



DATE: January 26, 2011

TO: Honorable Mayor and City Councilmembers

FROM: Development Services Department

SUBJECT: **ALTERNATIVE PUBLIC ACCESS ROADWAY FEASIBILITY STUDY FOR THE JEFFRIES RANCH NEIGHBORHOOD AREA**

SYNOPSIS

Staff recommends that the City Council consider an alternative public-access roadway option from the Jeffries Ranch neighborhood area to State Route 76 and provide direction to staff.

BACKGROUND

In November of 2008, Caltrans certified its Environmental Impact Report (EIR) for the widening of State Route 76 from its current two-lane roadway configuration to a four-lane expressway between Melrose Drive to Mission Road. In March of this year, the residents of Jeffries Ranch were notified by Caltrans that Jeffries Ranch Road at State Route 76 will be permanently closed as part of the widening. The closure of Jeffries Ranch Road at State Route 76 is recommended by Caltrans in order to achieve proper design and safety features typically required with regional expressways.

On March 25, 2010, City staff and representatives of Caltrans met with the Jeffries Ranch community to discuss the closure of Jeffries Ranch Road. At the meeting's conclusion, it was decided the City would work with the residents to identify opportunities to establish a new public-access road out of the neighborhood. A feasibility study was recommended by staff that would identify a new alternative public roadway access options to replace the access lost due to the closure of Jeffries Ranch Road at State Route 76.

ANALYSIS

The Feasibility Study includes preliminary environmental review with conceptual roadway designs and estimated costs for two potential alternative access roads (Executive Summary attached as Exhibit 1). Preliminary environmental review identified the context in which possible roadway alternatives could be constructed given specific environmental constraints and projected mitigation measures.

Two community meetings were held to identify community concerns and receive input on potential alternatives. During the first community meeting, held on August 17, 2010; staff reviewed the environmental constraints and solicited input on potential roadway alternatives. Areas of focus included Jeffries Ranch Road at State Route 76 as well as the open space located east of the Jeffries Ranch neighborhood.

The second community meeting was held on September 13, 2010, to review two potential roadway access alternatives from Jeffries Ranch Road to State Route 76 (Preliminary Designs attached as Exhibit 2). It was determined that construction of a new access road within the open space located east of the Jeffries Ranch neighborhood would result in significant environmental impacts with high construction and mitigation costs. Potential construction and environmental mitigation costs were a primary factor in choosing to focus alternatives in the area of Jeffries Ranch Road at State Route 76.

A total of three access alternatives were studied, which include:

1. Do Nothing: keep Jeffries Ranch Road at State Route 76 closed (estimated cost: \$0);
2. Right In/Out Only: construct a right-turn in pocket (deceleration lane) and a right-turn out pocket (acceleration lane) from Jeffries Ranch Road to State Route 76 (estimated cost: \$992,000). There is enough flexibility with this alternative to modify it to a right-turn out only access (estimated cost: \$744,000)
3. Frontage Road: construct a frontage road that extends from Jeffries Ranch Road to the proposed Caltrans traffic signal to the east at the Singh property on State Route 76 – (estimated cost: \$2,901,000).

In addition, a traffic study was completed to identify the shift in traffic patterns associated with the alternatives. Level of Service (LOS) analyses were completed for each alternative which revealed that neighborhood intersections and roadway segments will continue to operate at acceptable levels. However, the intersection of Melrose Drive at State Route 76 is projected to operate at LOS E in the p.m. peak hour in year 2030 for each alternative.

If either alternative #2 or #3 is chosen, a Mitigated Negative Declaration (MND) with final engineering is recommended as the next step. The costs above include funds to complete the MND for either alternative.

FISCAL IMPACT

Cost for the subsequent MND and final engineering for Alternative #2 is \$120,000 and the cost for Alternative #3 is \$370,000. No funds are currently appropriated for either alternative at this time.

Additional funding sources were reviewed such as the Thoroughfare Fee program and TransNET. It was determined that neither alternative qualifies for funding through the Thoroughfare Fee program because it is reserved for Circulation Element Streets only. Moreover, it was also determined that neither alternative qualifies for TransNET funding because the project needs to be identified and programmed into the Regional Transportation Improvement Program (RTIP). The City cannot do a RTIP amendment at this time because SANDAG has closed new submissions until late spring of next year.

