Overview: The subject of our interview today with Owen Randall will be his involvement in Utilities’ building of an extensive water and wastewater pipeline infrastructure to meet the needs of a city growing in both population and geographic size.

- The pipeline infrastructure was built up over several decades, beginning in the 1980s
- It included the design and building of large transmission mains and the AB Waterline.
- Pipeline infrastructure was added to the west and northeast of the city and outward from the older sections of the city to newer sections around Harmony Rd., Timberline Rd., Summitview Rd., and the Foothills.
- The expanding infrastructure included raw water, treated water, and waste water pipelines as well as sanitary sewers and diversion boxes.

Rather than simply discussing when and where the various pipelines were built, our interview today will focus on questions related to the infrastructure building process, including planning, materials, and outreach to the public.

1. Owen, perhaps we can begin with a few questions about Utilities’ process for measuring and evaluating demand for water:
   a) How, over time, has the Utilities department measured increase in demand? What metrics and other information has the city relied on?
   b) When, in the long process of evaluating and meeting increased demands for water, have you (as an engineer) been brought into discussions and planning? Has this changed over time as you’ve assumed higher levels of responsibility?
   c) Have there been points over the past three or four decades when you think Utilities responded too hastily or too slowly to growing demand for water?

2. I’d like to hear about how Utilities has planned the growth of its pipeline infrastructure.
   a) What was infrastructure planning like when you joined Utilities?
   b) How has Utilities worked over time to make its infrastructure planning more effective? What are the critical elements of good infrastructure planning?
c) Is there a meaningful difference between “infrastructure” and an “infrastructure system”?

3. As Utilities worked to expand its water and wastewater pipeline infrastructure, why and when did it shift from hard bid delivery to the Alternative Product Delivery System?
   a) Can you give an example of the problems Utilities had with hard bid delivery?
   b) Could you describe a project that went well because of the APDS?

4. I’d like to ask you some questions about the kinds of pipe materials Utilities has installed and how the city has protected those materials from corrosion:
   a) As Utilities has expanded its pipeline infrastructure, how has it made decisions about pipeline materials? Have priorities changed over time? Has the quality of pipes changed?
   b) I understand that Utilities relies on Cathodic Protection to minimize pipe corrosion. Could you explain how CP works? Also, when did Utilities begin to use CP and how effective has it been?

5. Pipeline infrastructure had involved both transmission and distribution. Can you explain the difference between transmission and distribution and how they present different challenges to Utilities?

6. Public outreach is often very important to municipal services.
   a) Can you tell us how Utilities has increased public outreach effort while expanding the pipeline infrastructure?
   b) Have there been critical instances of pushback from the public? Over what issues? How did Utilities respond?
   c) Can you describe a project that went extremely well because of effective public outreach?

7. As the city has grown, has it become increasingly difficult to get pipelines into the ground? Did Utilities anticipate this happening and take proactive steps?