

APPENDIX A

SOCIOECONOMIC, LAND USE, AND AGRICULTURAL DISTRICT REVIEW REPORT

GOOD HOPE-HARRISON 138 KV TRANSMISSION LINE REBUILD PROJECT, PICKAWAY, FAIRFIELD, AND HOCKING COUNTIES, OHIO

SOCIOECONOMIC, LAND USE, AND AGRICULTURAL DISTRICT REVIEW REPORT

Prepared for:

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Project #: 60482511

June 2016

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FIGURES (follow text)

Number

FIGURES 1A-1F LAND USE MAP

1.0 PROJECT DESCRIPTION

This document presents the socioeconomic, land use, and agricultural district review conducted by AECOM for American Electric Power Ohio Transmission Company's (AEP Ohio Transco) proposed Good Hope-Harrison 138 kV Transmission Line Rebuild Project (Project). AEP Ohio Transco is proposing to rebuild approximately 29.5 miles of the existing Good Hope-Harrison 138 kV transmission line through Pickaway, Fairfield, and Hocking Counties, Ohio.

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to assess and report the socioeconomic, land use, and agricultural district characteristics potentially affected by the Project, as stated in Ohio Administrative Code (OAC) Rule 4906-6-05(B)(10)(a) and (b). These rules state:

(10) The applicant shall describe the social and ecological impacts of the project.

- (a) Provide brief, general description of land use within the vicinity of the proposed project, including a list of municipalities, townships, and counties affected.*
- (b) Provide the acreage and a general description of all agricultural land and separately all agricultural district land, existing at least sixty days prior to submission of the application within the potential disturbance area of the project.*

AEP Ohio Transco retained AECOM to conduct a desktop review of socioeconomic, land use, and agricultural district land characteristics. A study corridor was established within 1,000 feet of each side of the line to be rebuilt, resulting in a 2,000-foot wide study corridor. In conjunction with ecological field surveys for the Project, AECOM noted land uses crossed by the Project. This report will be used to assist AEP Ohio Transco's efforts to avoid or minimize impacts to socioeconomic characteristics and land uses potentially present in the study area during construction activities.

2.0 GENERAL LAND USE DESCRIPTION

Land use within the study area is shown on Figures 1A through 1CC. Current land use characteristics were obtained through review of aerial photography taken in 2013; the United States Geological Survey (USGS) 7.5-minute topographic maps of the Lockbourne (1985), Canal Winchester (1985), East Ringgold (1985), Amanda (1985), Clearport (1963), and Rockbridge (1976), Ohio quadrangles; parcel GIS files of the Project area; and a field reconnaissance conducted in March 2016.

The Project vicinity is a rural area with sparse developed land present. The primary land uses within the 2,000-foot wide study corridor include agricultural, woodlots, and scattered residences. Transportation and utility corridors are also present.

The 2,000-foot wide study corridor crosses Pickaway, Fairfield, and Hocking Counties. Most of the study corridor in Hocking County is a part of the Clear Creek Nature Preserve. Slate Run Metropark also crosses the study corridor in Pickaway County. General land use trends in the area suggest very little

conversion of farmland and other open land. Little or minimal growth is expected in the immediate Project vicinity.

3.0 POPULATION DENSITY ESTIMATE

Population density estimates for land within the 2,000-foot wide study corridor were calculated by direct estimation based on study corridor size, number of residences identified in the corridor, and the average number of persons per household in the census tracts present in the study corridor. Approximately 244 homes were identified along the proposed 29.5-mile Good Hope-Harrison 138 kV line within the 7,230-acre study corridor. According to the 2010 U.S. Census, the study corridor falls along 6 census tracts with a household size range of 2.53 to 2.78 residents per household. Based on the number of homes identified along the study corridor, the total estimated population along the route is approximately 653. This equates to a population density of 0.09 persons per acre.

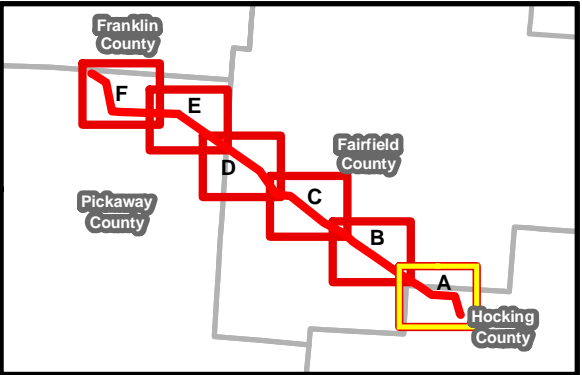
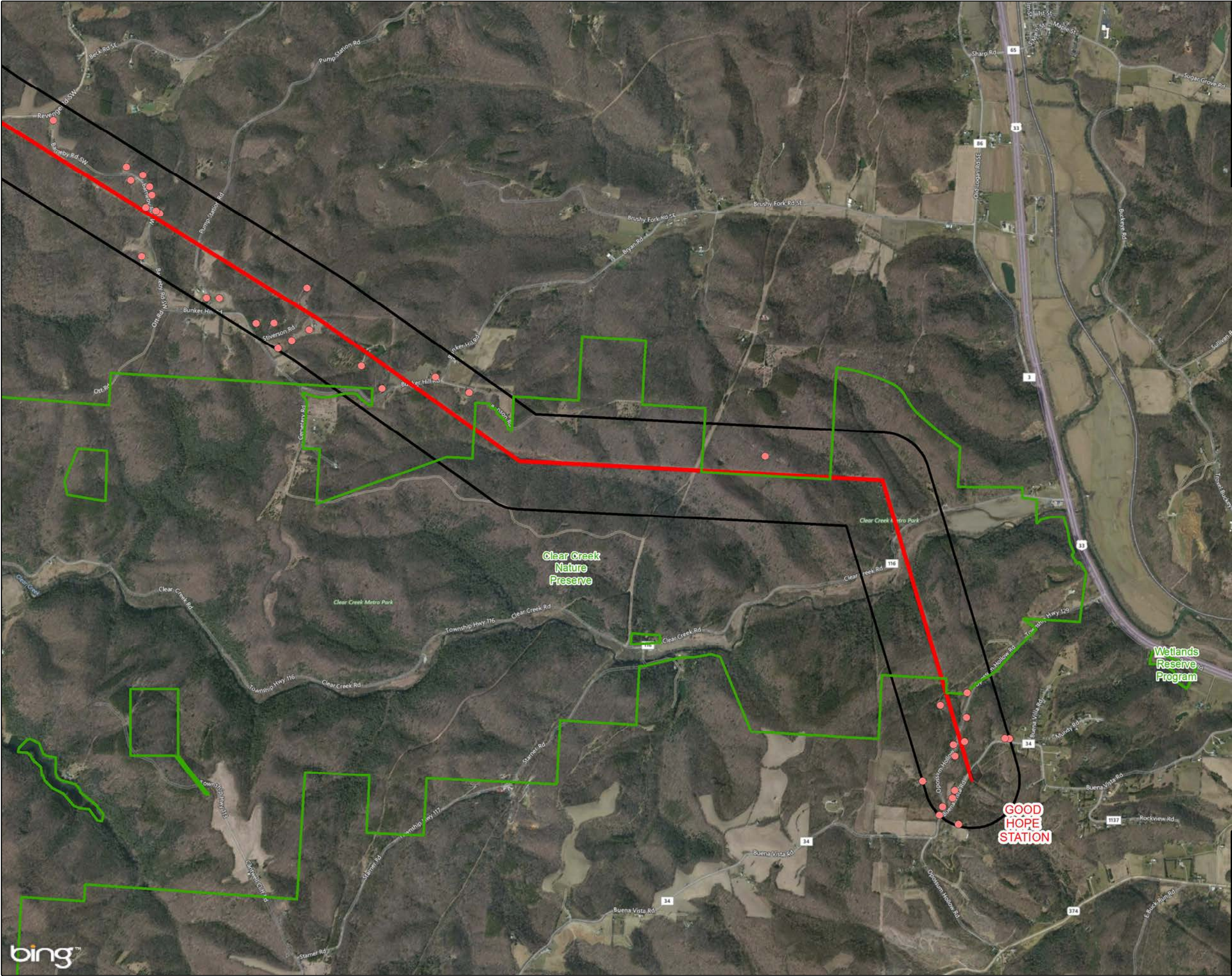
4.0 AGRICULTURAL DISTRICT LAND

AECOM contacted Pickaway, Fairfield, and Hocking County Auditors regarding agricultural district land parcels. Only Pickaway County contained agricultural district lands (23 parcels total) which intersected the 2,000-foot study corridor (as shown in Figures 1A through 1F).

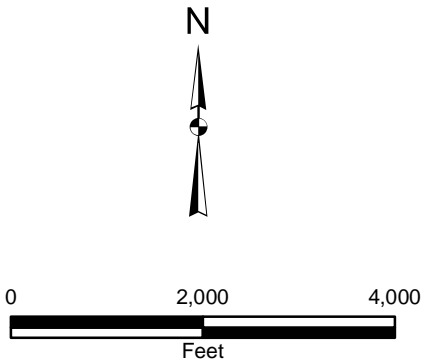
5.0 CONCLUSION

The Project is not expected to significantly impact current socioeconomic characteristics, land use, or agricultural district land in the vicinity. The Project is not expected to negatively impact any future land use plans for the area.