The City has not identified any funding for design and construction of either alternative. The transportation related funding that could be used is local TransNET funds. However, this project would have to be programmed and may impact other local TransNET funded projects. Another funding option such as an assessment district for all or a portion of the cost should be considered since the alternative access options are a direct benefit to the Jeffries Ranch Neighborhood.

COMMISSION OR COMMITTEE REPORT

Does not apply.

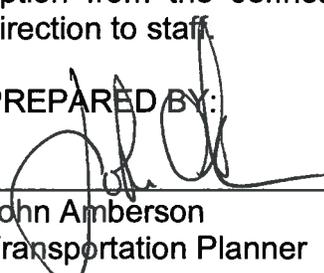
CITY ATTORNEY'S ANALYSIS

City Attorney analysis does not apply.

RECOMMENDATION

Staff recommends that the City Council consider an alternative public-access roadway option from the Jeffries Ranch neighborhood area to State Route 76 and provide direction to staff.

PREPARED BY:



John Amberson
Transportation Planner

SUBMITTED BY:



Peter A. Weiss
City Manager

REVIEWED BY:

Michelle Skaggs Lawrence, Deputy City Manager
George Buell, Development Services Director
for Scott O. Smith, City Engineer
David DiPierro, City Traffic Engineer
Teri Ferro, Financial Services Director



Attachment:
Feasibility Study

EXHIBIT 1



FEASIBILITY STUDY

CITY OF OCEANSIDE JEFFRIES RANCH NEIGHBORHOOD ALTERNATIVE PUBLIC ACCESS ROADWAY

DRAFT
November 2010

Prepared by:





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



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



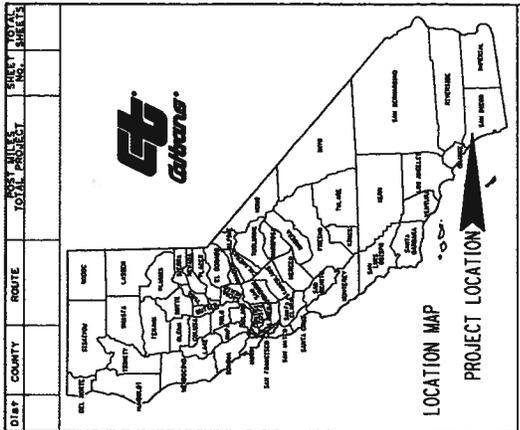
turning right onto Melrose Drive to access the neighborhood. The Frontage Road Alternative showed an increase in trips on Jeffries Ranch Road. With the addition of the frontage road and new signal on SR-76, more trips access Jeffries Ranch Road to/from the new signal on SR-76 than in the No Project scenario.

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 left-turn 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 pre-project 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.

