



MECKLENBURG COUNTY
Land Use and Environmental Services Agency

February 19, 2008

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

Re: Rezoning Petition 2008-053
Approximately 60.30 acres located on the south side of W Arrowood
Road between I-485 and Whitehall Executive Center 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

No Comment.

Groundwater & Wastewater Services

No Comment.

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/or 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.

Applicable Ordinances:

35 foot S.W.I.M. Buffer

One stream segment located on the subject property drains more than or equal to 100 acres and less than 300 acres. According to the City of Charlotte Zoning Ordinance, Chapter 12, Part 8- Surface Water Improvement and Management (S.W.I.M.) Stream Buffers, Section 12.804, *Buffer Standards*, streams meeting this criterion are required to have buffers of 35 feet in width on the applicable sides of the stream. One pond located on the property intersects the 35 foot S.W.I.M. stream segment. Ponds that intersect the stream channel shall have the same buffers as the original stream measured from the top of bank of the pond. This buffer requirement shall not apply to wet ponds used as structural BMP's.

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:

Central Catawba District Stream Buffers

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.

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 as specified in the design Manual.

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.

All buffers shall be measured from the top of the bank on both sides of the stream. The uses allowed in the different buffer zones as described in the S.W.I.M. Stream Buffer requirements in the Zoning Ordinance, Chapter 12, as well as the other provisions of the S.W.I.M. ordinance shall apply in the Central Catawba District (except buffer widths).

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.

For residential projects with greater than 24% BUA, 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 or perform a downstream analysis to determine whether peak control is needed, and if so, for what level of storm frequency.

For commercial projects with greater than 24% BUA, 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 and perform a downstream analysis to determine whether peak control is needed, and if so, for what level of storm frequency, or if a downstream analysis is not performed, control the peak for the 10-yr and 25-yr, 6-hour storms.

For commercial projects with less than or equal to 24% BUA, but greater than one acre of disturbed area, control the peak to match the predevelopment runoff rates for the 2 and 10-yr, 6-hr storm.

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

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Respectfully,

Heidi Pruess

Environmental Policy Administrator