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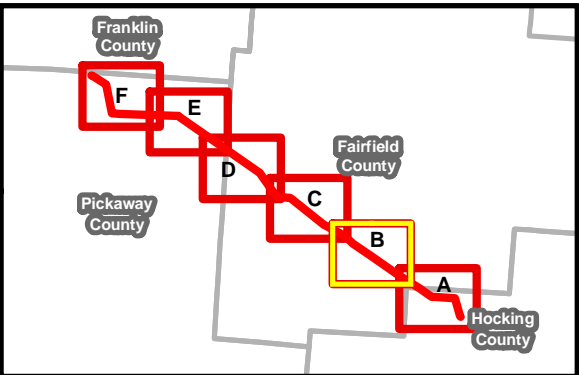
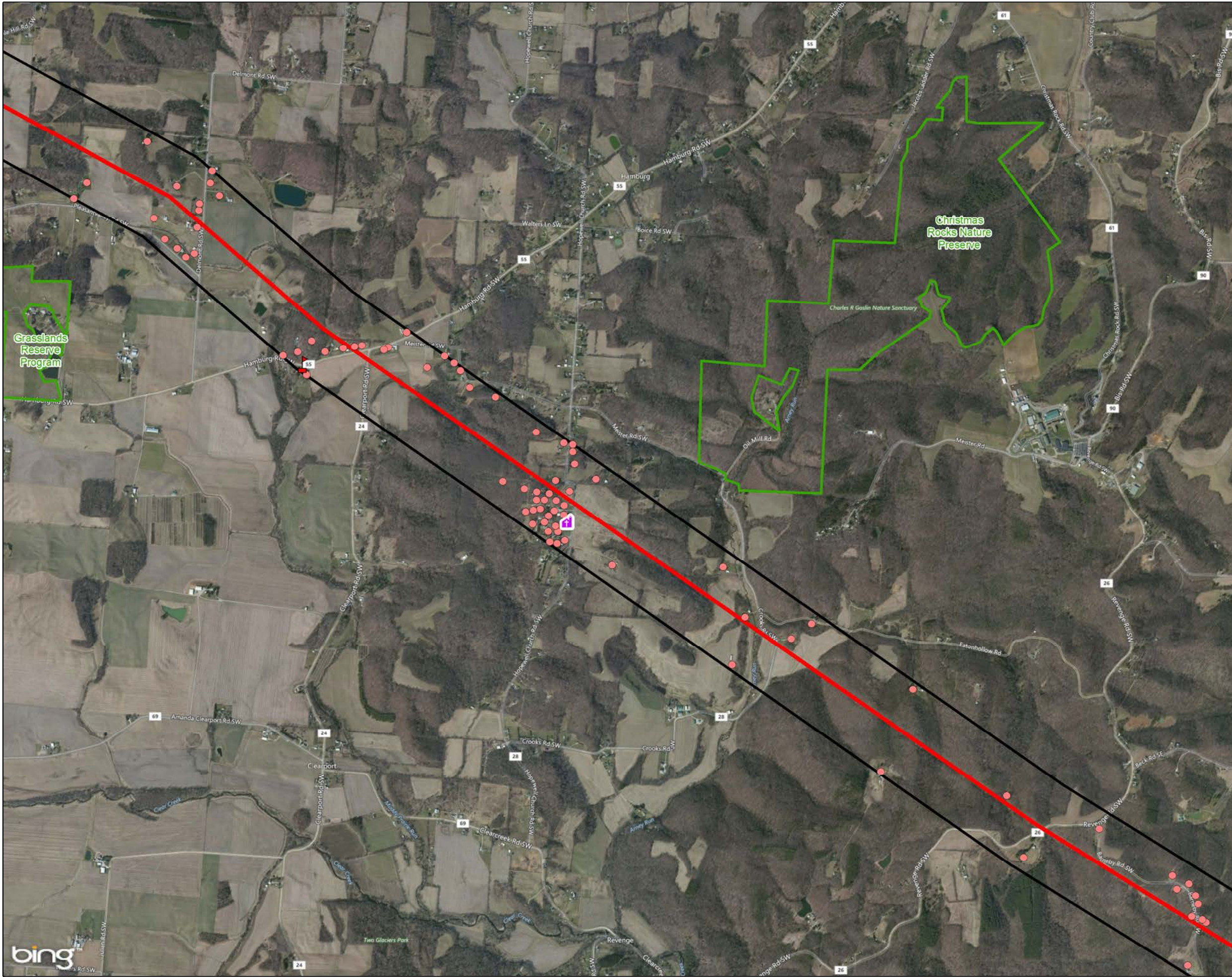
- LEGEND:
- Proposed Good Hope to Harrison 138 kV Transmission Line
 - 2,000ft Corridor Study Area
 - Residence
 - Government Owned Land



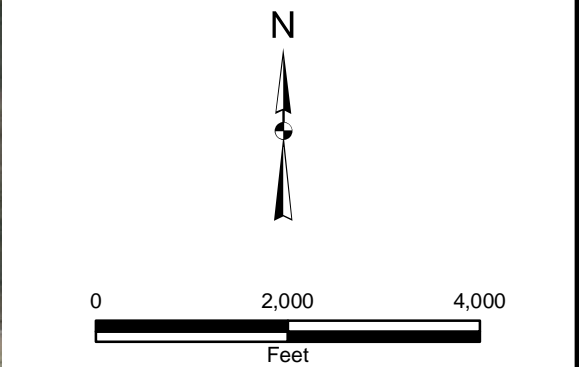
BASE MAP SOURCE:
Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation © 2010 NAVTEQ © AND

		<i>Good Hope-Harrison</i> <i>138 kV Line</i>	
FIGURE 1A LAND USE MAP			
DATE: 6/6/2016		SCALE: 1:24,000	
CREATED BY: RD		CHECKED BY: AG	
JOB NO. 60482511			

J:\Project\VAEP\60482511 Harrison-Good Hope-138kv Rebuild\Data-Tech\GIS\Harrison_GoodHope_LandUse20160602.mxd Date: 6/6/2016



- LEGEND:
- Proposed Good Hope to Harrison 138 kV Transmission Line
 - 2,000ft Corridor Study Area
 - Residence
 - Church
 - School

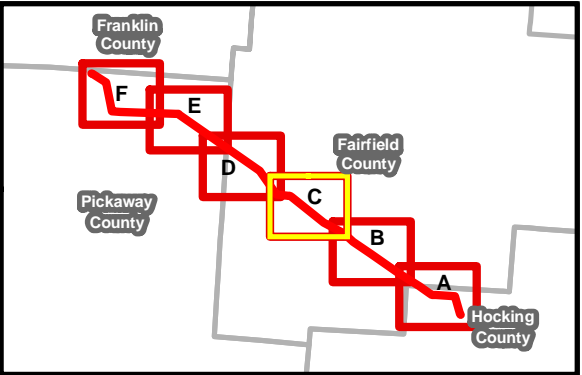


BASE MAP SOURCE:
Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation © 2010 NAVTEQ © AND

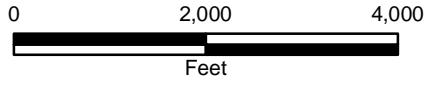
AEP OHIO TRANSMISSION COMPANY Good Hope-Harrison 138 kV Line

FIGURE 1B LAND USE MAP	
DATE: 6/6/2016	SCALE: 1:24,000
CREATED BY: RD	CHECKED BY: AG
JOB NO. 60482511	AECOM


J:\Project\VAEP\60482511 Harrison-Good Hope 138kv Rebuild\Data-Tech\GIS\Harrison_GoodHope_LandUse20160602.mxd Date: 6/6/2016



- LEGEND:
- Proposed Good Hope to Harrison 138 kV Transmission Line
 - 2,000ft Corridor Study Area
 - Residence
 - Cemetery
 - School/Education




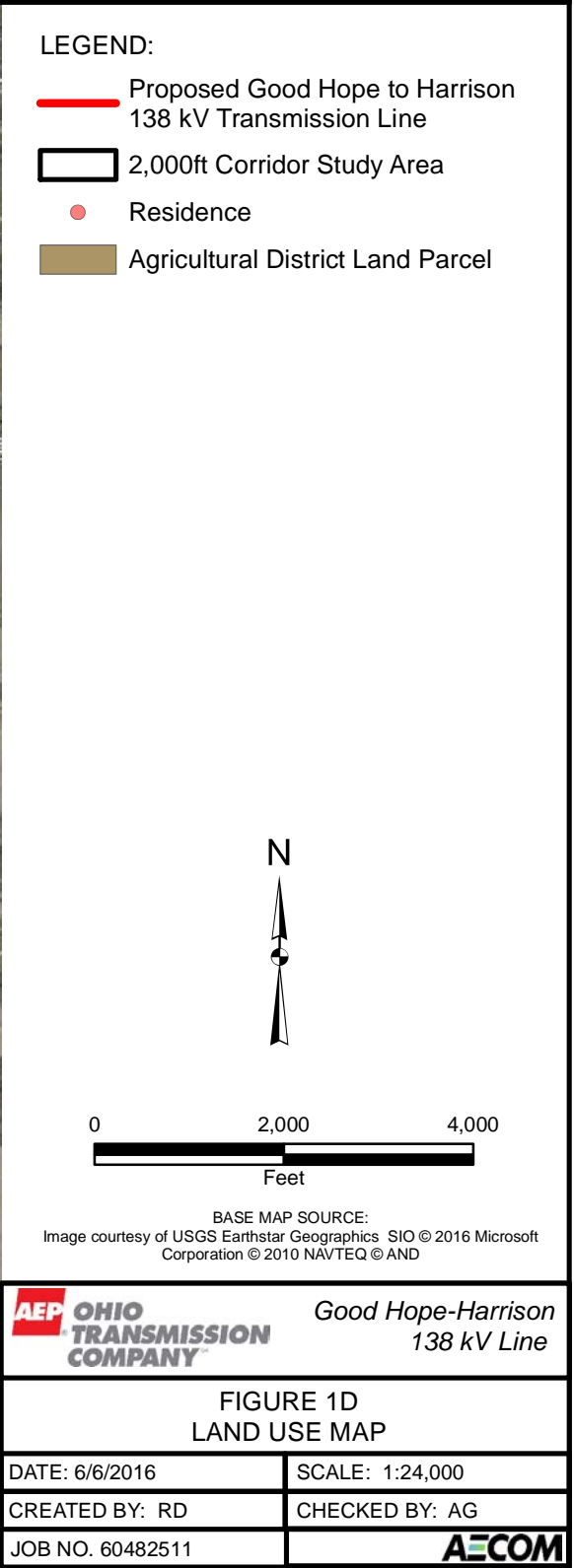
BASE MAP SOURCE:
Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation © 2010 NAVTEQ © AND

