



City of Marathon Sewer Lateral Connection Standards

Required Permitting, Testing and Inspections

The Building Code requires that you obtain a permit from the City before you begin installation of your Sewer Lateral. There will be two inspections required by the City during the construction of your Sewer Lateral by the Building Department.

Existing Septic Tanks/Cess Pits/On Site Systems

You will also be required to obtain an abandonment permit from the Building Department. The abandonment permit application will be provided along with the City plumbing permit application. Pump-out tickets, abandonment affidavits, and inspection of the system are required. If you wish to convert your septic tank into a cistern for irrigation, you will have to obtain a variance through the Department of Health.

Existing DEP-Permitted Wastewater Treatment Plants

A DEP collection/transmission system permit to install piping and any other required components necessary to connect the property's existing piping to the City's system will be required.

If there are multiple buildings on a property which are served by septic tanks, on site systems, or cess pits that do not have existing piping, a collection/transmission system permit from the DEP will be required.

All permit applications submitted to the DEP need to be signed and sealed by a Florida-registered Professional Engineer. Prior to submittal to the DEP, the permit application will need to be reviewed by Weiler Engineering to ensure the proposed design will be compatible with the City's system.

A permit from the DEP to abandon a permitted wastewater treatment facility is **NOT** required. However, the facility's permit contains a condition that requires the permittee to provide a plan for facility abandonment to the DEP at least 30 days prior to abandonment. A licensed wastewater treatment plant operator must be involved in the decommissioning of the facility.

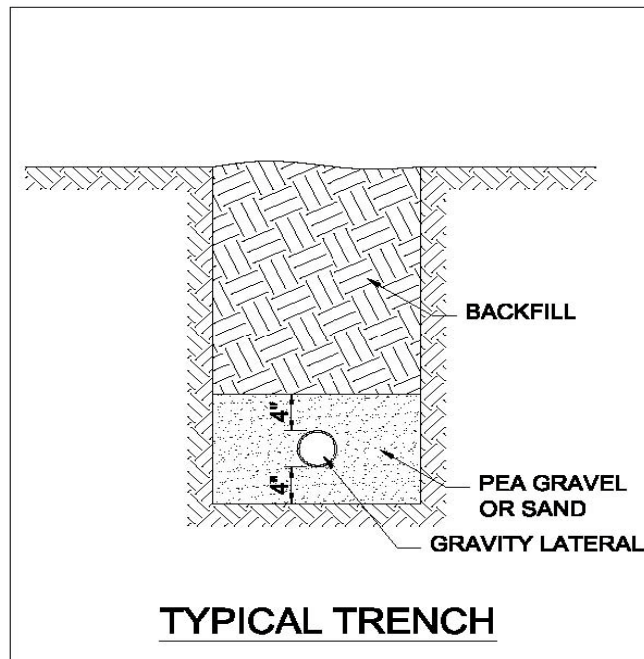
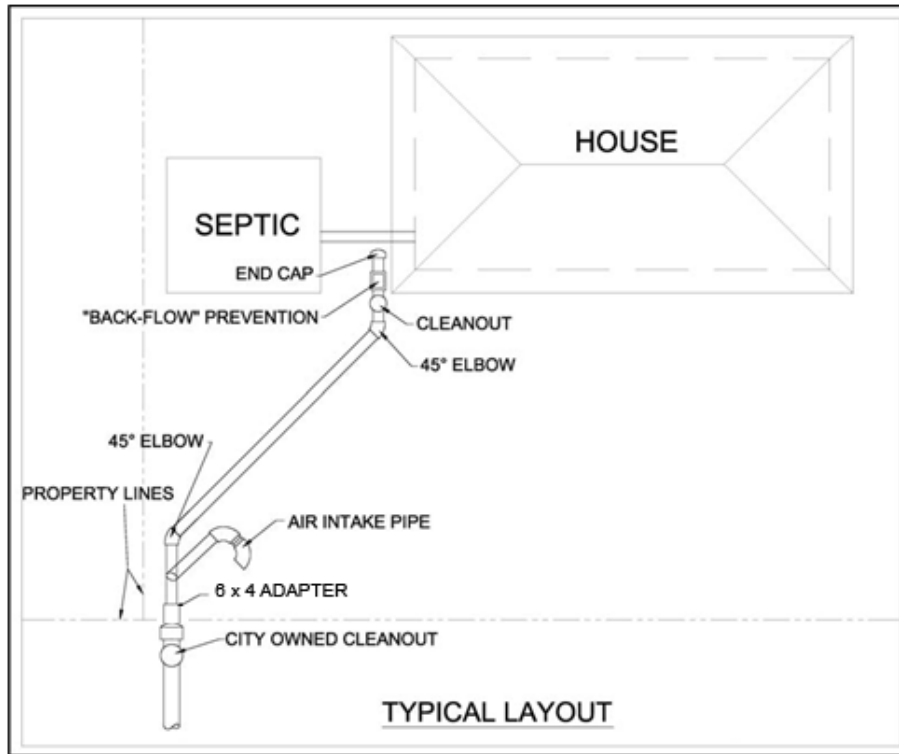
The wastewater permit also contains a requirement that permits to abandon the effluent disposal injection wells be obtained, and certifications of abandonment from a licensed water well contractor be provided to the South Florida Water Management District.

