



Minnesota Department of Transportation

Transportation Building

395 John Ireland Boulevard
Saint Paul, Minnesota 55155-1899

April 24, 2008

Jim Hallgren
Mn/DOT District 3
7694 Industrial Park Road, MS 030,
Baxter, MN 56425-8096

RE: No Effect Determination (Federal Threatened and Endangered Species)
S.P.7102-123, Trunk Highway 10
Roadway Improvements
City of Elk River
Sherburne County

Dear Mr. Hallgren:

In response to your request, the proposed action has been reviewed for potential effects to federally-listed threatened, endangered, proposed, candidate species and listed critical habitat. As a result of this review, a determination of no effect has been made.

Section 7 of Endangered Species Act of 1973, as amended, requires each Federal agency to review any action that it funds, authorizes or carries out to determine whether it may affect threatened, endangered, proposed species or listed critical habitat. Federal agencies (or their designated representatives) must consult with the Service if any such effects may occur as a result of their actions. Consultation with the Service is not necessary if the proposed action will not directly or indirectly affect listed species or critical habitat. If a federal agency finds that an action will have no effect on listed species or critical habitat, it should maintain a written record of that finding that includes the supporting rationale.

Action Area

The proposed action involves the expansion of Trunk Highway 10 from a 4-lane to a 6-lane arterial in the City of Elk River.

Listed Species/Critical Habitat

In coordination with the Service and according to the official County Distribution of Minnesota's Federally-Listed Threatened, Endangered, Proposed, and Candidate Species list, there are no federally listed endangered, threatened, proposed, candidate species or listed critical habitat in Sherburne County.

This precludes further action under Section 7 of the Act. However, if information becomes available indicating that federally-listed species may be affected, please contact this office and consultation with the Service will be initiated if necessary.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Alcott'.

Jason Alcott
Natural Resource Specialist, Program Coordinator

cc: Gerry Larson file



Minnesota Department of Natural Resources

500 Lafayette Road
St. Paul, Minnesota 55155-4010

May 24, 2008

Jim Hallgren
MnDOT District 3A
7694 Industrial Park Rd
Baxter, MN 56425

RE: Response to MnDOT Early Notification Memo Requesting Information and Early Coordination Regarding
TH 10 Reconstruction (S.P. 7102-123), Sherburne County

Dear Mr. Hallgren:

The Minnesota Department of Natural Resources (DNR) has completed review of the information submitted in the MnDOT Early Notification Memo regarding a proposed improvement project on TH 10 as it goes through the City of Elk River. There are no alignment plans to review, just a general area where impacts could occur. When specific alignments are chosen, we assume we would have an opportunity for further review. The following comments were submitted to me during DNR field review of the project:

1. The Mississippi River (a Public Waters) runs along the project area, though it is not known if any associated work, such as a stormwater system, would require outfalls into the river. New or retrofitting stormwater outfalls may require a Public Waters Work Permit.
2. The Minnesota Natural Heritage Information System has been queried to determine if any rare plant or animal species, native plant communities, or other significant natural features are known to occur within an approximate one-mile radius of the TH 10 planning area in Elk River. Based on this query, several rare features have been documented within the search area (for details, please see the attached database reports). The following rare features may be impacted by the proposed project:
 - a. Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been reported from the area and may be encountered on site. For your information, I have attached a Blanding's turtle fact sheet that describes the habitat use and life history of this species. The fact sheet also provides two lists of recommendations for avoiding and minimizing impacts to this rare turtle. Please refer to the first list of recommendations for your project. If greater protection for turtles is desired, the second list of additional recommendations can also be implemented. The attached flyer should be given to all contractors working in the area.
 - b. The black sandshell (*Ligumia recta*), a state-listed mussel species of special concern, has been documented in the Mississippi River in the vicinity of the project area. Mussels are particularly vulnerable to deterioration in water quality, especially increased siltation. As such, it is important that sound erosion and sediment control practices be implemented and maintained near the river.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological Resources, Department of Natural Resources. The NHIS 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. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist on the project area.

If you have questions regarding this letter, please e-mail me at peter.leete@dot.state.mn.us or call at (651) 366-3634.

On behalf of the DNR, Sincerely,

A handwritten signature in blue ink, appearing to read "Peter Leete", with a stylized flourish at the end.

