

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) ENCAP, Inc., on behalf of the Illinois Department of Transportation (IDOT), authorization for the incidental take of the State threatened Blanding's turtle (*Emydoidea blandingii*) associated with the associated with the Interstate 55 (FAI 55) at Arsenal Road (CH 17) in Will County, Illinois (as described/shown in the conservation plan received by the Department in March, 2008 - amended) is hereby granted. This is subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the Interstate 55 (FAI 55) at Arsenal Road (CH 17) Interchange in Northeastern Illinois.

Procedural History

The IDOT in conjunction with their consultant, TranSystems, prepared a conservation plan for the Interstate 55 (FAI 55) at Arsenal Road (CH 17) Interchange as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for the incidental take of Blanding's turtles were received by the Illinois Department of Natural Resources (Department) in March, 2008. Public notice of IDOT's request was published in the *Edwardsville Intelligencer* (Official State newspaper) and the *Joliet Herald News* on March 26 and April 2 as well as on April 9, 2008. Public comments on IDOT's conservation plan were accepted by the Department until May 9, 2008. No comments were received by the public during the period of March 26, 2008 through May 9, 2008.

The subject project is the reconfiguration of the Interstate 55 (FAI 55) at Arsenal Road (CH 17) interchange and relocation approximately one mile south. Arsenal Road will also be widened and extended approximately one mile south along the east side of Interstate 55 to the relocated interchange. The constructing agency is the Illinois Department of Transportation (IDOT). The project is in an unincorporated section of western Will County. There were three areas of interest as it related to habitat for the Blanding's turtle. The first location is Wetland INHS-42, classified as *potential suitable habitat* by the INHS Survey of October 13, 2005. Wetland INHS-42 is located on Exxon-Mobil Refinery Company property, legally described as NW ¼ Sec 27, R9E, T34N. The second location is Wetland B-13, classified as *marginally suitable habitat*. Wetland B-13 is located on Dow Chemical Company property, legally described as SE ¼ Sec 28, R9E, T34N and NE ¼ Sec 28, R9E, T34N. The third area is an impounded area of Grant Creek, classified as *marginally suitable habitat*. This area is south and east of the project limits and will not be impacted by the project.

An Environmental Assessment (EA) following NEPA procedures is being prepared for this project. There have been three NEPA/404 Merger Coordination Meetings. A Pre-Final EA has been completed and the EA is targeted for completion in late Summer 2008. The EA should be referred to for the detailed alternative analysis, social and economic studies, and environmental studies.

Input from many federal, state, and local agencies was considered in the alternatives analysis. A Public Informational Meeting was held in the project area on November 3, 2003. A Public Hearing is tentatively scheduled for late Summer 2008. A Pre-Final EA was submitted to IDOT District 1 in December, 2007 and has since been forwarded to the FHWA. Through these various studies along with public, local, and resource/regulatory agency input, an alignment was recommended. The location of the recommended alignment is the result of efforts to minimize impacts to wetlands and sensitive habitats.

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The take from Wetland INHS-42, (classified as potential suitable habitat), would come from activities associated with the construction of the extension of Arsenal Road along the east side of Interstate 55. These activities consist of placement of permanent fill in the wetland for roadway embankment and construction of a retaining wall to minimize impacts to Wetland INHS-42.

The take from Wetland B-13, (classified as marginally suitable habitat), would come from activities associated with the construction of the southbound exit ramp and realignment of the West Frontage Road. These activities consist of permanent fill in the wetland for roadway embankment, roadside ditches, and a potential detention pond. The impounded area of Grant Creek will not be impacted by this project.

The anticipated adverse effects include:

*Blanding's turtles may be crushed or entombed by equipment or vehicles.

*Wetland INHS-42: Permanent loss of habitat associated with retaining wall and fill for roadway embankment.

*Wetland B-13: Permanent loss of habitat associated with fill for roadway embankment, cut for drainage ditches, and a detention pond.

*Potential degradation of habitat associated with salt spray from the roadway.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

Throughout the EA preparation and the NEPA/404 process, extensive resource and regulatory agency coordination took place. The findings of the NEPA studies concluded that no adverse impact would occur to the species as a result of the construction of the relocated Interstate 55 at Arsenal Road interchange. These findings were based upon existing knowledge at the time and the sequencing efforts (avoidance, minimization, and compensatory mitigation) of the alternative analysis. However, since the species was known to inhabit the vicinity along with other sensitive plant and animal species, and in the interest of minimizing wetland impacts, a retaining wall will be constructed adjacent to Arsenal Road where it goes through Wetland INHS-42. Arsenal Road will also be located as far west as possible away from the wetland, while still providing the minimum separation from the northbound entrance ramp. Maximum side slopes will be used in the area of Wetland B-13 to minimize the project footprint.

