

## MECKLENBURG COUNTY

# Land Use and Environmental Services Agency

October 17, 2007

Mr. Solomon Fortune Charlotte-Mecklenburg Planning Commission 600 East Fourth Street Charlotte, North Carolina 28202

**Re:** Rezoning Petition 2007-140

Approximately 14.80 acres located on the east side of Reames Road

between Bella Vista Court and Lawnmeadow Drive

Dear Mr. Fortune:

Representatives of the Air Quality (MCAQ), Groundwater & Wastewater Services (MCGWS), Solid Waste (MCSW), Storm Water Services (MCSWS), and Water Quality (MCWQ) Programs of the Mecklenburg County Land Use and Environmental Services Agency (LUESA) have reviewed the above referenced rezoning petition. In order for the Mecklenburg County LUESA to support this rezoning, the following recommendations should be implemented and appear as notes or modifications on site plans:

### **Air Quality**

Development of this site may require submission of an asbestos Notification of Demolition and Renovation to MCAQ due to possible demolition or renovation of an existing structure. A letter of notification and the required forms will be mailed directly to the petitioner by MCAQ.

### **Groundwater & Wastewater Services**

The age of construction of the home on parcel 037-176-16 indicates that a water supply well may be present. The well may or may not currently be in use. GWS suggest that the petitioner conduct a water supply well survey to determine the presence or absence of wells. A local groundwater ordinance that addresses the installation, repair and abandonment of wells (including monitoring wells) was effective January 2005. No demolition or grading activity should be conducted until existing wells are either properly abandoned or the wellhead cordoned off to protect it from damage. The Mecklenburg County Groundwater & Wastewater Services (GWS) Program should be contacted at 704-336-5500 prior to undertaking any well related activity.

The age of construction also indicates that at one time the home was served by an on-site wastewater disposal system (septic system). No regulation governs the abandonment of septic systems; however, GWS does recommend that septic tanks be pumped by a

licensed waste hauler to removal any residual contents, and then crushed and backfilled. This recommendation is made because tanks that collapse pose a safety hazard and improperly abandoned septic tanks may not be able to support the weight of vehicular traffic, structural foundations, or people.

Groundwater & Wastewater Services request the following statements be added to the notes of the site plan:

All water supply wells shall be protected by flagging and fencing during site development or abandoned per the Mecklenburg County Groundwater Well Regulations prior to any demolition or grading activity.

Existing septic tanks shall be located, pumped by a licensed waste hauler to removal residual contents, crushed and backfilled prior to any demolition or grading activity.

### **Solid Waste**

Mecklenburg County Solid Waste requests the petitioner submit a Solid Waste Management Plan prior to initiating demolition and/or construction activities to include, at a minimum, the procedures that will be used to recycle all clean wood, metal, and concrete generated during demolition and construction activities. Additionally, the plan should specify that all land clearing and inert debris shall be taken to a properly permitted facility. The Plan shall also state that monthly reporting of all tonnage disposed and recycled will be made to the Mecklenburg County Solid Waste Program. The report shall include the identification and location of all facilities receiving disposed or recycled materials.

Mecklenburg County is committed to reduction of construction/demolition waste. Technical assistance is available at no charge to those companies willing to partner with the County in this effort.

## **Storm Water**

No Comment.

## **Water Quality**

In order for the Mecklenburg County Water Quality Program to support this rezoning, the following recommendations should be implemented and appear as notes on site plans.

The proposed project will include a substantial amount of impervious area, which will directly affect surface water quality due to storm water runoff from the project. Storm water runoff becomes contaminated with pollutants associated with the impervious area usage, transporting these pollutants to surface waters. In addition, this impervious area acts to increase the volume and velocity of storm water entering surface waters, which affects stream channel stability and negatively impacts water quality and aquatic habitat. In order to mitigate the impacts of these pollutants and to protect water quality conditions, the proposed project should incorporate the criteria specified below.

### **General Recommendations:**

## Stream Buffers

If applicable to the subject property, intermittent and perennial stream segments draining less than 50 acres shall be delineated by a certified professional using the U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology. The locations of streams and the required buffers shall be depicted on site plans.

If applicable to the subject property, a 35-foot protective buffer shall be established on both sides of intermittent and perennial stream segments draining between 50 acres and 100 acres. A buffer shall include two zones, a 20-foot undisturbed Streamside Zone, and a 15-foot limited-use Upland Zone. The allowable uses in these Zones are to be the same as those outlined in the City of Charlotte Zoning Ordinance, Chapter 12, Part 8, S.W.I.M. Stream Buffers, for streams draining greater than 100 acres, but less than 300 acres. If applicable to the subject property, all intermittent and perennial stream segments draining less than 50 acres should have a minimum 30-foot vegetated buffer including an undisturbed or bioengineered 10-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area in the 10-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques approved by MCWQP. All buffers shall be measured from the top of the bank on both sides of the stream.

## Storm Water Quality Treatment

Any separate, defined drainage area within a project that will have greater than 24% built-upon area is to have water quality best management practices (BMPs) to treat storm water runoff from the entire built-upon area within the separate, defined drainage area. The BMPs are to be constructed to achieve 85% Total Suspended Solid (TSS) removal for the entire post-development runoff volume for the first 1-inch of rainfall. The BMPs must be designed and constructed in accordance with the N.C. Department of Environment and Natural Resources (NCDENR) Best Management Practices Manual, April 1999, Section 4.0.

The use of Low Impact Design (LID) such as bioretention systems in tree islands, grassed swales, vegetated buffers, level spreaders, and other innovative systems in a "treatment train" is optional and encouraged, where applicable. LID systems can be employed in whole or in part, to meet the 85% TSS treatment standard for storm water runoff. LID must be designed and constructed per the NCDENR Best Management Practices Manual, April 1999, Section 4.0.

#### Storm Water Volume and Peak Controls

Any separate, defined drainage area within a project that will have greater than 24% built-upon area is to have best management practices (BMPs) to control the entire runoff volume for the 1-year, 24-hour. The runoff volume drawdown time for the BMPs shall be a minimum of 24 hours, but not more than 120 hours. The peak runoff rates should be controlled with BMPs to match the predevelopment runoff rates for the 10-year and 25-year, 6-hr storms <u>or</u> perform a downstream analysis to determine whether peak control is needed, and if so, for what level of storm frequency.

Storm water runoff from the development shall be transported from the site by vegetated conveyances to the maximum extent practicable.

Please contact the staff members who conducted the reviews if you have any questions. The reviews were conducted by, Leslie Rhodes (Leslie.Rhodes@mecklenburgcountync.gov) with MCAQ, Jack Stutts (Jack.Stutts@mecklenburgcountync.gov) with GWS, Joe Hack (Joe.Hack@mecklenburgcountync.gov) with MCSW, Bill Tingle (Bill.Tingle@mecklenburgcountync.gov) with MCSWS, and Rusty Rozzelle (Rusty.Rozzelle@mecklenburgcountync.gov) with the MCWQ.

Respectfully,

Heidi Pruess Environmental Policy Administrator