

Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOG SHEET

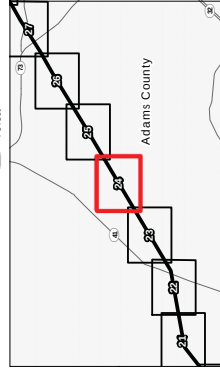
13870-0860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-14
Independent Review by JG on 2017-08-07
Adams and Pike Counties, Ohio

12,400 (At original document size of 11x17)



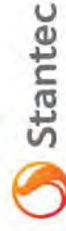
Legend

- Legend**
- Habitat Areas**
- Structure to be Replaced**
- 138kV Transmission Line**
- Access Road**
- Project Area (100' ROW and 30' Access Road)**
- Photo Location**
- Potential Bat Roost Tree**
- Upland Drainage Feature**
- Approximate Upland Drainage Feature**
- Field Delineated Waterway**
- Approximate Waterway**
- Field Delineated Waterway Area**
- Field Delineated Open Water**
- Approximate Open Water**
- Field Delineated Emergent Wetland**
- Field Delineated Forested Wetland**
- Approximate Wetland**
- Agri-cultural Field**
- Early Successional Deciduous Forest**
- Early Successional Deciduous/Coniferous Forest**
- Early Successional Riparian Forest**
- Existing Roadway**
- Fallow Field**
- Hayfield**
- Industrial**
- Mixed Early Successional/Second Growth Deciduous Forest**
- Mixed Early Successional/Second Growth Riparian Forest**
- New Field**
- Old Field**
- Pasture**
- Residential Lawn**
- Second Growth Coniferous Forest**
- Second Growth Deciduous Forest**



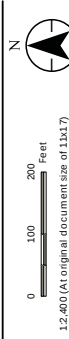
Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD



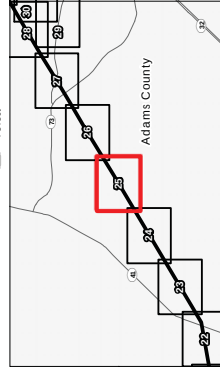
Client/Project

Project Location
Adams and Pike Counties, Ohio



Legend

- | Legend | Habitat Areas |
|---|---|
| AP Substation | Agricultural Field |
| Structure to be Replaced | Early Successional Deciduous Forest |
| 330kV Transmission Line | Early Successional Deciduous/Coniferous Forest |
| Access Road | Early Successional Riparian Forest |
| Project Area (100' ROW and 30' Access Road) | Existing Roadway |
| Photo Location | Fallow Field |
| Potential Bat Roost Tree | Hayfield |
| Upland Drainage Feature | Industrial |
| Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Field Delineated Waterway | Mixed Early Successional/Second Growth Deciduous Forest |
| Approximate Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Field Delineated Waterway Area | New Field |
| Field Delineated Open Water | Old Field |
| Approximate Open Water | Pasture |
| Field Delineated Emergent Wetland | Recreational Lawn |
| Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Approximate Wetland | Second Growth Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADS, USGS, OGRIP
3. Orthophotography: 2015 NAIP

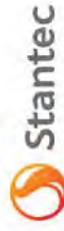


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

13070686

Prepared by JH on 2017-03-14

Technical Review by NH on 2017-04-03

Independent Review by JS on 2017-04-07

13070686

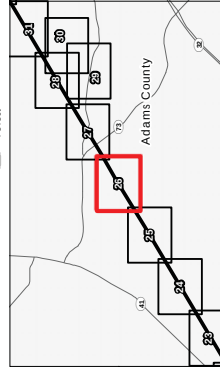
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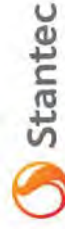
Legend

- AEP Substation
- Structure to be Replaced
- 138kV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
 - Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

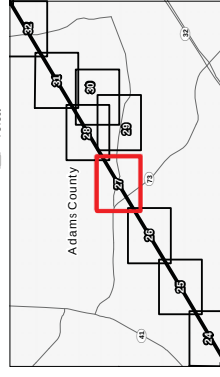
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Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by JG on 2017-04-07

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Legend

- Habitat Areas**
 - Structure to be Replaced
 - 138kV Transmission Line
 - Access Road
 - Project Area (100' ROW and 30' Access Road)
 - Photo Location
 - Potential Bat Roost Tree
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway
 - Field Delineated Open Water Area
 - Approximate Open Water
 - Field Delineated Emergent Wetland
 - Field Delineated Forested Wetland
 - Approximate Wetland
- Habitat Areas**
 - Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

- Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
- Data Sources include: Stantec, AEP, NAD, USGS, OGRIP
- Aerial photography 2015 NAD

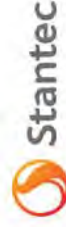


Figure No.

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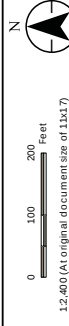
Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

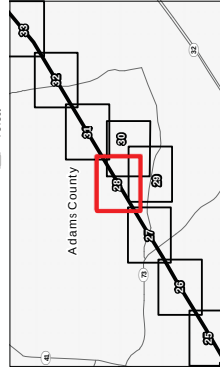
PROJECT LOG SHEET

13870-0860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-14
Independent Review by JG on 2017-08-07
Adams and Pike Counties, Ohio



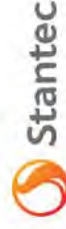
Legend

- | | | |
|---|--|---|
| AEP Substation | Agricultural Field | Early Successional Deciduous Forest |
| Structure to be Replaced | Early Successional Deciduous/Coniferous Forest | Early Successional Riparian Forest |
| 138kV Transmission Line | Early Successional Riparian Forest | Existing Roadway |
| Access Road | Fallow Field | Hayfield |
| Project Area (100' ROW and 30' Access Road) | Industrial | Mixed Early Successional/Second Growth Deciduous Forest |
| Photo Location | Mixed Early Successional/Second Growth Riparian Forest | Mixed Early Successional/Second Growth New Field |
| Potential Bat Roost Tree | Old Field | Pasture |
| Upland Drainage Feature | Residential Lawn | Second Growth Coniferous Forest |
| Approximate Upland Drainage Feature | Second Growth Deciduous Forest | |
| Field Delineated Waterway | | |
| Approximate Waterway | | |
| Field Delineated Waterway Area | | |
| Field Delineated Open Water | | |
| Approximate Open Water | | |
| Field Delineated Emergent Wetland | | |
| Field Delineated Forested Wetland | | |
| Field Delineated Forested Wetland | | |
| Approximate Wetland | | |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

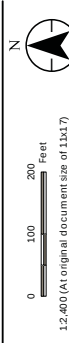
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

Project Location

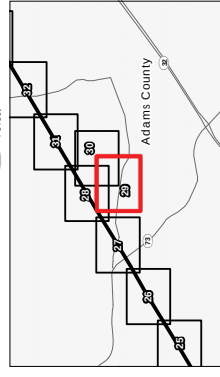
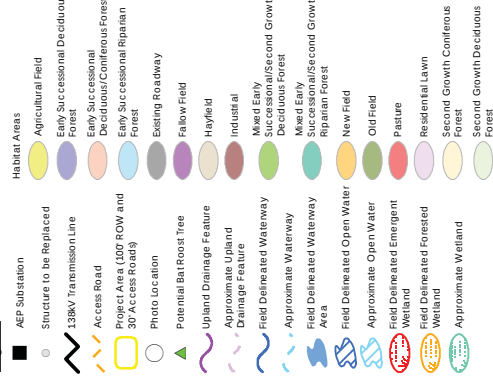
Adams and Pike Counties, Ohio

130705660

Prepared by: JLT on 2017-03-14
Technical Review by: NHT on 2017-03-14
Independent Review by: JSC on 2017-04-07



Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography: 2015 NHP

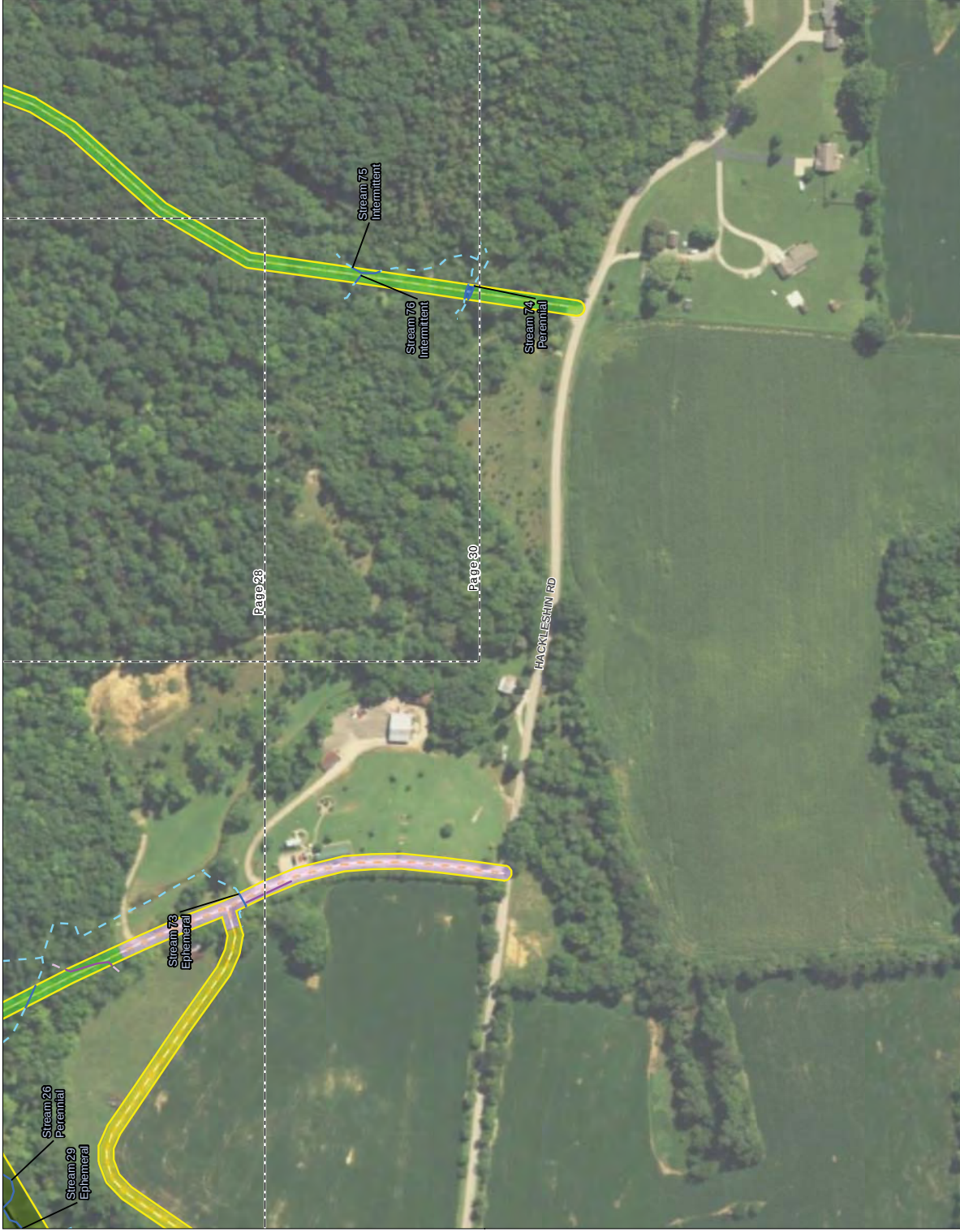
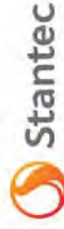


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

13870-0660
Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by DS on 2017-04-07

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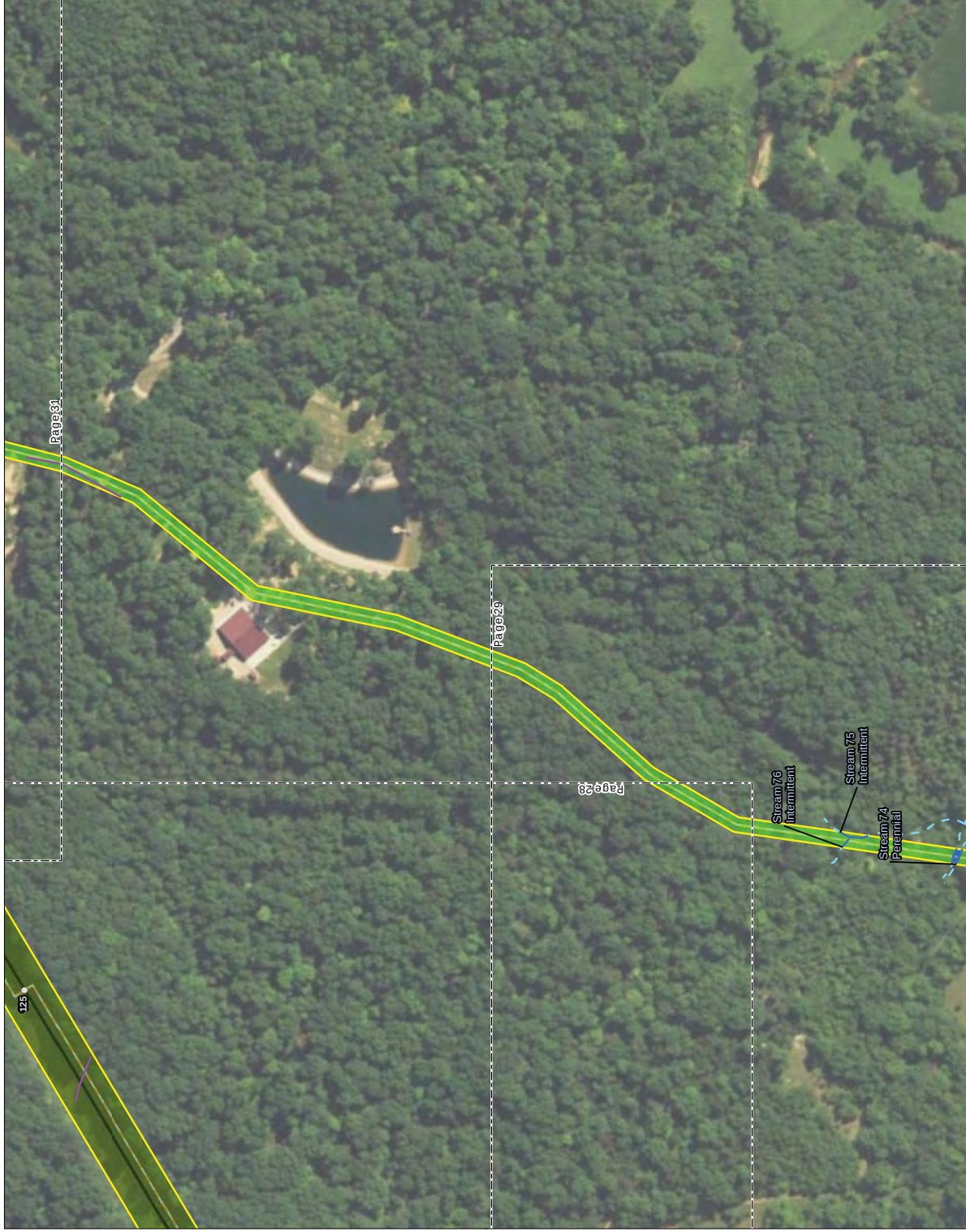
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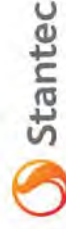
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Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec; AEP; NAD83; USGS; OGRIP
3. Orthophotography: 2015 NAD

Figure No.

