



PW/Utilities

Connection



July 2004

Utilities Data from June 2004

City of Melbourne Public Works & Utilities Department

Olde Eau Gallie waterlines being replaced in phases

Work is well underway for an important water distribution replacement project in the Olde Eau Gallie area. Old two- and four-inch waterline that was constructed 60-plus years ago is being replaced throughout the area in several phases taking place over several years.

The current phase under construction covers the north part of the Olde Eau Gallie area. New six-, eight- and ten-inch waterlines are being installed on Mathers, Masterson and McClendon Streets; and on one-block sections of Highland and Guava Avenues; and in one alley, all east of U.S. 1.

According to Engineering Inspector Calvin Oliver, who is overseeing the work being performed by the City's Contractor for the project, residents and businesses in



City Engineering Inspector Calvin Oliver reviews plans for the project as a section of PVC pipe ready for installation rests on the ground behind him.

the area will see a lot more water pressure and improved water quality as a result of the project.

"Most of the old pipe is two-inch galvanized steel that is being replaced with mostly eight- and ten-inch PVC," Oliver said. He noted that fire flow will be increased thanks to the project, and the lines will be looped to improve water quality.

"The flow in the two-inch pipe is probably down to about three-quarters of an inch due to tuberculation (or build up) in the pipes," explained Water and Wastewater Operations Superintendent Tom Hogeland. "Customers in

the area will notice a significant increase in their water pressure."

J.A.M. Construction Services, Inc. of Titusville is performing the work on this \$347,409 project.

Annexation of north Melbourne area to increase customers

By early August, a project to install new water lines in Melbourne's newest area is expected to be ready for bid, according to Project Engineer Martha Campbell. This comes as welcome news to the approximately 223 new residents who should be receiving City water from their taps by the end of the year.

The waterline extensions are now under design and expected to be ready for the bidding process by early August, according to Campbell. "We should have a contractor selected by early September with construction starting in October," she said. She added that the project will include installing approximately 10,000 feet of 12-inch pipe and 2,000 feet of six-inch pipe.

On June 22, property owners in this area, which covers

226 acres just west and north of the current city limits of Melbourne, approved the annexation by a referendum.

The annexed area is located along Turtle Mound Road in the vicinity of Parkway Drive and abuts the Kingsmill subdivision in Melbourne.

Besides water service, residents in the area will receive emergency services from the City, and all other services provided to Melbourne residents.

The City's planning staff has received dozens of similar requests from residents in the vicinity of the areas that have been annexed and anticipates similar expansion proposals in the near future, to be decided by affected voters.

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Monthly Water Usage and Raw/Finished Water Quality Statistics

Water Usage

- ◆ Water pumped to service: 466,668,000 gallons or 15.556 MGD average
- ◆ Maximum finished water pumped to service: 17.506 MGD on June 1, 2004
- ◆ Water billed: 444,448,700 gallons
- ◆ Fire hydrant flushing: 18,285,940 gallons
- ◆ Fire Department water usage: 38,550 gallons
- ◆ Brevard County water usage – sewer flushing: 0 gallons
- ◆ Flushing and testing new water mains: 10,040 gallons
- ◆ Committed capacity: 1.6842 MGD
- ◆ Capacity available for development: 9.7968 MGD (Based on 12-month average daily flow)

- ◆ pH: 7.3
- ◆ Alkalinity: 87 mg/L
- ◆ Total hardness: 159 mg/L
- ◆ Chlorides: 116 mg/L
- ◆ Color: 127
- ◆ Total dissolved solids (TDS): 363 mg/L

Well water quality

- ◆ pH: 7.3
- ◆ Alkalinity: 139 mg/L
- ◆ Total hardness: 620 mg/L
- ◆ Chlorides: 737 mg/L
- ◆ Color: 6
- ◆ TDS: 1,538 mg/L

Finished water quality - pumped to service

- ◆ pH: 8.3
- ◆ Alkalinity: 46 mg/L
- ◆ Total hardness: 124 mg/L
- ◆ Chlorides: 102 mg/L
- ◆ Color: 3
- ◆ Total dissolved solids (TDS): 339 mg/L

Water Quality Statistics

Lake water quality

Fleet Management mechanics earn ASE Blue Seal status

The Fleet Management Division has recently earned the Blue Seal of Excellence from the National Institute for Automotive Service Excellence (ASE). To qualify, at least 75 percent of all service mechanics and technicians must be ASE certified. Far exceeding the minimum, in the City of Melbourne, 100 percent have earned the certification.

