



DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3604

REPLY TO
ATTENTION OF:

Regulatory Division
SAS-2012-01042

DECEMBER 22 2015

JOINT PUBLIC NOTICE
Savannah District/State of Georgia

The Savannah District has received an application for a Department of the Army Permit, pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as follows:

Application Number: SAS-2012-01042

Applicant: Mr. Jim Renner
Southern Ionic Minerals, LLC
13291 Vantage Way, Suite 103
Jacksonville, Florida 32218

Agent: Mr. Alton Brown
Resource and Land Consultants
41 Park of Commerce Way, Suite 303
Savannah, Georgia 31405

Location of Proposed Work: The project site is located east of Georgia Highway 301, west of River Road, and south of Winokur Road, near the City of Folkston, Charlton County, Georgia (Latitude 31.0198, Longitude -81.9727).

Description of Work Subject to the Jurisdiction of the U.S. Army Corps of Engineers (Corps): The applicant proposes to temporarily impact 9.30 acres of jurisdictional wetlands associated with the southward expansion of Mission Mine South (MMS), to continue mining zirconium and titanium mineral sands from the underlying Penholoway Deposit. The mining process requires the extension of the existing 300' wide canal to facilitate the movement of a floating wet mill. Specifically, the extension of the canal would require impacts to wetland PP (2.00 acre) and a portion of wetland ZZ (2.76 acres). In addition to the extension of the wet mill canal, the remaining portions of wetland ZZ (2.86 acres) and wetland ZZZ (1.68 acre) would be excavated through mining activities. The applicant states that the wetland quality of ZZ and ZZZ are degraded from historic silviculture land-use. Wetland and upland areas would be reclaimed by re-establishing pre-mine topography one month after excavation, replacing stockpiled topsoil within three months, and replanting the following winter. All of the temporarily impacted wetlands would be restored in their pre-mine location as forested wetland, including the degraded wetlands. The expansion area would extend from the existing operation approximately 7,500 linear feet to the south of Widows Lake Road.

Generally, mining at Mission Mine South includes the following: The site is cleared of all planted pines, topsoil is removed and stock piled, a pump is installed to temporarily draw down the water table, the natural sand sediments are excavated with conventional earth-moving equipment, and the excavated sand is then transported to the mining unit by heavy duty haul trucks. At the mining unit the sand is screened, mixed with water, and piped to the wet mill. The wet mill is a five story structure that floats in a linear pit (wet mill canal) on pontoons. The applicant states that the maximum effective distance for pumping the sand-water slurry is $\pm 4,000$ linear feet, so the wet mill and mining unit are periodically moved to maintain effective hauling and pumping distances.

The location of the wet mill canal is constrained by water management and mining logistics. The applicant states that the canal must be constructed on the crest of the sand ridge. If the canal is placed too far to either side of the crest the natural gradient would create water management issues for both pumping and storage. One side of the canal cannot be significantly lower in elevation than the other. Due to the elongated north/south nature of the ore body, the wet mill and associated canal would migrate from the north of the property to the south. The mill would be gradually moved south, within the newly constructed canal, by attaching tow lines to the structure and pulling it with two to four bull dozers. Operating from a road on each side of the canal, the bull dozers slowly tow the wet mill down the constructed canal.

As compensatory mitigation for the project, the applicant proposes to purchase 48.4 wetland mitigation credits from an approved USACE approved primary service area mitigation bank within the Satilla watershed. Following completion of the proposed mining activities, elevations within the footprint of the wetland would be restored to pre-mining conditions, stockpiled topsoil (removed prior to mining) would be redeposited within the wetland footprint and the area would be planted with a variety of tree, shrub, and herbaceous species.

BACKGROUND

A wetland delineation was completed for the project area on April 16, 2013. The delineation identified 502.781 acre of jurisdictional wetlands, 4.37 acre of non-jurisdictional wetlands, and 823.78 linear feet of jurisdictional waters. This Joint Public Notice announces a request for authorizations from both the Corps and the State of Georgia. The applicant's proposed work may also require local governmental approval. The applicant has a Georgia Environmental Protection Division Surface Mining Permit for 1268 acres within Mission Mine South and has been mining zirconium and titanium mineral sands since June 2014.

STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required for a Federal Permit to conduct activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Watershed Protection Branch, 2 MLK Jr. Drive, Suite 418, Atlanta, Georgia 30334, during regular office hours. A copier machine is available for public use at a charge of 10 cents per page. All coastal projects are filed at our Brunswick office and will need to be requested from Mr. Bradley Smith at Bradley.Smith@dnr.ga.gov. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can be reviewed in the Savannah District, U.S. Army Corps of Engineers, Regulatory Division, 100 W. Oglethorpe Avenue, Savannah, Georgia 31401-3604.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

Marshland Protection: This notice also serves as notification of a request to alter coastal marshlands (under the provision of the Coastal Marshlands Protection Act, Georgia Laws, 1970, p. 939 and as amended), if required. Comments concerning this action should be submitted to the Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, 1 Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

Georgia Coastal Management Program: Prior to the Savannah District Corps of Engineers making a final permit decision on this application, the project must be certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

U.S. ARMY CORPS OF ENGINEERS

The Savannah District must consider the purpose and the impacts of the applicant's proposed work, prior to a decision on issuance of a Department of the Army Permit.

Cultural Resources Assessment: A phase I cultural resources survey has been completed within the project area by Golder Associates, LLC. The phase I survey identified 15 archeological sites and 17 isolated artifact finds. At this time, the Corps has not determined the eligibility of the aforementioned sites.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, we request the Georgia Historical Preservation Division (HPD) or any other interested party review the latest published version of the National Register of Historic Places (NRHP) to determine if the property has or has not any registered properties or properties listed as eligible for inclusion located at the site or in the area affected by the proposed work. Presently unknown archaeological, scientific, prehistorical, or historical data may be located at the site and could be affected by the proposed work.

Endangered Species: Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), we request information from the U.S. Department of the Interior, Fish and Wildlife Service, the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service; or, any other interested party, on whether any species listed or proposed for listing may be present in the area.

According to the applicant, Golder Associates Inc. was contracted to complete a threatened and endangered species survey within the project site. Based on the field survey, no federally listed species were observed within the project area; however, gopher tortoises are known to inhabit portions of the project area and burrows were observed during the field survey. The Savannah District has determined that the proposed project would have no effect on any Federally listed threatened or endangered species or their critical habitat that are under the purview of U.S. Department of the Interior, Fish and Wildlife Service. Pursuant to Section 7(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Public Interest Review: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion

and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and in general, the needs and welfare of the people.

Consideration of Public Comments: The U.S. Army Corps of Engineers is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Application of Section 404(b)(1) Guidelines: The proposed activity involves the discharge of dredged or fill material into the waters of the United States. The Savannah District's evaluation of the impact of the activity on the public interest will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency, under the authority of Section 404(b) of the Clean Water Act.

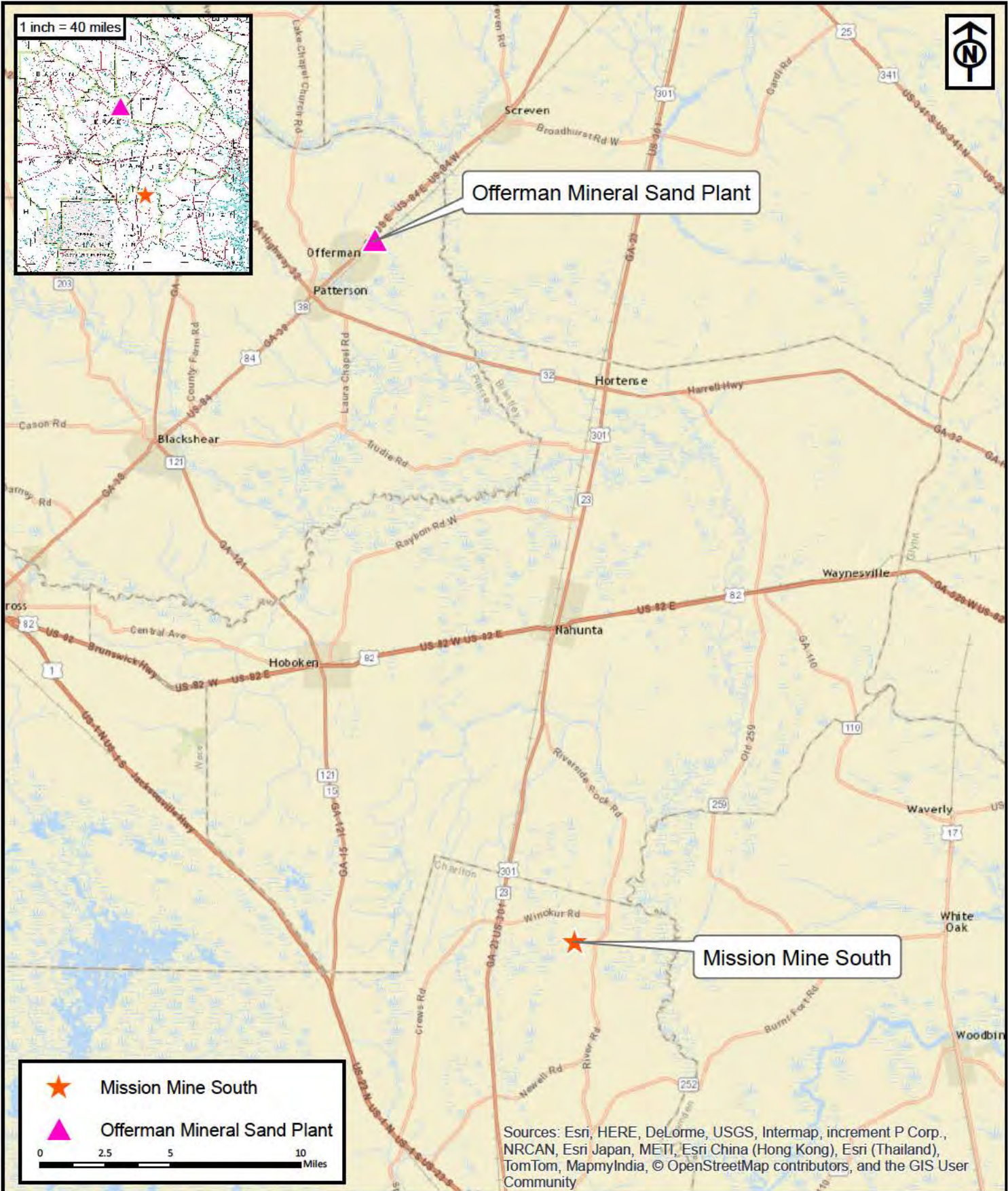
Public Hearing: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application for a Department of the Army permit. Requests for public hearings shall state, with particularity, the reasons for requesting a public hearing. The decision whether to hold a public hearing is at the discretion of the District Engineer, or his designated appointee, based on the need for additional substantial information necessary in evaluating the proposed project.

