



Franklin County Communique to the Planning Board

REQUEST FOR UDO AMENDMENTS 15-UDO-02

STAFF ANALYSIS

15-UDO-02

Staff Discussion

During a recent hearing before the County's Board of Adjustment, a variance petition was considered regarding community wells. Specifically, the applicant requested that their proposed subdivision be exempted from the requirement for subdivisions with 16 lots or more install a community well in the absence of a public water supply. The variance request was ultimately denied by the Board of Adjustment and the petitioner asked staff to examine the purpose of the community well requirement. Discussions between planning staff and the public utilities departments staff occurred shortly thereafter and ultimately staff found requirements may place an undue burden on developments which may ultimately affect homeowners in a negative manner due to community liability concerns for maintenance of the well and water supply system.

Staff is recommending that the requirement to install a community well for major subdivisions that are 16 lots or more be removed from the Unified Development Ordinance. Provisions regarding the installation and placement of community wells are recommended to remain but the ultimate decision as whether to install a community well or private well would be left to the developer.

Section 29-7: Utilities

(B) *Water Facilities*

~~Within Franklin County's jurisdiction, every lot in all new major subdivisions of (16) sixteen lots or more which are approved subsequent to the effective date of this amendment are required to connect, at the expense of the subdivider or developer, to a public water system. If all lots within the subdivision are of five acres or more the resulting subdivision will not be subject to these provisions. Such Public systems may be maintained, installed and operated by a private corporation, however, engineered plans, site specific improvements shall be approved by the Franklin County Public Utilities Department. All public and private community water systems shall be designed and constructed to provide potable water and a minimum fire flow of five hundred (500) GPM (gallons per minute) at twenty (20) PSI (pounds per square inch).~~

While all costs of extending the water lines to, into, and within the subdivision are to be borne by the subdivider or developer, the county reserves the right to extend, at county expense, any existing public water line. As stated in subsection (A) above, the construction of water lines shall be done in conformity with the county specifications for utility construction. Further, upon

completion and approval of said construction of all water lines to, into, and within the subdivision or development, the water improvements shall be conveyed, together with access easements for maintenance, to the county with a one year warranty, from the date of full acceptance, on all improvements. Thereafter, the county shall maintain said lines as same shall be part of its water system.

For all community water systems, the materials, design, and installation shall be subject to approval by the Division of Water Quality, NC Department of Environmental and Natural Resources, and/or the Franklin County Health Department. Water distribution lines shall be no smaller in size than eight (8) inches diameter with the following exception:

On cul-de-sacs which are served by fire hydrant connected to a line of six (6) inches diameter, or larger, water service may be provided with lines of small than six (6) inches, but not less than two (2) inches, if a blow-off valve is established at the end of such line or the line is connected to another line within the subdivision to form a loop. This exception shall not apply where such line represents the interconnection between the subdivision and the municipal system. On streets which are “stubbed out” at property lines to permit future development, service must be provided by lines of at least eight (8) inches normal diameter.

Private community water systems shall meet the approval of the Franklin County Health Department, Environmental Health Section. All private community water systems shall meet the following minimum standards:

- (1) The water supply well shall be of drilled construction with casing as approved by the N.C. Department of Natural Resources and Community Development. Casing should be grouted to a minimum depth of twenty (20) feet below the land surface. The bottom end of the well casing shall be ground into rock when in a consolidated formation. The top of the casing shall be terminated at least twelve (12) inches above the land surface. Every water supply well shall have a continuous bond concrete slab or well house concrete floor extending at least three (3) feet horizontally around the outside of the well casing. Concrete minimum thickness of the slab or floor shall be four (4) inches.
- (2) The upper terminal of the well casing shall have a sanitary seal with approved screened vent. In addition, a sample tap and piping arrangement of same pipe diameter as well drop pipe for discharge of water to waste shall be provided at the well head. A flow meter and water pressure gauge are strongly recommended but not required.
- (3) Water distribution mains shall be no less than eight (8) inch diameter pipe size. Each eight (8) inch diameter main shall not exceed one thousand (1,000) feet in length. All service taps shall be a minimum of three-quarter (3/4) inch pipe diameter. A continuous loop water system is strongly recommended where practical. All water lines shall be NSF (National Sanitation Foundation) approved for potable water.

- (4) A hydro-pneumatic water storage tank, properly sized, shall be provided. The size will be based on the formula: 25 gallons X number of lots = total storage volume. If an individual storage tank has over one hundred and twenty (120) gallons (actual storage volume) it shall be stamped ASME approved. However, tank must be of appropriate size to meet fire flow requirements.
- (5) The developer shall be required to have the well sampled, in order to insure a safe supply of water. A one-time only inorganic sample shall be required initially. If samples indicate the necessity, further sampling may be required. Bacteriological samples shall be required on a quarterly basis for total coliform bacteria. Disinfection by continuous chlorination (liquid feed) may be required if bacteriological analysis indicated the need, except that any well yielding water containing fecal coliform (which cannot be eliminated from the well) shall be abandoned. Water samples shall be analyzed by a certified lab and a copy of the lab analysis furnished promptly to the Franklin County Health Department, Environmental Health Section.
- (6) The well head shall be protected by a structurally sound well house. No potentially hazardous contaminants or material will be stored in the well house.

For the purpose of this section, the terms “water system” and “sewer system” shall include all appurtenances and fixtures normally associated with such facilities, including fire hydrants, gate valves, blow-offs, manholes, and pumping apparatus.

New structures that need water service for which a building permit shall be issued shall be required to tap onto the county water system provided that a water transmission main exists along the road which fronts the property and that the structure will be located within 250 feet of the water transmission main.

PLANNING STAFF RECOMMENDATION TO THE PLANNING BOARD

Recommend approval of the requested UDO amendments as noted above