



MEMO

TO: Steve Potter, City Manager
CC: Christopher Diaz, Interim City Attorney
FROM: Joy Eldredge, Utilities Director
DATE: 1/16/2025
SUBJECT: Emergency Declaration for 36-inch Asbestos Cement Transmission Main Replacement

Background

The City of Napa water system provides potable water to 86,906 persons throughout City of Napa and unincorporated Napa County. On the western side of the city, potable water is transported from the Barwick Jamieson Treatment Plant through a 36-inch asbestos-cement (AC) transmission main to the City of Napa service area. The 36-inch AC transmission main was installed in 1968 and is only 56 years old. Typically, an AC main would have a 100-year service life.

The main is critical to the City's ability to convey water throughout the City, without the 36-inch transmission main, the City relies on the 24-inch steel transmission main on the east side of the City and smaller local distribution mains. Any further disruptions at the same time as a 36-inch AC transmission main break can cause major impacts and restrict the ability to provide water for large portions of the City.

In the last couple years, the City has had nine main breaks on the 36-inch AC transmission main. Four of these breaks have occurred in the last six months. Previously the majority of main breaks were on the south side of Napa in open fields near the Napa Sanitation District. More recently the breaks have been occurring under pavement on Laurel Street and Old Sonoma Road. Historically there have been only two breaks under pavement in the 56-year lifetime of the pipeline. One of which was due to the 2014 earthquake. The types of breaks have also changed. Historically most of the breaks were due to failures at the rubber gaskets on the collars that hold two pieces of pipe together. Two of the more recent failures had holes in the pipe wall rather than at the gasket. These main breaks are a concern because they damage the surrounding pavement, may take several days to months to repair depending on location, and release large volumes of water that may severely damage public and/or private property. The increased frequency and severity of the breaks lead staff to believe that the pipe is in need of

immediate replacement. Indeed, staff anticipates that breaks will happen more frequently and with increased severity. These breaks compromise the city's ability to provide reliable water service to residents and may pose a threat to residential and commercial properties. Thus, the replacement of the pipes is necessary to avoid disruption to vital public functions and to mitigate potential damage to property. Moreover, the piping may be impacted by long lead times, so the city must be able to flexibly and quickly enter into contract to procure the pipe while being able to quickly remediate the condition of the current pipe.

City Staff has determined that due to the increased frequency of breaks and more damaging leaks that the 36-inch AC transmission main needs to be replaced by 36-inch steel pipe. The initial phase of pipe replacement is 5,500 to 11,000 linear feet of main located on the following streets:

- Linda Vista Avenue
- Robinson Lane
- Browns Valley Road
- Laurel Street
- Foothill Boulevard

Additional distribution system improvements may be required such as installing pressure regulating stations or replacing up to 1,000 linear feet of 12" or smaller mains that will be critical to continue service while sections of the 36" transmission main are out of service. These improvements would be needed to allow the City to replace multiple sections of the 36" transmission main concurrently to return the transmission main back to service as efficiently as possible.

The City has current projects to pave Laurel Street and Browns Valley Road. As a result, the City must quickly move to replace the pipe before any paving work is performed. The Laurel Street paving has been postponed until 2025 with temporary paving in place until final paving can be installed. The Browns Valley Road project has started constructing concrete sidewalks in January 2025 and will follow with asphalt paving later in 2025. Due to these projects the main replacement will be prioritized on Laurel Street and Browns Valley Road. By prioritizing these streets, the City will realize cost savings by avoiding repairing leaks that cause greater damage when the road surface is sealed under new pavement or installing a new main in new pavement and then needing to repave after the repair or installation has been completed.

Recommended Action

Per NMC Section 2.91.040, I am recommending the City Manager make the determination that the 36-inch AC transmission main along the streets mentioned above is an "emergency" resulting in the need to expedite its replacement. NMC Section 2.91.020 defines an "emergency" as a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services. The recent 36-inch leaks and need to replace the transmission main in the largely residential area was a sudden, unexpected occurrence.


The 36-inch AC transmission main remains in service as its needed to convey water throughout the western portion of the City. While it remains in service there is potential for additional leaks before the main is replaced. The emergency declaration will help fast track the procurement process to replace the main sooner to reduce the risk of a leak while the main

remains in service. The determination of the emergency condition will allow immediate action to commence contracting for the replacement of the public infrastructure to prevent damage or loss of property, protect essential public services, and protect public safety.

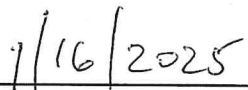
The proposed work plan under the emergency declaration will balance the need to commence construction to replace the transmission main starting in Spring 2025 with a modified bidding process to obtain competitive pricing. The City intends to prequalify contractors that have experience installing 36-inch steel pipe. The City will select from a qualified contractor from the prequalified list using a design-build or design-bid-build procurement process depending on which process provides value and efficiency to the City in order to meet the project deadlines of starting construction in early Spring 2025 and finishing construction by October 2025.

Declaration:

The City Manager hereby determines that there is substantial evidence documented in this memo from the Utilities Director (dated January 16, 2025) to support the conclusions that: (1) there is an "emergency" based on unexpected frequent failures of the 36-inch AC transmission main; (2) there is a need to take the immediate action for the repair work described in this memo to resolve the emergency, and (3) the emergency will not permit a delay resulting from compliance with the standard public bidding process. Therefore, the City Manager hereby authorizes the Utilities Director to execute the emergency contracts that are directly related to resolving the emergency, including the replacement of the 36-inch AC transmission main from West Pueblo Avenue to Old Sonoma Road in accordance with NMC Section 2.61.040.



Steve Potter, City Manager



Date