Comment Period: Anyone wishing to comment on this application for a Department of the Army Permit should submit comments in writing to the Commander, U.S. Army Corps of Engineers, Savannah District, Attention: Jared M. Lopes, 100 W. Oglethorpe Avenue, Savannah, Georgia 31401-3640, no later than 30 days from the date of this notice. Please refer to the applicant's name and the application number in your comments.

If you have any further questions concerning this matter, please contact Mr. Jared M. Lopes, Regulatory Specialist, Coastal Branch at 912-652-5348.

7 Encls

1. Project Location Map
2. USGS Topographic Map
3. Approximate Wetland Sketch
4. Proposed Wetland Impacts
5. Proposed Wetland Impact PP
6. Proposed Wetland Impacts ZZ & ZZZ
7. Mining schematic



1 inch = 40 miles



Offerman Mineral Sand Plant

Mission Mine South

★ Mission Mine South
▲ Offerman Mineral Sand Plant

0 2.5 5 10 Miles

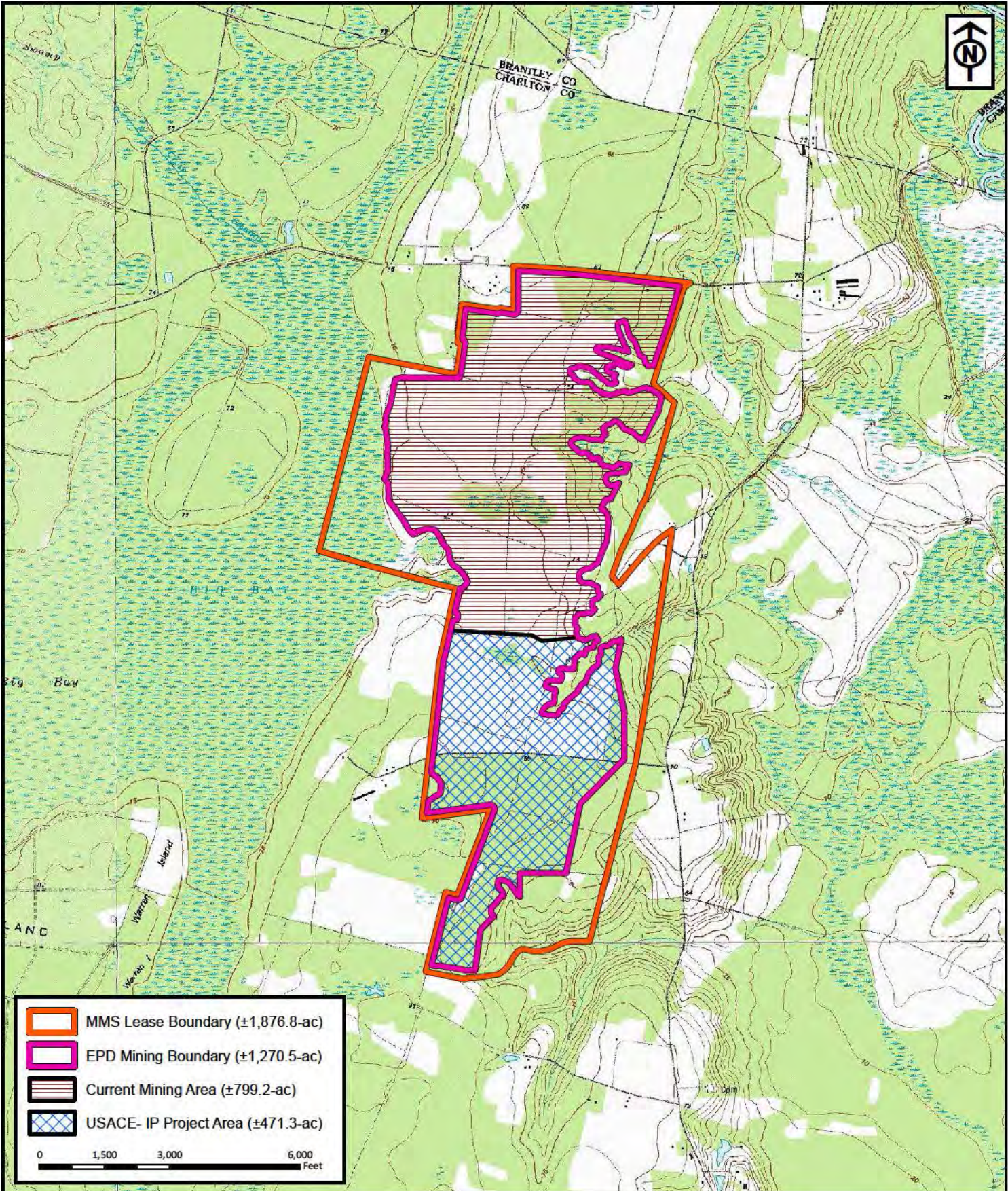
Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

