

FEASIBILITY STUDY

Little Miami Scenic Trail Extension Alternatives
Spring Hill Extension (PID 114496)
And Pocahontas Extension (PID 114497)

ATTACHMENT G

Ecological Resources Technical Memorandum



| | | | |
|-------|----------------------------------|-------|----------------------------------|
| To: | Paul Durham | From: | Michael de Villiers |
| | Stantec Consulting Services Inc. | | Stantec Consulting Services Inc. |
| File: | 173620147 | Date: | May 24, 2022 |

**Reference: HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Ecological Resources**

Introduction

This project includes two of 68 concepts within the Eastern Corridor Segments II and III study area which were identified in the *Conceptual Alternatives Implementation Plan for Segment II/III of the Eastern Corridor Study (PID 86462)*. The proposed trail extension projects are in Columbia Township and the Village of Mariemont, Hamilton County, Ohio (See **Figures 1.1** and **1.2**). Work involves developing a feasibility study to identify a shared-use path connection between the existing Columbia Connector near US50 West and the Mariemont Library at Pocahontas Avenue. This feasibility study will cover PID114496 which is championed by Great Parks of Hamilton County and involves the stretch of trail from the Columbia Connector to Spring Hill Drive. The assumed shared-use path width for design of this segment will be 14 feet to match the Columbia Connector trail. A minimum separation from the vehicular traveled way will be five feet. The feasibility study will also cover PID114497 which is championed by Columbia Township and involves the stretch of trail from Spring Hill Drive to Pocahontas Avenue. The assumed shared-use path width for design of this segment will be 12 feet and the minimum separation from the vehicular traveled way will be five feet.

The HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497) projects are needed to address pedestrian connectivity to businesses on the south side of US50, and bicycle connectivity from the Village of Mariemont to the Little Miami Trail. The project area size is approximately 19.43 acres for PID114496 and approximately 13.36 acres for PID114497.

Ecological field surveys for the proposed projects were conducted on March 15 and March 16, 2022. These surveys included wetland and stream delineations and assessment of land use and habitat types. A total of four (4) streams and one (1) wetland were found within the project areas (See **Figure 2**). Ecological resources found within the project areas are described below.

Streams

Two perennial streams (Stream 1 and Stream 4) and an intermittent stream (Stream 2) were found in the project area for HAM-LMST-Spring Hill (PID114496). One ephemeral stream (Stream 3) was found in the project area for HAM-US50-31.17 LMST (PID114497). All four streams are in an area mapped by the Ohio Environmental Protection Agency (OEPA) as “Ineligible” for Nationwide permitting. Table 1 below summarizes streams within the project areas:

Table 1. Summary of Streams

| Stream ID | Drainage Area (mi ²) | Stream Hydrology Type | Habitat Assessment | OEPA Aquatic Life Use Designation | Length in HAM-LMST-Spring Hill Project Area (LF) | Length in HAM-US50-31.17 LMST Project Area (LF) |
|-------------------------|----------------------------------|-----------------------|--------------------|--|--|---|
| Stream 1 (Walton Creek) | 1.33 | Perennial | QHEI 58.5 | WWH | 399* | 0 |
| Stream 2 | <0.01 | Intermittent | HHEI 63.0 | Modified Small Drainage Warmwater Stream | 211 | 0 |

May 24, 2022

Paul Durham

Page 2 of 5

Reference: HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Ecological Resources

| Stream ID | Drainage Area (mi ²) | Stream Hydrology Type | Habitat Assessment | OEPA Aquatic Life Use Designation | Length in HAM-LMST-Spring Hill Project Area (LF) | Length in HAM-US50-31.17 LMST Project Area (LF) |
|-------------------------------|----------------------------------|-----------------------|--------------------|--|--|---|
| Stream 3 | <0.01 | Ephemeral | HHEI 31.0 | Modified Small Drainage Warmwater Stream | 0 | 841** |
| Stream 4 (Little Miami River) | 1,720 | Perennial | N/A^ | EWB | 2,132 | 0 |

LF = Linear Feet; WWH = Warmwater Habitat; EWH = Exceptional Warmwater Habitat

* Includes 59 linear feet within culvert under Wooster Pike (US50)

** Includes 771 linear feet within culverts

^ Since the Little Miami River has an official OEPA Aquatic Life Use Designation of EWH, based on biological sampling, and because the project is not expected to impact the Little Miami River, no habitat assessment was conducted for Stream 4 (Little Miami River).

Wetlands

One (1) wetland was found within the HAM-US50-31.17 LMST project area. This palustrine scrub/shrub, emergent wetland (Wetland A) is adjacent to Stream 3. No other wetlands were found. Table 2 summarizes Wetland A.

Table 2. Summary of Wetland A.

| Wetland ID | Hydrologic Connection | ORAM Score (Category) | Wetland Type (Cowardin) | Estimated Total Size (Acre) | Estimated Size in Project Area (Acre) |
|------------|-----------------------|-----------------------|-----------------------------------|-----------------------------|---------------------------------------|
| Wetland A | Adjacent | 27.5 (Category 1) | Palustrine – Scrub/Shrub/Emergent | 0.007 | 0.007 |

Threatened and Endangered Species

Federally Listed Species

The Ohio Department of Natural Resources, Division of Wildlife (ODNR-DOW) conducted a Natural Heritage Database (NHDB) records check on April 11, 2022 for both the HAM-LMST-Spring Hill and the HAM-US50-31.17 LMST project areas. This check found no records of Indiana bat (*Myotis sodalis*) or Northern long-eared bat (*Myotis septentrionalis*) captures or hibernacula within a 1-mile radius of either of the project areas. According to a United States Fish and Wildlife Service (USFWS) email information request response on March 15, 2022, neither of the project areas are located within a bat buffer. No potential maternity roost trees were identified 100 feet past edge of pavement. No portals, openings, cracks, or crevices in rock outcrops that may be an entrance to a cave or mine that would be considered suitable winter hibernacula for Indiana bat or Northern long-eared bat were found within either of the project areas. Approximately 4.43 acres and 1.97 acres of suitable wooded habitat occur within the HAM-LMST-Spring Hill and HAM-US50-31.17 LMST project areas, respectively.

The ODNR-DOW NHDB records check found no records of bald eagle (*Haliaeetus leucocephalus*) nests within a 1-mile radius of the HAM-LMST-Spring Hill and the HAM-US50-31.17 LMST project areas and no nests were observed within either of the project areas. Five federally listed mussel species have been found

May 24, 2022

Paul Durham

Page 3 of 5

Reference: HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Ecological Resources

within Hamilton County: fanshell (*Cyprogenia stegaria*), pink mucket pearly mussel (*Lampsilis orbiculata*), rayed bean (*Villosa fabalis*), sheepnose (*Plethobasus cyphus*), and snuffbox (*Epioblasma triquetra*). Based on the ODNR-DOW NHDB records check, none of these listed mussel species occur within a 1-mile radius of the HAM-LMST-Spring Hill and HAM-US50-31.17 LMST project areas.

State Listed Species

Running buffalo clover (*Trifolium stoloniferum*) has been found within Hamilton County, however, the ODNR-DOW NHDB records check found no records of running buffalo clover within a 1-mile radius of the HAM-LMST-Spring Hill and the HAM-US50-31.17 LMST project areas and no running buffalo clover plants were observed within either of the project areas during field surveys conducted on March 15 and March 16, 2022.

The ODNR-DOW NHDB records check found eight records of state-listed species within a 1-mile radius of the project areas: elktoe (*Alasmidonta marginata*), wartyback (*Cyclonaias nodulata*), three-horn wartyback (*Obliquaria reflexa*), deertoe (*Truncilla truncata*), fawnsfoot (*Truncilla donaciformis*), mountain madtom (*Noturus eleutherus*), purple passion-flower (*Passiflora incarnata*), and Carolina willow (*Salix caroliniana*). The five state-listed mussel species and mountain madtom all occur in the Little Miami River. Although a relatively narrow portion of the right descending channel of the Little Miami River occurs within the HAM-LMST-Spring Hill project area, no impacts to the Little Miami River are expected. There is no additional suitable habitat for these six state-listed mussel and fish species within the HAM-LMST-Spring Hill or HAM-US50-31.17 LMST project areas. Therefore, no impacts to these six state-listed species are expected. Purple passion-flower is found in fields, rocky slopes, smaller wooded areas, and along roads and fences. It needs a lot of sunlight and well drained soils. Purple passion-flower can be found in fertile soils as well as clay soil. The ODNR-DOW NHDB record for purple passion-flower is located approximately 3,200 feet to the south of the project areas across the Little Miami River. Although there is some suitable habitat for purple passion-flower in the HAM-LMST-Spring Hill and HAM-US50-31.17 LMST project areas, no individual purple passion-flower plants were observed. Carolina willow grows well in nutrient-poor soil and in wet areas like thickets and swamps and is right at home along a stream bank or next to a pond. It can be found growing near riverbanks, sandbars, interdune ponds, canal banks, and other wet sites. It is not drought tolerant and requires consistently moist soils. The ODNR-DOW NHDB record for Carolina willow is located along the Little Miami River beginning approximately 1,200 feet to the east of the project areas. Although there is some suitable habitat for Carolina willow in the HAM-LMST-Spring Hill project area (along Streams 1, 2, and 4), no individual Carolina willow plants were observed.