EXHIBIT 2

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION CONCEPTUAL PLANS FOR JEFFRIES RANCH ROAD AND SR-76 INTERSECTION



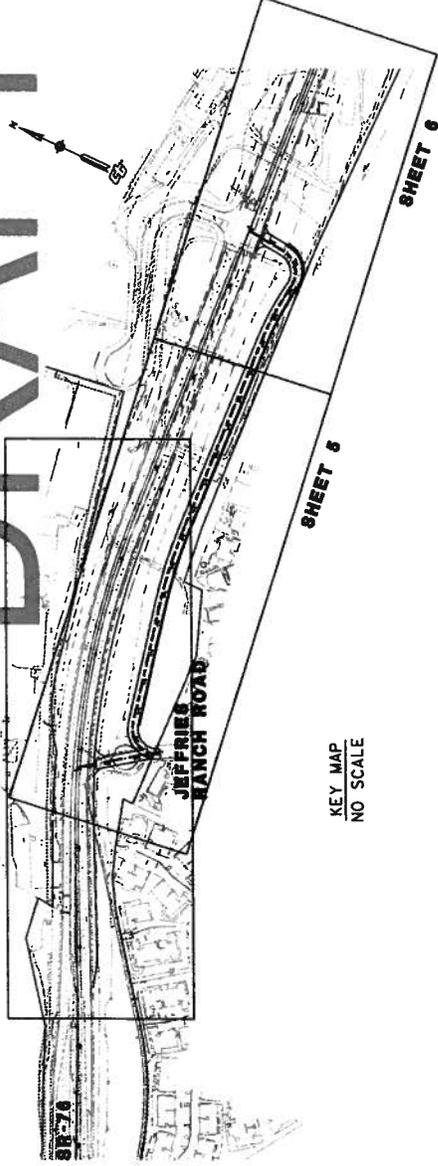
INDEX OF PLANS

- 1 TITLE SHEET AND KEY MAP
- 2 X-1 OPTION 1 - TYPICAL SECTIONS
- 3 L-1 OPTION 1 - LAYOUT AND PROFILE
- 4 X-2 OPTION 2 - TYPICAL SECTIONS
- 5 L-2 OPTION 2 - LAYOUT AND PROFILE
- 6 L-3 OPTION 2 - LAYOUT AND PROFILE

OPTIONS DESCRIPTIONS

- OPTION 1**
 RIGHT-IN, RIGHT-OUT OPTION. THIS OPTION CONSISTS OF CONSTRUCTING ~200' OF JEFFRIES RANCH ROAD TO JOIN THE FUTURE SR-76 ALIGNMENT. THE INTERSECTION WOULD ALLOW JEFFRIES VEHICULAR TRAFFIC TO TURN RIGHT IN AND RIGHT OUT.
- OPTION 2**
 JEFFRIES AS A FRONTAGE ROAD OPTION. THIS OPTION CONSISTS OF CONSTRUCTING ~2,900' OF FRONTAGE ROAD EXTENDING JEFFRIES EASTBOUND FROM ITS CURRENT END PARALLEL TO THE NEW SR-76 AND INTERSECTION AT A NEAR 90° ANGLE WITH THE SR-76 ALIGNMENT. THE CONSTRUCTION WOULD REQUIRE A TRAFFIC SIGNAL MODIFICATION TO ACCOMMODATE THE 4TH LEG OF THE INTERSECTION.

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- ### ABBREVIATIONS
- AC ASPHALT CONCRETE
 - AS AGGREGATE SUBBASE
 - ACC. ACCELERATION
 - C&G CURB AND GUTTER
 - DEC. DECELERATION
 - PROP. PROPOSED
 - TBD TO BE DETERMINED (AT THE NEXT DESIGN PHASE)
 - TBV TO BE VERIFIED (AT THE NEXT DESIGN PHASE)

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS".

BORDER LAST REVISED 7/2/2010 | CALTRANS WEB SITE (S: [HTTP://WWW.DOT.CA.GOV/](http://www.dot.ca.gov/))

RELATIVE BORDER SCALE 0 1 2 3
1/8 IN INCHES
LAYOUT FILE #1
BORDER FILE #2

UNIT 0000

PROJECT NUMBER & PHASE 00000000001

TITLE

DATE PLOTTED: 02/01/10
DATE: 02/01/10

DESIGN ENGINEER
PROJECT MANAGER

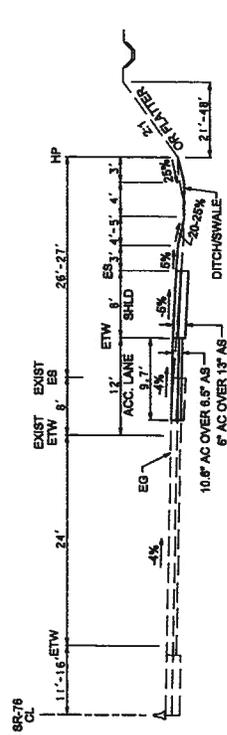
Dist	County	Route	Post Miles	Sheet	Total
11	SD	SR-76			

