

**Environmental Assessment  
for the Proposed Chanhassen 115 kV Substation and  
115 kV Transmission Line Tap  
Carver County, Minnesota**

**City of Chanhassen**

*December 2005*

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Appendix A	Legal Notices/Correspondence/Meeting Minutes
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## List of Acronyms Used in this Document

<b>ACRONYMS</b>	
ADT	Average Daily Traffic
BMPs	Best Management Practices
Commission	Minnesota Public Utilities Commission
DNR	Minnesota Department of Natural Resources
EA	Environmental Assessment
EMF	Electromagnetic fields
EQB	Minnesota Environmental Quality Board
GRE	Great River Energy
kV	Kilovolt
LMRWD	Lower Minnesota River Watershed District
MPCA	Minnesota Pollution Control Agency
MVEC	Minnesota Valley Electric Cooperative
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NURP	Nationwide Urban Runoff Program
RUS	Rural Utilities Service
SHPO	State Historic Preservation Office
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

## 1.0 Introduction

Great River Energy (GRE), located in Elk River, MN, provides generation and transmission to 28 member cooperatives in Minnesota. GRE and one of its cooperatives, Minnesota Valley Electric Cooperative (MVEC), are planning to construct a new substation and high voltage transmission line tap in Chanhassen, Carver County, Minnesota (Figure 1-1).

### 1.1 Project Location

The new substation and tap will be located on a 2.9 - acre site east of Audubon Road and north of Stoughton Avenue in an industrial area adjacent to the MA Gedney Plant in Chanhassen, Section 3, T115N, R23W, Chaska Township, Carver County. The site includes property previously owned by Xcel Energy. The new single circuit 115 kV transmission line will tap an existing 115 kV transmission line (owned by and operated by Xcel Energy) just northeast of the proposed substation site (Figure 1-2).

### 1.2 Project Description

The proposed project includes three primary components:

- ♦ MVEC plans to construct a new 115/12.5 kilovolt (kV) substation to be named the Chanhassen Substation. The substation site will be owned by MVEC and all distribution facilities will be constructed, operated and maintained by MVEC.
- ♦ GRE proposes to construct, own, and operate approximately 80 feet of 115 kV transmission line to energize the new substation (Figure 1-2). The line will be a single circuit design and will tap an existing 115 kV transmission line that is owned and operated by Xcel Energy. GRE will also own transmission switching facilities located in the substation.
- ♦ The Xcel Energy East Chaska Switching Station will be removed.

Each of these components is discussed in more detail below.

#### Substation

Electric facilities in the substation will include a 115/12.5 kV distribution transformer (Figure 1-3).

Some equipment within the substation is filled with mineral oil for cooling. This equipment will be sitting on concrete pads with three inches of crushed rock covering the entire fenced-in area in the event of an equipment leak. Substation sites are inspected on a monthly basis to check for leaks.

Figure 1-1 General Vicinity Map

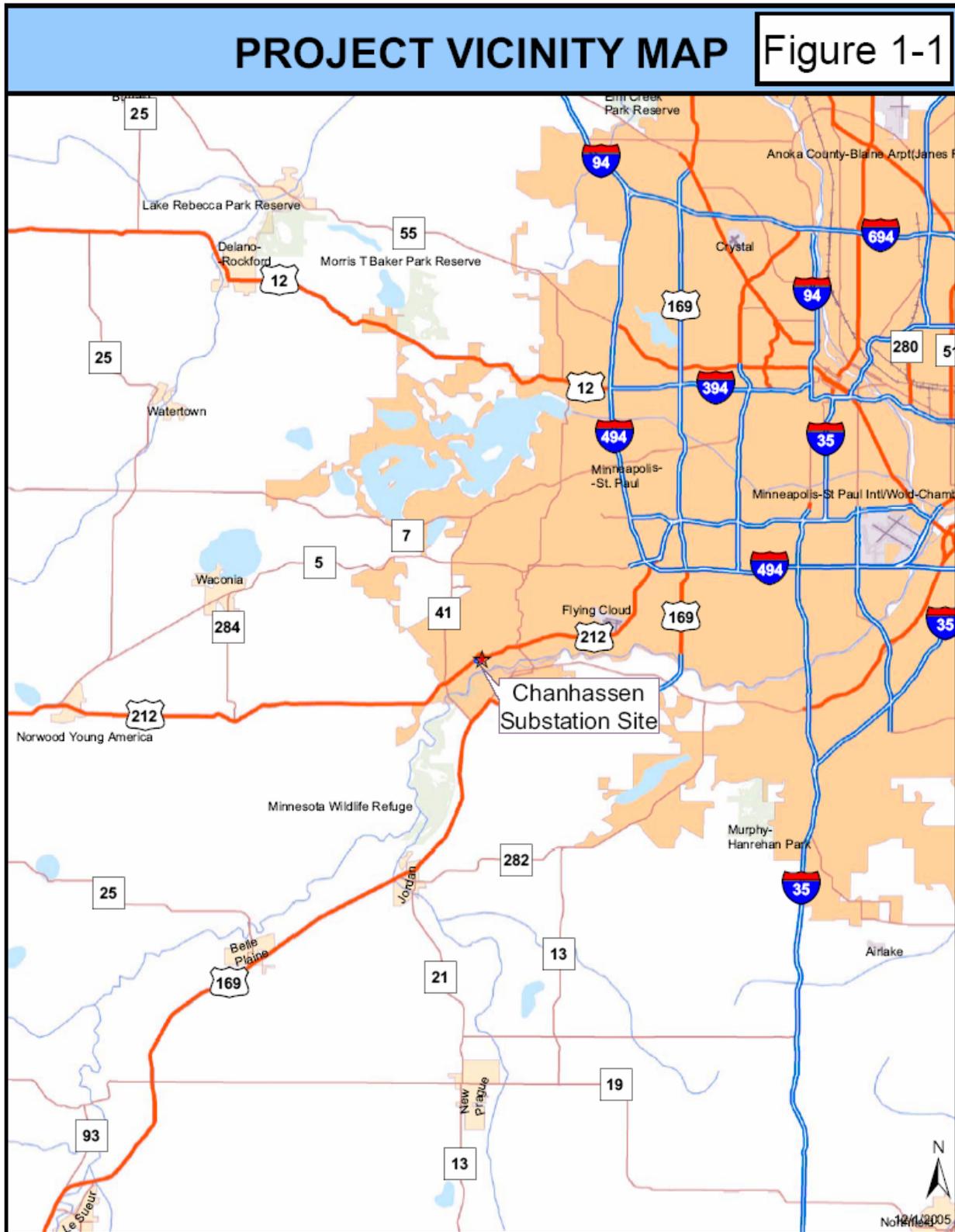
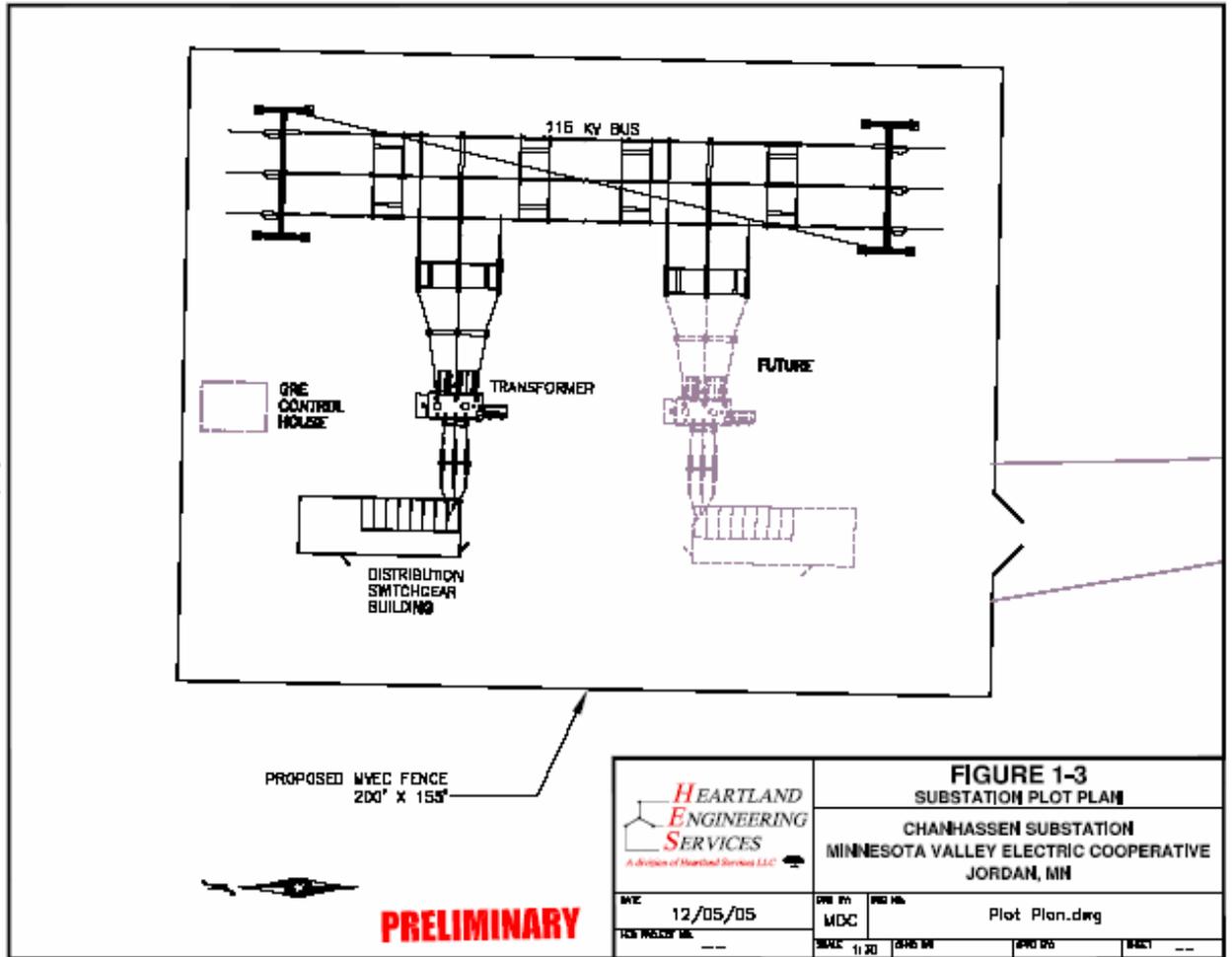


Figure 1-2 Project Map



Figure 1-3 Substation Plot Plan



 <b>HEARTLAND</b> <b>ENGINEERING</b> <b>SERVICES</b> <small>A Division of Heartland Service LLC</small>		<b>FIGURE 1-3</b>	
		SUBSTATION PLOT PLAN	
		CHANHASSEN SUBSTATION MINNESOTA VALLEY ELECTRIC COOPERATIVE JORDAN, MN	
DATE	12/05/05	DWG BY	MDC
DATE PLOTTED	---	DWG NO.	Plot Plan.dwg
		SCALE	1:20
		DWG BY	---
		DATE PLOTTED	---
		SCALE	---

The substation equipment will be enclosed in a 155' by 200' area situated inside the 2.9 - acre parcel. A decorative wall (stone patterned concrete wall made up of panels and pillars) will be placed on three sides (north, west and south) and a chain link fence will be placed on the east side. Additionally, the site will be surrounded with 58 trees and shrubs, as well as various small plantings.

The wall and fence will be designed to deter animals and to provide safety and security.

### Transmission Facilities

The transmission line serving the Chanhassen Substation will be a single circuit design. A single span of wires will run down the transmission corridor and terminate on two deadend, A-Frame structures. The line will then drop down through switches on to steel buswork. The two A-Frame structures will be 65-75 feet tall, to match the height of the existing transmission circuit in the vicinity. Each structure will carry three wires and a separate shield wire for lightning protection.

There will be self-supporting, tapered, tubular steel poles and guyed wood structures to route the transmission conductors in and around the substation.

### Switching Station Removal

The older existing lattice Xcel Energy East Chaska switching station located immediately adjacent to Stoughton Avenue will be removed as part of the project. The old site will be converted to green space and provide driveway access to the new facility located further north.

All transmission wiring will be reconfigured to route in and around the new Chanhassen Substation.

## 1.3 Project Need

This project is needed due to rapid growth in the MVEC service territory and associated increases in electrical load growth. The project will improve MVEC system reliability and provide some backup capabilities to the Bluff Creek and Chaska Tap substations under emergency conditions. The new substation will also help eliminate the present capacity limitations of these substations.

## 1.4 Project Cost Estimate

The estimated cost for the MVEC's distribution substation facilities is \$1.6 million, including site acquisition, site preparation, equipment, construction, and demolition of the Xcel Energy switching station. The estimated costs for GRE's transmission and substation facilities are \$250,000 and \$500,000, respectively. Total project cost is estimated to be \$2,350,000.

## 1.5 Sources of Information

Much of the information contained in this document was provided by the applicants or the applicant's representatives (Heartland Engineering Services and Bolton & Menk, Inc.) in the form of the Application for Conditional Land Use Permit for the Chanhassen Substation and subsequent correspondence.