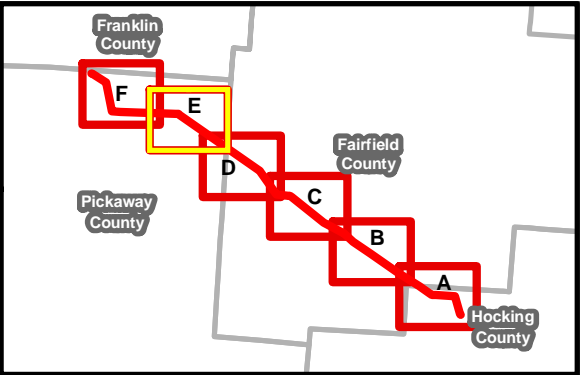
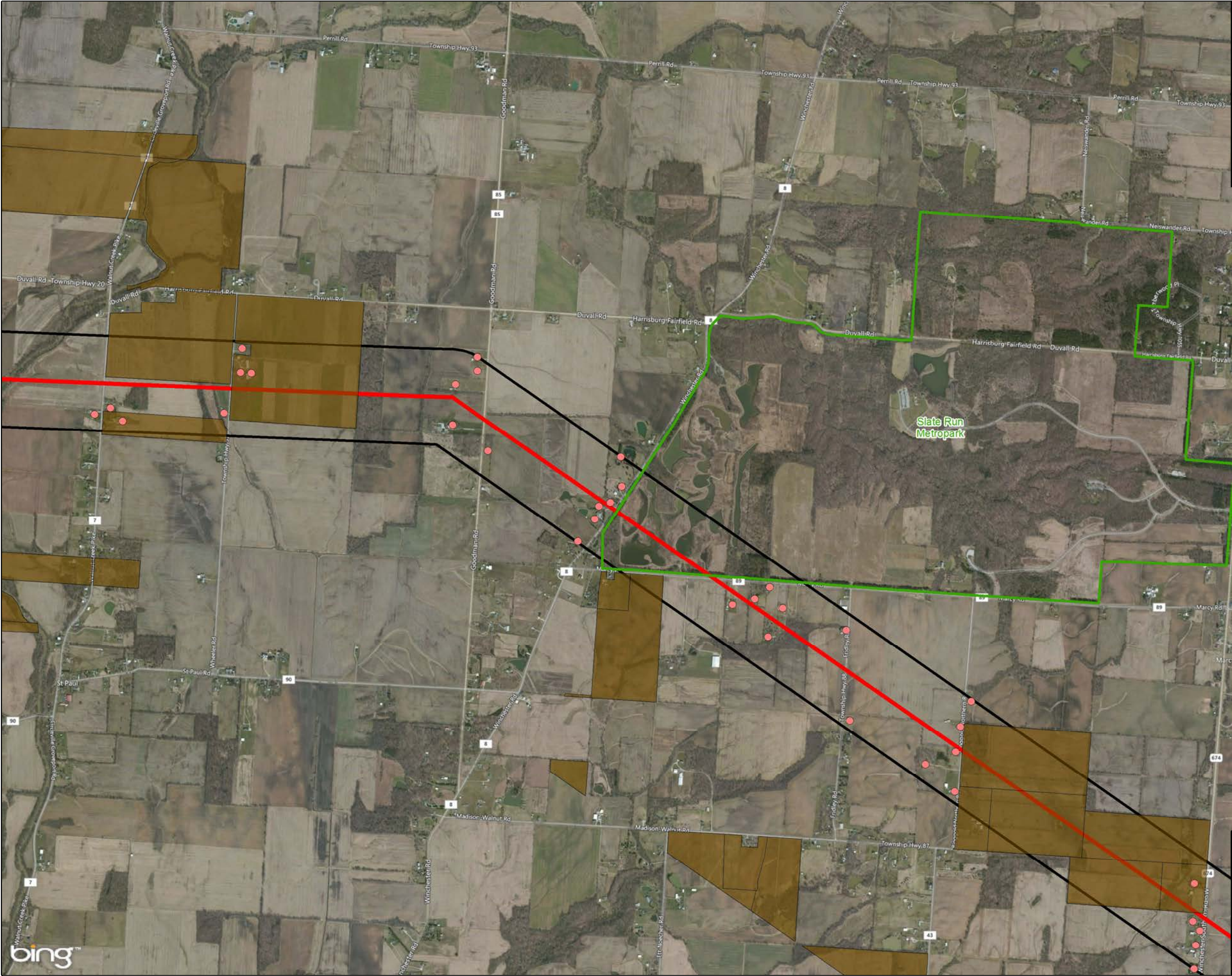


Good Hope-Harrison
138 kV Line

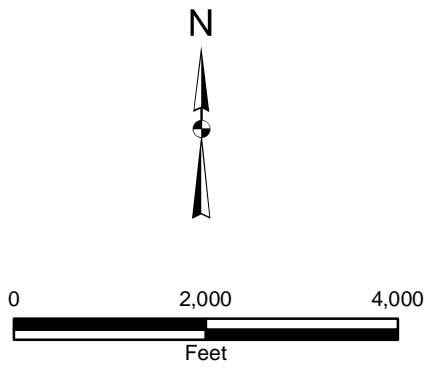
FIGURE 1C
LAND USE MAP

DATE: 6/6/2016	SCALE: 1:24,000
CREATED BY: RD	CHECKED BY: AG
JOB NO. 60482511	






- LEGEND:
- Proposed Good Hope to Harrison 138 kV Transmission Line
 - 2,000ft Corridor Study Area
 - Residence
 - Agricultural District Land Parcel




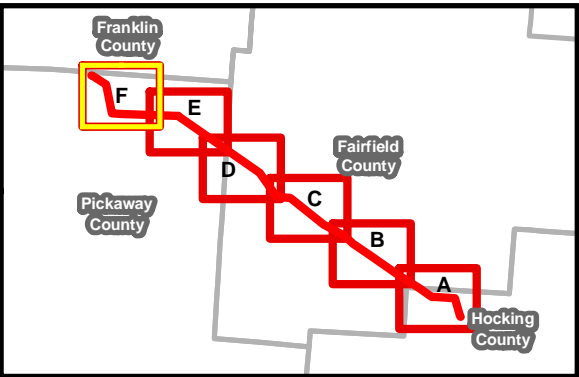
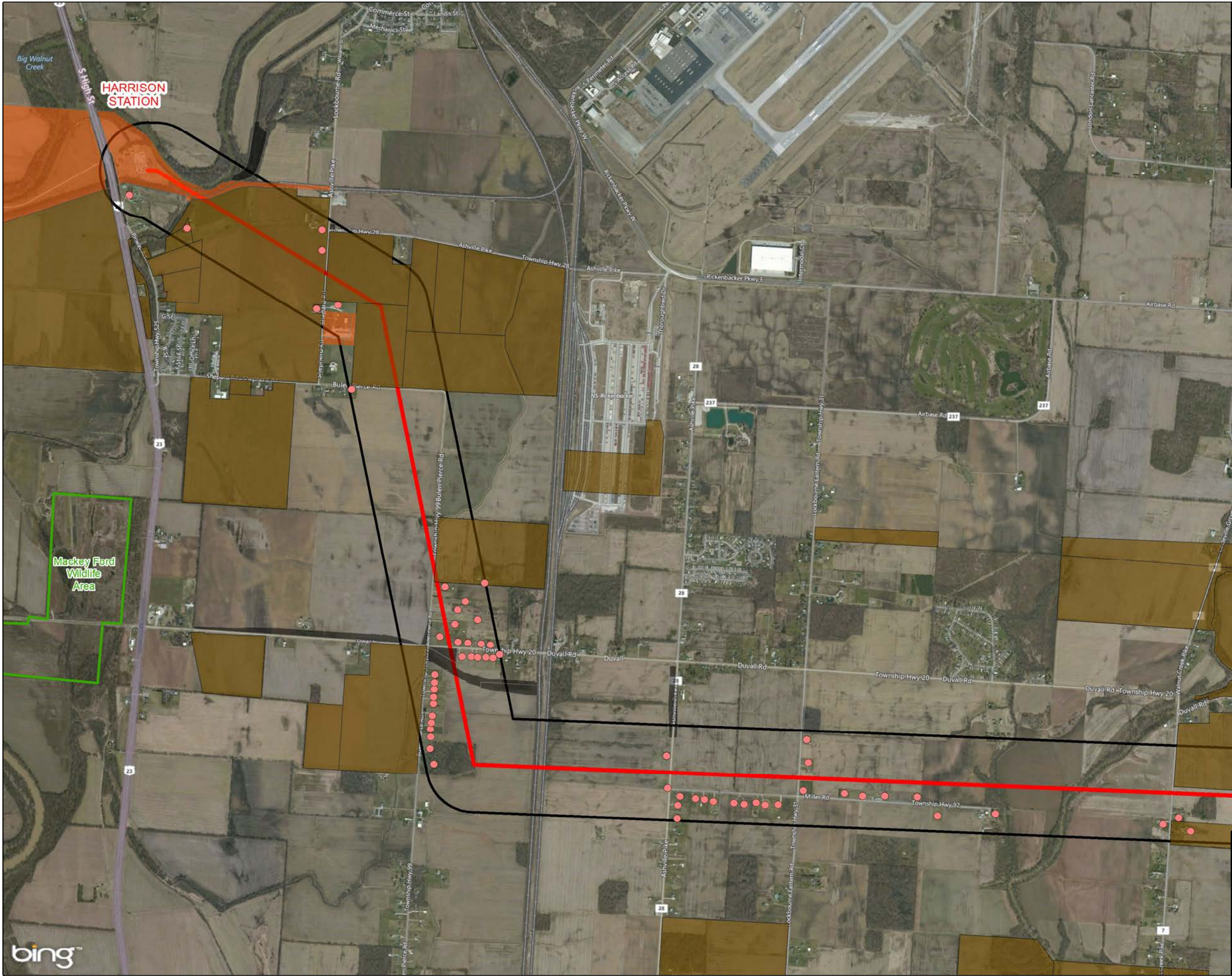
BASE MAP SOURCE:
Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation © 2010 NAVTEQ © AND



