



# **APPENDIX B**

## **Habitat Assessment**



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Fayetteville, AR 72703  
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[www.GarverUSA.com](http://www.GarverUSA.com)

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April 23, 2024

Re: Middle Tennessee State University (MTSU) Development  
Shelbyville Municipal Airport (SYI), Shelbyville, Tennessee

To Whom it May Concern:

A National Environmental Policy Act (NEPA) Environmental Assessment (EA) is being prepared to address the potential environmental impacts associated with the relocation of the Middle Tennessee State University (MTSU) Aerospace campus from Murfreesboro Municipal Airport (MBT) to Shelbyville Municipal Airport (SYI) (see **Figure 1**). The Aerospace Department, flight training, and aircraft maintenance programs will be relocated to SYI.

The EA will be submitted to Federal Aviation Administration (FAA) and Tennessee Department of Transportation Aeronautics Division (TAD) for review and approval. The project is needed to address potential program expansion impacts at MBT because of the increased demand for MTSU-offered aviation training. As a result, MTSU is looking to relocate their program to SYI, which does not currently have the infrastructure to accommodate these programs. Infrastructure at SYI needed to accommodate these programs includes hangars, classroom/office space, security fences, utilities, aprons, taxiway connections, and landside parking areas. The project includes a land lease of approximately 21 acres while the project study area consists of approximately 31 acres. The proposed project and location are shown in the attached figures and conceptual layout.

This letter serves to provide information on the occurrence of suitable habitat for the federally protected threatened or endangered species listed on the official species list provided by the IPaC project planning tool (attached) for the MTSU Development project located near the airport. A site investigation of the study area was conducted on November 29 and 30, 2023 and included all areas where construction and/or physical disturbance may occur (refer to attachments). This habitat assessment did not include official surveys for, or reveal evidence of, federally listed species during the site investigations.

#### **Habitat Overview**

The study area, owned by the City of Shelbyville, was historically farmed and consists mostly of undulating pastureland with some woodland. The pasture, regularly maintained, is dominated by false tall rye grass (*Schedonorus arundinaceus*) and broom-sedge (*Andropogon virginicus*) while the woodland is mostly eastern red cedar (*Juniperus virginiana*), post oak (*Quercus stellata*), chestnut oak (*Quercus montana*), and shag-bark hickory (*Carya ovata*). The study area consists of 28.5 acres of upland herbaceous vegetation and 1.9 acres of trees. Additionally, one 0.21 acre farm pond and 0.24 acre of maintained emergent wetlands are present. Six structures are present and include an abandoned house, barn, silo, and 3 other outbuildings. Bermuda grass was common around structures. The city owned house is scheduled to be burned as part of Shelbyville Fire Department training prior to this project and will not be present during project construction.

Refer to **Table 1** for federally listed species, habitat requirements, and effects determinations identified for this project. **Figure 2** depicts the study area and potential habitat present.

**Table 1. Federally Listed Species and Habitat Requirements**

Species/Status	Habitat Requirements	Suitable Habitat within Direct Study Area (SA)	Preliminary Effect Determination
<b>Gray Bat</b> ( <i>Myotis grisescens</i> ) Endangered	The gray bat occurs in limestone karst areas and primarily uses caves throughout the year, although they move from one cave to another seasonally. Smaller colonies also occasionally roost under bridge structures.	No caves, bridges, or suitable roosting structures are located within or adjacent to study area.	No Effect
<b>Northern Long-eared Bat</b> ( <i>Myotis septentrionalis</i> ) Endangered	In winter, northern long-eared bats use caves, mine portals, abandoned tunnels, protected sites along cliff lines and similar situations that afford protection from cold. During the summer they roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees.	No caves, mines, tunnels, or cliffs are within or adjacent to study area. The study area does contain a farm buildings and trees that are potentially suitable for summer roosting; however, per USFWS, the project is located in an area the northern long-eared bat is unlikely to occur.	No Effect
<b>Tricolored Bat</b> ( <i>Perimyotis subflavus</i> ) Proposed Endangered	In winter, Tricolored Bats hibernate in caves, mine portals, and man-made structures such as box culverts. During the summer they prefer to roost in the clumps of dead leaves of oak trees within complex oak forests greater than 50 years old. Less commonly, they will roost in clumps of dead pine needles attached to living trees. They commonly forage along riparian corridors. Maternity colonies also may utilize human-made structures or tree cavities; sometimes these are in open sites that would not be tolerated by most other bats.	No caves were observed within or near the project site. Woodland mostly consists of eastern red cedar in the study area but does include some mature hardwoods. Riparian corridors do not exist in or adjacent to the study area. The project will require the demolition of five buildings.	Will not jeopardize the continued existence
<b>Whooping Crane</b> ( <i>Grus americana</i> ) Experimental	Nesting occurs in dense emergent vegetation in ponds, lakes, and wetlands. Migration habitat includes marshes, shallow lakes, lagoons, salt flats, stubble and grain fields, and barrier islands	Dense emergent vegetation within or around the pond was absent. Emergent wetlands in the study area are regularly maintained or do not exhibit significantly dense vegetation. No other whooping crane habitat is present	No Effect