Land Cover

The project areas were surveyed for vegetative communities on March 15 and March 16, 2022 (See **Figure 3**). Summaries of the vegetative communities found within each of the two project areas is provided below:

HAM-LMST-Spring Hill (PID114496):

| VEGETATIVE COMMUNITIES AND LAND COVER | | | |
|--|---|---------------------------------------|----------------------------|
| Vegetative Communities and Land Cover found within the Project Area | Degree of Man Induced Ecological Disturbance | Unique, Rare, or High Quality? | Within Project Area |
| Developed High Intensity (DH) – includes highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses, and commercial/industrial. Impervious surfaces account for 80 to 100% of the total cover. | Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders or native highly tolerant taxa). | No | 9.32 acres |

May 24, 2022

Paul Durham

Page 4 of 5

Reference: HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Ecological Resources

| VEGETATIVE COMMUNITIES AND LAND COVER | | | |
|---|---|---------------------------------------|----------------------------|
| Vegetative Communities and Land Cover found within the Project Area | Degree of Man Induced Ecological Disturbance | Unique, Rare, or High Quality? | Within Project Area |
| Developed Open Space (DS) – mown right-of-way, large lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes. | High Disturbance (dominated by widespread taxa not typical of a particular community). | No | 2.40 acres |
| Upland Forest (UF) – uplands dominated by trees. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). | No | 2.89 acres |
| Floodplain Forest (FF) – floodplain dominated by trees. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). | No | 1.54 acres |
| Scrub/Shrub (SS) – true shrubs, and young trees in an early successional stage. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). | No | 0.97 acre |
| Open Water (OW) – all areas of open water, generally with less than 25% cover of vegetation or soil. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). | No | 2.29 acres |
| Total | | | 19.41 acres |

Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities account for approximately 48 percent and 12 percent, respectively, of land cover within the project area. Approximately 15 percent of the land cover within the project area is Upland Forest (UF), which consists primarily of boxelder (*Acer negundo*), black locust (*Robinia pseudoacacia*), black walnut (*Juglans nigra*), and amur honeysuckle (*Lonicera maackii*). Approximately 8 percent of the land cover within the project area is Floodplain Forest (FF), which consists primarily of boxelder, silver maple (*Acer saccharinum*), cottonwood (*Populus deltoides*), and American sycamore (*Platanus occidentalis*). Approximately 5 percent of the land cover within the project area is Scrub/Shrub (SS), which consists of amur honeysuckle, eastern red cedar (*Juniperus virginiana*), and callery pear (*Pyrus calleryana*). The remaining approximately 12 percent of land cover within the project area is made up of Open Water (OW) associated with Stream 1, Stream 2, and Stream 4.

HAM-US50-31.17 LMST (PID114497):

| VEGETATIVE COMMUNITIES AND LAND COVER | | | |
|--|--|---------------------------------------|----------------------------|
| Vegetative Communities and Land Cover found within the Project Area | Degree of Man Induced Ecological Disturbance | Unique, Rare, or High Quality? | Within Project Area |
| Developed High Intensity (DH) – includes highly developed areas where people reside or work in high numbers. Examples include apartment complexes, row houses, and commercial/industrial. Impervious surfaces account for 80 to 100% of the total cover. | Extreme Disturbance/Ruderal Community (dominated by opportunistic invaders or native highly tolerant taxa). | No | 6.76 acres |
| Developed Open Space (DS) – mown right-of-way, large lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes. | High Disturbance (dominated by widespread taxa not typical of a particular community). | No | 4.03 acres |
| Upland Forest (UF) – uplands dominated by trees. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under | No | 1.97 acres |

May 24, 2022

Paul Durham

Page 5 of 5

Reference: HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Ecological Resources

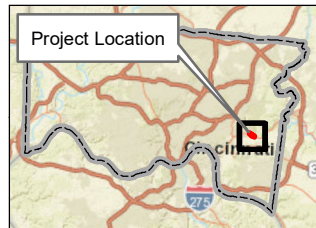
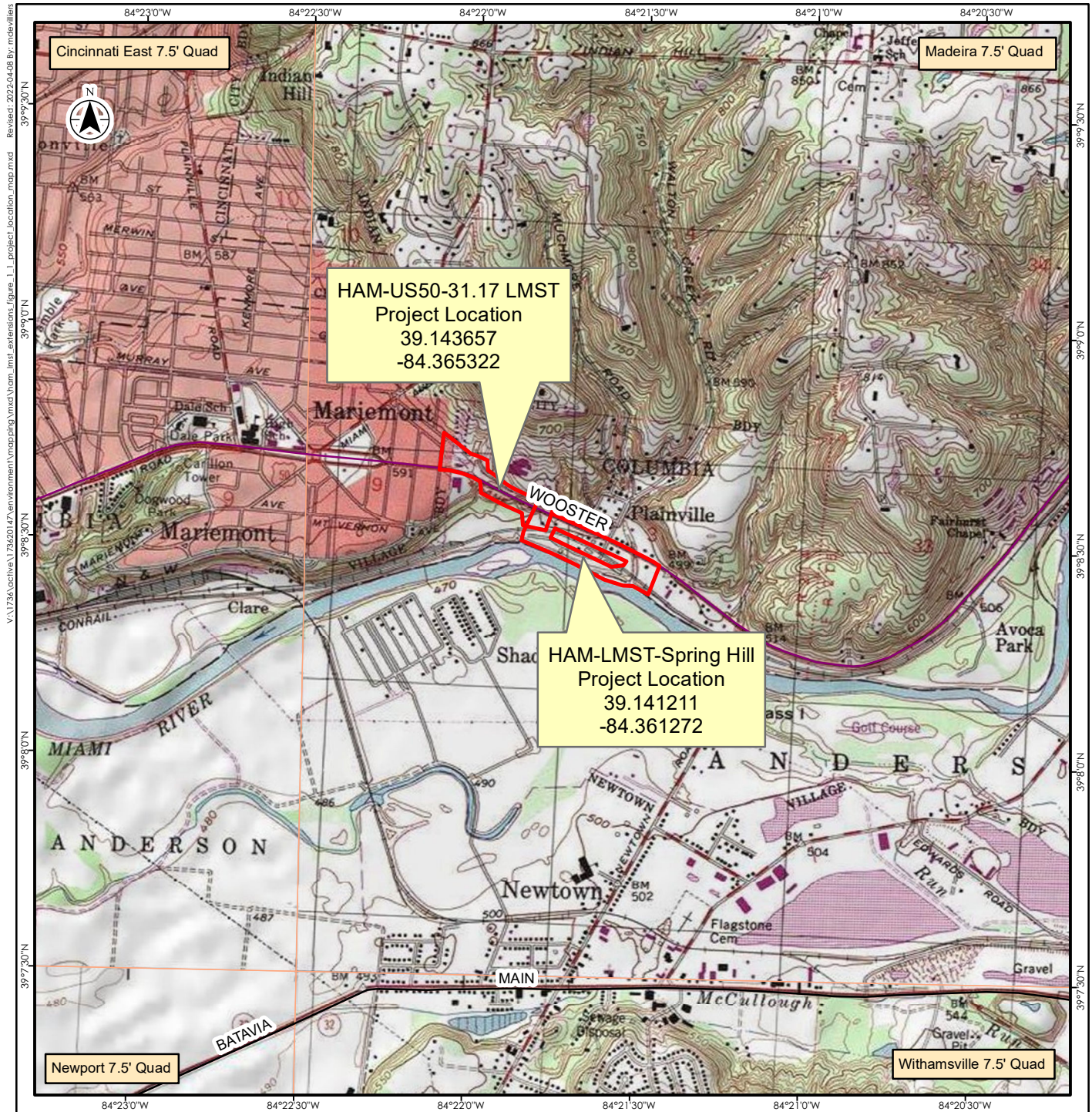
| VEGETATIVE COMMUNITIES AND LAND COVER | | | |
|---|---|---------------------------------------|----------------------------|
| Vegetative Communities and Land Cover found within the Project Area | Degree of Man Induced Ecological Disturbance | Unique, Rare, or High Quality? | Within Project Area |
| | some disturbance). | | |
| Scrub/Shrub (SS) – true shrubs, and young trees in an early successional stage. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). | No | 0.57 acre |
| Marsh (MA) – wetland dominated by submergent, floating, and/or emergent vegetation. | Intermediate Disturbance (dominated by plants that typify a stable phase of a native community that persists under some disturbance). | No | 0.007 acre |
| Total | | | 13.34 acres |

Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities account for approximately 51 percent and 30 percent, respectively, of land cover within the project area. Approximately 15 percent of the land cover within the project area is Upland Forest (UF), which consists primarily of boxelder, common hackberry (*Celtis occidentalis*), northern red oak (*Quercus rubra*), shag-bark hickory (*Carya ovata*), black locust, American sycamore, red maple (*Acer rubrum*), and amur honeysuckle. The remaining approximately 4 percent of land cover within the project area is made up of Scrub/Shrub (SS), which consists of amur honeysuckle, eastern red cedar, Callery pear, black locust, red maple, and multiflora rose (*Rosa multiflora*), and Marsh (MA), which consists of Wetland A.

[Attachments: Figures 1.1, 1.2, 2, and 3; Attachment A Ecological Resources Photolog](#)

c.

Figures



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Base features produced from project design elements.
3. Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS

0 1,000 2,000
Feet
1:25,000 (at original document size of 8.5x11)



Project Location 173620147
Prepared by MDV on 2022-04-08

Columbia Township,
Hamilton County, Ohio

Client/Project
HAM-LMST-Spring Hill (PID114496)
HAM-US50-31.17 LMST (PID114497)
Technical Memorandum

Figure No.