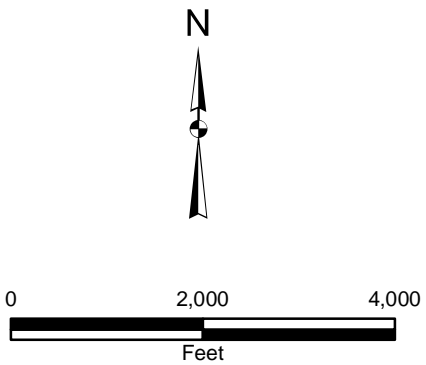
Good Hope-Harrison
138 kV Line

FIGURE 1E
LAND USE MAP



DATE: 6/6/2016	SCALE: 1:24,000
CREATED BY: RD	CHECKED BY: AG
JOB NO. 60482511	



- LEGEND:
- Proposed Good Hope to Harrison 138 kV Transmission Line
 - 2,000ft Corridor Study Area
 - Residence
 - Commercial/Industrial Land Use
 - Government Owned Land
 - Agricultural District Land Parcel



BASE MAP SOURCE:
Image courtesy of USGS Earthstar Geographics SIO © 2016 Microsoft Corporation © 2010 NAVTEQ © AND

		<i>Good Hope-Harrison 138 kV Line</i>	
FIGURE 1F LAND USE MAP			
DATE: 6/6/2016		SCALE: 1:24,000	
CREATED BY: RD		CHECKED BY: AG	
JOB NO. 60482511			

APPENDIX B

THREATENED AND ENDANGERED SPECIES SURVEY REPORT

HARRISON-GOOD HOPE 138 KV TRANSMISSION LINE REBUILD PROJECT, PICKAWAY, FAIRFIELD, AND HOCKING COUNTIES, OHIO

RARE, THREATENED, AND ENDANGERED SPECIES SURVEY REPORT

Prepared for:

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Project #: 60482511

May 2016

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FIGURES

Number

FIGURE 1	OVERVIEW MAP
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ATTACHMENT

Number

ATTACHMENT A	AGENCY RESPONSES
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1.0 PROJECT DESCRIPTION

This document presents the results of the rare, threatened, and endangered species assessment conducted by AECOM for American Electric Power Ohio Transmission Company's (AEP Ohio Transco) Good Hope-Harrison 138 kV Transmission Line Rebuild Project (Project). AEP Ohio Transco is proposing to rebuild approximately 29.5 miles of the existing Good Hope-Harrison 138 kV transmission line through Pickaway, Fairfield, and Hocking Counties, Ohio within its existing right-of-way (ROW).

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to assess and report the federal and state designated species potentially affected by the Project, as stated in Ohio Administrative Code (OAC) Rule 4906-6-05(B)(10)(e). This rule states:

(10) The applicant shall describe the social and ecological impacts of the project:

(e) Provide a description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest) that may be located within the potential disturbance area of the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.

AEP retained AECOM to conduct rare, threatened, and endangered species review and field surveys within areas crossed by the Project ROW. This report will be used to assist AEP Ohio Transco's efforts to avoid impacts to threatened and endangered species potentially present in the survey area during construction activities.

2.0 METHODS

The first phase of the survey involved a review of online lists of federal and state species of concern. In addition to the review of available literature, AECOM submitted a request to Ohio Department of Natural Resources (ODNR) Ohio Natural Heritage Database (ONHD) for Geographical Information System (GIS) records of species of concern that were reported within close proximity to the Project. AECOM also submitted coordination letters to the U.S. Fish and Wildlife Service (USFWS) and ODNR – Office of Real Estate soliciting comments on the Project. Agency-identified species and available species-specific information was reviewed to identify the various habitat types that listed species are known to frequent. AECOM field biologist conducted a general habitat survey in conjunction with the stream and wetland field surveys in March 2016. The 200-foot survey corridor was generally observed to be an existing electric transmission right-of-way.

3.0 AGENCY COORDINATION

3.1 State Species of Concern

In an email dated January 13, 2016, the ODNR provided a corresponding response to a request for GIS records including specific comments regarding the Project. The ONHD database review identified one conservation site, Duvall Woods, approximately 0.5 mile east of the northern portion of the proposed centerline. Three managed areas were identified within one mile of the existing centerline. Two of these managed areas, Clear Creek Metro Park and Slate Run Metro Park, are crossed by the existing Project ROW, while the third managed area is approximately 0.4 miles northeast of the Project. Eight terrestrial communities and two animal assemblages (a breeding amphibian site and a Great Blue Heron rookery) were identified within one mile of the Project centerline. One of the terrestrial communities, an Appalachian oak forest associated with the Clear Creek Metro Park & State Nature Preserve, is crossed by the southeastern portion of the existing Project centerline. A total of 42 rare or endangered plant and animal ONHD GIS polygons were identified within one mile of the existing Project centerline, including 14 state threatened species, 12 state potentially threatened species, 11 state species of concern, and five state species of special interest. Five of the rare or endangered species ONHD GIS polygons are crossed by the existing Project centerline, including four vascular plants and one vertebrate animal. The four vascular plant species crossed by the existing centerline includes two state threatened species, Raven-foot sedge (*Carex crus-corvi*) and great rhododendron (*Rhododendron maximum*), and two state potentially threatened species, little gray polypody (*Pleopeltis polypodioides*) and blunt-leaved milkweed (*Asclepias amplexicaulis*). The vertebrate animal species (a bird species) ONHD GIS polygon crossed by the existing centerline is the hermit thrush (*Catharus guttatus*). A copy of the ONHD email summarizing the database records review is included in Attachment A.

After receiving the ODNR ONHD response, AECOM sent a letter to ODNR – Office of Real Estate on March 21, 2016 soliciting specific comments regarding the Project. ODNR provided a letter response on April 28, 2016 in which they provided comments on the following species: the Indiana bat (*Myotis sodalis*), 19 mussel species, 12 fish species, three snake species, black bear (*Ursus americanus*) and American burying beetle (*Nicrophorus americanus*) as state special status species with ranges in the Project area. A copy of the ODNR response is included in Attachment A. Table 1 lists the species identified by ODNR in the April 28, 2016 letter response with ranges in the Project area.

**TABLE 1
STATE LISTED SPECIES THAT COULD INHABIT
THE PROJECT AREA**

Common Name	Scientific Name	State Status	General AEP/AECOM Notes
Mammals			
Indiana bat	<i>Myotis sodalis</i>	Endangered	Plan to follow seasonal clearing restrictions
Black bear	<i>Ursus americanus</i>	Endangered	Not likely to be impacted as ODNR stated.

**TABLE 1
STATE LISTED SPECIES THAT COULD INHABIT
THE PROJECT AREA**

Common Name	Scientific Name	State Status	General AEP/AECOM Notes
Fish			
Scioto madtom	Noturus trautmani	Endangered	In-stream work not proposed at this time for perennial streams.
Popeye shiner	Notropis ariommus	Endangered	
Northern brook lamprey	Ichthyomyzon fossor	Endangered	
Spotted darter	Etheostoma maculatum	Endangered	
Shortnose gar	Lepisosteus platostomus	Endangered	
Northern madtom	Noturus stigmosus	Endangered	
Goldeye	Hiodon alosoides	Endangered	
Tongue-tied minnow	Exoglossum laurae	Threatened	
Paddlefish	Polyodon spathula	Threatened	
Tippecanoe darter	Etheostoma tippecanoe	Threatened	
Bigeye shiner	Notropis boops	Threatened	
Lake chubsucker	Erimyzon sucetta	Threatened	
Mussels			
Purple cat's paw	Epioblasma o. obliquata	Endangered	In-stream work not proposed at this time.
Clubshell	Pleurobema clava	Endangered	
Fanshell	Cyprogenia stegaria	Endangered	
Northern riffleshell	Epioblasma torulosa rangiana	Endangered	
Rayed bean	Villosa fabalis	Endangered	
Rabbitsfoot	Quadrula cylindrical cylindrical	Endangered	
Butterfly	Ellipsaria lineolata	Endangered	
Snuffbox	Epioblasma triquetra	Endangered	
Long solid	Fusconaia maculata maculata	Endangered	
Ohio pigtoe	Pleurobema cordatum	Endangered	
Sharp ridged pocketbook	Lampsilis ovata	Endangered	
Washboard	Megolonaias nervosa	Endangered	
Elephant-ear	Elliptio crassidens	Endangered	
Pyramid pigtoe	Pleurobema rubrum	Endangered	
Ebonyshe	Fusconaia ebenus	Endangered	
Black sandshell	Ligumia recta	Threatened	
Threehorn wartyback	Obliquaria reflexa	Threatened	
Pondhorn	Unio merus tetralasmus	Threatened	
Fawnsfoot	Truncilla donaciformis	Threatened	

**TABLE 1
STATE LISTED SPECIES THAT COULD INHABIT
THE PROJECT AREA**

Common Name	Scientific Name	State Status	General AEP/AECOM Notes
Reptiles			
Timber rattlesnake	<i>Crotalus horridus horridus</i>	Endangered	Not likely to be impacted as ODNR stated.
Kirtland's snake	<i>Clonophis kirtlandii</i>	Threatened	Not likely to be impacted as ODNR stated.
Eastern massasauga	<i>Sistrurus catenatus</i>	Threatened	Not likely to be impacted as ODNR stated.
Insects			
American burying beetle	<i>Nicrophorus americanus</i>	Endangered	Not likely to be impacted as ODNR stated.

