

Draft Compatibility Determination

Title

Compatibility Determination for installation of a new water line within an existing road right-of-way on Wheeler National Wildlife Refuge (NWR, refuge)

Refuge Use Category

Rights-of-way and Rights to Access

Refuge Use Types

Rights-of-Way (Utility and Road)

Refuge

Wheeler NWR

Refuge Purposes and Establishing and Acquisition Authorities

“... as a refuge and breeding ground for migratory birds and other wildlife: ...”
Executive Order 7926, dated July 7, 1938.

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. § 715d (Migratory Bird Conservation Act)

“... suitable for – (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species...” 16 U.S.C. § 460k-1 “... the Secretary ... may accept and use ...real ... property. Such acceptance may be accomplished under the terms and conditions restrictive covenants imposed by donors ...” 16 U.S.C §460k-2 [Refuge Recreation Act (16 U.S.C. § 460k-460k4), as amended].

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

No. This is the installation of a new water utility line within an existing right of way (ROW).

What is the use?

The right to use and possibly alter the landscape through construction, maintenance, and operation of a water line. S&ME, Inc (SM&E) is requesting a ROW permit on behalf of Huntsville Utilities.

Is the use a priority public use?

No

Where would the use be conducted?

The proposed water line would be installed along the east side of Swancott Road from Rockhouse Road to Pryor Road in Limestone County, Alabama. The project area is considered approximately 10 feet from the edge of the pavement for approximately 4,400 feet along Swancott Road (See Figures 1 and 2).

When would the use be conducted?

The project would be expected to begin 7 - 12 months following issuance of a permit. The expected construction duration is approximately 120 days. Once planned, a detailed work schedule would be discussed with and approved by the refuge manager.

How would the use be conducted?

The proposed water line will be installed within the existing shoulder of the road. The water line will be constructed approximately 3.5 feet from the edge of pavement, with three feet of cover. The water line will be encased in 6 inches of compacted aggregate under and on each side of the pipe; 12 inches of compacted aggregate will be placed over the pipe. The excavated soil will be placed and compacted over the aggregate to match existing grades. Excess excavated soil will be removed from the site.

During construction, the excavated soil may be temporarily stored adjacent to the trench or in trucks, as a rolling lane closure is planned. Should the excavated soil be temporarily stored adjacent to the trench, it will not exceed 3 months and will not be placed in a manner that it is dispersed by currents or other forces. Silt fence will be installed to prevent staged soil from encroaching on the adjoining wetlands.

Tree removal will not be necessary for the installation of the water line. The disturbed area will be restored to current grade. Proposed construction limits will not go beyond 3 feet from the toe of the fill slope of the shoulder and will not encroach into the adjoining wetlands.

A portion of the proposed project consists of a horizontal directional drill (HDD) to install the water line beneath Beaverdam Creek on the northeast side of the bridge on Swancott Road. The HDD will be approximately 20 feet below the creek bed when crossing beneath the creek (See Figure 2). All drilling materials will be collected by the contractor and disposed of offsite.

Best Management Practices, in accordance with the Alabama Handbook for Erosion Control (Baier et al. 2018), will be employed during construction in order to minimize erosion and control sedimentation during construction.

A Special Use Permit (SUP) would be required and would reiterate stipulations in this compatibility determination.

Why is this use being proposed or reevaluated?

Although this action provides no direct benefits to the refuge, the purpose of the project is to provide water services to future residents due to the continued growth of adjoining areas to the refuge. Huntsville Utilities evaluated the best possible placement of the water line to reduce impacts to jurisdictional waters.

Availability of Resources

Preparation of the compatibility determination, coordination with other offices, public involvement, and assembly of the ROW Permit package requires refuge staff time. Document preparation for the ROW package to be submitted to the Division of Realty, and the coordination, review, and monitoring by various U.S. Fish and Wildlife Service (Service) divisions will likely require 40 – 80 hours of refuge staff and consultant time. Additionally, some staff time and transportation expenses, will be required for monitoring the project during construction.