RLC Project No.:	15-122
Appendix A:	Figure 1
Sketch Date:	22 October 2015
Prepared By:	TS
Map Scale :	1 inch = 26,400 feet

Mission Mine South
 Charlton County, Georgia

Project Location Map
 Prepared For: Southern Ionics Minerals

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 912.443.5896 www.rland.com

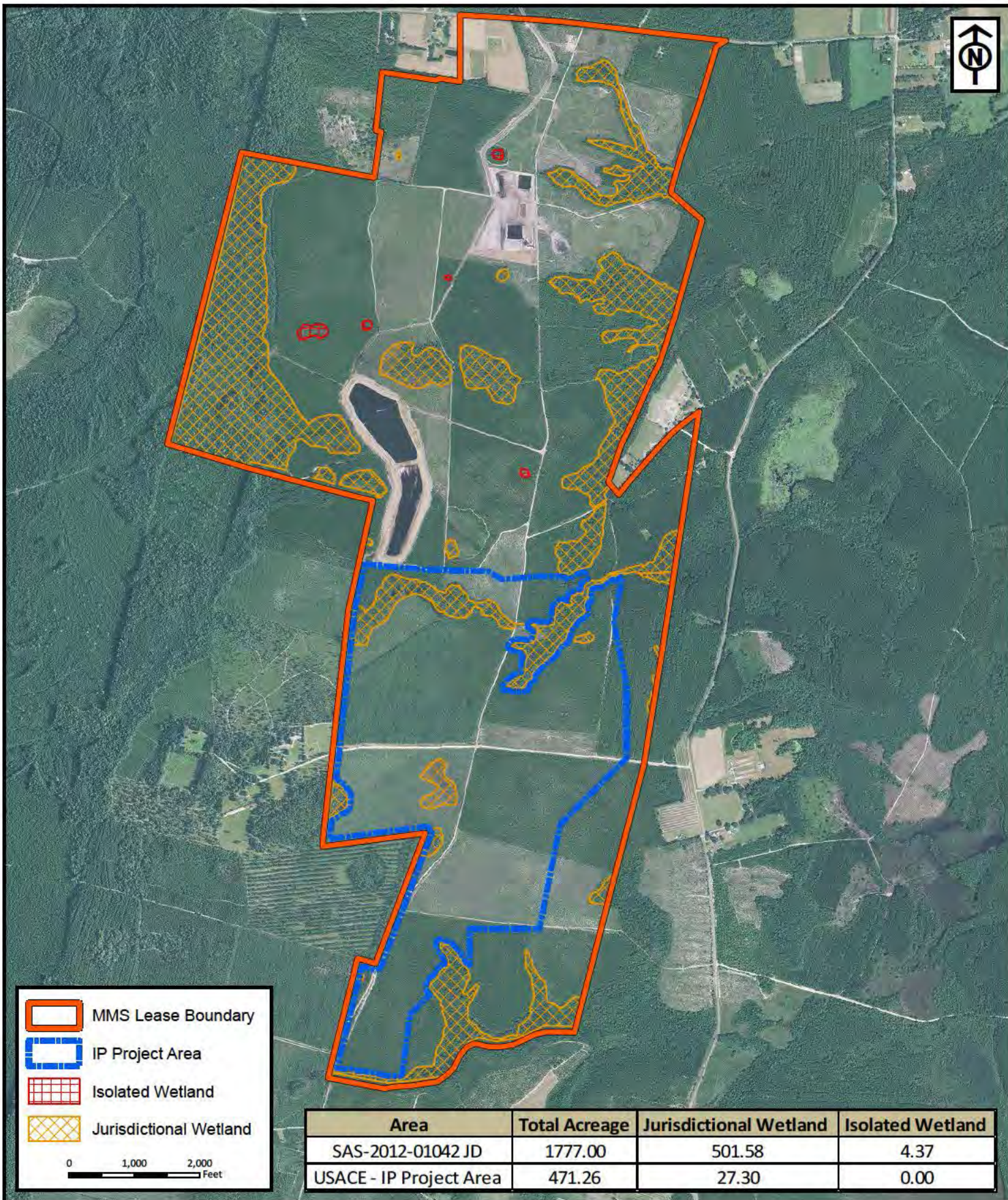






RLC Project No.:	15-122
Appendix A:	Figure 2
Sketch Date:	22 October 2015
Prepared By:	TS
