

US Army Corps
Of Engineers
Wilmington District

PUBLIC NOTICE

Issue Date: August 24, 2006
Comment Deadline: September 25, 2006
Corps Action ID #: SAW 2006-40205-063

The Wilmington District, Corps of Engineers (Corps) has received an application from the **Town of Southern Pines** seeking Department of the Army authorization to impact Section 404 jurisdictional Waters of the United States, including wetlands, adjacent to an unnamed tributary to Horse Creek, a tributary to Drowning Creek, for the purpose of constructing a new raw water storage reservoir for the Town of Southern Pines, Moore County, North Carolina. The 52 acre project area is located west of U.S. Highway 1, south of Thunder Road (NCSR 1102), southwest of the Town of Pinebluff, North Carolina. The proposed impacts include the discharge of fill material into 0.7 acre of wetlands and 277 linear feet of stream channel and the flooding of 0.9 acre of wetlands, 167 linear feet of stream channel and 1.4 acres of open water.

This Public Notice includes specific plans and location description. This Public Notice and all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant: Town of Southern Pines
Attn: David White, Director of Public Services
482 East Connecticut Avenue
Southern Pines, North Carolina 28347

Agent: Dr. J.H. Carter III & Associates, Inc.
Attn: Ms. Tracy Rush, Senior Biologist
515 Midland Road, Suite F
Southern Pines, North Carolina 28387

Authority

The Corps will evaluate this application and decide whether to issue, conditionally issue, or deny the proposed work pursuant to applicable procedures of Section 404 of the Clean Water Act.

Location

The 52 acre project area is located west of U.S. Highway 1, south of Thunder Road (NCSR 1102), southwest of the Town of Pinebluff, North Carolina. Latitude 35.08411 North and Longitude 79.4979 West.

Existing Site Conditions

The project site was clearcut in the early 1990's and currently consists of young loblolly (*Pinus taeda*) and longleaf (*Pinus palustris*) pine regeneration. The soils on the project site are classified as Candor sand (somewhat excessively drained) and Vacluse loamy sand (well drained). The adjoining properties consist of forestland and agricultural fields. The project site contains 1 jurisdictional system consisting of 3 features (pond, forested wetland and herbaceous wetland), totaling 3.0 acres. The pond would be classified as Palustrine, unconsolidated bottom, permanently flooded, diked/impounded. The forested wetland would be classified as Palustrine, scrub-shrub, broad-leaved deciduous, saturated. The herbaceous wetland, located at the upper reaches of the pond, would be classified as Palustrine, emergent, persistent, saturated.

Applicant's Stated Purpose

The purpose of the proposed project is to construct an emergency raw water reservoir for the Town of Southern Pines.

Project Description

The Town of Southern Pines proposes to construct a raw water reservoir for use in drought conditions. They propose to discharge of fill material into 0.7 acre of wetlands and 277 linear feet of stream channel for the construction of a new dam. In addition, they propose to flood 0.9 acre of wetlands, 167 linear feet of stream channel and 1.4 acres of open water. Project plans are included with this Notice.

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice in the NCDWQ Central Office in Raleigh serves as application to the NCDWQ for certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 1650 Mail Service Center, Raleigh, North Carolina 27699-1650 Attention: Ms. Cyndi Karoly by September 18, 2006.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and has determined that registered properties, or properties listed as being eligible for inclusion therein are located within the project area and/or will be affected by the proposed work. The 223.775 acre *McLeod Family Rural Complex* is located near the project area and may be effected by this project.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined pursuant to the Endangered Species Act of 1973 (ESA), that the proposed project may affect federally listed endangered or threatened species or their formally designated critical habitat. This includes the endangered Red-cockaded Woodpecker (*Picoides borealis*). In addition, this project may also affect the Sandhills Milk-vetch (*Astragalus michauxii*), a Federal Species of Concern. Consultation under Section 7 of the ESA will be initiated and no permit will be issued until the consultation process is complete.

Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impacts, 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 (in accordance with Executive Order 11988), 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. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

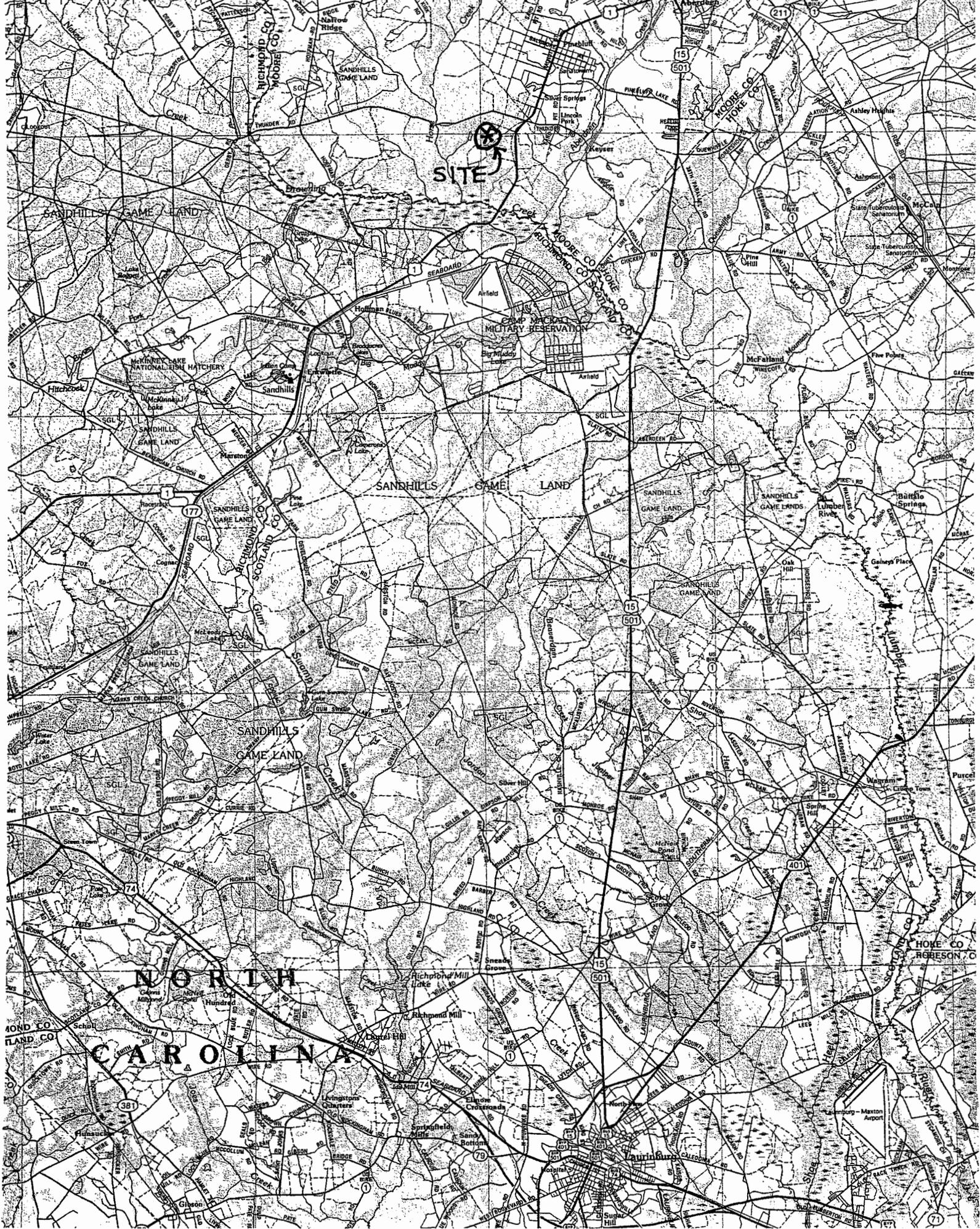
Commenting Information

The Corps is soliciting comments from the public; Federal, State and local agencies and officials; Indian 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 Corps 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 (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

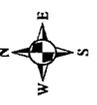
Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, September 25, 2006. Comments should be submitted to Jennifer S. Frye, Post Office Box 1890, Wilmington, North Carolina, 28402-1890, telephone (910) 251-4923.

