

LEASE LOT DRINKING WATER SYSTEMS – RUTH LAKE

GENERAL

The water system shall consist of the following:

1. Intake System
2. Pump System
3. Distribution System
4. Disinfection and Filtration

Prior to the installation of the water system, a complete system drawing shall be submitted to the Humboldt Bay Municipal Water District for approval. The drawing shall show system location, pipe sizes, materials and a plan of the inlet structure.

All work and materials shall meet State, County and District codes.

Fire Suppression systems are separate units with separate requirements.

INTAKE SYSTEM

The intake structure shall be constructed to prevent the entrance of foreign materials into the pump system and shall be easily accessible to perform required maintenance. A float or buoy type marker shall be attached to show its location. Additional buoy markers shall be placed at 20-foot intervals on pump suction or discharge lines, where submersed.

PUMP SYSTEM

There are a wide variety of pumps and appurtenances that will meet the design criteria. The three types of pumps most commonly used are Positive Displacement, Centrifugal, and Jet – the Submersible or Turbine being a variation of the three.

The system may be either Hydro pneumatic (pressure tank) or Gravity Storage. The pump will be controlled by pressure switch or float control to prevent tank overflow. Storage tanks may not exceed 1,000 gallons. Where the pump is not a submersible type, a pump house shall be constructed.

DISTRIBUTION SYSTEM

The distribution system includes all pipes, valves and hydrants from the pump system to the point of use and shall be designed to meet special conditions of each lot. The system shall be sized to furnish a minimum of 20 PSI at the point of use. There are a wide variety of piping materials available that will meet the design criteria. It is recommended that plastic pipe be used whenever possible. All pipes and fittings shall have a minimum working pressure of 150 PSI. A greater working pressure may be desired, depending on the individual lot conditions. All distribution lines shall be buried a minimum of 18 inches and marked above ground at 50-foot intervals. Method of marking shall be determined in the field during inspection.