



**MINUTES OF THE SPECIAL MEETING OF THE
ARAPAHOE COUNTY PLANNING COMMISSION
TUESDAY, JUNE 14, 2016**

ATTENDANCE	<p>A special meeting of the Arapahoe County Planning Commission was called and held in accordance with the statutes of the State of Colorado and the Arapahoe County Land Development Code. The following Planning Commission members confirmed their continued qualification to serve:</p> <p>Paul Rosenberg, Chair; Brian Weiss, Chair Pro-Tem; Jane Rieck; Richard Sall, and Diane Chaffin.</p> <p>Also present were: Jason Reynolds, Current Planning Program Manager; Jan Yeckes, Planning Division Manager; Molly Orkild-Larson, Senior Planner; Spencer Smith, Engineer; and members of the public.</p>
CALL TO ORDER	<p>Chair Rosenberg called the meeting to order at 6:30 p.m. and noted a quorum of the Board was present.</p>
DISCLOSURE MATTERS	<p>There were no Planning Commission member conflicts with the matters before them.</p>
REGULAR ITEMS:	
Item 1:	<p>Case No. L16-004, Dove Valley V #02 [ACWWA-CWSD Joint Water Purification Plant] / Location and Extent Plan (L&E), Molly Orkild-Larson, Senior Planner, Public Works and Development (PWD)</p> <p>Ms. Orkild-Larson stated the noticing requirement had been completed and the Planning Commission (PC) had jurisdiction to proceed. She introduced the case, stating the nature and purpose of the requested amendment and the location affected within the Dove Valley Business Park in areas zoned Mixed Use. She reported staff recommended approval with conditions, based on findings in the staff report.</p> <p>Commissioner Rosenberg asked whether the neighborhoods in Douglas County were sent referrals on the case.</p> <p>Ms. Orkild-Larson stated referrals were sent to Douglas County Planning and Engineering; however none were sent to the</p>

neighborhoods in Douglas County because they weren't within close proximity to the site.

Pat Mulhern, Mulhern MRE, Inc, on behalf of Arapahoe County Water and Wastewater Authority (ACWWA) / Cottonwood Water and Sanitation District (District) and Dove Valley Business Park Associates, LTD., introduced the project team. He presented a PowerPoint, a copy of which was retained for the record. He explained the history of water and wastewater for development in the south metro area, noting his involvement since 1984. He reported dependence on the deep-water aquifer had long been a concern. He stated Cherry Creek was a source of water, but the water quality was challenging. Mr. Mulhern reported Inverness was the fourth user in a 12-mile stretch. He explained the sequence of water use, treatment, and reuse by subsequent users. He explained water quality challenges related primarily to total dissolved solids (TDS), which caused the water to be "hard," as well as other components not well managed by water treatment processes. He said reverse-osmosis was the preferred system for bottling water, because it resulted in excellent water quality. However, Mr. Mulhern reported it also produced a "reject stream" that was discharged back to the natural stream. He said, in 2010, selenium became a problem in discharges, resulting in the plant being converted to micro-filtration, which met standards, but did not produce the desired quality of drinking water. He explained the project was intended to address the selenium problem and allow the plant to go back to the reverse-osmosis process. Mr. Mulhern reported the team had looked at a number of options, and the natural, biologic treatment system rose to the top. He stated the second option would cost \$12 million in comparison to \$5 million capital cost for the preferred method, which also has a lower annual cost. He explained the modeling study was completed in August 2015. Mr. Mulhern reported selenium occurred in nature at higher concentrations than the plant would need to treat. He also explained the steps taken to bring them here today and the many agencies that had to be consulted, as well as finding and getting a contract on land to locate the facility.