3

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860
Prepared by JH on 2017-03-14
Technical Review by NH on 2017-03-14
Independent Review by JS on 2017-04-07

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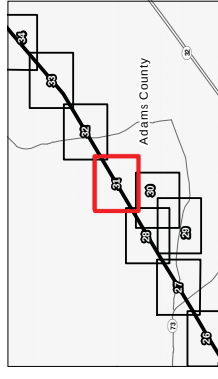
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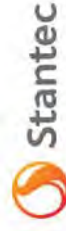
Legend

- AEP Substation
- Structure to be Replaced
- 138KV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
- Agricultural Field
- Early Successional Deciduous Forest
- Early Successional Deciduous/Coniferous Forest
- Early Successional Riparian Forest
- Early Successional Riparian Forest
- Existing Roadway
- Fallow Field
- Hayfield
- Industrial
- Mixed Early Successional/Second Growth Deciduous Forest
- Mixed Early Successional/Second Growth Riparian Forest
- New Field
- Old Field
- Pasture
- Residential Lawn
- Second Growth Coniferous Forest
- Second Growth Deciduous Forest



Notes

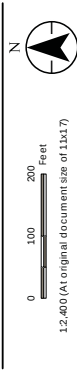
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NAD



Client/Project

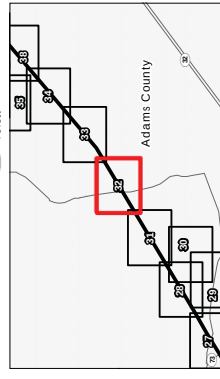
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location
Adams and Pike Counties, Ohio
Prepared by JLN on 2017-03-14
Technical Review by NN on 2017-04-03
Independent Review by DG on 2017-04-07
193704860



Legend

- | Legend | Habitat Areas |
|---|---|
| ■ AEP Substation | ● Agricultural Field |
| ● Structure to be Replaced | ● Early Successional Deciduous Forest |
| ⚡ 33kV Transmission Line | ● Early Successional Deciduous/Coniferous Forest |
| □ Access Road | ● Early Successional Riparian Forest |
| □ Project Area (100' ROW and 30' Access Road) | ● Existing Roadway |
| ○ Photo Location | ● Hayfield |
| ▲ Potential Bat Roost Tree | ● Industrial |
| ~ Inland Drainage Feature | ● Mixed Early Successional/Second Growth Deciduous Forest |
| ~ Approximate Upland Drainage Feature | ● Mixed Early Successional/Second Growth Riparian Forest |
| ~ Field Delineated Waterway | ● New Field |
| ~ Approximate Waterway | ● Old Field |
| ~ Field Delineated Waterway Area | ● Pasture |
| ~ Field Delineated Open Water | ● Residential Lawn |
| ~ Approximate Open Water | ● Second Growth Coniferous Forest |
| ~ Field Delineated Emergent Wetland | ● Second Growth Deciduous Forest |
| ~ Field Delineated Forested Wetland | |
| ~ Approximate Wetland | |



Notes

- NOTES**
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
 2. Data Sources Include: Stantec, AEP, NADS, USGS, OGRIP
 3. Orthophotography: 2015 NAIP

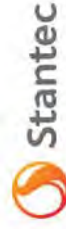


Figure No.

3

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

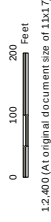
Adams and Pike Counties, Ohio

13870-0860

Prepared by JH on 2017-03-14

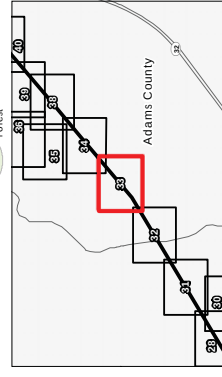
Technical Review by NH on 2017-04-03

Independent Review by DS on 2017-04-07



Legend

- | | |
|---|---|
| AEP Substation | Agricultural Field |
| Structure to be Replaced | Early Successional Deciduous Forest |
| 138kV Transmission Line | Early Successional Deciduous/Coniferous Forest |
| Access Road | Early Successional Riparian Forest |
| Project Area (100' ROW and 30' Access Road) | Existing Roadway |
| Photo Location | Fallow Field |
| Potential Bat Roost Tree | Hayfield |
| Upland Drainage Feature | Industrial |
| Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Field Delineated Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Approximate Waterway Area | New Field |
| Field Delineated Open Water | Old Field |
| Approximate Open Water | Pasture |
| Field Delineated Emergent Wetland | Residential Lawn |
| Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Approximate Wetland | Second Growth Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NAD

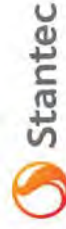


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

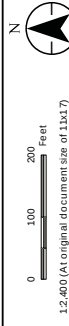
Adams and Pike Counties, Ohio

13870-0860

Prepared by JH on 2017-03-14

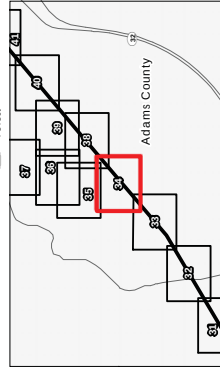
Technical Review by NH on 2017-04-03

Independent Review by JG on 2017-04-07



Legend

- | | |
|---|---|
| AEP Substation | Agricultural Field |
| Structure to be Replaced | Early Successional Deciduous Forest |
| 138kV Transmission Line | Early Successional Deciduous/Coniferous Forest |
| Access Road | Early Successional Riparian Forest |
| Project Area (100' ROW and 30' Access Road) | Existing Roadway |
| Photo Location | Fallow Field |
| Potential Bat Roost Tree | Hayfield |
| Upland Drainage Feature | Industrial |
| Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Field Delineated Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Approximate Waterway Area | New Field |
| Field Delineated Open Water | Old Field |
| Approximate Open Water | Pasture |
| Field Delineated Emergent Wetland | Residential Lawn |
| Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Approximate Wetland | Second Growth Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NAD, USGS, OGRIP
3. Orthophotography: 2015 NAD

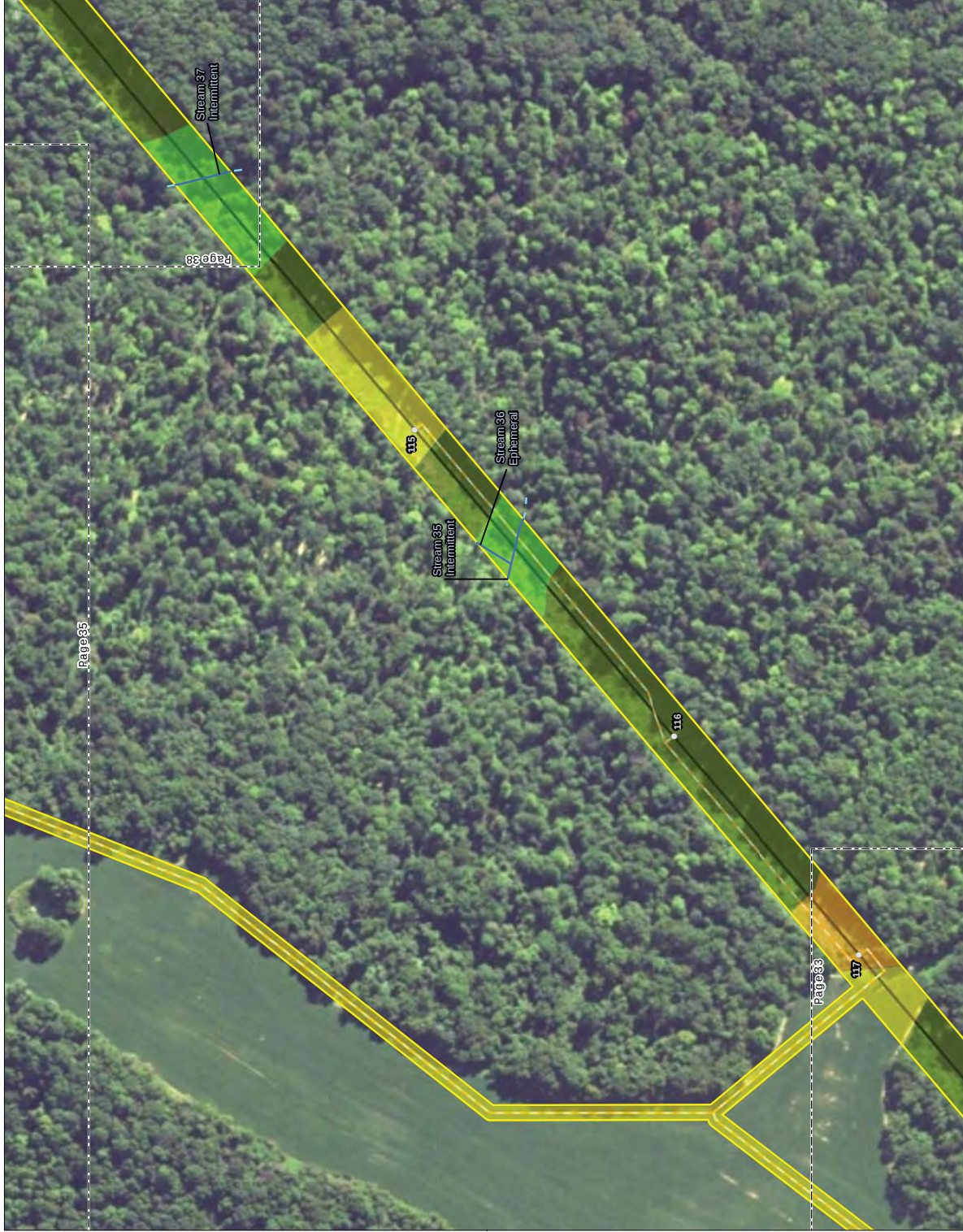
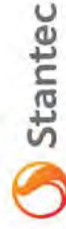


Figure No.

3

Title

Habitat Assessment Map

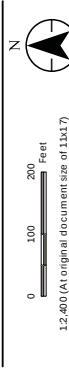
Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

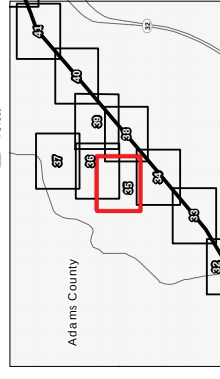
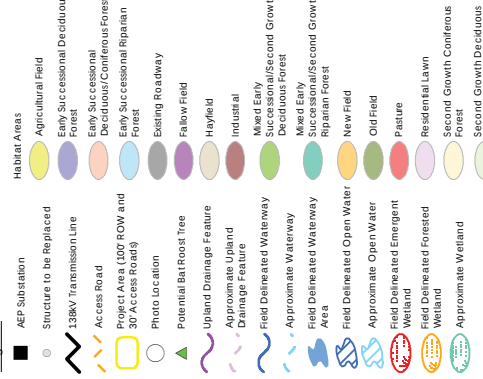
Project Location

Adams and Pike Counties, Ohio

13870-0860
Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by DS on 2017-04-07



Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources Included: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NAD

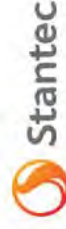


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860

Prepared by JLT on 2017-03-14

Technical Review by NHT on 2017-04-03

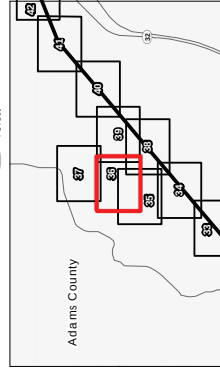
Independent Review by JSC on 2017-04-07

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12,400 (At original document size of 11x17)

Legend

- AEP Substation
 - Structure to be Replaced
 - 138kV Transmission Line
 - Access Road
 - Project Area (100' ROW and 30' Access Road)
 - Photo Location
 - Potential Bat Roost Tree
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway Area
 - Field Delineated Open Water
 - Approximate Open Water
 - Field Delineated Emergent Wetland
 - Field Delineated Forested Wetland
 - Approximate Wetland
- Habitat Areas
- Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources Included: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2013 NADP

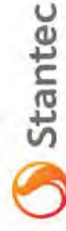


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

130704660

Prepared by JH on 2017-08-14

Technical Review by NH on 2017-08-03

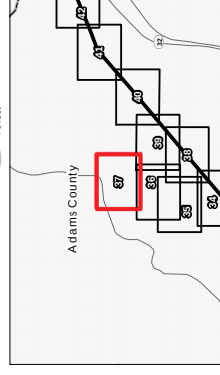
Independent Review by JG on 2017-08-07

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Legend

- AEP Substation
- Structure to be Replaced
- 138KV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
 - Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD



Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

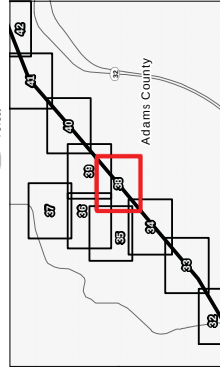
13870-0860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JG on 2017-08-07
Adams and Pike Counties, Ohio

12,400 (At original document size of 11x17)



Legend

- Habitat Areas**
 - Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest
- Structure to be Replaced**
 - 138kV Transmission Line
- Access Road**
 - Project Area (100' ROW and 30' Access Road)
- Photo Location**
 - Potential Bat Roost Tree
- Upland Drainage Feature**
 - Approximate Upland Drainage Feature
- Field Delineated Waterway**
 - Approximate Waterway
 - Field Delineated Waterway Area
 - Field Delineated Open Water
 - Approximate Open Water
 - Field Delineated Emergent Wetland
 - Field Delineated Forested Wetland
 - Approximate Wetland



Notes

- Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
- Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
- Aerial photography 2012 NAD

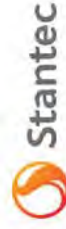


Figure No.

