

It is important to note that state highway standards set the minimum requirements. According to Minnesota Rules Chapter 8820.9920, "Engineering judgment may be used to choose a lane-width or shoulder-width dimension other than the widths indicated in the chart for roadways. Factors to consider may be safety, speed, population/land use, benefit/cost analysis, traffic mix, farm equipment, environmental impacts, terrain limitations, bicycle traffic, pedestrian traffic, other nonmotorized uses, functional classification, or other factors."

Typical sections of the existing and proposed roadway, a profile of the proposed roadway, and typical sections of the bridge are included in Appendix C.

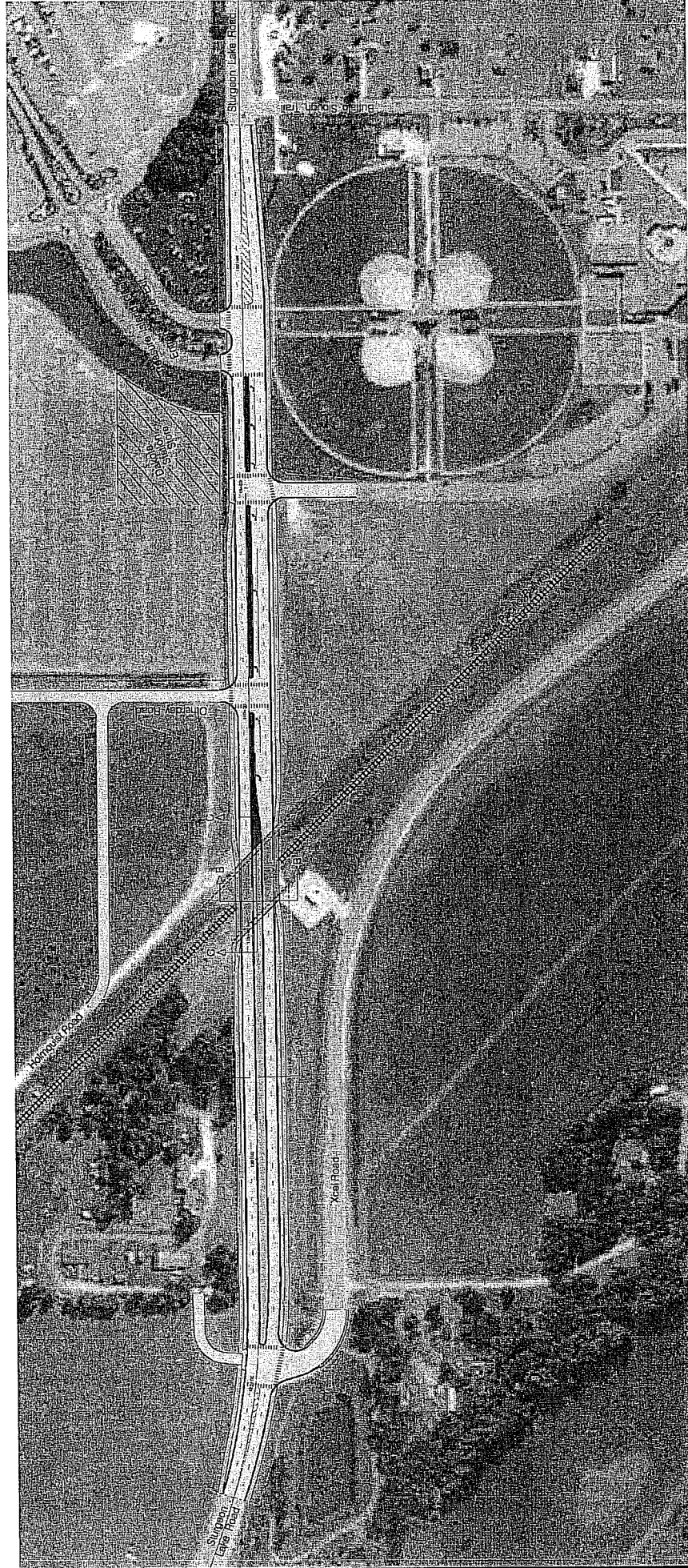
During the early stages of the preliminary design process, a bridge study was conducted (a copy of the bridge study may be obtained by contacting the Prairie Island Indian Community or City of Red Wing). The study concluded that a steel plate girder bridge type would be most appropriate for this project (as compared to a prestressed concrete beam bridge, for example) due to the fact that the depth of structure is less for a steel plate girder bridge. The shallower structure afforded by a steel plate girder bridge reduces the overall structure height, reduces the grades on the approaches, reduces the amount of fill required for the approaches, and reduces the footprint of the project. In addition, since the visual impact of the bridge was a concern expressed by residents in the area, it was considered prudent to take all reasonable measures to minimize the height of the structure.

The decision to include a sidewalk on the north side of the bridge and a paved multi-use trail on the south side of the bridge was made in response to the concerns of the community regarding the volume of non-vehicular traffic in the area. See discussion under Question 25c in the EAW section of this document.



## Figures





# Proposed Roadway Alignment Turtle Alternative

Sturgeon Lake Road Overpass  
Environmental Assessment

N  
↑ No Scale

Figure 3-A



Z

No Scale

### Figure 3-B



## **Appendix A – Agency Correspondence**



August 8, 2005

Endangered Species Environmental Review Coordinator  
Section of Ecological Resources  
**MINNESOTA DEPARTMENT OF NATURAL RESOURCES**  
500 Lafayette Road, Box 25  
St. Paul, MN 55155

**SUBJECT: Prairie Island Indian Community  
Sturgeon Lake Road (MSAS 104) Overpass  
S.P. 91-104-01**

To Whom It May Concern:

The Prairie Island Indian Community is in the process of developing the project documentation for roadway improvements at the current at-grade intersection of Sturgeon Lake Road and the Canadian Pacific Railway (CPR) rail line in the northern part of the City of Red Wing. This letter is a request for your review for threatened and endangered species in the project area.

The planned improvements include the construction of a grade-separated crossing (bridge) over the CPR line and associated improvements to the roadway. In compliance with State-Aid requirements, an Environmental Assessment/Environmental Assessment Worksheet (EA/EAW) is being prepared to describe the proposed project. The information you provide will be incorporated into the EA/EAW.

The project lies within the following sections:

Township	Range	Section(s)
114N	15W	South Half of 31
113N	15W	North Half of 6

I have enclosed a data request form and a map of the project area. If you need any additional information for your review, please contact me at 763-278-5911 or via e-mail at [scott.reed@hdrinc.com](mailto:scott.reed@hdrinc.com).

Thank you for your assistance on this project.

Sincerely,

HDR Engineering, Inc.



Scott M. Reed, P.G.  
Senior Environmental Scientist

Enclosures

C:  
Mr. Rick Elberts, Prairie Island Indian Community

File

HDR Engineering, Inc.

6190 Golden Hills Drive  
Minneapolis, MN 55416

Phone: (763) 591-5400  
Fax: (763) 591-5413  
[www.hdrinc.com](http://www.hdrinc.com)

For Agency Use Only:

Received \_\_\_\_\_ Due \_\_\_\_\_ RUSH

Related ES# \_\_\_\_\_

Search Radius \_\_\_\_\_ mi. ER/All EOs \_\_\_\_\_

Quads \_\_\_\_\_

Map'd \_\_\_\_\_ C / NoC Let \_\_\_\_\_ Inv \_\_\_\_\_ Log out \_\_\_\_\_

## MINNESOTA NATURAL HERITAGE INFORMATION SYSTEM DATA REQUEST FORM

DATE OF REQUEST August 8, 2005

### WHO IS REQUESTING THE INFORMATION?

Name and Title Scott M. Reed, P.G.

Agency/Company HDR Engineering, Inc.

Address 6190 Golden Hills Drive, Minneapolis, MN 55416

(Street)

(City)

(State)

(Zip Code)

Phone 763-278-5911 FAX 763-591-5413 e-mail scott.reed@hdrinc.com

THIS INFORMATION IS BEING REQUESTED ON BEHALF OF (if applicable): Prairie Island Indian Community - Sturgeon Lake Road Overpass Project - S.P. 94-104-01

### WHAT INFORMATION DO YOU NEED?

☒ Printouts of known occurrences of federally and state listed plants and animals; native plant communities; and aggregation sites such as bat hibernacula, colonial waterbird nesting sites, and prairie chicken booming grounds.

☒ Information listed above, plus geological features and state rare species with no legal status.

☐ Other (specify): \_\_\_\_\_

Frequent applicants: Check here if you DO NOT need a copy of the field-by-field explanation of the printouts: \_\_\_\_\_

WHERE IS THE AREA OF INTEREST? 1) **ENCLOSE A MAP** showing detailed boundaries of the project area (topographic or aerial photos are preferred). 2) If a GIS shapefile of the project area is available, please provide a copy.

For Agency Use  
Only:

### PROVIDE THE FOLLOWING REQUIRED PROJECT INFORMATION

REGION

County Goodhue Twnshp# T 114 N Range# 15 W Section(s) (and half-section, quarter-section, etc., if known) South Half of Section 31

Goodhue T 113 N 15 W North Half of Section 6

Project Name Proposed Sturgeon Lake Road Overpass

Project Proposer Prairie Island Indian Community

Detailed Project Description (attach additional sheets if necessary) \_\_\_\_\_

The Prairie Island Indian Community is exploring options for the construction of a grade-separated crossing at the current at-grade intersection of the Canadian Pacific Railway line and Sturgeon Lake Road.

The current and proposed future traffic levels on both the road and the rail line make this crossing a safety concern, especially considering that Sturgeon Lake Road is the only improved access to the Prairie Island Indian Community.

Past Land-Use of Project Site The project area has been used for transportation, agricultural, and rural residential purposes for the past several years.

(OVER)

HOW WILL THE INFORMATION BE USED? Describe the planned use of the information, including in what form and detail you wish to publish this information, if any. The information provided by the DNR NHIS will be used for the completion of a Federal Environmental Assessment/State Environmental Assessment Worksheet document. Only appropriate information will be made available for public review.

#### TURN-AROUND TIME

Requests generally take 2 to 3 weeks from date of receipt to process, and are processed in the order received. Rush requests are processed in 2 weeks or less.

