

Illinois
Department of
Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271

<http://dnr.state.il.us>

January 10, 2013

Adrienne P. Eilers, P.E.
Crawford, Murphy & Tilly, Inc.
Gateway Tower
One Memorial Drive – Suite 500
St. Louis, Missouri 63102

RE: *Incidental Take Authorization - Illinois Chorus Frog (ICF) & Ornate box turtle (OBT)
East Well Field Raw Water Transmission Main, Edwardsville - Madison County, Illinois*

Dear Adrienne:

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the City of Edwardsville (COE), authorization for the incidental take of the State listed (threatened) Illinois chorus frog (*Pseudacris streckeri*) and the State listed (threatened) ornate box turtle (*Terrepena ornata*) in Madison County, Illinois [associated with the proposed raw water mains (East Well Field Raw Water Transmission Main); as described/shown in the final conservation plan(s) received by the Department on 5 July 2012] is hereby granted, 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 proposed water main(s) that will primarily follow public road right-of-ways in Madison County, Illinois.

Please have an authorized City of Edwardsville (COE) Official sign the last page of both copies of the Authorization and Implementing Agreement and return **both** copies to my attention. Upon receipt, I will have the agreements signed and return one (1) fully executed copy to you for your official records. This authorization shall be effective once signed by the Department.

Thank you for your cooperation and assistance during the incidental take preparation and review process. Please do not hesitate to contact our office at (217)785-8764 with any questions or comments you may have regarding this authorization agreement.

Sincerely,

Joseph A. Kath
Endangered Species Manager
IDNR-Office of Resource Conservation



CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS

January 28, 2013

Illinois Department of Natural Resources
Office of Resource Conservation
Attn: Mr. Joseph Kath
One Natural Resources Way
Springfield, Illinois 62702

RE: City of Edwardsville, Illinois (Madison County, Illinois)
East Well Field Raw Water Transmission Main
Incidental Take Authorization
IDNR Project No. 1200926
CMT Project No. 09461-05-00

Dear Mr. Kath:

On January 12, 2013, Crawford, Murphy & Tilly, Inc. on behalf of the City of Edwardsville received an authorization letter for incidental take of the State listed Illinois Chorus frog and the State listed ornate box turtle for the referenced project from the Illinois Department of Natural Resources (IDNR). As requested both copies of the "Authorization for Incidental Take and Implementing Agreement" have been signed by the City of Edwardsville's Mayor and are enclosed for execution by IDNR. Once IDNR has signed the Authorization, please return one copy to my attention to be placed in the City's files. If you have any additional questions, comments or concerns please do not hesitate to contact me at 314-436-5500.

Sincerely,

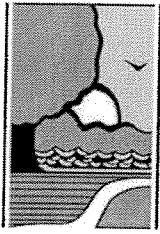
A handwritten signature in cursive script that reads "Adrienne P. Eilers".

Adrienne P. Eilers, P.E.

Crawford, Murphy & Tilly, Inc.

Enclosures - 2

Cc: City of Edwardsville




Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

Pat Quinn, Governor
Marc Miller, Director

TO: Dr. Jim Herkert

FROM: Joe Kath - 

DATE: 31 January 2013

SUBJECT: FINAL ITA APPROVAL: Incidental Take Authorization (ITA) for the: Illinois chorus frog & Ornate box turtle – East Well Field Raw Water Transmission Main, Madison County, Illinois.

Attached, please find for your review, approval, and signature, a Final Incidental Take Authorization for the: Illinois chorus frog & Ornate box turtle – East Well Field Raw Water Transmission Main, Madison County, Illinois.

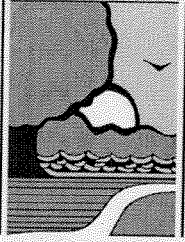
A DRAFT final ITA was reviewed by Staff of the Illinois Endangered Species Protection Board (comments received on 05 December 2012) and these comments were replied to by myself on 10 December 2012 – e-mail copy sent to the ESPB.

