



HOW THE HIGHLAND AVENUE WATER TREATMENT PLANT (HAWTP) WORKS

1. **RAW WATER PUMPED:** Raw water is drawn from the canal and pumped to the HAWTP facility.
2. **RAW WATER RESERVOIRS:** Basins store raw water and then feed it by gravity to the next process.
3. **PRE-FLASH MIX:** A compound is added to the water to aid in coagulation and flocculation. The water is agitated or mixed violently for a short time before released to the flocculation basin.
4. **FLOCCULATION AND SEDIMENTATION:** These basins provide enough contact time as the water moves slowly through this process, allowing the small particles to adhere to one another (flocculation) and making them heavy enough to settle out (sedimentation).
5. **FILTERS:** Water is filtered through layers of gravel and sand. Clear water emerges and is taken to the next process.
6. **POST-FLASH MIX:** Small amount of final substances are added to the water:
 - **LIME:** Used to adjust the final pH and alkalinity.
 - **FLUORIDE:** Added to prevent tooth decay.
 - **PHOSPHATE:** Used to protect distribution system pipes.
7. **CHLORINE CONTACT CHAMBER:** The water is disinfected in an underground chamber.
8. **STORAGE CLEARWELLS:** Up to 11 million gallons of clean water is stored in sanitized tanks underground before being pumped out to customers.
9. **PUMP STATIONS:** The pump stations and distribution system deliver the clean drinking water to our customers.