Sewer Lateral Construction

The construction of your residential Sewer Lateral will require two inspections. The first inspection is of the Sewer Lateral and Air Intake in the open trench. During this part of the system construction, the City will require you to schedule an open trench inspection during which the inspector will observe the pipe before you fill the trench and will require a 5' static head test to be passed. The line will also need to be video inspected or have a pig pulled thru to show that it is free of rocks and debris. The inspector will also check your connection to the City side at this time.

NOTE: ONLY PURPLE PRIMER AND HEAVY DUTY GREY GLUE ARE ACCEPTABLE

The following drawing shows a typical layout and trench detail.



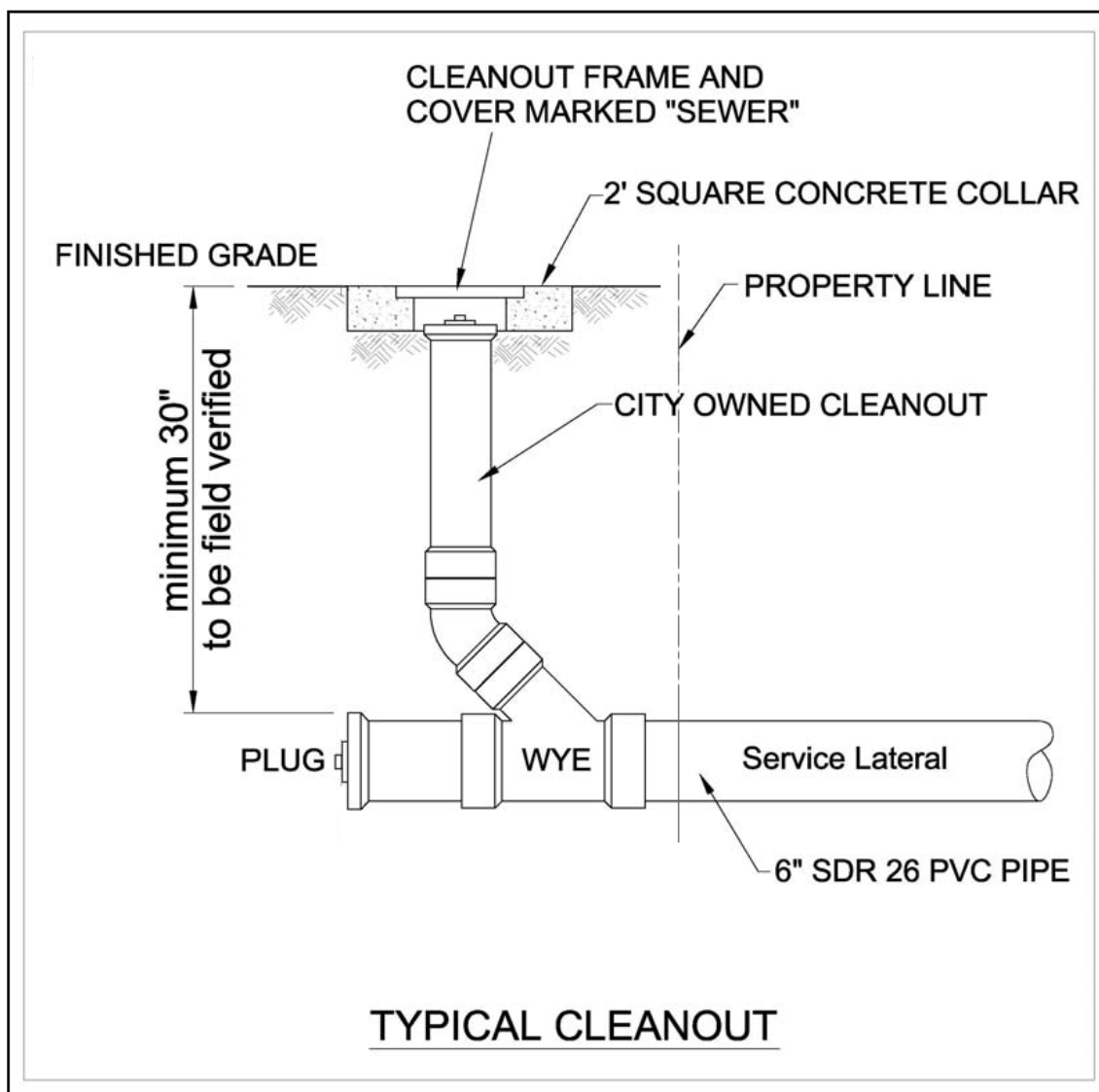
1/8" to 1/4" per foot fall

When Do I Hook Up?

The Building Sewer/Lateral cannot be connected to your building until the wastewater treatment system is officially available and AirVac valve is installed in pit. You will receive a 30-day notification of system availability after which you will be allowed to make the final connections to the City’s sewer system. Prior to this time, once a permit is obtained, you can install the bulk of the piping required for your Sewer Lateral, leaving only the final connection to the building until open trench is approved and valve installed by US Water.

Sewer Lateral

The term ‘Sewer Lateral’ refers to the gravity pipe extending from the home or building to the City-owned cleanout located at the property line at the City’s Right of Way. The City-owned cleanout is constructed of 6” SDR26 PVC pipe and is located underneath the concrete encased traffic-bearing cleanout cover. The illustration below depicts a typical City-owned cleanout.



The City requires that the Sewer Laterals be constructed in accordance with AirVac recommendations. Pressure rated pipe (Schedule 40/SCH80 or SDR 21/SDR26 PVC) is required for the Laterals because from time to time, your Lateral may be exposed to conditions which could cause non-pressure rated pipe to collapse.

NOTE: ONLY PURPLE PRIMER AND HEAVY DUTY GREY GLUE ARE ACCEPTABLE

After you receive your 30-day notice of system availability, you will be able to schedule an open trench inspection. At this time you will require a 5' static head test to be passed. The line will also need to be video inspected or have a pig pulled thru to show that it is free of rocks and debris.

