



**Address:** 2112 Vía Pacheco, Palos Verdes Estates

**Date of Inspection:** 3-18-24

**Cost of Inspection:** \$300

**Name of Inspector:** Nemesio "Nemo" Padilla

**West Coast Sewer Inspection:** (310) 876-4653

## Main Sewer Line Inspection Report

**Objective:** The objective is to view the main sewer line for the property. The main sewer line is the waste pipe on the outside of the building. The beginning of the main sewer line is where the pipe exits the house and the end of the main sewer line is where the pipe connects to the city sewer.

**Main Sewer Line Access Points:** In order to view the main sewer line for this property we used a 4" cleanout located behind the house. There's an additional cleanout in the front planter area that can also be used for routine maintenance and inspections on the main sewer line.

**Path of Main Sewer Line on Property:** The main sewer line is made of a cast iron material pipe as it exits the house near the front porch steps. The pipe then transitions into a clay material pipe as it travels alongside the driveway and out towards the center of the street. The connection to the city sewer is taking place underneath the street in front of the house.

**Types of Materials used in sewer line:** Clay is a good material for sewer lines as it does not rust or corrode over time. There is no limit to how long clay can potentially last but can be damaged by earthquakes or roots or even bad installation. There are areas of root intrusion within this clay main sewer line that will need to be cleared by hydrojet. Roots intruding into a clay system are common and can normally be maintained with regular sewer line cleanings. If neglected, roots can cause blockages in the pipe as well as potential damage. The clay pipe that was visible of this sewer line is functioning but has some defects in the condition of the pipe typical to clay sewer lines. These include some cracking as well as some misalignment of the joints in the pipe. When these represent a breach of the system there

are certain definite indicators which are not being demonstrated here. While this line is not perfect it does appear to be functional at this time.

Some of the pipe under the structure was visible to this inspection. While this is not the primary focus of this inspection it was noted that portions of this pipe are a cast iron material. Cast iron is the strongest of the pipe materials available for sewer. It is susceptible however to oxidation. The thick iron walls of the pipe typically wear away through gradual rusting over the course of 60-80 years. For this reason, cast iron has a finite life potential and will need replacement eventually. Due to the nature of the material, it can be difficult to determine if the pipe is able to leak from only an interior view.

Plastic is an excellent material for sewer line applications. It does not rust or corrode under chemicals commonly found in sewage. Therefore, it has an extended life potential. Also, it is flexible, and its joints do not allow for root intrusion when it is properly installed. This provides a trouble-free use from plastic for a very long service time.

**Areas Needing Attention:** The root intrusion in the clay pipe should be removed by hydrojet at this time. Hydro-jetting is high powered pressured water that will cut the roots and push them out towards the city sewer.

The cast iron pipe viewed during the inspection appears to be original to the structure and is rusted heavily in areas. There are also roots intruding into the cast iron pipe. Roots are not able to penetrate the walls of a cast iron pipe until the pipe has rusted to a degree where the pipe wall reduces in thickness in areas sufficiently for roots to push their way into the line. This represents a breach of the system. The roots can be de-scaled out of the pipe but would be recommended to replace this section of cast iron pipe. Repairing this now it would appear that a fiberglass lining system might be usable. This is a method of repairing sections of pipe which travel under difficult to access locations. The most effective and cost-efficient method of repairing the line can best be determined with the assistance of your sewer contractor of choice who will be performing the work.

**Estimated Costs for Repairs:** We can hydrojet and descale the line for \$600.

To repair the cast iron pipe section with roots it might cost \$3,000 - \$3,200.

***These are estimated costs based on work seen by plumbers and sewer contractors. Prices can vary depending on contractors and for definite estimates a plumber or sewer contractor will need to be contacted.***

### **Main Sewer Line Video Links:**

4" cleanout: <https://www.youtube.com/watch?v=Im9Ps98G-o4>

### **Photos of Main Sewer Line:**



Location of 4" cleanout used for inspection.



Transition from a plastic pipe to a cast iron pipe underneath the home.



Transition from a cast iron pipe to a clay pipe 2.5' deep under tool.  
Location of additional sewer cleanout.



**Connection to city sewer under tool 8.5' deep.**