Peter Leete
DNR-MnDOT OES Liaison, Transportation Hydrologist
Office of Environmental Services, mail stop 620
Minnesota Department of Transportation
395 John Ireland Blvd.

St. Paul, MN 55155

C: ERDB file 20080689

Printed April 2008
Data valid for one year

Minnesota Natural Heritage Information System: Rare Features Database
Index Report of records within 1 mile radius of:
TH 10 Planning in Elk River (S.P. 7102-123)
T32N R26W Section 3 and T33N R26W Sections 33 & 34
Sherburne County

Element Name and Occurrence Number	Federal Status	MN Status	State Rank	Global Rank	Last Observed Date	EO ID #
Anoka, Dakota, Hennepin, Ramsey, [...] County, MN						
<u>Ligumia recta</u> (Black Sandshell) #337 Location Description: T28N R23W S28, T33N R26W S26, T28N R23W S20, T28N R23W S22, T [...]		SPC	S3	G5	2004-08-19	30421
Sherburne County, MN						
<u>Emydoidea blandingii</u> (Blanding's Turtle) #494 Location Description: T33N R26W S33, T33N R26W S29, T33N R26W S28, T33N R26W S32		THR	S2	G4	1989-06-28	11220
<u>Emydoidea blandingii</u> (Blanding's Turtle) #610 Location Description: T33N R26W S33		THR	S2	G4	1992-08-26	14384
<u>Emydoidea blandingii</u> (Blanding's Turtle) #611 Location Description: T33N R26W S33		THR	S2	G4	1992-08-26	14383
<u>Emydoidea blandingii</u> (Blanding's Turtle) #669 Location Description: T33N R26W S27, T33N R26W S28, T33N R26W S33, T33N R26W S21		THR	S2	G4	1991-06-26	15848
Sherburne, Wright County, MN						
<u>Native Plant Community, Undetermined Class</u> #2145 Location Description: T33N R26W S33, T32N R26W S4, T121N R23W S15, T121N R23W S10		N/A	SNR	GNR	1979	24732
Wright County, MN						
<u>Haliaeetus leucocephalus</u> (Bald Eagle) #2285 Location Description: T121N R23W S10, T121N R23W S15		SPC	S3B,S3N	G5	2005-05-06	31248

Records Printed = 7

Endangered, Threatened, and Special Concern Species of Minnesota

Blanding's Turtle
(Emydoidea blandingii)

Minnesota Status: Threatened
Federal Status: none

State Rank¹: S2
Global Rank¹: 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 (e.g., cattails, water lilies) 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.

RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

List 1. Recommendations for all areas inhabited by Blanding's turtles.	List 2. Additional recommendations for areas known to be of state-wide importance to Blanding's turtles.
GENERAL	
A flyer with an illustration of a 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.	Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
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.	Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.
If a Blanding's turtle nests in your yard, do not disturb the nest.	If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.
Silt fencing should be set up to keep turtles out of construction areas. It is <u>critical</u> that silt fencing be removed after the area has been revegetated.	Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).
WETLANDS	
Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).	Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).
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.	Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.
ROADS	
Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).	Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels.
Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills).	Roads should be ditched, not curbed or below grade.

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).	
Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.	
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 st and before June 1 st).	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 1st** so the young turtles can escape from the nest when they hatch!

REFERENCES

- ¹Association 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.

REFERENCES (cont.)

- Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.
- Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.
- Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding's turtle in central Minnesota. *Chelonian Conservation and Biology* 3(4):626-636.

CAUTION



BLANDING'S TURTLES MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are state-listed as Threatened and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

**BLANDING'S TURTLES DO NOT MAKE GOOD PETS
IT IS ILLEGAL TO KEEP THIS THREATENED SPECIES IN CAPTIVITY**

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

(see Blanding's Turtle Fact Sheet for full recommendations)

- This flyer 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 that are in imminent danger should be moved, by hand, out of harms way. Turtles that 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.
- 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.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the 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 1st and before June 1st).