3

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860

Prepared by JH on 2017-03-14

Technical Review by NH on 2017-04-03

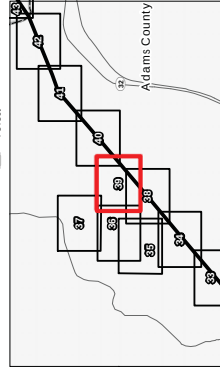
Independent Review by DS on 2017-04-07

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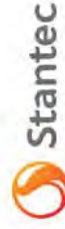
Legend

- AEP Substation
- Structure to be Replaced
- 138KV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- ▲ Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
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- Early Successional Deciduous/Coniferous Forest
- Early Successional Riparian Forest
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- Industrial
- Mixed Early Successional/Second Growth Deciduous Forest
- Mixed Early Successional/Second Growth Riparian Forest
- New Field
- Old Field
- Pasture
- Residential Lawn
- Second Growth Coniferous Forest
- Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NIP



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Figure No.

3

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

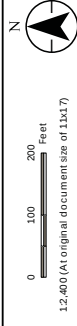
Adams and Pike Counties, Ohio

13870-0660

Prepared by JH on 2017-03-14

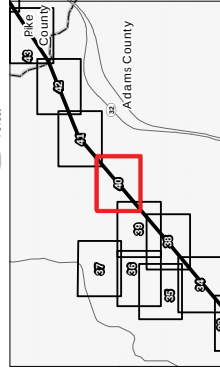
Technical Review by NH on 2017-04-03

Independent Review by DS on 2017-04-07



Legend

- | | |
|---|---|
| AEP Substation | Agricultural Field |
| Structure to be Replaced | Early Successional Deciduous Forest |
| 138kV Transmission Line | Early Successional Deciduous/Coniferous Forest |
| Access Road | Early Successional Riparian Forest |
| Project Area (100' ROW and 30' Access Road) | Existing Roadway |
| Photo Location | Fallow Field |
| Potential Bat Roost Tree | Hayfield |
| Upland Drainage Feature | Industrial |
| Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Field Delineated Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Approximate Waterway Area | New Field |
| Field Delineated Open Water | Old Field |
| Approximate Open Water | Pasture |
| Field Delineated Emergent Wetland | Residential Lawn |
| Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Field Delineated Forested Wetland | Second Growth Deciduous Forest |
| Approximate Wetland | |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2012 NAD

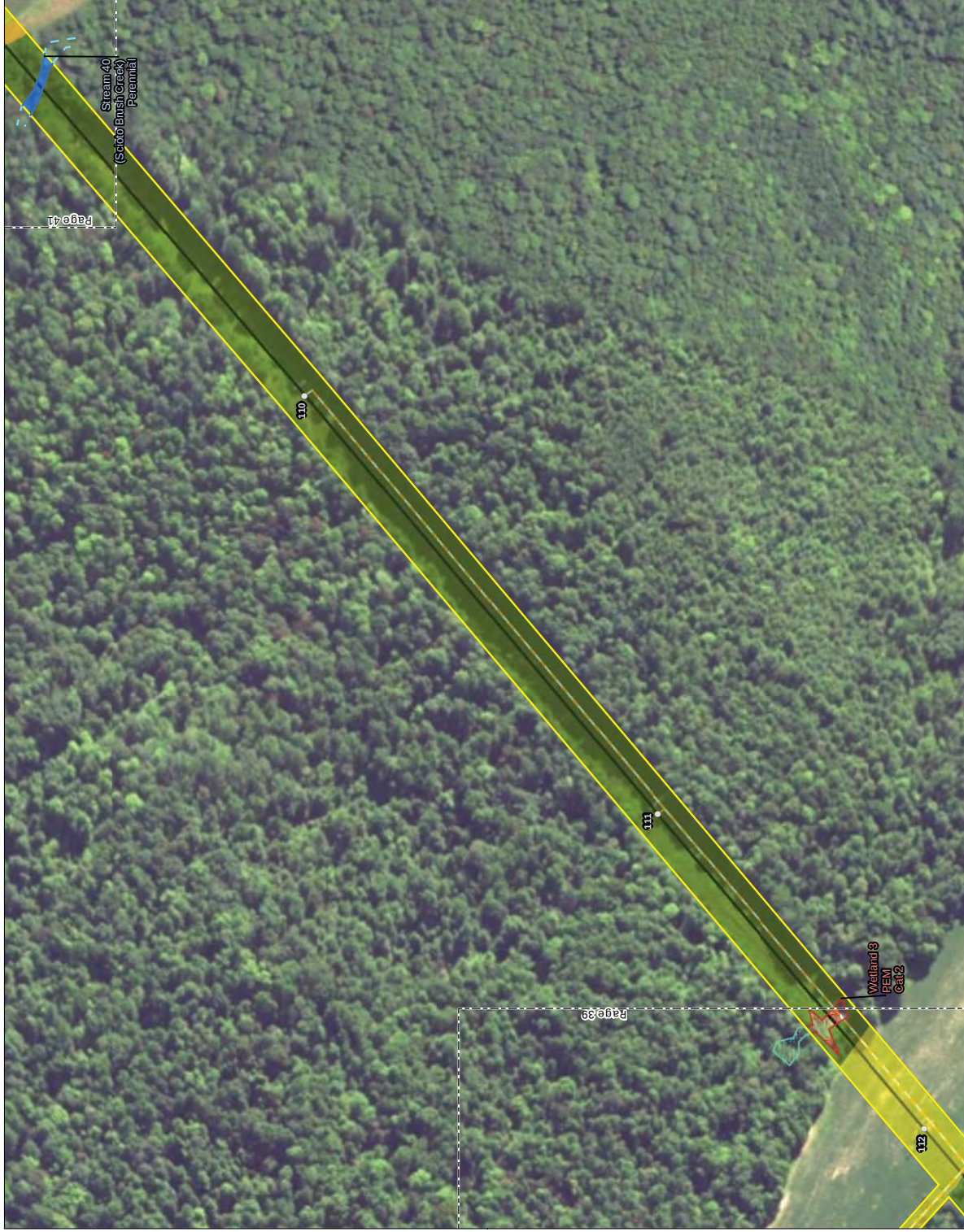
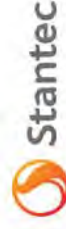


Figure No.

3

Title

Habitat Assessment Map

Client/Project

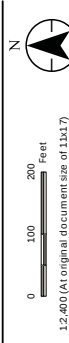
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

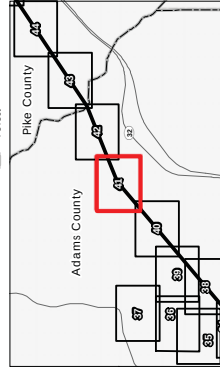
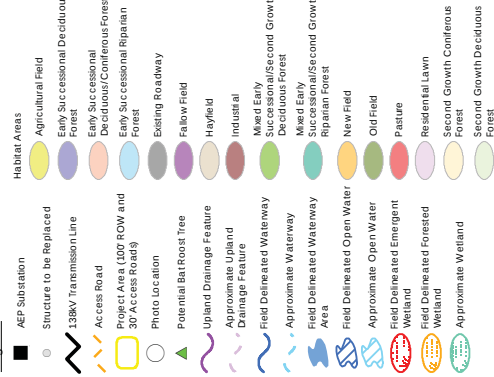
Adams and Pike Counties, Ohio

130705860

Prepared by JH on 2017-09-14
Technical Review by NH on 2017-09-03
Independent Review by DS on 2017-06-07

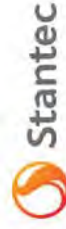


Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADS, USGS, OGRIP
3. Orthophotography 2015 NAD

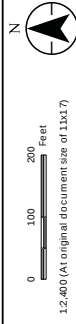


Habitat Assessment Map

Client/Project

**AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project**

Project Location
Adams and Pike Counties, Ohio
Prepared by JLN on 2017-03-14
Technical Review by NN on 2017-04-03
Independent Review by DG on 2017-04-07
193704860



Legend

- | AEP Substation | Habitat Areas |
|----------------|---|
| ■ | Agricultural Field |
| ● | Early Successional Deciduous Forest |
| ⚡ | 138kV Transmission Line |
| 🛣️ | Access Road |
| 📏 | Project Area (100' ROW and 30' Access Road) |
| ○ | Bearing Roadway |
| ▲ | Potential Bat Roost Tree |
| 🌿 | Upland Drainage Feature |
| 💧 | Approximate Upland Drainage Feature |
| 🌊 | Field Drained Waterway |
| 🌊 | Approximate Waterway |
| 🌊 | Field Drained Waterway Area |
| 🌊 | Field Drained Open Water |
| 🌊 | Approximate Open Water |
| 🌊 | Field Drained Emergent Wetland |
| 🌊 | Field Drained Forested Wetland |
| 🌊 | Second Growth Coniferous Forest |
| 🌊 | Second Growth Deciduous Forest |

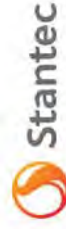
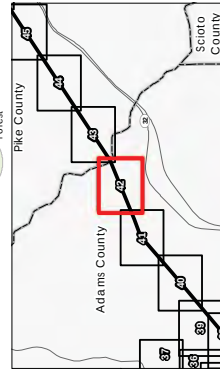


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

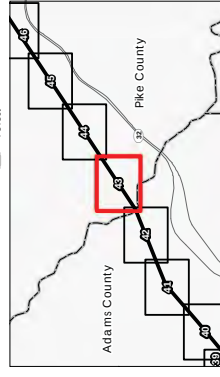
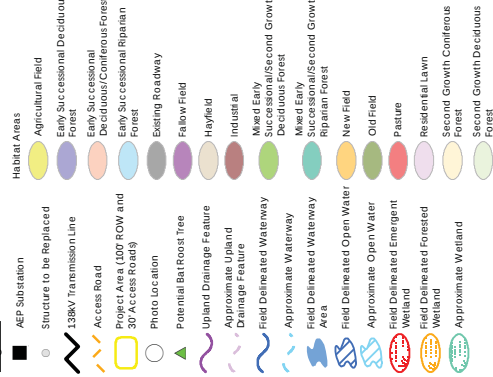
130706860

Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by JG on 2017-04-07

12,400 (At original document size of 11x17)



Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD

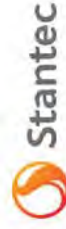


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860

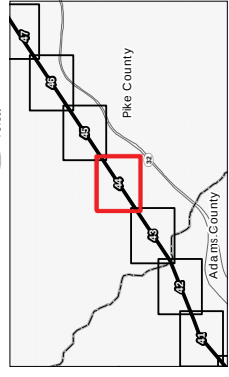
Technical Review by NRI on 2017-08-14

Independent Review by NRI on 2017-08-07

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12,400 (At original document size of 11x17)

Legend

- AEP Substation
- Structure to be Replaced
- 138kV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
- Agricultural Field
- Early Successional Deciduous Forest
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- Existing Roadway
- Fallow Field
- Hayfield
- Industrial
- Mixed Early Successional/Second Growth Deciduous Forest
- Mixed Early Successional/Second Growth Riparian Forest
- New Field
- Old Field
- Pasture
- Residential Lawn
- Second Growth Coniferous Forest
- Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources included: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography, 2015 NIP



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOG SHEET

13870-0860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JG on 2017-08-07
Adams and Pike Counties, Ohio

13870-0860

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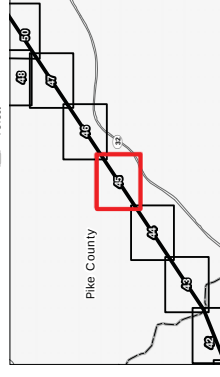
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Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography: 2013 NADP

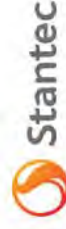


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

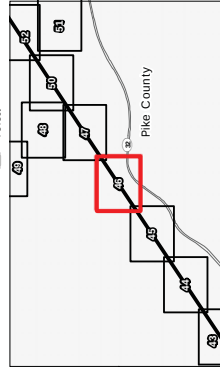
13870-0860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JG on 2017-08-07
Adams and Pike Counties, Ohio

12,400 (At original document size of 11x17)