Map Scale :	1 inch = 3,000 feet

Mission Mine South
Charlton County, Georgia

USGS Topographic Map
Prepared For: Southern Ionics Minerals

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 MMS Lease Boundary
 IP Project Area
 Isolated Wetland
 Jurisdictional Wetland

0 1,000 2,000
 Feet

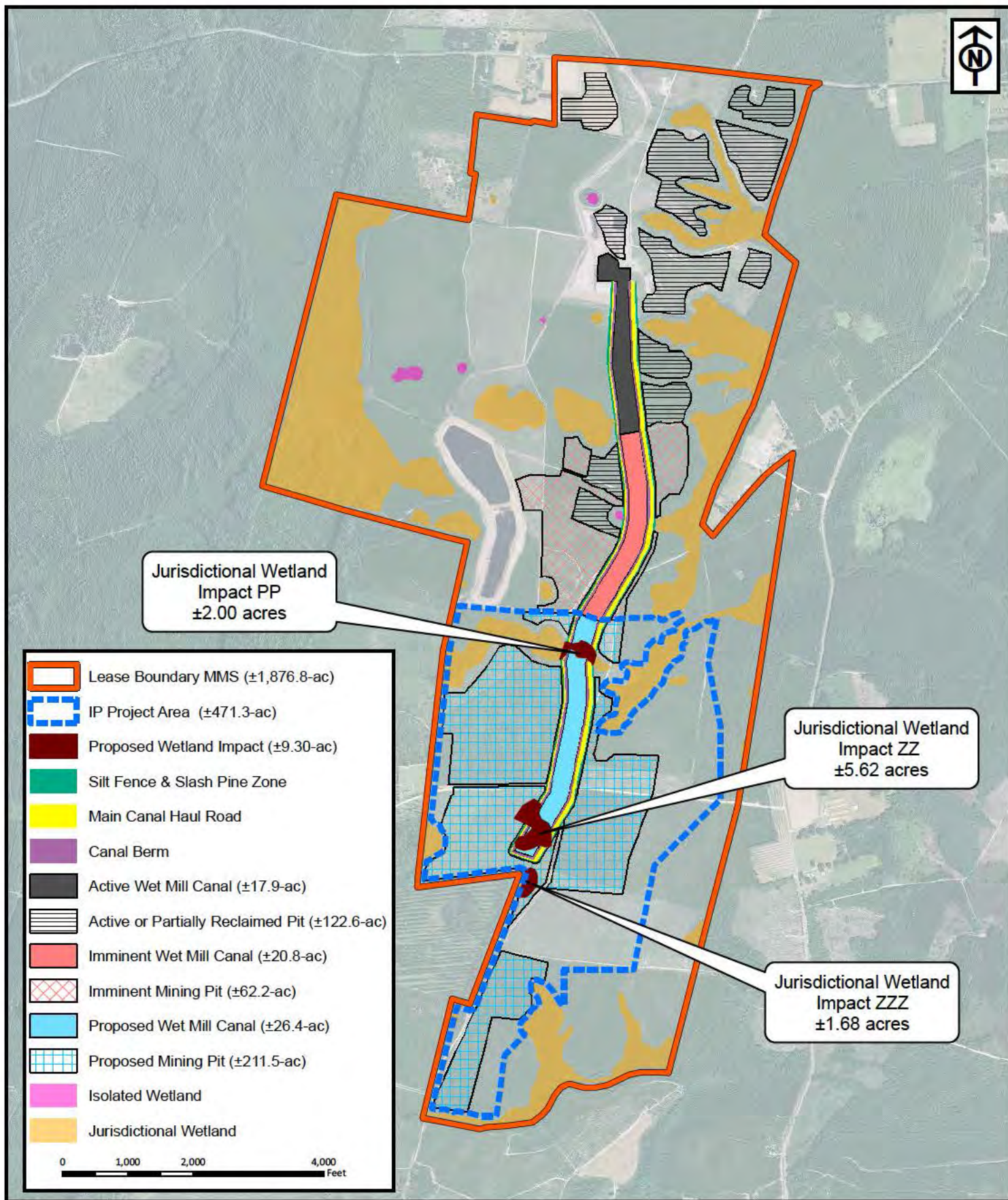
Area	Total Acreage	Jurisdictional Wetland	Isolated Wetland
SAS-2012-01042 JD	1777.00	501.58	4.37
USACE - IP Project Area	471.26	27.30	0.00