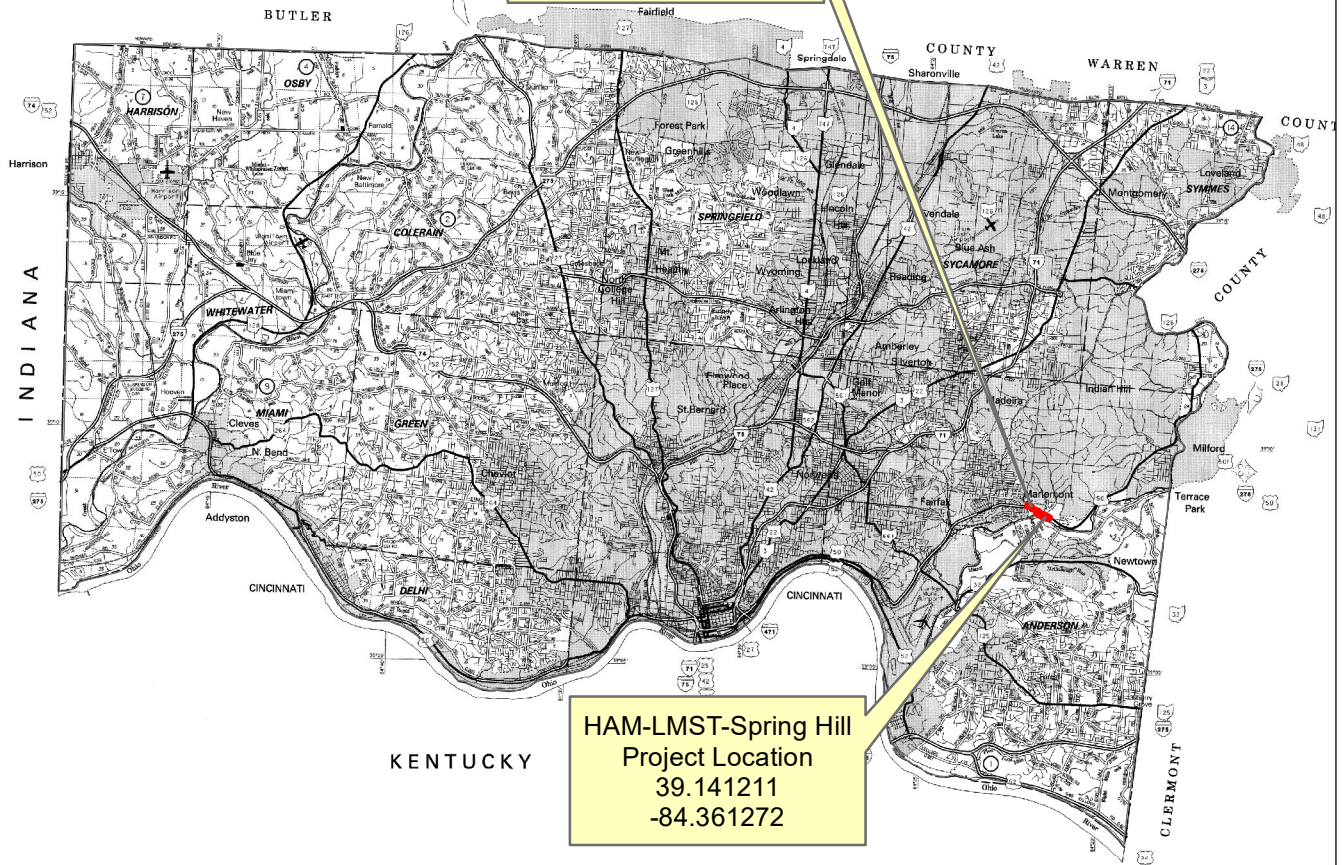
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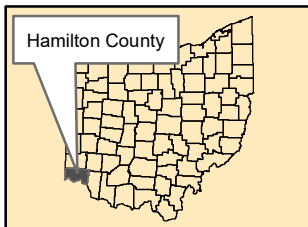
Project Location Map



**HAM-US50-31.17 LMST
Project Location**
39.143657
-84.365322



**HAM-LMST-Spring Hill
Project Location**
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-84.361272



Notes

1. Coordinate System: NAD 1983 StatePlane Ohio South FIPS 3402 Feet
2. Base features produced from project design elements.
3. Service Layer Credits: ODOT Mapping Services (2014)



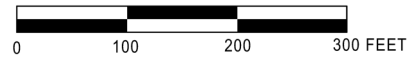
Project Location 173620147
Columbia Township, Hamilton County, Ohio Prepared by MDV on 2022-04-08
Client/Project
HAM-LMST-Spring Hill (PID114496)
HAM-US50-31.17 LMST (PID114497)
Technical Memorandum

Figure No.

1.2

Title

**Project Location Map
County Roadway Map Base**



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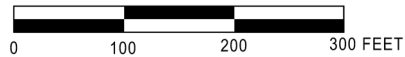


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EC Segment II/III - LMST Extensions Feasibility Study, Hamilton County, Ohio
HAM-LMST-Spring Hill/HAM-US50-31.17; PID 114496/114497

Figure 2a

Ecological Resources
(Streams and Wetlands)



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NORTH



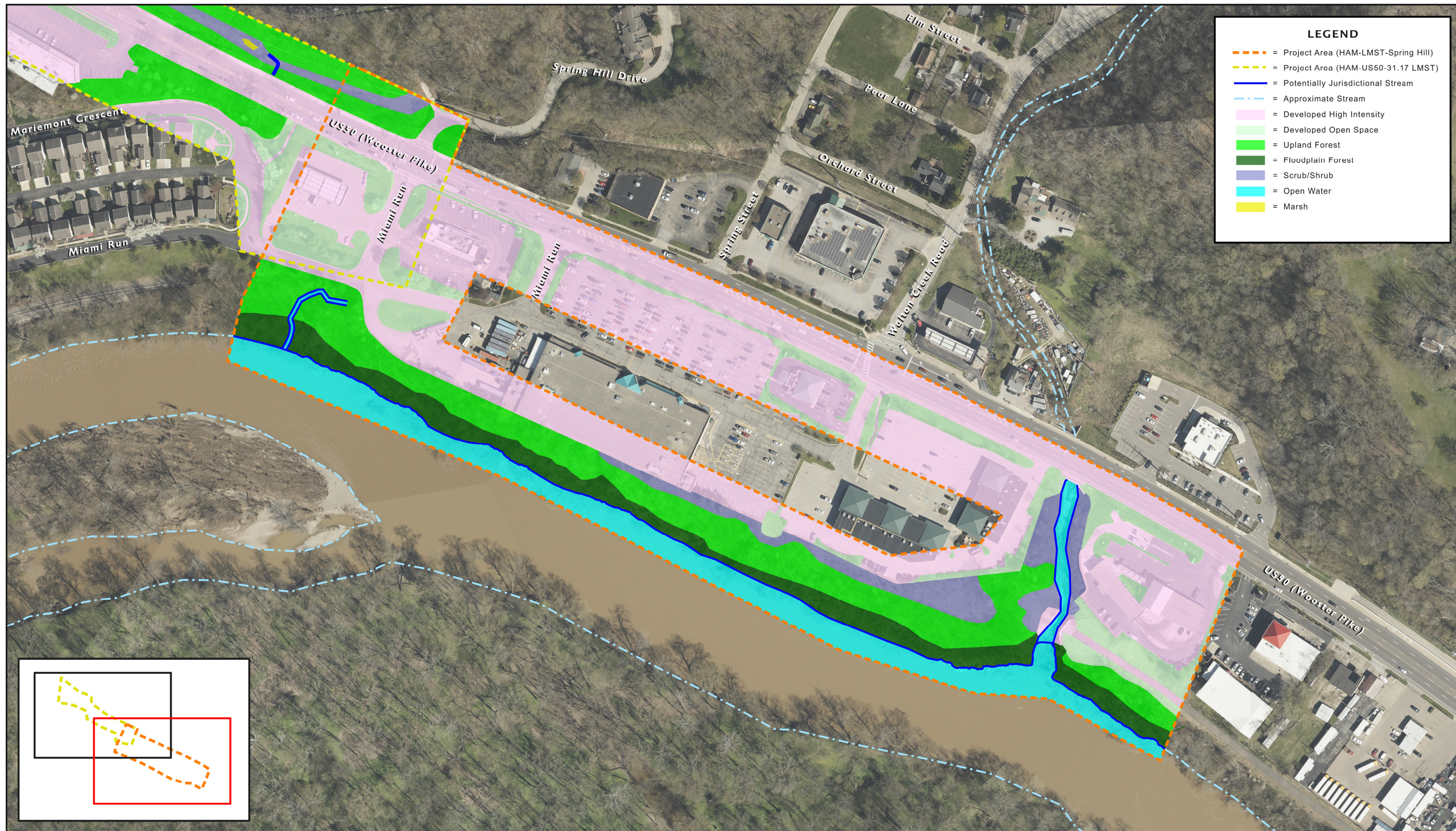
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HAM-LMST-Spring Hill/HAM-US50-31.17; PID 114496/114497

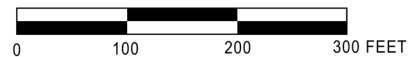
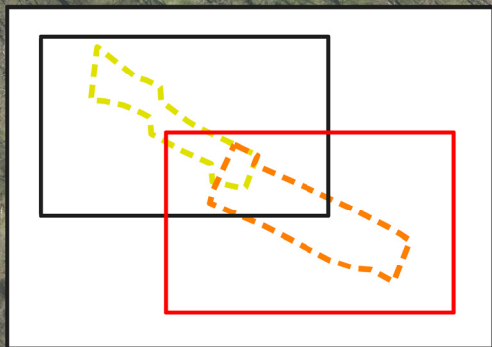
Figure 2b

