

CAMBRIDGE WATER BOARD

MEETING MINUTES

January 9, 2019

This meeting was called to order at 5:05 p.m. at 250 Fresh Pond Parkway, in Cambridge, Massachusetts. Those in attendance were:

Cambridge Water Board (CWB): Ann Roosevelt, Jason Marshall, Richard Johnson and James Burruss

Cambridge Water Department (CWD): Sam Corda, Fred Centanni, Mark Gallagher, Dave Kaplan, Jamie O'Connell, Ed Dowling and Linda Vierboom

Visitors: Paul Ryder; Jennifer Miles (VP), Monica Duffy Toft (President), Diana McArthur – Friends of Cambridge Athletics (FOCA): all on behalf of the 5K City Run/Walk Permit Application

Mr. Johnson announced that he will be recording the meeting.

A. MINUTES OF DECEMBER 11, 2018 MEETING

The vote to approve the December 11, 2018 minutes has been postponed until the next meeting when comments from Ms. Roosevelt and Mr. Marshall will be added.

Ms. Roosevelt said she thinks there is no way to do a health risk assessment, per Andrew Whelton, and would like to invite Sam Lipson of Public Health Department and talk about this at the next meeting. Mr. Corda will contact Mr. Lipson.

B. MANAGING DIRECTOR'S REPORT

ARM Upgrade Update by Fred Centanni, Director of Administration and Technology: **Data Collection Unit (DCU) Upgrade:** DCUs are receivers that are placed around the City which receive transmissions from the meter transmitting units (MTUs) and send the data to the CWD Server via cell phone. The MTUs are connected to the water meter and transmit the meter readings via radio signal to the DCU. The electronics of the DCU needs to be changed because the 3G cell phone service will not be supported after 2019. The DCU and solar panels will be inspected, and the batteries replaced. The AMR Vendor contract is being finalized so that we can start the work.

Questions or Comments: Ms. Roosevelt asked about the possibility of hacking and obtaining City or consumer data. Mr. Centanni said that intercepting the signal and then trying to decipher the thousands of pieces of information is extremely unlikely. The DCU collects thousands of signals a day and has a proprietary code. These numbers don't have a service address listed and the cell phone signal is encrypted, and the server is protected by the City firewall.

Online Read Program/Customer Service Module: Mr. Centanni said they are hoping for a kick off meeting in the next few weeks to begin the process and are anticipating customer access in the summer. The idea is for customers to see their daily consumption, conserve water and to see if they have leaks. At log in, the customer will be able to see daily reads. Then AMR vendor will facilitate the site, hosting the data and handling the cyber security, they will oversee all software upgrades. Each water account will have their own unique log in. The AMR vendor has a "leak detection" module that may be added in the future if it exceeds our existing "high reads" program.

Meter Transmitting Unit (MTU) Replacement: All MTU's are being replaced and upgraded. The new MTUs will have a 2-way communication ability and a 20 years battery life. This allows us to make changes to the MTU's remotely. Last week CWD mailed out another round of customer "Important Notifications" urging owners to contact Mass Installation to change MTU's and we hope to have it wrapped up by March 2019. It was noted that a pinhole size leak running 24/7 can cause a lot of usage. Blue dye tablets are in the lobby for residents to take home to test their toilets for leaks and some were disbursed to the board.

Questions or Comments: It was asked how many water mains use cathodic protection in the City. Mr. Corda responded that the force main is the only main that uses Cathodic Protection because it is thin walled steel which could make it susceptible to long term external corrosion. Mr. Gallagher added that cast iron is typically about 1.5 inches thick and is significantly less susceptible to long term external corrosion. Cast iron can be more susceptible internal corrosion if not cement lined. Failure of cast iron typically fails because of casting imperfections that can lead to cracking. Thermal expansion and contraction over many decades can cause stress fractures and ultimate failure in cast iron pipe. Class 52 double cement lined Ductile Iron pipe is our standard. CWD has been working on replacing old cast iron unlined pipe and replacing with ductile iron pipe. Any 6" pipe is typically replaced with 8" typically for fire flow needs. National Fire Protection Association (NFPA) regulations state pipes must be 1 diameter larger than fire hydrant and other connections. As a result of our water main rehabilitation work the number of leaks has been coming down and the average leaks per year is now in the 40-50 range. The leak detection company said that 5 leaks were found during their recent leak detection survey. This is considered "very tight". "Leak detection is the best maintenance we do", said Mr. Gallagher. Mr. Corda will ask CDM if they have standard methodology to use Cathodic Protection.

C. OPERATIONS

Transmission and Distribution:

No comments

Watershed:

When asked what SSO meant, Mr. Kaplan replied it was sanitary sewer overflow. Presently the sewer service at 404 Wyman Street, Waltham, runs under the highway and is problematic. Owner is looking to add a pump station and reroute the sewer line to eliminate the problems that they are having.

Weston Town Center Project - met with the town regarding the tributary to our supply.

Mr. Johnson would like the "Water Supply Summary Report" monthly precipitation chart to denunciate years using an Asterix or use crosshatching as copies are not available in color.

It was noted that water consumption has been down the last few years. Mr. Corda said that the average daily usage is down about 1 MGD to ~12.9MGD versus a few years ago. 2018 precipitation was well above average.

Mr. Johnson suggested that the department monitor and possibly respond to social media water related issues. Mr. Corda will review the options relating to this request and stated that this would be a huge burden for the staff.

Business:

Water is billed in measurements of CCF's. One CCF is equal to 100 cubic feet.

Water Operations:

No comments

Engineering:

It was noted that for every City project, we check to see if there are any lead services in the area, and if so, we replace them. The rough number currently is 1,700. Originally it was 12,000.

D. ACTION ITEMS

The permit request for the “5K City Run/Walk” was discussed and it meets all the permit requirements for Fresh Pond Reservation.

Mr. Marshall moved, and Ms. Roosevelt seconded the motion to approve the permit request for the 5K City Run/Walk. The vote was unanimous in favor of the motion.

E. MISCELLANEOUS CORRESPONDENCE AND ITEMS OF INTEREST

No comments

F. NEW BUSINESS

None

G. NEXT MEETING DATES/TOPICS

- February 12, 2019: Approved/Watershed Update
- March 19, 2019: TBA/Laboratory Update
- April 9, 2019 vs. the 16th: TBA/Distribution Update
- May 14, 2019: TBA/TBD
- June 18, 2019: TBA/TBD

Mr. Burruss moved, and Mr. Marshall seconded the motion to adjourn the meeting at 6: 15 p.m. The vote was unanimous in favor of the motion.