RLC Project No.: 15-122
 Appendix A: Figure 7
 Sketch Date: 22 October 2015
 Prepared By: TS
 Map Scale : 1 inch = 2,000 feet

Mission Mine South
 Charlton County, Georgia

**Approximate
Wetland Sketch**
 Prepared For: Southern Ionics Minerals


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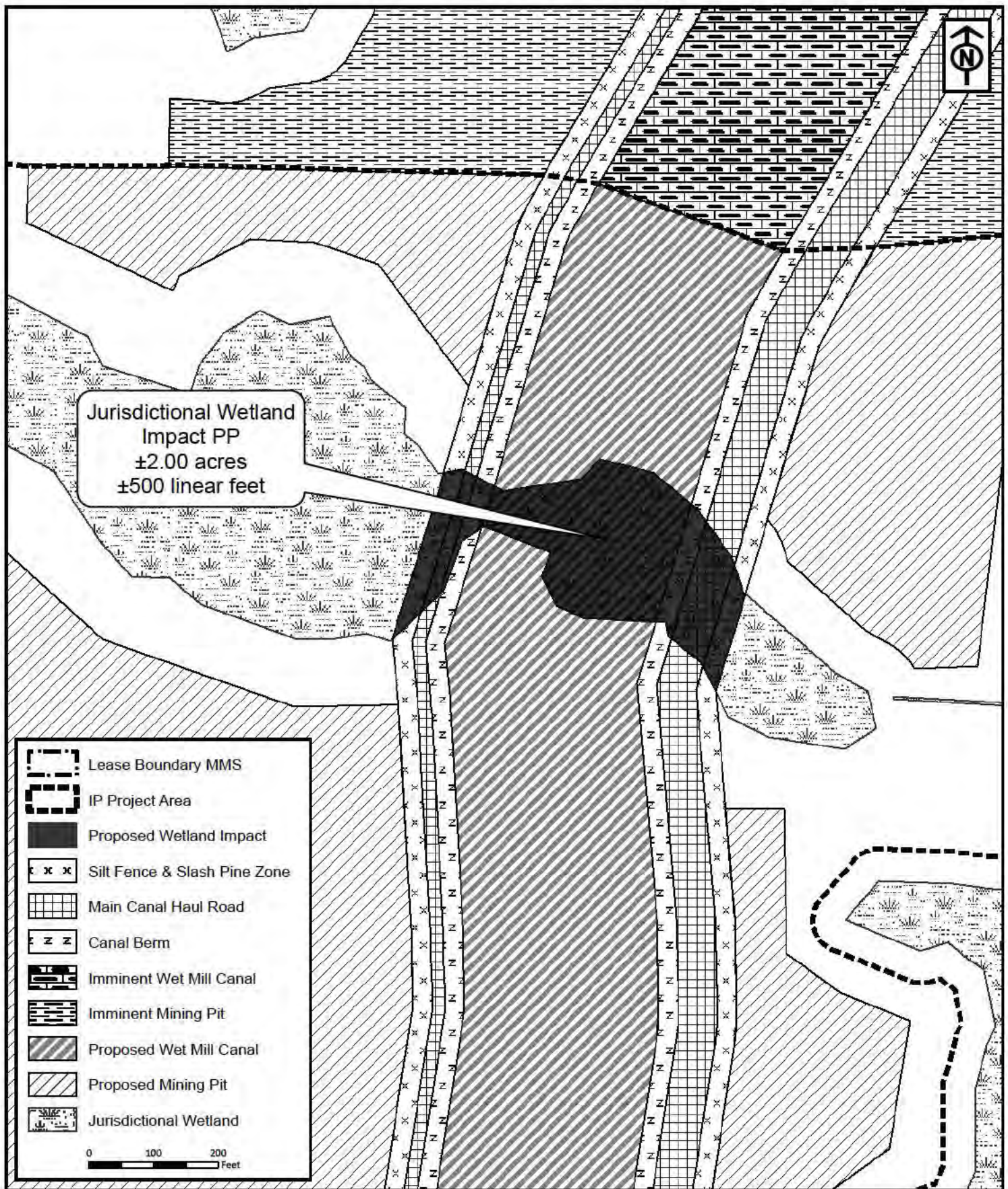


