June 30, 2014

Timothy M. Hill, Administrator
Ohio Department of Transportation
Office of Environmental Services
1980 West Broad Street, 3rd Floor
Mail Stop #4170
Columbus, Ohio 43223

Attn: Michael Pettegrew, Megan Michael

RE: HAM-32F-0.00/Eastern Corridor Segment 1 (Red Bank Road) (PID 86461)

Dear Mr. Hill:

This letter is in response to your March 31, 2014 request for site-specific review of the HAM-32F-0.00/Eastern Corridor Segment 1 (Red Bank Road) reconstruction and improvement project (PID 86461), pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended. Your request was received in our office on June 16, 2014. The project, as proposed, involves the reconstruction of Old Red Bank Road from Erie Avenue to IR 71, and will include associated intersection improvements, intersection and roadway realignments, and the extensions of two connector roads. Your May 14, 2014 Ecological Survey Report (ESR) indicated that the preliminary construction limits for the five Red Bank Corridor project components (listed below) were used for the assessment of ecological impacts. In addition, the ESR stated that ecological field surveys conducted in 2010 and 2011 were designed to assist in the alternatives evaluation process. Field surveys conducted in 2014 focused on the Segment 1 Red Bank Corridor Preferred Alternative as a whole, with a study area large enough to address all five of the project components.

- Component 1: Reconstruction of Old Red Bank Road
- Component 2: Babson Place and Hetzel Street Extensions
- Component 3: Realign Brotherton Road, Erie Avenue and Murray Avenue
- Component 4: Duck Creek Road Extension
- Component 5: Red Bank Expressway and Madison Road Intersection Improvements

We understand that the HAM-32F-0.00/Eastern Corridor Segment 1 (Red Bank Road) project will result in impacts to 9 streams totaling 8,023 linear feet of stream impacts. The project, as proposed, also includes impacts to 6 wetlands totaling 0.1529 acres of Category I and II wetland impacts. The area surrounding the project is generally urban and suburban commercial and residential development. Most of the site is dominated by disturbed lawn and scrub/shrub habitats, but approximately 35 acres of the 223 acre study area consist of upland and floodplain forest. In addition, 34 suitable Indiana bat roost trees and 3 Indiana bat summer maternity roost trees will be removed for the project within the total 17.3 acres of wooded habitat to be cleared.
FISH & WILDLIFE COORDINATION ACT COMMENTS:

The Service recommends that impacts to streams and wetlands be avoided, and buffers surrounding these systems be preserved. Streams and wetlands provide valuable habitat for fish and wildlife resources, and the filtering capacity of wetlands helps to improve water quality. Naturally vegetated buffers surrounding these systems are also important in preserving their wildlife-habitat and water quality-enhancement properties. We support and recommend mitigation activities that reduce the likelihood of invasive plant spread and encourage native plant colonization. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats. All disturbed areas in the project vicinity should be mulched and revegetated with native plant species.

FEDERALLY LISTED SPECIES:

The project is located within the range of the Indiana bat (Myotis sodalis), snuffbox mussel (Epioblasma triquetra), sheepnose mussel (Plethobas J s cyphyus), pink mucket pearly mussel, (Lampsilis abrupta), fanshell mussel (Cyprogenia stegaria), rayed bean mussel (Villosafabalis), and running buffalo clover (Trifolium stoloniferum), all federally listed endangered species; northern long-eared bat (Myotis septentrionalis), a species that is currently proposed for listing as federally endangered and, bald eagle (Haliaeetus leucocephalus), a federal species of concern protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d) and the Migratory Bird Treaty Act (16 U.S.C. 703-712).

ODOT has determined that the project may affect but is not likely to adversely affect the northern long-eared bat. The Service is unable to concur with this determination, as the expected project impacts to roosting habitat may adversely affect the species in ways similar to the adverse impacts anticipated for the Indiana bat (see below). However, in consideration of ODOT’s commitments to clear trees outside the summer roosting season and to offset impacts to the Indiana bat by protecting suitable habitat at ODOT’s SCCC2 conservation area in perpetuity (see below), which will also benefit the northern long-eared bat, it is our opinion that the project, as proposed, is not likely to jeopardize the continued existence of the species.

