

FEASIBILITY STUDY

CITY OF OCEANSIDE JEFFRIES RANCH NEIGHBORHOOD ALTERNATIVE PUBLIC ACCESS ROADWAY

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EXECUTIVE SUMMARY

This feasibility report has been prepared for the City of Oceanside (City) in response to the Jeffries Ranch community's concerns over the closure of Jeffries Ranch Road and State Route 76 (SR-76). The Jeffries Ranch community is located in the northeastern portion of the City, east of Melrose Drive and south of SR-76. The intersection of Jeffries Ranch Road and SR-76 was closed as part of the widening of SR-76 project by the California Department of Transportation (Caltrans). The closure of Jeffries Ranch Road at SR-76 does allow for emergency access at SR-76. The Jeffries Ranch community voiced concerns associated with the closure and only having access to SR-76 via Melrose Drive. Therefore, at the request of the City, this feasibility report has been prepared to assess the environmental, design and traffic impacts and constraints associated with two potential alternative public access roadways to SR-76 for the Jeffries Ranch community.

Alternatives Overview

There were several challenges presented when determining two potential alternative access roadways for the Jeffries Ranch community. The majority of the community wanted to restore access from Jeffries Ranch Road at SR-76; however, there were several challenges associated with restoring this access. These challenges included (but were not limited to) environmental, Caltrans design standards, and traffic constraints. Two community meetings were held to discuss potential alternative access roadways and the challenges associated with each alternative. Ultimately, two alternative public access roadways were selected for further review to be included in this feasibility study. The two alternatives were 1) Right-In/Out Alternative at Jeffries Ranch Road/SR-76 with acceleration and deceleration lanes on SR-76 and 2) Frontage Road Alternative from Jeffries Ranch Road to the new signal for Singh Properties on SR-76.

The Right-In/Out Alternative at Jeffries Ranch Road/SR-76 was designed using the Caltrans Highway Design Manual (HDM) and the City of Oceanside's Street Design standards. This alternative would include the construction of a 1,100-foot acceleration lane that would be constructed immediately adjacent to SR-76 for motorists to increase their speed prior to merging with traffic on SR-76. It also includes removing the eastbound lane drop on SR-76 to continue as an 11.8 foot right-turn only lane as it approaches Jeffries Ranch Road for motorists to decrease their speed prior to turning right onto Jeffries Ranch Road.

The Frontage Road Alternative from Jeffries Ranch Road to SR-76 was also designed using the Caltrans HDM and City of Oceanside Street Design standards. The frontage road would begin at the northern terminus of Jeffries Ranch Road and continue east to the new signal being installed by Caltrans for the Singh Properties on SR-76. In addition, it would require a westbound left-turn lane to turn into the frontage road. The frontage road would run parallel to SR-76 in the vacant area north of the Jeffries Ranch community. The frontage road is designed at 36-feet in width (one lane in each direction) with an overall design speed of 25-30mph. This alternative possibly would need retaining walls along the frontage road to help stabilize the cut slopes. The exact locations of the retaining walls would be determined during the advanced design stages, if this Alternative were selected.

The cost estimate for the Right-In/Out Alternative is estimated at \$992,000 and the Frontage Road Alternative at \$2,901,000. It should be noted that due to the close proximity of the Frontage Road Alternative to the Jeffries Ranch neighborhood, a sound wall has been included in

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the cost estimate (\$605,500). All costs are based on conceptual design and quantities; therefore, they are subject to change upon further detailed advanced design. The unit costs are based on 2009-2010 Caltrans cost data and other available information from recent bids.

In general, the residents of Jeffries Ranch strongly prefer that a signal be installed at the existing Jeffries Ranch Road/SR-76 intersection. The signal at Jeffries Ranch Road would be shared with the Singh Property to the north of SR-76. The close intersection spacing of the Melrose Drive and Jeffries Ranch Road intersections do not allow adequate queue space for eastbound left-turning trucks for the Singh Property. The Caltrans HDM states that access openings on expressways should not be spaced closer than one-half mile to an adjacent public road intersection or to another private access opening that is wider than 30 feet. Jeffries Ranch Road is approximately one-third a mile adjacent to the Melrose Drive intersection. Caltrans has stated opposition to the installation of a signal on SR-76 at Jeffries Ranch Road.