Species/Status	Habitat Requirements	Suitable Habitat within Direct Study Area (SA)	Preliminary Effect Determination
<b>Cumberland Moccasinshell</b> ( <i>Medionidus conradicus</i> ) Proposed Endangered	Found in riffles, runs, and shoals of high gradient streams to medium sized rivers with coarse sand, gravel, and/or cobble.	No streams or rivers present.	Will not jeopardize continued existence
<b>Cumberland Monkeyface (pearlymussel)</b> ( <i>Theliderma intermedia</i> ) Endangered	Found in riffles and shoals of headwater streams and large rivers with high gradients with sand and gravel substrates.	No streams or rivers present.	No Effect
<b>Fluted Kidneyshell</b> ( <i>Ptychobranchus subtentus</i> ) Endangered	Found in riffles, runs, and shoals of high gradient streams to medium sized rivers with sand, gravel, and/or cobble.	No streams or rivers present.	No Effect
<b>Rabbitsfoot</b> ( <i>Quadrula cylindrica cylindrica</i> ) Threatened	Found in small streams to medium rivers with swift current gravel or cobble substrates.	No streams or rivers present.	No Effect
<b>Round Hickorynut</b> ( <i>Obovaria subrotunda</i> ) Threatened	Found in small streams to large rivers and lake with sand, gravel, and cobble substrates and moderate flow.	No streams or rivers present.	No Effect
<b>Salamander Mussel</b> ( <i>Simpsonaias ambigua</i> ) Proposed Endangered	Found in small streams to large rivers and lake with mud, silt, sand, gravel, cobble, and boulder substrates and swift current.	No streams or rivers present.	Will not jeopardize continued existence
<b>Slabside Pearlymussel</b> ( <i>Pleuronaia dolabelloides</i> ) Endangered	Found in large creeks to medium rivers with sand, gravel, and cobble substrate with moderate current.	No streams or rivers present.	No Effect
<b>Tennessee Clubshell</b> ( <i>Pleurobema oviforme</i> ) Proposed Endangered	Found in headwater streams to small rivers with sand, gravel, and cobble substrate with moderate current.	No streams or rivers present.	Will not jeopardize continued existence



Species/Status	Habitat Requirements	Suitable Habitat within Direct Study Area (SA)	Preliminary Effect Determination
<b>Tennessee Pigtoe</b> <i>(Pleuroanaia barnesiana)</i> Proposed Endangered	Found in moderate to high gradient streams to medium rivers with sand, gravel, and/ or cobble.	No streams or rivers present.	Will not jeopardize continued existence
<b>Monarch Butterfly</b> <i>(Danaus plexippus)</i> Candidate	Monarch butterflies require the presence of milkweed ( <i>Asclepias spp.</i> ), flowering or potentially flowering nectar plants (defined as forbs that can provide nectar for monarchs at some point in the growing season), and additional native habitat such as meadows, prairies, and grasslands.	Though much of the study area is herbaceous vegetation which may provide flowering plants, it lacks plant diversity and is regularly maintained.	Will not jeopardize continued existence
<b>Leafy Prairie-clover</b> <i>(Dalea foliosa)</i> Endangered	Occurs on thin-soiled limestone glades and limestone barrens. In Tennessee, the plants occur on wet calcareous barrens and moist prairies or cedar glades, usually near a stream or where some seepage from limestone provides seasonal moisture. The plants require full sun and low competition for optimum growth and reproduction; periodic fire is needed to maintain these conditions.	Glades or limestone barrens were not observed in the study area. Herbaceous areas lacked diversity and leafy prairie-clover would likely struggle to compete with tall fescue and broomsedge. Vegetation is seasonally mowed.	May affect, not likely to adversely affect



The photographs below show the typical habitats observed within the study area.

