

BWS Upgrading Automated Water Meter Reading Equipment



A Board of Water Supply (BWS) contractor will be changing out meter transponder units (MXU) in BWS water meter boxes throughout the year, ending in December 2020.

The project will increase the efficiency of the automated meter reading (drive-by) process.

The BWS will replace roughly 80,000 of these devices throughout Oahu. The BWS has been gradually exchanging aging meter transponder units for newer ones; this project will accelerate those efforts.

The BWS has contracted Royal Contracting Company to install the new transponders and EKNA Services, Inc., as the construction managers. The project tasks include:

- Notifying customers of upcoming work in their area 1-2 weeks prior. The actual work will occur within 3-4 weeks of that notification. Most meters are in the public right-of-way.
- For meter boxes on private property, arranging with the customer, in advance, to gain access to the box.
- At the meter box, changing out the old meter transponder unit for a new one, taking about 15-20 minutes per meter.
- Performing Quality Assurance/Quality Control (QA/QC) work to ensure transponders are operating correctly. This will include a drive-by test.

Work will occur seven days a week, from 7:30 a.m. to 10:30 p.m.,

except on state highways where work is allowed only from 7:30 a.m. to 3:30 p.m. Water service will not be disrupted. Note that the BWS is NOT changing the water meter; only the meter transponder.

To address concerns that the project may be used to mask illegal activity:

- All contractor employees will have special BWS Contractor ID badges.
- No BWS employee or contractor shall ask the customer for any type of payment in conjunction with this project.
- BWS will post information online noting locations where contractors are working, along with maps and updates on the project:

- **BWS MXU website:** hbws.me/mxu
- **Facebook.com/BWSHonolulu**
- **Twitter at @BWSHonolulu**
- **Nextdoor.com**

If customers have concerns or questions about the project, they can contact the BWS via:

- **Email** ContactUs@hbws.org (Monitored 7:45 a.m. to 4:30 p.m., Mon. through Fri.)
- **Phone at 748-6500** (Monitored 7:45 a.m. to 10:30 p.m., including weekends. After hours, please leave your name and phone number so that we may return your call.)

MXU Project Frequently Asked Questions

What does this project involve?

Board of Water Supply (BWS) contractor Royal Contracting Company will be changing out roughly 80,000 aging meter transponder units in water meter boxes throughout Oahu. Work around the island began in January 2020 and is expected to finish by December 2020.

What is a meter transponder unit?

A meter transponder is 1 of 3 components of Automated Meter Reading (AMR) equipment in the water meter box:

- An electronic register that is physically attached to the water meter;
- A meter transponder that is connected via wire to the electronic register; and
- A vehicle transceiver in the BWS's drive-by vehicle.

As a BWS vehicle equipped with a transceiver drives along a meter-reading route, the transceiver sends a radio signal to meter transponders within range to notify them to transmit, via radio signal, meter reads back to the transceiver. The meter transponder gets the reading from the electronic register and sends it back via radio signal, to the transceiver where it is collected for bill processing.

Why is the BWS changing out transponder units?

The change-out will significantly increase the efficiency of the automated meter reading process (drive-by).

In 2017, the BWS started to replace aging transponders with newer ones in one of the 20 meter reading cycles, resulting in the AMR read rate rising from 80% to 92%. That cycle now has a consistent read rate of greater than 95%. Similar results have occurred in other cycles that were steadily changed out. This mass change-out project was initiated to speed up those efforts and the BWS anticipates that, after completion, AMR read rates will be at 95% or higher.

Will I be billed for the change-out?

No. Customers will NOT be billed for this project. No customer shall ever be approached for any type of payment by any BWS employee or contractor for this project. This project is funded by BWS in its FY2020 Capital Improvement Project budget. There will be no additional costs passed on to ratepayers.

How much does the project cost?

The project will cost about \$5.01 million.

How long will the actual work take?