Ecological Resources
(Streams and Wetlands)



LEGEND

- = Project Area (HAM-LMST-Spring Hill)
- = Project Area (HAM-US50-31.17 LMST)
- = Potentially Jurisdictional Stream
- - - = Approximate Stream
- = Developed High Intensity
- = Developed Open Space
- = Upland Forest
- = Floodplain Forest
- = Scrub/Shrub
- = Open Water
- = Marsh

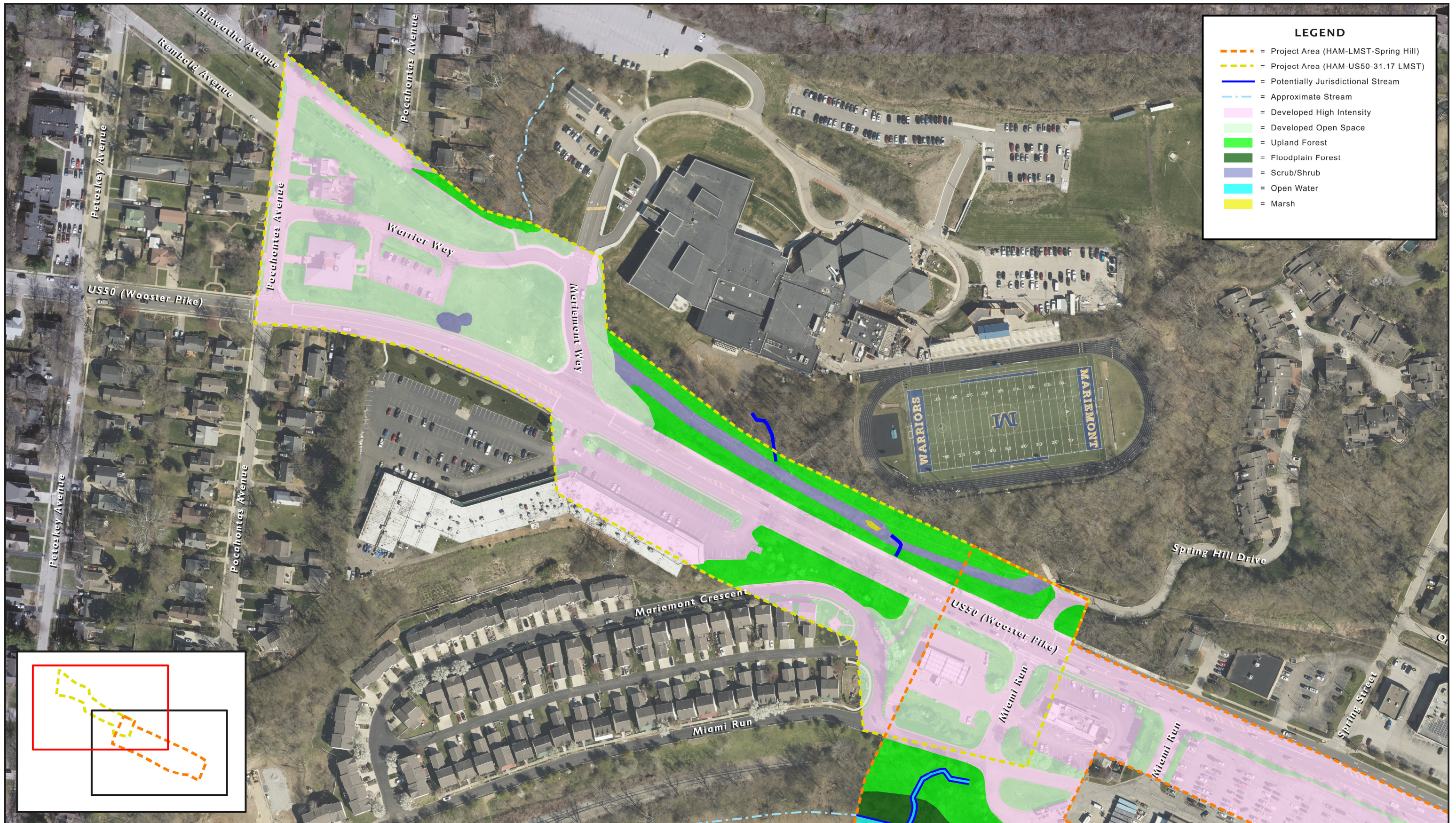


April 2022



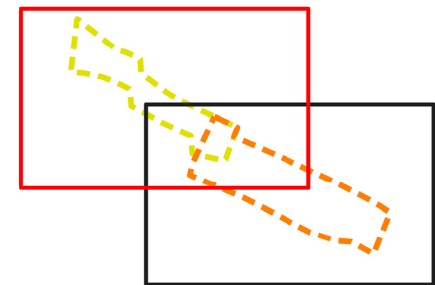
Technical Memorandum
 EC Segment II/III - LMST Extensions Feasibility Study, Hamilton County, Ohio
 HAM-LMST-Spring Hill/HAM-US50-31.17; PID 114496/114497

Figure 3a
 Ecological Resources
 (Vegetative Communities)



LEGEND

- Project Area (HAM-LMST-Spring Hill)
- Project Area (HAM-US50-31.17 LMST)
- Potentially Jurisdictional Stream
- Approximate Stream
- Developed High Intensity
- Developed Open Space
- Upland Forest
- Floodplain Forest
- Scrub/Shrub
- Open Water
- Marsh



April 2022



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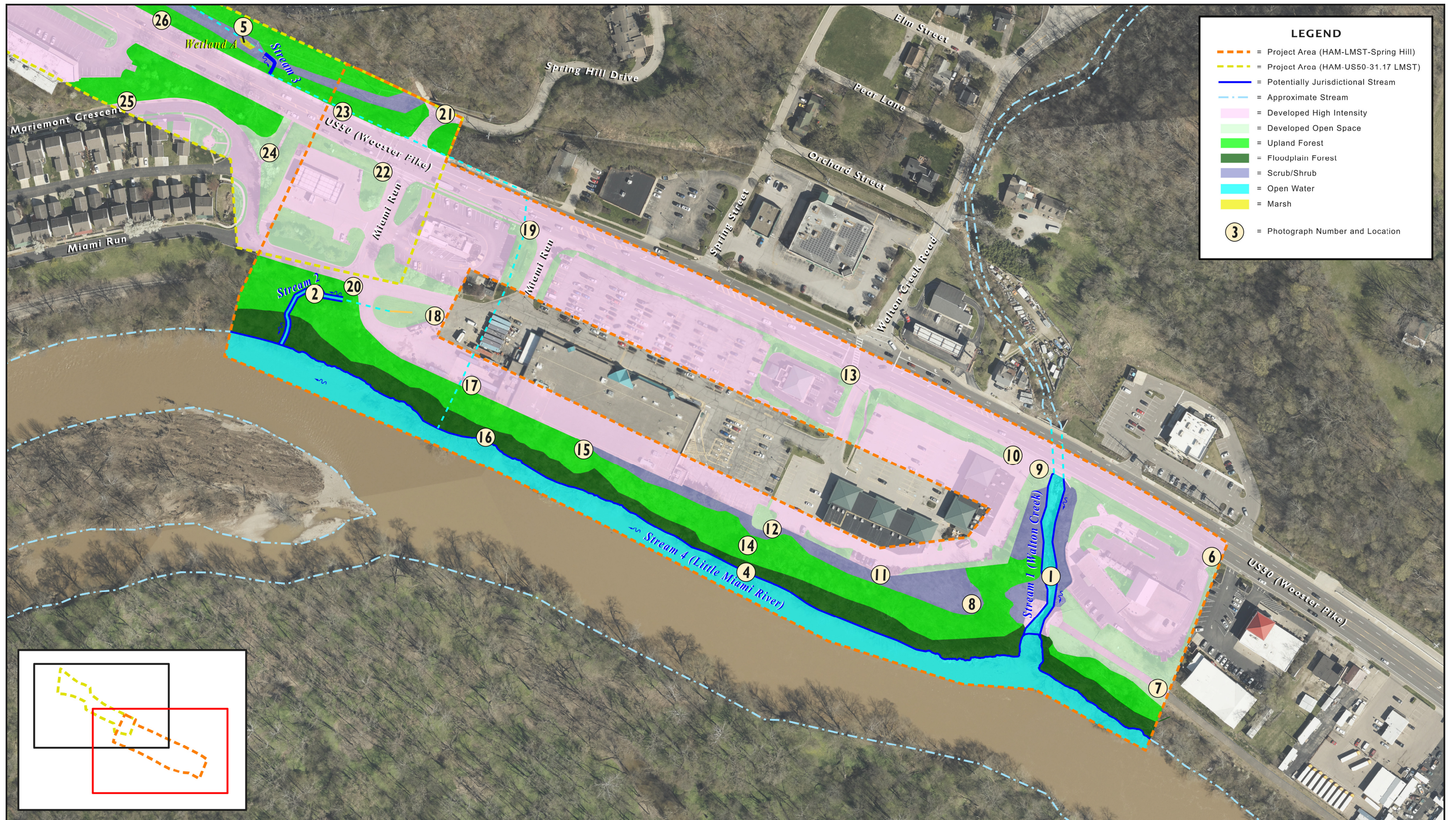
EC Segment II/III - LMST Extensions Feasibility Study, Hamilton County, Ohio
HAM-LMST-Spring Hill/HAM-US50-31.17; PID 114496/114497