Sarah Foster, CH2M Hill, explained selenium was very difficult to remove to low concentrations, which made the treatment complicated and expensive. She said selenium could be taken up by soils and plants. She stated the process used an organic substrate to drive microbial and chemical reactions to reduce concentrations of metals, acidity, and other components. Ms. Foster reported subsurface vertical flow aerobic polishing "cells" finish the process prior to discharge to the stream. She explained the biologic treatment cell construction process. She compared the smell to a garden center

at lower levels and the various layered components of each cell laid out across the site. Ms. Foster explained the path that water followed as it entered the system to the point it is eventually discharged to Windmill Creek, explaining the reject stream was the component of flows that would go through the selenium treatment process to prepare it for discharge. She described benefits of the biological treatment system, as already described, and the disadvantages, which were necessary for odor control and periodic hauling of depleted materials. Ms. Foster reported that occurred primarily when the cells needed to be deactivated and reconstructed for future use (estimated ten to twenty years after initial construction). She stated some maintenance activities occurred at 5 years. She reported a piloting of the bio-treatment system occurred over 12 weeks in the winter and spring. She said the two trains resulted in 88-93% removal of selenium and 83-96% removal of phosphorus, with good removal of other compounds, metals, and bacteria.

Mr. Mulhern addressed the question from the Planning Commission and explained the various outreach efforts made to neighborhoods to ensure people had an opportunity to learn about the project and get their questions answered. He said meetings were offered and the team met with those who opted to attend. He distributed two brochures that had been given to attendees, copies of which were retained for the record, to the Planning Commission. Mr. Mulhern further discussed the maintenance, hauling, and odor control anticipated and stated they would be good neighbors. He addressed the proposed schedule for the project.

Mr. McBrien described the customer base, which was more heavily weighted toward commercial and business users than residential users.

Mr. Mulhern answered questions from the Planning Commission about the site, whether neighbor concerns related primarily to odor (which they did), about current complaints with regard to water quality since having to stop using the R-O process, water quality impacts farther down the user line. He noted comparison TDS numbers in various locations north and south. He also explained the truck traffic associated with construction and maintenance. He reported some neighbors had asked about air quality impacts for people with asthma. Mr. Mulhern stated this does not seem to be a problem from Mr. Lambert's research.

Jim Bays, CH2M Hill, addressed questions about the results of the pilot study and variations in water quality as the system came on-line.

Mr. Rosenberg asked about the Prairie Waters project in Aurora and a treatment system that was built near Brighton and whether these were similar.

Ms. Foster explained the similarities and differences between the two systems and the problems each addressed.

Mr. Mulhern noted that reverse-osmosis was not an option, but they were able to blend the high-TDS water with low-TDS water from mountain flows.

Ms. Orkild-Larson asked about fencing for the project.

Mr. Mulhern reported neighbors questioned whether the system would be at risk for vandalism if not fenced. He said the team felt the fence could be an attractant; his thought was to not fence it unless problems came up.

Ms. Rieck asked whether the road would be gated to prevent undesired users.

Mr. Mulhern said that was likely.

Mr. Rosenberg opened the hearing for public comments.

There were no public comments.

The public hearing was closed.

It was moved by Ms. Rieck and duly seconded by Mr. Sall, in the case of L16-004, Arapahoe County Water and Wastewater Authority / Cottonwood Water and Sanitation District Joint Water Purification Plant Location and Extent Plan, that the Planning Commission had read the staff report and received testimony at the public hearing and found themselves in agreement with staff findings, including all plans and attachments as set forth in the staff report dated May 26, 2016, and move to approve this case, subject to the following conditions:

- 1. The applicant will make modifications to plans, as requested by the Public Works and Development Department.**
- 2. Place a note on the site plan that indicates that a future Southeast Metro Stormwater Authority (SEMSWA) detention facility is to be placed on Tract C.**

	The vote was: Mr. Weiss, Yes; Ms. Rieck, Yes; Ms. Chaffin, Yes; Mr. Sall, Yes; Mr. Rosenberg, Yes.
ADJOURNMENT	There being no further business to come before the Planning Commission, the meeting was adjourned.