

## **DOWNERS GROVE SANITARY DISTRICT SEWER CONTRACTOR'S CHECKLIST**

630-969-0664

### **A. BUILDING SERVICE CONNECTIONS**

1. No work may be started unless the contractor is bonded with the Sanitary District, in addition to any Village, Township, County or State requirements. See Section 28 for bond requirements.
2. No work may be started unless a Sewer Permit has been picked up by the contractor and posted on the job. All sewer repairs require a no-charge permit and a waiver signed by the property owner declining the Sanitary District's repair assistance program. All work must be inspected.
3. A Sewer Permit will not be issued until all fees have been paid. The Sanitary District must approve plans for new buildings. No sewer connection may be done until foundation is installed. Existing buildings must be inspected and approved by the Sanitary District and any violations must be corrected before connection to the sewer.
4. Any excavation within the right-of-way requires a separate permit from the appropriate Village, Township, County or State jurisdiction.
5. Pipe Size – 6" diameter minimum for building services.
6. Pipe Material – must meet the following requirements:
  - PVC pipe with a SDR of 26, complying with ASTM D2241, 160 psi pressure pipe push-on bell and spigot type with rubber ring seal gasket ASTM D3139.
  - Ductile Iron Pipe, AWWA C-151, Class 51, with rubber-gasket joints AWWA C-111. All pipe and fittings must have ceramic epoxy lining and exterior polyethylene tube encasement complying with ANSI\AWWA C105/A 21.5-93, with a thickness not less than 8 mils.
7. Utilities site plan is required for all new building sanitary services, including septic system conversions. This shall be provided on a topographic survey, which shows the rim elevation of the nearest upstream and downstream sanitary manholes.
8. An agreement for Sanitary District access to the building sanitary service, signed by the property owner, is required for all new building sanitary services.
9. Service stubs must be perpendicular to the main sewer to the property line.
  - Whenever possible, it is requested that the service be laid straight from the stub or property line to the building. Any changes in alignment must be made with 45° (or less) bends, no 90° bends are allowed. It is recommended that the service not be located under any existing or proposed driveway or sidewalk. Under no circumstances may drain tiles be connected to the service.

## 10. Outside Cleanouts

- An outside cleanout shall be installed on each new building sanitary service at the transition from 4-inch waste line to 6-inch service pipe just outside the foundation or other location approved by the Sanitary District. Refer to Downers Grove Sanitary District Specification for details. Wye fittings will not be allowed for outside cleanouts.

## 11. Pipe Bedding

- No pipe may be laid when there is water in the trench. If there is water in the trench it must be pumped out prior to placing any bedding material. No water from the trench may be allowed to enter the existing sanitary sewer. Any Contractor allowing this to happen will have his bond revoked.
- ¼" to ¾" washed chipped limestone, must be placed at least 4" below the bottom of the pipe and compacted.

## 12. Pipe Trench

- The pipe must be laid at a slope of at least 1.0%, starting from the stub or main sewer.
- The maximum trench width is 2' 0", measured above the top of the pipe. Over 12" above the top of the pipe, the sides of the trench may be stepped or sloped back.
- Maximum depth is 10' 0", measured from the top of the pipe to the finished grade.
- Minimum depth is 4' 0", measured from the top of the pipe to the existing grade. Anything less than 4' must be insulated.
- Water and sewer services must be placed in separate trenches at least 10 feet apart. Only when it is impossible to maintain 10 feet of separation may sewer and water services be placed in the same trench. When placed in the same trench, services must be at least 3 feet apart with 18 inches of vertical separation.
- Any water services that cross house sewers, storm drains, or sanitary sewers must also maintain an 18-inch vertical separation for a distance of 10 feet on both sides of the sewer. The excavated area between each pipe and the full width of the water service for a distance of 3 feet on both sides of the sewer must be replaced with compacted granular backfill.

## 13. Pipe Backfilling

- ¼" to ¾" washed chipped limestone, must be carefully placed under the sides of the pipe and firmly tapped into place. Granular backfill must be carefully placed to a level 12" above the top of the pipe and compacted.
- Selected excavated material, free of rocks and sticks, may be used to backfill from 12" above the top of the pipe to the surface, except under roadways and sidewalks.
- Parkway restoration shall comply with applicable village, township, county, or state requirements.
- Under roadways (and to 2' behind the back of the curb) and under sidewalks, granular material, from ¼" to ¾", must be used to backfill from 12" above the top of the pipe, to the subgrade elevation.

- Roadway and sidewalk restoration shall comply with applicable village, township, county, or state requirements.

#### 14. Foundation Over Dig & Double Wall Foundations

- The foundation over dig at the point where sanitary sewer service enters the building shall be filled with ¼" to ¾" washed chipped limestone from the footing to the bottom of service to provide support for this pipe.
- Service sewers passing through double foundation wall or under concrete porches shall be constructed of ductile iron pipe. Cast iron or PVC pipe will not be allowed in these situations.

#### 15. Service Risers

- A service riser must be constructed where the main sewer is more than 12' deep, measured from the invert of the pipe to the finished grade. Refer to Downers Grove Sanitary District Specification for details.

#### 16. No-Shear Couplings

- No-shear couplings (couplings with stainless steel shear ring) shall be used to connect pipes of dissimilar material or size – Flex-Seal Adjustable Repair Couplings or approved equal.

#### 17. Building Sanitary Service Air Testing

- All new building sanitary services shall be tested in accordance with Sanitary District specifications for building sanitary service air testing. Refer to Downers Grove Sanitary District Specification for details.