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NORTH CAROLINA





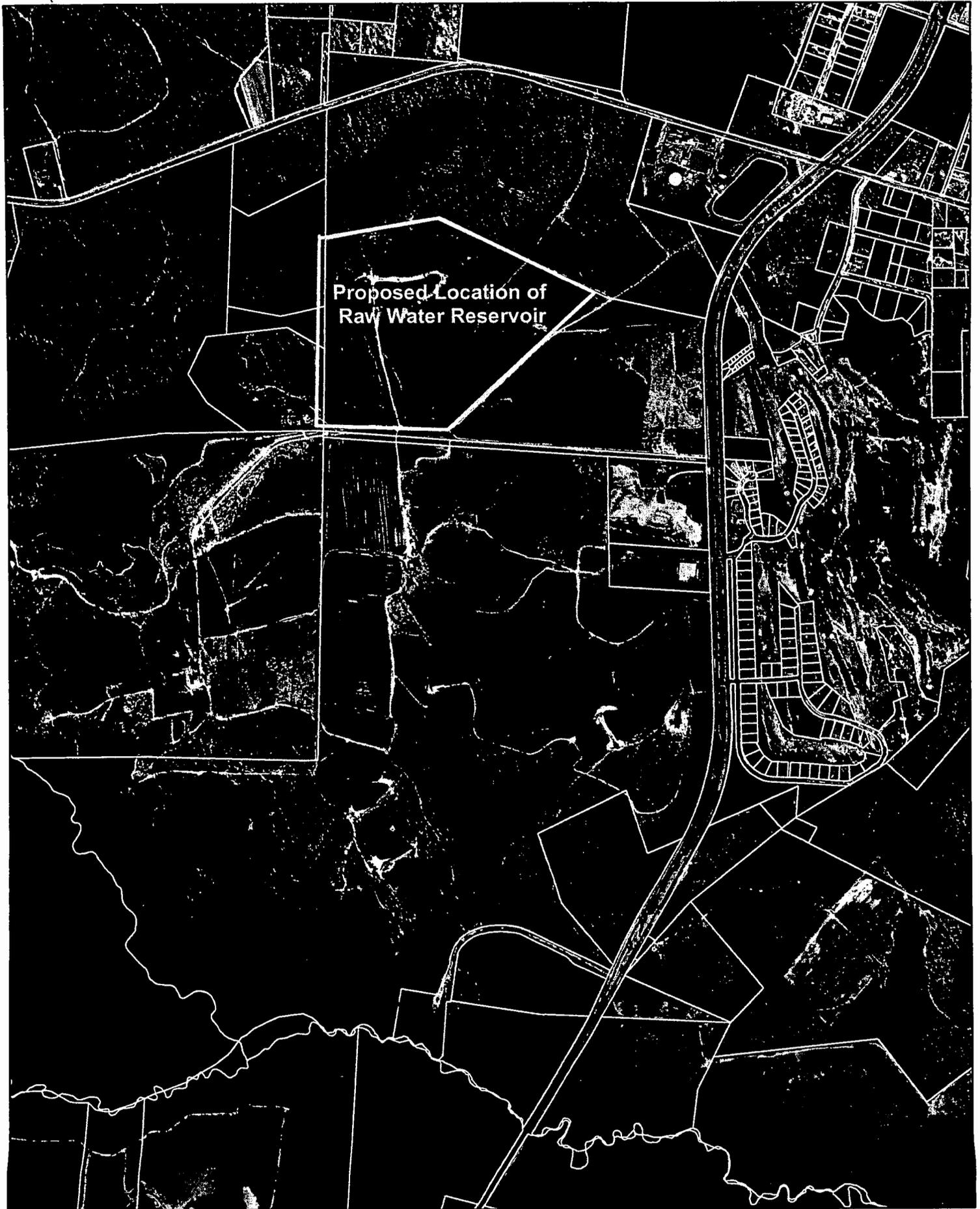
Proposed location of the Offstream Raw Water Reservoir for the Town of Southern Pines,
Moore County, NC.





