



### **DEAD END WATERMAINS IN NEW SUBDIVISIONS**

As the owner and operator of the City's water distribution network, the City of Calgary is responsible for the operation and quality of the water within the City's system. The City works to ensure all Calgarians have a safe and reliable supply of drinking water as outlined by the City's Approval to Operate under the province of Alberta's Environmental Protection and Enhancement Act.

One of the major risks to the quality of the drinking water in the City's water system is the growing number of dead end watermains being added to the water network throughout Calgary. Mains that are not looped limit the ability for water to circulate throughout the distribution network, increasing the likelihood of it becoming stagnant in the main until consumed by homes and businesses connected to it. When water remains stagnant for extended periods of time the chlorine residual in the water will deteriorate, allowing the potential growth of microbials which can pose a health risk for the consumer. Monitoring and operation of these flushing assemblies to maintain chlorine residuals has been identified as a significant ongoing operational cost to the City.

Going forward, in an effort to manage these operational costs and to mitigate water quality risks, Water Resources is committing to work with the Development Industry through the city planning process to reduce the number of dead end mains in new Outline Plan areas. Water Resources recognises that there are, and will continue to be unique situations where dead end mains may be unavoidable and will continue to approve them where required. On any new Outline Plan submitted to the City of Calgary after March 1, 2021, The Developer or Developers Representatives will highlight locations where dead end mains are being proposed and can't be avoided. Current City Spec reflects this in section 504.04.01 of the Waterworks Specifications when it notes that permission is required by the Engineer (City of Calgary) if there are no other options available. As part of the Outline Plan circulation, Water Resources will review and confirm there are no other options available. Approval of the Dead End Watermain is required at the outline plan stage to move forward with that design.

For more information, please contact Zhong Xiang, Leader of Development Approvals at [zhong.xiang@calgary.ca](mailto:zhong.xiang@calgary.ca)