“ASE Blue Seal recognition gives only the best establishments the right to stand out from the crowd,” said Kelly Tran, Manager of the Blue Seal program. “I am pleased to inform you that your professional staff meets the standards set by this program.”

Fleet Management has a staff of 15 who are responsible for more than 1,000 vehicles and pieces of equipment.

According to the division’s superintendent, Greg Schmidt, “This Blue Seal award is recognition that we



Fleet Management mechanics and technicians, from left, Steve Wilson, Albert Adams, Robert Mattingly, John Layton, Richard Boychuck, Glen Bossie, Ty Crosthwaite, Martin Andre and Steve Szilagyi. (Not shown is Richard Mauch, who was on vacation.)

have a qualified, factory-trained staff. Our technicians are ASE certified for all services we supply.”

ASE certification means that an individual has passed through industry-developed exams and meets experience requirements.

Beyond the standard certification, Schmidt notes that of the staff, five are master automotive mechanics, and three are master mechanics for trucks, with two additional mechanics expecting to complete the requirements

by next fall.

“Each master has to pass six to eight tests in that particular speciality,” Schmidt noted.

To maintain the Blue Seal status, ASE will review the status of Melbourne’s Fleet Management Division annually.

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Public Works/Utilities Data from June 2004

Wastewater Treatment Operational Summary and Reuse Statistics

D.B. Lee WWTP

- ◆ Treated this month: 130.91 MG
- ◆ Treated daily: 4.36 MGD
- ◆ Reuse production — total month flow: 64.74 MG
- ◆ Reuse average daily flow: 2.16 MGD
- ◆ Reuse number of days run: 30
- ◆ Plant efficiency, BOD removal: 98.14%
- ◆ Committed capacity: 0.7736 MGD
- ◆ Capacity available for development: 0.9023 MGD
(Based on 12-month average daily flow)

Grant St. WWTP

- ◆ Treated this month: 82.66 MG
- ◆ Treated daily: 2.76 MGD
- ◆ Reuse production — total month flow: 6.18 MG
- ◆ Reuse average daily flow: 0.21 MGD
- ◆ Reuse number of days run: 30
- ◆ Plant efficiency, BOD removal: 98.04%
- ◆ Committed capacity: 0.4638 MGD
- ◆ Capacity available for development: 2.1454 MGD
(Based on 12-month average daily flow)

Important project to rehabilitate Lift Station #6 underway

Lift Station #6 is located on Croton Road and is the City's third largest lift station. It receives about one million gallons each day of wastewater flows from Parkway Drive south to Eau Gallie Boulevard and I-95 east to Croton Road.

Concrete at the bottom of the wet well of the lift station had deteriorated to the point that the pumps could not be anchored. In periods of wet weather when flows are greatest, this had created problems.

To perform the rehabilitation, bypass pumps have been installed to divert the wastewater flows from the wet well while the work takes place.

This project is being performed in-house by two separate crews in wastewater collections. One is handling the bypass pumps, while the other works on the rehabilitation of the wet well.



Crew working inside the wet well includes, from left, Jim Symonetta, Butch Burke, Kevin Pugh and Charlie Charles.

According to Water & Wastewater Operations Superintendent Tom Hogeland, new steel framework will be poured onto a thicker concrete bottom.

"The previous pump anchor system didn't have an adequate steel framework and deteriorated because of the corrosive nature of wastewater," Hogeland explained. "The two 40-horsepower, six-inch submersible pumps within this wet well create quite a bit of torque when they start up. This torque, or twisting, is transferred

to the base assembly holding down each pump. If this base assembly is not adequately anchored, the pumps will twist loose inside the wet well and do considerable damage to the piping and structure."