Indiana bat comments: ODNR requested that suitable Indiana bat habitat should be conserved or cut between October 1 and March 31. A net survey must be conducted between June 15 and August 15 prior to cutting, if clearing is necessary during summer months.

Mussel comments: ODNR stated that Project must not have an impact on freshwater native mussels at the Project site, both listed and non-listed species. ODNR commented that if the Project would have any in-water work in streams that fall into the categories described in the Ohio Mussel Survey Protocol (2015), further coordination with them will be required and a professional malacologist may need to conduct mussel survey. If no in-water work will occur in perennial streams, then the Project is not likely to impact mussel species.

Fish comments: ODNR stated that they recommend no in-water work in perennial stream occur from April 15th to June 30th to minimize impacts to fish species. However, if no in-water work is proposed in a perennial stream, then the Project is not likely to impact the listed fish species.

Black bear comments: ODNR stated that due to the location, type of habitat present along the Project route, and the type of work proposed, the Project is not likely to impact the black bear.

Snake comments: ODNR stated that due to the location, type of habitat present along the Project route, and the type of work proposed, the Project is not likely to impact the timber rattlesnake, Kirkland's snake, or eastern massasauga.

American burying beetle comments: ODNR stated that due to the location, type of habitat present along the Project route, and the type of work proposed, the Project is not likely to impact the American burying beetle.

3.2 Federal Species of Concern

To address the Project's potential to impact federally protected species, AECOM conducted a literature review of U.S. Fish and Wildlife's (USFWS) *Federally Listed Species by Ohio Counties, April 2015*, a table that is publicly available on their website, to determine what species are known to potentially occur in Fairfield County, Hocking County, and Pickaway County. Table 2 lists the 12 species identified during the USFWS literature review.

TABLE 2
FEDERALLY LISTED SPECIES THAT COULD INHABIT
FAIRFIELD, HOCKING, AND PICKAWAY COUNTIES, OHIO

Common Name	Scientific Name	Federal Status	County	General Notes
Mammals				
Indiana bat	<i>Myotis sodalis</i>	Endangered	Fairfield, Hocking, Pickaway	Seasonal clearing restrictions
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	Fairfield, Hocking, Pickaway	Seasonal clearing restrictions
Reptiles				
Eastern massasauga	<i>Sistrurus catenatus</i>	Proposed as Threatened	Fairfield	Rebuild project predominantly in existing ROW
Fish				
Scioto madtom	<i>Noturus trautmani</i>	Endangered	Pickaway	In-stream work not proposed at this time
Mussels				
Clubshell	<i>Pleurobema clava</i>	Endangered	Pickaway	In-stream work not proposed at this time
Northern riffleshell	<i>Epioblasma torulosa rangiana</i>	Endangered	Pickaway	In-stream work not proposed at this time
Rabbitsfoot	<i>Quadrula cylindrica cylindrica</i>	Endangered	Pickaway	In-stream work not proposed at this time
Rayed bean	<i>Villosa fabalis</i>	Endangered	Pickaway	In-stream work not proposed at this time
Snuffbox	<i>Epioblasma triquetra</i>	Endangered	Pickaway	In-stream work not proposed at this time
Insects				
American burying beetle	<i>Nicrophorus americanus</i>	Endangered	Hocking	Available literature indicates that habitat preference includes grasslands and the open understory of oak-hickory forests. Rebuild project predominantly in existing ROW.

TABLE 2
FEDERALLY LISTED SPECIES THAT COULD INHABIT
FAIRFIELD, HOCKING, AND PICKAWAY COUNTIES, OHIO

Common Name	Scientific Name	Federal Status	County	General Notes
Plants				
Northern monkshood	<i>Aconitum noveboracense</i>	Threatened	Hocking	Rebuild project predominantly in existing ROW. Temporary impacts to vegetation
Small whorled pogonia	<i>Isotria medeoloides</i>	Threatened	Hocking	Rebuild project predominantly in existing ROW. Temporary impacts to vegetation

Federally Listed Species by Ohio Counties, April, 2015.

Accessed: May13, 2016; <http://www.fws.gov/midwest/Endangered/lists/pdf/OhioSppListNov2015.pdf>

AECOM submitted a coordination letter to USFWS on March 21, 2016, soliciting comments on the Project. In a letter to AECOM dated May 13, 2016, USFWS provided comments for the following species: species covered under the Migratory Bird Treaty Act, two bat species, four mussel species, one fish species, two plant species, one beetle species and two snake species. A copy of the USFWS letter is included in Attachment A.

Migratory Bird Treaty Act Species: USFWS stated that Sandhill cranes have been documented nesting at Slate Run Metro Park, which the Project crosses. USFWS indicated that to avoid disturbance of sandhill cranes nesting that disturbance within the park be avoided within March 1st and July 15th. Additionally, a great blue heron rookery was identified within the ONHD data received from ODNR, so therefore USFWS recommended that construction disturbance within 300 feet of the rookery should be avoided within April 1st through July 15th in order to avoid impacts to this breeding species. Based on the ONHD data, this rookery is approximately 0.7-miles to the southwest of the Project corridor and does not appear likely to be impacted by the Project.

Indiana Bat and Northern Long-Eared Bat: The federal government lists the Indiana bat as endangered in Ohio. Winter Indiana bat hibernacula include caves and mines, while summer habitat typically includes tree species exhibiting exfoliating bark or cavities that can be used for roosting. The 8- to 10-inch diameter size classes of several species of hickory (*Carya* spp.), oak (*Quercus* spp.), ash (*Fraxinus* spp.), birch (*Betula* spp.), and elm (*Ulmus* spp.) have been found to be utilized by the Indiana bat. These tree species and many others may be used when dead, if there are adequately sized patches of loosely-adhering bark or open cavities. The structural configuration of forest stands favored for roosting includes a mixture of loose-barked trees with 60 to 80 percent canopy closure and a low density sub-canopy (less than 30 percent between about 6 feet high and the base canopy). The suitability of roosting habitat for foraging or the proximity to suitable foraging habitat is critical to the evaluation of a particular tree stand. An open subcanopy zone, under a moderately dense canopy, is important to allow maneuvering while catching insect prey. Proximity to water is critical, because insect prey density is greater over or near open water.

The federal government also lists the Northern long-eared bat as federally threatened in Ohio. As with the Indiana bat, winter northern long-eared bat hibernacula include caves and mines, while summer habitat typically includes tree species exhibiting exfoliating bark or cavities that can be used for roosting. Northern long-eared bat has also been found, albeit rarely, roosting in structures like barns and sheds.

USFWS stated that the Project is within the vicinity of confirmed records and fall swarming records of Indiana bats and northern long-eared bats within Clear Creek Metropark. These species would be expected to be present after and prior to summer roosting season. USFWS indicated that since Indiana bat presence in the vicinity has been documented, clearing of trees greater than 3 inches diameter breast height (dbh) during the summer roosting season may result in a direct take of individuals. For the southeastern portion of the Project, USFWS recommended implementation of seasonal tree cutting (only clearing between November 15 and March 15), if necessary due to documented swarming in the fall by Indiana bats. USFWS indicated that the extended seasonal restriction will prevent direct impacts to bats that are swarming in the fall and staging in the spring. In the remaining portion of Project located west of Hocking Township in Fairfield County, USFWS recommended that tree removal only occur between October 1st and March 31st. USFWS indicated that following the season tree clearing recommendations should ensure that any effects to Indiana bats and northern long-eared bats are insignificant or discountable. USFWS also stated that because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for the species.

Bald eagle: The range of this protected species under the Bald and Golden Eagle Protection Act is listed within the Project area. USFWS indicated that based on Project location and nest records, no significant impacts are likely to this species.

Mussel species: The ranges of these five federally endangered mussel species are documented in the Scioto River in Pickaway County. Since no in-water work is planned as part of the Project, USFWS indicated no impacts to mussel species are anticipated. USFWS indicated that best construction techniques are recommended to minimize erosion and sediment to prevent indirect impact to streams.

Scioto madtom fish: This species has been identified within the Big Darby Creek in Pickaway County; however, there has not been a record of this species since 1957. USFWS indicated that the Project is unlikely to impact this species.

Plant species: The ranges of these two federally endangered plant species are listed as within Hocking County. USFWS indicated that based on the Project being within an existing, maintained ROW and the specific habitat requirements of these species, no significant impacts are likely to these species.

American burying beetle: The range of this federally endangered insect species is listed within Hocking County. USFWS indicated that based on Project location, no significant impacts are likely to this species.

Eastern massasauga: The range of this proposed federally threatened reptile species is listed within Hocking County. USFWS indicated that based on Project location, no significant impacts are likely to these species.

Timber rattlesnake: The range of this federal species of concern reptile species is within the Project area. USFWS provided some information on the species and recommended inquiring with local experts. Based on ODNR's comments, it is unlikely this species will be impacted.

4.0 FIELD SURVEY RESULTS

AECOM conducted a field survey in March 2016 that included a wetland delineation, stream assessment, and general habitat survey. During the field survey on March 25, 2016, AECOM biologists identified an area containing several great rhododendrons located within Clear Creek Metro Park. This species is identified as a state threatened plant which contains records in the ONHD from February 1999 in the area AECOM identified the plants. No additional species of concern or signs of these species, and no unique habitats were observed.

