

## **OPERATIONS – WATER/SEWER**

The Operations – Water/Sewer Division is responsible for the operation and maintenance of the Village water and sewer systems, and the storm water conveyance system. The Village has 7,515 residential and 674 commercial services, for a total of 8,189 utility billing addresses, of which approximately 150 are for properties outside of the Village limits. Duties include: monitoring of distribution and storage of potable water and associated regulatory reporting requirements; repair of water mains, valves, hydrants, customer water service lines and valve boxes located in the public right-of-way; hydrant flow testing; water valve exercising; water meter installation, repair and testing; water quality testing; manhole, vault, and catch basin repairs; sanitary sewer lift station maintenance; sanitary and storm sewer system cleaning and televising; and responding to residents requests for service and assistance.

### **Water Production, Pumping, Storage, and Distribution System**

- Two pressure adjusting stations located where Glen Ellyn receives Lake Michigan water from the DuPage Water Commission.
- Two 1,000,000 gallon ground storage reservoirs and two elevated storage tanks of 500,000 and 750,000 gallon capacity.
- Two stand-by ground water wells and two water pumping stations.
- 145.2 miles of water mains; 1,211 fire hydrants; 1,368 water main line valves; and 8,189 water meters.
- Supervisory Control and Data Acquisition (SCADA) monitoring and control system.

### **Sanitary Sewer System**

- 85 miles of sanitary sewer mains.
- 5 sanitary sewer lift stations.
- Approximately 2,000 manholes.

### **Storm Sewer System**

- 70 miles of storm sewer mains.
- 3,165 storm sewer inlets and catch basins.
- 1,200 storm sewer manholes.

### **Utilities Division Accomplishments for FY06/07**

1. Tested and calibrated 15 water meters that are 2 inch and larger in diameter.
2. Installed 5 security cameras with continual taping at Public Works.
3. Met all state and federal drinking water regulatory requirements.
4. Contracted the video taping of approximately five miles of sanitary sewer main and prioritized the maintenance and reconstruction needs of these mains.

5. Pressure cleaned approximately 17.5 miles of sanitary main.
6. Vacuumed out over 10% of the Village's 3,165 storm sewer system catch basins, and cleaned approximately four miles of storm sewer main.
7. Repaired 62 water main breaks, 11 fire hydrant replacements, 19 hydrant repairs, 8 water main valve replacements, 12 valve repairs, 13 water service line repairs, 8 sanitary sewer repairs, 6 storm sewer repairs, 28 storm sewer structure repairs, 32 sanitary manhole repairs, and 9 water vault rehabs.
8. Updated the Village's Water Atlas.
9. Marked sanitary sewer and water main locations for more than 5,000 JULIE requests.
10. This year staff has completed four comprehensive training sessions on emergency operations of our two back up wells, and emergency generator systems for wells and sanitary lift stations.
11. All required staff have completed mandatory FEMA / NIMS training, confined space entry training, shoring and excavation training, IDOT flagger training, blood born pathogen training, CPR training, and right to know training.
12. Replaced 4,523 feet of old 4 inch water main, 3,676 feet of old 6 inch water main, 8,940 feet of new 8 inch, 50 feet of new 6 inch, and 6581 feet of new 12 inch water main during FY 2006/2007 construction projects to improve fire protection and reduce water main breaks.
13. Cross-trained two staff members on water and sanitary plant operations.
14. Conducted an infrared inspection of all electrical motors and switchgear at our well houses, pump stations, and sanitary lift stations.
15. Developed clear water removal grant program.
16. Utilities Division sanitary lining project will be advertised and awarded in early spring of 2007, and be funded from the FY2006/2007 budget year.

#### **Utilities Division Goals for FY07/08**

1. Continue to meet all state and federal drinking water regulatory requirements.
2. To further reduce unmetered water loss, we will test for accuracy and repair another 15 meters that are two inch in diameter or larger.
3. Continue the on going research to identify the sources of clear water inflow in to the sanitary sewer collection system and develop viable plans to mitigate this inflow.

4. Conduct an annual infrared inspection of all well houses; pressure adjusting stations, and sanitary lift stations to provide early detection of potential electrical problems.
5. Provide Public Works coordination of work with the engineering consultants and engineering staff to assure that FY07/08 projects are built on time, and with minimal disruption to the Village of Glen Ellyn residents.
6. Pressure clean 20 miles of sanitary sewer main.
7. Pressure clean 5 miles of storm sewer main, and vacuum 650 storm sewer catch basins (20% of the 3,165 total basins).
8. Televis 5 miles of sanitary sewer main and prioritize the maintenance and reconstruction needs of these mains.
9. Continue to train two additional Public Works staff to be competent operators of the computerized SCADA system; the water production plants, and the sanitary sewer lift station systems.
10. Continue cross training Operations Division staff on water distribution and sanitary collection system operations and maintenance.
11. Continue training to meet 2007 FEMA / NIMS requirements, and to train with DuPage Department of Homeland Security as scheduled.