Figure 3b

Ecological Resources
(Vegetative Communities)

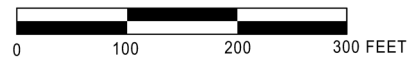
Attachment A

Photo Log



LEGEND

- = Project Area (HAM-LMST-Spring Hill)
- = Project Area (HAM-US50-31.17 LMST)
- = Potentially Jurisdictional Stream
- = Approximate Stream
- = Developed High Intensity
- = Developed Open Space
- = Upland Forest
- = Floodplain Forest
- = Scrub/Shrub
- = Open Water
- = Marsh
- 3 = Photograph Number and Location



April 2022



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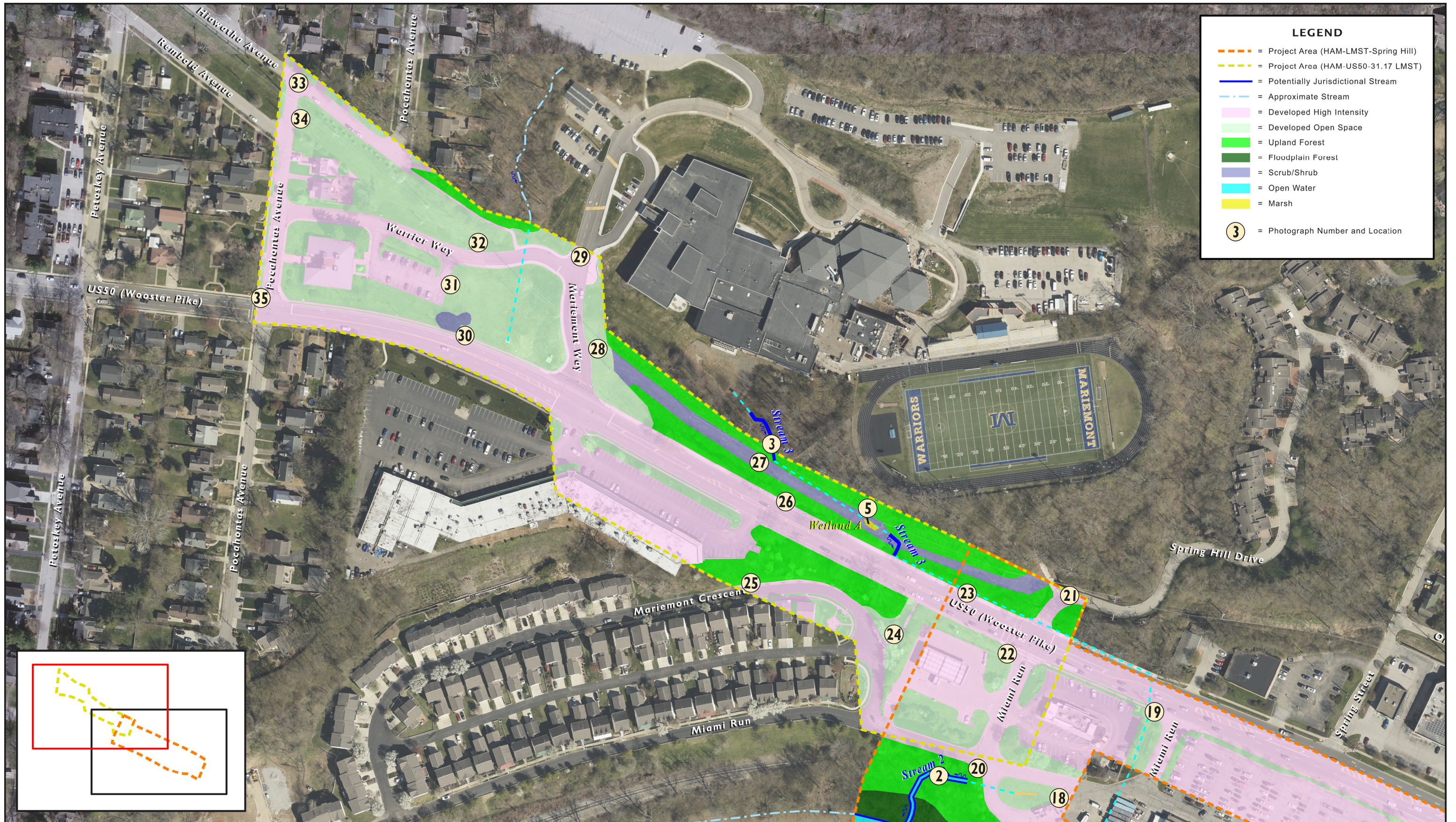


Technical Memorandum

EC Segment II/III - LMST Extensions Feasibility Study, Hamilton County, Ohio
HAM-LMST-Spring Hill/HAM-US50-31.17; PID 114496/114497

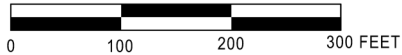
Attachment A1

Photograph Location Map



LEGEND

- Project Area (HAM-LMST-Spring Hill)
- Project Area (HAM-US50-31.17 LMST)
- Potentially Jurisdictional Stream
- Approximate Stream
- Developed High Intensity
- Developed Open Space
- Upland Forest
- Floodplain Forest
- Scrub/Shrub
- Open Water
- Marsh
- Photograph Number and Location



April 2022



NORTH



Technical Memorandum

EC Segment II/III - LMST Extensions Feasibility Study, Hamilton County, Ohio
 HAM-LMST-Spring Hill/HAM-US50-31.17; PID 114496/114497

Attachment A2

Photograph Location Map

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 1: Stream 1 (Walton Creek), perennial, facing upstream, north.



Photo Location 1: Stream 1 (Walton Creek), perennial, facing downstream, south.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 1: Stream 1 (Walton Creek), perennial, typical substrates.



Photo Location 2: Stream 2, intermittent, facing upstream, east.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 2: Stream 2, intermittent, facing downstream, northwest.

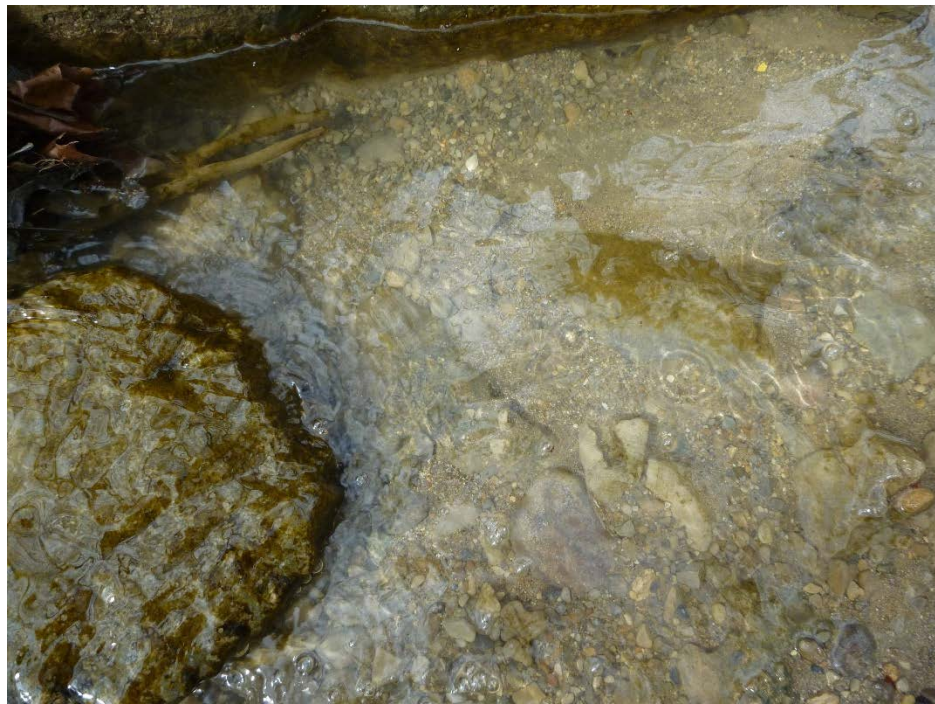


Photo Location 2: Stream 2, intermittent, typical substrates.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 3: Stream 3, ephemeral, facing upstream, northwest.



Photo Location 3: Stream 3, ephemeral, facing downstream, south.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 3: Stream 3, ephemeral, typical substrates.



Photo Location 4: Stream 4 (Little Miami River), perennial, facing upstream, southeast.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 4: Stream 4 (Little Miami River), perennial, facing downstream, northwest.



Photo Location 4: Stream 4 (Little Miami River), perennial, typical substrates.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 5: Wetland A, facing east.



Photo Location 6: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 7: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing northwest.



Photo Location 7: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing west.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 8: Scrub/Shrub (SS) and Upland Forest (UF) vegetative communities, facing west.



Photo Location 9: Developed High Intensity (DH), Developed Open Space (DS), and Scrub/Shrub (SS) vegetative communities, facing south.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 10: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing west.



Photo Location 11: Scrub/Shrub (SS) and Upland Forest (UF) vegetative communities, facing west.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 12: Developed High Intensity (DH), Developed Open Space (DS), and Scrub/Shrub (SS) vegetative communities, facing northwest.



Photo Location 13: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing west.

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HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 14: Upland Forest (UF) vegetative community, facing southeast.