One-time costs (document preparation and review, monitoring during construction): \$6,080

Annual/recurring expenses (annual monitoring of the ROW): \$3,344

Off-setting Revenue: none

Anticipated Impacts of the Use

Potential impacts of a proposed use on the refuge's purposes and the Refuge System mission

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This compatibility determination includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an “affected resource.”

Threatened and endangered species and other special status species, air quality, floodplains, cultural resources, refuge management and operations, and socioeconomics will not be more than negligibly impacted by the action and have been dismissed from further analyses.

Approximately 1 acre of refuge land will be disturbed during placement of the water line along the existing road ROW. No significant impacts to wildlife are anticipated as this area is a currently maintained road ROW that already experiences disturbance from traffic and road maintenance activities.

Threatened and Endangered Species

The following species may occur within or near the project area:

- Indiana bat, *Myotis soda/is* - Endangered
- Gray bat, *Myotis grisescens* - Endangered
- Northern long-eared bat, *Myotis septentrionalis* -Threatened
- Spring pygmy sunfish, *Elassomma alabamae* - Threatened
- Pink mucket, *Lampsilis aubruba*- Endangered
- Rough pigtoe, *Pleurobema plenum* - Endangered
- Armored snail, *Marstonia pachyta* - Endangered
- Slender campeloma, *Campeloma decampi* - Endangered

S&ME, Inc., conducted a protected species assessment (S&ME October 2020) at the request of Huntsville Utilities and found that aquatic habitats capable of supporting listed aquatic species within Beaverdam Creek would not be affected by the proposed action. Based on the assessment, S&ME, Inc., consulted with and received concurrence from the Division of Ecological Services in Daphne, Alabama (See Attachment 2).

Cultural Resources

S&ME, Inc., conducted an archaeological survey on behalf of Huntsville Utilities (Nagle and Carpini 2020). Fieldwork for the project was completed on September 8, 2020. Fieldwork consisted of a mix of pedestrian survey and shovel testing. A total of 25 shovel tests were excavated during the investigations along the proposed water line corridor. As a result of the survey, no new archaeological sites were recorded. It is the opinion of S&ME that no significant archaeological sites will be affected and that no additional archaeological work is necessary along the currently proposed project corridor. S&ME received concurrence from the Service Regional Historic Preservation Officer and Archaeologist (See Attachment 3).

Short-term impacts

Soils and water quality may be temporarily affected (i.e., erosion, increased sedimentation) within the construction site, during the construction phase. Huntsville Utilities contractor will obtain a National Pollutant Discharge Elimination System (NPDES) permit from the Alabama Department of Environmental Management and will be responsible for implementing Best Management Practices to reduce erosion of sediment into adjacent wetlands and streams in accordance with “Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas” (Baier et al. 2018). These practices include, but are not limited to, the use of silt fencing, temporary brush barriers, “Wattle Ditch”, rock, geotextile materials, and immediate revegetation of any disturbed areas.

Some sporadic disturbance, including noise from equipment and people and minimal exhaust from equipment, is expected with regular maintenance; however, no increase from the current level of maintenance is expected. Also, the area required to allow access is minor compared to the overall size of the refuge and habitat available for wildlife.

In general, refuge access will not be affected; no boat ramps, trailheads, or major access points will be affected. Access from this specific section (≤ 1 mile) of Swancott Rd may be temporarily affected during construction. If through-traffic is not allowed during construction, an alternate route, with signage will be available.

Long-term impacts

Future impacts, including to wildlife, vegetation, and visitors, associated with the ROW would be minimal because the activity is limited to periodic maintenance (i.e., mowing) which already occurs along the existing road ROW. Although temporary increases in noise levels are expected during construction, no long-term impacts from noise are expected because the maintenance of the ROW or use of Swancott

Road would not be expected to change.

The proposed project would provide water services to future residents in adjoining areas to the refuge. Long-term or cumulative impacts are not expected to refuge visitors.