The analysis also includes a No Project Alternative option. A No Project Alternative could include more than just leaving the closure of Jeffries Ranch (with emergency access) as it currently exists. In the No Project Alternative, the City and residents of Jeffries Ranch can explore the opportunities for creating additional community open space with the land south of SR-76. The open space could be used for equestrian trails, walking and/or bicycle paths, a community park, or revegetated with native plants.

Environmental Impacts Overview

The two alternatives were evaluated for environmental issue areas of aesthetics, biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, land use, and noise. Neither the Right-In/Out Alternative nor the Frontage Road Alternative have major environmental constraints associated with it. However, the Right-In/Out Alternative would have the lowest impact to the environmental constraints listed. The table below shows a summary of the level of environmental constraints for both alternatives.

Constraints	Right-In/Out Only Alternative	Frontage Road Alternative
Aesthetic	None	Moderate
Biological	Moderate	Moderate
Cultural	Low	Moderate
Hazards	None	None
Hydrology	Low	Moderate
Land Use	None	None
Noise	Moderate	Moderate

Traffic Impacts Overview

Two select link model runs (Year 2030) were conducted for the two Jeffries Ranch alternatives. The select link model showed minor variations in the traffic patterns between the two alternatives. For example, the Right-In/Out Alternative showed an increase in trips for the eastbound left-turn lane at the Melrose Drive/SR-76 intersection. These additional south to eastbound left-turns are using the right-in access at Jeffries Ranch Road instead of traveling southbound on Melrose Drive to access the neighborhood. Additional trips are also traveling eastbound through the Melrose Drive/SR-76 intersection to access Jeffries Ranch Road instead of

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turning right onto Melrose Drive to access the neighborhood. The Frontage Road Alternative showed an increase in trips on Jeffries Ranch Road. With the addition of the frontage road and new signal on SR-76, more trips access Jeffries Ranch Road to/from the new signal on SR-76 than in the No Project scenario.

The traffic analysis showed that all study area roadway segments are expected to operate at a level of service (LOS) B or better for the No Project, Right-In/Out Alternative, and Frontage Road Alternative. The peak hour intersection level of service for the study area intersections were calculated at LOS D or better with the exception of Melrose Drive/SR-76 in the PM peak hour which is calculated to operate at LOS E during the No Project, Right-In/Out Alternative, and Frontage Road Alternative. Only the Right-In/Out Alternative is shown to have a significant impact (>2 second delay increase) at the Melrose Drive/SR-76 intersection during the PM peak hour. This is due to a shift in the travel pattern of southbound traffic volumes. Trips that originally traveled southbound through the Melrose Drive/SR-76 intersection are now turning left (eastbound) at the intersection to access the right-in at Jeffries Ranch Road. The southbound leftturn lane is currently a double left and there are three eastbound through lanes at Melrose Drive/SR-76. Potential mitigation to improve the intersection to an acceptable LOS or to preproject standards is the addition of a fourth through lane on the eastbound approach or to increase the signal cycle length and green times for the through movements. Adding an additional eastbound through lane is not considered a feasible mitigation, because the SR-76 widening project does not include four receiving lanes east of Melrose Drive. A feasible mitigation would be to adjust the signal timing of Melrose Drive/SR-76; however, this would require review and approval by Caltrans.

Prior to implementing either alternative, the City would be required to prepare an Environmental Initial Study in accordance with Section 15063 of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.). The Initial Study will identify potentially significant environmental effects and all feasible measures to mitigate those effects to a less than significant level. If all impacts are mitigable to below a level of significance, a Mitigated Negative Declaration (MND) could be prepared in accordance with the CEQA Guidelines (Section 15070 et. seq.). Alternatively, if impacts could not be mitigated to below a level of significance, an Environmental Impact Report (EIR) would be required under CEQA.