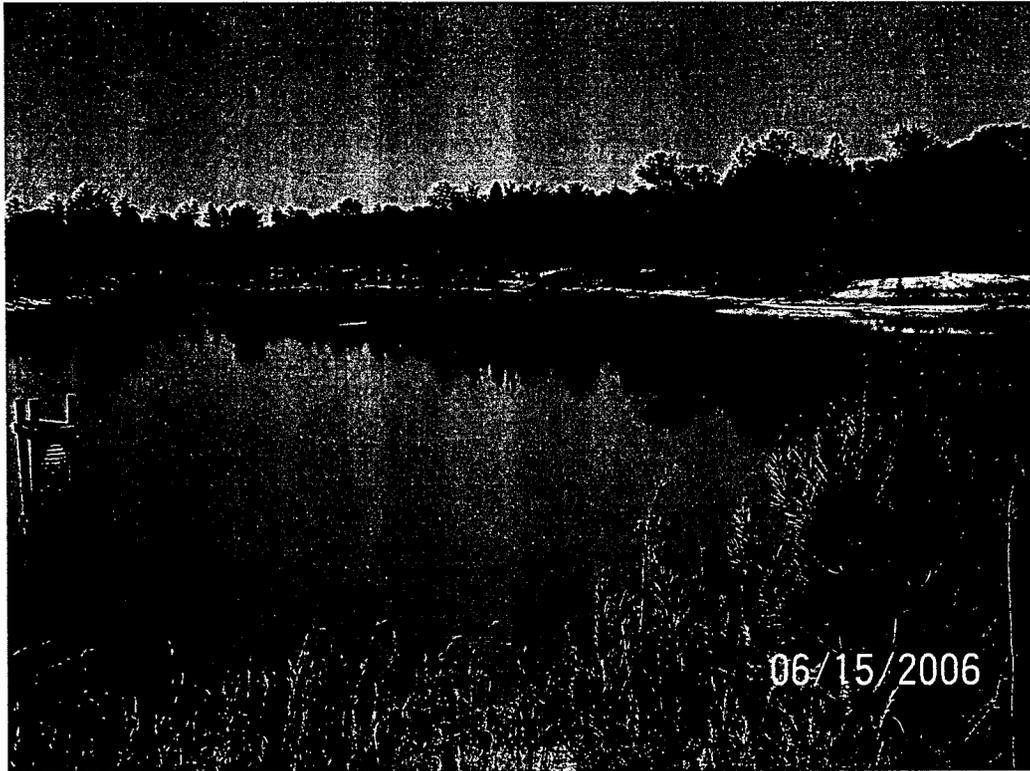
Location of proposed Raw Water Reservoir for the Town of Southern Pines and adjoining property owners, Moore County, NC.





Location of potential preservation area for the proposed Offstream Raw Water Reservoir for the Town of Southern Pines, Moore County, NC.





Photographs of proposed location of the Southern Pines Offstream Raw Water Reservoir

Alternatives Considered Town of Southern Pines Offstream Raw Water Reservoir

The Town of Southern Pines has experienced significant problems with the water supply intakes located in Drowning Creek. The issue has been the elevation of the intakes with respect to the depth of the creek during dry periods. Specifically, the intakes do not remain completely submerged and the Town is unable to get enough raw water to the plant to meet service needs. Hobbs, Upchurch and Associates (HUA) conducted this study to review all available options for preventing this problem in the future.

In order to ensure that the Town can meet the demands of its potable water system, it is essential that an adequate supply of raw water is constantly available to the plant. In reviewing the possible options, the following alternatives were considered.

A. **No Action**

The choice to take no action in the matter of providing constant raw water supply to the plant is not considered a viable alternative. Currently, during low-flow conditions, the intakes are not completely submerged and the Town is unable to get enough raw water to the plant, leaving the Town with a potable water crisis. In order to provide the Town with potable water during low-flow conditions in Drowning Creek, the Town must do something.

B. **Proposed Action—Pump to Offstream Raw Water Reservoir in anticipation of drought**

The construction of an Offstream Raw Water Reservoir would allow the Town to fill this “reserve” reservoir during the winter or high-flow months to ensure that an extra supply of raw water is on hand during the driest months, thereby reducing the amount of water needing to be withdrawn directly from Drowning Creek during severe drought conditions. This alternative has less environmental issues than Alternative E – Weir and Offstream Raw Water Reservoir.

