

**COMMENTS – PROPOSED DEVELOPMENT ORDINANCE
TOWN OF CHAPEL HILL
PUBLIC HEARING
JUNE 3, 2002**

Comments on Stormwater, Article 5

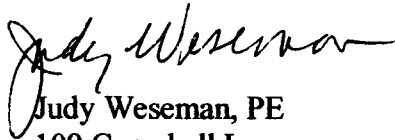
1. Appendix C is missing from the draft posted on town web page, leading to inability to determine submittal requirements.
2. Town is using one year storm peak flow as design storm and states it in a way that invites confusion among engineers and developers. We should be consistent with the standard municipalities are going with statewide: design for a 10 year storm and test the stormwater system for a 100 year storm to ensure that public safety is protected with no flooding or flow that endangers life. Do we want a watered down standard?
3. Use post development conditions as a basis for stormwater calculations, not predevelopment. Consider moving to full build out assumptions which can be implemented locally without huge costs – generally existing zoning is assumed to be the true future condition – an extra margin of safety results.
4. Recommend plans be subject to approval by Town Engineer instead of Town Manager consistent with other state municipalities.
5. In places where a registered landscape architect is required, the ordinance struck the option of other qualified professionals. This should be reinstated. The ordinance does not appear to take into account the evolving bioremediation work and wetlands restoration work, both where plant selection is made by a biologist and/or other professionals. Normally an engineer must design the bioremediation area with input from a biologist. This important stormwater retention method, currently in use in Chapel Hill at University Mall, would appear to not be considered in the requirement for landscape architect.
6. On As Built Plans and other places in Article 5, they require plans to show design specifications for all stormwater management facilities but not for conveyances, i.e. there are no controls for open channels, buried culverts, etc. Undersized culverts are responsible for many existing stormwater problems in Chapel Hill.
7. Some municipalities allow more severe storms, i.e. 25 year, 50 year, and 100 year (Hurricane Fran) to exceed the drainage capacity of a culvert and back up against a road, eventually overtopping it. There is no reference to policy here for what level storm should be allowed to overtop a road and if the town would consider the backing up a stormwater detention method (we need a policy on this). We then also need to determine what level road overtopping is allowed on. Usually NCDOT thoroughfares cannot be overtopped but small residential streets can.
8. It is very difficult to assess opportunities for improvement in the DO without the associated Stormwater Manual which, to the best of my knowledge, hasn't been written yet. They must complement each other in addressing all these issues.

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9. In talking about Best Management Practices, we should use terminology consistent with that used in NC state level publications - call riparian buffers just that, not use euphemisms. The whole issue of buffers seems weak - most towns are going to 100 ft buffers with a requirement for base floor elevation 2 ft. above the 100 yr floodplain elevation.

10. Town Council should consider requiring developers to put stub outs at terminations of their stormwater systems so future development can tie into existing subsurface structures.

Respectfully submitted,



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