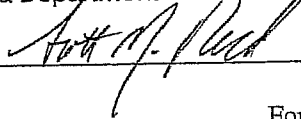
#### FEES

For-profit organizations, including consultants working for governmental agencies, are charged a fee for this service. In addition, a fee may be charged for large requests from any source. A surcharge (currently \$50) is applied for rush orders; if this is a rush order, please check the blank below. Fees subject to change. A fee schedule is available upon request. Please do not include payment with your request; an invoice will be sent to you.

☒ Rush

"The information supplied above is complete and accurate. I understand that material supplied to me from the Minnesota Natural Heritage Information System is copyrighted and that I am not permitted to reproduce or publish any of this copyrighted material without prior written permission from the Minnesota DNR. Further, if permission to publish is given, I understand that I must credit the Minnesota Natural Heritage and Nongame Research Program, Minnesota Department of Natural Resources as the source of the material."

Signature



Mail or email completed forms to:

For further information call:

Endangered Species Environmental Review Coordinator (for project reviews) (651) 296-7863 or 296-8279  
Sarah.hoffmann@dnr.state.mn.us

or

Assistant Database Manager (for general requests) (651) 296-8324  
Sharron.nelson@dnr.state.mn.us

at

Natural Heritage and Nongame Research Program  
Minnesota Department of Natural Resources  
500 Lafayette Road, Box 25  
St. Paul, Minnesota 55155

Or FAX completed forms to: (651) 296-1811

Additional information about the Natural Heritage & Nongame Research Program is available at  
[http://www.dnr.state.mn.us/ecological\\_services/nhnrp/index.html](http://www.dnr.state.mn.us/ecological_services/nhnrp/index.html)

For Agency Use Only:

EO's requiring comment \_\_\_\_\_

Sources contacted	Topic	Response
_____	_____	_____
_____	_____	_____
_____	_____	_____

Response Summary \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Responder \_\_\_\_\_



Proposed Sturgeon Lake Road  
Overpass  
S.P. 91-104-01

Sturgeon Lake

Treasure Island  
Resort & Casino

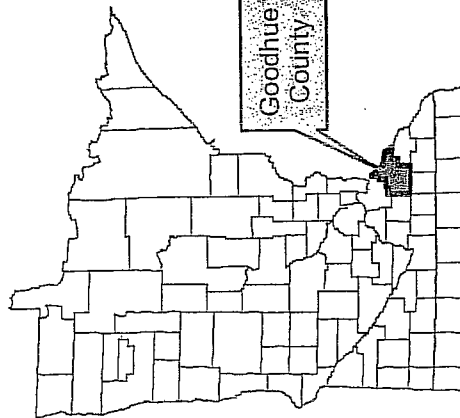
Sturgeon Lake Road

Prairie Island  
Nuclear Generating  
Plant

Canadian Pacific Railway

Prairie Island Boulevard (CSAH 18)

Project Area



Goodhue  
County





# 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

RECEIVED

AUG 22 2005

HDR Engineering, Inc.

August 17, 2005

Mr. Scott Reed  
HDR Engineering, Inc.  
6190 Golden Hills Drive  
Minneapolis, MN 55416

Re: Request for Natural Heritage information for vicinity of proposed Sturgeon Lake Road Overpass,  
T114N R15W Section 31 & T113N R15W Section 6, Goodhue County  
NHNRP Contact #: ERDB 20060132

Dear Mr. Reed,

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 31 known occurrences of rare species or native plant communities in the area searched (for details, see enclosed database printout and explanation of selected fields). Following are specific comments for **only those elements that may be impacted** by the proposed project. Rare feature occurrences not listed below are not anticipated to be affected by the proposed project.

- Blanding's Turtles (*Emydoidea blandingii*), a state-listed threatened species, are reported from the vicinity of the project area. For your information, I have attached a fact sheet and a flyer about the Blanding's Turtle. The fact sheet is intended to provide you with background information regarding habitat use, life history, and reasons for the species' decline, as well as recommendations for avoiding and minimizing impacts to this rare turtle. As you will note, there are two lists of recommendations. The first list contains recommendations to prevent harm to turtles during construction work, and is relative to all areas inhabited by Blanding's Turtles. Please refer to this first list of recommendations for your project. The second column expands on the first column, and contains greater protective measures to be considered for areas known to be of state-wide importance to Blanding's Turtles, or any area where greater protection for turtles is desired. Your project area is not within one of these priority areas. The flyer, which should be given to all contractors working in the area, contains an illustration and description of the Blanding's Turtle, as well as a summary of the recommendations provided in the fact sheet.

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, native plant 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 Goodhue County. Our information about native plant 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-

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ING	PRIMARY SECTION	PED	MN STATUS	S RANK	ELEMENT and OCCURRENCE NUMBER	MANAGED AREA
115W 05				S2	DRY OAK SAVANNA (SOUTHEAST) SAND-GRAVEL SUBTYPE #9	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 05		THR			FALCO PEREGRINUS (PEREGRINE FALCON) #66	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 06		NON			ARISMA DRACONTIUM (GREEN DRAGON) #17	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 06		SPC			DENDROICA CERULEA (GERULEAN WARBLER) #40	R.J.DORER STATE FOREST
115W 06				S2	FLOODPLAIN FOREST #57	R.J.DORER STATE FOREST
115W 06	LT	SPC			HALLAETUS LEUCOCERPHALUS (BALD EAGLE) #1722	R.J.DORER STATE FOREST
115W 06	LT	SPC			HALLAETUS LEUCOCERPHALUS (BALD EAGLE) #2142	R.J.DORER STATE FOREST
115W 06		NON		S2	LYCOPUS VIRGINICUS (VIRGINIA WATER HOREHOUND) #11	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 06				S2	MIXED EMERGENT MARSH (PRAIRIE) #19	R.J.DORER STATE FOREST
115W 08	LT	SPC			HALLAETUS LEUCOCERPHALUS (BALD EAGLE) #1532	R.J.DORER STATE FOREST
115W 08		SPC		S2	MAPLE-BASSWOOD FOREST (SOUTHEAST) #55	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 08		SPC			PANAX QUINQUEFOLIUS (AMERICAN GINSENG) #84	R.J.DORER STATE FOREST (STATUTORY ENDRY)
116W 01		SPC		S2	HESPERIA LEONARDUS LEONARDUS (LEONARD'S SKIPPER) #14	R.J.DORER STATE FOREST
116W 01				S2	MAPLE-BASSWOOD FOREST (SOUTHEAST) #28	R.J.DORER STATE FOREST
116W 01		SPC			PANAX QUINQUEFOLIUS (AMERICAN GINSENG) #83	R.J.DORER STATE FOREST (STATUTORY ENDRY)
116W 12				S2	OAK FOREST (SOUTHEAST) MESIC SUBTYPE #36	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 29		SPC			ACTIPENSER FULVESCENS (LAKE STURGEON) #206	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 29		SPC			CYCLEPTUS ELONGATUS (BLUE SUCKER) #61	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 29		SPC			CYCLEPTUS ELONGATUS (BLUE SUCKER) #81	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 29		SPC			HALLAETUS LEUCOCERPHALUS (BALD EAGLE) #1305	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 30	LT	SPC			CYCLEPTUS ELONGATUS (BLUE SUCKER) #80	R.J.DORER STATE FOREST (STATUTORY ENDRY)
115W 30				S2	FLOODPLAIN FOREST #54	
115W 31		NON			ELAPHE VULPINA (FOX SNAKE) #83	PRAIRIE ISLAND RESERVATION
115W 31		THR			EMYDOIDEA BLANDINGII (BLANDING'S TURTLE) #718	PRAIRIE ISLAND RESERVATION
115W 31				S2	FLOODPLAIN FOREST #53	GOES WMA
115W 31				S2	MIXED EMERGENT MARSH (PRAIRIE) #13	PRAIRIE ISLAND RESERVATION
115W 32		SPC			CYCLEPTUS ELONGATUS (BLUE SUCKER) #82	
115W 32		NON			OPSOPODUS EMILIAE (PUGNOSSE MINNOW) #99	
115W 32		THR			POLYDON SPATHULA (PADDLEFISH) #22	
116W 36				S2	DRY OAK SAVANNA (SOUTHEAST) SAND-GRAVEL SUBTYPE #2	R.J.DORER STATE FOREST (STATUTORY ENDRY)
116W 36		NON			REITHRODONTOMYS MEGALOTIS (WESTERN HARVEST MOUSE) #7	R.J.DORER STATE FOREST (STATUTORY ENDRY)

# Rare Features Database Print-outs: An Explanation of Fields

The Rare Features database is part of the Natural Heritage Information System, and is maintained by the Natural Heritage and Nongame Research Program, a unit within the Division of Ecological Services, Minnesota Department of Natural Resources (DNR).

*\*\*Please note that the print-outs are copyrighted and may not be reproduced without permission\*\**

**Field Name:** [Full (non-abbreviated) field name, if different]. Further explanation of field.

## -C-

**CBS Site:** [County Biological Survey site number]. In each county, the numbering system begins with 1.

**CLASS:** A code which classifies features by broad taxonomic group: NC = natural community; SA = special animal; SP = special plant; GP = geologic process; GT = geologic time; OT = other (e.g. colonial waterbird colonies, bat hibernacula).

**Cty:** [County]. Minnesota counties (ordered alphabetically) are numbered from 1 (Aitkin) to 87 (Yellow Medicine).

**CURRENT STATUS:** Present protection status, from 0 (owner is not aware of record) to 9 (dedicated as a Scientific and Natural Area).

## -D-

**DNR Region:** 1=NW, 2=NE, 3=E Central, 4=SW, 5=SE, 6= Minneapolis/St. Paul Metro.

**DNR Quad:** [DNR Quadrangle code]. DNR-assigned code of the U.S. Geologic Survey topographic map on which the rare feature occurs.

## -E-

**ELEMENT** or **Element:** See **AElement Name (Common Name)@**

**Element Name (Common Name):** The name of the rare feature. For plant and animal species records, this field holds the scientific name, followed by the common name in parentheses; for all other elements (such as plant communities, which have no scientific name) it is solely the element name.

