LEXINGTON COUNTY
JOINT MUNICIPAL WATER AND SEWER COMMISSION
STANDARD WATER AND SEWER SYSTEM "RECORD DRAWING" REQUIREMENTS

I. GENERAL INFORMATION

The following information shall appear on all record drawings:

1. Project Name and Address
2. Subdivision Name, Lot, Block, Section, Tax Map Number, Phase and Total Number of Lots.
3. Scale: Prefer 1" = 50', No Less than 1" = 100'
4. North Arrow and Location Map
5. Developers Name, Address and Telephone Number
6. Street Names
7. Title Block with Engineers Name, Address, Telephone Number, and Date of Record Drawings. (Show revision dates also.)
8. Signature, Seal and Certification of SC Design Engineer.
9. Locate all pipe and utility system crossings (electric, cable, telephone, gas, etc.). Include vertical and horizontal separation distances, depth of cover and pipe materials.
10. Provide total cost for each system (include engineering, surveying, legal and contract cost as a lump sum). Give separate costs for water, sewer and pump station systems.
11. All sheets shall be numbered consecutively in one set.
12. Exclusive easements deeds on all pipelines to be dedicated to the Lexington County Joint Municipal Water and Sewer Commission (unless located in a public road right-of-way). The width of the easement is based on a 1:1 slope, measured from the invert of the pipe to the finished ground level, with a minimum of 15 feet. The easement width increase shall be in 5 foot increments.
13. If the record drawing is to be used as the easement sketch, a SC Registered Land Surveyor seal and signature is also required on the record drawing.

II. SEWER

1. Provide manhole rim and invert (in, out or center, as applicable) MSL elevations, and actual line grades. Show size, length (center to center), and material of pipe used. It is the Commission's policy not to accept gravity lines with grades less than the minimum for any particular pipe size, based on Ten State Standards. Manholes shall be tied down to building corners, fire hydrants, property corners, or other suitable permanent locations.

2. Manholes shall be stationed from the downstream manhole going upstream, with all manholes reverting to 0+00 for the next line segment. Station all services (water and sewer) from downstream manhole, show distance in feet from the main line to the end of the service, and locate services from property corners. In cases where only water service is being provided, service line locations shall be presented in a manner acceptable to the Commission, and the design engineer shall discuss this matter with the Staff Engineer for the Commission prior to preparing record drawings.

3. Provide a chart on the drawing giving total number of manholes, L.F. of sewer pipe, size and material, number of single services and number of double

services. Also, include the name, address, and telephone number of the Contractor who installed the system, and the date of installation.

4. Provide MSL elevation on top of force main at its termination point, along with a final profile of the force main from origin to termination.

III. LIFT STATION

1 . Provide MSIL elevations of influent line invert, bottom of wetwell, initial pump control settings and top elevation of pump station slab.

2. Provide wetwell diameter.

3. Note on plans the make, HP, RPM and impeller size of pump provided. Also, initial pump drawdown test results and discharge/shutoff heads with date tested.

4. Provide two complete Operation and Maintenance manuals that include maintenance schedules, spare parts list and vendors/representative information.

IV. WATER

1. Tie-down locations of all valves, bends, tees, and fire hydrants to manholes, buildings and other permanent structures. Valves, bends, and tees may also be tied-down to fire hydrants. A minimum of two tie-down dimensions are required. Where valves are clustered together, show distance between valves. Show depth of cover on all valves and fittings.

2. Detail fire hydrants, show distance from hydrant to gate valve, valve to line, and depth of burial.

3. Tie-down location of meter service from buildings, manholes, fire hydrants, or other fixed reference points. Give size of services. Locate end of services off of property corners.

4. Provide a chart on the drawing giving the total number of main line gate valves, L.F. of water pipe, size and material, number of single services, number of double services, total number of meter services, and number of fire hydrants. Also include the name, address, and telephone number of the Contractor who installed the system, and installation date.

V. SUBMITTAL PROCEDURE

Submit 2 copies of the Preliminary record drawings and Easement Deeds to the Commission a minimum of 5 working days prior to the Commission's final inspection. The Commission will field verify the record drawings and Easement Deeds. If incorrect they will be returned to the Engineer. This step will be repeated until the record drawings or deeds are approved by the Commission. A final Commission inspection will be held.

Submit the following items 5 working days prior to the DHEC final inspection.

a. 3 Sealed Bond Copies (5 if also used as Easement Map).

b. Electronic media disk(s) (3-1/2") containing the drawing files for the record system. The drawing files shall be saved to the disk(s) in AutoCad 2004 or earlier (Commission has ACAD 2004) and shall include all

information required to be shown on the final Commission approved record drawings.

c. 1 Copy of Filed Subdivision Plat showing property lines with bearings and distances.

d. 1 Final Easement Deed (if applicable).

e. 3 Copies of Easement Map (if Easement Map is not combined with Record Drawings).

f. Bill of Sale (conveying improvements to Commission).