PLUMBING SYSTEMS ASSESSMENT Hanover High School

PLUMBING

- ? Presently, the plumbing systems serving the school are cold water, hot water, sanitary waste and vent system, special waste and vent, storm drain piping, and natural gas.
- ? The School is serviced by an on-site septic system and Town Water. Storm drainage from flat roof areas is disposed of by a system of roof drains, & rain water conductors which discharge to a piped storm drainage system on the exterior of the building.

FIXTURES:

- ? Fixtures in the building are of mixed vintage reflecting either original construction or renovation. Water closets are predominantly wall hung, flush valve vitreous china, with elongated bowls. Several areas contain floor mounted water closets with flush valves. Original flush valves are in poor condition. Some valves have been replaced.
- ? Urinals are wall hung, flush valve, vitreous china with extended shield.
- ? Lavatories are generally wall hung vitreous china, two handle type faucets. Renovated areas have self closing metering faucets.
- ? Drinking fountains are various types and styles. Floor mounted electric water cooler in corridor. Recessed china fountain/cuspidors in gym.
- ? Janitor's sinks are generally floor trap standard wall hung, cast iron sinks. Faucets generally lack vacuum breakers.
- ? Kitchen area fixtures: Good condition, pot and pan sink is fitted with grease trap. Dishwasher is fitted with grease trap. There is also an exterior grease trap installed in 1995.
- ? Science area: Emergency showers and eyewash exist in one (1) lab only, however, non ADA compliant.
- ? 1995 gym renovation includes: Gang showers for boys and modesty modules for girls in both locker rooms with a master mixer. Generally appear to be code compliant.
- ? Generally the fixtures are in acceptable condition and repair; flush valves have been replaced in some areas. However, fixtures are generally non-accessible and non-water

conserving. ADA retrofit is required throughout in event of a significant renovation.

DRAINAGE SYSTEMS:

- ? Cast iron is used for sanitary and storm drainage. Where exposed, the cast iron pipe appears to be in acceptable condition.
- ? There is acid resistant piping consisting of fused joint poly propylene provided in the renovated laboratory with a 30 gallon acid neutralizer chamber. This system is in violation of DEP regulations as acid waste is required to go to a tight tank.

WATER SYSTEMS:

- ? Domestic water piping is copper, insulated. Insulation on valves and fittings is cementitious and need to be evaluated for asbestos. Given the life of the copper piping an extensive renovation will dictate all new piping systems.
- ? The main building service is 4" cast iron and with a 3" compound meter with 3" copper out to the building.
- ? Domestic hot water heating is provided in the main boiler room with two storage tanks. Kitchen hot water includes a direct gas fired water heater with a separate 400 gallon storage tanks. There is a direct supply and return pipe to the kitchen.
- ? Hot water to the building is generated with submersible coils fed from the boilers within a 1300 gallon tank which appears to have exceeded its useful life.
- ? System does not have adequate temperature control old mixing valve is seriously deteriorated. An upgrade is indicated.

NATURAL GAS:

- ? There is a high pressure gas service to a gas meter located outside the main boiler room.
- ? Gas feeds the kitchen, boiler room and is piped to science areas.
- ?? There is a 5 psi gas system serving the boilers.
- ? The gas piping appears suitable for reuse depending of course on size considerations of new load.

FIRE PROTECTION

? Building has no existing fire protection systems.