C. **Move Intake Structure to Side Channel**

Moving the intake structures to a man-made side channel does not alleviate the issue of the water level and intake height. That is, the water level in a side channel would be the same as the main channel and would not insure that the intakes would remain submerged. Digging the side channel deeper than the main channel would result in constant siltation of this channel resulting in repeated maintenance, leaving the Town in a similar situation that they are in now.

D. **Lowering Intake structures in Drowning Creek**

Lowering the current intake structures was investigated, but the existing structures cannot be lowered further without compromising their function. Lowering them further would lead to constantly sucking silt and other undesirable bottom debris into the system.

E. **Weir and Offstream Raw Water Reservoir**

Originally, in addition to an Offstream Raw Water Reservoir, the Town of Southern Pines was proposing to install a permanent sheet pile weir in Drowning Creek. This would have raised the water level in the creek just enough to keep the intakes submerged during most low flow conditions. Normal flows would pass over the weir and the 7Q10 flow would be maintained by flow through a pipe in the bottom of the weir. Under this alternative, the Town would be able to fill the reservoir with the intakes submerged up to the worst drought conditions. It was determined that the weir would not be necessary as long as the capacity of the Offstream Reservoir was sufficient. The proposed weir had a number of environmental issues including downstream flow, impacts to wetlands and streams and fish and wildlife impacts.

**Avoidance and Minimization
Town of Southern Pines
Offstream Raw Water Reservoir**

The Town of Southern Pines determined that the installation of a permanent weir within Drowning Creek was not necessary as long as the capacity of the raw water reservoir was sufficient.

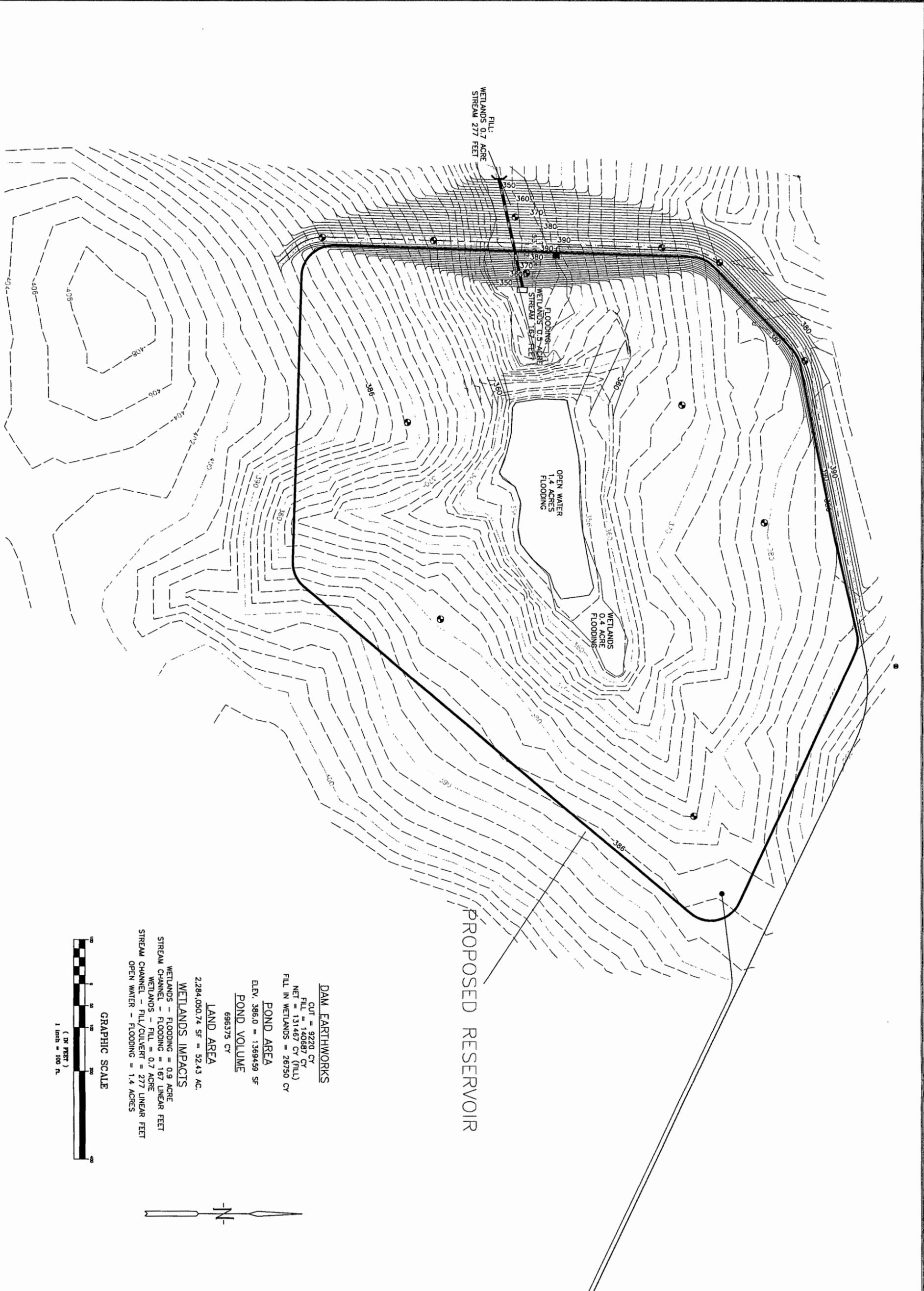
**Proposed Mitigation
Town of Southern Pines
Offstream Raw Water Reservoir**

