

# LAKE JEANETTE ASSOCIATION

November 3, 1995

## Storm Water Drainage Systems - Resident Interaction Policy

Lake Jeanette, by zoning condition, has ribboned paved streets, open-side ditches, drainage swales and detention ponds that serve to take storm water off of home sites and detain it long enough for silt, fertilizers, and other unwanted contaminants to settle out before reaching Lake Jeanette. Each of these systems is vital in that every step in the process is dependent on the one that precedes it and influences the one that follows. How each of the residents of Lake Jeanette interacts with this overall system is everyone's concern and responsibility. The following are the three major components and the resulting policies of Lake Jeanette Residents:

### Open-Side Ditches

On all public streets the City of Greensboro is granted right of way which is property that includes the pavement, shoulders, ditches and any space between the ditch and front property line of lots. Maintenance then, of the pavement, ditches and culvert pipes under the driveways, are the property, and therefore the responsibility, of the City of Greensboro. The city asks that residents provide routine maintenance to the drainage ditches and culvert pipes associated with their homes. This would include keeping yard waste out of the ditch and debris off the top of yard inlets. If there is ever a situation where you feel the job is larger that you can handle, or if the inlet seems to be clogged completely, the city asks that you call the Department of Transportation at 373-2339. If, at a future date, you wish to change your driveway, inlets within your yard, or anything else that will affect the flow of water within the open ditch system, you will need to call this same number in addition to getting architectural approval from the village association.

### Drainage Easements

Many of the areas around homes within Lake Jeanette either back up to or side drainage easements. These easements show up on the recorded plats for neighborhoods and are noticeable, in some cases, by a graded swale and/or berm that directs water in a particular direction across your property. These swales are an important part of the drainage system for they carry water off individual sites to drainage inlets, where the water is then carried by underground pipe to detention ponds.

Maintenance for these drainage swales is the responsibility of the village associations. By their design the swales will be saturated for a few days after heavy rains and may cause some temporary build up of water until settlement occurs. Berms may not be

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maintained free of debris and obstructions to function correctly. Also, the cutting of association sub-surface drainage pipe to drain standing water is not allowed. Unless this type of work is done by a licensed contractor, cutting the sub-surface pipe for individual yard inlets degrades the system greatly over time. If a situation arises around your home that involves this drainage system in which you feel something is not functioning correctly, please call the association and a representative will come to review the situation. Again, if the problem is within the street or side ditch call the above stated number for the City of Greensboro.

Many homes require foundation and gutter drains to carry water away from the home to minimize erosion. Drainage swales are designed for sheer flow conditions only, not point discharge. In other words, a drainage pipe discharging water with great force at a particular point will do damage to the swale over time. Gutter and foundation drains cannot be carried directly to the drainage swales in the back. They should be stopped short of the easement and a small patch of gravel placed at the point of discharge. Another method is to dig a small dry well (6" diameter) and cover with a small yard inlet. Water will "gurgle" out of this well slowing the water down and minimizing damage. If done correctly, both systems are almost unnoticeable.

The planting of landscaping will be allowed within the drainage easements as long as the landscaping is kept out of the drainage path (this is the area directly at the base of the swale). No fencing of any kind will be allowed to cross the drainage easement. Fencing has the potential of trapping material in heavy flow situations and causing further problems up stream. Decks and other permanent structures are strongly discouraged from encroachment on these easements. Any encroachment must be reviewed and approved by the City of Greensboro, Cornwallis Development Co. and the association prior to construction. A written agreement by the owner regarding maintenance and other responsibilities shall also be required with the request for approval. If the Association needs to take any encroaching structures out for maintenance reasons, all costs will be passed on to the resident. Also, any replacement costs will be the responsibility of the resident.

#### Detention Ponds

##### *Aqua Shade*

There are several products on the market that tint water within the detention ponds from mud red to various shades of blue. Products like "Aqua Shade", which is environmentally safe and serves to keep the pond algae from becoming as bad during the hot summer months, would accomplish this. It takes only a few caps full of dye to color an entire pond to enable it to last a good while. The City of Greensboro has approved the use of this product after several successful trial applications. The Association has information on these products for residents. If you live adjacent to a

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detention pond and would like to dye the water blue, a petition of the residents in the immediate area stating that common desire must be submitted. These residents will be assessed periodically for the cost of the dye. A village association approved contractor will be responsible for its continued application as long as these residents continue to pay the assessment and desire the use of the product. Judgments on the amount of colored dye administered, and therefore the color of the pond will be at the sole discretion of the association.

*Surface Algae*

Surface algae in the detention ponds occurs during the hot summer months and flourishes in conditions that contain direct sunlight, shallow water, fertilizer and nitrate run-off, and drought conditions. These conditions are common in ponds around Lake Jeanette. According to the Guilford County Agricultural Extension the only product that could be considered to kill surface algae is Calcium Sulfate. The problem is that, if administered incorrectly, this product could disturb the chemical balance of the water and soil and kill all plant life around the ponds edge. The Association therefore, cannot advocate or allow the use of this product to remedy what is an aesthetic condition. Algae, in its most extreme state could rob enough oxygen from the water to disturb animal life but would not affect the pond landscaping or the water detention capability.

*Dredging Schedule*

The detention ponds control of runoff is the primary concern of the village associations. Each pond has a holding capacity to treat the impervious surface runoff within the pond's drainage area. The association bases the cleaning and dredging cost on a planned five-year routine schedule. The association will continually monitor each pond to insure adequate water detention capacity and proper function.

*Plantings maintenance*

The maintenance of the landscaping, both in and around the detention ponds, is done on a monthly schedule by the association. In most cases, low maintenance material has been used to minimize cost. Pruning of material and replacement of mulch are the two biggest items on the maintenance budget. By their design, the landscape plans promote the material to grow together into a continuous wall of vegetation. The association has chosen this, as opposed to fencing, to keep trespassers out of the ponds. As with all landscaping, it will take several years for each pond to reach this state.