Summary Title: City of Palo Alto 2020 Water Gas and Wastewater Utility Standards

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From: City Manager

Lead Department: Utilities

This is an informational report and no Council action is required.

Background
The City of Palo Alto Utilities (CPAU) Department’s Water, Gas, and Wastewater (WGW) Engineering Division implements standard specifications and details to regulate construction of water, gas, and wastewater facilities in the public right-of-way and for CPAU-owned facilities on private properties. These standards ensure that utility infrastructure is constructed and maintained in a safe, uniform, and reliable manner. The WGW Utility Standards include installation requirements, material specifications, and standardized configurations.

Discussion
CPAU Engineering staff updates the WGW Utility Standards periodically and last issued revisions in 2019. This 2020 edition incorporates current field practices, contract management, and other non-substantial changes which can be viewed at this link (LINK). The most significant revisions to the 2020 WGW Utility Standards are summarized below:

- Reworded some phrasing and added new language to increase clarity of standards and requirements (in various Sections).
- Included additional language to clarify Contractor’s responsibilities on construction projects to help City manage capital improvement project (CIP) contracts (in various Sections).
- Changed the construction submittal format from hard copies to electronic files and added a requirement for the contractor to submit them within 10 working days from the date the Contract is signed (Section 800).
- Highlighted the testing and certification requirements for contractor personnel
performing work on natural gas facility or pipe-bursting operation (Section 800).

- Rearranged the order of specifications based on the sequence of events (Section 2200).
- Strengthened the potholing requirement to locate crossing and parallel utilities within 5 feet of the proposed utility to minimize construction conflicts. Also contractor’s responsibility to fully examine and inspect project site to identify and anticipate public and private utilities within the project area to avoid unnecessary dig-ins/damage (Section 2200).
- Specified the requirements for working around PG&E high pressure main and CPA high voltage electric duct bank (Section 2200).
- Clarified the polyethylene pipe marking requirements (Section 2300).
- Added the specification for temporary line stops on water mains (Section 2660).
- Added the specification for marking tape, pressure control fittings, drilling nipples, vent pipe, pressure testing of new service connected to PVC main, and abandonment procedures (Section 2685).
- Detailed the gas system operator qualification testing requirements (Section 2685).
- Added requirement for flow monitoring and hydraulic analysis of wastewater main for large development projects (Section 2730).
- Strengthened the requirements for cured-in-place liner installation in wastewater main (Section 2736).
- Added sewer manhole abandonment procedures (Section 2738).
- Strengthened cleaning equipment requirements and procedures for cleaning wastewater mains (Section 2739).
- Clarified the basis of survey control benchmarks for GPS data collection (Section 2740).
- Detailed the requirements to clear obstructions in wastewater main prior to performing cross bore inspection (Section 2741).
- Added hydraulic butt fusion procedures (Appendix F).

The 2020 City of Palo Alto Water Gas and Wastewater Utility Standards are available on the City’s website at www.cityofpaloalto.org/gov/depts/utl/eng/standards.asp.