
LESSON 6: KEY CONCEPTS

Visual Inspection Clues

- **Presence of Cast Iron** – even portions; trunks are less suspectable
- **Visual Leaks** – under sinks, under house, in the yard/flower bed; seams
- **Crawlspace** – rust, pitting, seepage at joints and seams
- **Pipe Connections under sinks** – corrosion
- **Slow Drains** – especially more than one
- **Cleanouts** – standing, rising, dirty water
- **Odor** – could indicate cracks
- **Mold** – can start with a little as 55% humidity; cracked pipe creates conditions
- **Shower Pan** – failing; especially remodel of older home
- **Green Grass** – healthy lawn in time when it should not be; or patches
- **Depressions in Soil** – indentations or sagging; dissipates soil (garden, driveway)
- **Puddles** – obvious sign
- **Trees in Alignment in front yard** – can result in root intrusion
- **Foundation Issues** – heaving, sink holes, moisture wicking, localized problem
- **Rodent Activity** – cockroaches, sewer flies, slugs (width of quarter); rats
- **Audible Sounds** – sewer vents, gurgling
- **Thermal Imaging** – walls, ceilings, floors, under the house

Case Studies

Bellies and Negative Slope

- 1 inch rule
- Is it holding debris?
- Distance: 10 feet or 80 feet
- Know your camera head size
- Skid Adjustments



Misaligned, Offsets, Reductions

- Heaved/Uphill Lines
- Direction of Waterfall
- Can you see bottom of offset
- Offset can break pipe

Cracks & Leaks

- Disappearing Water
- Flush Water to Observe Movement
- If you see Roots = indicates a leak



Roots

- Trees are opportunist – they do not cause leaks, roots find leaks
- Recommend further evaluation and repairs when you find roots
- Do not push through heavy roots
- Roots collect grease



Broken & Collapsed

- Soil Build up
- Black boot connections can look like separations
- Offsets with Bell joints usually indicate broken pipes



Blockages & Buildup

- If pipe is dirty, cannot identify pipe material
- Note when the line looks excessively clean, could indicate a previous problem
- Recommend Hydro-Jetting rather than blades



Rust, Corrosion & Deterioration

- Do not push through heavy channeling
- Flush toilet if cannot determine hair, root, or crack

Rodents & Insects



Uncommon Defects

