Section 5. Side Sewer Requirements

- 5 Side Sewer Requirements:
- 5.1 <u>General Provisions:</u> These standards are only for gravity lines and are not intended for pressure mains. Pressure mains shall meet ASTM specifications and/or specifications established by the District's consulting engineers for the project.
- 5.1.1 All materials and workmanship in connection with the installation of any sewers connected to the public sewer shall be as specified by this Resolution and/or the "Specifications and Standard Details" contained in the District's current "Developer Project Manual."
- 5.1.2 Connection shall be made at the point designated by the District and all plumbing outlets shall be connected to the sanitary sewer.
- 5.2 <u>Grade and Depth:</u> All side sewers shall be laid on not less than a two percent (2%) grade (two feet per one hundred feet), nor more than two hundred percent (200%) (two feet vertical; one foot horizontal) grade. Side sewers shall not be laid within thirty (30) inches from any foundation wall of any building and if there is no foundation wall, shall not be laid within thirty (30) inches from the outer lines of any footings, pilings, or building supports.

Minimum cover shall be:

- 5.2.1 Not less than sixty (60) inches at the curb line;
- 5.2.2 Not less than thirty-six (36) inches at the property line;
- 5.2.3 Not less than eighteen (18) inches on private property;
- 5.2.4 If minimum cover on private property cannot be attained, ductile iron pipe or ABS Schedule 40 pipe shall be installed;
- 5.2.5 If minimum cover in the right-of- way cannot be attained, ductile iron shall be installed.
- 5.3 Alignment, Bedding, and Backfill: The side sewer shall be laid at uniform grade and in straight alignment so far as is possible. Changes in direction shall be made only with curved pipe or with no greater than forty-five (45) degree bends. The connection to the structure plumbing outlet shall be make with 45 degree bends or a combination of bends. A bend of ninety (90) degrees shall include a clean-out. If the trench bottom is hardpan or contains mud or water, all pipe shall be laid on a four (4) inch granular base of 5/8" minus crushed rock, pea gravel, sand, or a combination thereof. Backfill around the pipe and to a point four (4) inches above it shall be the same material.
- 5.4 <u>Material Specifications</u>: The following material specifications are approved for use in the District:
- 5.4.1 Ductile Iron Pipe Conforming to AWWA specification C151 with cement and mortar

lining conforming to AWWA specification C104 with joints and fittings conforming to AWWA specifications C110 or C153.

- 5.4.2 <u>High Density Polyethylene Pipe (HDPE)</u> Conforming to ASTM F714, D3350. Installed in conformance with ASTM F585. Joined by thermal butt fusion per manufactures recommendation and ASTM D2657.
- 5.4.3 <u>Polyvinyl Chloride (PVC) Pipe</u> Conforming to ASTM D3034, SDR35 or F789 with rubber gasket joints conforming to ASTM 3212 using a restrained rubber gasket conforming to ASTM 477.
- 5.4.4 Acrylonitrile-Buladiene-Styrene (ABS) Pipe Conforming to ASTM designation D2661.
- 5.5 Sewer Pipe Size:
- 5.5.1 A four (4) inch side sewer shall be required for any single-family residence.
- 5.5.2 A maximum of four (4) single family residences may be connected to a common side sewer provided the side sewer is not less than six (6) inches in diameter and clean-outs are installed at all locations where fittings are used, including the connection to the house. A side sewer easement is required. (See Section 11.2.)
- 5.5.3 Apartment houses containing up to twenty-nine (29) apartments must have a minimum six (6) inch side sewer and six (6) inch fittings used from and including the junction. Additional buildings and/or connections will require a plan review by the District's General Manager and/or Engineer. A minimum deposit may be required to cover plan review costs, as well as determination of the permit fees, which are shown in Exhibit "A" (page 30).
- 5.5.4 Side sewer requirements for office buildings, apartments with greater than 29 units, and other commercial buildings, will be determined on an individual basis. See Exhibit "A" (page 30) for the fee schedule.
- 5.6 <u>Side Sewers Longer than 150 feet:</u> No six (6) inch side sewer shall be more than one hundred fifty (150) feet in length, except in such cases as may be approved by the General Manager and/or the Engineer. See Section <u>11.1</u>.
- 5.7 <u>Trailers, Mobile Homes and Auxiliary Dwelling Units:</u>
- 5.7.1 <u>Trailers and Mobile Homes:</u> Trailers must have a flush ABS connection accessible with a screw-down cap. Mobile homes situated on an individual single-family lot shall meet the same side sewer requirements as single-family structures.
- 5.7.2 <u>Auxiliary Dwelling Unit:</u> A four (4) inch side sewer from an auxiliary dwelling unit will be permitted to connect to a four (4) inch side sewer serving and existing single family structure.

Only one auxiliary dwelling unit per lot will be allowed to connect to an existing four (4) inch side sewer. If the lot is of such size that it can be divided, then Sections <u>5.5.2</u> and <u>11.2</u> will apply. Under all situations the auxiliary dwelling unit is subject to all permits, fees, connection charges, notifications, billings and requirements of a single family residence. See Exhibit "A" (page 30) for the fee schedule.