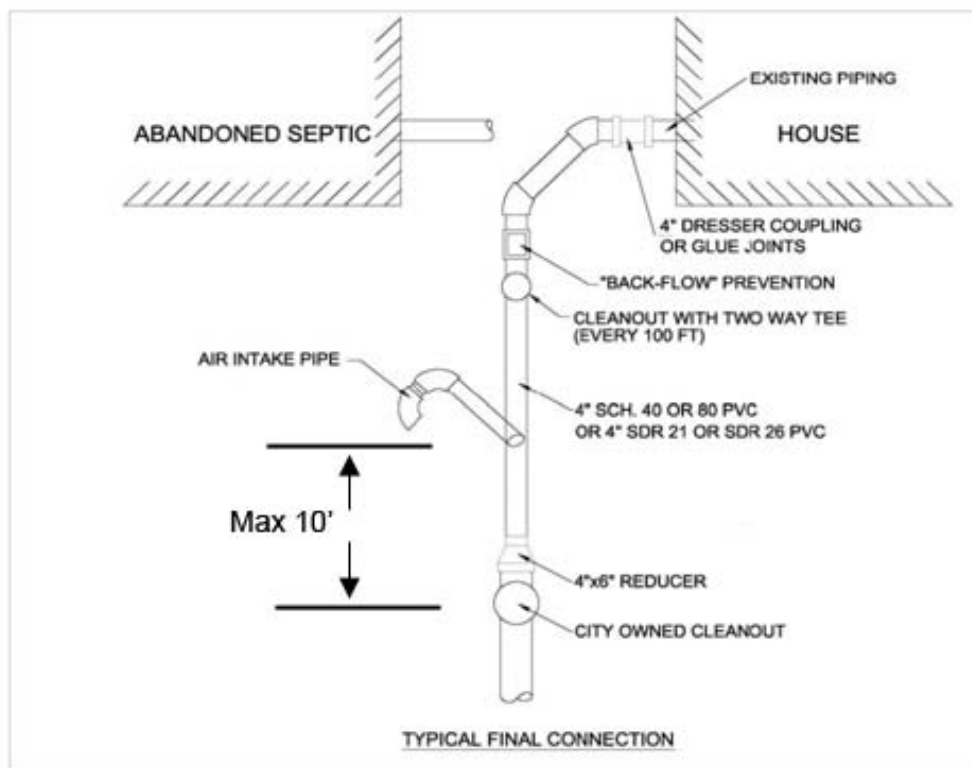
If the video shows rocks or debris in the line, the ball plug on the city side will not be allowed to be removed until a video inspection shows the line has been cleaned. This is very important since rocks in the vacuum system can cause damage to the vacuum mains.

After the open trench approval, call the inspection line for valve verification. After the valve is verified and tested you can hook up to the building and complete all the work in preparation for the final approval.

The final inspection must be scheduled with the building department 48 hours in advance. The Building department will final out and close the permit when it is 100% completed including final grading, driveways, and walks put back to their original condition.

A back-water valve and cleanouts are required.

The drawing below illustrates a typical final connection.



Air Intake

The Air Intake, consisting of a 4 inch pipe, fittings and a screen (minimum of 3/16 x 3 inch vinyl mesh) is required for each Sewer Lateral. Its purpose is to provide a sufficient amount of air to enter the Sewer Lateral to allow the vacuum pit and vacuum main to function. It is preferred that the Air Intake be located directly above the Sewer Lateral where practical. However, if that is not possible, the Air Intake may be located on a branch line off the Sewer Lateral. However, the criteria of being closer to the City-owned cleanout and downstream of the backwater valve still apply. The Air Intake wye must also be oriented so that that branch line drops into the Sewer Lateral from the top and the branch line must be sloped downhill toward the Sewer Lateral so that water does not accumulate in the Air Intake branch line.

The location of the Air Intake is important. It must be located closer to the City-owned cleanout than to the nearest drain fixture in your building. If it is farther away, it is possible that the sewer trap for that drain may be evacuated when the vacuum valve operates. It should be protected from damage and parked vehicles, the Building Code also requires that Air Intakes be at least 10 feet away from doors, windows, or other openings in the building.

The existing building sewer vents are **not** an acceptable substitute for an Air Intake. Sewer vents may not provide enough air, and their location could result in the building plumbing traps being evacuated when the vacuum valve pit operates. This could potentially allow sewer gases to back up into the building.

A typical “candy cane” Air Intake is shown below; as is a typical offset Air Intake configuration.