There were NO public comments on the Conservation Plan submitted by the City of Edwardsville.

Upon your approval, it would be greatly appreciated if you could please sign *BOTH* copies of the Final ITA at the noted locations and return the entire binder to me at your earliest convenience. I will then distribute appropriate copies to the applicant and compile information for IDNR records.

As always, please do not hesitate to contact me with any questions and/or comments you may have regarding this file. Thank you for your assistance.

-Joe-



Illinois Department of Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271

<http://dnr.state.il.us>

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the City of Edwardsville (COE), authorization for the incidental take of the State listed (threatened) Illinois chorus frog (*Pseudacris streckeri*) and the State listed (threatened) ornate box turtle (*Terrepenne ornata*) in Madison County, Illinois [associated with the proposed raw water mains (East Well Field Raw Water Transmission Main); as described/shown in the final conservation plan(s) received by the Department on 5 July 2012] is hereby granted, 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 proposed water main(s) that will primarily follow public road right-of-ways in Madison County, Illinois.

The project involves the proposed installation of approximately 8,900 feet of a 20-inch diameter raw water transmission main, 1,690 feet of 16-inch finished water main, 2,200 feet of 8-inch finished water main, 945 feet of 6-foot finished water main, and all fittings, valves, hydrants, and accessories to connect to existing and finished water mains that will convey raw groundwater from two wells recently constructed, located at the East Well Field, next to the existing water treatment plant.

Note that the finished water mains will be installed in a common trench with the raw water transmission main. Trenches will range from five feet to nine feet wide and be a minimum of five feet deep. The project is located along Sand Road in Edwardsville, Madison County, Illinois, and a portion of the project is located directly across from state-owned (IDNR) property that contains appropriate frog habitat and is a mitigation site for Illinois chorus frogs. The project area contains residential, agricultural, and undeveloped land. Legal locality information for the project site, taken from the Edwardsville, Illinois (7.5' series, 1954 edition, Photo Revised 1991) USGS topographic quadrangle map is as follows: Sections 7, 18, and 19, Township 4 North, Range 8 West, and Sections 13 and 24, Township 4 North, Range 9 West.

Procedural History

This project was initially submitted to the IDNR's Office of Realty and Environmental Planning (OREP) for review under the Endangered Species Consultation Process. Upon review within OREP, this project was then elevated to the IDNR's internal Incidental Take Authorization (ITA) committee. The ITA committee decided that this project should formally participate in the Incidental Take Authorization process and seek a formal ITA. At the request of the ITA committee, the OREP project manager was instructed to prepare a letter to the applicant suggesting modifications to the project [which would reduce impacts to the species of concern] and pursuit of a formal ITA – via submission of a Conservation Plan. SCI Engineering, Inc. (on behalf of the COE) prepared conservation plans for the water main project [East Well Field Raw Water Transmission Main] in Madison County, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and COE's request for authorization for incidental take of the State listed Illinois chorus frog (*Pseudacris streckeri*) and the State listed ornate box turtle (*Terrepenne ornata*) in Madison County (Edwardsville), Illinois were received by the Illinois Department of Natural Resources (Department) on 5 July 2012. Public notice of COE's request for authorization of incidental take of these State listed species was published in the Breese Courier (Official State newspaper) and the Edwardsville Intelligencer on August 17, August 24, and August 31, 2012. Public comments on COE's conservation plan were accepted by the Department until October 1, 2012. No public comments were received by the public during the period of August 17 through October 1, 2012.