**EO RANK:** [Element Occurrence Rank]. An evaluation of the quality and condition of natural communities from A (highest) to D (lowest).

**EO Size:** [Element Occurrence Size]. The size in acres (often estimated) of natural communities.

## -F-

~~**FED STATUS:** [Federal Status]. Status of species under the Federal Endangered Species Law. LB=endangered,~~

~~LT=threatened, C=species which have been proposed for federal listing.~~

~~**Federal Status:** See **A-FED STATUS@**~~

~~**Forestry District:** The Minnesota DNR=s Division of Forestry district number.~~

## -G-

**GLOBAL RANK:** The abundance of an element globally, from G1 (critically imperiled due to extreme rarity on a world-wide basis) to G5 (demonstrably secure, though perhaps rare in parts of its range). Global ranks are determined by the Conservation Science Division of The Nature Conservancy.

## -I-

**INTENDED STATUS:** Desired protection status. See also **ACURRENT STATUS@**. If a complete list of protection status codes is needed, please contact the Natural Heritage Program.

## -L-

**LAST OBSERVED** or **Last Observed Date** or **Last Observation:** Date of the most recent record of the element at the location.

**Latitude:** The location at which the occurrence is mapped on Natural Heritage Program maps. NOTE: There are various levels of precision in the original information, but this is not reflected in the latitude/longitude data. For some of the data, particularly historical records, it was not possible to determine exactly where the original observation was made (e.g. "Fort Snelling", or "the south shore of Lake Owasso"). Thus the latitude/longitude reflect the mapped location, and not necessarily the observation location.

**Legal:** Township, range and section numbers.

**Long:** [Longitude]. See NOTE under **ALatitude@**

## -M-

**MANAGED AREA** or **Managed Area(s):** Name of the federally, state, locally, or privately managed park, forest, preserve, etc., containing the occurrence, if any. If this field is blank, the element probably occurs on private land. If "(STATUTORY BOUNDARY)" occurs after the name of a managed area, the location may be a private inholding within the statutory boundary of a state forest or park.

**Map Sym:** [Map Symbol].

**MN STATUS:** [Minnesota Status]. Legal status of plant and animal species under the Minnesota endangered species law:

## Environmental Review Fact Sheet Series

### Endangered, Threatened, and Special Concern Species of Minnesota

#### Blanding's Turtle (*Emydoidea blandingii*)

Minnesota Status: Threatened  
Federal Status: none

State Rank<sup>1</sup>: S2  
Global Rank<sup>1</sup>: G4

#### HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (cattails, water lilies, etc.) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

#### LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding's turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

#### IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade\* and road kills during seasonal movements
- increase in predator populations (skunks, racoons, etc.) which prey on nests and young

\*It is illegal to possess this threatened species.

ROADS cont.	
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.	Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).
Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).	Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.
Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.	Roads crossing streams should be bridged.
UTILITIES	
Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).	
Below-ground utility construction sites should be returned to original grade (trenches can trap turtles).	
LANDSCAPING AND VEGETATION MANAGEMENT	
Terrain should be left with as much natural contour as possible.	As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).
Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).	Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1 <sup>st</sup> and before June 1 <sup>st</sup> ).	Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads).

**Protecting Blanding's Turtle Nests:** Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is *very important* that the fencing be removed **before August 1<sup>st</sup>** so the young turtles can escape from the nest when they hatch!

### REFERENCES

- <sup>1</sup>Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). <http://www.natureserve.org/ranking.htm> (15 April 2001).
- Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

## SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

*(see Environmental Review Fact Sheet Series for full recommendations)*

- A flyer with an illustration of an adult Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest, and do not allow pets near the nest.
- Blanding's turtles do not make good pets. It is illegal to keep this threatened species in captivity.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled.

---

Erosion should be prevented to keep sediment from reaching wetlands and lakes.

- ~~• Roads should be kept to minimum standards on widths and lanes.~~
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- ~~• Below-ground utility construction sites should be returned to original grade.~~
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1<sup>st</sup> and before June 1<sup>st</sup>).

August 8, 2005

Mr. Jason Alcott  
Minnesota Department of Transportation  
Office of Environmental Services  
395 John Ireland Boulevard  
St. Paul, MN 55155-1899

**SUBJECT:** Prairie Island Indian Community  
Sturgeon Lake Road (MSAS 104) Overpass  
S.P. 91-104-01

To Whom It May Concern:

The Prairie Island Indian Community is in the process of developing the project documentation for roadway improvements at the current at-grade intersection of Sturgeon Lake Road and the Canadian Pacific Railway (CPR) rail line in the northern part of the City of Red Wing. This letter is a request for your review for threatened and endangered species in the project area.

The planned improvements include the construction of a grade-separated crossing (bridge) over the CPR line and associated improvements to the roadway. In compliance with State-Aid requirements, an Environmental Assessment/Environmental Assessment Worksheet (EA/EAW) is being prepared to describe the proposed project. The information you provide will be incorporated into the EA/EAW.

The project lies within the following sections:

Township	Range	Section(s)
114N	15W	South Half of 31
113N	15W	North Half of 6

I have enclosed a data request form and a map of the project area. If you need any additional information for your review, please contact me at 763-278-5911 or via e-mail at [scott.reed@hdrinc.com](mailto:scott.reed@hdrinc.com).

Thank you for your assistance on this project.

Sincerely,

HDR Engineering, Inc.

  
Scott M. Reed, P.G.  
Senior Environmental Scientist

Enclosures

c:  
Mr. Rick Elberts, Prairie Island Indian Community  
File

HDR Engineering, Inc.

6190 Golden Hills Drive  
Minneapolis, MN 55416

Phone: (763) 591-5400  
Fax: (763) 591-5413  
[www.hdrinc.com](http://www.hdrinc.com)

Proposed Sturgeon Lake Road  
Overpass  
S.P. 91-104-01

Sturgeon Lake

Treasure Island  
Resort & Casino

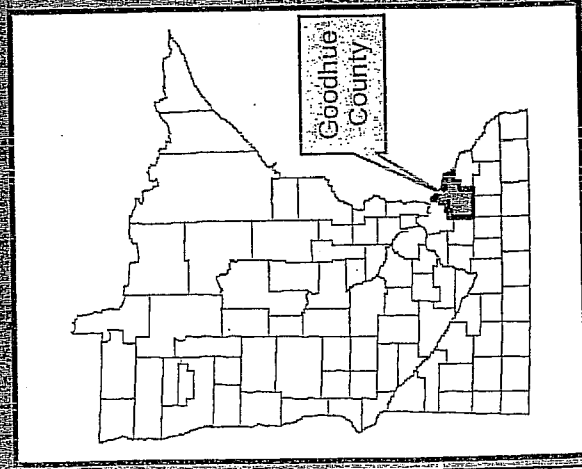
Sturgeon Lake Road

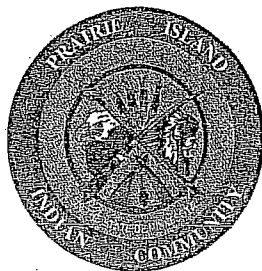
Prairie Island  
Nuclear Generating  
Plant

Canadian Pacific Railway

Prairie Island Boulevard (CSAH 1B)

Project Area





October 3, 2005

Dr. Greg Busacker  
Office of Environmental Services  
Minnesota Department of Transportation  
395 John Ireland Boulevard – M.S. 620  
Saint Paul, MN 55155

RE: State Project No.: S.P. 91-104-01  
Federal Project No.: PLHD 2504 (160)  
Proposed Sturgeon Lake Road Overpass, Prairie Island Indian Community

Subject: Bald Eagle Nesting Site

Dear Dr. Busacker:

During preliminary coordination with the Mn/DOT Office of Environmental Services (OES) and the United States Fish and Wildlife Service (USFWS) on the referenced project, a bald eagle nesting location was identified. The USFWS has expressed some concern regarding the potential for impacts to the nesting location. The primary concern is that the noise associated with the construction of an overpass on Sturgeon Lake Road at the Canadian Pacific Rail line could cause a failed nesting event.

To address this concern, the Prairie Island Indian Community (PIIC) has evaluated potential construction activities and reviewed the Minnesota Department of Natural Resources (Mn/DNR) Bald Eagle Environmental Review Fact Sheet (copy attached). Based on the information provided in the fact sheet, it appears that the following criteria are applicable to the proposed Sturgeon Lake Road Overpass project:

Zone	Nesting Period Segment			
	Critical (2/10 to 5/1)	Moderately Critical (1/10 to 2/10 and 5/1 to 6/1)	Less Critical (6/1 to 7/31)	Non-critical (7/31 to 1/10)
Primary (0 to 330 feet)	Avoid Construction	Avoid Construction	Avoid Construction	Avoid Construction
Secondary (330 to 660 feet)	Avoid Construction	Avoid Construction	Minimize Construction Activities	Minimize Construction Activities
Tertiary (660 to 1320 feet) <sup>1</sup>	Avoid Construction	No Restrictions	No Restrictions	No Restrictions

<sup>1</sup>Depending on site characteristics, the tertiary zone may extend further than 1320 feet.

The PIIC has examined the proposed project location in relation to the eagle nest. The attached figures demonstrate that the western end of the proposed project is approximately 1600 feet from the eagle nest, the likely bridge over the Canadian Pacific Rail line is approximately 3200 feet from the nest, and the eastern end of the project is roughly 4700 feet from the nest. Therefore the entire project is outside the tertiary zone (note that the wooded area on the west shore of the water across from the eagle nest location provides a visual buffer between the project and the nest).

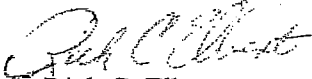
The PIIC, however, is aware that the roadway network that provides access to the project area does encroach upon the secondary and tertiary zones (see the attached eagle nest zone figure). In addition, the PIIC is well aware of the importance of the bald eagle not only as a federally listed species, but as a culturally important symbol to Native Americans. Therefore, the PIIC is submitting the following construction scheduling restrictions for consideration by Mn/DOT OES and USFWS staff:

- ❖ Critical Period – No hauling of fill or other construction materials to or from the project site; work at the project site limited to relatively quiet activities such as site preparation.
- ❖ Moderately Critical Period – No hauling of fill or other construction materials on CSAH 18 south of Sturgeon Lake Road; no pile driving at the construction site. Grading activities allowed provided that fill is trucked in via CSAH 18 southbound to Sturgeon Lake Road.
- ❖ Less Critical Period – Same as Moderately Critical Period
- ❖ Non-Critical Period – No restrictions on hauling; only period when pile driving is allowed

It is important to note that filling and grading activities need to begin in May so that the bridge embankments can be constructed in one construction season. By delaying filling and grading later than May, these activities could extend into a second construction season, and increase the duration of potential disturbance of eagle nesting.