Minnesota Department of Transportation

Office of Environmental Services

Mail Stop 620
395 John Ireland Boulevard
St. Paul, MN 55155

Office Tel: (651) 366-3614
Fax: (651) 366-3603

January 5, 2009

Dennis Gimmestad
State Historic Preservation Office
Minnesota History Center
345 Kellogg Blvd. West
St. Paul, MN 55102-1906



Regarding: S.P. 7102-123 (TH 10, Sherburne County)
Grade-separated intersections, realignment, and frontage roads
T. 33 N., R. 26 W., S. 32-34, City of Elk River

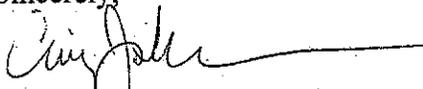
Dear Mr. Gimmestad:

We have reviewed the above-referenced undertaking pursuant to our FHWA-delegated responsibilities for compliance with Section 106 of the National Historic Preservation Act, as amended (36 CFR 800). The project involves the construction of grade-separated intersections, frontage roads and the realignment of TH 10 in the City of Elk River.

A Phase I and II architectural and archaeological survey and evaluation were undertaken on this project. The results appear in the following enclosed report entitled *Cultural Resources Studies for the Trunk Highway 10 Preliminary Design and Environmental Documentation, Elk River, Sherburne County, Minnesota* by Summit Envirosolutions, Inc. (December, 2008).

We concur with the report findings that there are two properties eligible for listing in the National Register of Historic Places within the area of potential effect (APE): the St. Paul and Pacific Railroad Corridor historic district (SH-ERC-188) and the Elk River Water Tower (SH-ERC-016). The Graves-Bailey Grain Elevator (SH-ERC-165) is not eligible. Although no eligible archaeological sites were found during the survey, two areas could not be surveyed due to denial of landowner permission. These include the western survey area for historic farmstead and precontact resources and a portion of the St. Paul and Pacific Railroad Corridor related to the operation of the railroad. These areas will be surveyed once the properties have been acquired. We are asking for your concurrence at this time. We will make a determination of effect at a later date.

Sincerely,


Craig Johnson
Cultural Resources Unit (CRU)

cc: Joe Hudak, Mn/DOT CRU
Jim Hallgren, Mn/DOT D.3 (1 report)

Mn/DOT CRU/CO File
Beth Bartz, SRF



State Historic Preservation Office

February 5, 2009

Craig Johnson
Cultural Resource Unit
MN Dept. of Transportation
Transportation Building, MS 620
395 John Ireland Boulevard
St. Paul, MN 55155-1899

Re: S.P. 7102-123, T.H. 10
Grade-separated intersections, realignment, and frontage roads
SHPO Number: 2009-0777

Dear Mr. Johnson:

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), and to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

We have reviewed the results of the survey activities that have been completed thus far. We concur with your determinations that the St. Paul and Pacific Railroad Corridor Historic District and the Elk River Water Tower meet National Register criteria.

We also concur with your determination that the Graves Bailey Grain Elevator does not meet National Register criteria. Our initial review identified a concern that the interior of the structure was not examined in accordance with the registration criteria established by the Multiple Property Documentation Form on grain elevators. However, upon further review of the history of the structure, as well as its current exterior configuration, we conclude that the "not eligible" determination is appropriate.

We note that additional survey work for this project is still to be completed. We look forward to reviewing the results of that survey and to completing this review.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dennis A. Gimmestad', with a long, sweeping horizontal stroke at the end.

Dennis A. Gimmestad
Government Programs & Compliance Officer

cc: Tom Cinadr, MnSHPO

June 19, 2009

Mr. Craig Johnson
Cultural Resources Unit
MN Dept. of Transportation
Transportation Building, Mail Stop 620
395 John Ireland Blvd.
St. Paul, MN 55155-1899

RE: S.P. 7102-123, T.H. 10
Grade-separated intersections, realignment, and frontage roads
SHPO Number: 2009-0777

Dear Mr. Johnson:

Thank you for your letter regarding the above-referenced project.

We concur with your assessment that the project will have an adverse effect on the St. Paul and Pacific Railroad Historic District.

We note that your letter acknowledges that an archaeological survey of this project is yet to be completed. We will not be able to reach a determination of effect for the project as a whole until that survey is reviewed.

Contact us at (651) 259-3456 with questions or concerns.

Sincerely,



er Dennis A. Gimmestad
Government Programs & Compliance Officer