ODOT has determined that the project may affect but is not likely to adversely affect running buffalo clover, a federal endangered species. We understand that surveys for this species were conducted within the original study area during the flowering period in 2011, and again throughout the expanded survey area in 2014. During these surveys, potential habitat for the species was found within the project area; however, no individuals of this species were discovered. Based on this information, the Service concurs with your determination that the project may affect but is not likely to adversely affect running buffalo clover.

ODOT has determined that this project will have no effect on the snuffbox, sheepnose, pink mucket pearly mussel, fanshell, rayed bean or the bald eagle; therefore, consultation under section 7(a)(2) of the ESA is not required. The remainder of this letter addresses impacts to the Indiana bat.

INDIANA BAT - TIER 2 BIOLOGICAL OPINION:

On January 26, 2007, the U.S. Fish and Wildlife Service (Service) issued a programmatic biological opinion (PBO) for the Ohio Department of Transportation’s (ODOT) Statewide Transportation Program. This PBO established a two-tiered consultation process for ODOT activities, with issuance of the programmatic opinion being Tier 1 and all subsequent site-specific project analyses constituting Tier 2 consultations. Under this tiered process, the Service will produce tiered biological opinions when it is
determined that site-specific projects are likely to adversely affect federally listed species. When *may affect*, not likely to adversely affect determinations are made, the Service will review those projects and if justified, provide written concurrence and section 7(a)(2) consultation will be considered completed for those site-specific projects.

In issuing the PBO (Tier 1 biological opinion), we evaluated the effects of all ODOT actions outlined in your Biological Assessment on the federally listed Indiana bat. Your current request for Service review of the **HAM-32F-0.00/Eastern Corridor Segment 1 (Red Bank Road)** reconstruction and improvement project (PID 86461) is a Tier 2 consultation under the January 26, 2007, PBO. We have reviewed the information contained in the letter and supporting materials submitted by your office describing the effects of the proposed project on federally listed species. We concur with your determination that the action is *likely to adversely affect* the Indiana bat. As such, this review focuses on determining whether: (1) this proposed site-specific project falls within the scope of the Tier 1 PBO, (2) the effects of this proposed action are consistent with those anticipated in the Tier 1 PBO, and (3) the appropriate conservation and mitigation measures identified in the biological assessment are adhered to.

That is, this letter serves as the Tier 2 biological opinion for the proposed **HAM-32F-0.00/Eastern Corridor Segment 1 (Red Bank Road)** reconstruction and improvement project. As such, this letter also provides the level of incidental take that is anticipated and a cumulative tally of incidental take that has been authorized and exempted in the PBO.

**Description of the Proposed Action**

Pages 1-3 of your letter, along with the supporting materials you submitted, include the location and a thorough description of the proposed action. The action, as proposed, involves the reconstruction of Old Red Bank Road from Erie Avenue to IR 71, and will include associated intersection improvements, intersection and roadway realignments, and the extensions of two connector roads within the City of Cincinnati and Village of Fairfax in Hamilton County. The purpose of this project is to create a balance of mobility and access to better serve local communities, businesses and neighborhoods while at the same time, improving travel along this important community connector. The project will: 1) reduce congestion and delays along Red Bank Expressway, particularly at major intersections; 2) improve accessibility, safety and flow of traffic; 3) re-establish and enhance local roadway network connections and provide opportunities for congestion management; and 4) provide accommodations for bicyclists and pedestrians. Thirty-four suitable Indiana bat roost trees and three Indiana bat summer maternity roost trees will be removed for the project with total tree clearing totaling 17.3 acres.

We understand that ODOT will implement the following conservation measures to avoid, minimize, and/or mitigate adverse impacts to the Indiana bat:

1) To avoid direct impacts, seasonal clearing restrictions will be implemented, clearing all trees to be impacted by the project between October 1 and March 31 (avoidance measure A-1).