The project is expected to be complete by the end of July.

Streets and Stormwater Management Monthly Summary

- ◆ Daytime street sweeper — hours run: 240
Cubic yards of material removed: 102
- ◆ Nighttime street sweeper — hours run: 114
Cubic yards of material removed: 86
- ◆ Asphalt repairs made: 20
- ◆ Tons of asphalt used: 57
- ◆ Feet of canals cleaned mechanically: 9,560
- ◆ Acres treated through aquatic spraying: 27
- ◆ Feet of storm drain pipe repaired: 200
- ◆ Concrete repairs: 28
- ◆ Cubic yards of concrete used: 37

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May Highlights

The level of Lake Washington increased during June. At the end of the month, the lake level was 13.67 feet above sea level. That compares to the end of May reading of 12 feet above sea level. Water quality remains good.

The D.B. Lee Wastewater Treatment Plant recorded 8.5 inches of rain during nine days in June. The Grant Street Wastewater Treatment Plant received 6.9 inches of rain over 14 days during the month. A total of 70.92 million gallons of reclaimed water was produced during June. This represents 33 percent of total plant flows for the month.

Noise reduced at water plant



A small in-house construction project that is having a big impact has recently been completed at the surface water treatment plant on Lake Washington Road. A sound attenuation wall,

shown above under construction, has been built to reduce the noise generated from the filter backwash air scours. The noise could be heard a quarter mile away, especially troubling at night for residents living close by, but has now been significantly reduced.

What's Done, What's Underway and What's Coming Up

Water Projects

Under Construction:

- ◆ Croton Road utility relocation associated with widening, \$593,257
- ◆ Trailer Haven waterline upgrades, \$195,905
- ◆ Wickham Road waterline replacement from SR 192 to Nasa Blvd., \$1,257,000
- ◆ Sludge handling facility motor control center and belt filter press control cabinets, \$175,685
- ◆ Waterline upgrade, Olde Eau Gallie, \$347,409
- ◆ Painting various structures at Lake Washington Water Treatment Plant, \$159,592

Under Design or in Bid

Process:

- ◆ Phase II surface water treatment plant improvements
- ◆ Utility relocation in association with NASA Boulevard realignment at Wickham Road
- ◆ Chemical feed upgrades at Canova Beach Booster Station
- ◆ Hibiscus booster station electric shut-off valves
- ◆ Wickham Road ground storage

tank and booster pump station

- ◆ Parkway Drive and Turtlemound water line extension
- ◆ Covered storage building at surface water treatment plant
- ◆ Fee Avenue waterline replacement under FEC
- ◆ Eau Gallie River sub-aqueous crossing

Wastewater Projects

Under Construction:

- ◆ Sewer manhole rehabilitation, Leewood Forest, \$123,525
- ◆ Inflows and infiltrations elimination, Lift Station 6 area, \$317,953

Under Design or in Bid

Process:

- ◆ Lift Station 24 replacement design
- ◆ New monitoring network for reuse system at DB Lee WWTP
- ◆ Demolition of old treatment units at D.B. Lee WWTF

Streets & Stormwater Projects

Under Construction:

- ◆ Street milling and resurfacing of various streets, \$794,000

- ◆ Sarno Road/Bell Street drainage improvements, \$257,911
- ◆ Swift Street stormwater improvements, \$195,107
- ◆ Babcock Street realignment, \$1,394,649
- ◆ Houston Street seawall rehabilitation, \$71,707
- ◆ Lime Drive cul de sac, \$123,627
- ◆ Eber Road widening from Babcock Street to Dairy Road, \$3,840,879

Under Design or in Bid

Process:

- ◆ Hoag Avenue paving and drainage improvements
- ◆ Upgrade of stormwater outfalls along Charles Dr./Almar Subdivision
- ◆ Upgrade of existing culvert crossing under Pirate Lane
- ◆ Pineapple Avenue pedestrian bridge at Cliff Creek

For more information about this report, please contact the Melbourne PW/Utilities Administration Department at (321) 674-5761 or send an e-mail to utilitiesadmin@melbourneflorida.org