No cumulative impacts are anticipated. This is a one-time construction project with annual maintenance. Beale (2007) found that wildlife displaced due to temporary construction activity return to use of the area when activities cease; therefore, we anticipate no long-term or cumulative impacts to wildlife from this action.

Public Review and Comment

A Notice of Availability for Comment on the ROW compatibility determination will be posted on the Refuge Website (<https://www.fws.gov/refuge/wheeler/>) and Refuge Facebook Page (<https://www.facebook.com/WheelerNWRComplex>) for public review and comment starting on (January 31, 2022), for a period of 14 days. Additionally, a hard copy of this document will also be posted at the Refuge Headquarters and Visitor Center (2700 Refuge Headquarters Rd, Decatur, AL 35603, and 3121 Visitor Center Road, Decatur, AL 35603, respectively). Concerns expressed during the public comment period will be addressed in the final document.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Prior to beginning construction, Huntsville Utilities and the contractor shall provide proof that all other required Federal and state permits were acquired.
2. Access and staging for construction will be restricted to the ROW.
3. All equipment and vehicles will be brought onsite in a clean and well-maintained condition to ensure no leaks of toxic materials or introduction of exotic vegetation species to the area.
4. All work-related trash, excess materials, and equipment will be removed promptly following construction completion.
5. During construction, erosion control measures, such as silt fencing, installation of hay bales, and other Best Management Practices, should be used on road shoulders to prevent erosion and sedimentation in drainage ditches.
6. Disturbed area will be maintained by Huntsville Utilities or their designated

contractor until stabilized by seeding or other Best Management Practices. The area where roadside vegetation and soil have been disturbed must be “hydro-seeded” with native plant species selected and approved by refuge staff.

7. All activities will be performed during daylight hours.
8. Service employees will be present before, during and after construction, and will periodically monitor and evaluate the site to determine if objectives are being met and to ensure additional resources are not being degraded.

Justification

The stipulations outlined above would help ensure that this use is compatible at Wheeler NWR. Rights-of-way (utility), as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that the ROW (utility) at Wheeler NWR, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes of the Wheeler NWR.

The proposed ROW will comply with Service and Department of Interior policies, as well as Wheeler NWR’s policy for ROW permits, as follows:

Implementation will comply with guidance provided in 340 FW 3 Rights-of-Way and Road Closings. No maintenance, alterations, or modifications to the ROW will be granted without compliance (U.S. Fish and Wildlife Service 2000). Any use specifically authorized for a period longer than 10 years (such as ROW) is subject to a compatibility determination at the time of the initial application and when the term expires and we receive a request for renewal (U.S. Fish and Wildlife Service 2000). We will use periodic reevaluations for such long-term uses to review compliance with permit terms and conditions.

The Service has fee title ownership of the land described above and has jurisdiction of the land and proposed use. The proposed use complies with all applicable laws, policies and regulations.

Signature of Determination

X

Refuge Manager

Date

Signature of Concurrence

X

Assistant Regional Director

Date

Mandatory Reevaluation Date: 2071

Literature Cited/References

S&ME Reports available upon email request: wheeler@fws.gov

Baier, J., E. Brantley, H. J. Holloway, R. Hulcher, C. M. LeBlue, T. Logiotatos, E. R. Jolley, J. L. Johnson, L. McGhee, E. L. Norton, P. L Oakes, T. Paglione, K. M. Rogers, B. D. Smith, E. D. Surrency, and J. Thurmond. 2018. Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas. Volume 1. Developing Plans and Designing Best Management Practices.

<https://alabamasoilandwater.gov/wp-content/uploads/2021/03/2018-Handbook-Vol-1.pdf>

Beale, C. 2007. The Behavioral Ecology of Disturbance Responses. International Journal of Comparative Psychology, 20 (2):111-120.