2) 17.3 acres of impacted forest will be added to the SCCC2 Debit List to mitigate adverse impacts to the bat (towards mitigation measure M-1). See attached document: ODOT Interim Debit List. The final type and amount of acreage to be deducted from the SCCC2 Conservation Area to offset impacts from this project will be calculated in accordance with the habitat replacement strategy and ratio to be included in the final agreement between ODOT and the Service regarding the use of the SCCC2 site to offset take of Indiana bat habitat.

**Status of the Species**
Species description, distribution, life history, population dynamics, and status are fully described on pages 13-26 for the Indiana bat in the PBO and are hereby incorporated by reference. Since the issuance of the PBO in 2007, there has been no change in the status of the species.

Species descriptions, life histories, population dynamics, status and distributions are fully described on pages 23-30 for the Indiana bat in the PBO and are hereby incorporated by reference. The most recent population estimate indicates 424,708 Indiana bats occur range wide (King 2011). The current revised Indiana Bat Recovery Plan: First Revision (2007) delineates recovery units based on population discreteness, differences in population trends, and broad level differences in land-use and macrohabitats. There are currently four recovery units for the Indiana bat: Ozark-Central, Midwest, Appalachian Mountains, and Northeast. All of Ohio falls within the Midwest Recovery Unit.

In 2007, white nose syndrome (WNS) was found to fatally affect several species of bats, including the Indiana bat, in eastern hibernacula. To date, WNS is known from the states Alabama, Connecticut, Georgia, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin, as well as the provinces of New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Quebec in Canada. The overall impact this syndrome will have on the species rangewide is uncertain, but surveys in eastern states with 2+ years of mortality from the disease have detected a decline in Indiana bat populations greater than a 70% (Turner et al. 2011).

Environmental Baseline
The environmental baseline for the species listed above was fully described on pages 21-26 of the PBO and is hereby incorporated by reference. Since the issuance of the PBO in 2007, there has been no change in the environmental baseline.

Status of the species within the action area
Since the issuance of the PBO in 2007, there have been no new Indiana bat capture records within the vicinity of this project. Your letter and supporting materials state that suitable habitat exists within the action area, thus we are assuming presence.

Effects of the Action
Based on analysis of the information provided in your letter and supporting materials, we have determined that the effects of the proposed action are consistent with those contemplated and fully described on pages 31-35 of the PBO. Adverse effects to the Indiana bat from this project could occur due to the removal of 17.3 acres of wooded habitat, including 69 potential roost trees and 3 potential maternity roost trees. However, implementation of seasonal cutting restrictions will avoid direct adverse effects to individual bats.

Projects that require the removal of one or more potential maternity roost tree outside of the Indiana bats' maternity season can result in adverse effects to colony members upon their return to maternity areas following hibernation. When a roost tree becomes unsuitable, members of a colony may initially distribute themselves among several previously used alternate roost trees (USFWS 2002; Kurta et al. 2002). Adult male and non-reproductive female Indiana bats may be indirectly exposed to loss of roosting habitat. In general, effects on these individual bats would be less severe than the effects associated with individuals of maternity colonies. Adult male and non-reproductive female Indiana bats are not subject to the physiological demands of pregnancy and rearing young. Males and non-reproductive females typically roost alone or occasionally in small groups. When these individuals are displaced from roosts they must utilize alternative roosts or seek out new roosts. Because these individuals are not functioning as members of maternity colonies, they do not face the challenge of reforming as a colony. Roost tree requirements for non-reproductive Indiana bats are less specific.
whereas maternity colonies generally require larger roost trees to accommodate multiple members of a colony. Therefore, it is anticipated that adverse indirect effects to non-reproductive bats will be less than the effects to reproductively active females.

In addition, ODOT’s placement of conservation-oriented restrictions on the SCCC2 site has the potential to provide suitable habitat for the Indiana bat on and near that property into perpetuity. The SCCC2 property was purchased by ODOT in December 2012 for the purpose of mitigating ODOT project impacts on waters of the U.S. and federally listed species. Prior to ODOT’s purchase of the property, the SCCC2 site was available for development, which likely would have further reduced available habitat for the Indiana bat in eastern Ohio.