Additional sources of information are listed below:

- 2020 Chanhassen Comprehensive Plan
- City of Chanhassen Zoning Ordinance
- City of Chaska 2020 Comprehensive Plan
- City of Chaska Zoning Ordinance
- Minnesota Department of Transportation 2003 Traffic Volumes

## **2.0 Regulatory Framework**

### **2.1 Permit Requirement**

This project falls under the State of Minnesota's Power Plant Siting Act, (Minnesota Statutes § 116C.51-.69 and Minnesota Rules Chapter 4400) for transmission projects over 100 kV and requires a permit from the Minnesota Public Utilities Commission (Commission). However, for eligible projects, a utility may apply to the local unit of government that has jurisdiction over the project for approval instead of applying to the Commission (Minn. Rules pt. 4400.5000). This proposed 115 kV substation project is eligible for local review.

The City of Chanhassen has agreed to act as the lead local unit of government with jurisdiction to approve the project. The City of Chanhassen was afforded the opportunity to relinquish its jurisdiction by requesting that the Commission assume jurisdiction, but has elected to maintain jurisdiction of the project. As required by Minn. Rules pt. 4400.5000 Subp.3, a project notice was sent to those persons on the Power Plant Siting General Notification list (see Appendix A).

### **2.2 Environmental Assessment Requirement**

In accordance with Minn. Rules pt. 4400.5000 Subp.5, an environmental assessment (EA) prepared by the local unit of government with jurisdiction over the project must be completed. The EA contains information on the human and environmental impacts of the proposed project and addresses methods to mitigate such impacts.

When the EA is complete, the City of Chanhassen must publish a notice in the Environmental Quality Board (EQB) Monitor that the EA is available for review, how a copy of the document may be reviewed, that the public may comment on the document, and the procedure for submitting comments to the City. A final decision on the project cannot be made until at least ten days after the notice appears in the EQB Monitor.

### **2.3 Scoping of Environmental Impacts**

The rules require that the public be afforded the opportunity to participate in developing the scope of the EA before it is prepared. The City of Chanhassen held a meeting on November 15, 2005 to obtain input from the public on the scope of the EA. A notice of the meeting was published in the Chanhassen Villager and a copy of the notice was direct-mailed to interested parties and residents near the proposed project (see Appendix A). One member of the public attended the meeting (a member of the Cemetery Board) but did not offer comment on the project.

## 2.4 Conditional Use Permit

The City of Chanhassen requires a Conditional Use Permit for this project. MVEC submitted a Conditional Use Permit Application to the City of Chanhassen on September 2, 2005. The City of Chanhassen will hold a public hearing on January 3, 2006 regarding MVEC and GRE's request for a Conditional Use Permit. The City of Chanhassen will make a decision on the application after notice of the EA has been published in the EQB Monitor and the comment period requirements have been met.

### **3.0 Assessment of Impacts and Mitigation**

This is a small project located in an industrial area and impacts to the environment are expected to be minimal and short-term, therefore little mitigation will be required. MVEC and GRE will minimize negative environmental impacts during construction of the project.

Correspondence relative to environmental conditions at the proposed site and responses received from state and federal agencies that reviewed the project are provided in Appendix B.

#### **3.1 Description of Environmental Setting**

The proposed substation project is located in an area zoned Office Industrial. The parcel purchased for the substation is currently undeveloped and land use in adjacent parcels is as follows:

- West side of the property - MA Gedney Plant
- North side of the property - undeveloped
- East side of the property - cemetery
- South side of the property - Stoughton Avenue

#### **3.2 Impacts on Human Settlement**

##### **3.2.1 Socioeconomics**

The local economy is based primarily on office/industrial businesses, which employ over 8,000 people. Approximately 5-10 workers will be required for construction of the new substation and tap line. During construction, there would be a small impact on the local community due to revenue created from expenditures of the construction crew (local community services, hotels, restaurants, construction materials). No permanent jobs will be created by this project.

##### **3.2.2 Displacement**

The new substation and transmission line tap will not cause the displacement of any residence and will not affect any public services. The substation will be set back approximately 200 feet north of Stoughton Avenue. The only residences in the area are south of Stoughton Avenue and are at a much lower elevation, and therefore will not be affected by the project.

##### **3.2.3 Noise**

The proposed substation will be designed and constructed to comply with State of Minnesota noise standards. It has been determined that there will be negligible noise at

the property boundaries. The substation transformer will be designed in accordance with ANSI standards.

#### 3.2.4 Aesthetics

The substation and transmission line as designed will have little impact on aesthetics of the area. This is an industrial area with many transmission lines, therefore the new substation will not significantly alter the existing character of the area. The site currently consists of grasses and minimal tree cover, many of which are dead or dying. The aesthetics will actually be improved along Stoughton Avenue when the existing Xcel Energy East Chaska switching station is removed as part of this project.

The new substation facility will be set back from the road and will not be within the viewshed of residences along Stoughton Avenue, as those residences are at a much lower elevation south of the road. The substation equipment area will be enclosed with a decorative wall on three sides (north, west and south) and a chain link fence on the east side. Additionally, the site will be surrounded with 58 trees and shrubs, as well as various small plantings.

#### 3.2.5 Human Health and Safety

No threats to public health and safety are anticipated for this project. All facilities will be constructed in accordance with all applicable standards, including standards of the Rural Utilities Service (RUS), the National Electric Safety Code, and other industry standards. Construction personnel will be required to follow Occupational Safety and Health Administration regulations. Other safety measures such as warning signs, fencing, and gates will be utilized as needed.

#### Electric and Magnetic Fields

Questions often arise about electric and magnetic fields (EMF), which are invisible lines of force that surround any electrical device. The term EMF refers to electric and magnetic fields that are coupled together such as in high frequency radiating fields. For lower frequencies such as for power lines, EMF should be separated into electric fields and magnetic fields. Transmission lines operate at a frequency of 60 hertz (cycles per second), which is in the non-ionizing portion of the electromagnetic frequency spectrum. Fields are considered ionizing when they cause electrons to eject from their orbits around a normal atom. This will typically occur with frequencies in the range of  $10^{16}$  to  $10^{22}$  hertz.

Magnetic fields result from the flow of electricity (current) in the transmission line. The intensity of the magnetic field is related to the current flow through the conductors. The magnetic field associated with the transmission line surrounds the conductor and rapidly decreases with the distance from the conductor. The value of the magnetic field density is expressed in the unit of gauss or milligauss.

The most recent and exhaustive studies of the health effects from power frequency fields conclude that the evidence of health risk is weak. Some of these studies are listed below:

- National Institute of Environmental Health Sciences. 2002. *EMF. Electric and Magnetic Fields Associated with the Use of Electric Power*. National Institutes of Health.
- National Research Council. 1997. *Possible Health Effects of Exposure to Residential Electric and Magnetic Fields*.
- Minnesota Department of Health. 2002. *EMF White Paper on Electric and Magnetic Field (EMF) Policy and Mitigation Options*.
- Electric and Magnetic Fields (EMF): Environmental Health in Minnesota. <http://www.health.state.mn.us/divs/eh/radiation/emf>

For this project, the overall EMF impact will not change at the property lines. With the retirement of the Xcel Energy East Chaska Switching Station, the overall EMF readings on the property are anticipated to decrease closer to the road. In the area of the new substation, the EMF will increase slightly, with new transformer and distribution facilities.

### 3.3 Impacts on Land-based Economies

#### 3.3.1 Recreation

The proposed project is not near any recreational areas and will not affect recreational opportunities.

#### 3.3.2 Prime Farmland

The Natural Resources Conservation Service (NRCS) was contacted regarding soil resources in the vicinity of the project. In a letter dated May 4, 2005, the NRCS indicated that the proposed construction will not affect any prime farmland soils or land of statewide importance.

#### 3.3.3 Transportation

The site will have a paved entrance located in the area of the gravel entrance currently serving the existing Xcel Energy switching station. This entrance will provide access from Stoughton Avenue, an existing city street. No offsite roadway improvements will be needed for equipment delivery. The proposed project is approximately six miles from the nearest airport (Flying Cloud Airport). The United States Geological Survey (USGS) elevation at the project site is 760 feet while the airport elevation is 900 feet, or nearly 140 feet higher. The project will therefore not be a hazard to aviation.

### 3.3.4 Mining and Forestry

There are no mining or forestry areas in the vicinity of the project.

### 3.3.5 Archaeological and Historic Resources

The Minnesota Historical Society State Historic Preservation Office (SHPO) was contacted about the presence of archaeological, historical or architectural resources located on or near the site. In a letter dated May 13, 2005, SHPO indicated that no historic properties eligible for or listed on the National Register of Historic Places will be affected by this project.

## 3.4 Natural Environment

### 3.4.1 Air Quality

Because electric substations and transmission lines do not affect air quality, there will be no long-term environmental impacts on the air. Temporary air quality impacts would be expected to occur during the construction phase of the project. However, adverse impacts to the surrounding environment will be minimal because of the short and intermittent nature of the emission and dust-producing construction phase.

### 3.4.2 Water Resources, Wetlands, Stormwater, and Soils

No impacts to water resources are anticipated. The substation site does not contain any existing wetlands or have any impact on groundwater or other surface waters.

The US Army Corps of Engineers (USACE) was contacted regarding this project and in an e-mail response dated August 25, 2005, the USACE indicated no permit or other approvals were required.

There are no Minnesota Department of Natural Resources (DNR) Public Waters in the vicinity of the project (Figure 3-1).

The stormwater runoff drainage patterns from the proposed site will mimic the existing conditions of the land. The majority of the site will drain to an infiltration area, which will retain the volume of runoff produced from a 6" rainfall event. The site overflows to the southwest and ultimately to the Minnesota River.

The proposed site will require some grading. Minimal erosion may occur at the site during construction, but erosion and sediment will be controlled on-site with all

Figure 3-1 DNR PWI Map

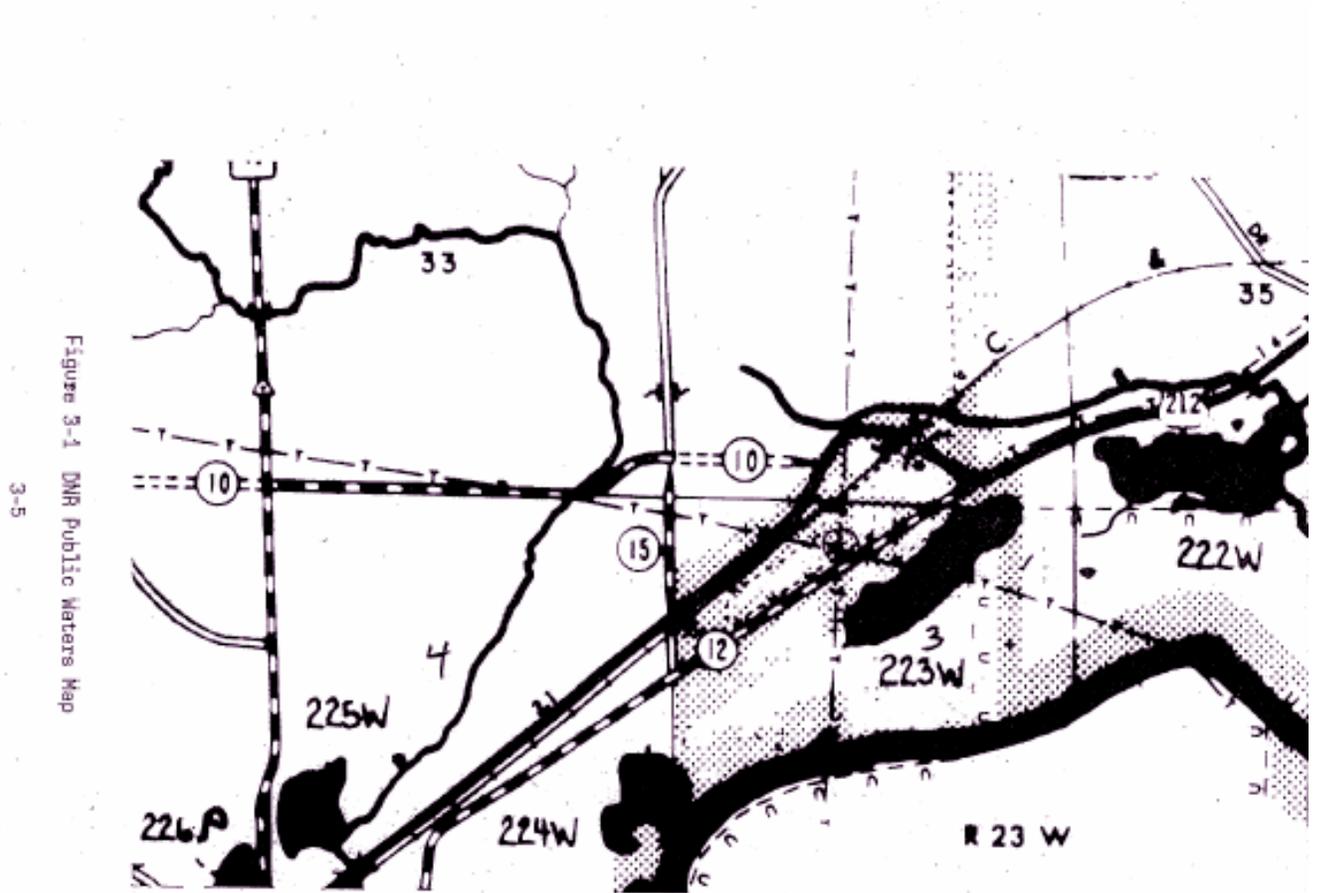


Figure 3-1 DNR Public Waters Map

3-5

appropriate best management practices (BMPs) in place for the duration of the construction activity. The site meets the design standards of local, state, and federal agencies and an NPDES permit application will be submitted to the Minnesota Pollution Control Agency prior to construction initiation.

