

# **Community & Economic Development Agency Design & Construction Services Department**

Parks and Recreation Advisory Commission (PRAC) To:

Matthew Webb, Chair

Community & Economic Development Agency, Design & Construction Services Dept. From:

Date: May 14, 2008

Temporary Use of Approximately 0.27 Acre of Dimond Canyon Park for Re:

The Seismic Retrofit of Leimert Boulevard Bridge over Sausal Creek

## SUMMARY

The Community & Economic Development Agency plans to retrofit the bridge that carries Leimert Boulevard over Dimond Canyon Park and Sausal Creek in order to meet current seismic safety standards. The retrofit requires strengthening the bridge foundations. The Community & Economic Development Agency wishes to use the portion of the park under the bridge on either side of Sausal Creek for project construction. In addition, the Agency wishes to use a small area of the park on either side of the bridge for equipment and material staging and storage. The park area that the Agency would use for project construction and staging totals approximately 0.27 acre. Following project construction, all equipment and materials would be removed and areas of the park disturbed by project construction would be restored in accordance with the requirements of a City of Oakland Creek Protection Permit.

#### BACKGROUND

Following the 1989 Loma Prieta Earthquake, Caltrans conducted a seismic safety inspection of bridges in the City of Oakland. The Leimert Boulevard Bridge over Sausal Creek (also called the Sausal Creek Bridge), among others, was determined to be in need of seismic retrofit to meet current seismic safety standards and prevent a likely collapse in an earthquake. The design of the retrofit project has been completed and staff now is in the process of implementing the project.

The Leimert Boulevard Bridge is supported by a concrete arch and 17 bents. A bent is a structural engineering term for a beam supported by columns. The deck of the bridge sits on the beams. The seismic retrofit project consists of strengthening the bent columns by placing steel casings around them and adding a concrete brace between two of the bents and the bridge arch, and strengthening the arch by placing steel jackets around the arch ribs. The existing bracing between bent columns would also be removed as part of this project.

Project construction would require the temporary use of approximately 12,050 square feet (0.27 acre) of Dimond Canyon Park. This total area consists of 6,650 square feet (0.15 acre) beneath the Leimert Boulevard Bridge for construction activities and 5,400 square feet (0.12 acre) on either side of Sausal Creek for construction staging.

All retrofit work would take place a minimum of 35 feet above Sausal Creek and 70 feet from its active channel. The canyon walls are too steep to pioneer a construction road to bring equipment underneath the bridge without causing substantial environmental damage. Therefore, equipment and materials for the project would be lowered from Park Boulevard to staging areas on either side of Sausal Creek. The precise location of the staging areas would be selected by the construction contractor, but would be located within 30 feet of the side of the bridge.

## **DISCUSSION**

Staff has looked at all alternatives and determined that the project would require the use of approximately 0.27 acre of Dimond Canyon Park for project construction and construction staging. It is estimated that project construction would take approximately six to eight months. Prior to construction, the area to be impacted would be fenced off from the public and erosion control materials such as compost socks would be installed to prevent sediments from entering Sausal Creek. Following completion of the project, all construction equipment and material would be removed and those areas that have been disturbed would be restored to pre-existing conditions.

Restoration of disturbed areas would be accomplished in several ways. Native shrubs and three native trees (two oaks and a California bay) would be planted. Irrigation would be provided to the shrubs and trees for five years. The area would also be hydromulched with a native grass mixture from a local supplier.

The developed recreational facilities in Dimond Canyon Park are located approximately 0.9 mile south of the Leimert Boulevard Bridge. There is a public trail parallel to Sausal Creek in the project area. While the trail is not located within the construction or staging areas for the project, the segment of the trail beneath the bridge would be closed during construction for public safety purposes. This trail would be reopened for public use following construction and vegetation planting.

Since this project is partially funded by federal funds, it must comply with Caltrans Section 4(f) for the use of parks. The commission's approval of the project will enable the City to obtain Caltrans approval on section 4(f).

## RECOMMENDATION

The Community & Economic Development Agency recommends that the Park and Recreation Commission allow the temporary use of approximately 0.27 acre of Dimond Canyon Park for the seismic retrofit of Leimert Boulevard Bridge over Sausal Creek for a period of six to eight months. This area of the park will be temporarily used for material laydown, equipment storage, and access to the bridge during project construction.

Respectfully submitted,

Michael Neary, Deputy Director

Community and Economic Development Agency

Reviewed by:

Marcel Uzegbu, Acting Division Manager Engineering Design Right of Way Division

Prepared by:

Emad Mirsaeidi, Supervising Civil Engineer

