JANUARY 2005 MEETING

Wednesday, January 19, 2005

TECHNICAL PROGRAM

Plumbing Tests and Repairs and Reroutes

Speaker: Tom Muncey, of Herndon/Muncey, Inc. Houston TX, Tel. 281-579-0515

PRESENTATION SUMMARY

To an audience of about 50, Tom Muncey of Herndon/Muncey, Inc., an investigative plumbing company in Houston, gave a slide and video presentation of how his company conducts plumbing tests, repairs, and reroutes for drain lines located below residential foundations. Mr. Muncey graduated with a BS degree in Petroleum Engineering from the University of Texas in 1977 and, since starting his company in 1995, he has performed over 10,000 leak tests and 2,000 repairs, mainly for the insurance companies (before they stopped coverage on underslab leaks).

Mr. Muncey said there are no published test standards to test plumbing lines below residential foundations. Like other local leak detection companies, his company has had to develop their own test methods which include the use of in-line video snakes and pneumatic test balls. Their test procedures sometimes require changes depending on the problems encountered, but the main steps they follow are:

1. Perform a hydrostatic test for 30 minutes by pulling off toilets and filling the underslab lines with water.

2. If the hydrostatic test fails, run a video in the line to look for the probable leak location(s).

3. Isolate the suspected problem(s) using test balls and refilling of the isolated sections until the leak is located. In this case, the video camera is connected and run immediately behind the test ball so they can ensure it is inflated at the correct location.

4. Perform flow tests if needed to determine how much loss there is under normal flow conditions. He cautioned however that the flow test may not be accurate when done immediately after the hydrostatic test since the voids around the leaking pipe will be inundated.

Mr. Muncey also discussed drainpipe materials and said that although cast iron pipe usually has a life of 35 to 50 years, he has found it to last as little as 20 years due to: a) poor material quality, b) homeowner use of corrosive drain cleaners, and c) varying types of soil. He also said he has seen cast iron pipes last as much as 80 years in River Oaks. Even so, tree roots tend to get in the lines just 2 feet outside the slab where the cast iron pipe is usually transitioned into a yard pipe made of concrete, and the joints are not sealed.

Mr. Muncey said that while ABS piping was used from 1970-75 and was not so good, PVC, used since 1975, is performing much better than cast iron and they do not yet know the life expectancy of it but think it will be longer than cast iron, particularly because it does not corrode and has more flexibility than cast iron.

Mr. Muncey cautioned that sanitary sewer lines must have 1 in / 8 ft (i.e., 1 percent) slope to the city trunk line. If it is less, the line will hold water and if it is more, the solids will drop out and cause a clog.

Mr. Muncey showed several informative videos of inline inspections, showing how the skilled snake operator navigates his video camera and test ball through 90 deg wyes and other hard-to-navigate fittings. He also had some excellent videos of below slab (in-tunnel) repairs and reroutes that gave the

audience a good feel for working under a slab, and that showed the commonly seen problems of rusting wire mesh below the concrete and missing vapor retarders.

PAST PRESENTATIONS (click here)