- 5.8 <u>Clean-Out:</u> A clean-out is required whenever more than a 1/8th (45 degree) bend is used and whenever two consecutive 1/8th bends are installed. In addition, clean-outs are required immediately outside a house or structure, and a clean-out is required every one hundred (100) feet for side sewers which are in excess of one hundred (100) feet in length. Additional clean-outs may be required where the District deems it necessary. All clean-outs within paved areas must be brought to surface and shall be capped and installed in a manner approved by the District. Clean-outs in landscaped areas shall have a minimum cover of twelve (12) inches.
- 5.9 Sewer and Water Line Separation: In general, parallel construction requires a minimum separation of four (4) feet with the sewer line constructed a minimum of one and one-half (1.5) feet below the water line on a separate shelf. Perpendicular crossing requires the sewer line be one and one-half (1.5) feet below the water line. Any exceptions shall comply with the latest edition, or most current edition, of the Washington State Department of Ecology "Criteria for Sewage Works Design." In any case, construction shall comply with the local water provider's regulations.
- 5.10 <u>Trailer/RV Disposal for Single-Family Residences:</u> Installation of a trailer sanitary disposal system requires a side sewer permit and inspection. The installation shall include a screw-on cap and must be approved by the District.

5.11 Connection to Public Sewers:

- 5.11.1 <u>Stub or Tee Location:</u> Stub and tee locations in most cases, are available at the District office. However, this information has not been verified by District personnel. Therefore, neither the District nor its personnel can be responsible for the accuracy of the information supplied. The contractor shall be responsible for verifying stub and tee locations.
- 5.11.2 <u>Saddles:</u> Prefabricated saddles approved by the District shall be used for any connection into the public sewer unless otherwise specified by the District. No connection will take place unless an authorized District representative is present and his/her presence is noted by him/her on the permit at that time. The sewer contractor responsible for coring a mainline must be licensed and bonded with the District. All coring equipment will be strapped onto the main during the cutting process and must be centered on the pipe at no more than a 45° slope. All cores to the main will be a minimum of six inches in diameter.
- 5.11.3 <u>Payment for Connections:</u> The District shall require a payment in the amount shown in Exhibit "A" (page <u>30</u>) for any connection required where a wye or tee is not found.

- 5.12 <u>Excavation</u>: No person shall leave unguarded any excavation made in connection with construction or repair of any side sewer or private drain within four (4) feet of any public place.
- 5.13 Non-Conforming Installations:
- 5.13.1 Non-conforming installation or variance from District standards shall not be permitted without the advance written express approval of the General Manager, Engineer, or Commissioners. Any variance permitted shall be subject to the person requesting the variance executing and the District's recording of the necessary releases or documents required under Section 11. See Exhibit "A" (page 30) for the fee schedule.
- 5.13.2 <u>Pump for Single-Family Residence</u>: If a property cannot serve by gravity to a District main, a request may be made to the District for the owner to install a pump. The District may allow pump installation under the following conditions:
- 5.13.2.1 The District will not be responsible nor liable for the operation, maintenance, replacement, or malfunction of the pump.
- 5.13.2.2 A pump plan shall be submitted to the District for review and shall include:
- 5.13.2.2.1 A site plan of the property with the building proposed;
- 5.13.2.2.2 Vertical use and horizontal distance of the force main;
- 5.13.2.2.3 Pump literature (curve, model, horsepower, etc.);
- 5.13.2.3 A plan review fee per schedule listed in Exhibit "A" (page $\underline{30}$) to be submitted to the District with the plan;
- 5.13.2.4 A hold harmless agreement to the District shall be executed before permits are issued. See Section $\underline{11}$.
- 5.14 <u>Requirements are Minimum:</u> The side sewer requirements set forth in this Resolution are minimum requirements intended to apply under usual and ordinary conditions. These requirements may be increased in unusual situations if the General Manager, Engineer, or Commissioners find it advisable.
- 5.15 <u>Connection of Another Structure to an Existing Side Sewer:</u> When an existing side sewer is used to connect another structure to the sewer system, the side sewer and the main line it is connected to shall be telespected (TV inspected) to insure the integrity and condition of the existing side sewer and the mainline connection. If the District determines that the side sewer or mainline tee is deteriorated, structurally unsound, cracked, leaking, or shows other indications that the useful life of the side sewer, stub, or tee connection is/are short, the side sewer, stub, and/or tee shall be replaced at the property owner's expense.