The Town of Southern Pines proposes a 1:1 mitigation ratio for wetland impacts (1.6 acres) along with preservation of approximately 8 acres of high quality forested wetlands adjacent to the existing pump station within the floodplain of Drowning Creek (see attached map).

The stream channel on the proposed reservoir site is degraded and silted in due to erosion from the existing earthen dam so the Town proposes a 1:1 ratio for stream channel impacts (444 linear feet).

No mitigation is proposed for impacts to the existing open water pond.

Based on the above ratios, the Town plans to purchase 2.0 acres of riparian wetland mitigation and 444 linear feet of stream channel mitigation from the N.C. Ecosystem Enhancement Program (EEP) along with the preservation of approximately 8 acres of high quality forested wetlands along Drowning Creek.



PROPOSED RESERVOIR

DAM EARTHWORKS

CUT = 9220 CY
 FILL = 140687 CY
 NET = 131467 CY (FILL)
 FILL IN WETLANDS = 26750 CY

POND AREA

ELEV. 366.0 = 1369459 SF

POND VOLUME

696375 CY

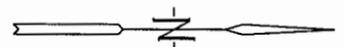
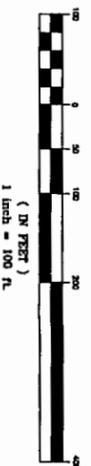
LAND AREA

2,284,050.74 SF = 52.43 AC.

WETLANDS IMPACTS

WETLANDS - FLOODING = 0.9 ACRE
 STREAM CHANNEL - FLOODING = 1.67 LINEAR FEET
 WETLANDS - FILL = 0.7 ACRE
 STREAM CHANNEL - FILL/CULVERT = 277 LINEAR FEET
 OPEN WATER - FLOODING = 1.4 ACRES

GRAPHIC SCALE



OFFSTREAM RAW WATER RESERVOIR
 SOUTHERN PINES, NORTH CAROLINA
DAM GRADING PLAN

HOBBS, UPCHURCH & ASSOCIATES, P.A.
 CONSULTING ENGINEERS
 SOUTHERN PINES, NORTH CAROLINA
 300 S.W. Broad Street, Southern Pines, North Carolina 28387
 Phone: (910) 692-5616 - Fax: (910) 692-7342

REVISIONS			
SYM.	DESCRIPTION	DATE	BY

DATE: OCT., 2002
 DESIGNED: DTU
 DRAWN: FDW
 CHECKED: DTU
 SCALE: 1" = 100'
 SHEET NO. C-1