RLC Project No.: 15-122
 Appendix E: Figure 2
 Sketch Date: 29 October 2015
 Prepared By: TS
 Map Scale: 1 inch = 2,000 feet

Mission Mine South
 Charlton County, Georgia

Proposed Wetland Impacts
 Prepared For: Southern Ionics Minerals

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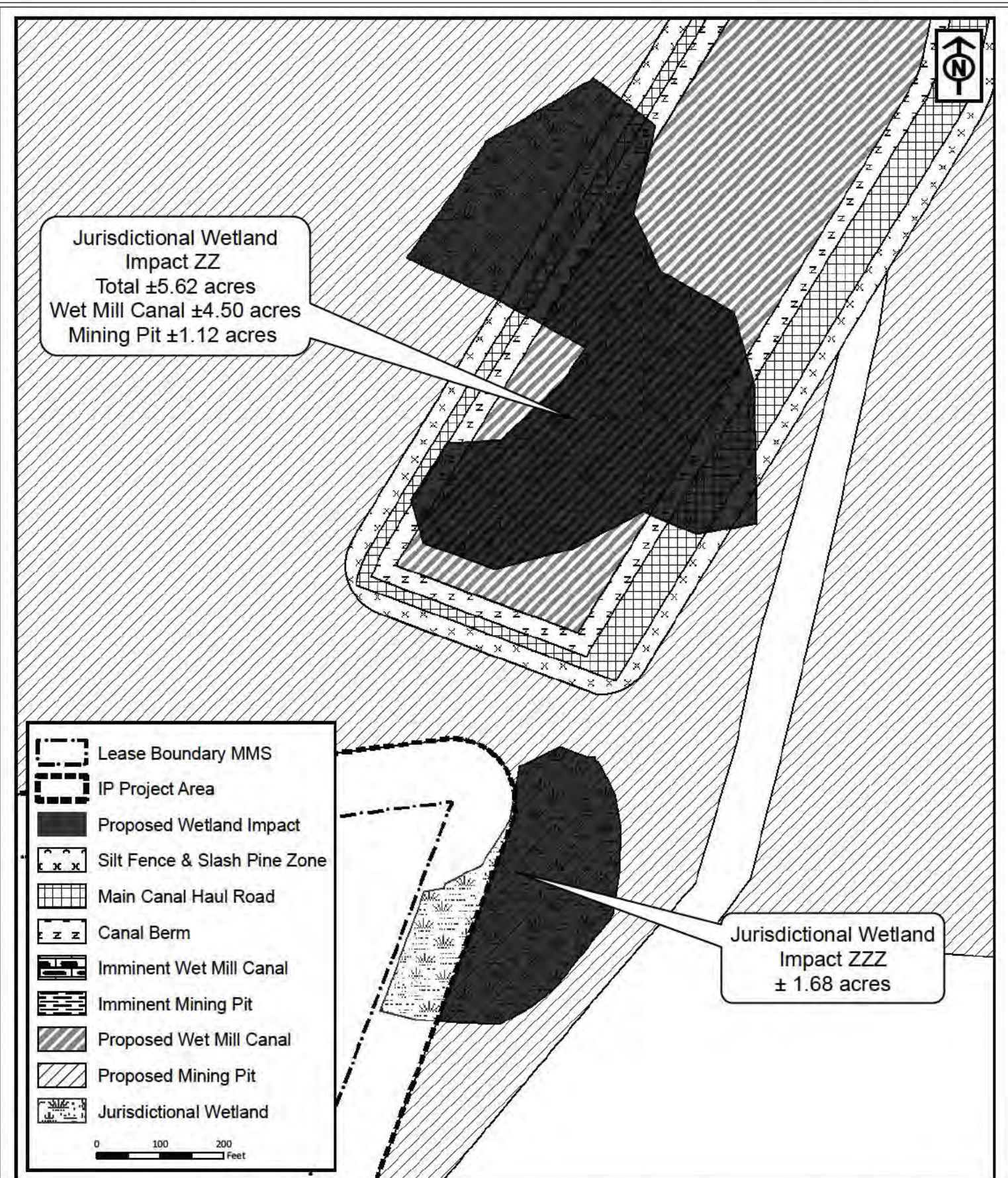