Photo Location 14: Upland Forest (UF) vegetative community, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 15: Upland Forest (UF) and Scrub/Shrub vegetative communities, facing southeast.



Photo Location 15: Upland Forest (UF) vegetative community, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

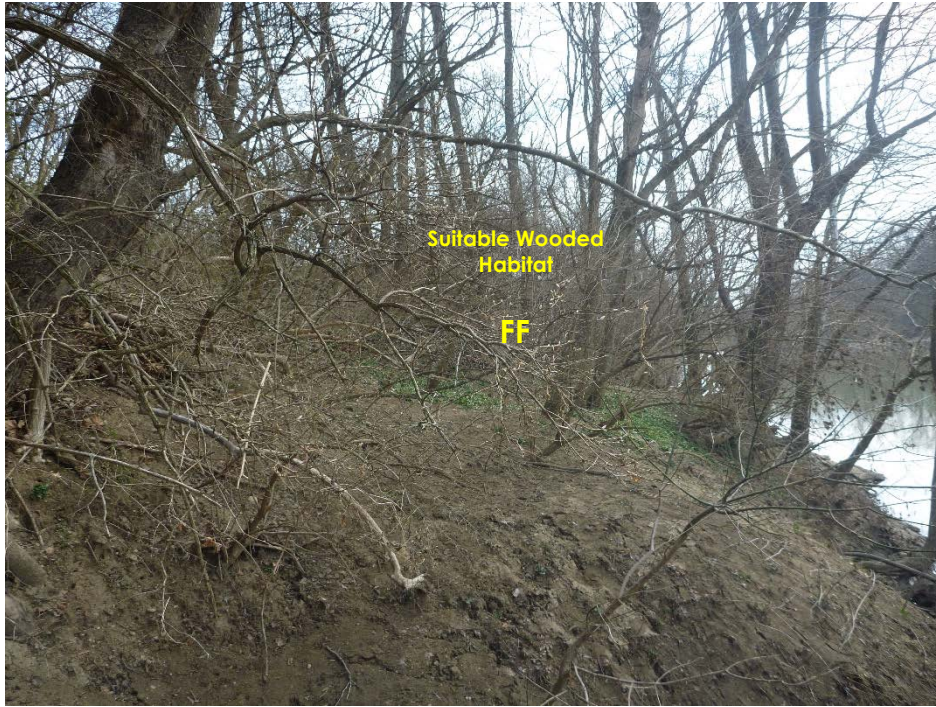


Photo Location 16: Floodplain Forest (FF) vegetative community, facing east.



Photo Location 16: Floodplain Forest (FF) vegetative community, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 17: Developed High Intensity (DH) and Upland Forest (UF) vegetative communities, facing west.

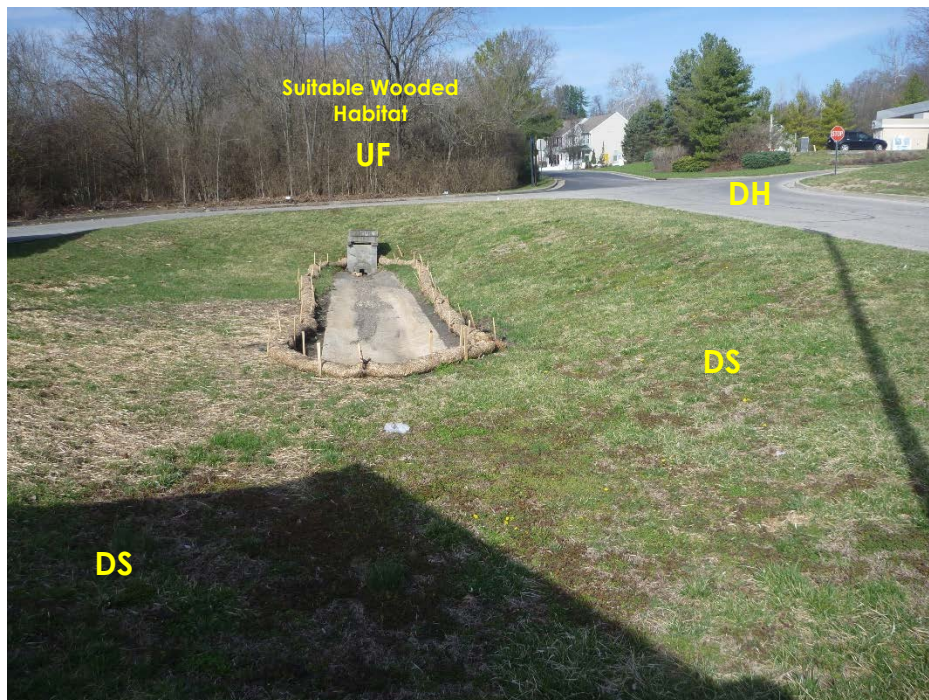


Photo Location 18: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing west.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 19: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing southeast.



Photo Location 19: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

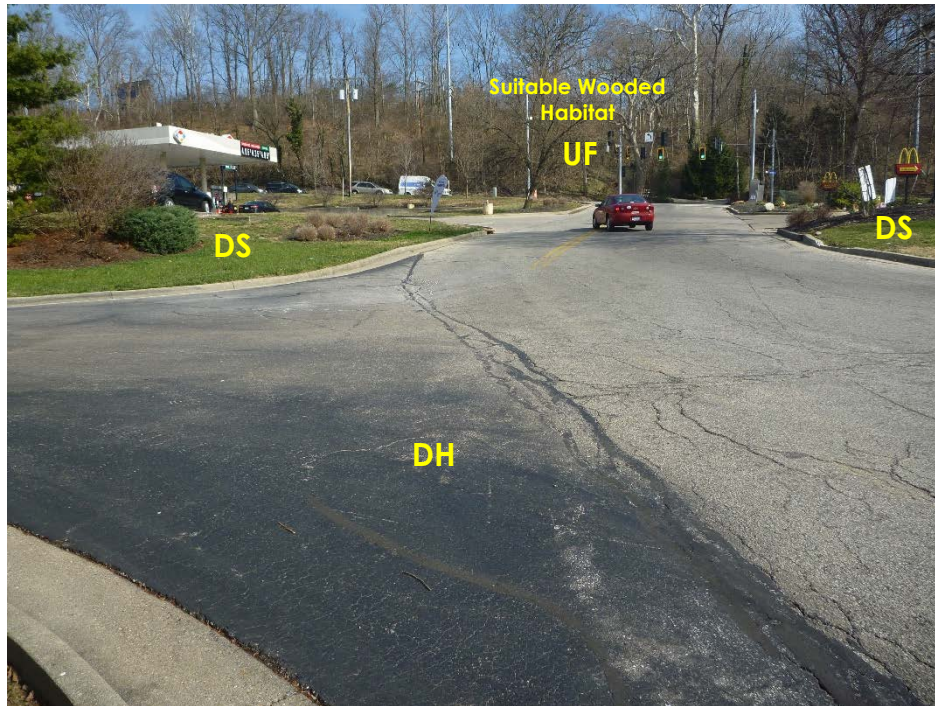


Photo Location 20: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing north.



Photo Location 21: Developed High Intensity (DH) and Upland Forest (UF) vegetative communities, facing southwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

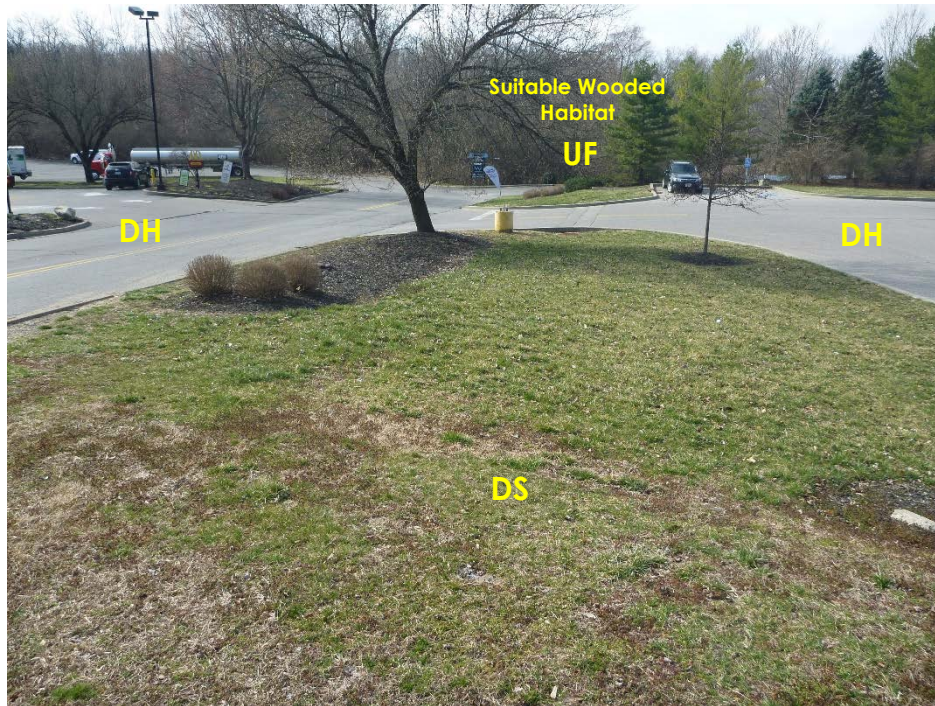


Photo Location 22: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing south.



Photo Location 22: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 23: Developed High Intensity (DH) and Upland Forest (UF) vegetative communities, facing west.