Target Species

Illinois chorus frog (*Pseudacris streckeri*) - (Illinois) State Threatened [ICF]

The Illinois chorus frog (*Pseudacris streckeri*) is a small (up to 4.7 cm SVL) tan to gray frog with dark brown and/or black lines on the back, a white belly, and granular skin rather than smooth. Habitats include sand prairies and remnants, such as sandy agricultural fields and waste areas. This animal typically burrows in sand and emerges after heavy, early spring rains to breed in nearby flooded fields, ditches, and/or other vernal ponds. This frog is somewhat unusual because it digs forward with its stout front legs, rather than backward like the spadefoot and other toads. This species is somewhat locally abundant in undisturbed sand prairies in Cass and Morgan counties (west central Illinois). Threats include uncontrolled and unregulated drainage activities and cultivation of breeding ponds and adult habitat.

Target Species

Ornate box turtle (*Terrepenne ornata*) - (Illinois) State Threatened [OBT]

The ornate box turtle (*Terrepenne ornata*) hibernates (brumates) in burrows as deep as three feet underground. Such burrows are far from obvious to humans, so that for more than six months of the year, this species is not subject to easy observation. This species spends significant portions of each day underground, either in burrows or shallow excavations near the surface called "forms". Hatchlings spend most of their time underground during their first two or three years of life. Excavation of soils and pipeline trenching activities in potential habitat during the above-noted timeframe run the risk of killing or injuring unobserved turtles. The ornate box turtle's daily pattern consists of an early morning emergence, followed by basking to raise its body temperature. When the right temperature for activity is achieved, it forages across its range for several hours, feeding, until temperatures become too high, then it seeks shelter beneath vegetation, in a burrow, or in a 'form'. It remains inactive until late afternoon or early evening, when temperatures allow a second foraging period. Before darkness falls, it retreats to its burrow, except for females during the nesting period (May and June), when eggs are laid at night. This species also demonstrates high fidelity to brumation sites, often returning to within a yard of where it spent the winter the previous year. If a brumation site is located where work is being conducted, it is unclear how a turtle will respond.

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 proposed action [East Well Field Raw Water Transmission Main] requires the trenching of 8,900 feet (note: only 8,900 feet of trenching since the finished water main and raw water main will be installed in a single trench), or approximately 1.69 miles, for the placement of the subject water main. The construction activities have the potential to temporarily contribute to groundwater degradation. The construction associated with the placement of the water mains and its appurtenances may result in the take of Illinois chorus frogs and/or ornate box turtles in the area of construction. It is impossible to accurately predict the number of individuals that may be "taken" by this project, as the size of both species of concern is relatively small and the population(s) remain primarily underground during the vast majority of the year.

Therefore, the number of individuals that may be taken was not estimated. Lack of this information however does not imply Departmental approval of this project and/or dismiss the applicant (COE) from any and all mitigation responsibilities listed in the Authorization Section of this document. Temporary habitat modification or degradation may lead to the death or injury to the listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Specific mitigation measures for these impacts are described below under the Authorization Section.

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

ICF:

Since the Illinois chorus frog is known to exist near the project area, and due to the frog's fossorial habitat and small size, an Incidental Take Authorization is being requested by COE. The number of individuals that may be taken cannot be estimated. Construction limits for the proposed project have been reduced to the smallest area possible, in an effort to minimize impacts to the frogs and their habitat. Additionally, construction activities will cease during the frog's breeding season (February through April). If Illinois chorus frogs are encountered during construction activities, Mark Phipps (IDNR District Heritage Biologist, 618/462-1181, ext. 137) or Dr. Paul Brunkow (Southern Illinois University, 618/650-2976) will be contacted, per the Illinois Department of Natural Resources' (Department). Since construction activities will stop from February to April, wetland delineations, will not be conducted.

IDNR Endangered Species Consultation Process Recommendation #4 to be followed: Equipment staging areas will be provided to the Department for their review and concurrence prior to any construction activities to ensure that they do not adversely impact frog populations. Staging areas should be located outside of sandy soils or drainage ditch areas.

Recommendation #5 to be followed: All on-site personnel involved in the project should be educated on how to recognize this species. Color photos and educational materials will be distributed, discussed at pre-construction meetings, and displayed at work zones. This species is usually only seen above ground during the spring breeding season (February – April), during which time construction will cease. Illinois chorus frogs prefer to be below ground from May to January.

