

## APPENDIX "D"

### SEWER MAIN SPECIFICATIONS

Specifications prescribing materials and workmanship required by the District for sewer main construction are as follows:

1. The contractor shall post a performance bond in cash, irrevocable letter of credit or surety bond in the amount of 100% of the total cost of any work in excess of \$25,000 with the District Manager or Clerk prior to commencement of work. Upon completion of the work to the satisfaction of the District Superintendent, said bond shall be returned. In the event that the work is not satisfactorily completed, the District shall be entitled to keep all or any portion of the bond to be applied toward the completion of the work to the Superintendent's satisfaction. *[Amended 2-14-2005]*
2. All mains shall be laid in straight runs between manholes.
3. All manholes shall have pre-cast stairs, base and P.S. 10 pressurized seal gasket pipe fittings. All sections shall be placed together with two (2) rings of one inch (1") Rub'R-Nek, Ram-Nek, or approved equivalent. All manholes shall be at final grade. All barrel sections shall meet ASTM C-478. All manhole lids shall be self-sealing.
4. All manholes shall be tested, prior to backfilling, by performing a leakage test.
5. All pipe up to fifteen inch (15") diameter shall be PVC, PSM, ASTM D-3034. Pipe greater than fifteen inch (15") diameter shall be reinforced concrete, ASTM C-76. PVC pipe shall have gasketed joints; concrete pipe shall have joints conforming to ASTM C-443. Ductile iron pipe may be required, in the sole discretion of the District, in certain cases. No other type of pipe shall be used without the prior written consent of the District.
6. All sewer mains shall be tested using the "Cherne Air-Lock" low pressure air test, or equivalent as approved by the District. Exfiltration tests shall only be used with the prior written consent of the Superintendent. No infiltration test shall be accepted.
7. All pipes shall be bedded with Class "A" or Class "B" bedding. Compaction of at least 95% of the distributed trench.
8. All tests and construction shall be witnessed by District personnel with twenty-four (24) hour prior notice required for tests.
9. Sewer mains shall be laid at a depth of at least eight feet (8') where possible. Lines which are to be laid at depths of less than six feet (6') require the express written consent of the District. Any lines which are laid at depths shallower than six feet (6') shall be insulated using a nominal 2 lb./closed cell foam with a flame spread of 30, water resistance conforming to ASTM D-2126 and covered in a PVC or polyethylene wrap of at least 35 mils.