Please contact me at (651) 267-4084 if you have any questions regarding this letter, or wish to discuss this issue further.

Sincerely,  
Prairie Island Indian Community



Rick C. Elberts  
Tribal Engineer

Enc.: Environmental Review Fact Sheet Series 'Bald Eagle'  
Eagle Nest Location and Distance from Project  
Eagle Nest Location and Potential Impact Zones

c: C. Wills  
D. Brisk – HDR  
S. Reed – HDR

## Environmental Review Fact Sheet Series

### Endangered, Threatened, and Special Concern Species of Minnesota

## Bald Eagle (*Haliaeetus leucocephalus*)

Minnesota Status: Special Concern  
Federal Status: Threatened

State rank<sup>1</sup>: S3  
Global Rank<sup>1</sup>: G4

### HABITAT

During the breeding season, the Bald Eagle typically inhabits forests near lakes and rivers where large trees are available for nesting. The nest trees are usually within 1 mile of water, and are often closer. In northern Minnesota, red or white pines in the supercanopy (taller than the surrounding forest) are often selected as nest trees, whereas in the central and southern part of the state, eagles choose large hardwoods such as aspen or cottonwood. In winter, Bald Eagles can be found in upland areas where game or carrion is available. However, it is most common for them to congregate along major rivers where open water remains (such as near dams or power plants), as these areas provide opportunities for obtaining their major food items, fish and waterfowl.

### LIFE HISTORY

For the purpose of assessing the impacts of human activity on Bald Eagles, the nesting period can be broken into four segments, as detailed in the following table. The "wintering" season for Bald Eagles varies by latitude, but can generally be considered to be October 15<sup>th</sup> through March 15<sup>th</sup> (a period which includes spring and fall migration).

Nesting Period Segment	Dates for	
	Northern Minnesota*	Southern Minnesota*
Critical - Eagles are involved with courtship, egg-laying, and incubation.	March 15 <sup>th</sup> - May 15 <sup>th</sup>	Feb. 10 <sup>th</sup> - May 1 <sup>st</sup>
Moderately critical - Eagles are becoming physiologically conditioned for breeding (February/March), or newly hatched chicks require frequent brooding and feeding (May/June).	Feb. 15 <sup>th</sup> - March 15 <sup>th</sup> and May 15 <sup>th</sup> - June 15 <sup>th</sup>	Jan. 10 <sup>th</sup> - Feb. 10 <sup>th</sup> and May 1 <sup>st</sup> - June 1 <sup>st</sup>
Less critical - Eagle chicks are one month old to 1 week post-fledging.	June 15 <sup>th</sup> - Aug. 15 <sup>th</sup>	June 1 <sup>st</sup> - July 31 <sup>st</sup>
Non-critical - Most eagles are not regularly present at the nest site.	Aug. 15 <sup>th</sup> - Feb. 15 <sup>th</sup>	July 31 <sup>st</sup> - Jan. 10 <sup>th</sup>

\*The state is arbitrarily divided into north and south by State Highway 210.

### IMPACTS / THREATS / CAUSES OF DECLINE

- habitat loss
- human disturbance
- farm runoff and industrial pollution
- leg-hold traps
- management activities such as timber harvest and burning
- power lines and transmission structures (collisions, electrocutions)
- roads and bridges (vehicle collisions)
- lead poisoning (e.g. by lead shot ingested by eagles during feeding)
- shooting (in violation of state and federal law)
- contaminants and poisons (particularly organochlorine, organophosphorus, mercury and other heavy metals)

## PROTECTION

Bald Eagles are protected under the Migratory Bird Treaty Act, and under the Bald and Golden Eagle Protection Act of 1940 and the Endangered Species Act of 1973, as amended, which prohibit the possession or taking of Bald Eagles, or their nests, eggs, or young. "Taking" is defined by the Endangered Species Act as to harass (i.e., create the likelihood of injury), harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Prohibited activities include, for example, cutting down nest trees (at any time of the year), and intense human activity that is demonstrated to have caused adult eagles to abandon eggs or young in the nest. Possession permits may be issued by the U.S. Fish & Wildlife Service for Indian religious purposes, or for scientific or exhibition purposes of public museums, public scientific societies, or public zoological parks.

In addition, the National and Minnesota Environmental Protection Acts prevent certain actions which would cause significant adverse impacts to the environment (including destruction of habitat for listed species) if there is a reasonable alternative to the proposed action.

If you are uncertain whether a proposed action may take Bald Eagles or their nests, or if you for any reason cannot follow the recommendations below, contact USFWS Ecological Services at (612) 725-3548.

## RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

*These recommendations will be useful in avoiding or minimizing effects that may be caused by federal or non-federal actions, but all federal actions that may affect bald eagles must also complete consultation with U.S. Fish and Wildlife Service under section 7 of the Endangered Species Act. A federal action is any action that a federal agency funds, authorizes, or carries out. Contact the U.S. Fish and Wildlife Service at (612) 725-3548 for further information regarding section 7 consultation.*

### WINTERING AREAS<sup>2</sup>

Bald Eagle wintering area habitat contains three main components: foraging (feeding) areas, daytime perching areas, and night roosts. Within these areas, eagles need to be protected from human disturbance, physical alterations of their habitat, environmental contaminants, and loss of food resources.

**Foraging and Daytime Perching Areas:** In Minnesota, winter foraging areas where Bald Eagles congregate are located primarily along major rivers. Daytime perches tend to be near these foraging areas. While eagles are present, buffer zones (areas within which there is no human activity) of at least 1/4 mile (400m) should be maintained around foraging areas where possible. Where this is impractical, human use should be avoided between sunrise and 10am, when Bald Eagle feeding activity is greatest. Buffer zones around daytime perches should be 1/8 to 1/4 mile (250m-400m). At foraging areas along rivers, trees within 100 ft. of the shore seem to be preferred as perches. Therefore, no trees greater than 12 in. diameter should be removed within 100 ft. (33m) of river banks or other foraging areas. Activities which have the potential to kill trees (such as livestock grazing and dumping of dredge spoil) should be avoided within foraging and perching areas. New road and bridge construction should be at least 2 mile from major foraging areas.

**Night Roosts:** Bald Eagles are more sensitive to disturbance at night roosts than at foraging and daytime perching areas. No logging, development, or road building should occur at any time in critical roosts. Critical roosts are defined as those used more than 14 nights per season by eagles from local breeding territories or more than 14 nights per season by more than 15 eagles or roosts which have been documented as active for 5 years or longer. A buffer zone of at least 1/4 mile (400m) should be maintained around night roosts, within which both low and high impact activities, including recreation, are restricted while the roost is in use. New road or bridge construction should be at least 1/5 mile from critical roosts.

## RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS Cont.

### NESTING AREAS

Studies show that Bald Eagles are vulnerable to human intrusion. The vulnerability varies with the type of disturbance and the particular eagle, as some individuals have become accustomed to human activity near their nests. However, because some eagles are easily disturbed, human contact with Bald Eagles should be avoided whenever possible, particularly during the critical segment of the nesting period. The following table, adapted from the Minnesota Department of Natural Resources (DNR) Management Guidelines for Bald Eagle Breeding Areas, and the Northern States Bald Eagle Recovery Plan, summarizes recommendations for protecting individual occupied and active nest sites.

If a nest is not occupied during the year in which the activity will occur, the recommendations for the Non-critical Nesting Period Segment may be used year-round. If a nest is abandoned (unused for more than 5 years and not being maintained by eagles), activities are only restricted within the Primary Zone. Whether a nest is occupied, unoccupied, or abandoned must be determined in consultation with a DNR Nongame Specialist (see contact numbers below the table) and the U.S. Fish and Wildlife Service (612-725-3548). Because eagles often rebuild nests that have been blown out of trees, in this situation activities are restricted within the Primary Zone for 3 years after the event. If the nest is not rebuilt, zone restrictions are removed.

Activity	Nesting Period Segment			
	Critical	Moderately	Less Critical	Non-critical
<b>Primary Zone:</b> (within 330 feet of the nest)				
Landscape Alteration <sup>a</sup>	avoid	avoid	avoid	avoid <sup>b</sup>
Construction (structures, trails, etc.) <sup>c</sup>	avoid	avoid	avoid	avoid <sup>b</sup>
Burning <sup>d</sup>	avoid	avoid	avoid	restrict/minimize <sup>b</sup>
Minor Forest Maintenance <sup>e</sup>	avoid	avoid	avoid	restrict/minimize <sup>b</sup>
Motorized Access	avoid <sup>f</sup>	avoid <sup>f</sup>	restrict/minimize <sup>b</sup>	restrict/minimize <sup>b</sup>
Human Entry	avoid <sup>f</sup>	avoid <sup>f</sup>	restrict/minimize <sup>b</sup>	restrict/minimize <sup>b</sup>
Low Flying Aircraft	avoid	avoid	no restrictions	no restrictions
<b>Secondary Zone:</b> (330 to 660 feet from the nest)				
Landscape Alteration <sup>a</sup>	avoid	avoid	avoid	restrict/minimize <sup>b</sup>
Construction (structures, trails, etc.)	avoid	avoid	restrict/minimize <sup>b</sup>	restrict/minimize <sup>b</sup>
Burning <sup>d</sup>	avoid	avoid	avoid	restrict/minimize <sup>b</sup>
Minor Forest Maintenance	avoid	avoid	no restrictions <sup>f</sup>	no restrictions <sup>g</sup>
Motorized Access	avoid <sup>f</sup>	restrict/minimize <sup>b</sup>	restrict/minimize <sup>b</sup>	no restrictions <sup>g</sup>
Human Entry	avoid <sup>f</sup>	restrict/minimize <sup>b</sup>	restrict/minimize <sup>b</sup>	no restrictions
Low Flying Aircraft	avoid	restrict/minimize <sup>b</sup>	no restrictions	no restrictions
<b>Tertiary Zone:</b> (660 feet to 1/4 mile from the nest - May extend up to 2 mile from the nest, if topography or vegetation permit a direct line of sight to the disturbance area.)				
Landscape Alteration <sup>a</sup>	avoid	avoid	avoid	no restrictions <sup>g</sup>
Burning <sup>d</sup>	avoid	avoid	avoid	restrict/minimize <sup>b</sup>
Other Activities (as listed above)	avoid <sup>f</sup>	no restrictions <sup>g</sup>	no restrictions <sup>g</sup>	no restrictions <sup>g</sup>

<sup>a</sup> Landscape alteration includes activities such as clear cutting or land clearing, which result in significant changes in the landscape.

