

## APPENDIX B

### PROCEDURES FOR APPLICATIONS TO CONSTRUCT SEWERAGE FACILITIES TO BE CONNECTED TO VALLEY FORGE SEWER AUTHORITY FACILITIES

The sewerage system built to extend sewerage services to new areas will serve the public for many years. The system, after the warranty period, will become the property of the Valley Forge Sewer Authority, and the Authority will maintain and operate it for the use of the public.

The sewers carry waste into the Authority's interceptor and treatment plant. Measures must be taken to protect sewers from damage or unnecessary loads as a result of improper use or excessive infiltration into the system.

The following procedures are provided to insure that new sewerage facilities are properly designed and installed. When followed, they will benefit the builder by minimizing the expenditure of money during the warranty period for maintenance and protect the public interests after the system is turned over to the Authority.

#### I. GENERAL

- A. All plans must be prepared under the supervision of, or by a Pennsylvania registered professional engineer acceptable to the Authority, whose seal, signature and registration number shall appear on each sheet of the plans.
- B. All plans must meet the current requirements of the Pennsylvania Department of Environmental Resources, U.S. Environmental Protection Agency, and Valley Forge Authority.
- C. Each application shall include a realistic estimate of cost of the sewerage project (materials, cost of installation, engineering, supervision and inspection; including excavation and restoration of unpaved surfaces and re-paving of existing roads).
- D. At the time of preliminary plan application, each applicant must include a deposit of two (2) percent of the estimated cost of the sewerage project against which will be charged any engineering and legal expenses incurred by the Sewer Authority in checking the application, processing permits, etc. The minimum fee is One Hundred Dollars (\$100.00).
- E. Each application shall include a time schedule for construction and connection.

- F. Four (4) copies of all plans and other documents shall be submitted to the Authority clerk via the Township at each stage of application.
- G. The applicant must design and build the system to the point of connection to Authority system. However, if Authority requires pipe sizes for interceptor larger than that required for applicant, the Authority will pay for difference in cost.
- H. If any pumping stations are required, the Authority Engineer should be consulted for plan requirements and for detailed specifications.
- I. If sewage other than domestic waste is to be discharged, the following is also required:
  - 1. A detailed description of origin and nature of waste.
  - 2. A process plan for pretreatment of waste to bring it to Authority specifications and any applicable State and Federal requirements.
  - 3. A detailed plan for construction of the plant (consult the Authority Engineer).
  - 4. A detailed plan for operation of the plant and testing of effluent.

## II. SUBMISSION OF PLANS

The submission of plans to the Valley Forge Sewer Authority for sewers to be constructed in East Pikeland Township will follow the same general procedure as those required for submission and approval of subdivision or land development plans. The plan designations given below are intended to be equivalent and comparable to the various stages of subdivision plans submitted to the Township.

- A. Sketch Plan
  - 1. Copies of the subdivision sketch plan submitted to the Township shall also be submitted to the Valley Forge Sewer Authority. The plan submitted to the Authority shall show the approximate sewer layout and the point of connection to the Authority's system or ends of capped sewers. In all other respects, the plan shall meet the requirements of the East Pikeland Township Subdivision and Land Development Ordinance for sketch plans.

2. The principal purpose of the sketch plan is to provide the Authority with information on proposed additions to the sewer system and to afford the opportunity for the prospective subdividers and the Authority to work out problems related to the timing and location of service. This stage of planning is not intended to provide information with regard to final location and grades of sewers or design of pumping facilities.

B. Preliminary Plans

The preliminary plan shall include the preliminary design of sewerage systems including, but not limited to, the locations and grade of sewers, pumping stations and force-mains. In all other respects, the plan shall meet the requirements of the East Pikeland Township Subdivision and Land Development Ordinance. With particular respect to the design of sewer, the following requirements shall apply:

1. The Valley Forge Sewer Authority's datum shall be used for all elevations.
2. Standard engineering symbols shall be used to designate the various sewerage facilities.
3. The ground line profile shall represent the elevation along the centerline of the proposed pipeline and should indicate where final grade will differ from present grade. Preliminary profiles of sewer lines may be shown in conjunction with preliminary street profiles, or in the event of location of sewer lines on rights of way, by separate plan.
4. The profile and plan shall be on the same sheet, corresponding portions of the profile below the plan.
5. Existing and proposed utilities near the proposed sewer line shall be shown on the plan and on the profile.
6. Basement and first floor elevations shall be shown on the profile locations on the plan. These elevations may be shown as approximate for proposed lot development.
7. Manholes shall be numbered in a systematic way, leaving space available for the Authority Engineer to supply a three (3) or four (4) digit prefix for each manhole number.
8. Lengths of runs between manholes shall be indicated, along with slope (in %), and size and type of pipe.