Photo Location 24: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing northwest.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio



Photo Location 25: Developed High Intensity (DH) and Upland Forest (UF) vegetative communities, facing northeast.



Photo Location 26: Developed High Intensity (DH), Developed Open Space (DS), and Upland Forest (UF) vegetative communities, facing west.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

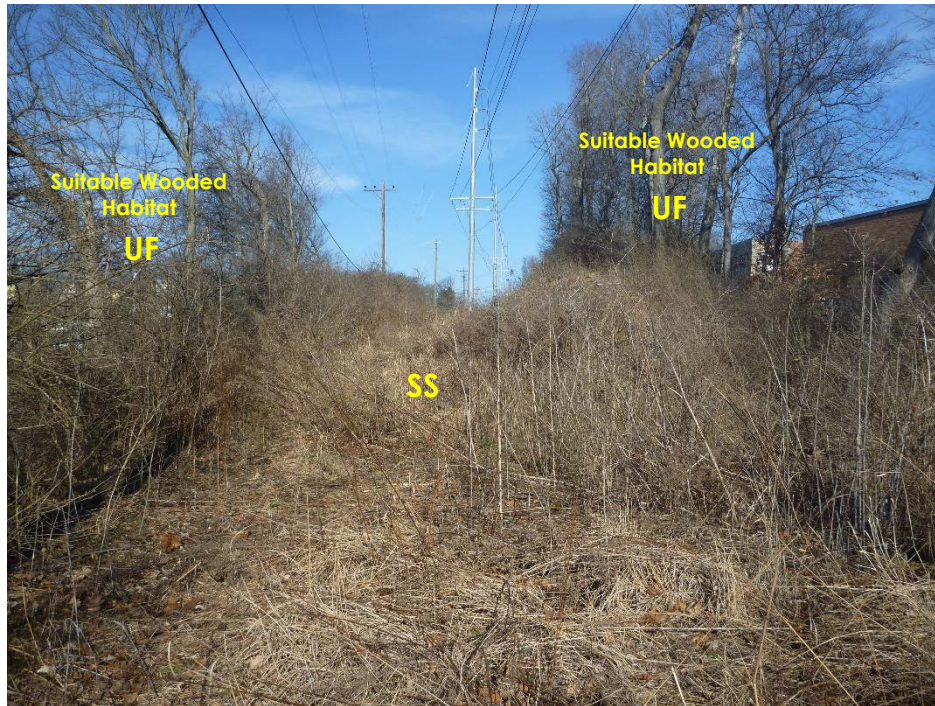


Photo Location 27: Scrub/Shrub (SS) and Upland Forest (UF) vegetative communities, facing northwest.

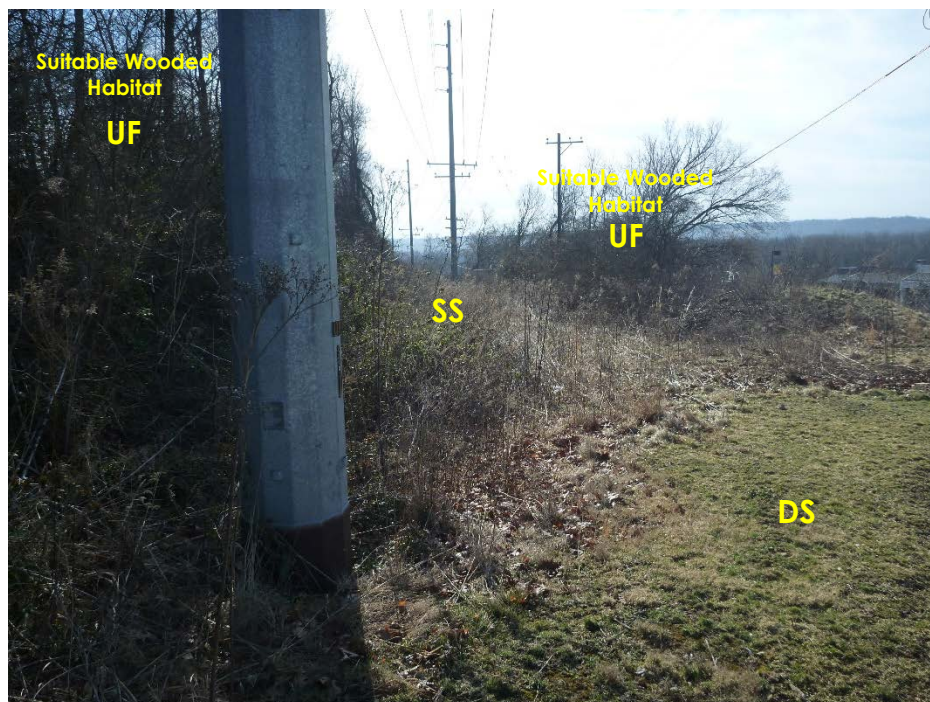


Photo Location 28: Developed Open Space (DS), Scrub/Shrub (SS), and Upland Forest (UF) vegetative communities, facing southeast.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

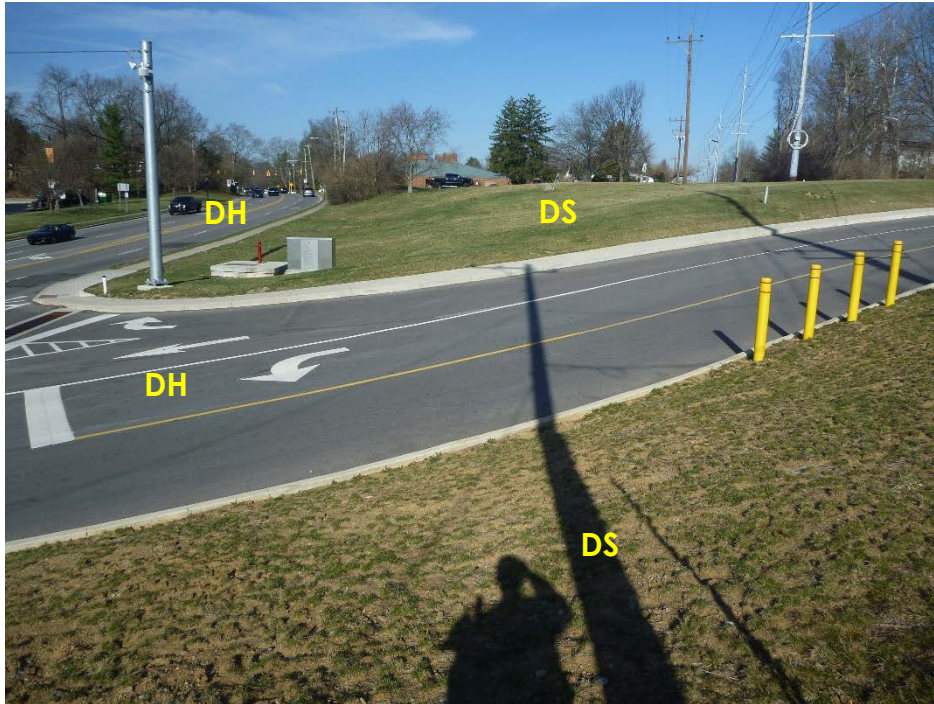


Photo Location 28: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing west.



Photo Location 29: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing south.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

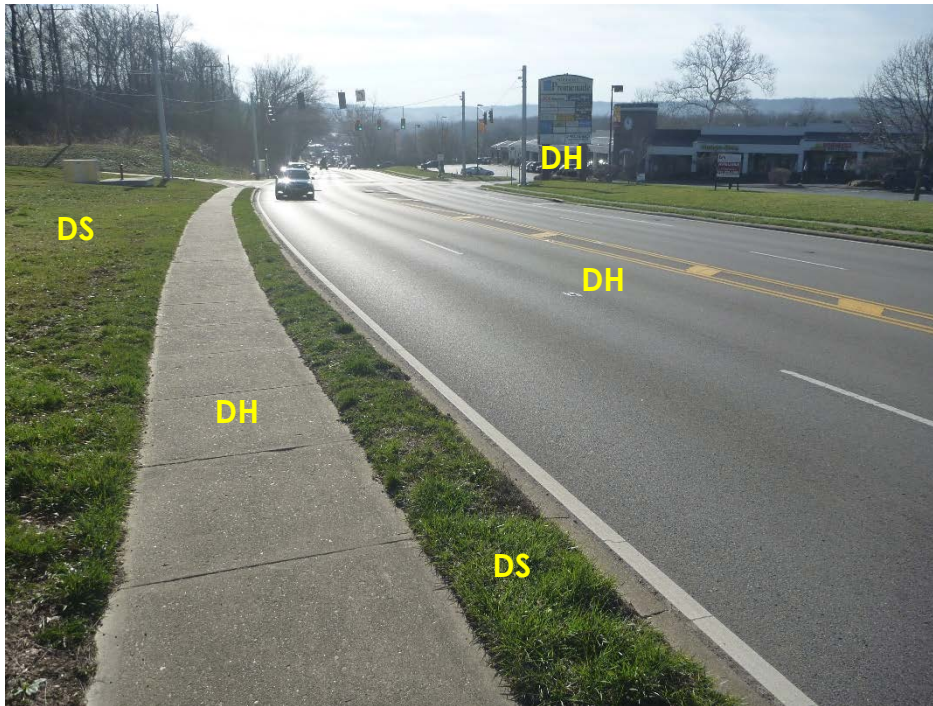


Photo Location 30: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing southeast.