A Phase II Environmental Site Assessment conducted by Braun Intertec reported no conditions at the site that would require special environmental regulatory actions.

### 3.4.3 Vegetation and Wildlife/Rare and Unique Natural Resources

The DNR and the United States Department of the Interior Fish and Wildlife Service (USFWS) were contacted regarding vegetation and wildlife resources in the vicinity of the project.

In a letter of April 25, 2005, the DNR indicated that there are a number of rare species or natural communities in the general project area. However, based on the nature and location of the proposed project, it will not affect any known occurrences of rare features (Figure 3-2).

The USFWS (e-mail of April 13, 2005) indicated that the bald eagle is documented to nest in Carver County. However, given the location (not within areas with known nesting bald eagles) and type of activity proposed, it is not likely to adversely affect any federally listed species.

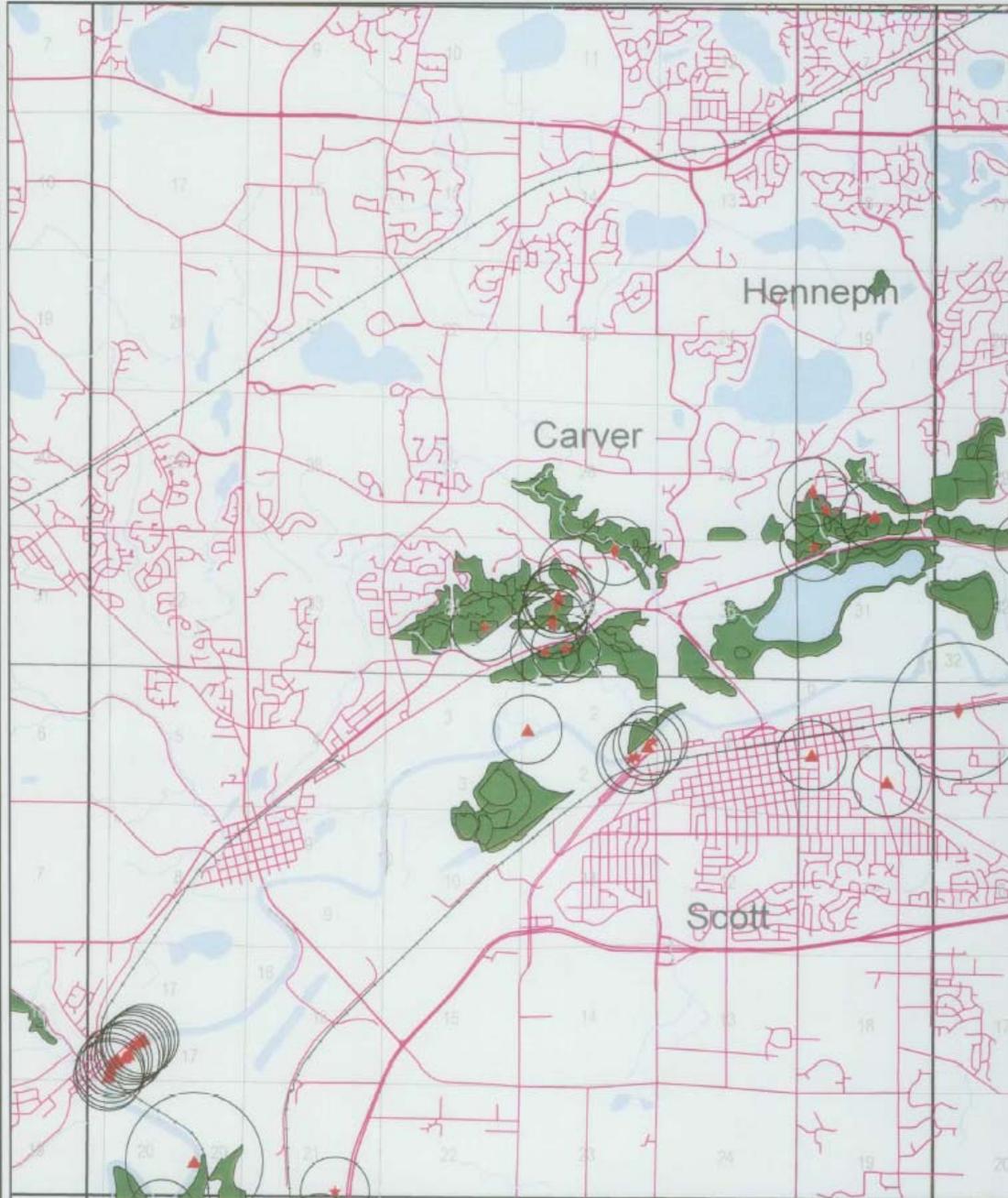
Effects on area wildlife will be minimal. The substation is designed to deter animal entry.

Figure 3-2 DNR Sensitive Areas Map

Figure 3-2

# Sensitive Areas

Shakopee 1:24,000 U.S.G.S. Quadrangle (DNR Code = S15d)  
Includes portions of Carver, Scott and Hennepin Counties



**Map created: September 12, 2005.**

Map data provided by the Minnesota Department of Natural Resources (DNR) and the Minnesota Department of Transportation (MnDOT). The data is not intended for use in any way that would be construed to mean that the DNR or MnDOT is responsible for any consequences or liabilities arising from the use of the data. For what the DNR is not aware and shall not be held responsible for. Permission to use these data does not imply endorsement or approval by the DNR of any interpretations or products derived from the data.

● Center of Highly Sensitive Areas  
+ Center of Sensitive Plant Areas  
▲ Center of Sensitive Animal Areas  
▼ Center of Significant Native Plant Community Areas  
from Minnesota County Biological Survey Counties Only  
 Significant Native Plant Communities  
Identified by the Minnesota County Biological Survey  
 Buffer Designating Sensitive Areas  
 Significant Railroad Prairie Right-of-Way Areas

Water bodies  
 County boundaries  
 Township lines  
 Section lines  
 Quadrangle border

— Major Roads  
— Other Roads  
— Railroads

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#### 4.0 Regulatory Permits and Approvals Required

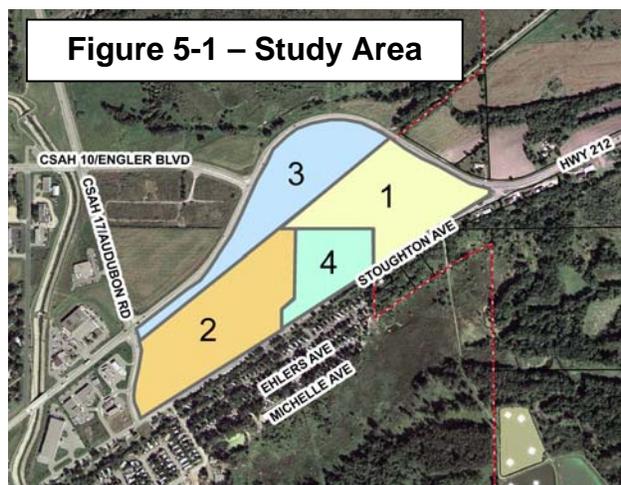
Permit requirements or approvals anticipated for this project and the status of each are shown below in Table 4-1.

**Table 4-1 Regulatory Permits and Approvals Required**

<b>Government Unit</b>	<b>Type of Approval</b>	<b>Regulated Activity</b>	<b>Status</b>
USDA Rural Utilities Service (RUS)	Environmental Review	Construction of 115 kV transmission line and 115/12.5 kV substation	Environmental Review for substation sent to RUS on 9/8/05; approval in process
US Dept. of Interior Fish and Wildlife Service	Threatened and Endangered Species Review	Review of records for federally threatened or endangered species that may exist at or near the substation site or transmission facilities	No federally listed species will be affected by the project – e-mail dated 4/13/05
US Dept. of the Army Corps of Engineers	Wetland and Waterways Review	Review navigable water and the dredging or filling of US waters including wetlands	Proposed work does not require permit or other Corps of Engineers approval– e-mail of 8/25/05
MN Dept. of Natural Resources (DNR)	Environmental Review – Wetlands, Water, Threatened and Endangered Species	Comprehensive review of substation site impacts	The project will not affect rare features – letter of 4/25/05
USDA Natural Resources Conservation Service	Environmental Review – Soil Resources	Prime farmlands and land of statewide importance	The construction will not affect prime farmlands or land of statewide importance – letter of 5/4/05
MN Historical Society State Historic Preservation Office (SHPO)	SHPO Review of Nationally Registered Historic Places	Historic preservation	No historic properties will be affected by the project – letter of 5/13/05
City of Chanhassen	Conditional Use Permit	Construction of new facilities	Application in process
City of Chaska	Driveway/Access Permit		Application will be made once project is approved
Minnesota Pollution Control Agency (MPCA)	National Pollutant Discharge Elimination System (NPDES) Permit	Stormwater Pollution Prevention Plan (SWPPP) and stormwater permit required for disturbance of one acre or more	Application will be made once project is approved

## 5.0 Potential Future Areawide Infrastructure

The study area, described below, lies within both the City of Chaska and the City of Chanhassen. As shown in Figure 5-1, Areas 1 and 2 are in Chanhassen and Areas 3 and 4 are in Chaska. The proposed substation site lies within the easternmost part of Area 2 with the proposed access drive through the southwesterly corner of Area 4. Based on both cities' Land Use Guide Plans and Zoning Maps, the entire area was analyzed to determine the feasibility of future development in this area and how public services could be provided to enable future development to take place. An analysis of the traffic impacts and public utilities that would be needed for a feasible future development scenario using all of the potentially developable land in this area is included below.



### 5.1 Street Layout and Traffic Analysis

The area is bordered by US Highway 212 on the north and east, by Stoughton Avenue on the south, and by Audubon Road on the west. A strip of land that is abandoned railroad right-of-way bisects the area. The Hennepin County Regional Railroad Authority owns the eastern end of this strip of land and it is currently not developed with a trail. A regional recreational trail east of US Highway 212 is constructed and operated by Three Rivers Park District. The Chaska Economic Development Authority and MA Gedney Company own the balance of the abandoned right-of-way.

Table 5-1 identifies the current zoning classifications and general land use development assumptions for developing trip generation and general distribution assumptions. Figure 5-1 illustrates Areas 1-4 described in the table.

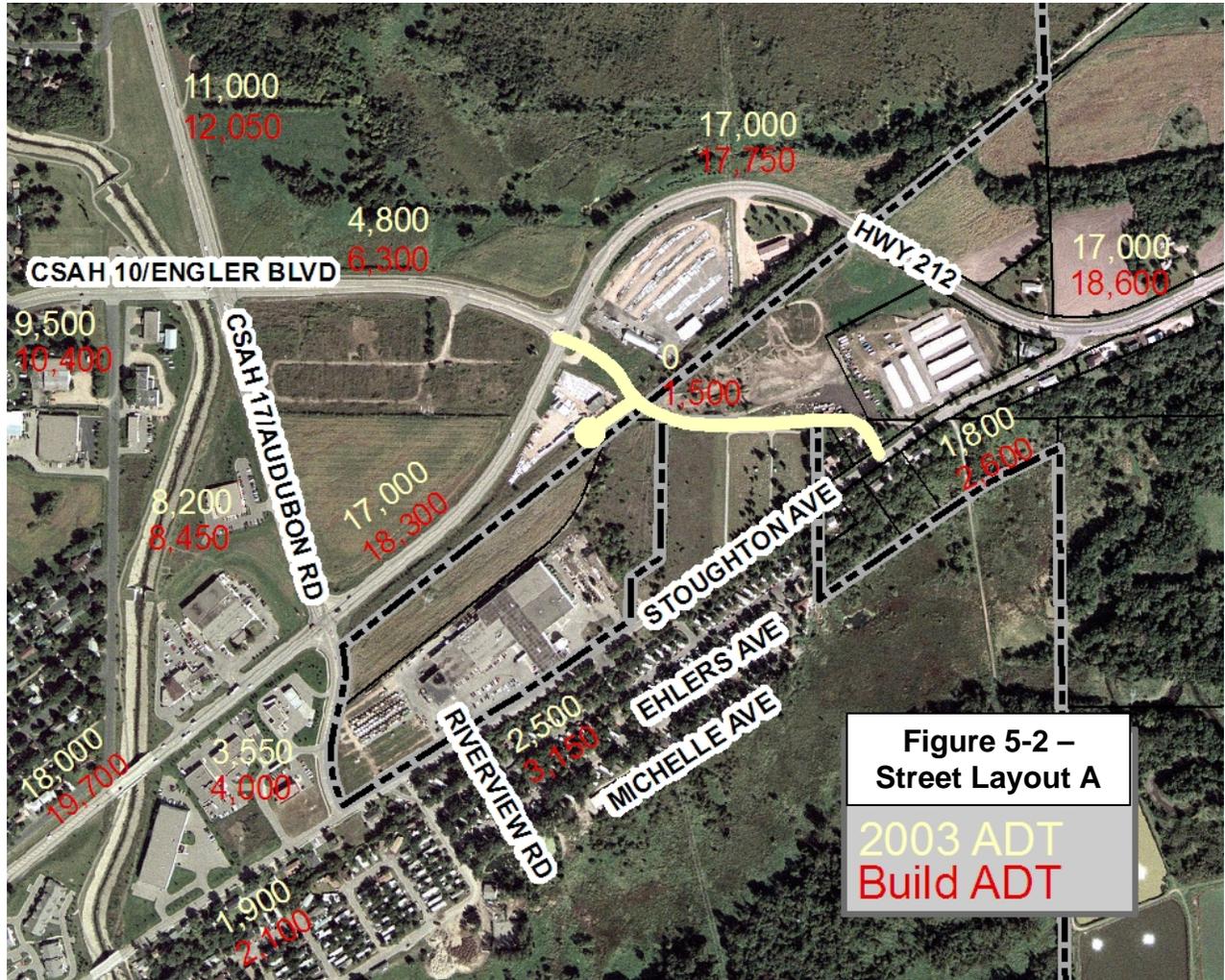
Table 5-1 – Development Assumptions								
Area	City	Zoning District	Symbol	Acres Total	Impervious Surface Maximum-Chanhassen Floor Area Ratio-Chaska	Estimated Building Height	Estimated Floor Space (sq. ft.)	Land Use Type(s) Sq. Ft. Per Use
1	Chanhassen	Fringe Business	BF	18.3	40%	1 story	80,000	60% Auto Vehicle Sales & 40% Cold Storage & Warehousing
2	Chanhassen	Industrial Office Park	IOP	23.1	70%	2 story	175,000	25% Office & 75% Industrial /Warehousing
3	Chaska	Industrial	I	18.2	0.5*	2 story	200,000	50% Office & 50% Industrial /Warehousing
4	Chaska	Medium Density Residence	R2	7.8	0.4	NA	0	Cemetery
				0.5	0.4	NA	0	None - proposed to provide access to substation property