Study area looking north northwest	1
 <p data-bbox="672 338 933 380"><b>Shelbyville TN</b></p> <p data-bbox="380 407 1224 443">☼ 342°N (T) LAT: 35.554756 LON: -86.445846 ±19ft ▲ 794ft</p> <p data-bbox="347 989 461 1010">Garver LLC</p> <p data-bbox="1029 989 1256 1010">29 Nov 2023, 16:27:41</p>	
Study area looking south	2
 <p data-bbox="563 1136 1055 1178"><b>2778 US-231 Shelbyville TN</b></p> <p data-bbox="396 1205 1221 1241">☼ 201°S (T) LAT: 35.556115 LON: -86.447782 ±13ft ▲ 808ft</p> <p data-bbox="350 1787 464 1808">Garver LLC</p> <p data-bbox="1037 1787 1265 1808">29 Nov 2023, 14:40:01</p>	





Farm pond present in the study area.		3
<div>Shelbyville TN</div> <div>☉ 23°NE (T) LAT: 35.555900 LON: -86.446125 ±9ft ▲ 780ft</div> <div><div>Garver LLC29 Nov 2023, 16:01:52</div></div>		
Maintained emergent wetland with eastern red cedar in the uplands.		4
<div>Shelbyville TN</div> <div>☉ 133°SE (T) LAT: 35.555214 LON: -86.445619 ±9ft ▲ 791ft</div> <div><div>Garver LLC30 Nov 2023, 08:22:44</div></div>		





<b>Woodland dominated by eastern red cedar and a hardwood with a cavity.</b>	<b>5</b>
<div data-bbox="349 262 1274 955"><p data-bbox="686 283 937 325"><b>Shelbyville TN</b></p><p data-bbox="406 346 1218 388">☉ 114°SE (T) LAT: 35.554866 LON: -86.445842 ±9ft ▲ 749ft</p><p data-bbox="365 913 479 934">Garver LLC</p><p data-bbox="1031 913 1258 934">29 Nov 2023, 16:24:39</p></div>	
<b>View of the house to be burned for fire department training prior to the project.</b>	<b>6</b>
<div data-bbox="349 1024 1274 1717"><p data-bbox="573 1045 1050 1087"><b>2778 US-231 Shelbyville TN</b></p><p data-bbox="406 1108 1218 1150">☉ 54°NE (T) LAT: 35.556158 LON: -86.447770 ±13ft ▲ 811ft</p><p data-bbox="365 1675 479 1696">Garver LLC</p><p data-bbox="1031 1675 1258 1696">29 Nov 2023, 14:39:35</p></div>	



View of two outbuildings and the barn partially hidden by trees.	7
<div data-bbox="349 262 1274 955"><p data-bbox="570 283 1052 321">2778 US-231 Shelbyville TN</p><p data-bbox="410 348 1218 380">☉ 63°NE (T) LAT: 35.555963 LON: -86.447574 ±9ft ▲ 780ft</p><p data-bbox="365 915 479 936">Garver LLC</p><p data-bbox="1036 915 1258 936">29 Nov 2023 14:39:06</p></div>	
A view of a third outbuilding.	8
<div data-bbox="349 1018 1274 1711"><p data-bbox="570 1039 1052 1077">2778 US-231 Shelbyville TN</p><p data-bbox="410 1104 1218 1136">☉ 1°N (T) LAT: 35.556026 LON: -86.446994 ±13ft ▲ 801ft</p><p data-bbox="365 1671 479 1692">Garver LLC</p><p data-bbox="1036 1671 1258 1692">29 Nov 2023, 14:46:30</p></div>	



View one of the outbuildings.		9
<div>2778 US-231 Shelbyville TN</div> <div>☉ 149°SE (T) LAT: 35.556138 LON: -86.447149 ±13ft ▲ 807ft</div> <div></div> <div>Garver LLC29 Nov 2023, 14:44:52</div>		
A view of the barn and silo.		10
<div>2782 SR-10 Shelbyville TN</div> <div>☉ 215°SW (T) LAT: 35.556422 LON: -86.446610 ±13ft ▲ 801ft</div> <div></div> <div>Garver LLC29 Nov 2023, 14:49:52</div>		

February 26, 2024  
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This information is to document habitat within the study area. We respectfully request your concurrence with these findings. Thank you for your assistance and please call me (479-879-9746) or email (JCMarshall@GarverUSA.com) if you have any questions or need any additional information.

