

# *Wauconda* *Public Works*

Date: June 11, 2009

To: Dan Quick, Village Administrator

From: David Geary, Director of Public Works  
Betty Harrison, Superintendent of Administration  
Alex Pryde, Superintendent of Operations

## **Public Works Administrative Report for May 29<sup>th</sup> through June 11<sup>th</sup>**

### **Lake County Workforce Summer Workers**

Three temporary (three month) full time workers have been placed at the Public Works Department from the Lake County Workforce Program. The three local young adults have been assisting the staff with basic duties such as cleaning, painting and weeding.

### **Street Department Landscaping**

Street Department staff have been landscaping around some Village owned property to improve the appearance of the buildings and allow them to more easily blend in with the surrounding neighborhoods. A total of 103 plants were installed.



Landscaping work has been completed at the CAC Center, the Police Department, Well #5, Lift station # 13 (Main Street), Lift station # 17 (Roxbury Lane), Lift station #2 (Larkdale), Lift station # 8 (Callahan Road), Lift station # 10 (Serenity Lane), Lift station #14 (Wethington Drive), and Lift station #5 (Oakdale Avenue).

## **Emerald Ash Borer Prevention Program**

The Village Arborist completed the pre-treatment program of ash trees to help prevent an emerald ash borer infestation. During this program, approximately 700 trees were treated with a chemical used to make the trees undesirable for the ash borers. Smaller ash trees were treated with a soil additive, and larger trees were injected with the chemical through the Arbor Jet system. The Arborist will continue to monitor the spread of the ash borer in the Midwest to determine if further actions will be necessary.

## **Water Department**

### **Water Leak**

On Memorial Day a water leak was spotted along Slocum Lake Road. It was determined that this was a leak on an old  $\frac{3}{4}$  inch lead service line servicing four units at 132 Slocum Lake Road. Bartnick Construction was contacted to tap the water main and bore a new service line to the existing B-box. By boring a new line, it was not necessary to dig through the roadway and the disruption to traffic was minimized. On June 1, the Water Department crew excavated the water main and the b-box with the vactor truck. The service was then upgraded to a 1-1/2 copper line since the  $\frac{3}{4}$  inch was inadequate to serve four units.

### **Water Main Repair**

On June 3, the water main was excavated and repaired at Pershing Drive and Lincoln Avenue. A small hole was found in the water main at this location. A 15-inch stainless steel repair sleeve was installed. Thirteen homes were without service for an hour and a half while repairs were made.

### **Fire Hydrants**

Due to the additional staff hours now available due to the discontinuation of the residential seaweed pickup program, the Department's inspection of fire hydrants has begun. Twenty-one hydrants have been inspected for defects in the first week. Since spring flushing was not accomplished in the low zone due to lead and copper sampling, hydrant inspection will not include a full fledged flow test in those areas, but all hydrants will be operated and lubricated to check for operational issues and problems.

### **Well 3 Air Vacuum Valve Replacement**

Since putting Well 3 back in service in May, the Water Department was having trouble with the operation of the new air vacuum valve discharging large volumes of water at start-up and creating a mess in the filter room where it discharges. The function of this valve is to release air from the well column pipe upon start up and allow air back into the column pipe upon shut down. This prevents air from entering the potable piping system and also helps prevent water hammer problems for users. We discovered that the new valve was improperly sized for the application, after a new valve was installed, the problem has been rectified.

## **Water Reclamation Department**

### **Process and Maintenance.**

During this period:

- A rusting galvanized pipe airline was replaced with a PVC pipe in new grit mixer.
- The # 2 secondary clarifier was taken out of service for annual inspection. The clarifier was pumped down, cleaned and the annual inspection was performed to check for

problems or issues. This maintenance was completed with the assistance of the Vector truck and crew.

- Floors were painted at the reclamation facility in the chlorine room, the oil storage room, the wet and dry panel room, the non-potable room and in the control building. The floor was also painted in the stairwell in the primary effluent building.
- Five hours of weekly preventative maintenance was completed. Forty hours of annual preventative maintenance was completed.

#### **Performance Indicators for Water Reclamation (14 day reporting period) – Final Effluent**

- Total pumpage for period: 24,228,000 gallons
- Design flow of treatment: 1,900,000 gallons per day
- Design maximum flow of treatment works: 6,000,000 gallons per day
- Average flow for reporting period: 1,731,000 gallons per day
- High flow for reporting period: 2,396,000 gallons per day
- Low flow for reporting period: 1,480,000 gallons per day

#### **Performance Indicators for Water Produced**

- Total pumpage for period: 17,821,000 gallons
- Dependable capacity of water works @ 24 hrs/day: 3,470,070 gallons per day
- Dependable capacity of water works @ 18 hrs/day: 2,548,470 gallons per day
- Average daily pumpage for reporting period: 1,371,000 gallons per day
- High day for reporting period: 1,509,000 gallons per day
- Low flow for reporting period: 1,102,000 gallons per day

#### **Water Department Activity and Weekly Projects**

- JULIE locates: 87
- Daily check of water facility: 14
- Daily water supply operational tests conducted: 278
- Daily water distribution operation test conducted: 76
- Non-daily bacteriological samples collected: 11
- Non-daily chemical samples collected: 2
- Repaired water meters: 3
- Water quality inquiry: 4
- Penalty posted: 198
- Red Tag Notice shut-offs: 17
- Final readings: 32
- Backflow 2<sup>nd</sup> notice: 32