In all, there are 0.35 acres (0.8 percent loss) of impacts to Wetland INHS-42 and 0.81 acres (6.4 percent loss) of impacts to Wetland B-13.

A. Plans for management of the area affected that will enable the continued use:

The land and habitat of the areas in question are under private ownership. The Exxon-Mobil Refinery Company owns and manages the property where Wetland INHS-42 is located and Dow Chemical Company owns and manages the property where Wetland B-13 is located. The existing land use in these areas is open space. Both areas are secured and fenced-in with no public access to them. Due to the nature of these areas, it is not anticipated that the existing land use will change and therefore the properties are not in danger of secondary impacts due to redevelopment. The level of quality of the habitats in these areas has been allowed to improve because they have been mostly undisturbed and fenced off from public access. It is anticipated that the continued isolation provided by the private property owners will only serve to maintain the habitat areas and enable the continued use of the habitats.

B. Description of all measures to be implemented to minimize or mitigate the effects:

Avoidance and minimization efforts were described above, as well as in the EA. The affected wetlands will be mitigated by using wetland banks. The existing hydrologic conditions of the remaining wetlands will be maintained.

Disturbed areas within the construction limits will be restored to the pre-construction contours and vegetation type. Native species of plants shall be used in the restoration.

Super silt fencing will be installed and diligently maintained along the construction perimeter to minimize undue encroachment into and disturbance of the habitat area. To further minimize construction impacts, the IDOT's Erosion and Sediment Control, Landscape Design Criteria Manual will be used. This Manual utilizes the latest techniques in sediment and erosion control design and implementation.

Pre-construction awareness training will be provided for all contractors. The contractors and their employees will be made aware of the possibility that these turtles may be present and that **NO turtles should be killed**. A picture of the Blanding's turtle will be provided to the workers so they can be informed of the particular turtle in need of protection. If a turtle is found in the project area, a contact phone number will be made available so proper identification and handling of the turtle is afforded. This will be a qualified person from IDNR, INHS or an environmental consultant.

C. Plans for monitoring the effects of measures implemented:

IDOT shall team with the Illinois Natural History Survey to supply Blanding's Turtle monitoring and research one year prior to construction, during construction, and one year after the construction of the Interstate 55 at Arsenal Road interchange within the areas of the Blanding's turtle habitats. IDOT District One shall be responsible for notifying the BDE one year prior to the start of construction. BDE shall task the INHS to monitor the project site. A reporting schedule would be developed which provides a summary of the efforts on a regular basis.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

The design, construction, permitting and mitigation measure for the project are being funded by IDOT. Project funding has been programmed in the IDOT FY 2007-2012 program, but specific funding levels and specific Program Fiscal Year will be determined by IDOT at a later date.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

Redmer and Anton (1993) found an adult male Blanding's turtle on the Joliet Training Area (JTA) on May 17, 1993. It was found between the eastern two rails of the railroad track along the southwest perimeter of the JTA (T34N, R9E, Sec 22, SE ¼, Channahon topographic quadrangle). Redmer and Anton (1993) observed four individuals in 1993 on the Joliet Army Ammunition Plant (JAAP) property and four additional individuals on private property adjacent to the JAAP. Seven of the observations occurred at T34N, R9E, Sec 34, SE ¼, one record is approximately in the center of Sec 34, Channahon topographic quadrangle. The Blanding's turtle is known from other localities in Will County such as Lockport Prairie Nature Preserve, Braidwood Dunes and Savanna Nature Preserve, Keepataw Nature Preserve, and Crest Hill Community Park. It is also known from Goose Lake Prairie State Natural Area in adjacent Grundy County.

Final Survey Results

The herpetology studies for the Interstate 55 at Arsenal Road interchange were conducted on July 13, 14, 27, 28 and August 24, 2005 and July 14, 15, and 16, 2006. The area was experiencing a severe to extreme drought during the 2005 study. The Dow Chemical property was visited on July 13 and August 24. Wetland B-13 on the Dow Chemical property was dry and overgrown with vegetation during both visits. This wetland is marginally suitable for Blanding's turtle. An adult Blanding's turtle was observed on the Dow Chemical property on July 13, approximately 1.1 miles west of the proposed interchange location. It was observed on a gravel road near a storm water detention pond, heading in the direction of the nearby Des Plaines River. The Exxon-Mobil property was visited on July 14, 27, and 28, 2005. All wetlands in the vicinity of the proposed interchange were dry during the July 14 visit, except for an impounded portion of Grant Creek. Grant Creek was trapped for turtles on July 27 and 28, 2005. Turtles were captured in the three trap-nights, but none of them were Blanding's turtles. Wetland INHS-42 was reduced to two small puddles. This cattail-dominated wetland is adjacent to the proposed interchange and it appears to be suitable habitat.