Sincerely,  
GARVER, LLC

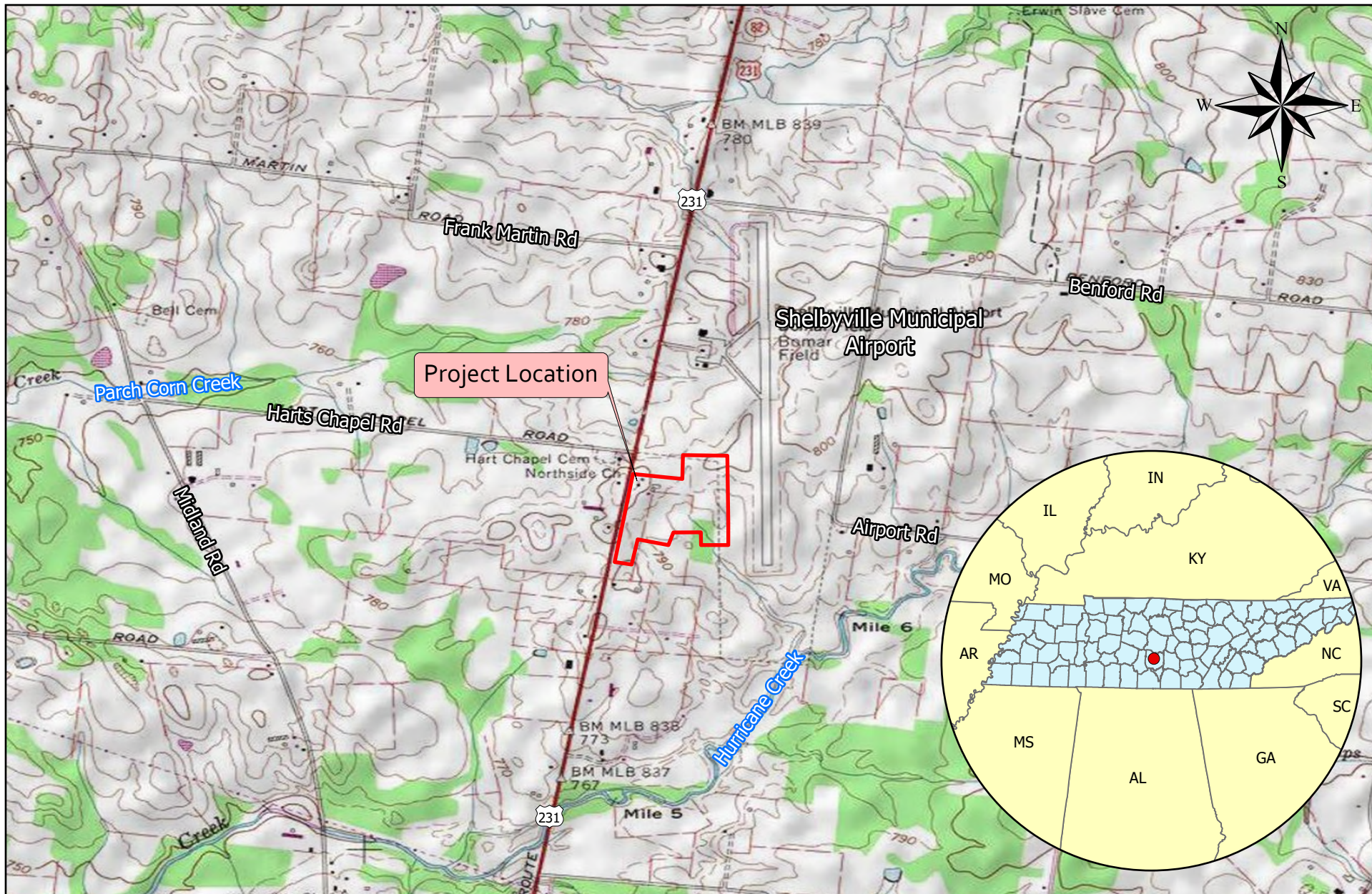


Colby Marshall  
Environmental Scientist

Copies To: Matthew Claerbout, PE - Garver  
Ryan Mountain, PWS - Garver

Enclosures: Figure 1 - Site Location Map  
Figure 2 - Habitat Overview Map  
Conceptual Layout  
IPaC Official Species List  
USFWS Consistency Letter