<sup>b</sup> Restrictions should be decided on a case by case basis, based on type, extent, and duration of proposed activity, and sensitivity of individual eagle pairs. For assistance, contact your nearest DNR Nongame Specialist: Bemidji (218-755-2976); Grand Rapids (218-327-4267); Brainerd (218-828-2228); New Ulm (507-359-6033); Rochester (507-280-5070); St. Paul (651-297-2277).

<sup>c</sup> For construction involving land clearing, see also recommendations for the "Landscape Alteration" activity.

<sup>d</sup> If burning can not be done within the non-critical nesting period segment, please contact your nearest DNR Nongame Specialist (see contact numbers above).

<sup>e</sup> Such as thinning of tree stands, pruning, and other like maintenance.

<sup>f</sup> Some eagles have become habituated to human activity and can be tolerant of these activities, particularly if they were occurring regularly at the time the eagles began nesting. In these cases, complete avoidance of the activity may not be necessary. If you believe this is the case in your particular situation, contact your nearest Nongame Specialist (see contact numbers above).

<sup>g</sup> However, the habitat should not be altered in ways that would make it unsuitable for future nesting.

#### REFERENCES

- <sup>1</sup>Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). <http://www.natureserve.org/ranking.htm> (15 April 2001).
- Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.
- Grier, J. W., J. B. Elder, F. J. Gramlich, N. F. Green, J. V. Kussman, J. E. Mathisen, and J. P. Mattsson. 1983. Northern States Bald Eagle Recovery Plan. U. S. Fish and Wildlife Service. 76 pages +appendices.
- <sup>2</sup>Martell, M. 1992. Bald Eagle Winter Management Guidelines. Unpublished brochure, The Raptor Center, University of Minnesota, St. Paul, unpagged. August.

Eagle Nest Location  
and Distance From Project

Sturgeon Lake Road Overpass  
S.P. 91-104-01

Prairie Island Indian Community

## Study Area

Approximate  
Eagle Nest  
Location

# Sturgeon Lake Road

Canadian Pacific Railway

5000 Feet

**4500 Feet**

**4000 Feet**

**3500 Feet**

**3000 Feet**

**2500 Feet**

**2000 Feet**

1500 Feet

1000 Feet

500 Feet

CSAH 18 AADL 7490 yoo



Eagle Nest Location  
and Potential Impact Zones

Sturgeon Lake Road Overpass  
S.P. 91-104-01

Prairie Indian Indian Community

## Study Area

Approximate  
Eagle Nest  
Location

### Legend

Primary Zone - 0-330 feet

Secondary Zone - 330-660 feet

Tertiary Zone - 660-1320 feet

Canadian Pacific Railway

# Children Take Notice

# САНІТ

# AAD Approved





Minnesota Department of Transportation

Office of Environmental Services  
395 John Ireland Boulevard, MS 620  
St. Paul, MN 55155-1899

OCT 19 2005  
HDR Engineering, Inc.

Fax: 651/ 284-3754  
Phone: 651/ 284-3750

October 14, 2005

Mr. Gary Wege  
USFWS St. Paul Field Office  
4101 E 80<sup>th</sup> St  
Bloomington, MN 55425

RE: Request for concurrence, State Project No.: SP 91-104-01  
Federal Project No.: PLHD 2404 (160)  
Proposed Sturgeon Lake Road Overpass, Prairie Island Indian Community  
Bald Eagle Nesting Site  
Goodhue County

Dear Mr. Wege:

We have reviewed the effects the above referenced project will have upon Federal Threatened and Endangered (T&E) Species. According to the County Distribution of Minnesota's Federally-Listed Threatened, Endangered, Proposed and Candidate Species list maintained by the U.S. Fish and Wildlife Service (USFWS), Goodhue County is within the distribution range of the bald eagle (*Haliaeetus leucocephalus*), the dwarf trout lily (*Erythronium propullans*), the Higgins eye pearl mussel (*Lampsilis higginsii*), and the prairie bush-clover (*Lespedeza leptostachya*). All are federal T&E Species.

If a Federal agency authorizes, funds, or carries out a proposed action, the responsible Federal agency, or its delegated agent, is required to evaluate whether the proposed action "may affect" listed species. If it is determined that the action "may affect" a listed species, then the responsible Federal agency shall request Section 7 consultation with the USFWS. If the consultation shows "no effect" on the listed species, further consultation is not necessary.

According to the information provided by the Natural Heritage Database (updated 7-13-05) maintained by the Minnesota Department of Natural Resources, there are no known occurrences of three of the four Federal T&E Species or their critical habitat within the immediate project area. The bald eagle has an established nesting site within one mile of the proposed project.

During our preliminary coordination with your office, and the Prairie Island Indian Community (PIIC), concern was expressed regarding the potential for impacts to the nesting success of the bald eagle pair using the nest. The primary concern is that the noise and activity associated with the construction of an overpass on Sturgeon Lake Road at the Canadian Pacific Rail line could cause a failed nesting event.

To address this concern, the PIIC has evaluated potential construction activities and reviewed the Minnesota Department of Natural Resources Bald Eagle Environmental Review Fact Sheet. The PIIC has examined the proposed project location in relation to the eagle nest. The western end of the proposed project is approximately 1600 feet from the eagle nest, the likely bridge site over the Canadian Pacific Rail line is approximately 3200 feet from the nest, and the eastern end of the project is roughly 4700 feet from the nest. Therefore, the entire project is outside the tertiary zone of 660 to 1320 feet expressed in the fact sheet. However, the roadway network that provides access to the project area does encroach upon the secondary and tertiary zones. Therefore, the PIIC is proposing the following construction scheduling restrictions for consideration and concurrence by USFWS:

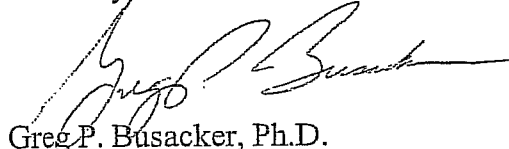
- Critical Period (2/10 to 5/1) – No hauling of fill or other construction materials to or from the project site; work at the project site limited to relatively quiet activities such as site preparation.
- Moderately Critical Period (1/10 to 2/10 and 5/1 to 6/1) – No hauling of fill or other construction materials on CSAH 18 south of Sturgeon Lake Road; no pile driving at the construction site. Grading activities allowed provided that fill is trucked in via CSAH 18 southbound to Sturgeon Lake Road, then east to the project site.
- Less Critical Period (6/1 to 7/31) – Same as Moderately Critical Period
- Non-Critical Period (7/31 to 1/10) – No restriction on hauling; only period when pile driving is allowed.

Filling and grading activities need to begin in May so that the bridge embankments can be constructed in one construction season.

Due to the nature, location, and timing of the proposed project, and the absence of the dwarf trout lily, the Higgins eye pearl mussel, and the prairie bush-clover in the project area, we have determined there will be no effect of this project on the dwarf trout lily, the Higgins eye pearl mussel, and the prairie bush-clover, all are Federal T&E Species. Based on discussions with the PIIC Tribal Engineer and coordination with your office, we request your concurrence that the proposed project “may effect, but is not likely to adversely effect” the bald eagles nesting on Sturgeon Lake if the proposed restrictions listed above are followed. If new information becomes available we will re-initiate Section 7 consultation with your office.

This review was completed for Federally Listed T&E Species only. For information on State Listed T&E Species, contact the Natural Heritage and Nongame Research Program of the Minnesota Department of Natural Resources.

Sincerely,

A handwritten signature in dark ink, appearing to read "Greg P. Busacker", written over a horizontal line.

Greg P. Busacker, Ph.D.  
Natural Resource Specialist

cc: Gerry Larson  
Scott Reed - HDR

Jason Alcott

Rick Elberts, PIIC



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Twin Cities Field Office  
4101 East 80th Street  
Bloomington, Minnesota 55425-1665

RECEIVED

NOV 7 2005

HDR Engineering, Inc.

NOV 2 2005

Mr. Greg. P. Busacker, Ph.D.  
Natural Resource Specialist  
Minnesota Department of Transportation  
Office of Environmental Services  
395 John Ireland Boulevard, MS 620  
St. Paul, Minnesota 55155-1899

RE: State Project No. SP 91-104-01  
Federal Project No.: PLHD 2404 (160)  
Proposed Sturgeon Lake Road Overpass, Prairie Island Indian  
Community  
Bald Eagle Nesting Site  
Goodhue County, Minnesota

Dear Mr. Busacker:

This concerns your October 14, 2005, letter requesting U.S. Fish and Wildlife Service comments on potential impacts to federally endangered or threatened species from the proposed construction of the Sturgeon Lake Road Overpass on the Prairie Island Indian Community in Goodhue County, Minnesota.

You have determined that the proposed project will not affect the endangered Higgins eye pearlymussel (*Lampsilis higginsii*), endangered dwarf trout lily (*Erythronium propullans*), and threatened prairie bush clover (*Lespedeza leptostachya*) as these species do not occur in the project area.