Legend

- | | | |
|---|--|---|
| AEP Substation | Agricultural Field | Early Successional Deciduous Forest |
| Structure to be Replaced | Early Successional Deciduous/Coniferous Forest | Early Successional Riparian Forest |
| 138kV Transmission Line | Existing Roadway | Fallow Field |
| Access Road | Potential Bat Roost Tree | Hayfield |
| Project Area (100' ROW and 30' Access Road) | Upland Drainage Feature | Industrial |
| Photo Location | Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Potential Bat Roost Tree | Field Delineated Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Upland Drainage Feature | Approximate Waterway Area | New Field |
| Approximate Upland Drainage Feature | Field Delineated Open Water | Old Field |
| Field Delineated Waterway | Approximate Open Water | Pasture |
| Field Delineated Open Water Area | Field Delineated Emergent Wetland | Residential Lawn |
| Field Delineated Emergent Wetland | Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Field Delineated Forested Wetland | Approximate Wetland | Second Growth Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD

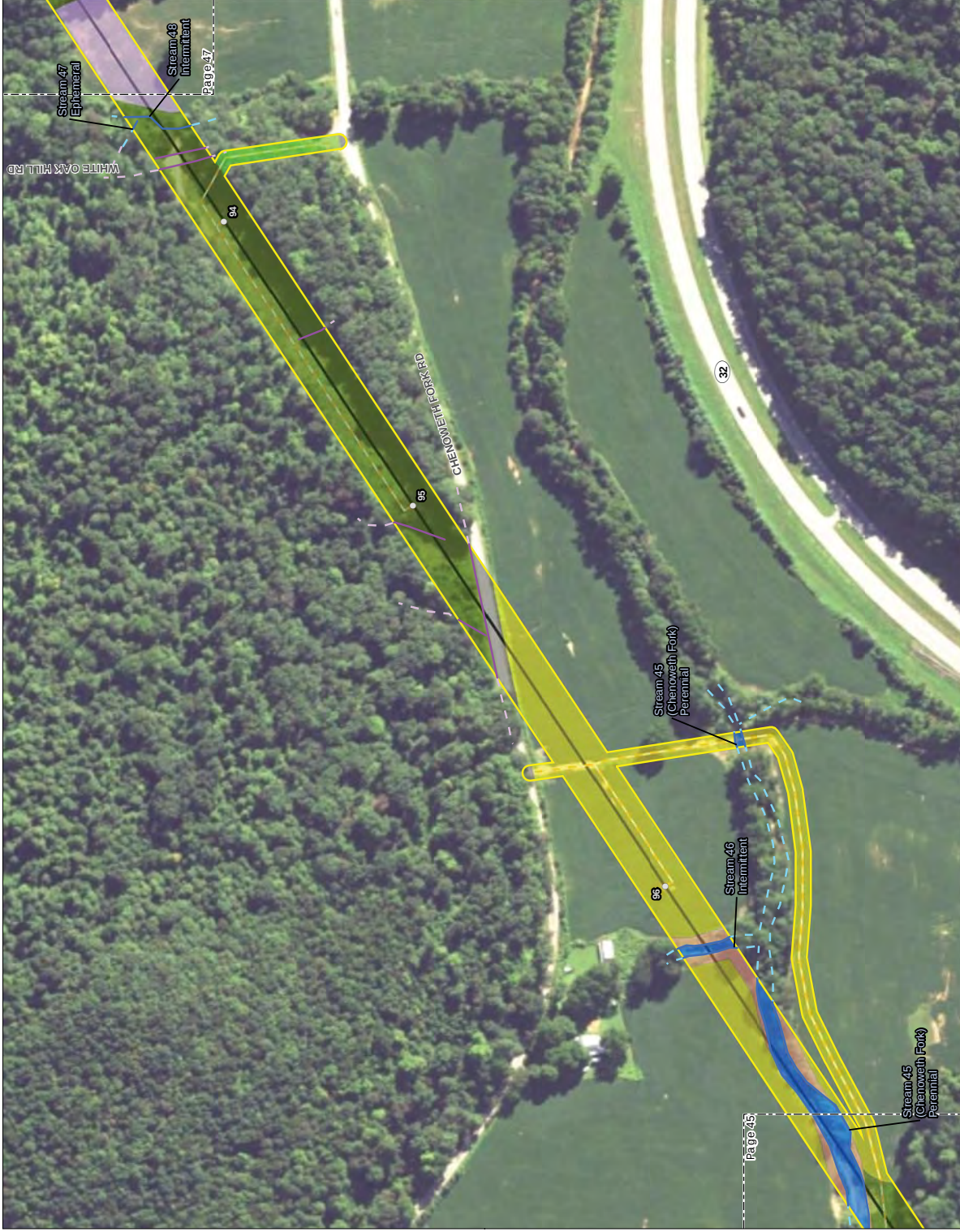
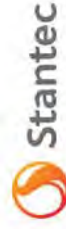


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860

Prepared by JH on 2017-03-14

Technical Review by NH on 2017-04-03

Independent Review by DS on 2017-04-07

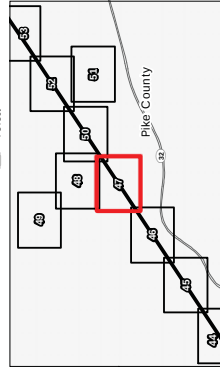
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N

Legend

- AEP Substation
- Structure to be Replaced
- 138kV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
- Agricultural Field
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- Industrial
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- Mixed Early Successional/Second Growth Riparian Forest
- New Field
- Old Field
- Pasture
- Residential Lawn
- Second Growth Coniferous Forest
- Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD

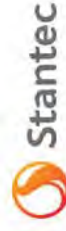


Figure No.

3

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

138706860

Technical Review by NHP on 2017-03-14

Independent Review by NHP on 2017-04-03

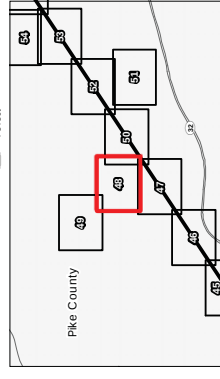
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Legend

- AEP Substation
 - Structure to be Replaced
 - 138kV Transmission Line
 - Access Road
 - Project Area (100' ROW and 30' Access Road)
 - Photo Location
 - Potential Bat Roost Tree
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway Area
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 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2013 NHP

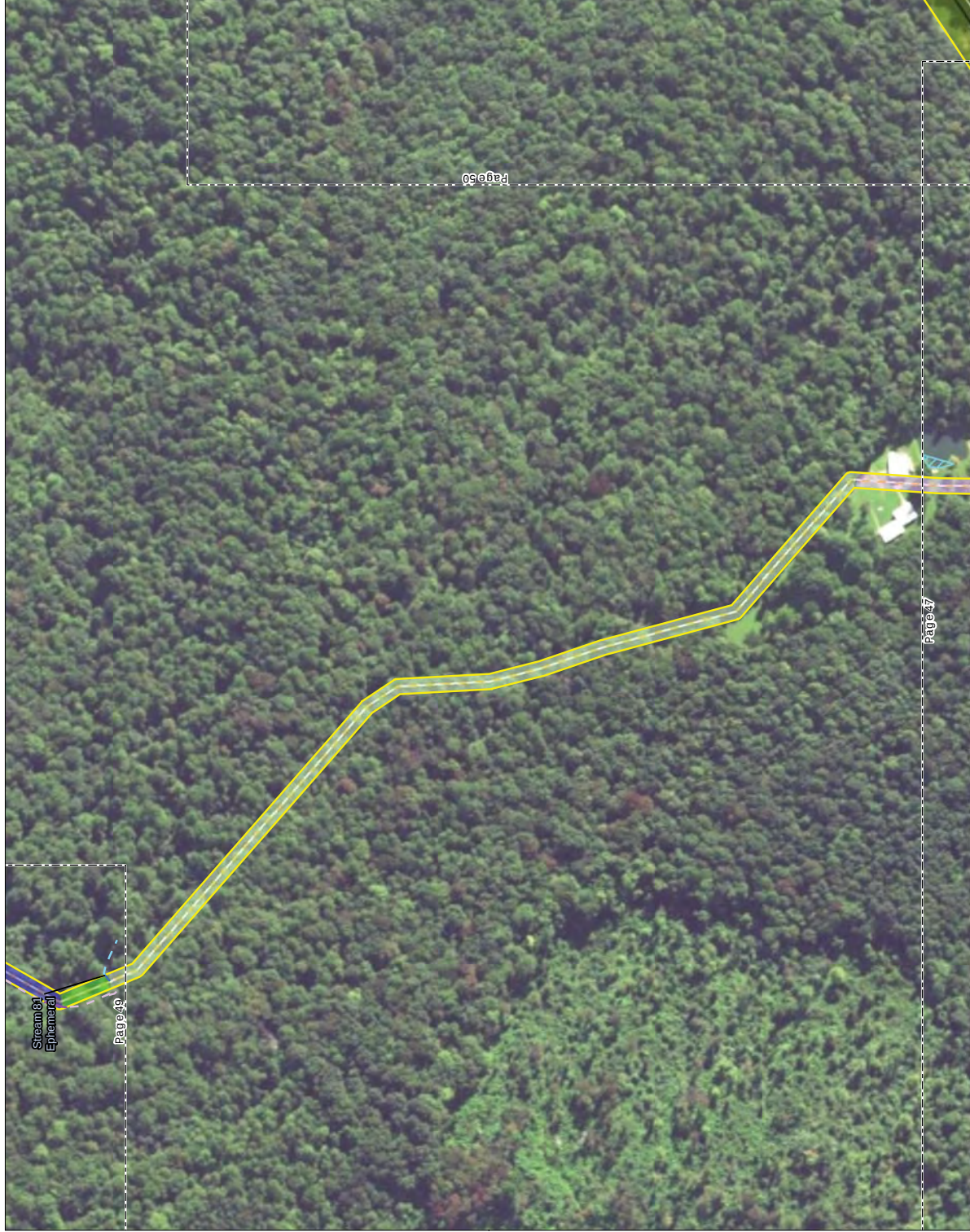
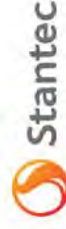


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

130706860

Prepared by JLT on 2017-03-14

Technical Review by NHT on 2017-04-03

Independent Review by JSC on 2017-04-07

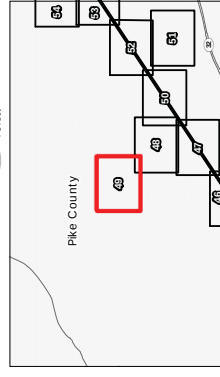
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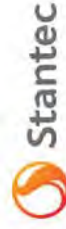
Legend

- AEP Substation
- Structure to be Replaced
- 138KV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
 - Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NHP



Page 49

Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

Technical Review by NRI on 2017-03-14

Independent Review by JSC on 2017-04-07

130704860

12,400 (At original document size of 11x17)

0 100 200 Feet

North Arrow

Legend

AP Substation

Structure to be Replaced

138kV Transmission Line

Access Road

Project Area (100' ROW and 30' Access Road)

Photo Location

Potential Bat Roost Tree

Upland Drainage Feature

Approximate Upland Drainage Feature

Field Delineated Waterway

Approximate Waterway

Field Delineated Waterway Area

Field Delineated Open Water

Approximate Open Water

Field Delineated Emergent Wetland

Field Delineated Forested Wetland

Approximate Wetland

Habitat Areas

Agricultural Field

Early Successional Deciduous Forest

Early Successional Deciduous/Coniferous Forest

Early Successional Riparian Forest

Existing Roadway

Fallow Field

Hayfield

Industrial

Mixed Early Successional/Second Growth Deciduous Forest

Mixed Early Successional/Second Growth Riparian Forest

New Field

Old Field

Pasture

Residential Lawn

Second Growth Coniferous Forest

Second Growth Deciduous Forest

Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet

2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP

3. Orthophotography: 2013 NIP

Stantec

Page 50 of 70



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

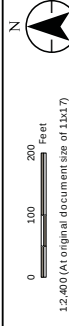
Adams and Pike Counties, Ohio

130706860

Prepared by JH on 2017-03-14

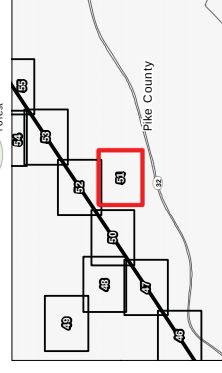
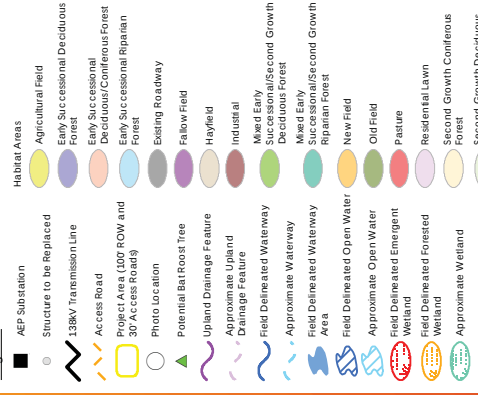
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Independent Review by JS on 2017-04-07



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Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NAD

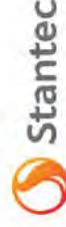


Figure No.