# **SITE LOCATION MAP**

MTSU - Aviation Facility Development  
Shelbyville Municipal Airport, Bedford County, Tennessee

ESRI World Street Map

Study Area

Lat: 35.555341°  
Long: -86.446596°

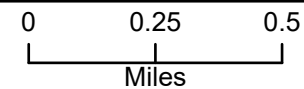
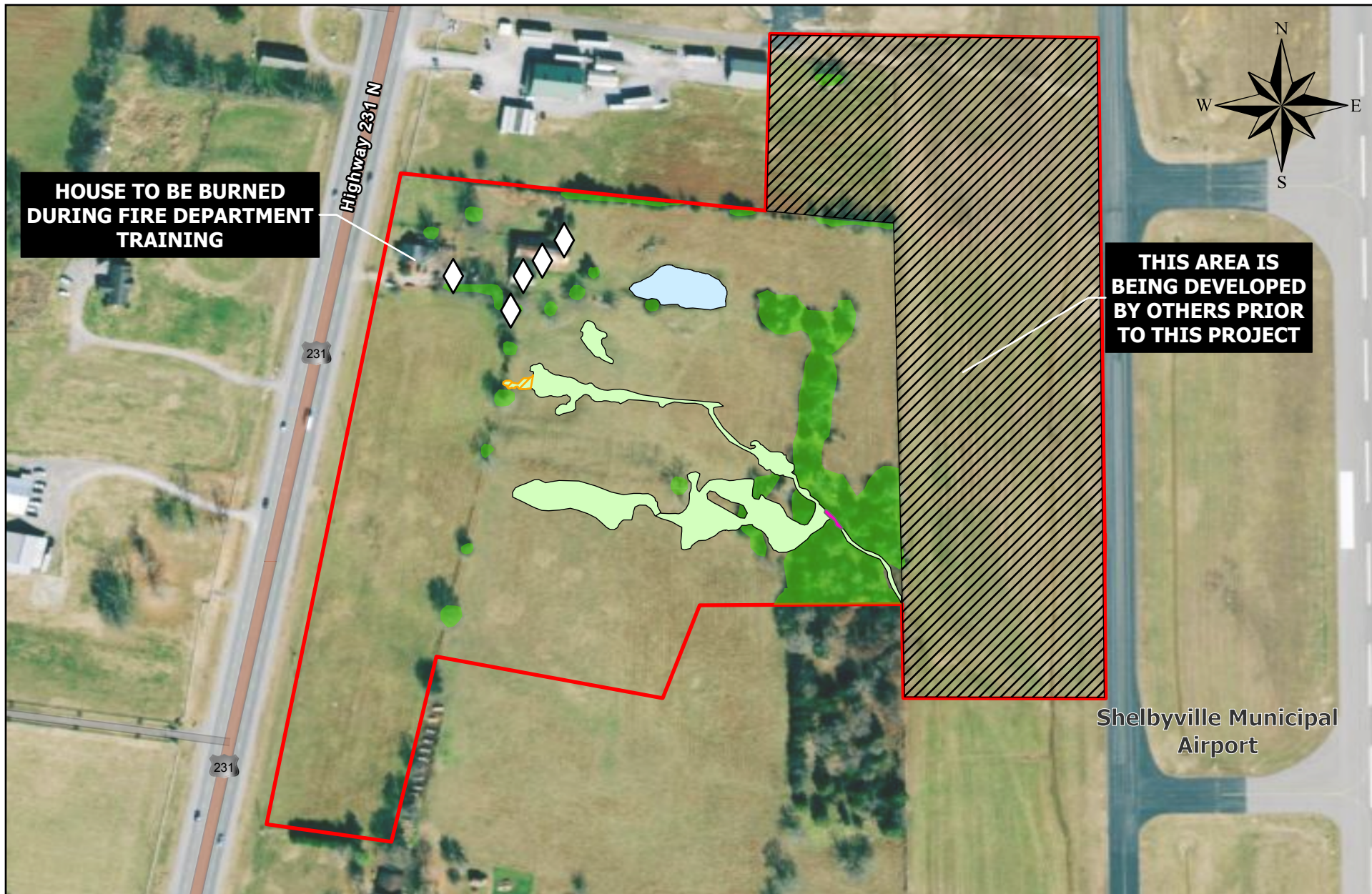