We concur with your determination that the proposed project may effect but is not likely to adversely affect the threatened bald eagle (*Haliaeetus leucocephalus*). An eagle nest is located in the vicinity of the proposed project and has been active for several years. As indicated in your letter, the Prairie Island Indian Community has proposed the following construction scheduling restrictions to avoid adverse impacts to nesting eagles if the nest is active again next year:

1. Critical Period (2/10 to 5/1) – No hauling of fill or other construction materials to or from the project site; work at the project site limited to relatively quiet activities such as site preparation.
2. Moderately Critical Period (1/10 to 2/10 and 5/1 to 6/1) – No hauling of fill or other construction materials on CSAH 18 south of Sturgeon Lake Road; no pile

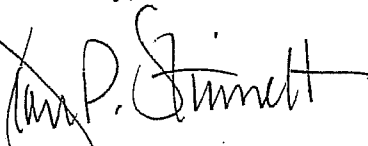
driving at the construction site. Grading activities allowed provided that fill is trucked in via CSAH 18 southbound to Sturgeon Lake Road, then east to the project site.

3. Less Critical Period (6/1 to 7/31) – Same level of activity as described for Moderately Critical Period.
4. Non-Critical Period (7/31 to 1/10) – No restriction on hauling; only period when pile driving is allowed.

We concur with these avoidance measures and request they be required and enforced during project implementation. 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 area, consultation with this office should be reinitiated.

We appreciate the opportunity to comment and look forward to working with you and the Prairie Island Indian Community in the future. If you have questions regarding our comments, please call Mr. Gary Wege of my staff at (612) 725-3548, extension 207.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan P. Stinnett", with a long horizontal stroke extending to the right.

Dan P. Stinnett  
Field Supervisor

DATE: August 10, 2005

TO: Joe Hudak, Chief Archaeologist  
Mn/DOT Office of Environmental Services  
395 John Ireland Boulevard, MS 620  
St. Paul, MN 55155

FROM: Scott Reed, Senior Environmental Scientist  
HDR Engineering, Inc. – Consultant to the Prairie Island Indian Community

SUBJECT: Request for Archaeological/Historical Review to Meet State and Federal Requirements

District No.: 6

County: Goodhue

S.P. No.: 91-104-01

S.A.P. No.: None

Highway Type: ( ) TH ( ) CSAH ( ) CR ( ) Twp. Rd.  
or ( ) Trail – None - MSAS

Highway No.: MSAS # 104

Does project have FHWA funds? ( ) No

(X) Yes

Does project require a federal permit? (e.g., Corps of Engineers 404 permit)

( ) No

(X) Yes → Permitting agency: Uncertain at this time – potential for USACE Section 404 permit, also approval from BIA for conversion of tribal trust lands

Project letting date: Not Determined – Tentative Letting in Fall 2006

Bridge no. and feature crossed (e.g., railroad, river, stream) (if applicable): Bridge # not determined; new bridge planned for the crossing of the Canadian Pacific Railway line

Document being prepared: ( ) PM ( ) EIS (X) EA (X) EAW

Project is in: ( ) scoping stage (X) pre-design stage

Plan drawings are: ( ) available (X) not yet available

Is project within an Indian reservation? ( ) No (X) Yes → Reservation name: Prairie Island Indian Community

**Brief project description.** (Please include an explanation of how proposed improvements will change existing conditions, such as horizontal and vertical alignments, the current vs. proposed ROW, traffic lane width, or ditch profiles, etc. For bridge work please indicate whether project will include filling and/or cutting):

The proposed project consists of the construction of a grade-separated rail crossing at the current at-grade intersection of Sturgeon Lake Road and the Canadian Pacific Rail Line. This project is in the early stages of preliminary design; conceptual horizontal and vertical alignments and construction limits have not been developed. Filling will be required, and some excavation for utilities and potentially for soil correction may be necessary. The attached project location figures depict the area in which alternative rail crossings will be considered.

Are any borrow or disposal areas associated with this project?

Borrow: ( ) No ( ) Yes **Unknown at this time** Disposal: ( ) No ( ) Yes **Unknown at this time**  
( ) new area ( ) within limits of existing area ( ) expanded portion of existing area

Current land use (e.g., cultivated field; pasture; mixture of fallow field and woodland, etc.):

The current land use in the project area includes a mix of fallow field, roadway/railway, and rural residential property.

Legal location:

Township	Range	Section(s)
114N	15W	South Half of 31
113N	15W	North Half of 6

Please include the following with your request for review:

- An 8½" x 11" or 11" x 17" photocopy from a USGS 7.5-minute topographic map showing project location (please include name of map quadrangle)
- If a paper copy of USGS map is not available, this information is available in electronic format on the MnDNR's web site at <http://maps.dnr.state.mn.us/tomo> (please include name of map quadrangle)
- Project plan showing construction limits, roadway widening or addition of turn lanes, existing ROW, proposed ROW, realignment, temporary easement or construction bypass (if detailed plans are not yet available, please be sure to include this information in the brief project description section above)
- If **borrow or disposal areas** are part of the project, indicate legal location of the area or areas to be used (Twp., Range, Section[s])

Contact person for any additional information concerning the project:

Name Scott Reed, P.G. (Consultant)

Phone No. 763-278-5911

Name Rick Elberts, P.E. (PiIC Tribal Engineer)

Phone No. 651-267-4084

**Additional comments or information:**

E-mail for Scott Reed – [scott.reed@hdrinc.com](mailto:scott.reed@hdrinc.com)

E-mail for Rick Elberts – [relberts@piic.org](mailto:relberts@piic.org)

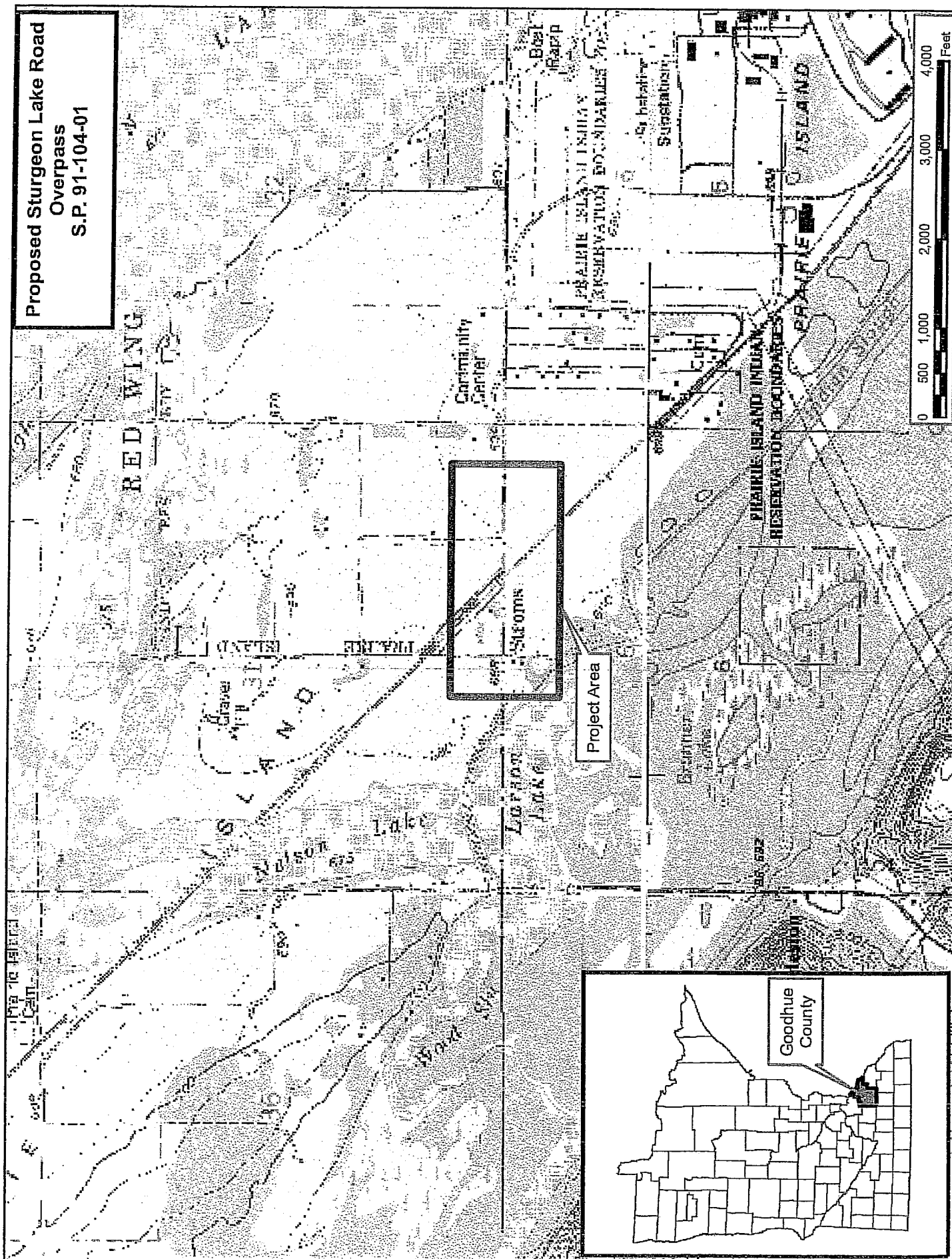
USGS 7.5 Minute Quadrangle Maps - The project is located near the south edge of the Diamond Bluff West quadrangle; the Welch quadrangle is located immediately to the south.

Note: Cultural resource work was conducted in the project area in 1995. A report titled "Report on Cultural Resource Reconnaissance Surveys Conducted Along CSAH 18 and Sturgeon Lake Road, Goodhue County, Minnesota" was prepared by Archaeological Research Services in December 1995. SHPO Numbers 95-1812 (CSAH 18) and 95-1280 (Sturgeon Lake Road) are associated with this survey work, as is Minnesota Archaeological Research License 95-036. Please contact Scott Reed if you would like a copy of the report.