3

Title

Habitat Assessment Map

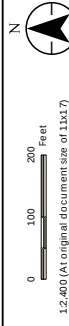
Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

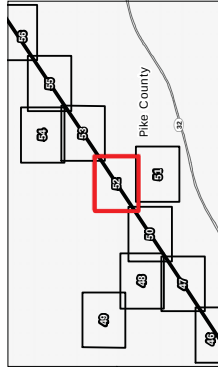
Adams and Pike Counties, Ohio

130705860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JG on 2017-06-07



Legend

- | | |
|---|---|
| AEP Substation | Agricultural Field |
| Structure to be Replaced | Early Successional Deciduous Forest |
| 138kV Transmission Line | Early Successional Deciduous/Coniferous Forest |
| Access Road | Early Successional Riparian Forest |
| Project Area (100' ROW and 30' Access Road) | Existing Roadway |
| Photo Location | Fallow Field |
| Potential Bat Roost Tree | Hayfield |
| Upland Drainage Feature | Industrial |
| Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Field Delineated Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Approximate Waterway Area | New Field |
| Field Delineated Open Water | Old Field |
| Approximate Open Water | Pasture |
| Field Delineated Emergent Wetland | Residential Lawn |
| Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Approximate Wetland | Second Growth Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NAD

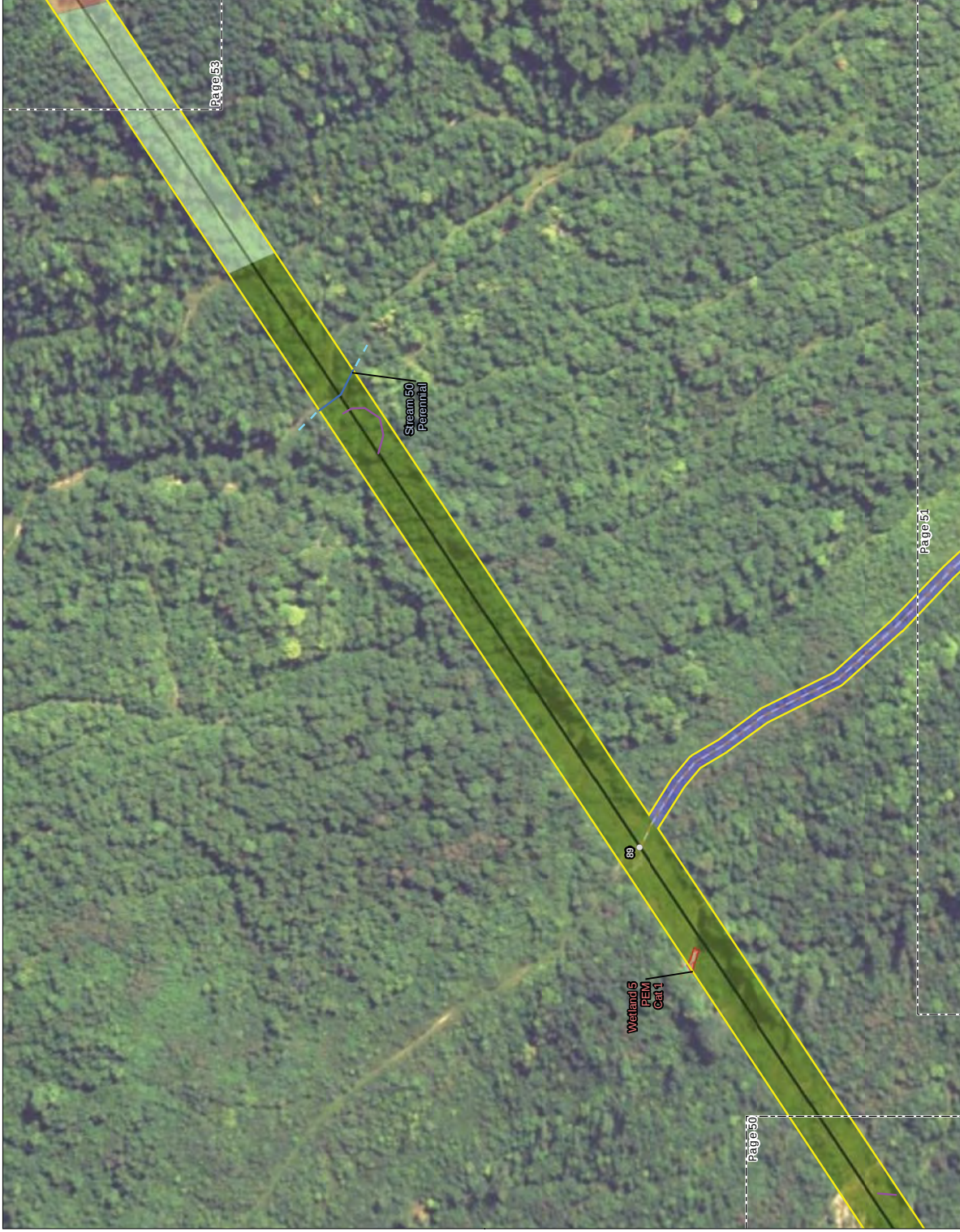
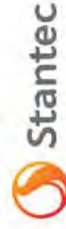


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

Technical Review by NHP on 2017-08-14

Independent Review by NHP on 2017-08-07

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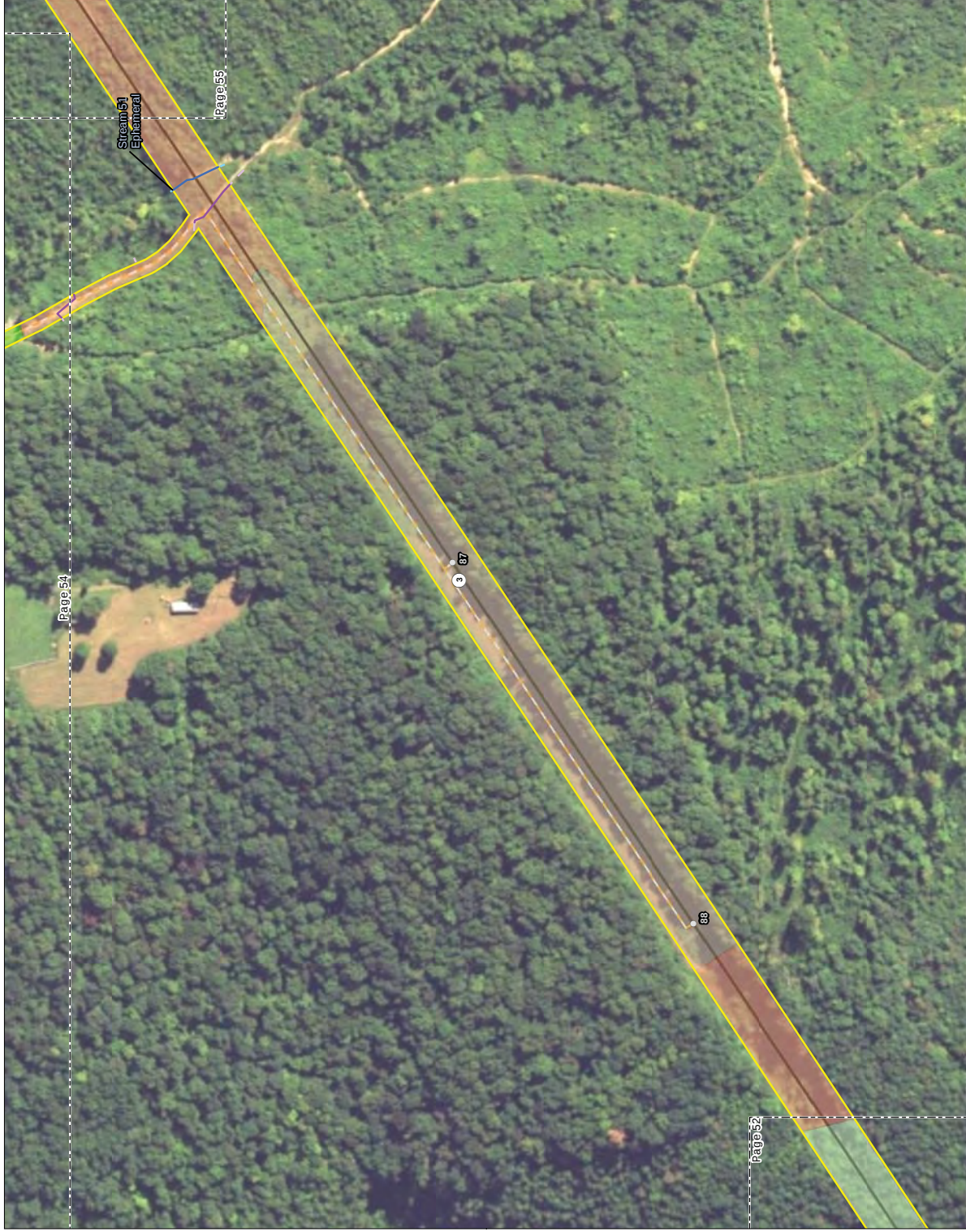
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Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography 2015 NHP

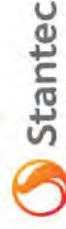


Figure No.

3

Title

Habitat Assessment Map

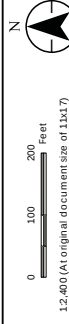
Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

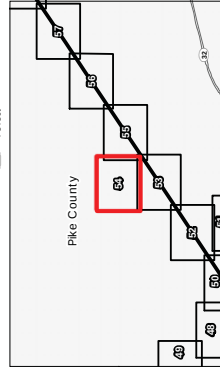
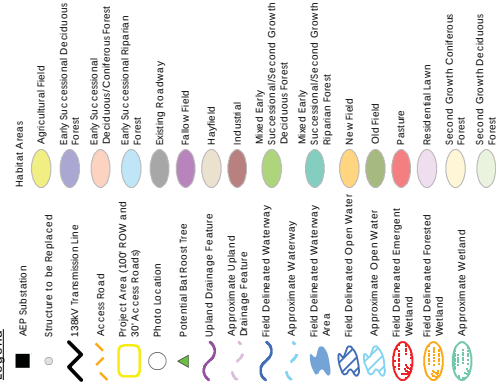
PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860
Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by JS on 2017-04-07



Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NIP

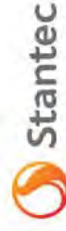


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio
Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by DS on 2017-04-07

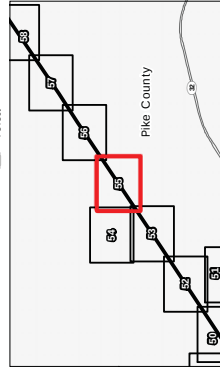
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Legend

- | | |
|---|---|
| AEP Substation | Agricultural Field |
| Structure to be Replaced | Early Successional Deciduous Forest |
| 138kV Transmission Line | Early Successional Deciduous/Coniferous Forest |
| Access Road | Early Successional Riparian Forest |
| Project Area (100' ROW and 30' Access Road) | Existing Roadway |
| Photo Location | Fallow Field |
| Potential Bat Roost Tree | Hayfield |
| Upland Drainage Feature | Industrial |
| Approximate Upland Drainage Feature | Mixed Early Successional/Second Growth Deciduous Forest |
| Field Delineated Waterway | Mixed Early Successional/Second Growth Riparian Forest |
| Approximate Waterway | New Field |
| Field Delineated Open Water Area | Old Field |
| Approximate Open Water | Pasture |
| Field Delineated Emergent Wetland | Residential Lawn |
| Field Delineated Forested Wetland | Second Growth Coniferous Forest |
| Approximate Wetland | Second Growth Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2013 NIP

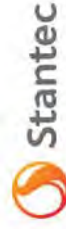


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

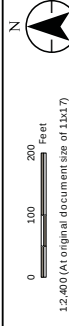
Adams and Pike Counties, Ohio

138705860

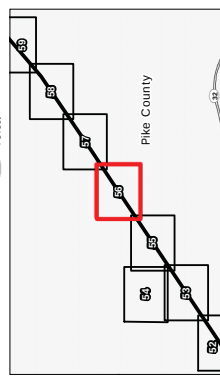
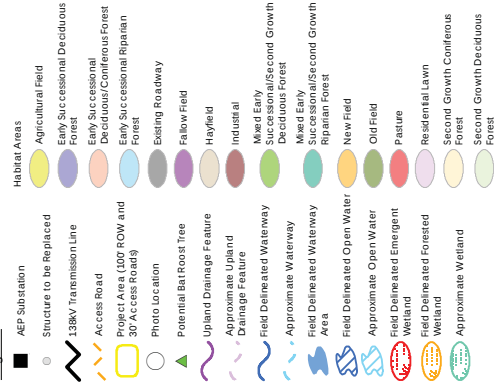
Prepared by JH on 2017-08-14

Technical Review by NH on 2017-08-14

Independent Review by JG on 2017-08-07



Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2012 NAD

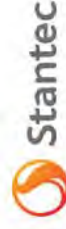


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

Technical Review by NHI on 2017-08-14

Independent Review by NHI on 2017-08-07

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Legend

Habitat Areas

Structure to be Replaced

138kV Transmission Line

Access Road

Project Area (100' ROW and 30' Access Road)

Photo Location

Potential Bat Roost Tree

Upland Drainage Feature

Approximate Upland Drainage Feature

Field Delineated Waterway

Approximate Waterway Area

Field Delineated Waterway

Field Delineated Open Water

Approximate Open Water

Field Delineated Emergent Wetland

Field Delineated Forested Wetland

Approximate Wetland

Habitat Areas

Agricultural Field

Early Successional Deciduous Forest

Early Successional Deciduous/Coniferous Forest

Early Successional Riparian Forest

Existing Roadway

Fallow Field

Hayfield

Industrial

Mixed Early Successional/Second Growth Deciduous Forest

Mixed Early Successional/Second Growth Riparian Forest

New Field

Old Field

Pasture

Residential Lawn

Second Growth Coniferous Forest

Second Growth Deciduous Forest

Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet

2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP

3. Orthophotography 2015 NHP

Stantec

Page 57 of 70



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Habitat Assessment Map

Client/Project

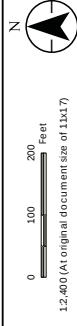
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location	193704860

Project Location
Adams and Pike Counties, Ohio

Technical Review by NN on 2017-04-03
Independent Review by OC on 2017-04-07

independent Review by DG on 2017-04-07

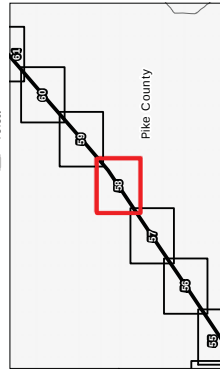
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12,400 (At original document size of 11x17)



Legend

- | AEP Substation | Habitat Areas |
|---|---|
|  |  Agricultural Field |
|  |  Early Successional Deciduous Forest |
|  |  Early Successional Coniferous Forest |
|  |  Early Successional Riparian Forest |
|  |  Early Successional Coniferous Forest |
|  |  Existing Roadway |
|  |  Fallow Field |
|  |  Hayfield |
|  |  Industrial |
|  |  Mixed Early Successional Second Growth Deciduous Forest |
|  |  Mixed Early Successional Second Growth Riparian Forest |
|  |  New Field |
|  |  Old Field |
|  |  Pasture |
|  |  Residential Lawn |
|  |  Second Growth Coniferous Forest |
|  |  Second Growth Deciduous Forest |



Notes

- NOTES**
1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
 2. Data Sources Include e: Stantec, AEP, NADS, USGS, OGRIP
 3. Orthophotography: 2015 NAIP

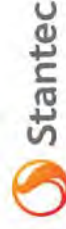


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

Adams and Pike Counties, Ohio

13870-0860

Prepared by JLR on 2017-03-14

Technical Review by NLR on 2017-04-03

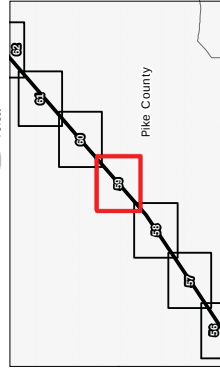
Independent Review by JPS on 2017-04-07

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Legend

- AEP Substation
 - Structure to be Replaced
 - 138kV Transmission Line
 - Access Road
 - Project Area (100' ROW and 30' Access Road)
 - Photo Location
 - Potential Bat Roost Tree
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway Area
 - Field Delineated Open Water
 - Approximate Open Water
 - Field Delineated Emergent Wetland
 - Field Delineated Forested Wetland
 - Approximate Wetland
- Habitat Areas
- Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources Included: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2015 NIP

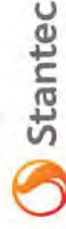


Figure No.

