

# 124<sup>th</sup> Reservoir Erosion and Rip Rap Design

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Project Manager: Brad Dallam, Assistant Director of Utilities

## Strategic Plan



Supportive and Sustainable Infrastructure

#### Introduction

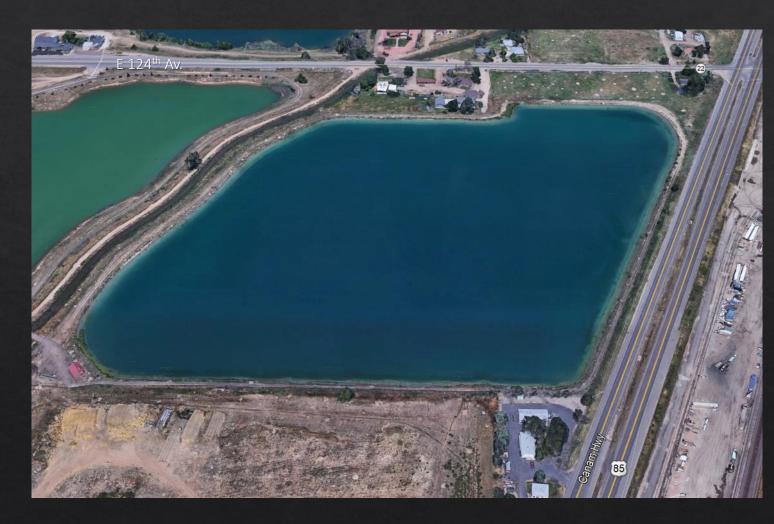
- Project Background
- Project Details
- ♦ RFP Process and Results
- ♦ Final Recommendation

## Project Background

- ♦ The City of Brighton owns a reservoir at 124<sup>th</sup> Avenue and US 85, which is used for augmentation.
- ♦ The reservoir is suffering from erosion on the East (US-85 side) and South sides of the reservoir due to wind damage and groundwater penetration.
- ♦ This threatens the structural integrity of the reservoir, as well as the City's ability to augment water.

## Project Details

- Several years ago, the City retained TZA Water Engineers to evaluate the condition of the reservoir.
  - ♦ Their opinion was that the installation of a slurry wall would have the highest probability of success.



## Project Details

- ♦ A request for proposal was sent out for engineering services to further protect the reservoir from erosion. This includes:
  - ♦ Surveying and geotechnical work
  - ♦ Design to re-grade the eroding sides and install rip rap to mitigate future erosion
- ♦ The City would like to have the construction work performed concurrently with the construction of Metro's Sand/Second Creek pipeline, which is currently scheduled for fall of 2020. This would reduce the length of disruption to the area.

## Project Details

- Work product will be in three phases
  - ♦ 1<sup>st</sup> Phase: Engineering report that describes various alternatives with cost associated with each and a recommendation as to the preferred alternative.
  - ♦ 2<sup>nd</sup> Phase: Develop plans for construction that reflect the decision of the first phase.
  - ♦ 3<sup>rd</sup> Phase: Services during construction.

#### RFP Process and Results

- Formal Request For Proposal Process
  - ♦ Proposals due November 15, 2019
  - ♦ Two proposals were received
- City staff analyzed and evaluated the proposals
  - ♦ Engineering Analytics, Inc. was determined to be the most responsive and responsible bidder with a proposal price not to exceed \$52,659.00

#### Final Recommendation

Staff believes that accepting the proposal from Engineering Analytics Inc. for the design services for the 124<sup>th</sup> Reservoir Erosion and Rip Rap Project would accomplish the following:

- Mitigate the erosion of the east and south end of the reservoir
- ♦ Prevent a deterioration of US-85 due to erosion
- ♦ Retain a greatest amount of sustainable storage as possible

# Questions?