FIGURE 1





	<b>HABITAT MAP</b> MTSU - Aviation Facility Development Shelbyville Municipal Airport, Bedford County, Tennessee	[Red Outline] Study Area [Light Green] Emergent Wetland [Pink] Scurb-Shrub Wetland [Blue] Pond (PUB)	[Dark Green] Forest Habitat [Diamond] Potential Bat Roosting Structure [Orange Hatched] Monarch Habitat (Milkweed)	Lat: 35.555341° Long: -86.446596°
	ESRI NAIP Imagery (Hybrid)			0 190 380 Feet









## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Tennessee Ecological Services Field Office  
446 Neal Street  
Cookeville, TN 38501-4027  
Phone: (931) 528-6481 Fax: (931) 528-7075



In Reply Refer To:

February 21, 2024

Project Code: 2024-0044690

Project Name: Middle Tennessee State University (MTSU) Development

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Tennessee Ecological Services Field Office**

446 Neal Street

Cookeville, TN 38501-4027

(931) 528-6481

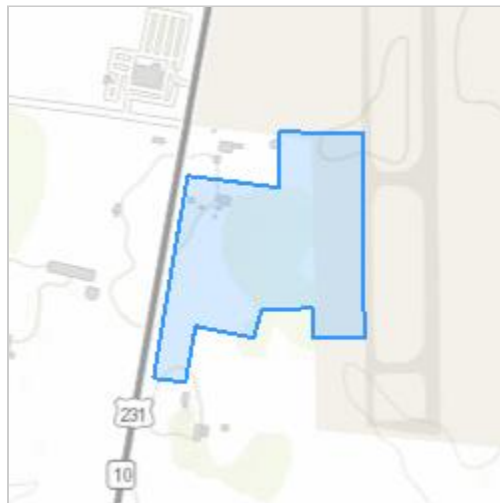
## PROJECT SUMMARY

Project Code: 2024-0044690  
Project Name: Middle Tennessee State University (MTSU) Development  
Project Type: Airport - Maintenance/Modification  
Project Description: A National Environmental Policy Act (NEPA) Environmental Assessment (EA) is being prepared to address the potential environmental impacts associated with relocation of the Middle Tennessee State University (MTSU) Aerospace campus from Murfreesboro Municipal Airport (MBT) to SYI. The Aerospace Department, flight training, and aircraft maintenance programs will be relocated to SYI.

The EA will be submitted to Federal Aviation Administration (FAA) and Tennessee Department of Transportation Aeronautics Division (TAD) for review and approval. The project is needed to address potential program expansion impacts at MBT because of the increased demand for MTSU-offered aviation training. As a result, MTSU is looking to relocate their program to SYI, which does not currently have capacity to accommodate these programs. Infrastructure at SYI needed to accommodate these programs includes hangars, classroom/office space, security fences, utilities, aprons, taxiway connections, and landside parking areas. The project includes a land lease of approximately 21 acres while the project study area consists of approximately 31 acres.

### Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.5552413,-86.44589015811732,14z>



Counties: Bedford County, Tennessee

## ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6329">https://ecos.fws.gov/ecp/species/6329</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Experimental Population, Non- Essential

## CLAMS

NAME	STATUS
Cumberland Moccasinshell <i>Medionidus conradicus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9881">https://ecos.fws.gov/ecp/species/9881</a>	Proposed Endangered
Cumberland Monkeyface (pearlymussel) <i>Theliderma intermedia</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6999">https://ecos.fws.gov/ecp/species/6999</a>	Endangered
Fluted Kidneyshell <i>Ptychobranhus subtentus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1397">https://ecos.fws.gov/ecp/species/1397</a>	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5165">https://ecos.fws.gov/ecp/species/5165</a>	Threatened
Round Hickorynut <i>Obovaria subrotunda</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9879">https://ecos.fws.gov/ecp/species/9879</a>	Threatened
Salamander Mussel <i>Simpsonaias ambigua</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6208">https://ecos.fws.gov/ecp/species/6208</a>	Proposed Endangered
Slabside Pearlymussel <i>Pleuronaia dolabelloides</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1518">https://ecos.fws.gov/ecp/species/1518</a>	Endangered
Tennessee Clubshell <i>Pleurobema oviforme</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3254">https://ecos.fws.gov/ecp/species/3254</a>	Proposed Endangered
Tennessee Pigtoe <i>Pleuronaia barnesiana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9887">https://ecos.fws.gov/ecp/species/9887</a>	Proposed Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate



## FLOWERING PLANTS

NAME	STATUS
Leafy Prairie-clover <i>Dalea foliosa</i> Population: No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5498">https://ecos.fws.gov/ecp/species/5498</a>	Endangered

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

- 
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
  2. The [Migratory Birds Treaty Act](#) of 1918.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

## MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

- 
1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<b>Chimney Swift <i>Chaetura pelagica</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9406">https://ecos.fws.gov/ecp/species/9406</a>	Breeds Mar 15 to Aug 25
<b>Field Sparrow <i>Spizella pusilla</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9446">https://ecos.fws.gov/ecp/species/9446</a>	Breeds Mar 1 to Aug 15
<b>Prairie Warbler <i>Dendroica discolor</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9513">https://ecos.fws.gov/ecp/species/9513</a>	Breeds May 1 to Jul 31
<b>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9398">https://ecos.fws.gov/ecp/species/9398</a>	Breeds May 10 to Sep 10
<b>Rusty Blackbird <i>Euphagus carolinus</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9478">https://ecos.fws.gov/ecp/species/9478</a>	Breeds elsewhere
<b>Wood Thrush <i>Hylocichla mustelina</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9431">https://ecos.fws.gov/ecp/species/9431</a>	Breeds May 10 to Aug 31

## PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

### Breeding Season (■)

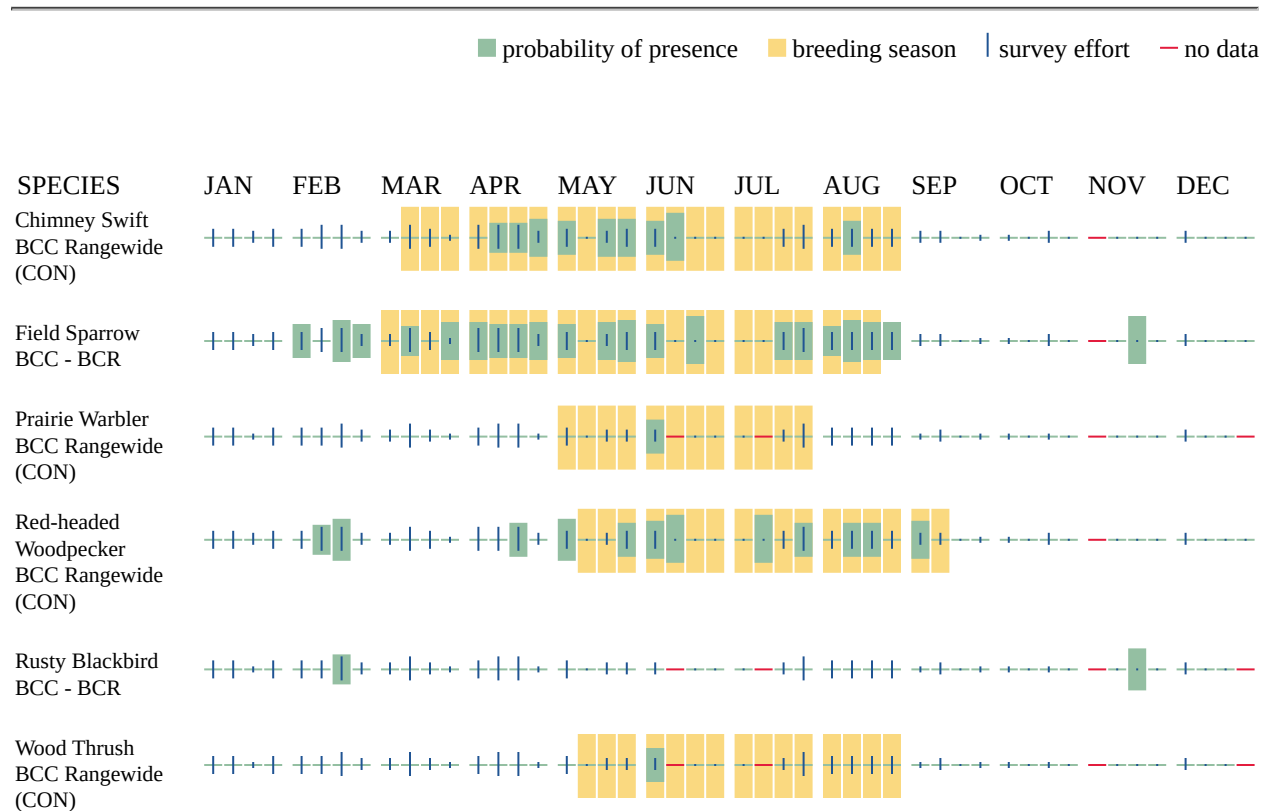
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

### Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

# WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

## FRESHWATER POND

- PUBH

## RIVERINE

- R5UBH

## **IPAC USER CONTACT INFORMATION**

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## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Aviation Administration



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Tennessee Ecological Services Field Office  
446 Neal Street  
Cookeville, TN 38501-4027  
Phone: (931) 528-6481 Fax: (931) 528-7075



In Reply Refer To:  
Project code: 2024-0044690  
Project Name: Middle Tennessee State University (MTSU) Development

February 26, 2024

Federal Action Agency (if applicable): Federal Aviation Administration

**Subject:** Record of project representative's no effect determination for 'Middle Tennessee State University (MTSU) Development'

Dear Garver LLC:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 26, 2024, for 'Middle Tennessee State University (MTSU) Development' (here forward, Project). This project has been assigned Project Code 2024-0044690 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

### **Ensuring Accurate Determinations When Using IPaC**

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

### **Determination for the Northern Long-Eared Bat**

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed

action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

### **Other Species and Critical Habitat that May be Present in the Action Area**

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Cumberland Moccasinshell *Medionidus conradicus* Proposed Endangered
- Cumberland Monkeyface (pearlymussel) *Theliderma intermedia* Endangered
- Fluted Kidneyshell *Ptychobranhus subtentus* Endangered
- Gray Bat *Myotis grisescens* Endangered
- Leafy Prairie-clover *Dalea foliosa* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Rabbitsfoot *Theliderma cylindrica* Threatened
- Round Hickorynut *Obovaria subrotunda* Threatened
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Slabside Pearlymussel *Pleuroaia dolabelloides* Endangered
- Tennessee Clubshell *Pleurobema oviforme* Proposed Endangered
- Tennessee Pigtoe *Pleuroaia barnesiana* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

### **Next Steps**

Based upon your IPaC submission, your project has reached the determination of "No Effect" on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively)

federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Tennessee Ecological Services Field Office and reference Project Code 2024-0044690 associated with this Project.



**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Middle Tennessee State University (MTSU) Development

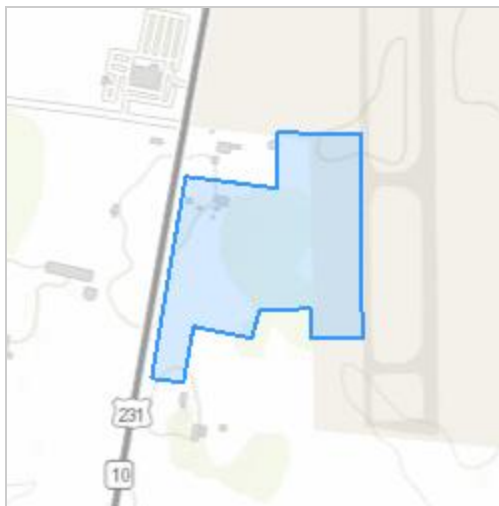
**2. Description**

The following description was provided for the project 'Middle Tennessee State University (MTSU) Development':

A National Environmental Policy Act (NEPA) Environmental Assessment (EA) is being prepared to address the potential environmental impacts associated with relocation of the Middle Tennessee State University (MTSU) Aerospace campus from Murfreesboro Municipal Airport (MBT) to SYI. The Aerospace Department, flight training, and aircraft maintenance programs will be relocated to SYI.

The EA will be submitted to Federal Aviation Administration (FAA) and Tennessee Department of Transportation Aeronautics Division (TAD) for review and approval. The project is needed to address potential program expansion impacts at MBT because of the increased demand for MTSU-offered aviation training. As a result, MTSU is looking to relocate their program to SYI, which does not currently have capacity to accommodate these programs. Infrastructure at SYI needed to accommodate these programs includes hangars, classroom/office space, security fences, utilities, aprons, taxiway connections, and landside parking areas. The project includes a land lease of approximately 21 acres while the project study area consists of approximately 31 acres.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.5552413,-86.44589015811732,14z>



## DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats are likely to be present in the action area, answer "NO" and continue through the key.

Do you want to make a no effect determination?

Yes

# PROJECT QUESTIONNAIRE

## **IPAC USER CONTACT INFORMATION**

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## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Aviation Administration