#### 18. Building Sanitary Service Televising

- All new building sanitary services shall be televised in accordance with Sanitary District specifications for building sanitary service televising. Refer to Downers Grove Sanitary District Specification for details.

#### 19. Inspections

- All sewer services shall be left completely exposed until the Sanitary District inspector has accepted it. 24 hours notice is required for such inspection. Inspections may be scheduled Monday through Friday, between 8:00 a.m. and 4:00 p.m.
- A representative of the sewer contractor shall be in attendance at time of all inspections.

#### 20. Record of Work Performed

- Upon completion of a new building sanitary service or any repairs to an existing building sanitary service, the sewer contractor or property owner must submit to the Sanitary District

a written record of the work completed, including a sketch, pipe sizes, footages, depths, fittings and measurements from property lines or building corners, before final acceptance of said work will be granted by the Sanitary District. This information should be in sufficient detail to allow the location of the building sanitary service to be clearly marked at a future date.

#### 21. Inspection Manhole\*

- For all non-residential buildings, an inspection manhole is required on the service between the building and the main sewer. It must be placed so that all flow from the building passes through the manhole. The inspection manhole must be 4 feet in diameter and have a Sanitary District standard manhole cover. Refer to Downers Grove Sanitary District Specification for details. Manholes must pass a vacuum test before acceptance.

\*Also pertains to Flood Control Manhole.

#### 22. Grease, Oil and Sand Traps

- When required as a condition of the Sewer Permit for non-residential buildings, such traps shall be of a design approved by the Sanitary District and shall be located where easily accessible for cleaning and inspection. Grease traps shall be located outside where possible and shall be below the ground. Where outside installation is impossible, the grease trap may be located inside but must be below the floor. Dishwashing machines cannot be discharged through any grease trap. All grease traps must be cleaned on a monthly basis. Oil separators shall be triple-basin type. Sand traps may be a single manhole with sump. All such installations shall conform to the requirements of the DuPage County Health Department and Village and State Plumbing Codes.

#### 23. Overhead Sewer

- Overhead sewer is required for all new construction and septic system conversions.

#### 24. Blockings/Demolitions

- All buildings to be demolished shall have their sanitary sewer service blocked at the main sewer connection; this work shall be done prior to the actual demolition. Rebuilds will be required to install a new service out to the main sewer. Existing tee or wye connections may be reused only upon approval by the Sanitary District inspector. It shall be the responsibility of the contractor to determine the point of disconnection on the public sanitary sewer. The contractor shall televise and electronically locate the building sanitary service to the connection point to public sanitary sewer. Prior to the issuance of sanitary disconnection permit, the contractor shall submit to the Sanitary District a copy of the video of the building sanitary service televising and a corresponding written report for Sanitary District review and approval. The written report shall note all observations and shall indicate the location of the building sanitary service connection point on the public sanitary sewer, measured from the nearest Sanitary District

manhole. The televising shall comply with the Sanitary District Specification for Building Sanitary Service Televising. The intent of the televising and locating is to determine that the building sanitary service is not shared with any other building and to locate the connection point to the public sanitary sewer.

#### 25. Machine Taps

- Whenever there is not a tee or wye for a service connection, a machine tap shall be made. The connection shall be made with a Geneco Sealite Sewer Saddle (Model S) or approved equal.

#### 26. Septic System Conversion

- When an existing building is to be connected to the Sanitary District sanitary sewer system (septic system conversion), the new building sanitary service pipe must extend all the way to the existing building foundation; i.e., no existing service pipe may remain in service.

#### 27. Special Conditions

- Special conditions may be required as a condition of the Sewer Permit. The contractor is advised to check such conditions on the Sewer Permit and the set of plans approved by the Sanitary District before starting the work. All sewers must be installed in accordance with the Standard Specifications for Sanitary Sewer Construction of the Downers Grove Sanitary District.

#### 28. Sewer Contractor Bonding Requirements

- The Sanitary District requires all contractors performing sewer construction and repairs to have a License and Permit Bond on file with Sanitary District office. The bond requirements are as follows:

Bond Type: *License & Permit Bond*

Bond Amount: *\$10,000.00*

Obligee: *Downers Grove Sanitary District (not Village of Downers Grove)*

Licensed as: *Sewer Contractor (not plumber)*

### **B. MAIN SEWER EXTENSIONS**

1. All extensions must be constructed in accordance with plans approved by the Sanitary District.
2. No work may be started unless the contractor is bonded with the Sanitary District.

3. No work may be started until the Illinois EPA permit and all village or county permits are obtained.
4. All sewers must pass an air test and a lamping inspection. All PVC sewers must pass a deflection test. Refer to the plans or to Downers Grove Sanitary District Specification for details.
5. All public sanitary sewers shall be laid with straight alignment and uniform slope between manholes. The alignment shall be checked by lamping in accordance with Sanitary District construction inspection procedures. Contractors are required to use a pipe laser to set pipe slope and alignment for public sanitary sewer main construction
6. All manholes must pass a vacuum pressure test. Refer to Downers Grove Sanitary District Specification for details.
7. The constructed sewers must be televised under simulated flow conditions. Sanitary District personnel must be present during televising. No sags greater than 25% of the pipe diameter will be accepted. All unacceptable sags must be replaced in a manner acceptable to the Sanitary District.
8. Maximum trench widths measured at a point 12" above the top of the pipe are as follows:

<u>Trench Excavations</u>	
<u>Pipe Size</u>	<u>Trench Width</u>
6"	2' 0"
8"	2' 6"
10"	2' 6"
12"	3' 0"
15"	3' 0"
18"	3' 0"
21"	3' 6"
24"	3' 9"