



STAFF REPORT

December 7, 2022
File Number 0600-10; A-3354

SUBJECT

CHANGE ORDERS FOR THE OAKVALE ROAD REALIGNMENT PROJECT

DEPARTMENT

Utilities Department, Construction and Engineering Division

RECOMMENDATION

Request the City Council adopt Resolution No. 2022-169, authorizing change orders to the Public Improvement Agreement with L.B. Civil Construction, Inc., in the amount of \$4,963,698.45 for the Oakvale Road Realignment Project ("Project").

Staff Recommendation: Approval (Utilities: Christopher W. McKinney, Deputy City Manager / Director of Utilities)

Presenter: Angela Morrow, Deputy Director of Utilities

FISCAL ANALYSIS

Funding for the Oakvale Road Realignment Project is available in the Lake Wohlford Dam Replacement Project Water Capital Improvement Project ("CIP") No. 704912.

PREVIOUS ACTION

On May 12, 2021, the City Council adopted Resolution No. 2021-45, authorizing the Mayor to execute a Public Improvement Agreement with L.B. Civil Construction, Inc., the lowest responsive and responsible bidder, in the amount of \$8,467,520, for construction of the Oakvale Road Realignment Project.

BACKGROUND

Lake Wohlford Dam ("Dam") was constructed with earth and rock in 1895 as part of Escondido's local water system. In 1925, the dam was raised to its current height using a slurry hydraulic fill process. In 2007, during a routine seismic evaluation of the dam, the California Division of Safety of Dams ("DSOD") determined that the newer, hydraulic fill section of the dam has the potential to liquefy and fail in the event of a large earthquake with magnitude greater than 7.5. In response to these potential seismic concerns, the City immediately lowered the water level of Lake Wohlford so that the maximum level of the lake does not exceed the level of the original, seismically-sound rock structure. The lake has been operated at this level until the present day and continues to provide recreational opportunities and local water storage.

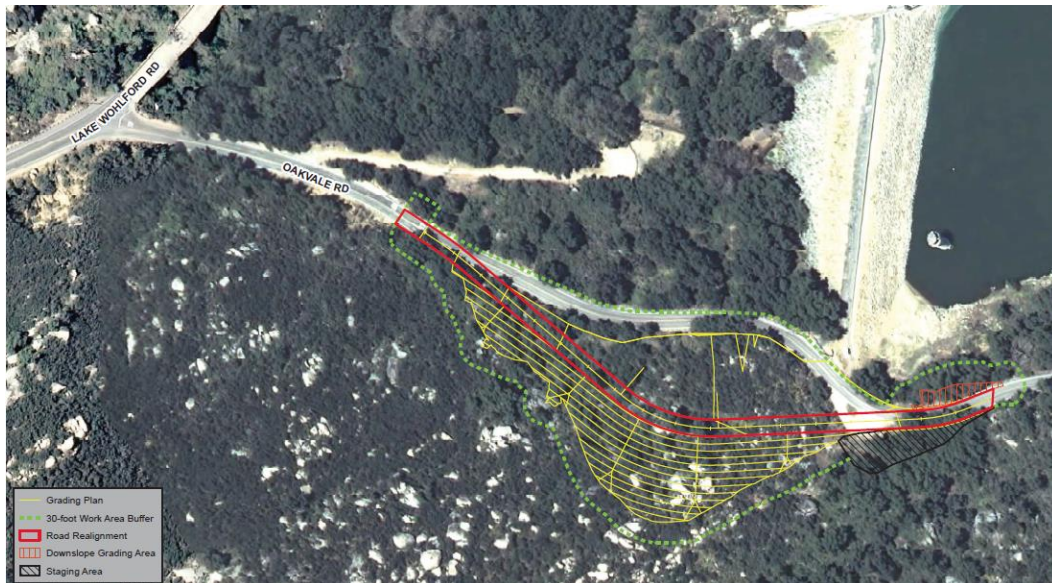


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A design for a new, replacement dam to be constructed just downstream of the existing dam has been completed. The left abutment of the proposed dam will conflict with the existing Oakvale Road, so the road must be realigned prior to the construction of the new dam.

The Oakvale Road Realignment Project will realign an approximately 1,200-foot section of Oakvale Road near the Lake Wohlford Dam, straightening the road and moving it toward the south. The realignment will require excavation into the adjacent hillside to remove approximately 56,000 cubic yards of rock and earth to create space for realigning the road, which would be shifted a maximum distance of approximately 150 feet to the south of the existing alignment. The existing roadway will remain in service during construction of the new roadway.



As excavation of the hillside commenced, the subsurface soil conditions started to differ from the mixed rock face that had been found during the geotechnical explorations conducted near the project site during the design of the Project. The field conditions encountered during construction consisted of a mixture of floating boulders, organic soils, and various weathered granitic material. The rock bolts and netting system included in the original bid would not provide the required anchorage needed to retain the proposed slope, therefore the slope stabilization system had to be redesigned. A soil nail and shotcrete wall was recommended to stabilize the slope. Once completed, the wall would be approximately 1,100 feet long and 100 feet high at its highest point. The soil nail and shotcrete wall is estimated to take approximately five times more material and labor to install than the rock bolts and netting system.



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Due to the high cost of the proposed change order, two independent cost estimates were performed by firms specializing in the design and construction management of similar type projects. The independent estimates included the review of recent costs incurred on Caltrans projects with similar walls. The independent estimates were close to the contractor's price, concluding that the proposed change order is reasonable in today's construction market.

The change orders would also provide the necessary funds to pay for any potential future changes arising from unforeseen circumstances in a timely manner, and to avoid the costly decision to stop the contractor's progress due to insufficient funds. If any of these funds are not used, they will remain with the City.

The proposed change orders would add an additional 569 calendar days to the construction contract, resulting in construction completion by February 2024.

RESOLUTIONS

- A. Resolution No. 2022-169

ATTACHMENTS

- A. Attachment "1" – Oakvale Road Realignment Project Change Order