Recommendation #6 to be followed: Trenches and excavations dug as a result of this project will be covered at the end of each work day. Before starting work each day, trenches and excavations will be routinely inspected to ensure no frogs have fallen in and become trapped.

Recommendation #7 to be followed: Vehicles and machinery will attempt to stay off any soils that are defined as sandy and use matting as additional compaction avoidance.

Recommendation #8 to be followed: Future archaeological work by Illinois Historic Preservation Agency staff, on behalf of the City, should not commence until, and unless, consultation/IDNR staff are made aware of the proposed work sites. Turf/sod grass should not be planted over the well field site as this would prevent frogs from emerging, thus entombing the species in this area. If fencing is going to be placed around the well field site, plans will be forwarded to the Department for their approval first.

Please note that many residential properties in the project area, as well as a sod farm, use private wells for their water supply. Existing data which would clarify whether the future drawdown as a result of the subject project will adversely impact water levels in these breeding ponds, if the ponds are groundwater fed, is not available.

OBT:

Unfortunately, the number of individuals that may be taken cannot be estimated. Construction limits for the proposed project have been reduced to the smallest area possible, in an effort to minimize impacts to the turtles. If ornate box turtles are encountered during construction or maintenance activities, Mark Phipps (IDNR District Heritage Biologist, 618/462-1181, ext. 137) or Dr. Paul Brunkow (Southern Illinois University, 618/650-2976) will be contacted.

IDNR Endangered Species Consultation Process Recommendation #3 to be followed: All on-site personnel involved in the project should be educated on how to recognize this species. Color photos (of adults and juveniles) and educational materials will be distributed, discussed at pre-construction meetings, and displayed at work zones. This species is usually only seen above ground from mid-April to late September, outside of its brumation season.

Recommendation #4 to be followed: Trenches and excavations dug as a result of this project will be covered at the end of each work day. Before starting work each day, trenches and excavations will be routinely inspected to ensure no turtles have fallen in and become trapped.

Recommendation #5 to be followed: Vehicles and machinery will attempt to stay off any soils that are defined as sandy and use matting as additional compaction avoidance.

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

All necessary funds needed to minimize and mitigate potential adverse impacts to the Illinois chorus frog and ornate box turtle emanating directly from this project (as stated in the final Conservation Plan received by the Department on 5 July 2012), will be funded by the City of Edwardsville, Illinois through local enterprise funds. There is no state or federal funding being utilized for the construction of this project. The City of Edwardsville exclusively abides by the National Environmental Policy Act (NEPA) and all associated state and federal environmental laws in carrying out the mission of performing the most environmentally sensitive methods of planning and engineering.

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:

Due to the nature of the project, the City of Edwardsville does not anticipate any changed or unforeseen circumstances. The water main installation will be completed and no additional work will likely be necessary afterwards.

For the ICF: It is impossible to predict the number of individuals that may be "taken" by this project, as the size of the species is so small and the population remains underground during the vast majority of the year. Temporary habitat modification or degradation may lead to the death or injury to the listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. If measures are taken to minimize compaction of sandy soils in the area, frogs should still inhabit the area. Additionally, if turf/sod grass is not planted, frogs should still be able to emerge from and burrow into the sandy soils. Because the alignment traverses existing residential and agricultural property, where existing landscape and turf/sod grass is disturbed by the placement of the water main, the landscaping and grass will be replaced following construction. Turf/sod grass planting is not planned for areas where none exists currently.

For the OBT: If measures are taken to minimize compaction of sandy soils in the area, turtles should still inhabit the area. Additionally, if turf/sod grass is not planted, turtles should still be able to emerge from and burrow into the sandy soils. Because the alignment traverses existing residential and agricultural property, where existing landscape and turf/sod grass is disturbed by the placement of the water main, the landscaping and grass will be replaced following construction. Turf/sod grass planting is not planned for areas where none exists currently.

