



LATERAL VIDEO INSPECTIONS

PRINCETON SEWER DEPARTMENT | 400 WITHERSPOON STREET, PRINCETON, NJ 08540
609-497-7639 | SEWER@PRINCETONNJ.GOV | WWW.PRINCETONNJ.GOV/SEWER

As a condition of your sewer permit, you may be required to submit a video of a sewer lateral inspection to the Sewer Department for review. The purpose of this inspection is to confirm that the lateral(s) is operable, structurally sound, and leak free. This inspection process protects the property owner(s) and occupant(s), future property owners and occupants, and the municipality as a whole. Check your approved sewer permit to see if an inspection is required for your project.

A sewer pipe inspection camera (“push camera”) is used to record a video of the interior of the sewer lateral. The push camera is inserted into the lateral from a cleanout near or inside the building and pushed downstream to the connection to the public sewer. If the lateral is long, and the camera does not reach the sewer, the camera should be inserted into intermediate cleanouts until the entire length of the lateral has been inspected. Typically, lateral inspections are required to include the entire length of the lateral from the building to the public sewer. This includes the portion of the lateral within the right-of-way. If a portion of the lateral was replaced as part of the active project, and Sewer Department and/or Construction Department staff conducted an external visual inspection of the replacement, the replaced portion of the lateral may be omitted from the video inspection. Property owners may rent a push camera to conduct and record the inspection themselves or hire a professional to conduct and record the inspection for them. Lateral inspections and reinspections, as needed, are conducted at the property owner’s expense.

The video must be of sufficient quality for Sewer Department staff to confidently determine that none of the defects listed below are present in the lateral. The suitability and quality of the video will be subject to approval from Sewer Department staff. Video resolution, image noise, lighting, color rendition, and file compression must all be at reasonable levels. The video should be recorded directly to digital media from the camera. **Recording the push camera’s monitor using a phone or other secondary camera is not acceptable.** Flush the lateral with fresh water prior to the inspection. The camera lens must be kept clean. Any grease, smears, or debris on the camera lens that negatively affects the clarity of the video must be cleaned off. To confirm the location of the inspection, the video recording should begin above ground. The Sewer Department will send an email to the address listed in the sewer permit application with instructions to upload inspection videos securely through an internet browser. Video files submitted through email, thumb drive, or other means will be rejected.

If the defects listed below are present in the lateral, the lateral will “fail” the inspection, and the property owner will be directed to fix the defects. Any repair(s) made to the lateral, including the connection to the public sewer, shall be made at the property owner’s expense. Property owners can save time by addressing these issues before submitting the inspection video to the Sewer Department. The Sewer Department must be notified of any changes to the scope of work of the sewer permit. The Construction Department must be notified if additional work will be conducted on private property. After defects are addressed, a follow-up inspection will be required unless the pipe was replaced and Sewer Department and/or Construction Department staff conducted an external visual inspection of the replacement. Subject to Sewer Department staff determination, a lateral will fail an inspection for the following reasons:

- Roots, grease, sediment, or other material obstructs 10% or more of the pipe’s cross sectional area. If the obstruction appears repeatedly along the length of the lateral, or if the obstruction may otherwise reasonably lead to a buildup of debris and cause a blockage.
- A sag or dip causes water to pond to a depth of 25% or more of the diameter of the pipe, extends 10 or more feet in length, or may otherwise reasonably lead to a buildup of debris and cause a blockage.
- The pipe has a fracture, break, hole, or collapse. Hairline cracks are acceptable if there’s no indication of active leakage or further deterioration of the cracks.
- The pipe joints are markedly offset or separated or if soil is coming into the pipe through the joints. Small offsets are acceptable if they are less than the thickness of the pipe wall, without soil intrusion.
- There is active leakage of groundwater into the pipe or definite signs of leakage, such as mineral staining and/or hard water deposits, indicating that intermittent yet significant leakage occurs at other times.
- Any other defect exists that reasonably threatens the structural, operational, or water tight condition of the lateral.



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CROSS SECTIONAL AREA REFERENCE:

Figures 1-3 show various obstructions of 10% of the cross sectional area of a pipe. Figure 4 shows water ponding to a depth of 25% of the diameter of the pipe (which fills about 20% of the cross sectional area of the pipe). Obstructions or ponding depths equal to or greater than what is depicted in the figures below will cause the lateral to “fail” the inspection.