5.0 SUMMARY

AEP retained AECOM to conduct a rare, threatened, and endangered species literature review for areas located within 1,000 feet of the proposed Project, a field survey within the proposed Project 200-foot survey corridor, and conduct coordination with USFWS, ONHD and ODNR. This report will be used to assist AEP's efforts to avoid impacts to rare, threatened, and endangered species potentially present in the ROW during construction activities. The field surveys were conducted by AECOM field biologists on March 2016. During a field survey on March 25, 2016, AECOM biologists identified an area containing several Great Rhododendrons located within Clear Creek Metro Park. This species is identified as a state threatened plant which contains records in the ONHD from February 1999 in the surveyed area. No additional species of concern or signs of these species, and no unique habitats were observed.

6.0 CONCLUSION

Based upon the nature of the Project, review of available current literature, review of federal and state records of species of concern, and review of agency correspondence, it is not anticipated that federal or state species of concern will be impacted by the Project as currently planned (see below). AEP has worked to develop a construction access plan that contains the least amount of impact to sensitive resources (wetlands, streams, etc.), as well as minimizing impacts to threatened and endangered species habitat that may be present along the alignment.

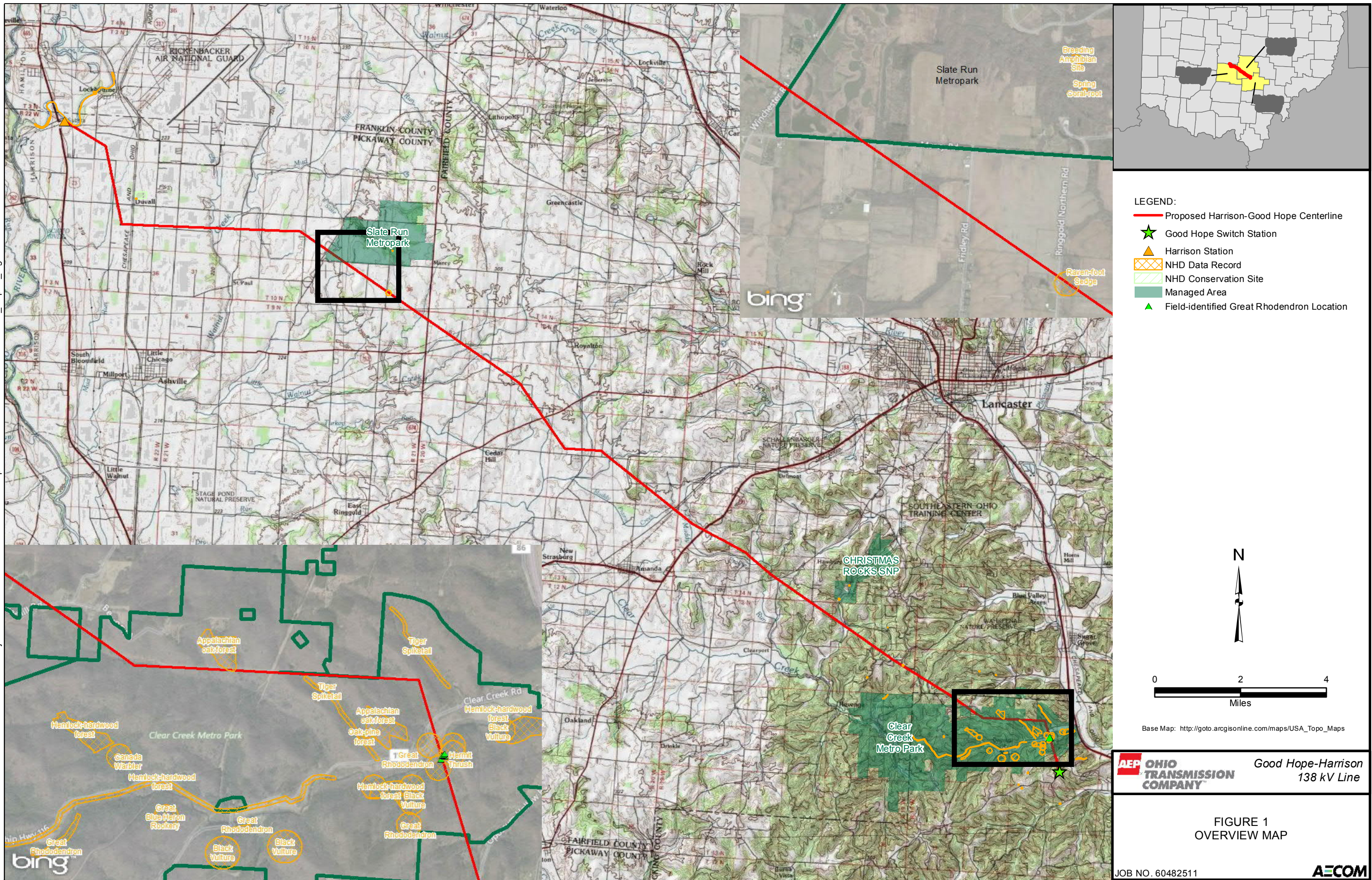
USFWS stated that the Project is within the vicinity of confirmed records and fall swarming records of Indiana bats and northern long-eared bats within Clear Creek Metropark. For the southeastern portion of the Project, USFWS recommended implementation of seasonal tree cutting (only clearing between November 15 and March 15), if necessary due to documented swarming in the fall by Indiana bats. In the remaining portion of Project located west of Hocking Township in Fairfield County, USFWS recommended that tree removal only occur between October 1st and March 31st. USFWS indicated that following the season tree clearing recommendations should ensure that any effects to Indiana bats and northern long-eared bats are insignificant or discountable. AEP intends to follow USFWS' recommendation and will only remove trees between the seasonal restricted dates for the corresponding areas.

USFWS stated that Sandhill cranes have been documented nesting at Slate Run Metro Park, which the Project crosses. USFWS indicated that to avoid disturbance of sandhill cranes nesting that disturbance within the park be avoided within March 1st and July 15th. To avoid impacting the nesting of this migratory bird species, AEP plans to follow the USFWS' recommendation of avoiding construction activities within the wetlands of Slate Run Metro Park between March 1st and July 15th.

A great blue heron rookery was identified within the ONHD data received from ODNR, so therefore USFWS recommended that construction disturbance within 300 feet of the rookery should be avoided within April 1st through July 15th in order to avoid impacts to this breeding species. Based on the ONHD data, this rookery is approximately 0.7-miles to the southwest of the Project corridor and does not appear likely to be impacted by the Project.

USFWS and ODNR commented that if the Project would have any in-water work in streams that further coordination with them will be required regarding listed mussel and fish species. If no in-water work will occur in streams, then the Project is not likely to impact mussel or fish species. To avoid impacting these federal and state-listed species, no in-stream water work is proposed for the Project. Additionally, AEP will utilize best management practices to avoid any indirect impact to streams through its use of erosion and sediment controls within the SWPPP.

During a field survey on March 25, 2016, AECOM biologists identified an area containing several Great Rhododendrons located within Clear Creek Metro Park. This species is identified as a state threatened plant which contains records in the ONHD from February 1999 in the surveyed area. To avoid impacting this state-listed plant species, AEP will utilize best management practices and avoid this area by using construction fencing with inclusion into the SWPPP.



ATTACHMENT A

AGENCY RESPONSES



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Ohio Division of Wildlife
Raymond W. Petering, Chief
2045 Morse Rd., Bldg. G
Columbus, OH 43229-6693
Phone: (614) 265-6300

January 13, 2016

Beth Wilburn
AECOM
525 Vine St.
Cincinnati, OH 45202

Dear Ms. Wilburn,

Per your request, I have e-mailed you a set of shapefiles with our Natural Heritage Program data for the Harrison-Good Hope 138 kV Transmission Line Rebuild project, including a one mile radius, in Pickaway, Fairfield and Hocking Counties, Ohio. This data will not be published or distributed beyond the scope of the project description on the data request form.

Records included in the data layer may be for rare and endangered plants and animals, geologic features, high quality plant communities and animal assemblages. Fields included are scientific and common names, state and federal statuses, as well as managed area and date of the most recent observation. State and federal statuses are defined as: E = endangered, T = threatened, P = potentially threatened, SC = species of concern, SI = special interest, FE = federal endangered, FT = federal threatened and A = recently added to inventory, status not yet determined.

The managed areas layer includes state, federal and county lands, as well as areas owned by non-profits, museums and other entities. Managed areas are sites under formal protection for their natural resources. Please be aware that this layer may not be complete and we are continually updating it as new information becomes available to us.

The conservation sites layer shows areas deemed by the Natural Heritage Program to be high quality sites not currently under formal protection. They may, for example, harbor one or more rare species, be an outstanding example of a plant community, or have geologically significant features, etc. These sites may be in private ownership and our listing of them does not imply permission for access.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. This letter only represents a review of rare species and natural features data within the Ohio Natural Heritage Database. It does not fulfill coordination under the National Environmental Policy Act (NEPA) or the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S. C. 661 et seq.) and does not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Debbie Woischke". The signature is fluid and cursive.

Debbie Woischke
Ohio Natural Heritage Program



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Office of Real Estate
Paul R. Baldridge, Chief
2045 Morse Road – Bldg. E-2
Columbus, OH 43229
Phone: (614) 265-6649
Fax: (614) 267-4764

April 28, 2016

Beth Wilburn
AECOM
525 Vine Street, Suite 1800
Cincinnati, Ohio 45202

Re: 16-204; Harrison-Good Hope 138 kV Transmission Line Rebuild Project

Project: The proposed project involves the replacement of approximately 29.5 miles of 138 kV transmission line along the existing centerline and within existing right-of-way.