RLC Project No.: 15-122
 Appendix E: Figure 3.1
 Sketch Date: 29 October 2015
 Prepared By: TS
 Map Scale: 1 inch = 200 feet

Mission Mine South
 Charlton County, Georgia

Proposed Wetland Impact PP
 Prepared For: Southern Ionics Minerals

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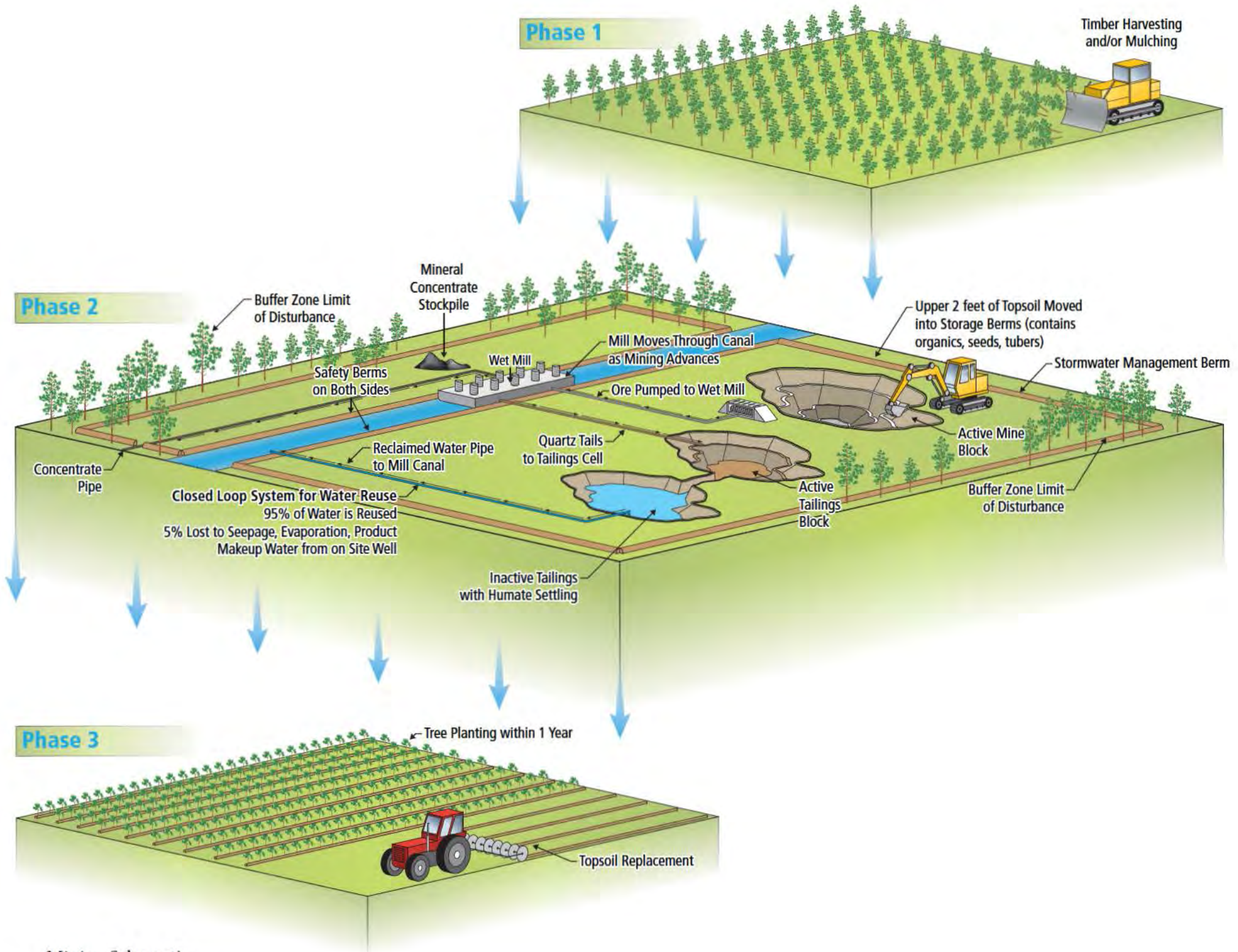


RLC Project No.: 15-122
 Appendix E: Figure 4.1
 Sketch Date: 29 October 2015
 Prepared By: TS
 Map Scale : 1 inch = 200 feet

Mission Mine South
 Charlton County, Georgia

Proposed Wetland Impacts ZZ & ZZZ
 Prepared For: Southern Ionics Minerals

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Mining Schematic