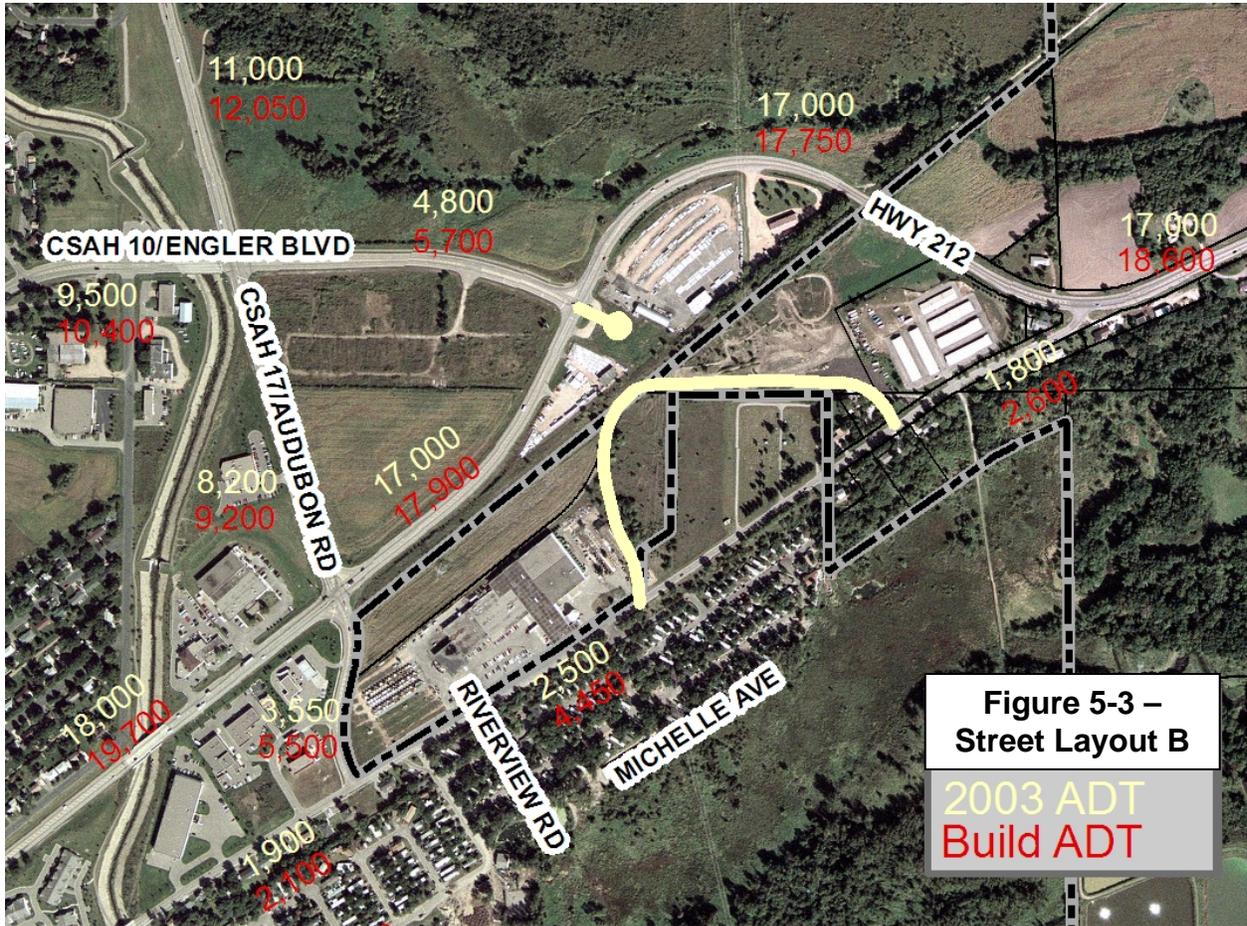
\* In a Planned Industrial Development District, there is the opportunity for a maximum floor area ratio of up to 2.0 for a single lot, provided the entire District does not exceed .75. Lot coverage by buildings shall be no more than 40% of the lot.

Table 5-2 shows 6,754 trips will be generated by the assumed land uses. Based on existing travel patterns it has been assumed that 19.2% of the trips will go to or from Audubon Road, 16.5% to/from Engler Boulevard, 31.4% to/from the west on Highway 212, 29.6% to/from the east on Highway 212, and 3.3% to/from the west on Stoughton Avenue.

Table 5-2 – Trip Generation				
Area	ITE Trip Generation Code	Estimated Floor Space (sq. ft.)	Rate Per 1,000 Sq. Ft. of Floor Space	Total Trips Generated
1	841 – Auto Vehicle Sales	48,000	33.34	1,601
1	150 – Warehouse	32,000	4.96	469
2	710 – General Office	43,750	11.01	706
2	130 – Industrial Park	131,250	6.96	1,399
3	710 – General Office	100,000	11.01	1,335
3	130 – Industrial Park	100,000	6.96	1,244

Based on the 2003 annual average daily traffic (ADT) volumes and land use assumptions outlined above, traffic volumes were developed for two different internal street layout alternatives. The internal street layout options and corresponding ADT are illustrated in Figures 5-2 and 5-3.





**Figure 5-3 –  
Street Layout B**  
2003 ADT  
Build ADT

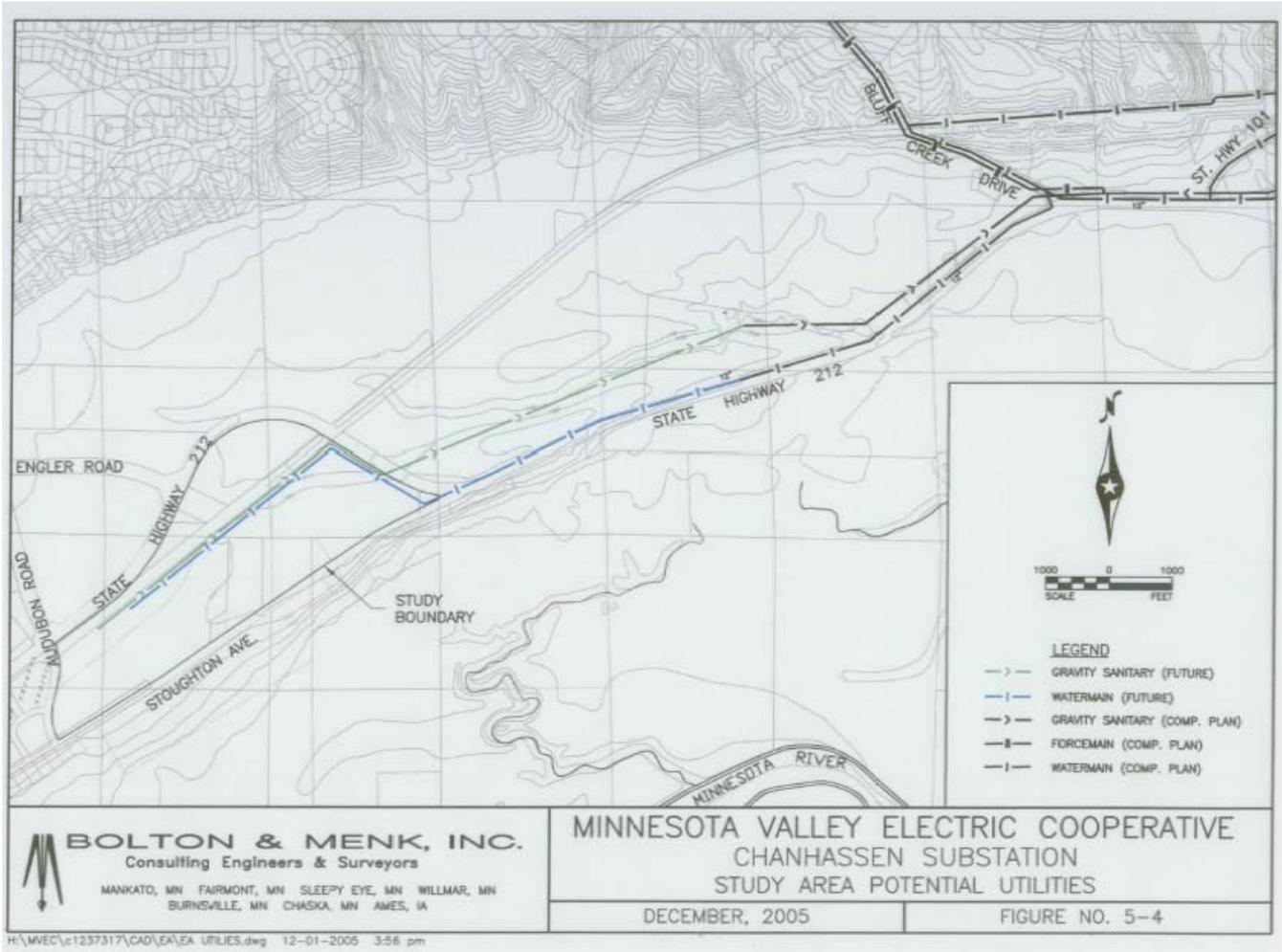
With either of these street layouts, along with the existing road network, the additional traffic demand could be accommodated and it is anticipated that vehicle-related air emissions would remain at acceptable MPCA levels.

## 5.2 Sanitary Sewer and Watermain Service

The majority of the area studied does not currently have utility services nearby. The exception is the Gedney factory in the southwestern-most portion of Chanhassen, which has sanitary sewer and water service provided by the City of Chaska.

The City of Chanhassen’s comprehensive plan indicates that a gravity sewer extending from a future lift station located between Bluff Creek Drive and Highway 101 (approximately 5,500 feet to the northeast) would service the sanitary needs of the Chanhassen portion of the study area. This sewer and the extended sewer needed to serve the remainder of the study area are shown in Figure 5-4. The 59.6 acres of future office/industrial land use, not including the cemetery area, yield a projected daily peak flow rate of 125 gallons per minute. This indicates that an 8” gravity sanitary line at minimum grade can adequately service the Chanhassen portion of the study area, as well as the land in Chaska, if desired.

Figure 5-4 Study Area Potential Drainage Plan



The Chanhassen portion of the study area is within the “Lower Bluff Pressure Zone” as identified in the water distribution figure of the City of Chanhassen’s comprehensive plan. This figure shows a future 12” watermain extending west from Bluff Creek Drive, which has been reproduced in Figure 5-4. This main, or perhaps a smaller size pipe (depending on the fireflow requirements of the City), could be extended further west to serve the remainder of the study area, including the Gedney property. This scenario would provide an undesirable “dead end” in the water system unless the piping was looped back to the main, which may prove too costly to be feasible. Another, and perhaps more economical, option is for the City of Chanhassen to enter into an agreement with the City of Chaska to provide water service to the area in question.

The portion of the study area within the City of Chaska was considered for water service during the recent development process of adjacent land to the west. That development, Chaska Gateway, installed a 12” watermain, which would provide adequate flows to the current study area.