The 2006 survey consisted of 14 trap-nights in wetland INHS-42 but only three eastern snapping turtles and a painted turtle were captured. Immediately east of the main wetland is an extensive cattail marsh that is also suitable habitat for Blanding's turtles but did not have water deep enough for setting traps. This area was visually searched for one man-hour, but no Blanding's turtles were encountered. Although 14 trap-nights of effort did not result in any Blanding's turtle captures, this is not conclusive evidence that Blanding's turtles are not present in this wetland as trapping in May and June is the best way to determine if Blanding's turtles are present in a wetland.

Because of the recommendations of the 2006 survey to conduct additional trapping in May and June, additional surveys were conducted in June, 2007. The survey consisted of 38.5 trap-days in wetland INHS-42 and captured only one snapping turtle. No Blanding's turtles were captured or encountered within the wetlands. Although there were numerous turtle tracks in the mud as the water of the pond receded, it is nearly impossible to tell if they belonged to Blanding's turtles. It is possible that Blanding's turtles will occupy these ephemeral marshes until they dry then move to more permanent bodies of water to the east for the remainder of the active season. The wetland is a suitable composition of cattail marsh, sedge meadow, and open water. Therefore because the habitat is suitable and there are recent records in the immediate vicinity, it must be assumed that Blanding's turtles inhabit the project corridor, at least during portions of the activity season.

This data and conclusion will be contained in all of the INHS and NEPA documents for the Environmental Assessment for the project. Many of the Blanding's turtle colonies occur in the expanding Chicago region. Several articles have focused on movements of Blanding's turtle populations in northeastern Illinois including Rowe and Moll (1991) and Rubin et al (2001). The Blanding's turtle is known from other localities in Will County such as Lockport Prairie Nature Preserve, Braidwood Dunes and Savanna Nature Preserve, Keepataw Nature Preserve, and Crest Hill Community Park. It is also known from Goose Lake Prairie State Natural Area in adjacent

Grundy County. The proposed project will only impact approximately 6.4 percent of the total area of Wetland B-13 and 0.8 percent of Wetland INHS-42. As a percentage of the whole the impacts are very small. The habitat restoration, management and monitoring efforts which will be committed to by IDOT should provide more than adequate conservation measures to facilitate the continued existence of the Blanding's turtle. Therefore, it is unlikely that the temporary and permanent corridor impacts to the wetland habitats will jeopardize the continued existence of the species in Illinois.

IDOT will only have jurisdiction within their right-of-way. However, they can work with the private property owners to educate and make them aware to help in the conservation efforts.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and official IDOT signature(s) on this authorization indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

The IDOT in conjunction with their consultant, TranSystems, prepared a conservation plan for the Interstate 55 (FAI 55) at Arsenal Road (CH 17) Interchange as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and IDOT's request for authorization for the incidental take of Blanding's turtles were received by the Illinois Department of Natural Resources (Department) in March, 2008. Public notice of IDOT's request was published in the *Edwardsville Intelligencer* (Official State newspaper) and the *Joliet Herald News* on March 26 and April 2 as well as on April 9, 2008. Public comments on IDOT's conservation plan were accepted by the Department until May 9, 2008. No comments were received by the public during the period of March 26, 2008 through May 9, 2008.

Authorization

It is the determination of the Department that the measures to be implemented by the IDOT (and the INHS) will adequately minimize and mitigate for the anticipated taking (disturbance/harassment/death) of a small number of Blanding's turtles due to the construction of the Interstate 55 (FAI 55) at Arsenal Road (CH 17) interchange. Further, it is our opinion that the take (disturbance/harassment/death) authorized herein would not diminish the likelihood of the survival of either the Blanding's turtle in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a period of five (5) years - starting in 2008 and commencing in 2013, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].

2. The following measures shall be implemented with regards to the IDOT Interstate 55 (FAI 55) at Arsenal Road (CH 17) interchange project:

3. It is recognized that the take from Wetland INHS-42, (classified as potential suitable habitat), would come from activities associated with the construction of the extension of Arsenal Road along the east side of Interstate 55. These activities consist of placement of permanent fill in the wetland for roadway embankment and construction of a retaining wall to minimize impacts to Wetland INHS-42.