The change-out at the box should take about 15-20 minutes. As part of the QA/QC work, you also may notice the contractor conducting drive-bys to ensure that the transponder is connecting and transmitting. This drive-by

test will occur within the following 24-hours after the change-out.

Can I schedule a specific date and time for this work to be done?

The contractor will only be scheduling appointments for those residences where the water meter is located on private property and access is required. Most water meters are located in the public right-of-way.

Will the contractor do any other repairs when they come to replace the transponder?

The contract is for transponder replacement, but through the inspections of the meter boxes, it has been noticed that another piece called the ECR may need changing as well. This is far less common. Royal will replace all transponders in an area first, then return later to change out those meter boxes with both transponders and ECRs. However, if they note any other condition issues in the meter box, they will let the customer and the BWS know that a follow-up visit may be needed to assess and conduct any additional work. Customers may call 748-5000, extension 1, to report and follow-up.

Once the change-out is complete in my area, will the contractor have to come back?

The contractor is working to replace transponder units as quickly and as safely as possible. There will be times, such as when there are meter readings taking place, where the contractor will pause their work and have to return to the area at a later date.

I reported a leak in the meter box to the BWS. Can the contractor fix that since they are already coming here?

If you already contacted the BWS about a possible leak in the meter box, a BWS employee will come to investigate it. If you need to report a leak in the box, please call 748-5000, extension 1, and speak to a BWS dispatcher. The contractor will not be repairing leaks.

Are you replacing or upsizing my meter?

We are NOT replacing the meter, only a component in the meter box.

Will the contractor notify customers in advance of doing the work?

Yes, Royal Contracting Company is mailing postcards to residents about 3-4 weeks in advance of their work in an area.

Is there a way to identify the contractor's employees who are working on this project?

Employees from Royal Contracting Company will be wearing bright yellow vests with their company logo. They will have identification badges indicating they are BWS

contractors. They may be on foot or in vehicles that are marked with Royal Contracting Company's logo and they will have a rolling cart with their equipment on it. Please refer to the pictures in this flyer to see the vests and badges.

My meter box is on my property, behind a fence or at the back of the lot, so how will the contractor handle the change out?

The contractor will pre-arrange with you to gain access to the meter box.

Will I still have water service during the change-out work?

Yes. Water service will NOT be disrupted during the work.

Is this work limited to regular business hours?

No. Work will occur seven days a week, from 7:30 a.m. to 10:30 p.m., except along state highways where work is allowed only from 7:30 a.m. to 3:30 p.m. However, work is limited to the meter box only.

There is activity occurring on my street that could be related to this project, but I am not sure. How can I check if work is being done in my area?

The BWS regularly updates information about where the contractor is working via a webpage at hbws.me/mxu and its social media channels – Facebook, Twitter, and Nextdoor.

Also, unless a customer is notified in advance, the contractor's employees should not enter private property before, during, or after the change-out activity.

I saw someone working in my neighbor's meter box but they didn't do mine. Later, I saw someone else down the road working in a meter box. Why?

The contractor will deploy teams of employees, each of whom have specific meter boxes assigned to them, into an area. So one employee may work on a neighbor's box while another works on the one servicing your home or one further down the street.

Besides making the drive-by readings more efficient with these new transponders, have there been inaccurate readings being generated by the existing meters?

No – the readings have not been inaccurate. The reason we are doing this project is to increase the drive-by read rate. If we do not get a drive-by reading from a meter, then the Water Data Collection Clerk has to return and read the meter manually, which is not an efficient use of staff time. When completed, this project will increase the number of meter readings the staff can collect via automated meter reading (drive-bys) and reduce the number of manual reads needed to bill our customers.

What if I have other concerns or questions about the project?

If you have other questions or concerns, contact the BWS by:

- **Email:** contactus@hbws.org monitored Monday – Friday, from 7:45 a.m. – 4:30 p.m.
- **Phone:** 748-6500 which is monitored daily, from 7:45 a.m. – 10:30 p.m. After hours, please leave your name and phone number so that we may return your call.