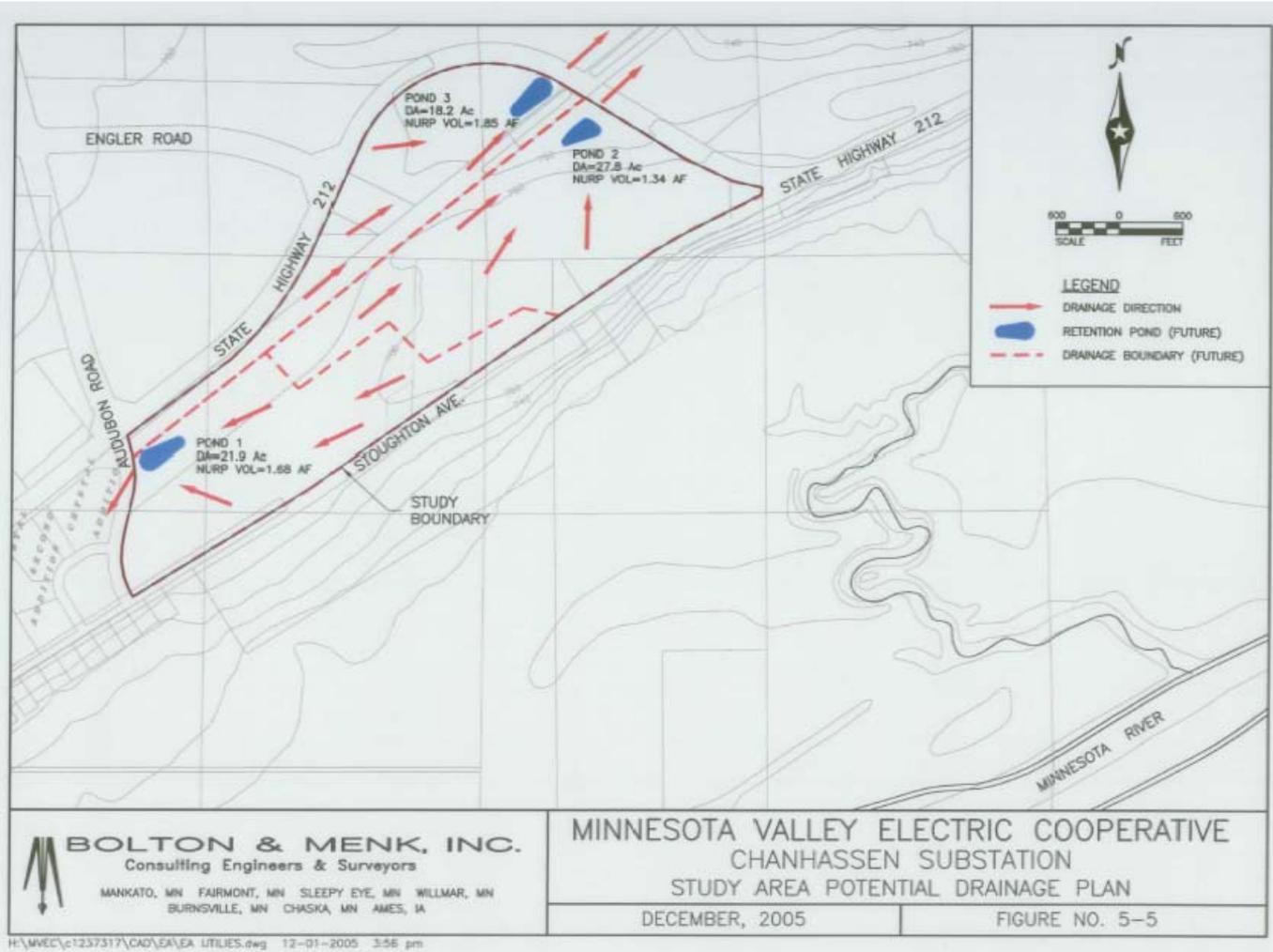
### 5.3 Stormwater Management

The study area is within the Lower Minnesota River Watershed District (LMRWD), which requires that runoff discharge rates after development are equal to or less than the existing flow rates leaving the site. The LMRWD does not have its own permitting process, but instead relies on the local governmental units to monitor the development activity for compliance.

It is assumed that the future development of the study area will manage and treat stormwater runoff through the construction of retention or wet sedimentation basins to the design standards of the nationwide urban runoff program (NURP). For the purposes of this study, a regional approach to stormwater management has been assumed. That is, an attempt has been made to minimize the amount of ponding through consolidation and strategic placement of the basins. These basins would provide permanent treatment of the runoff and would be maintained as per the City’s comprehensive stormwater management plan.

As shown in Figure 5-5, three potential ponding locations have been identified from the ten-foot contours of the USGS quadrangle maps. Pond 1 is proposed to treat runoff from the western portion of the Chanhassen area prior to discharging to the west. Ponds 2 and 3 would discharge to the east after treating water from the eastern Chanhassen property and Chaska property, respectively. These basins have been roughly sized for potential future land uses to provide the NURP-recommended dead-pool storage volumes as shown in Table 5-3.

Figure 5-5 Study Area Potential Drainage Plan



**BOLTON & MENK, INC.**  
 Consulting Engineers & Surveyors  
 MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN WILLMAR, MN  
 BURNSVILLE, MN CHASKA, MN AMES, IA

**MINNESOTA VALLEY ELECTRIC COOPERATIVE**  
 CHANHASSEN SUBSTATION  
 STUDY AREA POTENTIAL DRAINAGE PLAN

DECEMBER, 2005

FIGURE NO. 5-5

H:\MVEC\c1257317\CAD\EA\EA UTILIES.dwg 12-01-2005 3:56 pm

**Table 5-3 Potential Pond Characteristics**

I.D.	Area (ac)	Future CN	NURP Volume <sup>1</sup> (ac-ft)	Pond Surface <sup>2</sup> Area (ac)
Pond 1	21.9	80.6	1.68	0.37
Pond 2	27.8	73.4	1.34	0.29
Pond 3	18.2	85.7	1.85	0.39

<sup>1</sup> Assumes 70% max. impervious area in Chanhassen; cemetery remains

<sup>2</sup> Normal Water Level Area

The study area contains approximately 67.9 acres of Hydrologic Soil Group Type A soils, primarily consisting of Hubbard and Alluvial soils. These soils are very well drained and provide for some of the highest infiltration rates in Carver County. Because of this, it is recommended that future development planning consider infiltration techniques in addition to, or in lieu of, the wet sedimentation basins described above. These measures could include: infiltration swales and basins, rock trenches, as well as vegetated swales and rain gardens. The design of these techniques is dependent upon an in-depth site analysis and would occur as part of a detailed development process. The 2.5-acre site being considered for the MVEC substation will control runoff rates and minimize runoff volume through the construction of an infiltration basin. This basin will infiltrate 15,700 cubic feet of runoff prior to overflowing to the southwest.

All construction activity will utilize the appropriate BMPs to minimize erosion and sediment transport during construction. If more than one acre of land is disturbed, a SWPPP will be developed and the associated NPDES permit obtained.

## **6.0 Anticipated Staging of Various Developments**

MVEC is anticipating the construction of the new Chanhassen Substation along with GRE's high voltage transmission line tap in time to meet the peak power demand of early summer 2006. The other possible development scenarios analyzed in Section 5.0 will not likely occur until well into the future. The Business Fringe zoning district designation for Area 1 is intended to accommodate limited commercial uses temporary in nature without urban services, while maintaining the integrity, minimizing impact, and protecting the natural environment. Because there is no schedule for providing urban services to this area from those existing in Chanhassen, any potential development would need to provide their own private on-site systems. This would likely be cost prohibitive, at least into the foreseeable future. Area 2, which includes the existing Gedney factory, would be very expensive to redevelop and this also is not likely in the foreseeable future. There may be a possibility for new development of the northerly 6.2 acres of the separate parcel of Gedney-owned property; however the City of Chaska may not have sewer capacity for any additional development that is not within their city.

Area 3 is in the City of Chaska and water service would be available from the Chaska Gateway development on the north side of US Highway 212; however sewer service availability is questionable. This area could be sewerred through the City of Chanhassen as indicated in Section 5.2, but this would not likely occur for many years. If sewer capacity is available through Chaska's existing system, there would be considerable expense involved with the necessary extension under US Highway 212 and possibly the need for a lift station. Therefore, future development of Area 3 does not appear to be a very near term possibility.

Area 4 is an existing cemetery in the City of Chaska, except for the small parcel in the southwest corner that is owned by Xcel Energy. No change in use is expected, although access to the proposed substation site would be through the Xcel Energy parcel.

Any future development that would occur would involve modification of the ground topography to accommodate new roads, drives, buildings, utilities and stormwater management facilities. Due to the relatively flat terrain, no significant amount of earth moving is anticipated.



# APPENDIX A

## LEGAL NOTICES CORRESPONDENCE

CITY OF CHANHASSEN  
CARVER & HENNEPIN COUNTIES  
NOTICE OF PUBLIC HEARING  
PLANNING CASE NO. 05-30

NOTICE IS HEREBY GIVEN that the Chanhassen Planning Commission will hold a public hearing on Tuesday, November 15, 2005, at 7:00 p.m. in the Council Chambers in Chanhassen City Hall, 7700 Market Blvd. The purpose of this hearing is to determine the **scope of an Environmental Assessment**, request for a **Conditional Use Permit with Variances** and a **Site Plan Review** application to construct a local electric distribution substation on property zoned Industrial Office Park, located east of the Gedney Pickle plant, north of Stoughton Avenue and south of Flying Cloud Drive. Applicant: Minnesota Valley Electric.

A plan showing the location of the proposal is available for public review at City Hall during regular business hours. All interested persons are invited to attend this public hearing and express their opinions with respect to this proposal.

Sharmeen Al-Jaff, Senior Planner

Email: [saljaff@ci.chanhassen.mn.us](mailto:saljaff@ci.chanhassen.mn.us)  
Phone: 952-227-1134

(Publish in the Chanhassen Villager on November 3, 2005)





GREAT RIVER  
ENERGY®

17845 East Highway 10 • P.O. Box 800 • Elk River, Minnesota 55330-0800 • 763-441-3121 • Fax 763-241-2366

September 14, 2005

WO #48241

Dr. Burl W. Haar  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101

SUBJECT: Chanhassen Substation and 115 kV Transmission Line Project

Dear Dr. Haar:

In accordance with the Power Plant Siting Act, this letter serves as the required notice to the Minnesota Public Utilities Commission (Commission) that Minnesota Valley Electric Cooperative (MVEC) has elected to seek local approval for the construction of a new 115 kV substation in Chanhassen, Minnesota.

The proposed substation would be located within the city limits of Chanhassen in Carver County. MVEC will own the substation and GRE will own the one-span tap into the substation. The new facility will meet the growing electrical demand and improve the service and reliability of electric facilities in the area. A fact sheet that provides more detail on the project is enclosed.

Great River Energy (wholesale power supplier to MVEC) will assist MVEC and the City of Chanhassen with the permitting process. MVEC submitted a Conditional Use Permit application to the City of Chanhassen on September 2, 2005. The City of Chanhassen has been informed that they have 60 days to refer the permitting process to the Commission.

Questions regarding this project should be directed to Dennis Wolf, MVEC VP Special Projects at 952-492-8260, Sharmeen Al-Jaff, Senior Planner at the City of Chanhassen at 952-227-1100, or me at 763-241-2367. Thank you for your attention to this matter.

Sincerely,  
GREAT RIVER ENERGY



Craig Poorker  
Field Representative

Enclosure

CC: General List of Interested Persons – w/encl.  
Denny Wolf, MVEC – w/encl.  
Deborah Pile, Department of Commerce – w/encl.

CP:jhr:\subs\Chanhassen\Chanpubutil.commltr.doc

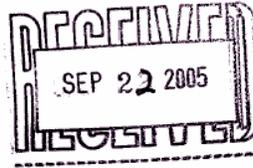
Direct Dial (763) 241-2367

E-Mail [cpoorker@greenergy.com](mailto:cpoorker@greenergy.com)

FAX (763) 241-6167

[www.GreatRiverEnergy.com](http://www.GreatRiverEnergy.com)

A Touchstone Energy® Cooperative 



85 7th Place East, Suite 500  
St. Paul, Minnesota 55101-2198  
651.296.4026 FAX 651.297.1959 TTY 651.297.3067

September 20, 2005

Craig Poorker  
Great River Energy  
17845 East Hwy 10, PO Box 800  
Elk River, MN 55330-0800

Ron Jabs  
Minnesota Valley Electric Cooperative  
125 Minnesota Valley Electric Drive  
Jordan, MN 55352

Sharmeen Al-Jaff, Senior Planner  
City of Chanhassen  
7700 Market Boulevard  
Chanhassen, MN 55317

**RE: Chanhassen Substation and 115 kV Transmission line Project**

Dear Sirs:

This letter confirms that the Public Utilities Commission (PUC)<sup>1</sup> has received notification that Great River Energy (GRE) and Minnesota Valley Electric Cooperative (MVEC) propose to seek local review to build a new 115 kV Substation and a one-span section of 115 kV HVTL tapping into an existing GRE 115 kV line. The project would be constructed in the City of Chanhassen in Carver County.