As a point of reference, a description of alternative actions considered that would not result in a take of the species (ICF/OBT), and the reasons that the alternatives were not selected are provided below:

- a. The No Action alternative is defined as abandoning the plan to install a water main to connect the two recently-constructed wells to the existing water treatment plant. Additional water capacity is needed during the peak demand season next year (2013). The No Action alternative would not provide additional raw water capacity to the City's water treatment plant, and it would result in the ineffectiveness of the two new wells. Therefore, this alternative was abandoned.
- b. Another alternative consists of the realignment of the water main. However, the proposed route of the water main is the shortest alignment, which provides the most cost effective option for the City. The alignment also falls within existing right of ways, where possible, with additional permanent easements being obtained where needed. Where it is possible to stay within the existing right of way, the main is being installed along the edge of existing roadway pavement. Moreover, other alignments within the general vicinity could also traverse through potential frog habitat. Therefore, a realignment alternative of the proposed project was abandoned.
- c. The preferred alternative requires the trenching of 8,900 feet, or approximately 1.69 miles, for the placement of water main(s) and associated fittings, valves, hydrants, and accessories to connect to existing and finished water mains that will convey raw groundwater from the two wells recently constructed, located at the East Well Field, next to the existing water treatment plan.

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 COE 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:

SCI Engineering, Inc. (on behalf of the COE) prepared conservation plans (ICF and OBT) for the water main project [East Well Field Raw Water Transmission Main] in Madison County, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and COE's request for authorization for incidental take of the State listed Illinois chorus frog (*Pseudacris streckeri*) and the State listed ornate box turtle (*Terrepenne ornata*) in Madison County (Edwardsville), Illinois were received by the Illinois Department of Natural Resources (Department) on 5 July 2012. Public notice of COE's request for authorization of incidental take of these State listed species was published in the Breese Courier (Official State newspaper) and the Edwardsville Intelligencer on August 17, August 24, and August 31, 2012. Public comments on COE's conservation plan were accepted by the Department until October 1, 2012. No public comments were received by the public during the period of August 17 through October 1, 2012.

Authorization

It is the determination of the Department that the measures to be implemented by the COE (see below), and its environmental consultant, will adequately minimize and mitigate for the possible taking (disturbance/harassment/relocation/lethal take) of the State listed (threatened) Illinois chorus frog (*Pseudacris streckeri*) and the State listed (threatened) ornate box turtle (*Terrepenne ornata*) in Madison County, Illinois [associated with the proposed raw water main -- East Well Field Raw Water Transmission Line; as described/shown in the final conservation plan(s) received by the Department on 5 July 2012] Further, it is our opinion that the possible take (disturbance/harassment/relocation/lethal take) authorized herein would not diminish the likelihood of the survival of either of these aforementioned species 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 the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the City of Edwardsville (COE), authorization for the incidental take is hereby granted, 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 proposed water mains that will primarily follow public road right-of-ways in Madison County, 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 applicable only to the East Well Field Raw Water Transmission Line Project in Madison County (Edwardsville), Illinois. This authorization is effective upon signature of the Department and shall remain in effect for a period of five (5) years, commencing the first day

of official use of the entire COE east well field water main route proposed for commercial/residential purposes, 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].

As stated above in *Section 2* of this Authorization: This Incidental Take Authorization is only applicable to water main construction activities described in the formal Conservation Plan as the "East Well Field Raw Water Transmission Main". Any and all subsequent projects submitted either by the COE or any other entity related to this water main extension shall first be reviewed by the Department for potential environmental impacts and by signing this document, the COE recognizes that any and all subsequent Phases of this particular water main extension may require additional and separate Incidental Take Authorizations before any ground disturbance occurs.

