## Applegate Park Laura's Fountain Update



## Laura's Fountain



## Laura's Fountain

Charles H. Huffman built this marble fountain and granite base in 1888 to honor his wife, Laura Kirkland Huffman. Because of Laura's Fountain, Merced was known as Fountain City to many traveling train passengers. This public fountain was located next to the El Capitan railroad depot that became synonymous with Merced. The fountain was moved to Applegate Park in 1935.
"Merced County Historical Society Archives"


## Laura's Fountain - Existing Condition



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## GEOTECHNICAL ANALYSIS \& FINDINGS

- Donated Services by Technicon Engineering Services, Inc.
- Geotechnical analysis done on the subsurface soil beneath the Fountain to investigate observed settlement issues
- Subsurface borings to a depth of 8 feet


## Findings

- Concrete Slab around Fountain - no reinforcing steel found
- Subsurface Soil - Moderately expansive clay soil and saturated
- Shrink and swell cycles of clay soil - causing movement, settlement and unevenness
- Shrink and swell cycles beneath fountain will continue in the future - how much? variable


## GEOTECHNICAL ANALYSIS \& FINDINGS

## Recommendations

- Mitigate future potential shrink and swell of uncompacted fill under fountain concrete
- Provide a stable subgrade for fountain and surrounding concrete
- Option 1 - Excavate and Recompact
- Remove clayey soils and replace with non-expansive engineered fill
- Minimum of 2 feet depth and placed in 8 inch horizontal lifts and compacted
- Option 2-Grout Injection
- Densification of subgrade by injection of cement or polyurethane grout
- Remove and replace concrete slab around fountain


## GEOTECHNICAL ANALYSIS \& FINDINGS - Cont'd

## Recommendations

- It is assumed that the Fountain sits on a concrete slab most likely with no steel
- It is recommended that a new steel reinforced concrete slab on grade ( 4 " to 5 " thick)
- Recommend a continuous spread footings be utilized to support the fountain
- Footings minimum embedment depth of 18 inches below lowest adjacent grade
- Restore fountain


## Request For Proposals (RFP)

- In August 2018, staff solicited Request for Proposals for the Applegate Park Laura's Fountain Repair
- Fountain/Pool company with a minimum 5 years experience in commercial pool renovations and repair projects. With a minimum of 10 similar projects.
- Provide a proposed plan of repairs, and updates, to restore the fountain to at least original working condition. The plan may include additional optional upgrades that the Vendor feels may enhance the appearance, operation, or appeal of the fountain.
- Staff received only one proposal from Aquatic Evironments
- Proposed plan was very similar to the recommendation of the geotechnical report
- Remove the fountain elements, construct a strong supporting base, reinstall the restored elements
- Preliminary Proposed Budget -- $\mathbf{\$ 1 9 0 , 0 0 0}$


## Council Next Step?

- Continue RFP to see if we get more interest
- Wait to see if there maybe grant opportunities for funding (i.e. Prop 68)
- Seek donations from businesses
- Consider use of General Fund
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