9. Special features, such as drop manholes, concrete encasement, special bedding materials, waterproof manhole covers, special fill, etc., shall be shown on the plan.
10. Invert elevations shall be indicated to two (2) decimal points.
11. Special paving or sod replacement shall be shown.
12. Where capped sewers are installed, the plans shall provide for lateral connections for each lot extended to two (2) feet inside of the property line for each lot.
13. Where connections for future use are required, the plan shall provide for such connections to be laid to a point two (2) feet behind the curb line of streets.

C. Final Plans

1. The final plans, which may be prepared in conjunction with final subdivision plans, shall contain the completed design for all sewers, pumping stations or other facilities required. They shall be prepared in compliance with orders of the Authority resulting from the review of preliminary plans.
2. If rights of way are involved, descriptions of such rights of way shall be provided, along with information as to the record owners of land involved. Before construction of any sewer systems is authorized by the Authority, the applicant will be required to submit executed rights of way in the form prescribed by the Authority.
3. Final plans shall be accompanied by completed application forms and modules prepared in the name of the Valley Forge Sewer Authority as may be required to obtain the necessary permits from the Pennsylvania Department of Environmental Resources or other State or Federal agencies.
4. Final application shall be accompanied by a deposit of fifteen (15) percent of the project cost to pay for inspection during construction; testing and inspection as construction is completed; and infiltration, and, if necessary, TV inspection during bond period, and TV inspection just prior to release of bond. This fund is to be added to if needed or returned if not expended completely. The minimum deposit is One Thousand Dollars (\$1,000.00).

5. A performance and maintenance bond shall be submitted in a form acceptable to the Authority for one hundred (100) percent of the construction cost with a term of two (2) years after Certification of Satisfactory Completion of Sewer Construction. This Certificate will be issued by the Authority Engineer after pressure testing and visual inspection of lines upon completion of all construction in the project or approved section thereof.
6. Final applications shall include a Sewer Agreement acceptable to the Authority, obligating the applicant to follow Valley Forge Sewer Authority regulations and rules, to connect all sewer lines and pumping stations to the system, to turn over the system to the Authority without reservations, and to allow the Authority to use the system as it wishes before turnover.

### III. CONSTRUCTION PHASE

- A. Resident inspection shall be at the discretion of the Authority. The resident inspector shall have the authority to halt construction if he feels construction is not being done according to specifications.
- B. Each section between manholes and all force mains must be pressure tested before any house connections are made. All sections and manholes downstream of the house must be certified as acceptable by Authority Engineer before any house connections can be made.
- C. When the entire sewerage system is complete and found satisfactory on test and visual inspection by Authority Engineer, a Certificate of Satisfactory Completion of Sewer System Construction will be issued by the Authority Engineer.
- D. Each house connection must be inspected by plumbing inspector before being back-filled. For houses going on line immediately, connection fee must be paid and connection permit obtained before connection is made. For capped sewers, testing will include laterals. House connections shall be double-weight cast iron pipe. In capped sewer developments, house connections are required only to the septic tank, but should be located and arranged for eventual connection to the sanitary sewer.
- E. Material samples and material compliance statements shall be provided at the request of the Authority Engineer.
- F. One (1) reproducible copy of as-built drawings shall be provided to the Authority.

IV. BOND PERIOD PHASE

- A. If system is in use, periodic inspection will be made by the Authority during periods of high water table.
- B. If manhole inspection indicates excessive infiltration, TV inspection will be done at expense of applicant to locate leaks.
- C. Leaks will be repaired by the applicant at his expense. If work is not done promptly, leaks will be repaired by the Authority at the applicant's expense.
- D. At the end of the maintenance bond period, the entire system installed by the applicant will be TV inspected at his expense and all defects corrected at his expense.
- E. Upon finding the system in acceptable condition and dedication of the system by the applicant, the Authority will release the Construction and Maintenance Bond.