# RED TILING

## Overpass

**S.P. 91-104-01**



Proposed Sturgeon Lake Road  
Overpass  
S.P. 91-104-01



Sturgeon Lake

Treasure Island  
Resort & Casino

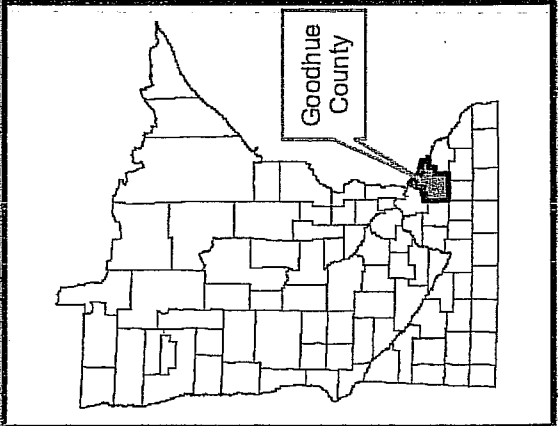
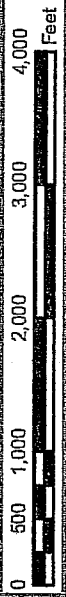
Sturgeon Lake Road

Prairie Island  
Nuclear Generating  
Plant

Canadian Pacific Railway

Prairie Island Boulevard (GSAH 18)

Project Area

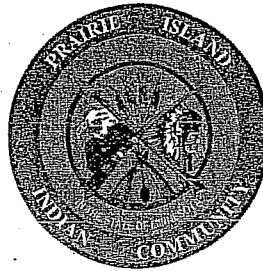


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OCT 14 2005

Ronald Johnson  
HDA Engineering, Inc.

Lucy Taylor  
Treasurer



Doreen Hagen  
President

Victoria Winfrey  
Secretary

Alan Childs, II  
Assistant Secretary/Treasurer

October 12, 2005

Ms. Lynnette Roshell  
State Aid for Local Transportation  
Minnesota Department of Transportation  
395 John Ireland Boulevard – M.S. 500  
Saint Paul, MN 55155

Mr. Kevin Kliethermes  
Federal Highway Administration  
Galtier Plaza  
380 Jackson Street, Suite 500  
St. Paul, MN 55101

RE: S.P. 91-104-01 – Proposed Sturgeon Lake Road Overpass  
Prairie Island Indian Community  
Request for Concurrence on 4(f) Eligibility Determination

Dear Ms. Roshell and Mr. Kliethermes:

As you are aware, the Prairie Island Indian Community (PIIC) is in the process of developing environmental documentation and preliminary engineering concepts for a Sturgeon Lake Road overpass of the Canadian Pacific Railway. As the concept development process has progressed, it has been determined that limited impacts to the PIIC Sports Complex are likely. The area of potential impact is depicted on the enclosed figure.

Since the sports complex is a recreational facility and since the overpass project is federally funded through FHWA, the issue of Section 4(f) applicability must be considered. PIIC and consultant staff have reviewed the facility characteristics, and are of the opinion that the facility is not a 4(f) resource for the following reasons:

- The facility is not publicly owned; the sports complex was developed by the PIIC as a business venture
- As a business venture, the facility is only available for softball tournaments where participating teams have paid a fee to use the facilities
- The facility is not available to the general public when softball tournaments are not occurring

Ms. Lynnette Roshell  
Mr. Kevin Kliethermes  
October 12, 2005  
Page 2

While it is not a determining factor regarding the 4(f) eligibility of the sports complex, please note that the proposed road improvement alternatives will not actually impact the function of the ball fields. The proposed improvements will involve the acquisition of right of way up to the existing fence line of the two northern ball fields.

The PIIC requests the concurrence of MN/DOT and the FHWA regarding the Community's position that the sports complex is not eligible as a 4(f) resource.

Please contact Rick Elberts, Tribal Engineer at (651) 267-4084 if you have any questions regarding this letter, or wish to discuss this issue further.

Sincerely,



Doreen Hagen  
President

Enclosure (as stated)

cc: D. Brisk - HDR  
S. Reed - HDR

PIIC Sports Complex

Sturgeon Lake Road Overpass  
S.P. 91-104-01

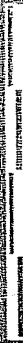
Prairie Island Indian Community

Treasure Island  
Resort/Casino

Sturgeon Lake Road

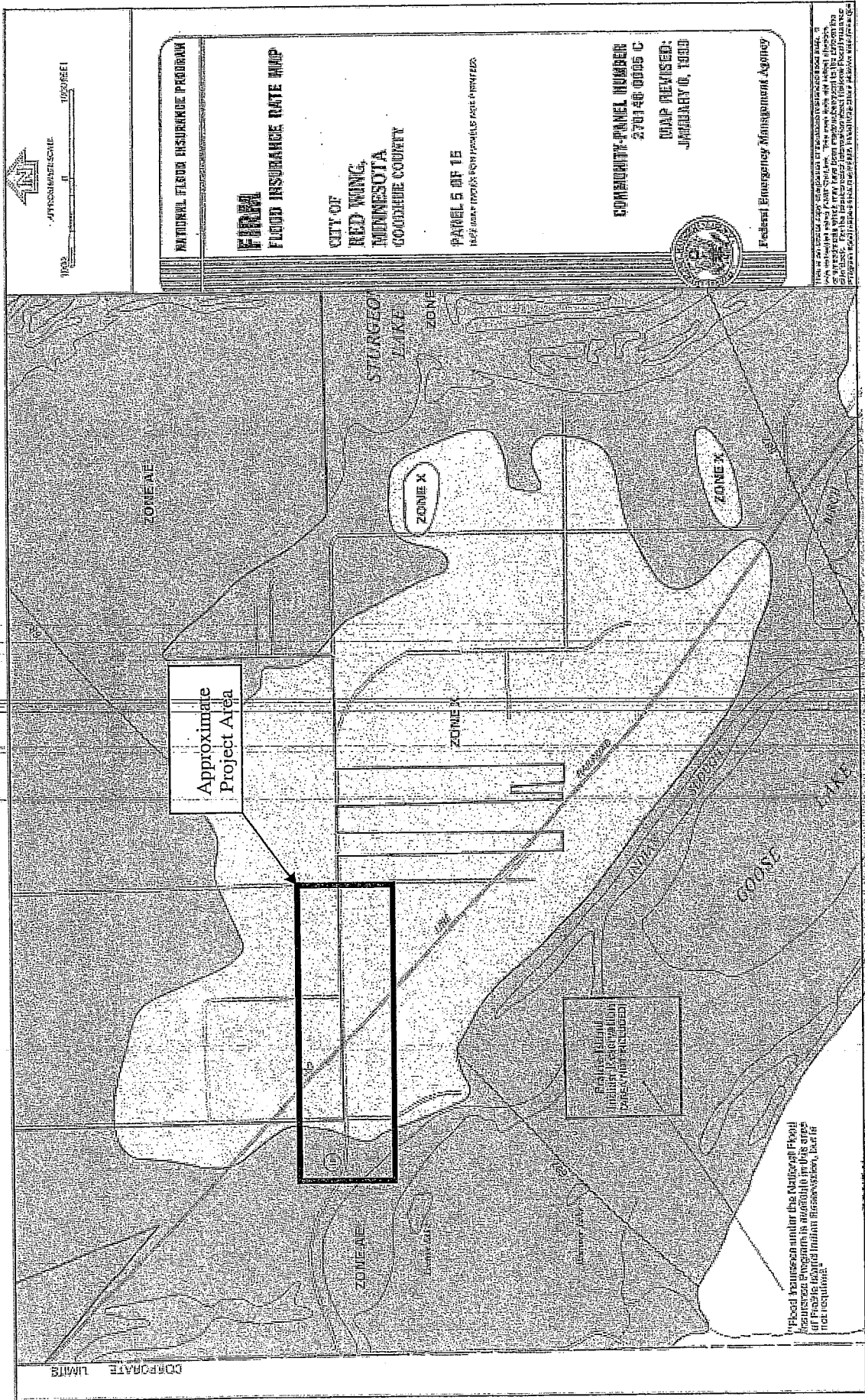
Potential Area  
of Impact

Sports Complex



## **Appendix B – FEMA Flood Insurance Rate Map**

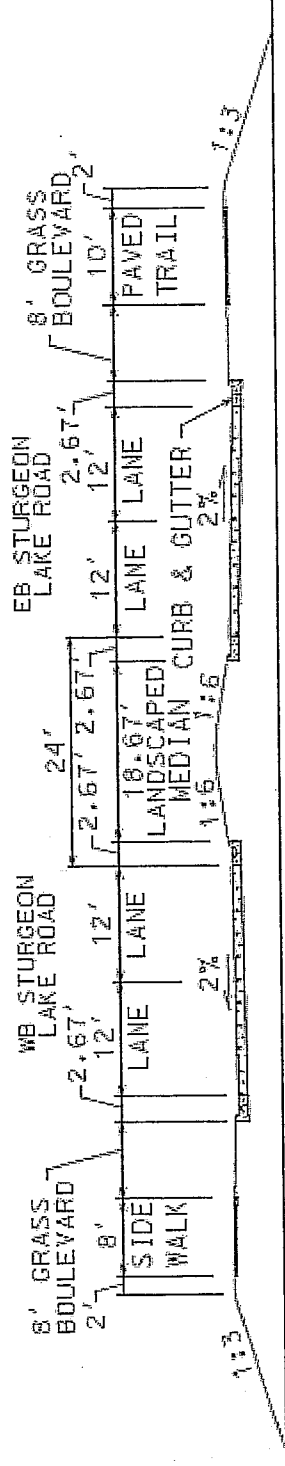




S.P. 91-104-02 – Proposed Sturgeon Lake Road Overpass  
 FEMA Flood Insurance Rate Map

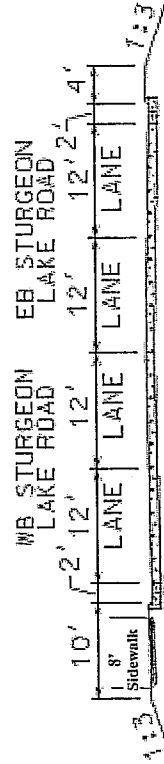
## **Appendix C – Typical Roadway Sections**