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Title

Habitat Assessment Map

Client/Project

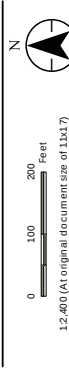
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

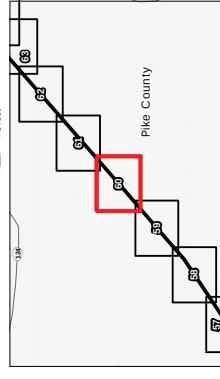
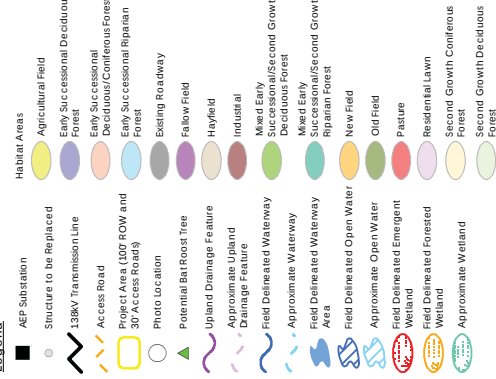
13870-0860

Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JG on 2017-06-07



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Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2013 NAD

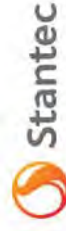


Figure No.

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Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOG SHEET

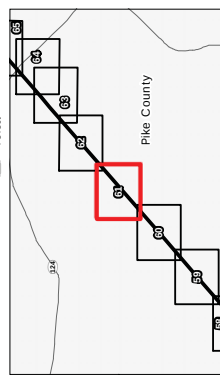
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Prepared by JH on 2017-03-14
Technical Review by NH on 2017-04-03
Independent Review by DS on 2017-04-07

Adams and Pike Counties, Ohio

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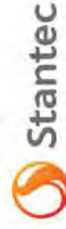
Legend

- AEP Substation
- Structure to be Replaced
- 138kV Transmission Line
- Access Road
- Project Area (100' ROW and 30' Access Road)
- Photo Location
- Potential Bat Roost Tree
- Upland Drainage Feature
- Approximate Upland Drainage Feature
- Field Delineated Waterway
- Approximate Waterway
- Field Delineated Waterway Area
- Field Delineated Open Water
- Approximate Open Water
- Field Delineated Emergent Wetland
- Field Delineated Forested Wetland
- Approximate Wetland
- Habitat Areas
- Agricultural Field
- Early Successional Deciduous Forest
- Early Successional Deciduous/Coniferous Forest
- Early Successional Riparian Forest
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- Mixed Early Successional/Second Growth Deciduous Forest
- Mixed Early Successional/Second Growth Riparian Forest
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- Old Field
- Pasture
- Residential Lawn
- Second Growth Coniferous Forest
- Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography: 2013 NAF



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

130704860

Prepared by JLN on 2017-03-14

Technical Review by NHT on 2017-04-03

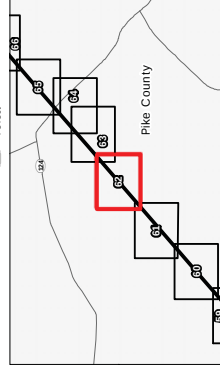
Independent Review by JSC on 2017-04-07

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N

Legend

- AEP Substation
 - Structure to be Replaced
 - 138KV Transmission Line
 - Access Road
 - Project Area (100' ROW and 30' Access Road)
 - Photo Location
 - Potential Bat Roost Tree
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway Area
 - Field Delineated Open Water
 - Approximate Open Water
 - Field Delineated Emergent Wetland
 - Field Delineated Forested Wetland
 - Approximate Wetland
- Habitat Areas
- Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
 - Hayfield
 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2013 NHP



Figure No.

3

Title

Habitat Assessment Map

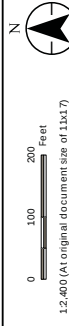
Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

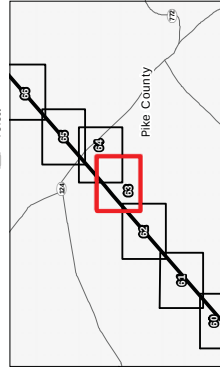
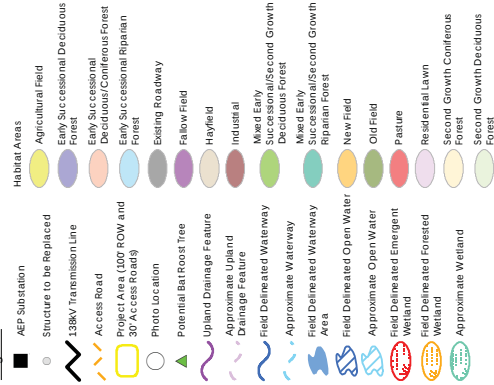
PROJECT LOG SHEET

13870-0660
Prepared by JH on 2017-03-14
Technical Review by NH on 2017-03-14
Independent Review by JG on 2017-04-07

Adams and Pike Counties, Ohio

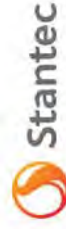


Legend



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography 2015 NAD



Habitat Assessment Map

Client/Project
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

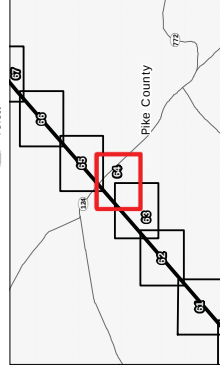
PROJECT LOCATION
Adams and Pike Counties, Ohio

13870-0660
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JS on 2017-06-07



Legend

- | | | |
|---|---|--|
| AEP Substation | Agricultural Field | Early Successional Deciduous Forest |
| Structure to be Replaced | Early Successional Deciduous/Coniferous Forest | Early Successional Riparian Forest |
| 138KV Transmission Line | Existing Roadway | Fallow Field |
| Access Road | Hayfield | Industrial |
| Project Area (100' ROW and 30' Access Road) | Mixed Early Successional/Second Growth Deciduous Forest | Mixed Early Successional/Second Growth Riparian Forest |
| Photo Location | Potential Bat Roost Tree | New Field |
| Upland Drainage Feature | Field Delineated Waterway | Old Field |
| Approximate Upland Drainage Feature | Field Delineated Waterway Area | Pasture |
| Approximate Waterway | Field Delineated Open Water | Residential Lawn |
| Field Delineated Waterway | Approximate Open Water | Second Growth Coniferous Forest |
| Field Delineated Emergent Wetland | Field Delineated Emergent Wetland | Second Growth Deciduous Forest |
| Field Delineated Forested Wetland | Approximate Wetland | |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography 2015 NIP



Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

PROJECT LOCATION

13870-0862
Prepared by JLT on 2017-08-14
Technical Review by NH on 2017-08-03
Independent Review by JSC on 2017-08-07
Adams and Pike Counties, Ohio

13870-0862

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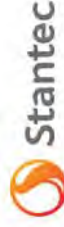


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

130706860
Prepared by JH on 2017-08-14
Technical Review by NH on 2017-08-14
Independent Review by DS on 2017-08-07

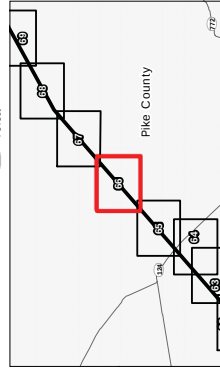
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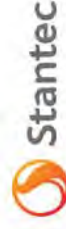
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- AEP Substation
 - Structure to be Replaced
 - 138kV Transmission Line
 - Access Road
 - Project Area (100' ROW and 30' Access Road)
 - Photo Location
 - Potential Bat Roost Tree
 - Upland Drainage Feature
 - Approximate Upland Drainage Feature
 - Field Delineated Waterway
 - Approximate Waterway
 - Field Delineated Waterway Area
 - Field Delineated Open Water
 - Approximate Open Water
 - Field Delineated Emergent Wetland
 - Field Delineated Forested Wetland
 - Approximate Wetland
- Habitat Areas
- Agricultural Field
 - Early Successional Deciduous Forest
 - Early Successional Deciduous/Coniferous Forest
 - Early Successional Riparian Forest
 - Existing Roadway
 - Fallow Field
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 - Industrial
 - Mixed Early Successional/Second Growth Deciduous Forest
 - Mixed Early Successional/Second Growth Riparian Forest
 - New Field
 - Old Field
 - Pasture
 - Residential Lawn
 - Second Growth Coniferous Forest
 - Second Growth Deciduous Forest



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography: 2015 NADP



Page 66 of 70



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

13070-0860

Prepared by JH on 2017-03-14

Technical Review by NH on 2017-04-03

Independent Review by DS on 2017-04-07

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Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources include: Stantec; AEP; NAD83; USGS; OGRIP
3. Orthophotography: 2015 NAD

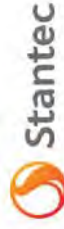


Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

13870-0660

Prepared by JH on 2017-03-14

Technical Review by NH on 2017-04-03

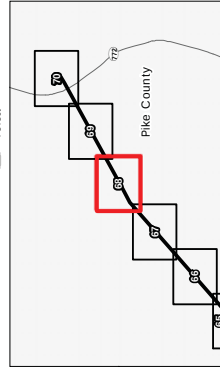
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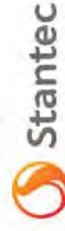
Legend

- | | | |
|---|-------------------------------------|-------------------------------------|
| AEP Substation | Agricultural Field | Early Successional Deciduous Forest |
| Structure to be Replaced | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| 138kV Transmission Line | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Access Road | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Project Area (100' ROW and 30' Access Road) | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Photo Location | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Potential Bat Roost Tree | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Upland Drainage Feature | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Approximate Upland Drainage Feature | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Field Delineated Waterway | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Approximate Waterway | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Field Delineated Waterway | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Field Delineated Open Water | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Approximate Open Water | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Field Delineated Emergent Wetland | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Field Delineated Forested Wetland | Early Successional Deciduous Forest | Early Successional Deciduous Forest |
| Approximate Wetland | Early Successional Deciduous Forest | Early Successional Deciduous Forest |



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Data Sources Included: Stantec, AEP, NADs, USGS, OGRIP
3. Orthophotography: 2013 NAD



Page 68 of 70



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Figure No.

3

Title

Habitat Assessment Map

Client/Project

AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138KV Transmission Line Project

Project Location

Adams and Pike Counties, Ohio

Prepared by JH on 2017-08-14

Technical Review by NH on 2017-08-03

Independent Review by JS on 2017-08-07

13870-0860

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North Arrow

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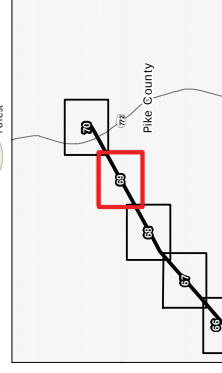
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2. Data Sources include: Stantec, AEP, MADS, USGS, OGRIP
3. Orthophotography: 2015 NAD

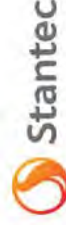


Figure No.

3

Title

Habitat Assessment Map

Client/Project

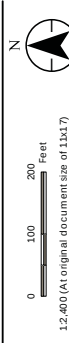
AEP Ohio Transmission Company, Inc.
Ware Road-Seaman
138kV Transmission Line Project

Project Location

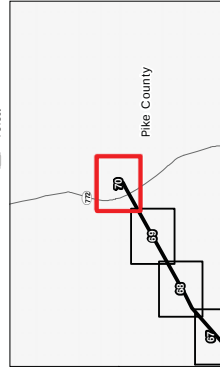
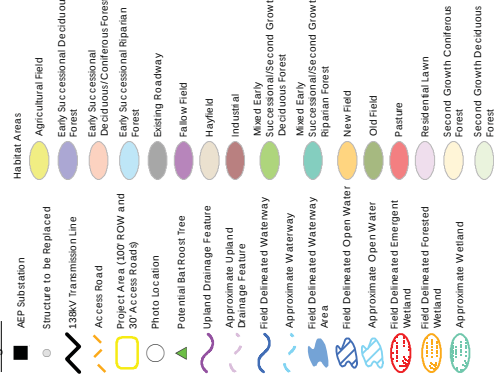
Adams and Pike Counties, Ohio

130704860

Technical Review by NHI on 2017-04-14
Independent Review by US on 2017-04-07

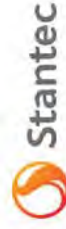


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Notes

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2. Data Sources include: Stantec, AEP, NAD, USGS, OGRIP
3. Orthophotography: 2015 NHP



Appendix B Agency Correspondence



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

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

February 24, 2017

Dan Godec
Stantec Consulting Services Inc.
11687 Lebanon Road
Cincinnati, Ohio 45241

Re: 17-053; Request for Environmental Review, Waverly-Adams-Seaman 138 kV Transmission Line Rebuild Project

Project: The proposed consists of the rebuilding of approximately 32.8 miles of the Waverly-Adams-Seaman 138 kV transmission line.