This project falls under the Power Plant Siting Act, Minnesota Statutes § 116C.51-69 and Minnesota Rules Chapter 4400, which requires a permit from the PUC for most transmission line projects over 100 kV. However, for eligible projects, a utility may apply to those local units of government that have jurisdiction over the route for approval to build the project instead of applying to the PUC. The proposed 115 kV substation and transmission project is eligible for local review. [Minnesota Statutes § 116C.576 and Minnesota Rules 4400.5000 subps. 2. C., D.]

GRE and MVEC have indicated that the City of Chanhassen is the only local unit of government with jurisdiction in permitting the project and that a Conditional Use Permit application was submitted to the City on September 2, 2005. A local unit of government may relinquish its jurisdiction by requesting the PUC to assume jurisdiction within 60 days of the filing of an application with the local unit of government. [Minnesota Rules 4400.5000 subp. 4.]

<sup>1</sup> On July 1, 2005, Minnesota Senate File 1368 transferred generation plant siting and transmission line routing authority from the Minnesota Environmental Quality Board to the Public Utilities Commission. EQB routing and siting staff was transferred to the Department of Commerce and continue to manage the application process.

Market Assurance: 1.800.657.3602      Licensing: 1.800.657.3978  
Energy Information: 1.800.657.3710      Unclaimed Property: 1.800.925.5668  
www.commerce.state.mn.us      An Equal Opportunity Employer

Craig Poorker/Sharmeen Al-Jaff/Ron Jabs  
September 20, 2005  
Page 2

An environmental assessment must be prepared by the local unit of government with jurisdiction over the project. I acknowledge that the City of Chanhassen is the Responsible Government Unit for the Chanhassen Substation and 115 kV Transmission line Project.

Specific requirements with regard to the environmental review process include providing an opportunity for the public to participate in the development of the scope of the environmental assessment before it is prepared; publishing notice in the EQB Monitor of when the assessment is available for review and of the procedure for commenting on the assessment; and withholding a final decision on the project until at least ten days after the notice appears in the EQB Monitor. The City of Chanhassen also must provide a copy of the environmental assessment to the PUC when it is completed. [Minnesota Rules 4400.5000 subp. 5.]

GRE and MVEC have sent the required notice to those persons on the PUC facilities permitting general notification list that a permit has been applied for from the local unit of government. [Minnesota Rules 4400.5000 subp. 3.]

If there are any other questions, please feel free to contact me by phone or email.

Sincerely,



DAVID BIRKHOLZ  
Energy Facilities Permitting  
Department of Commerce  
85 7<sup>th</sup> Place East, Suite 500  
Saint Paul, MN 55101-2198  
(P) 651.296.2878  
(F) 651.297.7891  
david.birkholz@state.mn.us

# APPENDIX B

AGENCY  
CORRESPONDENCE

United States Department of Agriculture



Natural Resources Conservation Service  
6120 Earle Brown Drive, Rm 650  
Brooklyn Center, MN 55430-4104

*70 Years*

*"A Partner in Conservation Since 1935"*

Phone: (763) 566-2941  
FAX: (763) 566-3468

May 4, 2005

Heather Nelson  
Heartland Engineering Services  
PO Box 330  
Rockford, MN 55373

Re: Environmental Review of the proposed Chanhassen Substation  
Minnesota Valley Electric Cooperative  
Jordan, Minnesota  
HES Project No. 240118

Dear Ms Nelson,

This letter is in regards to your request for NRCS to review the project referenced above. It is the responsibility of the USDA, Natural Resources Conservation Service to monitor the effects of Federal programs or money on the conversion of farmland to nonagricultural uses through the Farmland Protection Policy Act (Public Law 97-98, Dec. 22, 1981). NRCS has completed an analysis of the site. Enclosed is a map with the soil information. The proposed site did not have any prime farmland soils or land of statewide importance that will be affected by the construction. If the proposed site includes soil types other than PA Sparta A slope or PB Sparta B slope please contact our office to determine if you need to complete a Farmland Conversion Impact Rating form.

If the NRCS can be of any further assistance please contact our office at 763-566-2941.

Sincerely,

A handwritten signature in cursive script that reads "Peter Weikle".

Peter Weikle  
Area Resource Soil Scientist

Carver County  
section 34, T. 116 N, R. 23 W  
section 3, T. 115 N, R. 23 W



400 0 400 800 Feet

Scale 1:7920  
8"/mile



Carver County  
section 34, T. 116 N, R. 23 W  
section 3, T. 115 N, R. 23 W



Scale 1:4000





MINNESOTA HISTORICAL SOCIETY  
STATE HISTORIC PRESERVATION OFFICE

May 13, 2005

Ms. Heather Nelson  
Heartland Engineering Services  
PO Box 330  
Rockford, MN 55373

RE: Minnesota Valley Electric Cooperative – proposed Chanhassen Substation  
T116 R23 S34, Chanhassen Twp., Carver County  
SHPO Number: 2005-1743

Dear Ms. Nelson:

Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the State Historic Preservation Officer by the National Historic Preservation Act of 1966 and the Procedures of the Advisory Council on Historic Preservation (36CFR800).

Based on available information, we conclude that **no properties** eligible for or listed on the National Register of Historic Places are within the project's area of effect.

Please contact Dennis Gimmestad at (651) 296-5462 if you have any questions regarding our review of this project.

Sincerely,

A handwritten signature in cursive script that reads "Britta L. Bloomberg".

Britta L. Bloomberg  
Deputy State Historic Preservation Officer

**Heather Nelson, Heartland Engr**

*(Army Corps of Engineers)*

---

**From:** Curtis Cordt, Engineer  
**Sent:** Thursday, August 25, 2005 2:17 PM  
**To:** Heather Nelson, Heartland Engr  
**Subject:** FW: MVEC Chanhassen Substation ER Approval Request

---

**From:** Yanta, Joseph J MVP [mailto:joseph.j.yanta@mvp02.usace.army.mil]  
**Sent:** Thursday, August 25, 2005 2:09 PM  
**To:** Curtis Cordt, Engineer  
**Subject:** RE: MVEC Chanhassen Substation ER Approval Request

The proposed Chanhassen Substation (SE 1/4 Sec. 34, T. 116 N., R. 23 W., Carver County) does not require a permit or other approvals from the Corps of Engineers.

---

**From:** Curtis Cordt, Engineer [mailto:ccordt@WHE.ORG]  
**Sent:** Thursday, August 25, 2005 1:47 PM  
**To:** Yanta, Joseph J MVP  
**Cc:** Heather Nelson, Heartland Engr  
**Subject:** MVEC Chanhassen Substation ER Approval Request

Joe,

Similar to last the last substation request; we are seeking to build a substation in the Chanhassen Area which is in Carver County. We have received positive responses from all the other agencies contacted except no response from the Corp. Could you please check over these materials and get back to us.

Thanks,  
Curt

**Curtis Cordt P.E.**  
**Manager**  
**Heartland Engineering Services**  
**Phone No. (763)477-3076**  
**Email Address: [ccordt@heartlandes.com](mailto:ccordt@heartlandes.com)**

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9/08/2005



## Minnesota Department of Natural Resources

Natural Heritage and Nongame Research Program, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-40  
Phone: (651) 296-7863 Fax: (651) 296-1811 E-mail: sarah.hoffmann@dnr.state.mn.us

April 25, 2005

Ms. Heather Nelson  
Heartland Engineering Services  
PO Box 330  
6800 Electric Drive  
Rockford, MN 55373

Re: Request for Natural Heritage information for vicinity of proposed Chanhassen Substation, T115N  
R23W Section 3, Carver County  
NHNR Contact #: ERDB 20050745

Dear Ms. Nelson,

Please note that we detected what *we believe to be* an error in the Township and Section information as it was described in the Environmental Review report. Because the location description in the report did not exactly match the project area outlined on the map, the enclosed search results are for the area indicated on the map (as listed in the subject line of this letter). If the location description of your project area, as listed above, is in error, please contact me.

The Minnesota Natural Heritage database has been reviewed to determine if any rare plant or animal species or other significant natural features are known to occur within an approximate one-mile radius of the area indicated on the map enclosed with your information request. Based on this review, there are 24 known occurrences of rare species or natural communities in the area searched (for details, see enclosed database printout and explanation of selected fields). However, based on the nature and location of the proposed project I do not believe it will affect any known occurrences of rare features.

The Natural Heritage database is maintained by the Natural Heritage and Nongame Research Program, a unit within the Division of Ecological Services, Department of Natural Resources. It is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, natural communities, and other natural features. Its purpose is to foster better understanding and protection of these features.

Because our information is not based on a comprehensive inventory, there may be rare or otherwise significant natural features in the state that are not represented in the database. A county-by-county survey of rare natural features is now underway, and has been completed for Carver County. Our information about natural communities is, therefore, quite thorough for that county. However, because survey work for rare plants and animals is less exhaustive, and because there has not been an on-site survey of all areas of the county, ecologically significant features for which we have no records may exist on the project area.

The enclosed results of the database search are provided in two formats: index and full record. To control the release of locational information which might result in the damage or destruction of a rare element, both printout formats are copyrighted.

The index provides rare feature locations only to the nearest section, and may be reprinted, unaltered, in an Environmental Assessment Worksheet, municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the index for any other purpose, please contact me to request written permission. **The full-record printout includes more detailed locational information, and is for your personal use only. If you wish to reprint the full-**

DNR Information: 651-296-6157 • 1-888-646-6367 • TTY: 651-296-5484 • 1-800-657-3929

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record printouts for any purpose, please contact me to request written permission.  
Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,



Sarah D. Hoffmann  
Endangered Species Environmental Review Coordinator

encl: Database search results  
Rare Feature Database Print-Outs: An Explanation of Fields



Minnesota Natural Heritage Database  
Element Occurrence Records

CHAMBLISSIN SUBSTATION  
T115W R23N SECTION 3, CARVER COUNTY  
MNDNR, Natural Heritage and Nongame Research Program

12:53 Sunday, APRIL 24, 2005  
Copyright 2005 State of Minnesota DNR

T115W R23W N5E02 SCOTT COUNTY, MN  
Element: ACTINONAIAS LIGAMENTINA (MICKET MUSSEL) #93  
State Status: THREATENED  
EO Size:

EO Rank: EO Rank: EO Rank:  
Site: JACKSON 2  
Ownership: Owner unknown  
Managed Area(s): MINNESOTA VALLEY RECREATION AREA  
Source: BRIGHT, R. (MUSSEL SURVEY OF MINNESOTA RIVER)  
DEAD SPECIMENS ONLY FOUND AT SITE (ACCESS GAINED FROM NW VALLEY BIKE TRAIL.)  
Current Status: Intended Status:  
Last Observed Date: 17 August 1989  
Quad Map: SHAROPPE (S15D)  
Latitude: 44 47' 53" Long: 93 32' 32"  
Precision: within 0.25 mile, confirmed  
Voucher: Verification: verified

DNR Region: 6  
Wildlife Area: 605  
Forestry District: 613

T115W R23W N5E02 SCOTT COUNTY, MN  
Element: ANCIDENS CONFRAGOSUS (ROCK POCKETBOOK MUSSEL) #9  
State Status: ENDANGERED  
EO Size:  
EO Rank:  
Site: JACKSON 2  
Ownership: Owner unknown  
Managed Area(s): MINNESOTA VALLEY RECREATION AREA  
Source: BRIGHT, R. (MUSSEL SURVEY OF MINNESOTA RIVER)  
DEAD SPECIMENS ONLY FOUND AT SITE (ACCESS GAINED FROM NW VALLEY BIKE TRAIL.)  
Current Status: Intended Status:  
Last Observed Date: 17 August 1989  
Quad Map: SHAROPPE (S15D)  
Latitude: 44 47' 53" Long: 93 32' 29"  
Precision: within 0.25 mile, confirmed  
Voucher: Verification: verified

DNR Region: 6  
Wildlife Area: 605  
Forestry District: 613

T115W R23W S8W02 CARVER COUNTY, MN  
Element: EALYABEATUS LEUCOPHEALUS (BALD EAGLE) #2225  
State Status: SPECIAL CONCERN  
EO Size:  
EO Rank:  
Site: CHASKA 2  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: GULLI, J. (DNR)  
NESTING AREA, SHAROPPE/ CHASKA TRAIL.  
Current Status: Intended Status:  
Last Observed Date: 2002  
Quad Map: SHAROPPE (S15D)  
Latitude: 44 47' 57" Long: 93 33' 36"  
Precision: within 0.25 mile, confirmed  
Voucher: CV -003A Verification: verified

DNR Region: 6  
Wildlife Area: 723  
Forestry District: 613

T115W R23W N5E02 SCOTT COUNTY, MN  
Element: LAMPISILUS TERAS (YELLOW SANDSHELL MUSSEL) #8  
State Status: ENDANGERED  
EO Size:  
EO Rank:  
Site: JACKSON 2  
Ownership: Owner unknown  
Managed Area(s): MINNESOTA VALLEY RECREATION AREA  
Source: BRIGHT, R. (MUSSEL SURVEY OF MINNESOTA RIVER)  
DEAD SPECIMENS ONLY FOUND AT SITE (ACCESS GAINED FROM NW VALLEY BIKE TRAIL.)  
Current Status: Intended Status:  
Last Observed Date: 17 August 1989  
Quad Map: SHAROPPE (S15D)  
Latitude: 44 47' 47" Long: 93 32' 38"  
Precision: within 0.25 mile, confirmed  
Voucher: Verification: verified

DNR Region: 6  
Wildlife Area: 605  
Forestry District: 613

Minnesota Natural Heritage Database  
Element Occurrence Records

T115W R23N NRE502 SCOTT COUNTY, MN  
Element: MUSSEL SAMPLING SITE #135

EO Size: EO Rank: 2  
Site: JACKSON 2  
Ownership: Owner unknown  
Managed Area(s): MINNESOTA VALLEY RECREATION AREA  
Source: BRIGHT, B. (MUSSEL SURVEY OF MINNESOTA RIVER)  
ACCESS GAINED FROM MN VALLEY BIKE TRAIL. LIVE SPP: 1 ANODONTA GRANDIS GRANDIS, 1 LAMNIGONA COMPRESSA, 5 LEPTOGEA FRAGILIS, 4 POTAMILLUS CHIOENSIS, 1 TRUNCILLA DONACIFORMIS, 1 T. TRUNCATA. DEAD SPP: FUSCONAIA FLAVA, LAMPSILIS TERES TERES, L. VENTRICOSA, L. RADIATA LUTKOLA, OBLIQUARIA REFLEXA, CUCURULA NOBULATA, C. COARCTATA, ACTINOMYIAS LIGNENTINA CARINATA, ACRIDENS CONFRAGOSUS, TRUNCILLA DONACIFORMIS, T. TRUNCATA.