Location: The proposed project is located in Fairfield, Hocking, and Pickaway Counties, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following data at or within a one mile radius of the project area:

Purple triple-awned grass (*Aristida purpurascens*), P
Blunt-leaved milkweed (*Asclepias amplexicaulis*), P
Pale straw sedge (*Carex albolutescens*), P
Bush's sedge (*Carex bushii*), T
Raven-foot sedge (*Carex crus-corvi*), T
Midland sedge (*Carex mesochorea*), T
Reznicek's sedge (*Carex reznicekii*), T
Spring coral-root (*Corallorhiza wisteriana*), P
Villous panic grass (*Dichanthelium villosissimum*), P
One-sided rush (*Juncus secundus*), P
Hairy tall lettuce (*Lactuca hirsuta*), T
Southern woodrush (*Luzula bulbosa*), P
Carolina leaf-flower (*Phyllanthus caroliniensis*), T
Little gray polypody (*Pleopeltis polypodioides*), P
Great rhododendron (*Rhododendron maximus*), T
Hemlock hardwood forest plant community

Appalachia oak forest plant community
Oak pine forest plant community
Elktoe (*Alasmidonta marginata*), SC, FSC
Wavy-rayed lampmussel (*Lampsilis fasciola*), SC
Kidneyshell (*Ptychobranhus fasciolaris*), SC
Fawnsfoot (*Truncilla donaciformis*), T
Deertoe (*Truncilla truncata*), SC
Hermit thrush (*Catharus guttatus*), SI
Magnolia warbler (*Dendroica magnolia*), SI
Canada warbler (*Wilsonia canadensis*), Si
Black vulture (*Coragyps atratus*), SC
Tiger spiketail (*Cordulegaster erronea*), SC
Great blue heron rookery
Breeding amphibian site
Christmas Rocks State Nature Preserve – ODNR Division of Natural Areas & Preserves
Clear Creek Metro Park – Columbus & Franklin Co. Metro Park District
Slate Run Metro Park – Columbus & Franklin Co. Metro Park District
Duvall Woods Conservation Site

The review was performed on the project area you specified in your request as well as an additional one mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity. Additional comments on some of the features may be found in pertinent sections below.

A Conservation Site is an area deemed by the Natural Heritage Database to be a high quality natural area not currently under formal protection. It may, for example, harbor one or more rare species, be an outstanding example of a plant community or have geologically significant features, etc. These sites may be in private ownership and our listing of them does not imply permission for access.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Statuses are defined as: E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; SI = state special interest; A = species recently added to state inventory, status not yet determined; X = presumed extirpated in Ohio; FE = federal endangered, FT = federal threatened, FSC = federal species of concern, FC = federal candidate species.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: shagbark hickory (*Carya ovata*), shellbark hickory (*Carya laciniosa*), bitternut hickory (*Carya cordiformis*), black ash (*Fraxinus nigra*), green ash

(*Fraxinus pennsylvanica*), white ash (*Fraxinus americana*), shingle oak (*Quercus imbricaria*), northern red oak (*Quercus rubra*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), sassafras (*Sassafras albidum*), post oak (*Quercus stellata*), and white oak (*Quercus alba*). Indiana bat roost trees consists of trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the purple cat's paw (*Epioblasma o. obliquata*), a state endangered and federally endangered mussel, the snuffbox (*Epioblasma triquetra*), a state endangered and federally endangered mussel, the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the northern riffleshell (*Epioblasma torulosa rangiana*), a state endangered and federally endangered mussel, the rayed bean (*Villosa fabalis*), a state endangered and federally endangered mussel, the rabbitsfoot (*Quadrula cylindrica cylindrica*), a state endangered and federal candidate mussel, the washboard (*Megaloniais nervosa*), a state endangered mussel, the butterfly (*Ellipsaria lineolata*), a state endangered mussel, the long-solid (*Fusconaia maculata maculata*), a state endangered mussel, the ebonyshell (*Fusconaia ebenus*), a state endangered mussel, the sharp-ridged pocketbook (*Lampsilis ovata*), a state endangered mussel, the pyramid pigtoe (*Pleurobema rubrum*), a state endangered mussel, the Ohio pigtoe (*Pleurobema cordatum*), a state endangered mussel, the elephant-ear (*Elliptio crassidens*), a state endangered mussel, the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel, the fawnsfoot (*Truncilla donaciformis*), a state threatened mussel, the pondhorn (*Unio merus tetralasmus*), a state threatened mussel, and the black sandshell (*Ligumia recta*), a state threatened mussel.

This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2015), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 10 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2015) can be found at:

<http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses%20&%20permits/OH%20Mussel%20Survey%20Protocol.pdf>

The project is within the range of the popeye shiner (*Notropis ariommus*), a state endangered fish, The project is within the range of the Scioto madtom (*Noturus trautmani*), a state endangered and federally endangered fish, the spotted darter (*Etheostoma maculatum*), a state endangered fish and a federal species of concern, the northern brook lamprey (*Ichthyomyzon fossor*), a state endangered fish, the northern madtom (*Noturus stigmosus*), a state endangered fish, the goldeye (*Hiodon alosoides*), a state endangered fish, the shortnose gar (*Lepisosteus platostomus*), a state endangered fish, the Tippecanoe darter (*Etheostoma tippecanoe*), a state threatened fish, the paddlefish (*Polyodon spathula*), a state threatened fish, the bigeye shiner (*Notropis boops*), a state threatened fish, and the lake chubsucker (*Erimyzon sucetta*), a state threatened fish, and the tonguetied minnow (*Exoglossum laurae*), a state threatened fish. The DOW recommends no in-water work in perennial streams from April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact these or other aquatic species.

The project is within the range of the timber rattlesnake (*Crotalus horridus horridus*), a state endangered species, and a federal species of concern. The timber rattlesnake is a woodland species. In addition to using wooded areas, the timber rattlesnake also utilizes sunlit gaps in the canopy for basking and deep rock crevices known as den sites for overwintering. Due to the location, the type of habitat along the project route, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat along the project route and within the vicinity of the project route, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federal candidate snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat present at the project site and within the vicinity of the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the black bear (*Ursus americanus*), a state endangered species. Due to the mobility of this species, this project is not likely to impact this species.

The project is within the range of the American burying beetle (*Nicrophorus americanus*) a state and federal endangered beetle. Due to the habitat requirements of this species, the project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler
ODNR Office of Real Estate
2045 Morse Road, Building E-2
Columbus, Ohio 43229-6693

John.Kessler@dnr.state.oh.us



UNITED STATES DEPARTMENT OF THE INTERIOR
U.S. Fish and Wildlife Service
Ecological Services Office
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / Fax (614) 416-8994



May 13, 2016

Ms. Beth Wilburn
AECOM.
525 Vine Street
Suite 1800
Cincinnati, OH 45202

TAILS: 03E15000-2016-TA-0985

Dear Ms. Wilburn:

This is in response to your March 21, 2016 email and additional information regarding the proposed Harrison-Good Hope 138kV above ground transmission line provided in an email dated May 5, 2016. The project will be located in Fairfield, Hocking, and Pickaway Counties and will be built within the existing right-of-way (ROW). The project area currently consists of a landscape of forested habitat, rural residential development, agricultural fields, and limited commercial development.

There are no Federal wildlife refuges, wilderness areas, or Critical Habitat within the vicinity of this project. However, the project does cross Clear Creek Metro Park, the largest dedicated State Nature Preserve in Ohio, and Slate Run Metro Park which are owned and managed by Columbus and Franklin County Metro Parks. We recommend that you coordinate activities at these sites with Carrie Morrow at morrow@metroparks.net or 614-895-6214 to avoid impacts to natural resources.

The Service recommends that impacts to wetlands and streams be avoided and buffers surrounding streams and wetlands be preserved. Streams and wetlands provide valuable habitat for fish and wildlife resources. Buffers of native vegetation surrounding these systems are also important in preserving their wildlife-habitat and water quality-enhancement properties. We recommend that any proposed projects use best construction techniques to minimize erosion. Prevention of non-native, invasive plant establishment is critical in maintaining quality habitats. All disturbed areas should be mulched and re-vegetated with native plants.

MIGRATORY BIRD COMMENTS:

The project lies within the range of the **bald eagle** (*Haliaeetus leucocephalus*), a species protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Due to the location of eagle nests in the area no significant impacts are expected for this species. Relative to this species, this precludes the need for further action on this project as required by the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Migratory birds are one of the “trust resources” that the U.S. Fish and Wildlife Service is charged by Congress to protect and conserve for the benefit of all American people. The Migratory Bird Treaty Act protects 836 species of birds. Migratory birds are threatened by habitat loss including degradation of habitat due to invasive species and destruction of breeding,

wintering, or stopover habitat. Sandhill cranes have been documented nesting at Slate Run Metro Park. To avoid disturbance to this important breeding site we recommend that disturbance within the wetland be avoided between March 1 and July 15. In addition, you have indicated that the project is located within the vicinity of a great blue heron rookery. To avoid disturbance to the rookery we recommend that disturbance within 300 feet of this area be avoided from April 1 through July 15.

LISTED SPECIES COMMENTS:

All projects in the State of Ohio lie within the range of the federally endangered **Indiana bat** (*Myotis sodalis*) and the federally threatened **northern long-eared bat** (*Myotis septentrionalis*). In Ohio, presence of the Indiana bat and northern long-eared bat is assumed wherever suitable habitat occurs unless a presence/absence survey has been performed to document absence. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥ 3 inches dbh that have any exfoliating bark, cracks, crevices, hollows and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. In the winter, Indiana bats and northern long-eared bats hibernate in caves and abandoned mines.