<https://escholarship.org/uc/item/43m7b2d5>

Nagle, K., and H. Carpini. 2020. Archaeological Investigations Swancott Road Waterline – FWS Property Limestone County, Alabama. S&ME, Inc.

S&ME, Inc. 2020. Report of Protected Species Assessment 16” Waterline on Swancott

Road in Wheeler Wildlife Refuge, Limestone, County, Alabama. S&ME Project No. 5182-20-012.

U.S. Fish and Wildlife Service. 1993. Rights-of-Way and Road Closings (340 FW 3). The Fish and Wildlife Service Manual. Division of Realty.
<https://www.fws.gov/policy/340fw3.html>

U.S. Fish and Wildlife Service. 2000. National Wildlife Refuge System Uses: Compatibility. The Fish and Wildlife Service Manual (603 FW 2). Division of Conservation Planning and Policy. 19 pp. <https://www.fws.gov/policy/603fw2.html>

Attachment 1

Figures

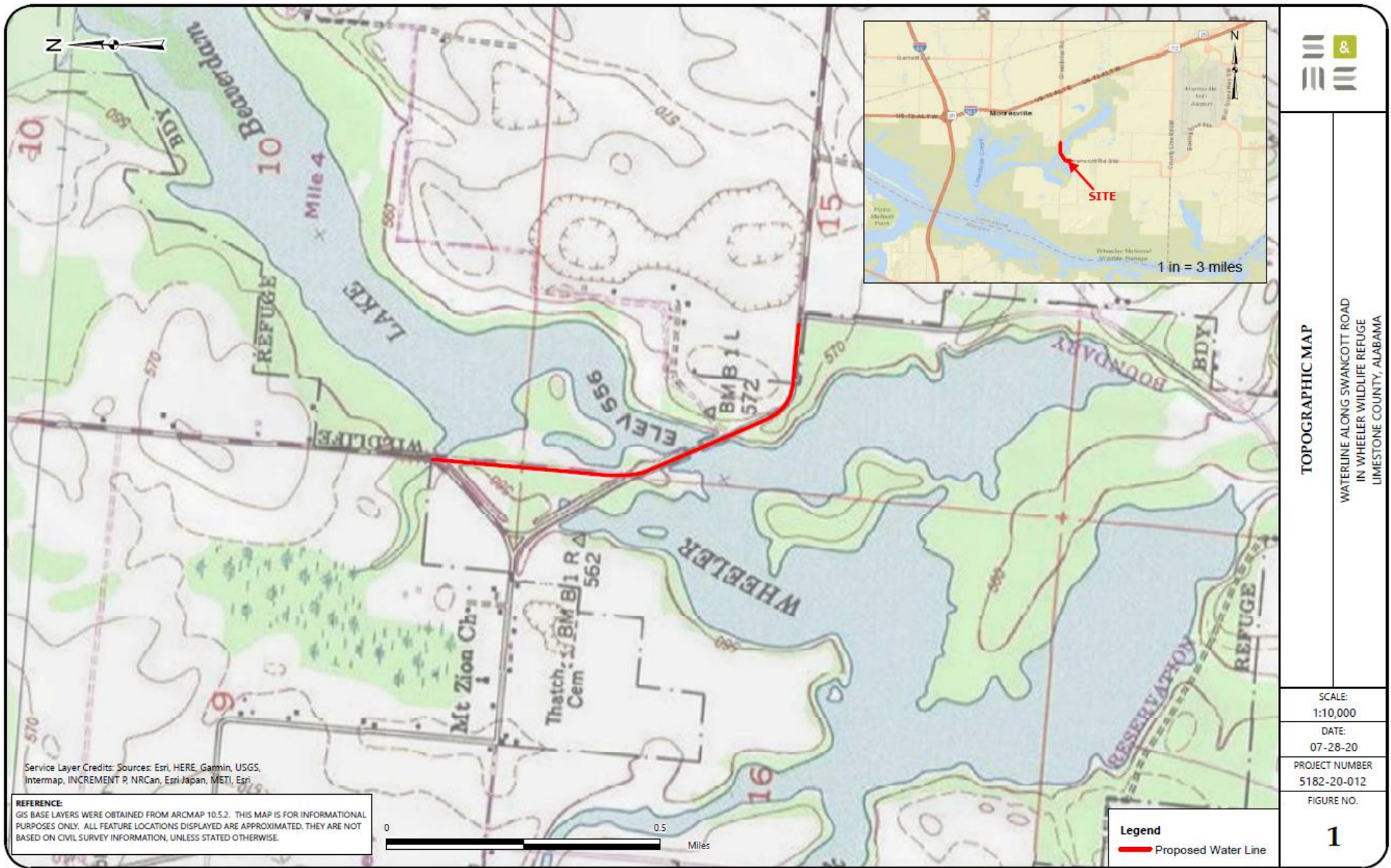


Figure 1. Proposed water line along Swancott Road on Wheeler National Wildlife Refuge in Limestone County, Alabama.

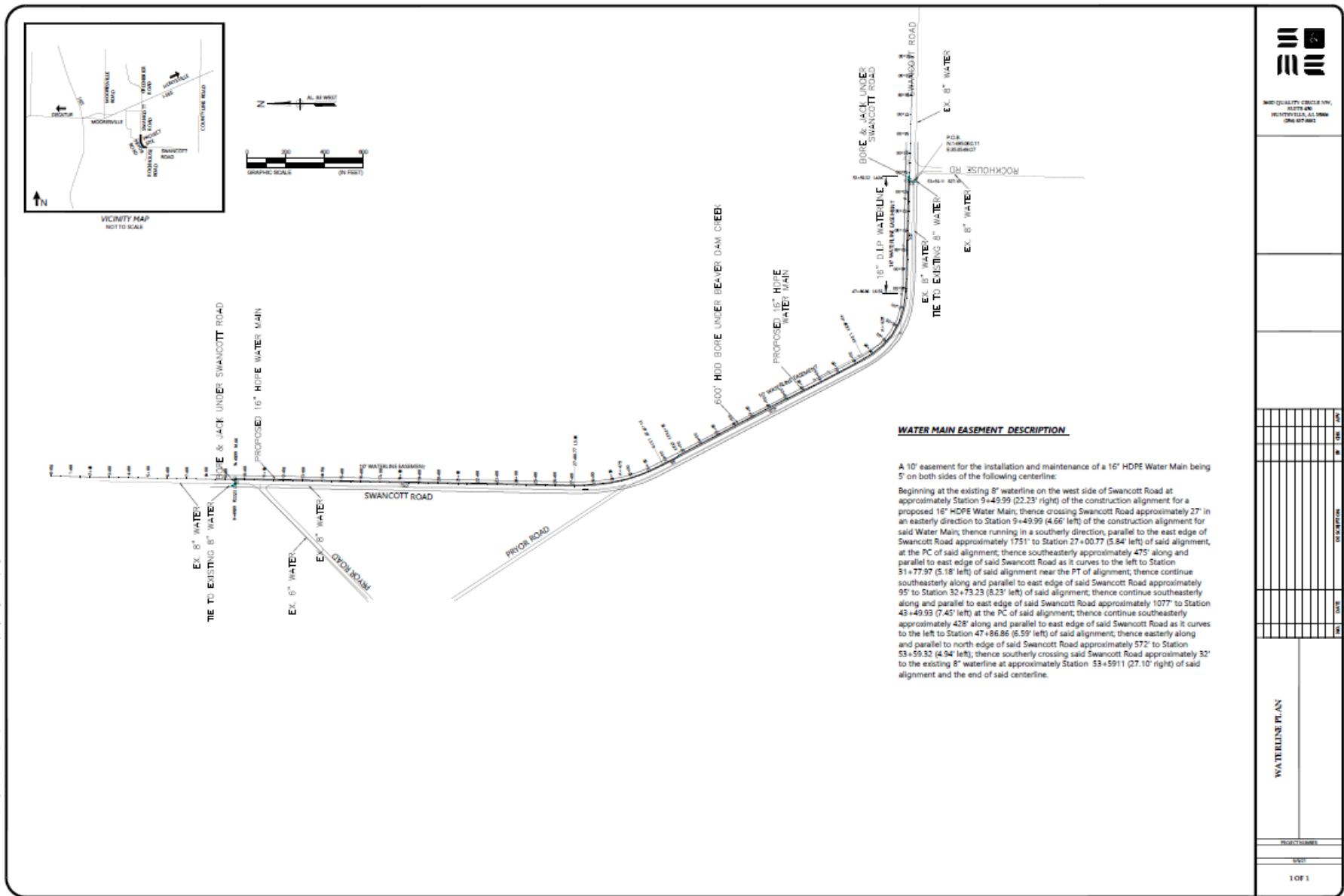
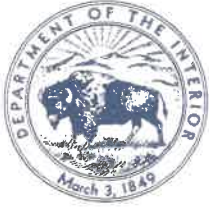