REGISTERED CIVIL ENGINEER	DATE	REGISTERED PROFESSIONAL ENGINEER & ARCHITECT
PLANS APPROVAL DATE		

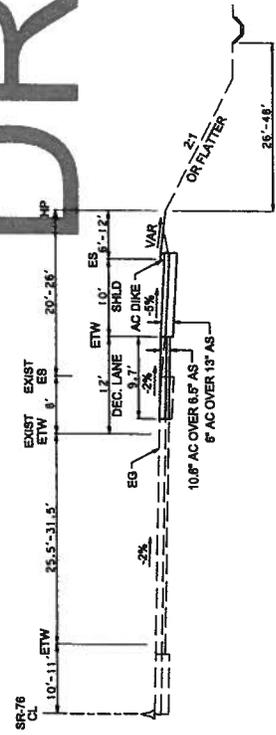
THE STATE OF CALIFORNIA, BY THE REGISTERED PROFESSIONAL ENGINEER & ARCHITECT, HAS REVIEWED THE ACCURACY OF THE INFORMATION CONTAINED HEREIN AND THE COMPLETENESS OF THE PLANS OF THIS PROJECT.

CITY OF OCEANSIDE
 300 NORTH COAST HWY
 OCEANSIDE, CA 92054

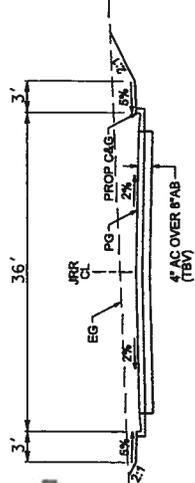
IBI GROUP
 101 B STREET
 SAN DIEGO, CA 92101



SECTION B-B



SECTION A-A



SECTION C-C

**TYPICAL SECTIONS ALONG
JEFFRIES RANCH ROAD**

TYPICAL SECTIONS ALONG SR-76

**OPTION 1 - RIGHT-IN RIGHT-OUT
TYPICAL SECTIONS**
SCALE: NO SCALE

X-1

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	IBI GROUP	CHECKED BY	DATE REVISION

DIS#	COUNTY	ROUTE	POST MILES	SHEET TOTAL
11	SD	SR-76	TOTAL PROJECT	SHEET NO.

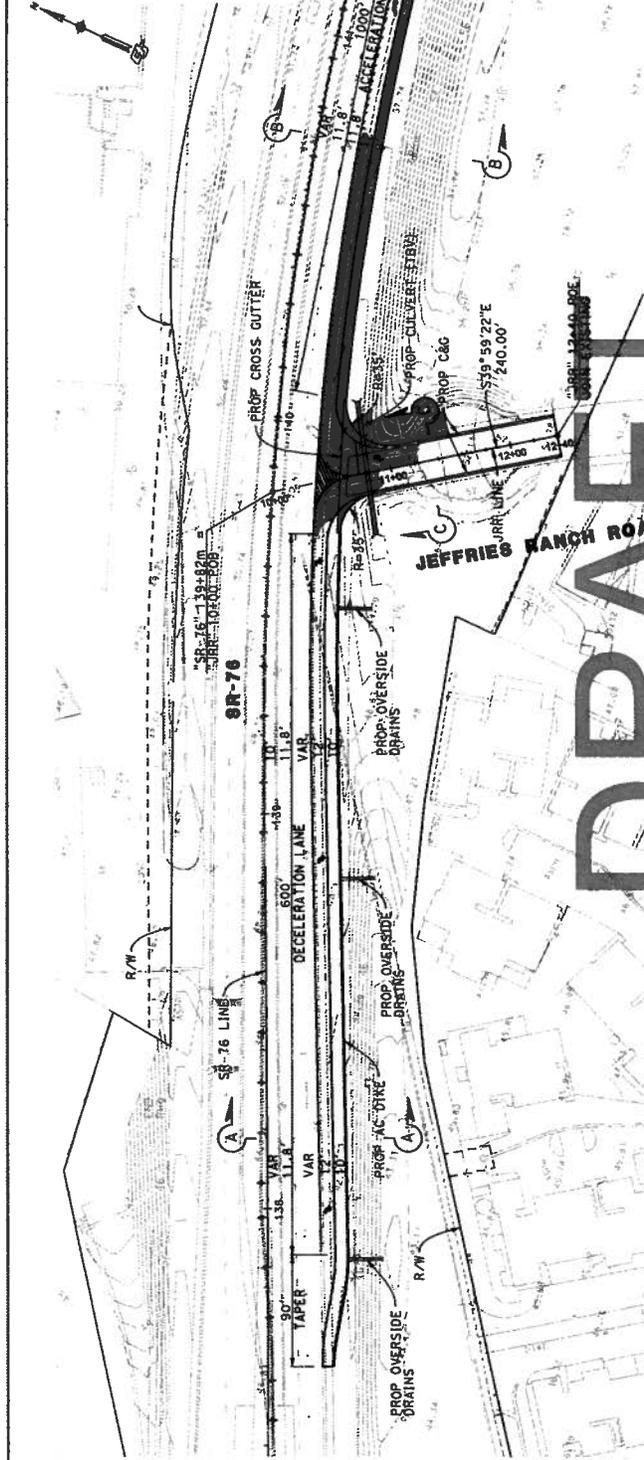
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER & ARCHITECT
 CIVIL
 STATE OF CALIFORNIA