The existing ROW has been previously cleared of trees. However some trees may need to be cleared to provide access. In an email dated May 5, 2016 it was indicated that approximately 1.6 acres of trees will need to be cleared for this project.

The proposed project is in the vicinity of one or more confirmed records of Indiana bats, and Northern long-eared bats recorded from Clear Creek Metro Park. These records include fall swarming records. Therefore, we recommend that trees ≥ 3 inches dbh be saved wherever possible. Because the project will result in a small amount of forest clearing relative to the available habitat in the immediately surrounding area, habitat removal is unlikely to result in significant impacts to this species. Since Indiana bat presence in the vicinity of the project has been confirmed, clearing of trees ≥ 3 inches dbh during the summer roosting season may result in direct take of individuals. If any caves or abandoned mines may be disturbed, further coordination with this office is requested to determine if fall or spring portal surveys are warranted. If no caves or abandoned mines are present and tree removal is unavoidable, we recommend that removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31 for the area of the transmission line within and west of Hocking Township in Fairfield County. Along the transmission line within Madison and Berne Townships of Fairfield County and Good Hope Township of Hocking County tree removal is limited to occur only between November 15 and March 15 as Indiana bats have been documented swarming in the fall in this area. A map indicating the area of the transmission line within the vicinity of the Indiana bat captures was provided in an April 29, 2016 email from our office. Following this seasonal tree clearing

recommendation should ensure that any effects to Indiana bats and northern long-eared bats are insignificant or discountable. **Please note that, because Indiana bat presence has already been confirmed in the project vicinity, any additional summer surveys would not constitute presence/absence surveys for these species.**

This project may require a federal permit if wetlands will be impacted. In addition, it may require permitting from the Ohio Power Siting Board. If there is a federal nexus for the project (federal funding provided, federal permits required to construct, etc.) then no tree clearing on any portion of the parcel should occur until consultation under section 7 of the ESA, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit to this office a determination of effects to the Indiana bat and northern long-eared bat for our review and concurrence.

The proposed project lies within the range of the **clubshell** (*Pleurobema clava*), **northern riffleshell** (*Epioblasma torulosa rangiana*), **rabbittsfoot** (*Quadrula c. cylindrica*), **rayed bean** (*Villosa fabalis*), and **snuffbox** (*Epioblasma triquetra*) mussel species. Most of these species have been documented in the Scioto River in Pickaway County. You have indicated that no in-water work is required. This will avoid direct impacts to these species. We recommend the use of best construction techniques to minimize erosion and prevent sedimentation and reduce indirect impacts to these species.

The proposed project area lies within the range of the **Scioto madtom** (*Noturus trautmani*), a federally listed endangered species. The Scioto madtom is known only from Big Darby Creek in Jackson Township of Pickaway County. Habitat for this species includes riffles where the water velocity is decreasing and the substrate is composed of sandy gravel with some small stones no larger than 4 inches in diameter. However, this species has not been seen since 1957. Therefore, we do not anticipate that any impacts to the Scioto madtom will occur as a result of the proposed project.

The proposed project lies within the range of **northern monkshood** (*Aconitum noveboracense*), a federally listed threatened species. The plant is found on cool, moist, talus slopes or shaded cliff faces in wooded ravines. Due to the project being located within an existing, maintained ROW and the specific habitat requirements of this species, no significant impacts are expected to this species.

The proposed project lies within the range of the **small whorled pogonia** (*Isotria medeoloides*), a federally listed threatened species. Due to the project being located within an existing, maintained ROW and the specific habitat requirements of this species, no significant impacts are expected to this species.

The project area lies within the range of the **American burying beetle** (*Nicrophorus americanus*) a federally listed endangered species. However, due to the project location no significant impacts are expected for this species.

PROPOSED SPECIES COMMENTS:

The project lies within the range of the **eastern massasauga** (*Sistrurus catenatus*), a small, docile rattlesnake that is currently proposed to be listed as federally threatened. Since designated as a candidate species in 1999, it has declined significantly throughout its range and populations

in Ohio that were once throughout glaciated portions of the state, are now small and isolated. The species has been listed by the State of Ohio as endangered since 1996. Due to the project location, no significant impacts are expected for this species.

SPECIES OF CONCERN COMMENTS:

The project lies within the range of the **timber rattlesnake** (*Crotalus horridus horridus*), a federal species of concern and Ohio endangered species. Your proactive efforts to conserve this species now may help avoid the need to list the species under the Endangered Species Act in the future. In Ohio, the timber rattlesnake is restricted to the un-glaciated Allegheny Plateau. Winters are spent in dens usually associated with high, dry ridges. In the fall, timber rattlesnakes return to the same den.

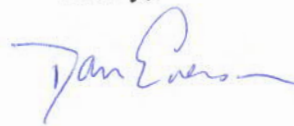
It may be helpful to inquire about timber rattlesnake sightings with local resource agency personnel or reliable local residents. Local herpetologists may have knowledge of historical populations as well as precise knowledge of the habits, and especially the specific, local types of habitats that may contain timber rattlesnakes.

In areas where timber rattlesnakes or their dens are known or likely to exist, clearing, construction, and maintenance activities (mowing, cutting, burning, etc.) should be avoided at least 100 feet from ridges and areas of exposed rock and should be conducted from November 1 to March 1, when timber rattlesnakes are hibernating.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act of 1973, as amended, and are consistent with the intent of the National Environmental Policy Act of 1969 and the U.S. Fish and Wildlife Service's Mitigation Policy. This letter provides technical assistance only and does not serve as a completed section 7 consultation document. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

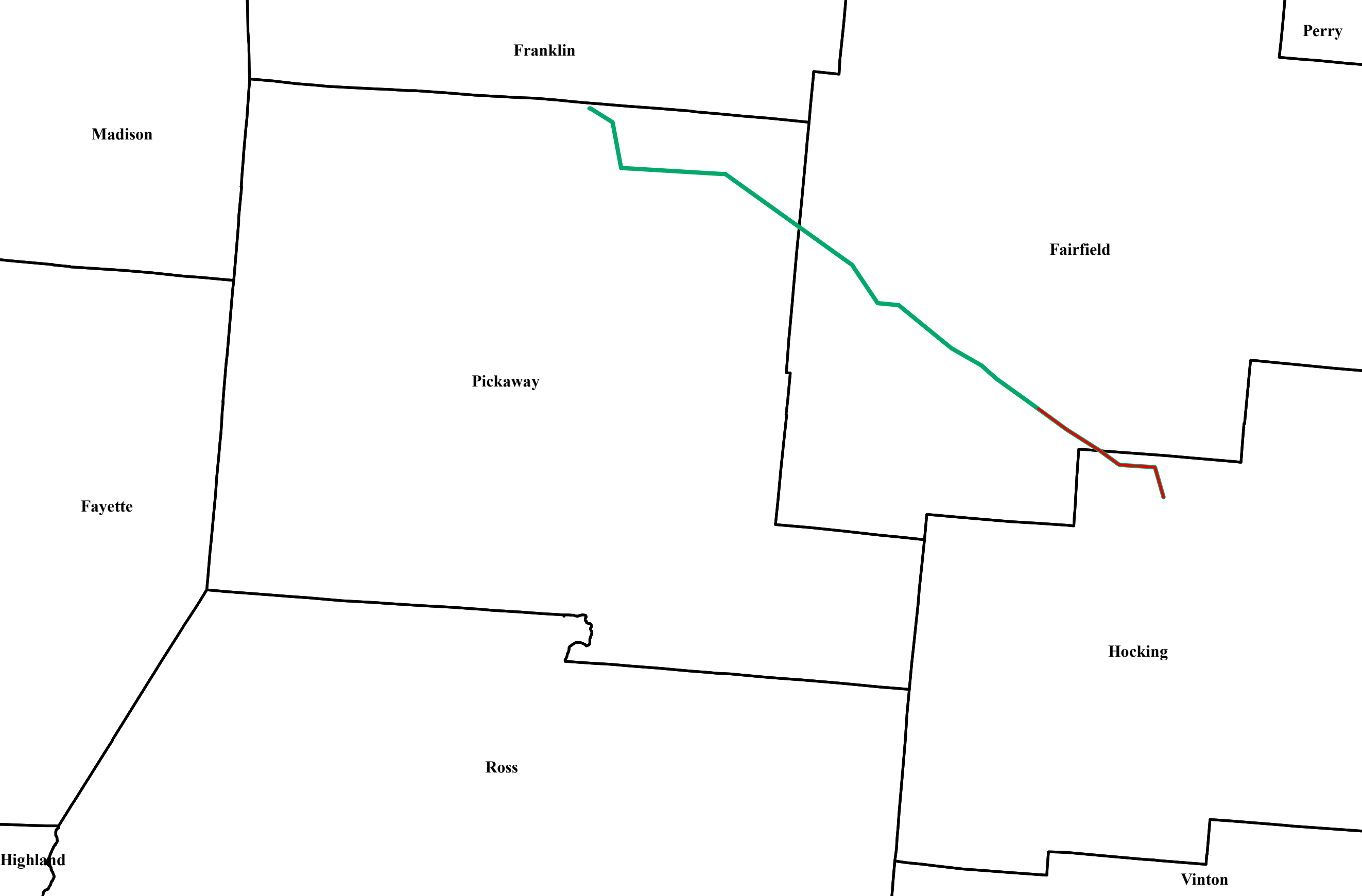
If you have any questions regarding this response or if you need additional information, please contact Jennifer Finfera at Extension 13.

Sincerely,



Dan Everson
Field Supervisor

cc: Jennifer Norris, ODNR-DOW
Nathan Reardon, ODNR-DOW
Ron Howard, AEP



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Summary: Letter of Notification - Part 3 of 10 electronically filed by Mr. Hector Garcia on behalf of AEP Ohio Transmission Company