

**ORANGE COUNTY PLANNING & INSPECTIONS DEPARTMENT**

Craig N. Benedict, AICP, Director

Administration  
(919) 245-2575  
(919) 644-3002 (FAX)  
www.co.orange.nc.us



306F Revere Road  
P. O. Box 8181  
Hillsborough, NC 27278



**MEMORANDUM**

**TO:** Frank W. Clifton, Jr., County Manager  
Board of County Commissioners

**FROM:** Craig Benedict, AICP, Planning & Inspections Director

**DATE:** November 30, 2009

**SUBJECT:** UNC School of Medicine – Orange County Research Farm  
BOCC December 15, 2009 Information Item

In October 2003, UNC asked for a Zoning Determination on a parcel of land in southwest Orange County, Bingham Township. The property was an approximate 57-acre parcel where UNC-CH had been operating for approximately 30 years. They wanted to expand the facility and asked what processes were necessary. The Planning Department consulted with the County Attorney and County Manager and collectively determined the following regarding this facility.

- The project is classified as P23 Universities, Colleges & Institutes of the 4.3 Permitted Use Table of the Orange County Zoning Ordinance. The university is the principal use and all other uses are ancillary and accessory to the principal use. Teaching and research are the primary results of the activity.
- Where the facilities accommodate faculty and students in an office building, these areas are subject to zoning under the permitted by right category of P23 in Agricultural Residential areas. Where activities are related to the university in terms of research regarding agricultural livestock, then these areas may be more clearly related to farm activities, which are exempt from zoning. The applicant submitted the University Environmental Assessment plan for comprehensive review as a courtesy and accordingly subjected themselves to State Clearinghouse environmental review.

The Planning Department has limited authority over activities that are exempt under state statute regarding farm operations. Most UNC facilities are not inspected by local governments. However, buildings for office and research were required to go through the site plan process.

The site plan for the facility was approved in September 2004 to include an additional 66,771 square feet of floor area beyond the existing 23,514 square feet. An environmental assessment (EA) was conducted by S&ME. The Executive Summary from that EA is enclosed.

Since then Orange County has communicated with UNC regarding their existing state DENR permits. The facility has expanded a portion (approximately 11,000 square feet) of their original expansion plan at this time.

*Please see additional comments from Tom Konsler, Environmental Health Department (attached).*

## 1.0 Executive Summary

This Environmental Assessment (EA) describes potential impacts associated with the construction of a new building at the Research Resources Facility (RRF), located in Orange County, North Carolina. This EA has been prepared for review by The University of North Carolina at Chapel Hill (UNC). The purpose of this EA is to provide State Agencies with information to determine if the planned project has a level of impact on the environment such that preparation of an Environmental Impact Statement (EIS) is required. In the event that impacts to the environment resulting from the *Proposed Action* are kept to a level that does not evoke preparation of an EIS, a Finding of No Significant Impact (FONSI) will be the anticipated conclusion.

UNC is obligated under G.S. 113A to perform this study. This EA was prepared in compliance with Chapter 25, Section .0500 of SEPA. Accordingly, this EA includes a discussion of the following items: 1) need for the proposed action; 2) a reasonable alternative to the proposed action; 3) methods proposed to mitigate or avoid environmental impacts; and 4) the environmental effects of the proposed activity and alternatives. This EA is organized in accordance with the guidance and format set forth in the North Carolina Department of Administration's Environmental Assessment Guidelines, dated March 1999. This EA was prepared by S&ME scientists, and provides a fair, objective and impartial analysis of the *Proposed Action*.

The proposed development will take place within the grounds of the RRF. The RRF is located on an estimated 57-acre tract approximately 3,000 linear feet (lf) north of the intersection of Orange Chapel Clover Garden Road/Crawford Dairy Road (NCSR 1956) and Old Greensboro Road (NCSR 1005) in Orange County, North Carolina (- 35°54'10" North, 79°14'21" West). The subject property is depicted on Figure 1, Appendix I. The facility includes a one-story, 6,616 square-foot (sf) research building. A portion of the project area is fenced as pasture, and contains three heated shelters. Several storage buildings, an unoccupied farmhouse and a trailer used as a residence by an employee of the facility are also located on-site. An incinerator and storage refrigerator are located adjacent to the loading dock of the existing building.

Historically, the main building has been used for a variety of research-related purposes, including the housing and quarantine of laboratory animals. The RRF is operated on State-owned land, operated by the Division of Laboratory Animal Medicine (DLAM), and funded in part by research grants. The RRF is accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC), is United States Department of Agriculture (USDA) inspected, and is operated in accordance with federal and state regulations governing such facilities.

Currently, the RRF is used primarily to house animals used in research at the Francis Owen Research Laboratory (FORL), which is located in Carrboro, North Carolina. In recent years, the research colony for studies involving gene therapy at FORL has expanded significantly. The National Institutes of Health (NIH) and National Heart, Lung and Blood Institute (NHLBI) support the important animal research colony housed there as a national resource.

The RRF has been successful in obtaining grants to fund on-going research conducted at the facility. The amount of grant support, however, has exceeded the capacity of the current research facilities. The central aim of the *Proposed Action* is the construction of a new 10,000 sf masonry building that will house over 26,000 research rodents in 6,000 ventilated cages. The facility will include cage wash units, locker rooms for staff, lab space and work areas, an office, storage areas and a loading dock. The size of the proposed facility expansion is based upon the recommendation of the DLAM. Further, since the RRF is a remotely located ample laboratory, work space must be included to accommodate personnel engaged in research at the facility.

In addition to construction of the new building, the proposed project further entails the widening of an existing gravel access road, a gravel parking area for 30 vehicles, new walkways to the addition, and improvements to the current entrance of the RRF. The project footprint is located entirely within previously-cleared land currently consisting of maintained lawn, and minimal grading will be required. The addition of the roadway and parking area will be designed to fit within the existing topography of the site.

Based upon an evaluation of the proposed project and development area, it is unlikely that construction of the new building and gravel access road will result in significant impacts to the resource categories outlined within this document, with the exception of topography, which will be altered in a small, local area to accommodate the building pad.

**From:** Tom Konsler  
**Sent:** Monday, November 30, 2009 5:36 PM  
**To:** Craig Benedict; Rosemary Summers  
**Cc:** Shannon Berry; David Stancil; Greg Wilder  
**Subject:** RE: UNC Research farm in Bingham township

Craig,  
I can give you some information regarding the wastewater system which can be incorporated into your report.

The facility is served by a spray irrigation wastewater system that is reviewed and permitted by the Division of Water Quality (DWQ) of NC Department of Environment and Natural Resources. These systems have pretreatment facilities similar to a package treatment plant, followed by disinfection and storage. The treated effluent is sprayed on the ground surface for soil absorption and evapo-transpiration.

This system was permitted by DWQ for an expansion which involved constructing new lagoon storage, additional tanks and spray fields. The system expansion has been installed and is currently in use. Our field staff has recently communicated concerns regarding the condition and the operation of the new system to the DWQ as a result of observations made during our routine inspection. We are still awaiting a response as to what DWQ plans to do about the concerns.

Tom

Tom Konsler, R.S.  
Environmental Health Director  
Orange County Health Department  
PO Box 8181  
Hillsborough, NC 27278  
[tkonsler@co.orange.nc.us](mailto:tkonsler@co.orange.nc.us)