



# City of Milwaukee

200 E. Wells Street  
Milwaukee, Wisconsin  
53202

## Meeting Minutes CAPITAL IMPROVEMENTS COMMITTEE

**ALD. ROBERT BAUMAN, CHAIR**

**Ald. Nik Kovac, Ald. Michael Murphy, Ghassan Korban,  
Martin Matson, Mark Nicolini, and Mariano Schifalacqua**

**Staff Assistant: Linda Elmer, 286-2231**

**Fax: 286-3456, lelmer@milwaukee.gov**

**Fiscal Planning Specialist: Kathleen Brengosz, 286-3926,  
kbreng@milwaukee.gov**

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Wednesday, September 2, 2015

9:00 AM

City Hall, Room 301-B

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*Meeting convened: 9:07 A.M.*

*Members excused: Mark Nicolini and Mariano Schifalacqua*

### 1. Review and approval of the minutes from the June 25th meeting.

*Ald Kovac moved for approval of the minutes. There were no objections.*

### 2. Presentation of the Dept. of Public Works Fleet Condition Report.

*Mr. Jeff Tews discussed the City's capital fleet. He said the Repair Division works at five locations on two shifts and has the capability to run a 24/7 if needed during emergency operations. He said that the Division was recognized for the second year in a row by Government Fleets magazine. He said the City's fleet was ranked 16th out of approximately 25,000. Mr. Tews said there are 123 different types of equipment. There are 4,700 pieces of equipment about 2,800 of which are owned by Fleet Services. The full replacement value of the fleet is over \$228 million. The Fleet Services portion is \$164.6 million. He said there are 839 pieces of capital equipment, which is about 30% of the quantity of the fleet but over 82% of the monetary value. Mr. Tews discussed recent additions to the fleet including seven brush chippers, two street sweepers, ten snow and ice control dump trucks, two hydro excavators and a tractor.*

*Mr. Tews discussed compressed natural gas (CNG) packers. He said 22 new refuse packers were purchased at one time using funds allocated in 2012, 2013, and 2014. He said the City now has 45 CNG packers. He said the CNG packers are economical, quiet and reduce emissions. He said 12.6% of the fleet's fuel needs are met with CNG. He said that using CNG has saved the City \$508,000 since 2012.*

*Mr. Tews said that the average age of capital equipment is about 12.2 years. He said that funding at the 2016 requested level of \$6.725 million is expected to raise the average age to 12.3 years. He said that some equipment in the fleet lasts longer than the traditional life expectation for its duty class because it is not used every day. Mr. Tews said the overall size of the City fleet is relatively stable over the course of the year. He also said that changes to Sanitation routes that are currently being developed may decrease the number of packers required for garbage pick up. Mr. Matson asked what the current replacement cycle for packers is. Mr. Tews said that*

*the department tries to replace packers on an 11 year cycle. He said that some packers are 17 years old, but that they are used more for snow plowing than for regular garage pick up. Mr. Korban asked how a reduced packer fleet will affect snow and ice control operations. Mr. Tews said that dump trucks may be redeployed from other divisions to supplement the plowing fleet.*

### **3. Presentation of the Water Works Condition Report.**

*Ms. Carrie Lewis discussed the condition of the treatment plants, pumping and storage facilities and the distribution system of the Milwaukee Water Works. She said the department evaluated five different aspects of each asset in the treatment plants; the buildings, the physical structure of the device, the pipes and valves leading to it, the electrical system and the connection to the SCADA system. Each item is rated on a scale of 1 to 5. For pumps, the evaluation included the physical structure of the building, the electrical, the pipes and valves and the individual pumps. She said there have been small improvements at most facilities over the last three years. She noted that pumping and storage facilities had a relatively large improvement in 2015.*

*Ms. Lewis discussed recent projects including the bypass valves and backup power generation at the Linnwood plant, the Riverside Tunnel, pumping improvements at Riverside and the replacement of the Adler pumping station. The installation of bypass valves will allow raw water from the lake to go directly to the chlorination phase of treatment. The project will allow the treatment plant to continue operating in the event the ozone system needs has to be taken offline for maintenance or repair. The backup generator will provide 4.5 megawatts of power to run the plant in the event of a power failure. The generator will automatically turn on and reconnect the plant to the grid as necessary. The Riverside Tunnel was found to be in generally in good condition. The 7,100 foot long 9 foot diameter concrete tunnel was drained, cleaned, photographed, videoed, physically assessed and measurements. Cracks were repaired and new gaskets were installed at access points. Ms. Lewis said access to the tunnel is through narrow vertical shafts. Pump 5 at the Riverside station was replaced while the tunnel was out of service. A 25 million gallon/day fixed speed pump was replaced with a variable speed pump of the same capacity. The variable speed pump is more energy efficient and allows for more constant pressure in the distribution system. The underground Adler pumping station, which pressurizes the Bluemound pressure district was replaced with an above ground station. The project was primarily funded by WisDOT (90/10 split). The new station has three variable speeds pumps each with a capacity of 3 million gallons/day. Current projects include a finished water reservoir at Linnwood, flood protection at the Riverside pumping station and the painting of the Lincoln tanks. Ms. Lewis said the Wisconsin Dept. of Natural Resources (DNR) is requiring that buried reservoir tanks have a membrane on top of the concrete. The membrane will provide an extra level of public health protection. She said a spillway will be constructed this fall to prevent bluff runoff from flooding the Riverside station. She said access to the path will be maintained and that Milwaukee Metropolitan Sewerage District provided funding to disconnect from the combined sewer system. The interior and exterior of the Lincoln tanks is being stripped and repainted. Ms. Lewis said the project is a little behind schedule because the DNR required mitigation of contaminated soil. Ms. Lewis discussed the distribution system. There are 1,825 of distribution mains 130 miles of feeder mains. She said that so far in 2015, 8 miles of main have been installed, 6 miles are under contract and one mile will be bid shortly. Ms. Lewis said this past winter had far fewer main breaks than the previous winter. She expects that 2015 will be below the 10 year average of 600 main breaks per year. Ms. Brengosz said that the number of main breaks per hundred miles of main has been trending downward. Ms. Lewis said the downward trend is due to water main replacements*

*and operating improvements. She said variable speed pumps come on and off more slowly which puts less stress on the distribution system. Mr. Korban said that a reduction in water main breaks will also reduce the cost and impact of undermined pavement.*

*Ms. Lewis discussed water consumption saying that it is down 2.5% over last year. She said consumption has been trending downward at that rate for several years. She said most of the reduction is related to residential customers. She said a recent study predicted that water usage in North America will continue to decline for another 20 years because so much of the country's housing stock has yet to replace regular flow toilets, showers, and dishwashers with low flow fixtures.*

*Ms. Lewis discussed water usage for community gardens. She said the department would like to get all non-firefighting uses off of hydrants. She said many gardens are doing creative things to get their own water such as filling cisterns. She said the smaller gardens that are currently popping up are more difficult because they don't always have access to a hydrant. She said the department generally does not allow hoses to go across the streets, alleys or driveways and strongly encourages the installation of a service if at all possible. She said the department works with Ground Works, a non-profit organization, to coordinate the community gardens. Ground Works gets the permits and takes responsibility for oversight.*

*Meeting adjourned: 9: 38 A.M.*

*This meeting can be viewed in its entirety through the City's Legislative Research Center at <http://milwaukee.legistar.com/calendar>.*