Photo Location 30: Developed High Intensity (DH), Developed Open Space (DS), and Scrub/Shrub (SS) vegetative communities, facing west.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

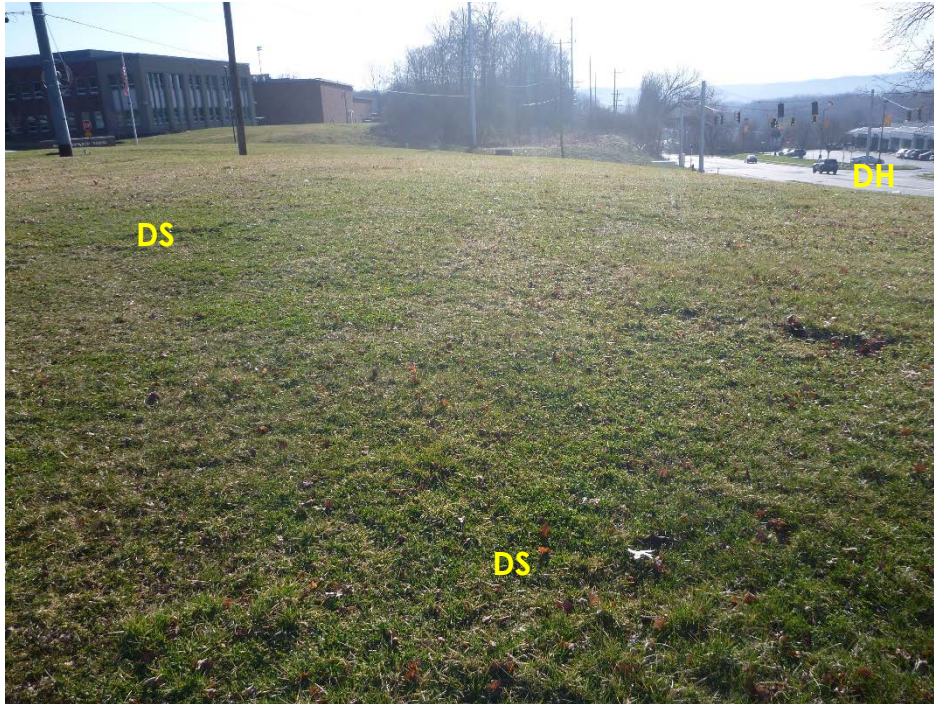


Photo Location 31: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing east.

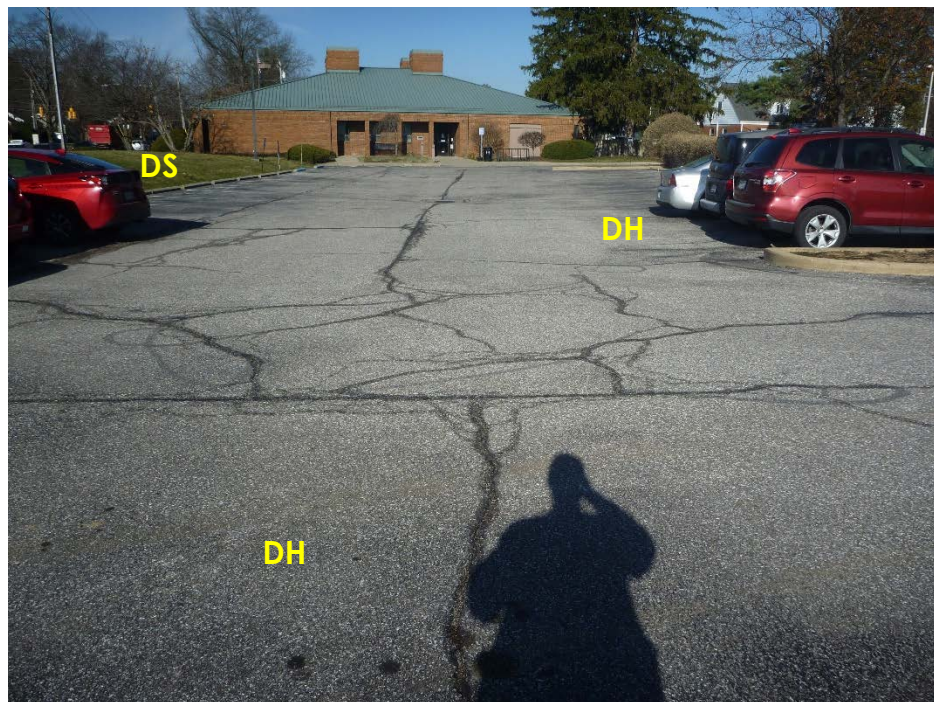


Photo Location 31: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing west.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

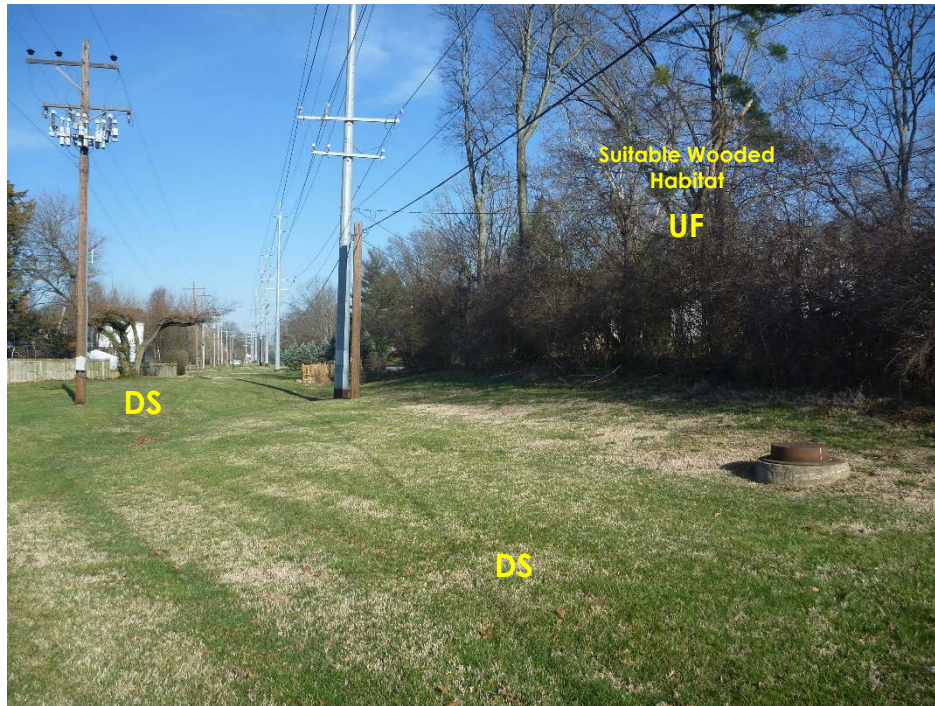


Photo Location 32: Developed Open Space (DS) and Upland Forest (UF) vegetative communities, facing northwest.



Photo Location 33: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing southeast.

Little Miami Scenic Trail Extension
HAM-LMST-Spring Hill (PID114496) and HAM-US50-31.17 LMST (PID114497)
Hamilton County, Ohio

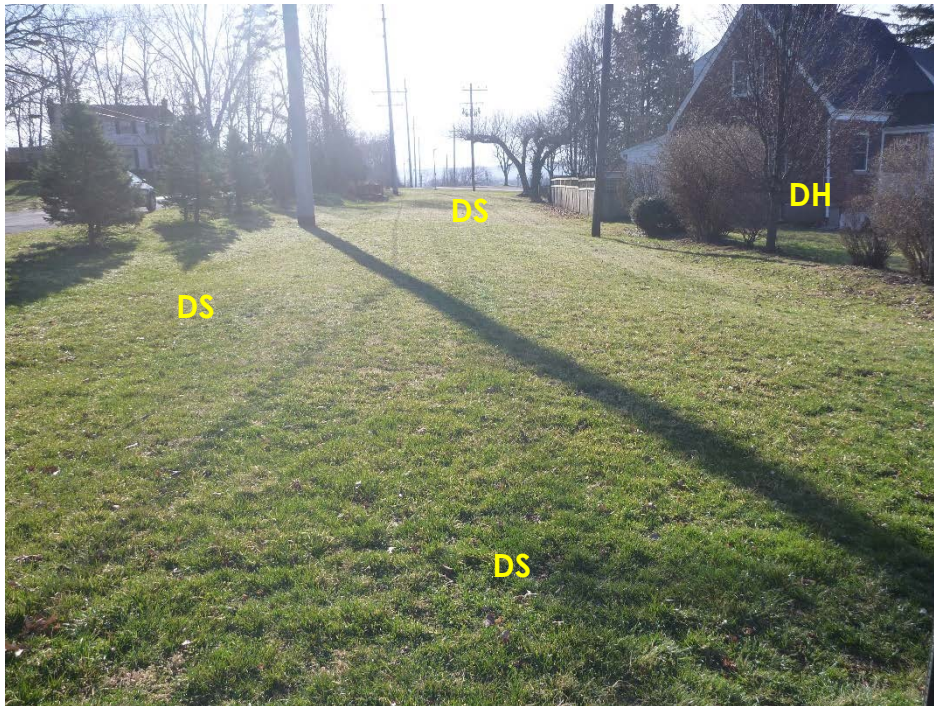


Photo Location 34: Developed Open Space (DS) and Developed High Intensity (DH) vegetative communities, facing southeast.



Photo Location 35: Developed High Intensity (DH) and Developed Open Space (DS) vegetative communities, facing east.