Location: The proposed project is located in Scott, Meigs and Franklin Townships, Adams County, and Sunfish, Benton, Pebble and Pee Pee Townships, Pike County, 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 data request response dated December 16, 2016 is included on pages 10-15 of the project documentation.

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

The DOW recommends that impacts to streams, 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: 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 any to 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 sheepnose (*Plethobasus cyphus*), a state endangered and federally endangered mussel, the fanshell (*Cyprogenia stegaria*), a state endangered and federally endangered mussel, the pink mucket (*Lampsilis orbiculata*), 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 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 yellow sandshell (*Lampsilis teres*), a state endangered 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 wartyback (*Quadrula nodulata*), a state endangered mussel, the Ohio pigtoe (*Pleurobema cordatum*), a state endangered mussel, the threehorn wartyback (*Obliquaria reflexa*), a state threatened mussel, the fawnsfoot (*Truncilla donaciformis*), 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 (2016), 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 (2016) 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 shortnose gar (*Lepisosteus platostomus*), a state endangered fish, the popeye shiner (*Notropis ariommus*), a state endangered fish, the goldeye (*Hiodon alosoides*), a state endangered fish, the shovelnose sturgeon (*Scaphirhynchus platyrhynchus*), a state endangered fish, the channel darter (*Percina copelandi*), a state threatened fish, the blue sucker (*Cycleptus elongatus*), a state threatened fish, the bigeye shiner (*Notropis boops*), a state threatened fish, the American eel (*Anguilla rostrata*), a state threatened fish, the Tippecanoe

darter (*Etheostoma tippecanoe*), a state threatened fish, and the river darter (*Percina shumardi*), 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, this project is not likely to impact these 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. The DOW recommends that a habitat suitability survey be conducted by an approved herpetologist to determine if suitable habitat is present along the project route. If suitable habitat is found to be present, the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by an approved herpetologist. Survey reports can be submitted to Nathan Reardon, DOW Compliance Coordinator at Nathan.reardon@dnr.state.oh.us.

The project is within the range of the eastern spadefoot toad (*Scaphiopus holbrookii*), a state endangered species. This species is found in areas of sandy soils that are associated with river valleys. Breeding habitats may include flooded agricultural fields or other water holding depressions. The DOW recommends that a habitat suitability survey be conducted by an approved herpetologist to determine if suitable habitat is present along the project route. If suitable habitat is found to be present, the DOW recommends that a presence/absence survey be conducted, or an avoidance/minimization plan be developed and implemented by an approved herpetologist. Survey reports can be submitted to Nathan Reardon, DOW Compliance Coordinator at Nathan.reardon@dnr.state.oh.us.

The project is within the range of the lark sparrow (*Chondestes grammacus*), a state endangered bird. This sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. In the Oak Openings area west of Toledo, lark sparrows occupy open grass and shrubby fields along sandy beach ridges. These summer residents normally migrate out of Ohio shortly after their young fledge or leave the nest. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to June 30. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the Kramer's cave beetle (*Pseudanophthalmus krameri*), a state endangered species, and the Ohio cave beetle (*Pseudanophthalmus ohioensis*), a state endangered species. These species are found only in caves. The Ohio Cave Protection Law, Section 1517.21 of the Ohio Revised Code, protects caves from impacts, in turn, protecting the habitat of these species. Therefore, this project is not likely to have an impact on these 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.

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.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

<http://water.ohiodnr.gov/water-use-planning/floodplain-management#PUB>

Forestry: The Division of Forestry has the following comments.

The proposed project will occur in part on Brush Creek State Forest. If access to Brush Creek State Forest land is necessary, those activities should be coordinated with the Forest Manager, Dale Egbert (Charles.Egbert@dnr.state.oh.us, 740-858-6685), in order to obtain a special use permit.

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



Ohio Division of Wildlife APPROVED HERPETOLOGISTS

The following individuals are approved to conduct habitat suitability surveys and presence/absence surveys for the state listed reptiles and amphibians specified below.

Ramsey Langford

3023 Colon Dr.
Copley, Ohio 44321

ramseylangford@gmail.com

330-447-4840

Approved for: - Spotted turtle (*Clemmys guttata*)
- Blanding's turtle (*Emydoidea blandingii*)
- Smooth greensnake (*Opheodrys vernalis*)

Teal Dimitrie

3054 Kensington Rd.
Cleveland Heights, Ohio 44118

trichards-dimitrie@enviromscienceinc.com

586-846-0087

Approved for: - Spotted turtle (*Clemmys guttata*)
- Blanding's turtle (*Emydoidea blandingii*)

The following individuals are approved to conduct habitat suitability surveys and presence/absence surveys for all state listed reptiles and amphibians.

Kent Bekker

542 Centerfield Drive
Maumee, Ohio 43537

kbekker@gmail.com

419-376-4384

Ralph Pfingsten

347 Pineview Circle
Berea, Ohio 44017

rap347@wideopenwest.com

440-243-7568

Tim O. Matson

5696 Matson Rd
Geneva, OH 44041

tmatson@cmnh.org

440-417-8196

Jeff Davis

625 Crescent Road
Hamilton, Ohio 45013

ohiofrogs@gmail.com

513-868-3154

Gregory Lipps, LLC

1473 County Road 5-2
Delta, Ohio 43515-9657

greglipps@gmail.com

419-376-3441

Doug Wynn

241 Chase Street, Apt. A3L
Russell's Point, Ohio 43348

Sistrurus@aol.com

614-306-0313

Please direct questions concerning this list to: wildlife.permits@dnr.state.oh.us

October 2016

Kristin Stanford

OSU Stone Laboratory

P.O. Box 119

Put-in-Bay, OH 43456

theislandsnakelady@yahoo.com

419-285-1847

Please direct questions concerning this list to: wildlife.permits@dnr.state.oh.us

October 2016

Godec, Daniel

From: susan_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>
Sent: Monday, December 19, 2016 12:44 PM
To: Godec, Daniel
Subject: Waverly-Adams-Seaman 138 kV Trans Line Rebuild, Pike & Adams Co. (REVISED)



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



TAILS: 03E15000-2017-TA-0407

Dear Mr. Godec,

We have received your recent correspondence requesting information about the subject proposal. There are no federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area. The following comments and recommendations will assist you in fulfilling the requirements for consultation under section 7 of the Endangered Species Act of 1973, as amended (ESA).

The U.S. Fish and Wildlife Service (Service) recommends that proposed developments avoid and minimize water quality impacts and impacts to high quality fish and wildlife habitat (e.g., forests, streams, wetlands). Additionally, natural buffers around streams and wetlands should be preserved to enhance beneficial functions. If streams or wetlands will be impacted, the Corps of Engineers should be contacted to determine whether a Clean Water Act section 404 permit is required. Best management practices should be used to minimize erosion, especially on slopes. All disturbed areas should be mulched and revegetated with native plant species. Prevention of non-native, invasive plant establishment is critical in maintaining high quality habitats.

FEDERALLY 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 diameter at breast height (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.

Should the proposed site contain trees ≥ 3 inches dbh, we recommend that trees be saved wherever possible. 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 trees ≥ 3 inches dbh cannot be avoided, we recommend that removal of any trees ≥ 3 inches dbh only occur between October 1 and March 31. Seasonal clearing is being recommended to

avoid adverse effects to Indiana bats and northern long-eared bats. While incidental take of northern long-eared bats from most tree clearing is exempted by a 4(d) rule (see <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>), incidental take of Indiana bats is still prohibited without a project-specific exemption. Thus, seasonal clearing is recommended where Indiana bats are assumed present.

If implementation of this seasonal tree cutting recommendation is not possible, summer surveys may be conducted to document the presence or probable absence of Indiana bats within the project area during the summer. If a summer survey documents probable absence of Indiana bats, the 4(d) rule for the northern long-eared bat could be applied. Surveys must be conducted by an approved surveyor and be designed and conducted in coordination with the Endangered Species Coordinator for this office. Surveyors must have a valid federal permit. Please note that summer surveys may only be conducted between June 1 and August 15.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area 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 a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

The proposed project lies within the range of **running buffalo clover** (*Trifolium stoloniferum*), a federally listed endangered species. This plant can be found in partially shaded woodlots, mowed areas (lawns, parks, cemeteries), and along streams and trails. Running buffalo clover requires periodic disturbance and a somewhat open habitat to successfully flourish, but cannot tolerate full-sun, full-shade, or severe disturbance. If suitable habitat is present, we recommend that surveys for this species be conducted by a trained botanist in May or June when the plant is in flower. The survey must be coordinated with this office in advance.

Due to the project type, size, and location, we do not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

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 ESA, and are consistent with the intent of the National Environmental Policy Act of 1969 and the 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/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at john.kessler@dnr.state.oh.us.

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or ohio@fws.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Everson". The signature is fluid and cursive, with the first name "Dan" being more prominent than the last name "Everson".

Dan Everson

Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW



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

December 13, 2016

Dan Godec
Stantec Consulting Services, Inc.
11687 Lebanon Rd.
Cincinnati, OH 45241

Dear Mr. Godec,

I have reviewed the Natural Heritage Database for the Waverly-Adams-Seaman 138 kV Transmission Line Rebuild project area, including a one mile radius, in Scott, Meigs and Franklin Townships, Adams County and Sunfish, Benton, Pebble and Pee Pee Townships, Pike County, Ohio. The numbers/letters on the list below correspond to the areas marked on the accompanying map. Common name, scientific name and status are given for each species.

- A. Tranquility Wildlife Area – ODNR Division of Wildlife
- B. Chalet Nivale/Bacon Flats – Highlands Nature Sanctuary
- C. Appalachian Highway Cliffs Conservation Site
- D. Brush Creek State Forest – ODNR Division of Forestry (several parcels)
 - 1. Mussel Bed
 - 2. *Liatris squarrosa* – Scaly Blazing-star, potentially threatened
 - 3. Cave or Cavern
 - Natural Bridge or Arch
 - Asplenium ruta-muraria* – Wall-rue, threatened
 - Viola walteri* – Walter's Violet, threatened
 - Thuja occidentalis* – Arbor Vitae, potentially threatened
 - Draba cuneifolia* – Wedge-leaved Whitlow-grass, threatened
 - Draba reptans* – Carolina Whitlow-grass, threatened
 - Ranunculus fascicularis* – Early Buttercup, threatened
 - Cardamine dissecta* – Narrow-leaved Toothwort, potentially threatened
 - 4. *Silene caroliniana* ssp. *wherryi* – Wherry's Catchfly, threatened
 - 5. *Silene caroliniana* ssp. *wherryi* – Wherry's Catchfly, threatened
 - 6. *Notropis boops* – Bigeye Shiner, threatened
 - 7. *Potamogeton tennesseensis* – Tennessee Pondweed, threatened
 - 8. *Potamogeton tennesseensis* – Tennessee Pondweed, threatened

A Conservation Site is an area deemed by the Natural Heritage Program 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.

We are unaware of any scenic rivers, state nature preserves or parks or national wildlife refuges, parks or forests within a one mile radius of the project area.

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.

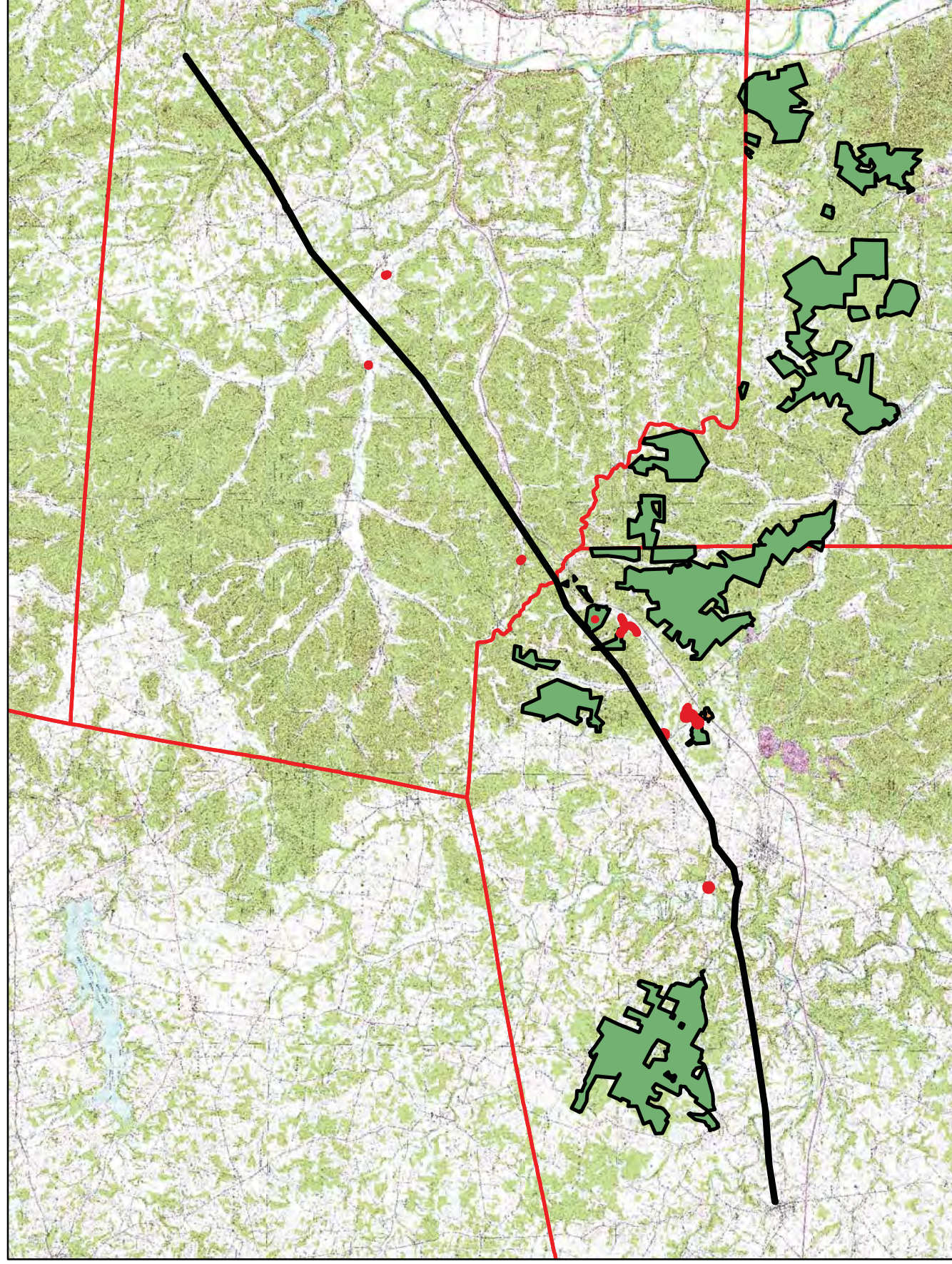
Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