Section 6. Work in Right-of-Way

6 Right-of-Way:

- 6.1 <u>Construction</u>: No person shall install stub sewers in any public right-of-way or within a District easement located on private property unless the installer is licensed and bonded with the District pursuant to Section <u>4</u> of this Resolution and has complied with all of the requirements of this Resolution.
- 6.1.1 Any work in a right-of-way shall conform with the requirements of the agency having jurisdiction over those rights-of-way. It will be the contractor's responsibility to notify the District before beginning work in the right-of-way and to ascertain that the proposed schedule of operation is satisfactory to the District; provided, however, that all work must be completed with dispatch and within a reasonable time. The District will then notify the governmental agency having jurisdiction over the right-of-way in which work is being done.
- 6.2 <u>Protection:</u> Any excavation made by any sewer contractor in a right-of-way or immediately adjacent to it shall be protected and guarded by fencing, covering and/or with proper warning lights. The protection of the public from the danger of any excavation shall be the sole responsibility of the sewer contractor, and the contractor shall be liable for any damages caused by its failure to properly protect and guard the excavation as required by this Resolution.
- 6.2.1 In the event the District discovers any excavation unguarded, the District may immediately take the necessary steps to provide adequate guarding for such excavation and shall charge the sewer contractor the cost of such action. The charge shall in no event be less than \$300.00.

6.3 Responsibility:

- 6.3.1 One (1) year responsibility: Any sewer contractor who has applied for and received a right-of-way permit shall be responsible for its work for a period of one (1) year from date of acceptance by the agency owning the right-of-way.
- 6.3.2 <u>Notice of Failure, Defect and/or Complaint:</u> Any contractor shall respond within 24 hours of notice of road failure, defects, and/or complaint from the District. If the contractor fails to take immediate action and the District finds it necessary to make said repair, the contractor and/or its bonding company will be billed for all costs incurred.
- 6.3.2.1 Labor and materials shall be billed at the reimbursement rate approved by the Board of Commissioners, plus a 15% administrative fee, but in no event less than \$300.00.

- 6.3.2.2 The contractor shall be responsible for all reasonable attorney's fees incurred by the District to enforce payment by the sewer contractor, whether or not the District is required to file suit.
- 6.3.3 <u>Eleventh-Month Inspection:</u> Prior to the end of the one (1) year period, the District shall re-inspect the site and, by certified mail, notify the contractor and his/her bonding agent of any defects in restoration and shall set a time limit for corrective action. If the sewer contractor has not complied by the date set, the District shall perform the work at the contractor's expense and both the contractor and its bonding company shall be notified. In the event the District incurs any attorney fees in enforcing payment under this section, the contractor or its bonding company shall pay all such fees in addition to all other costs.
- 6.4 <u>Billings</u>: All costs billed to the District by other agencies having jurisdiction shall be the responsibility of the contractor. Reimbursement to the District will be made upon the contractor's receipt of bill.

Section 7. Inspections and Testing

- 7 Inspections and Testing:
- 7.1 <u>Call for Inspection:</u> District shall be given twenty-four (24) hours notice of when construction is ready for inspection.
- 7.1.1 No inspections will be scheduled after 3:00 p.m.
- 7.1.2 The permit fee covers only one inspection visit. Any additional inspections resulting from any cause shall be billed to contractor and/or owner in the amount set forth in Exhibit "A" (page 30).
- 7.1.3 No person shall cover or backfill any side sewer or public sewer without having first called for an inspection and having received permission and approval to backfill from the District.
- 7.1.4 If any person covers or backfills any side sewer or public sewer without inspection and without having obtained approval, the District will require the person to uncover the work so that a proper inspection can be made.
- 7.1.5 The contractor and/or owner are responsible for locating and connecting all plumbing outlets to the side sewer.
- 7.1.6 The District shall have access at reasonable times for the purpose of inspecting side sewers and ascertaining whether provisions of this Resolution have been complied with.
- 7.1.7 Inspections after regular office hours or on weekends are at the option of the District inspector by appointment. The contractor is to pay the fee shown in Exhibit "A" (page $\underline{30}$) in advance at the District office. No inspections will be performed on legal holidays.
- 7.2 <u>Materials and Workmanship:</u> The District shall inspect and make such tests as it deems necessary in order to ensure that all sewer construction meets all requirements of this Resolution.
- 7.3 Notice of Defects: If the inspector finds the work or material used is not in accordance with the provisions of this Resolution, the inspector shall give notice of the deficiency to the person doing the work and also to the owner of the premises by posting a written notice upon the premises. A copy of that notice shall be kept on file in the District office. If any defects are not corrected within thirty (30) days of the notice or, in the opinion of the inspector, the work is detrimental to the public sewerage system, the General Manager may order or cause the defects to be corrected and the actual cost of such correction shall be charged to the owner in the same manner as the District service charge and shall become a lien upon the property served by the

side sewer. A copy of the notice shall be placed in the licensed side sewer contractor's file for action, pursuant to Section 4.

7.4 <u>Water and Air Tests:</u> Side sewers shall be tested, by the contractor, for visible leakage before backfilling by inserting a removable test plug at the lower end of the line and filling the line with water to its highest point. The contractor shall have the test on and ready when he calls for an inspection. A tee shall be provided in the sewer for insertion of the plug and shall be capped tightly and securely against back pressure upon completion of the test.

7.4.1 Air testing may be substituted for the above procedure.