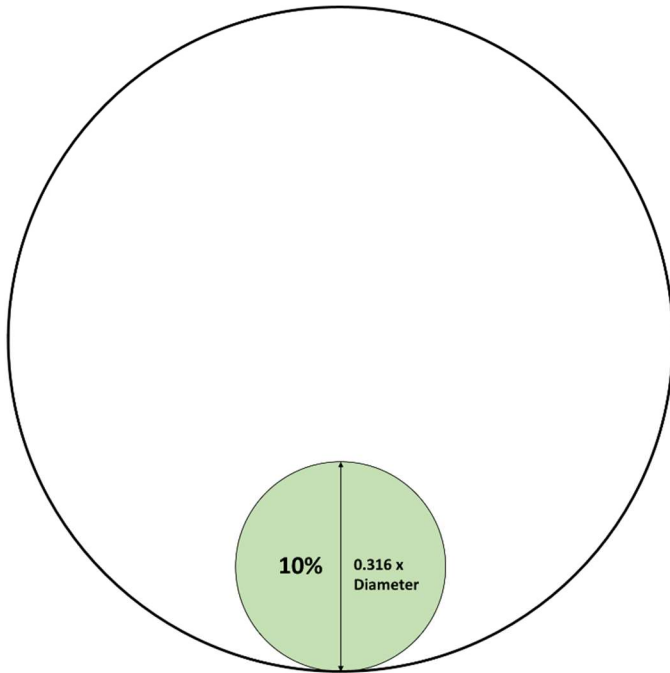


Fig. 1: Obstruction of 10% of Cross Sectional Area of Pipe

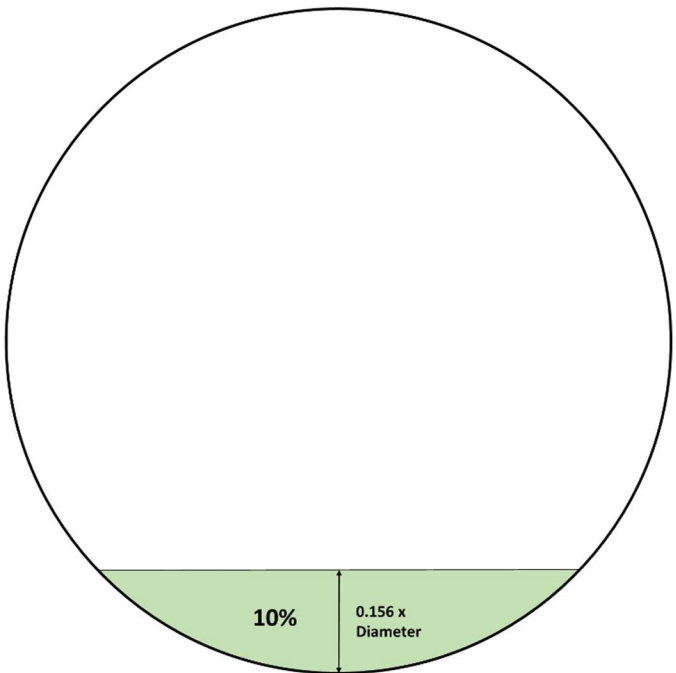


Fig. 2: Obstruction of 10% of Cross Sectional Area of Pipe

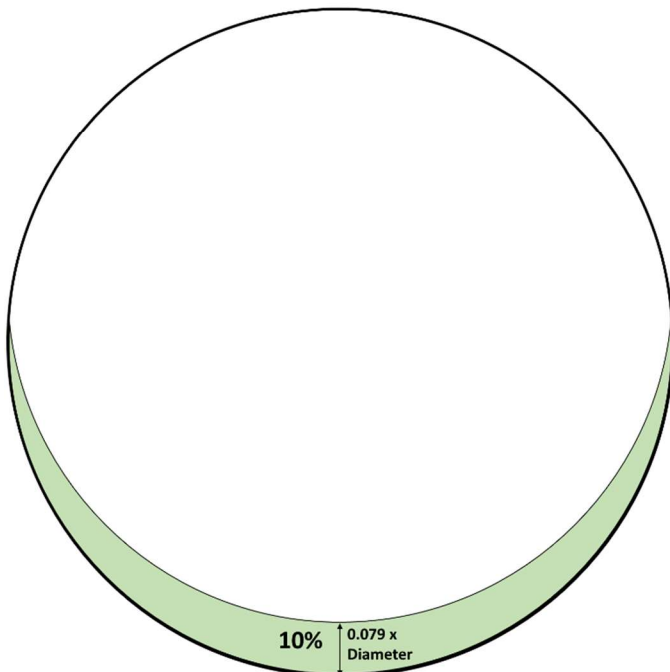


Fig. 3: Obstruction of 10% of Cross Sectional Area of Pipe

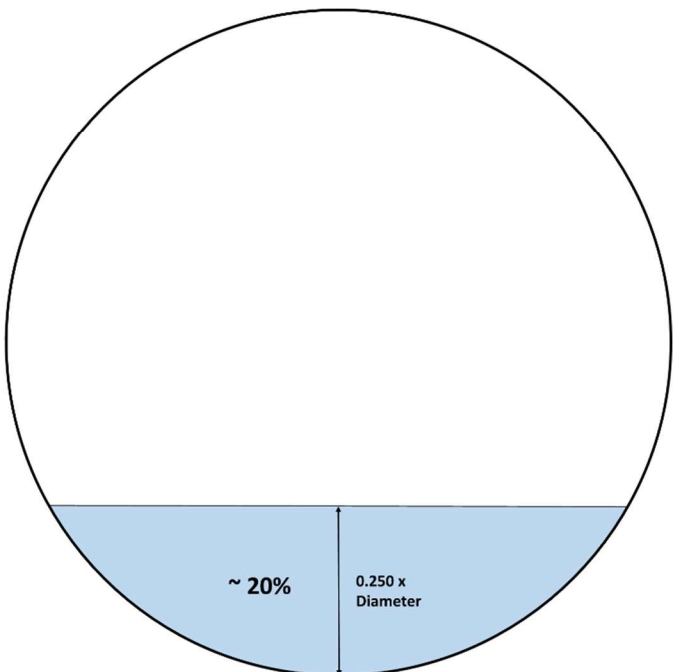


Fig. 4: Ponding Depth of 25% of the Diameter of the Pipe