T115W R23N NRE502 SCOTT COUNTY, MN  
Element: CUCURULA NOBULATA (WASTYBANK MUSSEL) #9  
State Status: ENDANGERED  
EO Size: EO Rank: 2  
Site: JACKSON 2  
Ownership: Owner unknown  
Managed Area(s): MINNESOTA VALLEY RECREATION AREA  
Source: BRIGHT, B. (MUSSEL SURVEY OF MINNESOTA RIVER)  
DEAD SPECIMENS ONLY FOUND AT SITE (ACCESS GAINED FROM MN VALLEY BIKE TRAIL.)

T115W R23W NWR418E03 SCOTT COUNTY, MN  
Element: MIXED EMERGENT MARSH (PRAIRIE) #27  
S Rank: S2  
EO Size: EO Rank: B  
Site: WASSERS LAKE  
Ownership: MN DNR Parks and Recreation  
Managed Area(s): MINNESOTA VALLEY RECREATION AREA  
Source: HARRIS, P. (OO BIOL SURVEY 1995)  
LARGE AREA DOM BY SCIRPUS FLOV IN DEEPER WATER AROUND LAKE EDGE. SS OF THIS IS OUTER SHALLOW MARSH ZONE WITH GROUNDWATER SEEPAGE CONSISTING OF MOSAIC OF PATCHES DOM'D BY SPORGNATIUM SURY, PHRAGMITES, SCIRPUS CP ACUTUS, ACORUS, IBERGIA ORYZ. RICH SPP DIV IN SHALLOW ZONE INCL/S SAGITTARIA LAT, POTAMOGETON SP, ELEGCHARIS, LACOPUS AMER, RUMEX CRU, SLU, & MERTHA. EXCEL CONDIT BUT BAND OF PHALARIS ON EDGES. S OF MINN RIVER IN MINN RIVER FLOODPLAIN.

T116N R23W SRE5E34 CARVER COUNTY, MN  
Element: CALCAREOUS SEEPAGE FEN (CENTRAL) PRAIRIE SUBTYPE #2  
S Rank: S0  
EO Size: EO Rank: AB  
Site: SEMINARY FEN  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: HARRIS, P. (OO BIOL SURVEY 1995)  
FEN W/LARGE AREAS DOM BY CAREX STERILIS, C. FRAILEA & MUEHLBERGIA RICH. SCOTT'D SHERBS - S. SALIX SP, INCL S. CANDIDA & CORNUS STOL. CONTAINS A GOOD DIVERSITY OF TYPICAL SPP. IN EXCELLENT CONDITION W/VIRTUALLY NO EXOTICS. SOIL IS DEEP, WELL HYDRATED FENT WITH MUCH WATER AT SURFACE. OCCURS AMONG AREAS OF HERB SWAMP & CAREX STRICTA MEADOWS W/IN LARGER COMPLEX OF WETLANDS. FEN STRONGLES COMPRESSA-CHASKA CORD BERRY W OF RR GRADE. IN MINN VALLEY OUTWASH BEDM AREA.

CHAMBERSEN SUBSTATION  
T115W R23W SECTION 3, CARVER COUNTY  
MHR, Natural Heritage and Heritage Research Program

12:53 Sunday, APRIL 24, 2005  
Copyright 2005 State of Minnesota DNR

Last Observed Date: 17 August 1989  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 47' 49" Long: 93 32' 35"  
Precision: within 0.25 mile, confirmed  
DNR Region: 6  
Wildlife Area: 605  
Forestry District: 613

Voucher: Verification:  
1 ANODONTA GRANDIS GRANDIS, 1 LAMNIGONA COMPRESSA, 5 LEPTOGEA FRAGILIS, 4 POTAMILLUS CHIOENSIS, 1 TRUNCILLA DONACIFORMIS, 1 T. TRUNCATA.

Last Observed Date: 17 August 1989  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 47' 46" Long: 93 32' 41"  
Precision: within 0.25 mile, confirmed  
DNR Region: 6  
Wildlife Area: 605  
Forestry District: 613  
Voucher: Verification: verified

Last Observed Date: 06 July 1995  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 47' 25" Long: 93 33' 45"  
Precision: approx. boundaries have been determined  
DNR Region: 6  
Wildlife Area: 605  
Forestry District: 613

Voucher: Verification: verified  
RICH SPP DIV IN SHALLOW ZONE INCL/S SAGITTARIA LAT, POTAMOGETON SP, ELEGCHARIS, LACOPUS AMER, RUMEX CRU, SLU, & MERTHA. EXCEL CONDIT BUT BAND OF PHALARIS ON EDGES. S OF MINN RIVER IN MINN RIVER FLOODPLAIN.

Last Observed Date: 15 June 1995  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 48' 35" Long: 93 34' 0"  
Precision: approx. boundaries have been determined  
DNR Region: 6  
Wildlife Area: 723  
Forestry District: 613

Voucher: REIWE 1995 Verification: verified  
S. SALIX SP, INCL S. CANDIDA & CORNUS STOL. CONTAINS A GOOD DIVERSITY OF TYPICAL SPP. IN EXCELLENT CONDITION W/VIRTUALLY NO EXOTICS. SOIL IS DEEP, WELL HYDRATED FENT WITH MUCH WATER AT SURFACE. OCCURS AMONG AREAS OF HERB SWAMP & CAREX STRICTA MEADOWS W/IN LARGER COMPLEX OF WETLANDS. FEN STRONGLES COMPRESSA-CHASKA CORD BERRY W OF RR GRADE. IN MINN VALLEY OUTWASH BEDM AREA.

T116N R23W SW35 CARVER COUNTY, MN  
Element: CALCAREOUS SEDGE FEN (CENTRAL) PRAIRIE SUBTYPE #3  
S Rank: SU  
EO Size: 20 acres approx EO Rank: A Current Status: Intended Status:  
Site: SEMINARY FEN CBS Site #: 1  
Ownership: Private  
Managed Area(s): not managed or no record

Source: SMITH, N.R.; HARRIS, F. (CO BIOL SURVEY 1996)  
LARGE CALCAREOUS FEN SHOWING LITTLE SIGN OF DISTURBANCE. SEVERAL POCKETS OF SEDGE-DOMINATED HABITATS INTERSPERSED WITH TYPHA AND PHEASANTS-DOMINATED HABITATS. WITH CLADUM, ELBOCHAEIS ROSTELLATA, SCYLLARIA, RHYNCHOSPORA, VALERIANA, CYPRIPEIDIUM.  
Voucher: RELIEVES Verification: verified

Last Observed Date: 1995  
Quad Map: SHAWOPEE (S15D)  
Latitude: 44 48' 40" Long: 93 33' 18"  
Precision: approx. boundaries have been determined

DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613

T116N R23W SW35 CARVER COUNTY, MN  
Element: CAREX STERILIS (STERILE SEDGE) #105  
State Status: THREATENED  
EO Size:  
Site: SEMINARY FEN EO Rank: A Current Status: 0 Intended Status: 9  
CBS Site #: 1  
Ownership: Private  
Managed Area(s): not managed or no record

Source: HARRIS, F. & MOVCH, D. (95019)  
1000'S OF PLANTS LOCALLY DOMINANT IN LOW SEDGE "OPENINGS" SCATTERED THROUGHOUT APPROX 35 ACRES OF CALCAREOUS FEN. CO-OCCURRING WITH CAREX PRAIRIA, SCIRPUS ACUTUS, CAREX ISTRICINA, CARDAMINE BULBOSA, HYPOXIS HIRSA, & PARNASSIA GLAUCO. ON LARGE MOUND OF PEAT LOCATED AT FOOT OF NORTH SIDE OF MAIN RIVER VALLEY NORTH OF OLD SEMINARY BUILDING.  
Voucher: MN Verification: verified

Last Observed Date: 25 June 1995  
Quad Map: SHAWOPEE (S15D)  
Latitude: 44 48' 37" Long: 93 33' 23"  
Precision: within 0.25 mile, confirmed

DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613

T116N R23W NW35 CARVER COUNTY, MN  
Element: CAREX STERILIS (STERILE SEDGE) #106  
State Status: THREATENED  
EO Size:  
Site: BAQUET WMA EO Rank: C Current Status: 0 Intended Status: 9  
CBS Site #: 45  
Ownership: Private  
Managed Area(s): not managed or no record

Source: HARRIS, F. (SIGHT RECORD)  
SEVERAL HUNDRED PLANTS DOMINANT IN LOW SEDGE ZONE IN CALCAREOUS FEN ON SHALLOW, SW-FACING SLOPE ON SITE OF LARGE PEAT MOUND. OTHER DOMINANTS PRESENT INCLUDE CAREX PRAIRIA, CAREX SARTWELLI, AND MUEhlenBERGIA RICHARDSONIS. LOCATED JUST SW OF TWO RADIO TOWERS SOUTH OF HIGHWAY 212 ON OPPOSITE SIDE OF ROAD FROM OLD SEMINARY BUILDING.  
Voucher: Verification: slight or sound rec.

Last Observed Date: 06 July 1995  
Quad Map: SHAWOPEE (S15D)  
Latitude: 44 48' 28" Long: 93 33' 16"  
Precision: within 0.25 mile, confirmed

DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613

T116N R23W NW35 CARVER COUNTY, MN  
Element: CAREX STERILIS (STERILE SEDGE) #107  
State Status: THREATENED  
EO Size:  
Site: BAQUET WMA EO Rank: B Current Status: 0 Intended Status: 9  
CBS Site #: 45  
Ownership: Private  
Managed Area(s): not managed or no record

Source: HARRIS, F. (SIGHT RECORD)  
SEVERAL HUNDRED PLANTS DOMINANT IN LOW SEDGE ZONE IN CALCAREOUS FEN ON SHALLOW, SW-FACING SLOPE ON SITE OF LARGE PEAT MOUND. OTHER DOMINANTS PRESENT INCLUDE CAREX PRAIRIA, CAREX SARTWELLI, AND MUEhlenBERGIA RICHARDSONIS. LOCATED JUST SW OF TWO RADIO TOWERS SOUTH OF HIGHWAY 212 ON OPPOSITE SIDE OF ROAD FROM OLD SEMINARY BUILDING.  
Voucher: Verification: slight or sound rec.

Last Observed Date: 16 June 1995  
Quad Map: SHAWOPEE (S15D)  
Latitude: 44 48' 27" Long: 93 33' 27"  
Precision: within 0.25 mile, confirmed

DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613

T116N R23N SW35 CARVER COUNTY, MN  
Element: CALCAREOUS SEEPAGE FEN (CENTRAL) PRAIRIE SUBTYPE #3

S Rank: SU BO Rank: A  
EO Size: 20 acres approx BO Rank: A  
Site: SEMINARY FEN  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: SMITH, W.R.; HARRIS, F. (CO BIOL SURVEY 1955)  
LARGE CALCAREOUS FEN SHOWING LITTLE SIGN OF DISTURBANCE. SEVERAL POCKETS OF SEDGE-DOMINATED HABITATS INTERSPERSED WITH TYPHIA AND PEROGONITES-DOMINATED HABITATS. WITH CLADIUM, ELEOCHARIS ROSTKIIANA, SCELERIA, RHYNCHOCROBA, VALERIANA, CYPRIPELION.