Figure 2. Description of water main right-of-way along Swancott Road on Wheeler National Wildlife Refuge in Limestone County, Alabama.

Attachment 2



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1208-B Main Street
Daphne, Alabama 36526

JAN 05 2021

IN REPLY REFER TO:
2020-TA-0831

Ms. Emily J. Kennedy, Project Scientist
S&ME, Inc
360D Quality Circle NW
Suite 450
Huntsville, AL 35806

Dear Ms. Kennedy:

Thank you for your letter dated November 3, 2020, requesting comments on proposed installation of a new water line as it relates to federally threatened and endangered species. We understand that activities will include the installations of a new waterline along Swancott Road from Rockhouse Road to Pryor Road in Limestone County, Alabama. We understand that the waterline will be placed along the existing road right of way using open trench methods except where it will cross Beaverdam Creek, where the water line will be installed with horizontal directional drilling methods. Further, we understand that S&ME, Inc. has conducted a protected species assessment at the request of Huntsville Utilities to assist them in obtaining permission from Wheeler National Wildlife Refuge to conduct the work on the refuge property. We have reviewed your information and are providing the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) (ESA).

Endangered and Threatened Species

The following species may occur within or near the project area:

- Indiana bat, *Myotis sodalis* - Endangered
- Gray bat, *Myotis grisescens* - Endangered
- Northern long-eared bat, *Myotis septentrionalis* – Threatened
- Spring pygmy sunfish, *Elassomma alabamae* – Threatened
- Pink mucket, *Lampsilis abrupta* – Endangered
- Rough pigtoe, *Pleurobema plenum* – Endangered
- Armored snail, *Marstonia pachyta* – Endangered
- Slender campeloma, *Campeloma decampi* – Endangered

In your November 3, 2020, letter, you indicate that caves and portals to subterranean karst habitats are not located within the project area, and that trees will not be cleared for the proposed project.

Therefore, no impacts to the gray bat, Indiana bat and/or northern long-eared bat are anticipated as a result of your proposed project.

From your protected species assessment you found that aquatic habitats capable of supporting listed aquatic species within Beaverdam Creek would not be affected by the proposed action due to the implementation plans of the project. Specifically, effects to Beaverdam Creek will be avoided by implementing horizontal directional drilling techniques to avoid direct impacts to the stream bottom and incorporating best management practices to control and minimize sediments from entering the stream. As we stated in our May 08, 2020, letter, we agree that these methods are protective of aquatic habitats and the species that depend on them. Therefore, no further endangered species consultation will be required for this portion of the project unless: 1) the identified action is subsequently modified in a manner that causes an effect on listed species or a designated critical habitat; 2) new information reveals the identified action may affect federally protected species or designated critical habitat in a manner or to an extent not previously considered; or 3) a new species is listed or critical habitat is designated under the Endangered Species Act that may be affected by the identified action. Because this project directly affects land within Wheeler National Wildlife Refuge, please insure you coordinate with the refuge office for obtaining permission for conducting the proposed activities. Wheeler National Wildlife Refuge Headquarters can be reached by phone at 256-353-7243, or wheeler@fws.gov.