We are not aware of any non-federal actions in the action area that are reasonably certain to occur. Thus, we do not anticipate any cumulative effects associated with this project.

Conclusion
We believe the proposed HAM-32F-0.00/Eastern Corridor Segment 1 (Red Bank Road) reconstruction and improvement project is consistent with the PBO. After reviewing site specific information, including 1) the scope of the project, 2) the environmental baseline, 3) the status of the Indiana bat and its assumed presence within the project area, 4) the effects of the action, and 5) any cumulative effects, it is the Service’s biological opinion that this project is not likely to jeopardize the continued existence of the Indiana bat.

Incidental Take Statement
The Service anticipates that the proposed action will result in incidental take associated with projects in the South management unit. Incidental take for this project, based on the potential removal of approximately 17.3 acres, results in the cumulative incidental take of 371.40 for this management unit. This project, added to the cumulative total of incidental take for the implementation of ODOT’s Statewide Transportation Program, is well within the level of incidental take anticipated in the 2007 PBO (see table below).

<table>
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<tr>
<th>Management Unit</th>
<th>IT anticipated in PBO</th>
<th>IT for this project</th>
<th>Cumulative IT granted to date</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>1,565 acres</td>
<td>0 acres</td>
<td>222.85 acres</td>
</tr>
<tr>
<td>Central</td>
<td>2,280 acres</td>
<td>0 acres</td>
<td>137.21 acres</td>
</tr>
<tr>
<td>Northeast</td>
<td>4,679 acres</td>
<td>0 acres</td>
<td>375.31 acres</td>
</tr>
<tr>
<td>East</td>
<td>6,370 acres</td>
<td>0 acres</td>
<td>223.54 acres</td>
</tr>
<tr>
<td>South</td>
<td>7,224 acres</td>
<td>17.3 acres</td>
<td>956.73 acres</td>
</tr>
<tr>
<td>Statewide</td>
<td>22,118 acres</td>
<td>17.3 acres</td>
<td>1915.65 acres</td>
</tr>
</tbody>
</table>

We determined that this level of anticipated and exempted take of Indiana bats from the proposed project, in conjunction with the other actions taken by ODOT pursuant to the PBO to date, is not likely to result in jeopardy to the species.

We understand that ODOT is implementing all pertinent Indiana bat conservation measures, specifically A-1 and M-1 stipulated in the Biological Assessment on pages 29-31. In addition, ODOT is monitoring the extent of incidental take that occurs on a project-by-project basis. These measures will minimize the impact of the anticipated incidental take.

This fulfills your section 7(a)(2) requirements for this action. However, should the proposed project be modified or the level of take identified above be exceeded, ODOT should promptly reinitiate consultation as outlined in 50 CFR §402.16. As provided in 50 CFR §402.16, reinitiation of formal consultation is
required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the continued implementation of ODOT’s Statewide Transportation Program and projects predicated upon it may affect listed species in a manner or to an extent not considered in this opinion; (3) the continued implementation of ODOT’s Statewide Transportation Program and projects predicated upon it are subsequently modified in a manner that cause an effect to federally listed species not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease, pending reinitiation. Requests for reinitiation, or questions regarding reinitiation, should be directed to the U.S. Fish Wildlife Service’s Columbus, Ohio Field Office.

In addition to the criteria, described immediately above, under which formal consultation must be reinitiated for the Indiana bat, the following reinitiation guidance also applies. Should, during the term of this action, additional information on listed or proposed species, or their critical habitat become available, if a proposed species becomes officially listed, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be reinitiated to assess whether the determinations are still valid.

We appreciate your continued efforts to ensure that this project is consistent with all provisions outlined in the Biological Assessment and PBO. If you have any questions regarding our response or if you need additional information, please contact Marci Lininger at extension 27 or Karen Hallberg at extension 23.

Sincerely,

Mary Knapp, Ph.D.
Field Supervisor

cc: J. Kessler, ODNR, Office of Real Estate, Columbus, OH (email only)
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