CITY OF OCEANSIDE
 300 NORTH COAST HWY
 OCEANSIDE, CA 92054

IBI GROUP
 701 B STREET
 SAN DIEGO, CA 92101

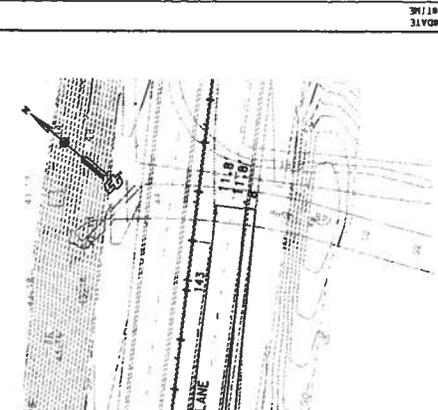


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LAYOUT



JEFFRIES RANCH ROAD PROFILE



LAYOUT

OPTION 1 - RIGHT-IN RIGHT-OUT LAYOUT AND PROFILE

SCALE: HORIZ 1"=50'
 VERT 1"=25'

L-1

DISP	COUNTY	ROUTE	POST MILES	SHEET NO.	TOTAL SHEETS
11	SD	SR-76			

REGISTERED CIVIL ENGINEER DATE

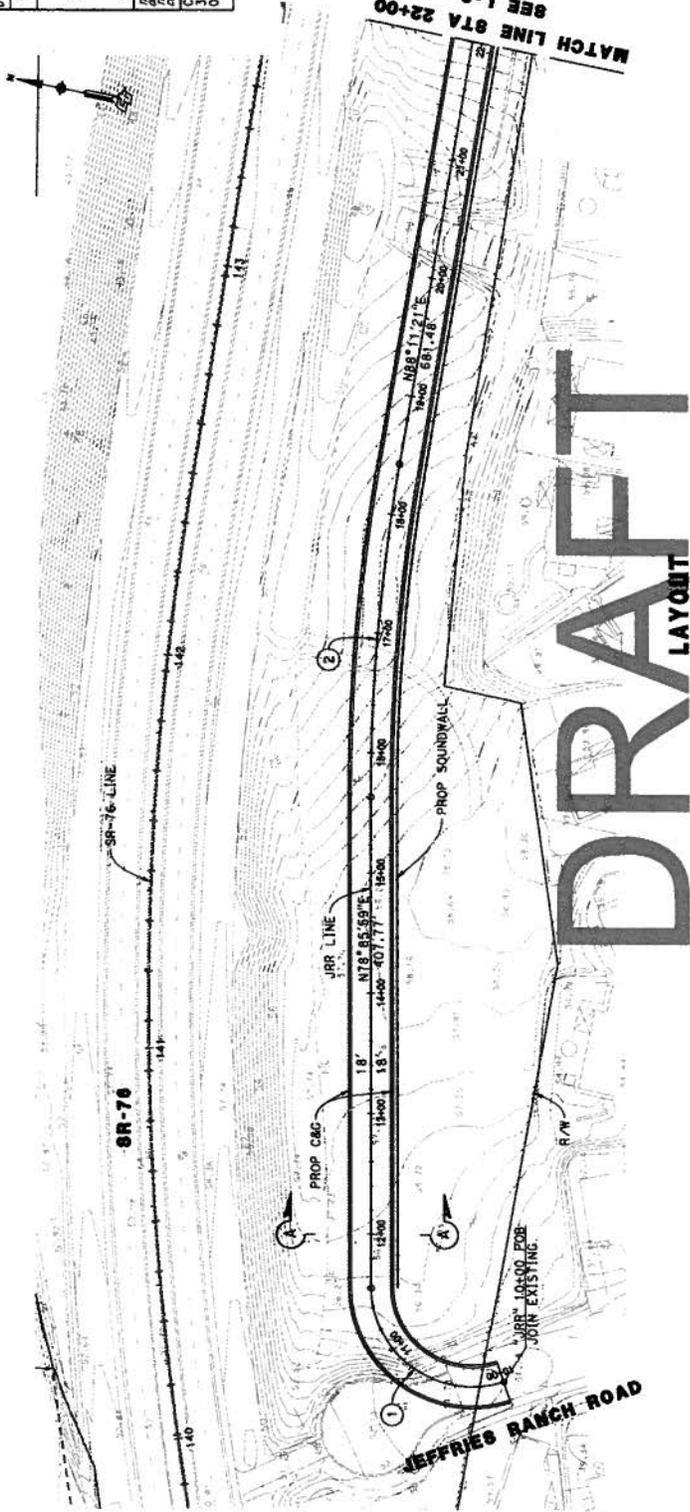
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA BY ITS OFFICERS
 IN REGISTRATION FOR THE PROTECTION OF THE PUBLIC
 CONFERS THIS RIGHT OF PRACTICE

