



MEMORANDUM

Ordinance 23-61, An Ordinance of the City Council of Homer, Alaska Amending the FY24 Capital Budget by Appropriating \$300,000 from the Water Capital Asset Repair and Maintenance Allowance (CARMA) Fund to Design and Rebuild the Ben Walters Pressure Reducing Station. City Manager/Public Works Director.

Item Type: Backup Memorandum
Prepared For: City Council
Date: November 14, 2023
From: Janette Keiser, PE, Public Works Director/City Engineer
Through: Rob Dumouchel, City Manager

I. Issue: The purpose of this Memorandum is to request an appropriation in the amount of \$300,000 from the Water CARMA to rebuild the pressure reducing station in Ben Walters Way.

II. Background:

There is a pressure reducing station in Ben Walters Way, directly under the alignment of the curb/gutter, which will be installed as part of the new sidewalk project. This station is old. It leaks, has outdated plumbing and obsolete electrical works. At first we thought we could abandon this station by demolishing it in place. We proceeded to design the Ben Walters sidewalk with this idea in mind. However, this past summer, we completed work to update Homer's Water Model. This work involved using a computer program to simulate water pressures/flows throughout Homer's water distribution system, augmented by field tests taken at fire hydrants around town. Results from the Water Model demonstrated that the Ben Walters Pressure Reducing Station is an important element of Homer's water distribution resilience; that is, this station allows us to adjust water pressures in multiple branches of the water distribution line, so we can provide continuous water flow to customers in the event an emergency cuts off flow in the immediate proximity. We concluded it is not in the best interests of the public to abandon this pressure reducing station after all.

Once we realized we needed to keep the pressure reducing station at this location, we took a closer look at what was required to bring it to a state of good repair. First, the access port for the station is directly within the alignment of the new sidewalk. As a minimum, we need to relocate the access port so that it doesn't create a conduit for inflow of storm water into the pressure reducing station or create a tripping hazard in the new sidewalk. Next, we need to

repair the plumbing and upgrade the electrical works. We also need to stop ground water from leaking into the station, which will require excavation to expose the concrete vault and applying water proofing. We concluded, with all this work, it would be more cost effective to build a new, above-ground pressure reducing facility, outside the footprint of the road and sidewalk. The estimated cost of doing this is \$300,000. This work needs to be done in conjunction with the sidewalk project, to minimize adverse impact to the water operations and protect the integrity of the new sidewalk. We don't want to have to tear up the new sidewalk to access the old pressure reducing facility.

We are requesting funds from the Water CARMA fund so we can design the rebuild as soon as possible so the work can be done as part of the sidewalk project. Construction of the sidewalk is slated for the summer 2024.

- III. RECOMMENDATION:** That the City Council appropriate \$300,000 from the Water CARMA fund to pay for design and construction of rebuilding a new Ben Walters Pressure Reducing Station as part of the Ben Walters Sidewalk Project.