2. All construction for this water main extension (and any subsequent phases of this water main extension project proposed by the COE) shall take place **only** outside of the breeding season of the Illinois chorus frog (February 1 through April 30) and OBT. All creek and road/ditch crossings shall be directional bored instead of open cut. In the case of trenches/ditches left open during this time, please see Condition #5 below. In the event of a COE water main break (of any kind), environmental disturbances shall be kept to a minimum. Also, in the event of such a water main break, Joseph Kath of the Department shall be notified within 24 hours via phone (217/785-8764) and/or e-mail: Joe.Kath@illinois.gov of break discovery, and any and all animal specimens injured or killed (listed or non-listed) as a direct result of this water main break shall be reported during this time.

3. After construction is complete and major ground disturbance is kept to a minimum, all impact zones and associated habitat quality shall be restored to better than pre-construction conditions. All areas now in natural vegetation, shall be reseeded with a native vegetation mix (warm season grasses at a recommended sparse density planting rate at or near 2-3 lbs/acre). Restoration in applicable cultivated and non-cultivated areas shall be completed using native species (warm season grasses). All planting methods and timing efforts shall be compatible with the life cycle of the OBT and the ICF and avoid the emergent and breeding season of this animal (February 1- April 30). Site restoration shall return the entire area to its original contours and areas with natural vegetation shall be seeded with native prairie/warm season grasses and returned to original conditions. If after 4 years, the native seed/warm season mix was deemed unsuccessful (less than 60% germination and/or survival), COE (and/or its environmental consultant) shall reseed all affected areas again with a native seed mix at least two (2) more times, if not successful the first time.

4. Appropriate erosion control methods for Phase I will be implemented and monitored until final completion of the entire COE East Well Field water main extension project. Formal erosion control inspections along the entire Phase I construction corridor shall be conducted at least once (1x) a month by an appropriate environmental consultant (hired by COE) and erosion control reports shall remain on file with this consultant. These reports shall be faxed/e-mailed to the COE immediately upon completion and any and all recommendations made by the consultant to COE to repair/replace erosion control devices shall be completed by COE, and/or a recognized agent/subcontractor/consultant of COE within 72 hours of report receipt.

5. With reference to Condition #2: During the ICF emergent and breeding season (February 1 through April 30), any and all open trenches related to water main construction activities shall be surrounded by silt fence that is buried beneath the soil surface at all points - this shall prevent animals (ICF and OBT in particular) from escaping and/or passing through the bottom of the fence. This perimeter silt fence shall serve as a barrier to either keep animals, namely the ICF and OBT, out of the construction zone, or help construction personnel remove animals trapped within the construction zone. Any and all animals, including the ICF and/or OBT, found on the interior or exterior of the fence shall be safely and humanely placed in a suitable container and then released within (one) 1 hour of capture at least one (1) mile from the project site in similar or suitable habitat. For the ICF, this shall be a vernal pool, pond, wetland, drainage ditch, moist soil unit, sand blowout, sand prairie, or sand deposit near or surrounding an agricultural or fallow field. For the OBT, this shall be a forested/savanna area, sand blowout, sand prairie, mesic prairie, or sand deposit near or surrounding an agricultural or fallow field.

6. With relation to Condition #5 above, any ICFs and/or OBTs witnessed or handled during any portion of the entire COE East Well Field Raw Water Transmission main extension project in Madison County, Illinois, shall be reported to the Illinois Department of Natural Resources (IDNR), attention: Joseph Kath at 217/785-8764 (e-mail: Joe.Kath@illinois.gov) within 24-48 hours of discovery/translocation. A series of clear and readable digital photographs shall also be provided at the same time for documentation purposes. A map showing the exact location the animal(s) was/were deposited shall also be supplied to the Department at this time.