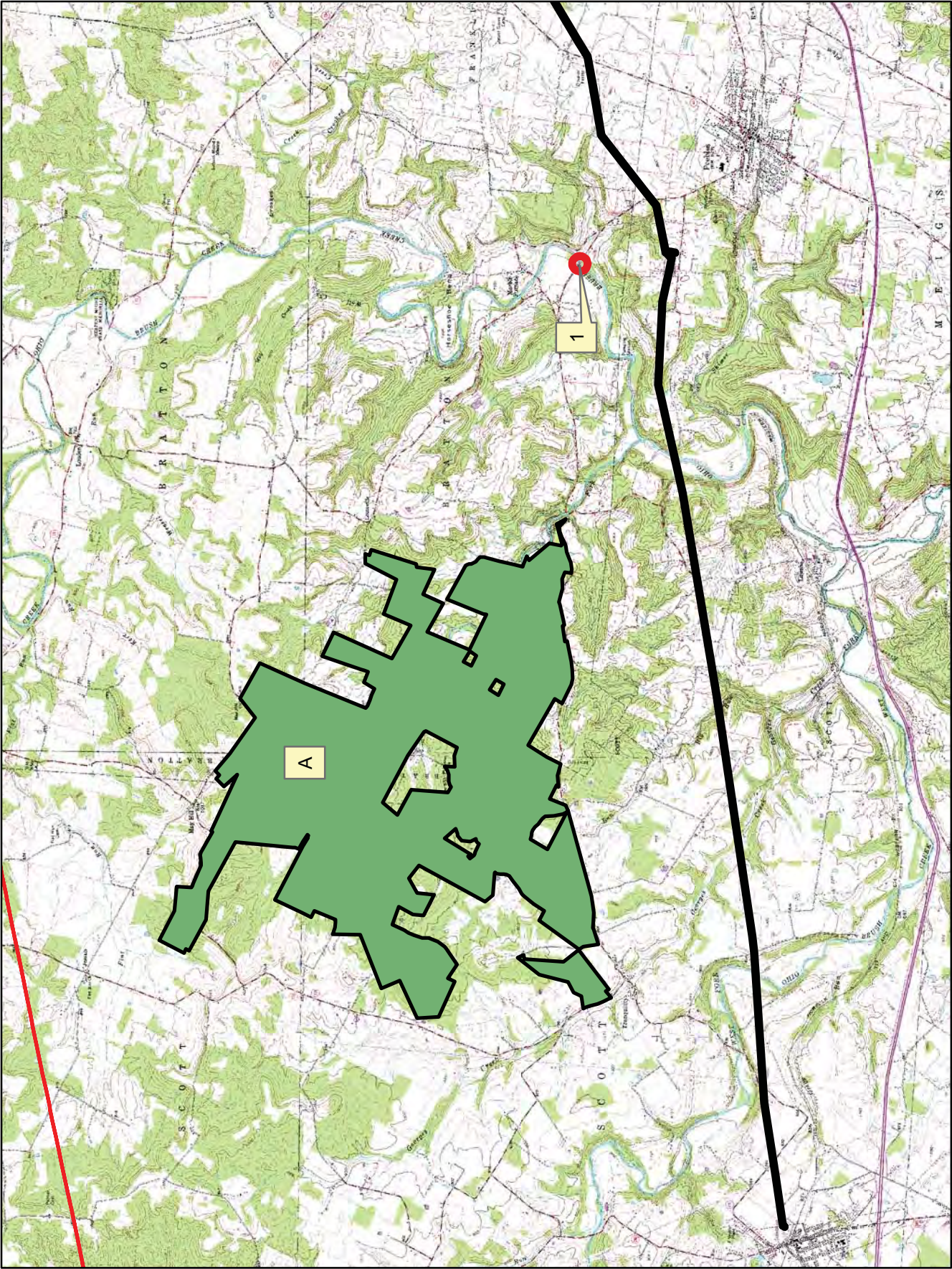
A handwritten signature in blue ink that reads "Debbie Woischke". The signature is fluid and cursive, with the first name "Debbie" and last name "Woischke" clearly distinguishable.

Debbie Woischke
Ohio Natural Heritage Program

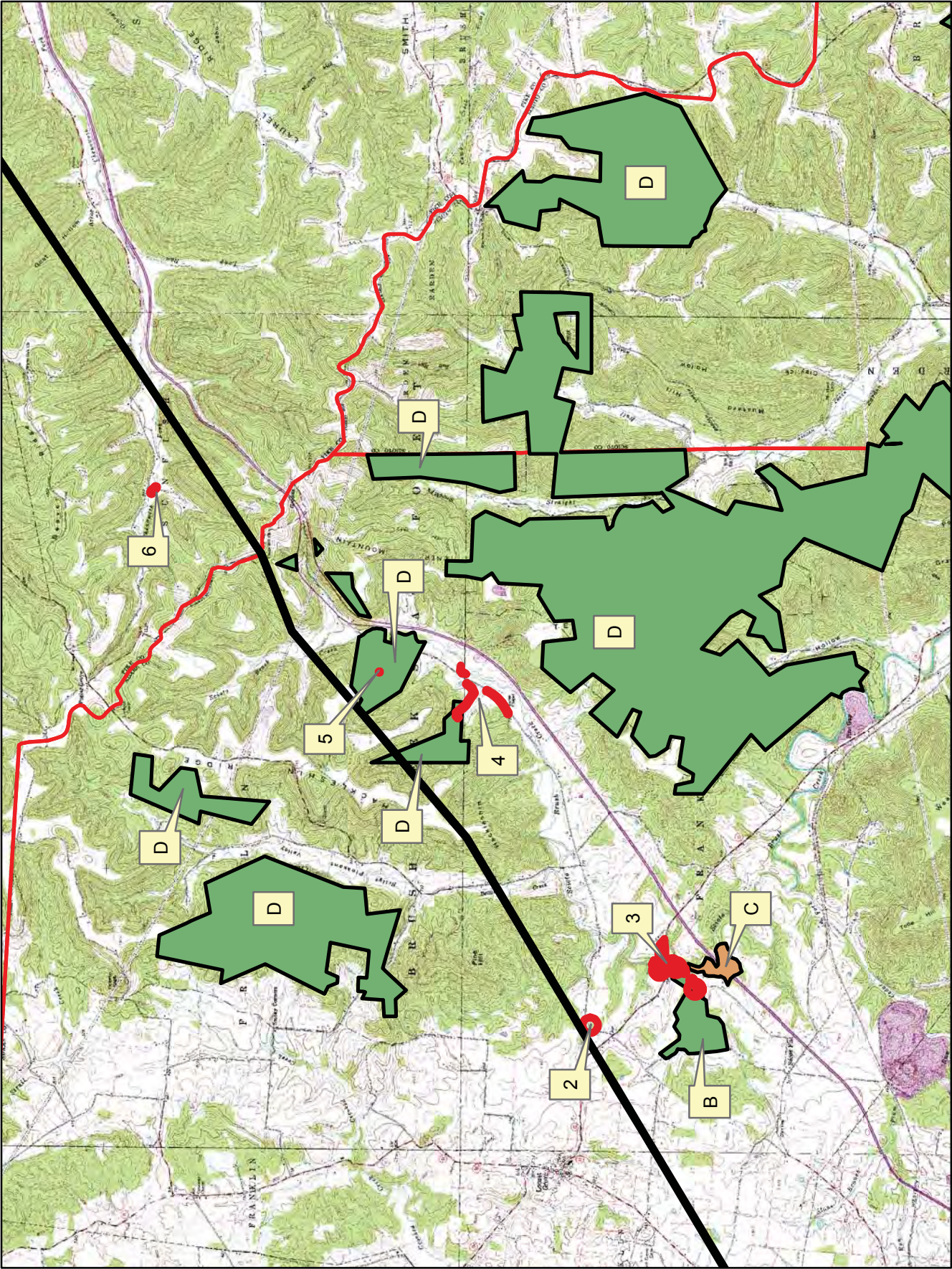
Waverly-Adams-Seaman 138 kV Transmission Line Rebuild Project



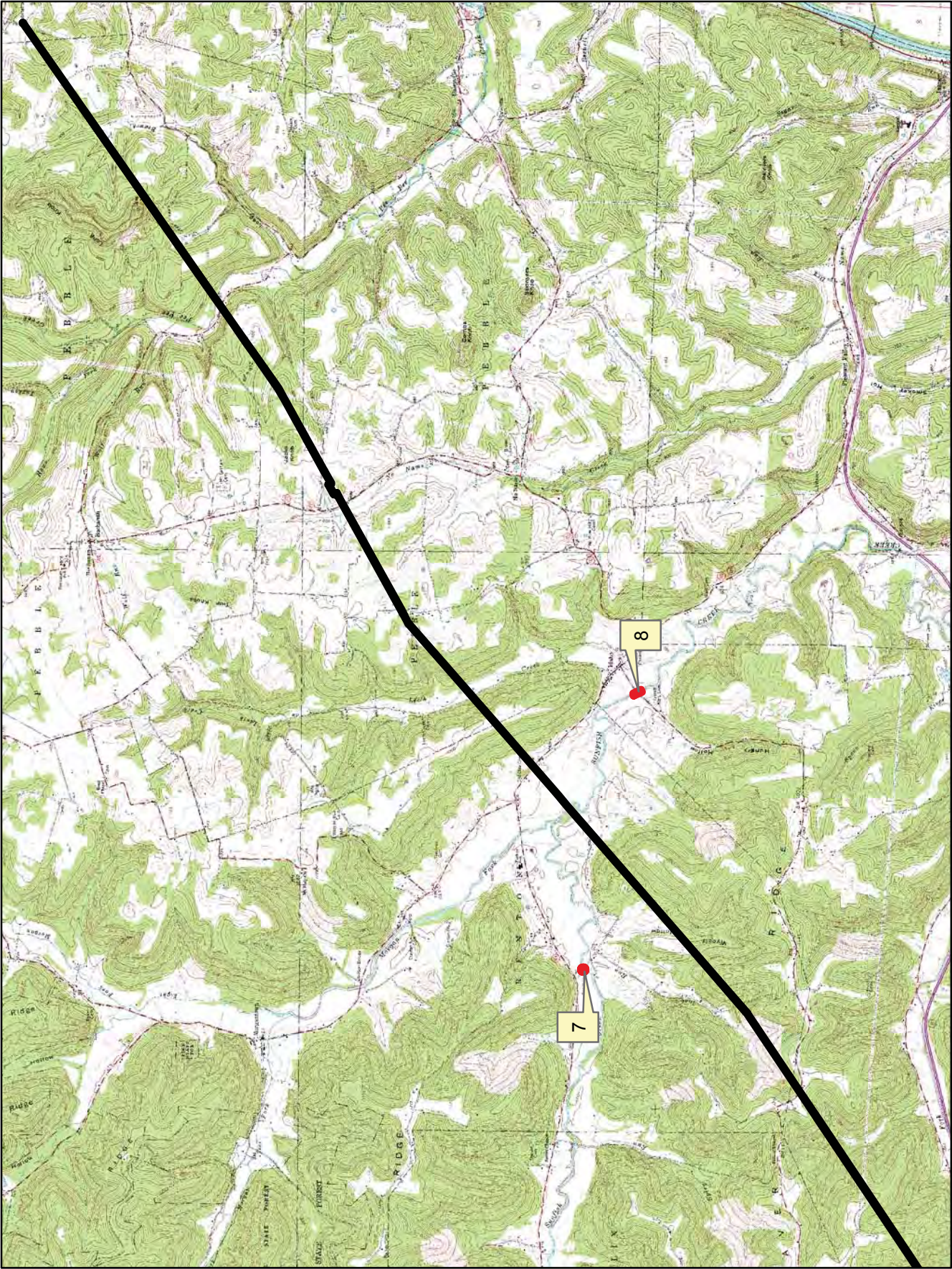
Waverly-Adams-Seaman 138 kV Transmission Line Rebuild Project



Waverly-Adams-Seaman 138 kV Transmission Line Rebuild Project



Waverly-Adams-Seaman 138 kV Transmission Line Rebuild Project



Appendix C Representative Photographs

Wetland and Waterbody Photographs

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

5/5/2017 1:47:08 PM

in

Case No(s). 17-0813-EL-BLN

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