Last Observed Date: 1995  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 48' 40" Long: 93 33' 18"  
Precision: approx. boundaries have been determined

Current Status: 0  
Intended Status: 9  
CBS Site #: 1

T116N R23N SW35 CARVER COUNTY, MN  
Element: CAREX STERILIS (STERILE SEDGE) #105  
State Status: THREATENED

Last Observed Date: 15 June 1995  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 48' 37" Long: 93 33' 23"  
Precision: within 0.25 mile, confirmed

EO Rank: A  
Current Status: 0  
Intended Status: 9  
CBS Site #: 1

Site: SEMINARY FEN  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: HARRIS, F. & NOVICH, D. (1950/19)  
1000'S OF PLANTS LOCALLY DOMINANT IN LOW SEDGE "OPENINGS" SCATTERED THROUGHOUT APPROX 35 ACRES OF CALCAREOUS FEN. CO-OCCURRING WITH CAREX PRAIRIEA, SCIRPUS ACUTUS, CAREX TESTANICA, CARDAMUMS SULCATA, HYPOXIS HIRSUTA & PARNASSIA GLAUCA. ON LARGE MOUND OF PEAT LOCATED AT FOOT OF NORTH SIDE OF MINN RIVER VALLEY NORTH OF OLD SEMINARY BUILDING.

T116N R23N NW35N35 CARVER COUNTY, MN  
Element: CAREX STERILIS (STERILE SEDGE) #106  
State Status: THREATENED

Last Observed Date: 06 July 1995  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 48' 28" Long: 93 33' 16"  
Precision: within 0.25 mile, confirmed

EO Rank: C  
Current Status: 0  
Intended Status: 9  
CBS Site #: 45

Site: RAQUET WMA  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: HARRIS, F. (SIGHT RECORD)  
PLANTS LOCALLY ABUNDANT (50-100 PLANTS) IN OPENING ON PEAT SOIL, WITH LYSIMACHIA QUADRIFLORA, CAREX HYSTERICINA, CIRSIUM MUCICUM, AND SENECEO SP. LOCATED JUST TO SW OF OLD SEMINARY BARN SOUTH OF HWY 212.

Voucher: MIN  
Verification: verified

Voucher:  
Verification: eight or sound rec.

T114N R23N NW35N35 CARVER COUNTY, MN  
Element: CAREX STERILIS (STERILE SEDGE) #107  
State Status: THREATENED

Last Observed Date: 16 June 1995  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPEE (S15D)  
Latitude: 44 48' 27" Long: 93 33' 27"  
Precision: within 0.25 mile, confirmed

EO Rank: B  
Current Status: 0  
Intended Status: 9  
CBS Site #: 45

Site: RAQUET WMA  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: HARRIS, F. (SIGHT RECORD)  
SEVERAL HUNDRED PLANTS DOMINANT IN LOW SEDGE ZONE IN CALCAREOUS FEN ON SHALLOW, SW-FACING SLOPE ON SIDE OF LARGE PEAT MOUND. OTHER DOMINANTS PRESENT INCLUDE CAREX PRAIRIEA, CAREX SARTWELLII, AND MULLERBERGIA RICHARDSONIS. LOCATED JUST SW OF TWO RADIO TOWERS SOUTH OF HIGHWAY 212 ON OPPOSITE SIDE OF ROAD FROM OLD SEMINARY BUILDING.

Voucher:  
Verification: eight or sound rec.

T116N R23W SEMW35 CARVER COUNTY, MN  
Element: CLADIM MAGSCOIDES (TNG-RUSH) #35  
State Status: SPECIAL CONCERN  
EO Size: EO Rank: C Current Status: Intended Status:  
Site: SEMINARY FEN CBS Site #: 1  
Ownership: Owner unknown  
Managed Area(s): not managed or no record  
Source: SMITH, M.R. (22009)  
AT THE BASE OF A STEEP S-FACING SLOPE IN THE NW RIVER VALLEY, ABOUT 3 MILES NE OF CHASKA. CALCAREOUS FEN; PH 7.4, MIXTURE OF PEAT AND TRAVERTINE. ONE CLONE ABOUT 4 METERS ACROSS.

T116N R23W NENSW35 CARVER COUNTY, MN  
Element: CYPRIPEDIUM COMIDUM (SMALL WHITE LADY'S-SLIPPER) #261  
State Status: SPECIAL CONCERN  
EO Size: EO Rank: C Current Status: 0 Intended Status: 9  
Site: SEMINARY FEN CBS Site #: 1  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: HERRIS, P. (95017)  
SMALL, WIDELY-SCATTERED CLUMPS OF PLANTS PRESENT IN CALCAREOUS FEN ON LARGE PEAT MOUND AT FOOT OF N SIDE OF MINN RIVER VALLEY. WITH CAREX STERILIS, CAREX PEABRIA, LYSIMACHIA QUADRIFLORA, SOLIDAGO RIDGELII, AND CORDYLINE BULBOSA. SITE OF POPULATION UNKNOWN.

T116N R23W SEMW35 CARVER COUNTY, MN  
Element: ELBOCHARIS ROTELLATA (BEAKED SPIKE-RUSH) #11  
State Status: THREATENED EO Rank: B Current Status: Intended Status:  
EO Size: EO Rank: B Current Status: CBS Site #: 1  
Site: SEMINARY FEN  
Ownership: Owner unknown  
Managed Area(s): not managed or no record  
Source: SMITH, M.R. (22013)  
AT THE BASE OF A STEEP S-FACING SLOPE IN THE NW RIVER VALLEY, ABOUT 3 MILES NE OF CHASKA. CALCAREOUS FEN; PH 7.4, MIXTURE OF PEAT AND TRAVERTINE. LOCALLY ABUNDANT.

T116N R23W MW35 CARVER COUNTY, MN  
Element: MAPLE-BASSWOOD FOREST (BIG WOODS) #139  
S Rank: S2  
EO Size: 20 acres approx EO Rank: BC Current Status: Intended Status:  
Site: SEMINARY FEN CBS Site #: 1  
Ownership: Private  
Managed Area(s): not managed or no record  
Source: MOUNDA, D.S. (CD BICE SURVEY 1995)  
MAPLE-BASSWOOD FOREST IN SHALLOW SAVINE. CANOPY DOM BY TALL STRAIGHT 50-70CM DBH ACER SACCH & QUERCUS RUB; OCCAS Q. RUB TO 95CM. SOME LARGE OMS. SUBCANOPY ABSENT EXCEPT BENEATH CANOPY GAPS. SHRUB LAYER GENERALLY SPARSE. GROUND LAYER W/ CIRCERA, ABIESMA, HYDROPHYLLUM & PATCHES OF LAPONIETA. OCCAS LARGE DICKEYING LOG. DARK LOMY SOILS W/THIN HUMUS LAYER. COMTN 1" LITTER. STOMES PRESENT IN SOME PARTS. DRAIN PIPE FROM ABOVE. SOME EROSION. GRASED IN PAST.

Last Observed Date: 11 September 1992  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPPE (S1SD)  
Latitude: 44 48' 47" Long: 93 33' 20"  
Precision: within 0.25 mile, confirmed

Voucher: MIN Verification: verified

Last Observed Date: 15 June 1995  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPPE (S1SD)  
Latitude: 44 48' 39" Long: 93 33' 23"  
Precision: within 0.25 mile, confirmed

Voucher: MIN Verification: verified

Last Observed Date: 11 September 1992  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPPE (S1SD)  
Latitude: 44 48' 47" Long: 93 33' 19"  
Precision: within 0.25 mile, confirmed

Voucher: MIN Verification: verified

Last Observed Date: 29 June 1995  
DNR Region: 6  
Wildlife Area: 610  
Forestry District: 613  
Quad Map: SHAKOPPE (S1SD)  
Latitude: 44 48' 56" Long: 93 33' 19"  
Precision: approx. boundaries have been determined

Voucher: Verification: verified

TILSON R21W SENN35 CARVER COUNTY, MN  
 Element: DANAX QUINQUEVULVUS (AMERICAN GINSENG) #198  
 State Status: SPECIAL CONCERN  
 EO Site: EO Rank: C Current Status: Intended Status:  
 Site: BLUFF CREEK CBS Site #: 2  
 Ownership: Private  
 Managed Area(s): not managed or no record  
 Source: HARRIS, P. (SIGHT RECORD)  
 SMALL CLUSTER OF PLANTS OBSERVED IN RICH MAPLE-BASSWOOD FOREST AT MIDSLOPE ON VERY STEEP N-FACING SLOPE ALONG S SIDE OF BLUFF CREEK. LANDOWNER SAYS PLANTS HAVE BEEN HARVESTED IN PAST BY A COLLECTOR. ASSOCIATED SPF INCL DICENTRA CUC, HEPATICA ACUT, TRILLIUM FLEX, ANASON CAN. FULL EXTENT OF POPULATION NOT KNOWN.

TILSON R21W SENN35 CARVER COUNTY, MN  
 Element: RHYNCHOPORA CAPILLARIS (HAIR-LIKE BEAK-RUSH) #65  
 State Status: THREATENED  
 EO Site: EO Rank: B Current Status: 1 Intended Status: 9  
 Site: SEMINARY FEN CBS Site #: 1  
 Ownership: Owner unknown  
 Managed Area(s): not managed or no record  
 Source: SMITH, M.R. (18080)  
 AT THE BASE OF A STEEP S-FACING SLOPE IN THE NW RIVER VALLEY, ABOUT 3 MILES NE OF CHASKA. CALCAREOUS FEN, PH 7.4, MIXTURE OF PEAT AND TRAVERTINE. LOCALLY ABUNDANT IN PATCHES DOMINATED BY LOW SEDGES.

TILSON R21W SENN35 CARVER COUNTY, MN  
 Element: SCLERIA VERTICILLATA (WHORLED NUT-RUSH) #20  
 State Status: THREATENED  
 EO Site: EO Rank: B Current Status: 1 Intended Status: 9  
 Site: SEMINARY FEN CBS Site #: 1  
 Ownership: Owner unknown  
 Managed Area(s): not managed or no record  
 Source: SMITH, M.R. (18079)  
 AT THE BASE OF A STEEP S-FACING SLOPE IN THE NW RIVER VALLEY, ABOUT 3 MILES NE OF CHASKA. CALCAREOUS FEN, PH 7.4, MIXTURE OF PEAT AND TRAVERTINE. LOCALLY ABUNDANT IN PATCHES DOMINATED BY LOW SEDGES.

TILSON R21W SENN35 CARVER COUNTY, MN  
 Element: VALESIANA EDULIS VRS. CILIATA (VALESIAN) #47  
 State Status: THREATENED  
 EO Site: EO Rank: C Current Status: Intended Status:  
 Site: SEMINARY FEN CBS Site #: 1  
 Ownership: Owner unknown  
 Managed Area(s): not managed or no record  
 Source: SMITH, M.R. (22011)  
 AT THE BASE OF A STEEP S-FACING SLOPE IN THE NW RIVER VALLEY, ABOUT 3 MILES NE OF CHASKA. CALCAREOUS FEN, PH 7.4, MIXTURE OF PEAT AND TRAVERTINE. INFREQUENT.

Last Observed Date: 06 June 1995  
 Quad Map: SHAKOPEE (S15D)  
 Latitude: 44 49' 5" Long: 93 32' 50"  
 Precision: within 0.25 mile, confirmed  
 Voucher: Verification: sight of sound rec.  
 Last Observed Date: 28 August 1990  
 Quad Map: SHAKOPEE (S15D)  
 Latitude: 44 48' 57" Long: 93 33' 12"  
 Precision: within 0.25 mile, confirmed  
 Voucher: MIN Verification: verified  
 Last Observed Date: 28 August 1990  
 Quad Map: SHAKOPEE (S15D)  
 Latitude: 44 48' 57" Long: 93 33' 12"  
 Precision: within 0.25 mile, confirmed  
 Voucher: MIN Verification: verified  
 Last Observed Date: 11 September 1992  
 Quad Map: SHAKOPEE (S15D)  
 Latitude: 44 48' 45" Long: 93 33' 21"  
 Precision: within 0.25 mile, confirmed  
 Voucher: MIN Verification: verified

**Heather Nelson, Heartland Engr**

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**From:** Nick\_Rowse@fws.gov  
**Sent:** Wednesday, April 13, 2005 1:44 PM  
**To:** Heather Nelson, Heartland Engr  
**Subject:** ER's for Victoria, Credit River, and Chanhassen substations

Dear Heather:

This responds to three proposals by Minnesota Valley Electric Cooperative to construct substations in Victoria (HES Project No. 230174), in Credit River (HES Project No. 230083), and in Chanhassen (HES Project No. 240118). You requested comments from the Fish and Wildlife Service. The bald eagle (*Haliaeetus leucocephalus*), which is federally threatened, is documented to nest in Carver, Hennepin, and Scott Counties and the Higgins eye pearl mussel (*Lampsilis higginsii*), which is federally endangered, is documented in the Minnesota River up from Pike Island. Given the location and type of activity proposed, we will concur with your determination of not likely to adversely affect any federally listed species for the above sites because the sites are not within areas with known nesting bald eagles or near Higgins eye pearl mussels. This precludes the need for further action on this project as required under section 7 of the Endangered Species Act of 1973, as amended. However, if the project is modified or new information becomes available which indicates that listed species may occur in the affected areas, consultation with this office should be reinitiated.

We appreciate the opportunity to comment and look forward to working with you in the future. If you have questions regarding our comments, please call me at (612) 725-3548, extension 210.

Sincerely,  
Nick Rowse  
Field Biologist  
Twin Cities Field Office  
U.S. Fish and Wildlife Service  
4101 American Boulevard E.  
Bloomington, MN 55425-1665