It is recognized that the take from Wetland B-13, (classified as marginally suitable habitat), would come from activities associated with the construction of the southbound exit ramp and realignment of the West Frontage Road. These activities consist of permanent fill in the wetland for roadway embankment, roadside ditches, and a potential detention pond. The impounded area of Grant Creek will not be impacted by this project.

The anticipated adverse effects include:

*Blanding's turtles may be crushed or entombed by equipment or vehicles.

*Wetland INHS-42: Permanent loss of habitat associated with retaining wall and fill for roadway embankment.

*Wetland B-13: Permanent loss of habitat associated with fill for roadway embankment, cut for drainage ditches, and a detention pond.

*Potential degradation of habitat associated with salt spray from the roadway.

4. Throughout the EA preparation and the NEPA/404 process, extensive resource and regulatory agency coordination took place. The findings of the NEPA studies concluded that no adverse impact would occur to the species as a result of the construction of the relocated Interstate 55 at Arsenal Road interchange. These findings were based upon existing knowledge at the time and the sequencing efforts (avoidance, minimization, and compensatory mitigation) of the alternative analysis. However, since the species was known to inhabit the vicinity along with other sensitive plant and animal species, and in the interest of minimizing wetland impacts, a retaining wall will be constructed adjacent to Arsenal Road where it goes through Wetland INHS-42. Arsenal Road will also be located as far west as possible away from the wetland, while still providing the minimum separation from the northbound entrance ramp. Maximum side slopes will be used in the area of Wetland B-13 to minimize the project footprint.

In all, there are 0.35 acres (0.8 percent loss) of impacts to Wetland INHS-42 and 0.81 acres (6.4 percent loss) of impacts to Wetland B-13.

A. Plans for management of the affected area that will enable continued use:

The land and habitat of the areas in question are under private ownership. The Exxon-Mobil Refinery Company owns and manages the property where Wetland INHS-42 is located and Dow Chemical Company owns and manages the property where Wetland B-13 is located. The existing land use in these areas is open space. Both areas are secured and fenced-in with no public access to them. Due to the nature of these areas, it is not anticipated that the existing land use will change and therefore the properties are not in danger of secondary impacts due to redevelopment. The level of quality of the habitats in these areas has been allowed to improve because they have been mostly undisturbed and fenced off from public access. It is anticipated that the continued isolation provided by the private property owners will only serve to maintain the habitat areas and enable the continued use of the habitats.

B. Description of all measures to be implemented to minimize or mitigate the effects:

Avoidance and minimization efforts were previously described in this document, as well as in the EA. The affected wetlands will be mitigated by using wetland banks. The existing hydrologic conditions of the remaining wetlands will be maintained. Disturbed areas within the construction limits will be restored to the pre-construction contours and vegetation type. Native species of plants shall be used in the restoration.

Super silt fencing shall be installed and diligently maintained along the construction perimeter to minimize undue encroachment into and disturbance of the habitat area. To further minimize construction impacts, the IDOT's Erosion and Sediment Control, Landscape Design Criteria Manual shall be used. This Manual utilizes the latest techniques in sediment and erosion control design and implementation.

Pre-construction awareness training shall be provided for all contractors. The contractors and their employees will be made aware of the possibility that these turtles may be present and that **NO turtles should be killed**. A picture of the Blanding's turtle will be provided to the workers so they can be informed of the particular turtle in need of protection. If a turtle is found in the project area, a contact phone number will be made available so proper identification and handling of the turtle is afforded. This will be a qualified person from IDNR, INHS or an environmental consultant.

C. Plans for monitoring the effects of measures implemented:

IDOT shall team with the Illinois Natural History Survey to supply Blanding's Turtle monitoring and research one year prior to construction, during construction, and one year after the construction of the Interstate 55 at Arsenal Road interchange within the areas of the Blanding's turtle habitats. IDOT District One shall be responsible for notifying the BDE one year prior to the start of construction. BDE shall task the INHS to monitor the project site. A reporting schedule would be developed which provides a summary of the efforts on a regular basis.

5. The effective period of this authorization may be altered by mutual agreement between the IDOT and the Department.

6. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that IDOT has failed to comply with any of these terms and conditions or has been responsible for the take of any Blanding's turtles beyond that which is incidental to the construction of the Interstate 55 (FAI 55) at Arsenal Road (CH 17) interchange project.

7. The IDOT official identified below is authorized to execute this agreement. Execution by the IDOT official indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources

Mike Conlin

Mike Conlin, Acting Director
Office of Resource Conservation

7.30.08

Date Signed

For the IDOT

Diane Okun

Signature

Diane Okun

Regional Engineer Region 1

Please print name and official title

8-28-08

Date Signed