We appreciate the opportunity to comment on this project. If you have any questions or need additional information, please contact Mr. Evan Collins of my staff at evan_collins@fws.gov. Please refer to the reference number located at the top of this letter in future phone calls or written correspondence.

Sincerely,



William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

CC: Mr. Ricky Ingram, Refuge Manager, Wheeler NWR

Attachment 3



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Office of the Regional Archaeologist
Savannah Coastal Refuges
694 Beech Hill Lane
Hardeeville, South Carolina 29927
CELL (912) 257-5434
email: richard_kanaski@fws.gov
haley_messer@fws.gov



February 19, 2021

Ms. Lee Anne Wofford, Deputy State Historic Preservation Officer
Alabama Historical Commission
ATTN: Section 106 Review
468 South Perry Street
P.O. Box 300900
Montgomery, Alabama 36130-0900

Re: Proposed Huntsville Utilities' Swancott Road
Waterline, Wheeler National Wildlife Refuge,
Limestone County, Alabama

Dear Ms. Wofford:

Huntsville Utilities (HU) proposes to install a 0.82-mile long waterline along Swancott Road, a portion of which crosses Wheeler National Wildlife Refuge (Refuge) in Limestone County, Alabama (Fig. 1). The Refuge is one of the U.S. Fish and Wildlife Service's (Service) National Wildlife Refuge System units. The project area is located in Sections 9, 10, 15, and 16 of Township 5S, Range 3W. An approximately 0.46 mile section is within an existing road and bridge right-of-way. A 0.36-mile section runs through a forested stand on the Refuge.

Based upon reviews of the Southeast Region and Alabama Master Site Files; historic maps; Tennessee Valley Authority's (TVA) Land Acquisition Maps; and the Natural Resources Conservation Service's web soil database, the Service deemed that part of HU's undertaking crossed an area that had not been substantially disturbed by past human actions, such as commercial silvicultural and agricultural operations or Refuge and/or TVA activities. The Service requested that a Phase I archaeological survey be conducted of a 0.36-mile section. The investigations were to minimally include reviews of the master site files, available literature, and historic maps; a pedestrian walkover; systematic shovel testing using a 20-meter interval; and submission of completed site forms and a technical report.

HU contracted SM&E, Inc. to conduct the archaeological investigations. The firm conducted the field work in September 2020 under ARPA Permit No. WNWRC062920 and Refuge Special Use Permit No. 20-024. SM&E, Inc. crews, under the supervision of Senior Archaeologist Kimberly Nagle, M.A., RPA, excavated 25 shovel test units along the proposed alignments. They did not recover any artifacts or observe cultural deposits or features in any of the units. Based upon their investigations, the firm concluded that no historic properties are present along

the proposed waterline alignment, further investigations were not recommended or warranted, and that its installation will have “no effect”. My office concurs with the findings of “no effect as no historic properties are present” and that further fieldwork is not warranted.

To facilitate your office’s review and comment, we have enclosed a copy of SM&E’s 2020 report “*Archaeological Investigations Swancott Road Waterline – FWS Property Limestone County, Alabama*”, as well as GIS shapefiles of the project area.

The Service appreciates your timely review and comment regarding this undertaking. Should you require any additional information, please do not hesitate to contact me at (912) 257-5434 or at richard_kanaski@fws.gov.

Sincerely,

RICHARD KANASKI

Digitally signed by RICHARD KANASKI Date: 2021.02.19 12:39:08 -0500

Richard S. Kanaski
Regional Historic Preservation Officer &
Regional Archaeologist
South Atlantic-Gulf & Mississippi Basin
Unified Regions

Enclosure

cc: Wheeler NWR
SM&E, Inc.