STURGEON LAKE ROAD - PROPOSED TYPICAL SECTION

(NOT TO SCALE) LOOKING EAST

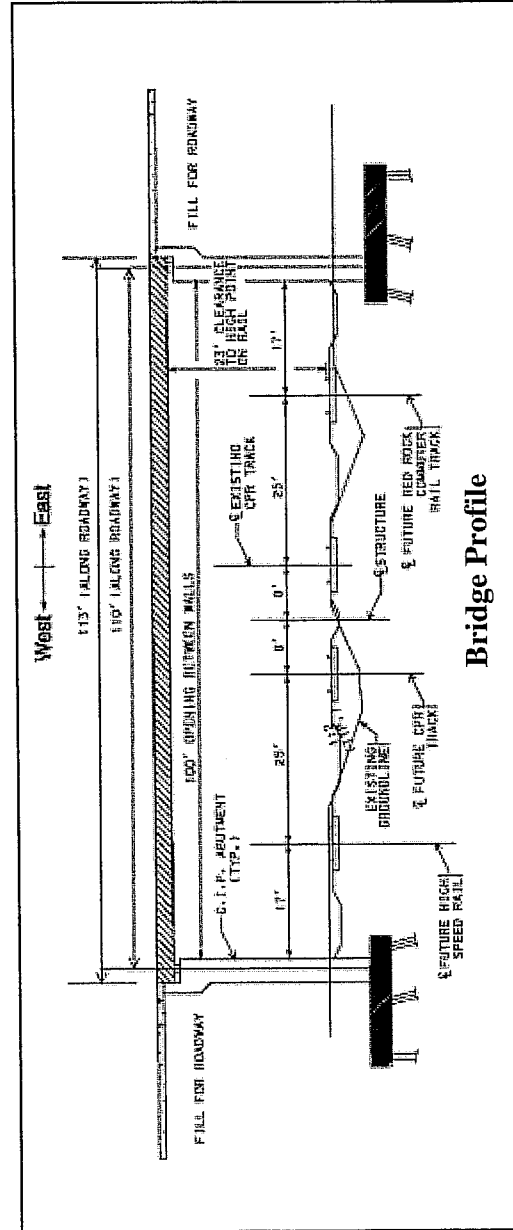
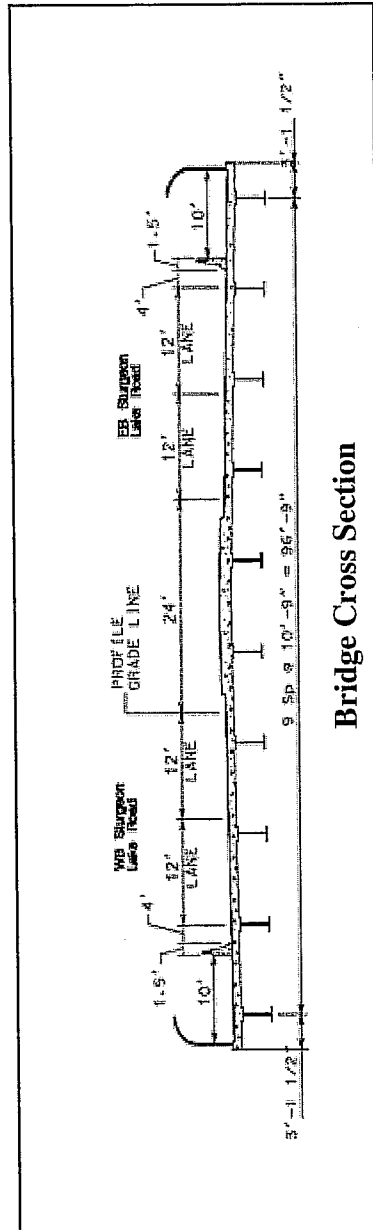
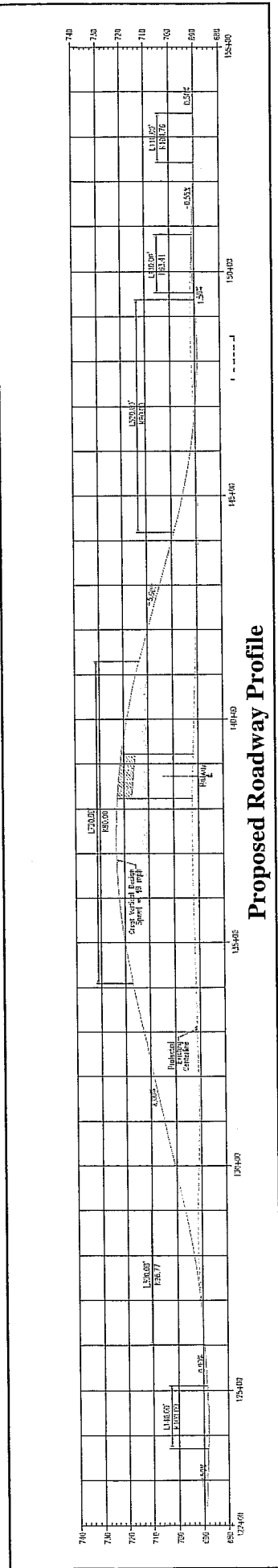


STURGEON LAKE ROAD - EXISTING TYPICAL SECTION

(NOT TO SCALE) LOOKING EAST

## SP 91-104-02 - Proposed Sturgeon Lake Road Overpass

Existing and Proposed Typical Sections - Roadway



## SP 91-104-02 – Proposed Sturgeon Lake Road Overpass Profile and Bridge Sections

## **Appendix D – Letter Report – Archaeological Survey**



November 10, 2005

Ms. Teresa Martin  
Minnesota Department of Transportation  
Office of Environmental Services  
Cultural Resources Unit  
395 John Ireland Boulevard  
Mail Stop 620  
St. Paul, MN 55155-1899

In regards to: Phase I Archaeological Survey and potential Phase II Archaeological Evaluation of the Proposed Sturgeon Lake Road Overpass, Goodhue County. Mn/DOT contract #88836; OSA license #05-044

Dear Ms. Martin:

During the month of October 2005, HDR Engineering, Inc. (HDR) conducted Phase I archaeological reconnaissance studies for the proposed grade separation of the Canadian Pacific Railway (CPR) and Sturgeon Lake Road. Sturgeon Lake Road provides the only improved access to the Prairie Island Indian Community (PIIC) and the Treasure Island Casino. The proposed project is located in the S ½ Section 31, Township 114 N, Range 15 W, and in the NE ¼ of Section 6, Township 113N, Range 15W in Goodhue County, Minnesota.

The survey work was done to satisfy the compliance requirements of Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulations 36 CFR 800. The act requires federal agencies to consider the effects of federal undertakings on historic properties defined as eligible for listing on the National Register of Historic Places (NRHP). The Federal Highway Administration (FHWA) is the lead federal agency for this project. The project is using FHWA funds administered through the Minnesota Department of Transportation (Mn/DOT).

Information provided by Mn/DOT prior to the field study suggested that the area may have a high potential for buried archaeological resources due to the proximity of several burial mounds and precontact American Indian sites. The nearest site is roughly 600 feet south of the southern project area boundary.

On October 26 and 27, 2005, HDR archaeologists surveyed the project area for archaeological resources. The crew photographed and assessed the area for relative archaeological potential. It was clear from a visual inspection that most of the area on the eastern end of Sturgeon Lake Road has been developed to the extent that no intact soils are present. The area to the north consists of a convenience store and associated fuel pumps and parking lot, and is adjacent to a large overflow parking lot for Treasure Island Casino. The south side at this point has been developed into a ball park. Construction of several roadways and a railroad has also modified the natural landscape. Paralleling the roadways are buried utilities whose installation has also caused ground disturbance.

Toward the western end of the project area, there is a large open agricultural field. Part of the field had been previously planted in corn, which had been harvested by the time the field crew inspected the area. Surface visibility in the corn field was adequate for pedestrian survey. The remaining portion of field had been recently harvested of soybeans and visibility was adequate for surface survey. Pedestrian survey of the fields yielded two objects. One possible piece of lithic debitage was found on the western field edge, closest to the Vermillion River. A piece of weathered mammal bone was noted in the same field roughly 50 feet away. The bone was not collected, but a GPS point was taken with a hand-held Garmin unit.

Because of the proximity of the Vermillion River, the area held some potential for buried soil horizons. A local resident informed the field crew that much of the surrounding terrain floods on a regular basis during the spring. Preliminary assessment of the geomorphology of the area suggested that any stable, buried soil horizon would most likely not be more than 1 meter from the present ground surface. To research the possibility that buried soil horizons that may contain precontact archaeological materials exist at depth, a line consisting of twelve auger tests spaced at 30-meter intervals was dug through the bean and corn fields. The auger was able to sample soils to a depth of up to 3 meters, although most tests only sampled to about 110 cm. The auger tests measured roughly 8-9 inches (20-23 cm) in diameter, and all retrieved soils were passed through a ¼-inch mesh hardware cloth. One auger test produced an iron nail from around 240 centimeters below ground surface (cmbs). All other tests produced negative results and did not identify any buried topsoil horizon.

While conducting pedestrian survey, the HDR crew noted lithic debitage on the ground surface along the very edge of a plowed field with excellent visibility on the far north and west of the project area. No collecting was done, as the exact status of the area in relation to construction limits still needed to be assessed, along with obtaining property owner information. After discussing the area with the PIIC Tribal Engineer, this area was determined to be outside the construction limits and will not be affected by the project.

Sixteen shovel tests (15-m intervals) were dug in the triangular area of fallow land east of the railroad and south of Sturgeon Lake Road. Tests were dug to between 75 and 110 cmbs. Only recent historic material was retrieved in one of the tests. A neighboring landowner stopped out to

visit the field crew, and explained that the eastern end of this parcel used to have a small visitor center of some sort, with a gravel parking lot. At some point in the past the structure was taken down and the gravel was pushed into a pile before being hauled away. Remnant gravel/crushed rock is still abundant on the ground surface in this area. The structure does not appear on the 1949 aerial photograph of Prairie Island. It is possible that the structure was constructed after 1949 and razed before the most recent aerial photos were taken.

### **Recommendations**

Two previously unreported archaeological sites were identified by the HDR crew. One lithic scatter is outside the area of direct effects and should not need additional consideration. The other site is within the construction boundaries, but is sparse and in a disturbed context and is recommended as not meeting eligibility requirements for the NRHP.

Respectfully,

**HDR Engineering, Inc.**

Michael A. Justin  
Archaeologist/Cultural Resources Project Manager