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## 1) Soil Pipes and Anti-syphon pipes:

### Soil Pipes:

#### Definition

Piping occurs when water erodes beneath the surface of the ground creating an underground tunnel known as soil pipe.

OR,,

A pipe carrying wastes from toilets and sometimes from waste pipes.

OR,,

A soil pipe is designed to carry soiled water from the toilet, urinal or bidet to the sewer.

This is usually begins as small pores underground and are enlarged with increase erosion, in some instance, these hole may be even large enough for a person to crawl through

- In areas where there are cracks in the soil or areas of less resistance, water will start to move through creating a void
- Eventually after constant erosion the surface layer of the ground will not have any support beneath and thus collapse creating a depression.
- Soil piping is a common feature along side river bank leading to river bank failure.

## Anti-Syphon Pipes:

An extra pipe connected to the outlets of toilet seats of all the floors, the other end of which is exposed to atmosphere is called anti-syphonage pipe. These are provided to maintain water seal so that foul gases of the sewer line do not find entry in to the toilet/bathrooms.

## 2) Sanitary Fixture and Traps

### Sanitary Fixture:

Sanitary fixtures are installed in different areas. Bathtubs, Washst and, shower sumps, traps and bidets are installed in bathrooms, washrooms, and shower rooms. Toilet bowls, lavatory pans, and urinals of

Various types, whether equipped with flush tanks or taps are installed in lavatories. Washers, Sinks and drains are installed in kitchen

## Sanitary Traps:

A Trap is a device shaped with a bending pipe path to retain fluid to prevent sewer gases from entering buildings while allowing waste materials to pass through. In oil refineries, traps are used to prevent hydrocarbon and other dangerous gases and chemical fumes from escaping through drains.

### 3) Cross Connection:

A cross-connection is a point in a plumbing system where it is possible for a nonportable substance to come into contact with the portable drinking water supply.

Identifying cross-connections can be challenging because many distribution systems are expending to ~~serve~~ serve new & customers and changing to accommodate customer needs.

## Back Siphonage Control:

### Back Siphonage

Control is one type of backflow.

Back siphonage — The flowing back of used, contaminated or polluted water from a plumbing fixture or vessel into a potable water

Supply because of negative pressure in the pipe. Branch — Any part of <sup>the</sup> piping system other than <sup>the</sup> main, riser, or stack.