

## 21.0 Water Treatment System

The existing domestic water supply for the East Ventilation building is located within the walkway on the roadway of the South bore. The existing water supply line is combined with the existing supply to the hydrants. A new domestic water supply shall be provided from the West Ventilation building, originating in the existing water treatment room and interconnected with the water treatment room located in the East Ventilation building. New domestic water piping shall extend through the roadway and fan deck levels, traversing the tunnel through the North bore plenum space.

Modifications to the existing water treatment plant are required to improve the functionality of the system. This may include additional piping to increase chlorination time and upgrading the existing filters.

### 21.1 Piping and Materials

All new piping and materials shall be suitable for domestic water use and in accordance with the International Plumbing Code, International Mechanical Code and NFPA 502. The use of non-metallic piping is not permitted.

All new domestic water piping shall be independently supported from all other systems, including the existing fixed fire suppression system. New piping in the plenum shall not be installed on the plenum divider wall and shall not add additional loading to the plenum floor.

Piping shall be protected from freezing in all areas.