7. According to the project plans, the areal extent of the subject trench will impact 103,370 square feet, or 2.37 acres of land providing suitable habitat, essentially for the Illinois Chorus Frog, with slightly less emphasis on the Ornate Box Turtle. As derived from the State of Illinois' Interagency Wetlands Mitigation Act, a mitigation ratio of 5.5:1 is employed when endangered/threatened species are at risk. Accordingly, it is the responsibility of the applicant (COE) to provide the Department with a mitigation/compensation cost equal to the value of approximately 13.04 acres (2.37 x 5.5) of land in the local area. According to December 2012 calculations from IDNR's Office of Realty and Environmental Planning, land values in Madison County range from a low of \$2,000/acre to a high of \$20,000/acre, with an average value of approximately \$8,000/acre. Given the condition and proximity of the impact zone, a value of \$2,000/acre will be employed in this Incidental Take Authorization for mitigation purposes. Accordingly, this yields a total mitigation amount of: \$2,000/acre x 13.04 acres = \$26,080.00 due to the Department.

Therefore, the applicant shall provide the Department with a check made out to the Illinois Wildlife Preservation Fund in the amount of: \$26,080.00. This check shall be received within 6 months after formal implementation of the ITA (after the document is signed by both the COE and the IDNR). These funds will be used solely for management and recovery actions of both the Illinois Chorus Frog and Ornate Box Turtle in central/west-central Illinois.

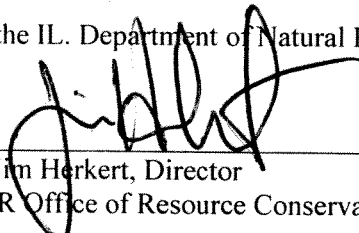
8. Post construction ICF/OBT surveys: The COE shall hire an appropriate environmental/biological consultant to conduct post construction monitoring surveys for the Illinois Chorus Frog and the Ornate Box Turtle along the entire construction route in years 2 and 4 following project completion. These surveys should be conducted during the emergent and breeding season of these animals (February 1- April 30). The environmental consultant shall submit a final report within 60 days of survey completion directly to Joseph Kath of the Illinois Department of Natural Resources. These reports will be used by the Department to evaluate the successes and failures of the minimization and mitigation activities authorized under this Incidental Take Authorization.

9. The effective period of this authorization may be altered only by mutual agreement between the City of Edwardsville (COE) and the Department.

10. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that the COE, and/or its environmental consultant(s), has failed to comply with any of these terms and conditions and/or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of new water mains in Madison County (Edwardsville), Illinois.

11. The COE official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources

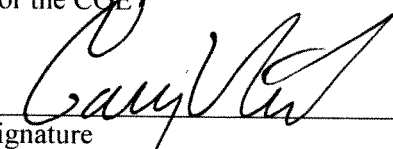


Dr. Jim Herkert, Director
IDNR Office of Resource Conservation

3-11-13

Date Signed

For the COE



Signature

Gary D. Niebur, Mayor

Please print name and official title

1/25/2013

Date Signed

8. Post construction ICF/OBT surveys: The COE shall hire an appropriate environmental/biological consultant to conduct post construction monitoring surveys for the Illinois Chorus Frog and the Ornate Box Turtle along the entire construction route in years 2 and 4 following project completion. These surveys should be conducted during the emergent and breeding season of these animals (February 1- April 30). The environmental consultant shall submit a final report within 60 days of survey completion directly to Joseph Kath of the Illinois Department of Natural Resources. These reports will be used by the Department to evaluate the successes and failures of the minimization and mitigation activities authorized under this Incidental Take Authorization.

9. The effective period of this authorization may be altered only by mutual agreement between the City of Edwardsville (COE) and the Department.

10. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that the COE, and/or its environmental consultant(s), has failed to comply with any of these terms and conditions and/or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of new water mains in Madison County (Edwardsville), Illinois.

11. The COE official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources

Dr. Jim Herkert, Director
IDNR Office of Resource Conservation

Date Signed

For the COE



Signature

Gary D. Niebur Mayor

Please print name and official title

1/25/2013

Date Signed