REGISTERED PROFESSIONAL ENGINEER
 No. 11111
 State of California

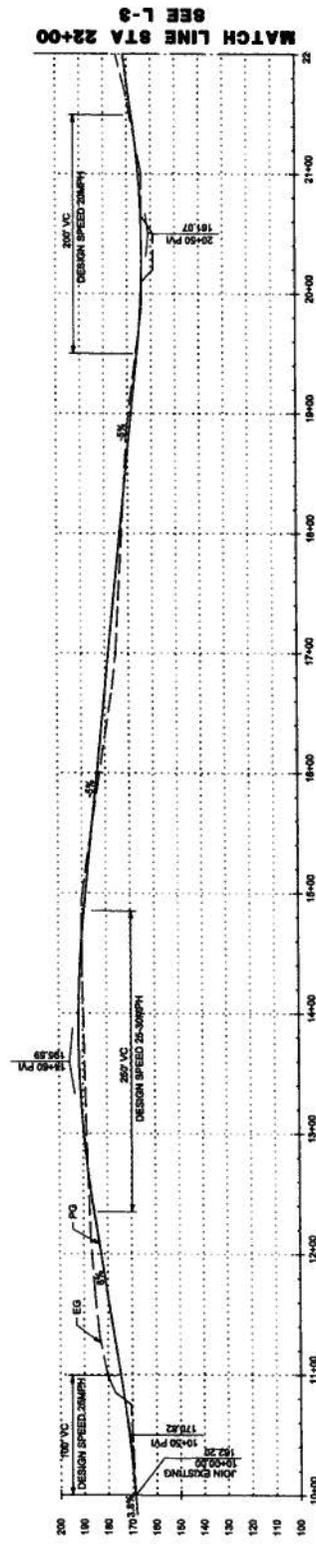
CITY OF OCEANSIDE
 300 NORTH COAST HWY
 OCEANSIDE, CA 92054

IBI GROUP
 701 B STREET
 SUITE 1170
 SAN DIEGO, CA 92101



CURVE DATA

No.	R	L	SPEED
1	82.00'	155.40'	15 MPH
2	1640.00'	279.33'	50 MPH



OPTION 2 - FRONTAGE LAYOUT AND PROFILE

SCALE: HORIZ 1"=50'
 VERT 1"=25'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CONSULTANT FUNCTIONAL SUPERVISOR	IBI GROUP	CHECKED BY	DATE REVISION
DESIGNED BY				
REVISIONS				

Dist	County	Route	Sheet	Total
11	SD	SR-76	SR-76	11

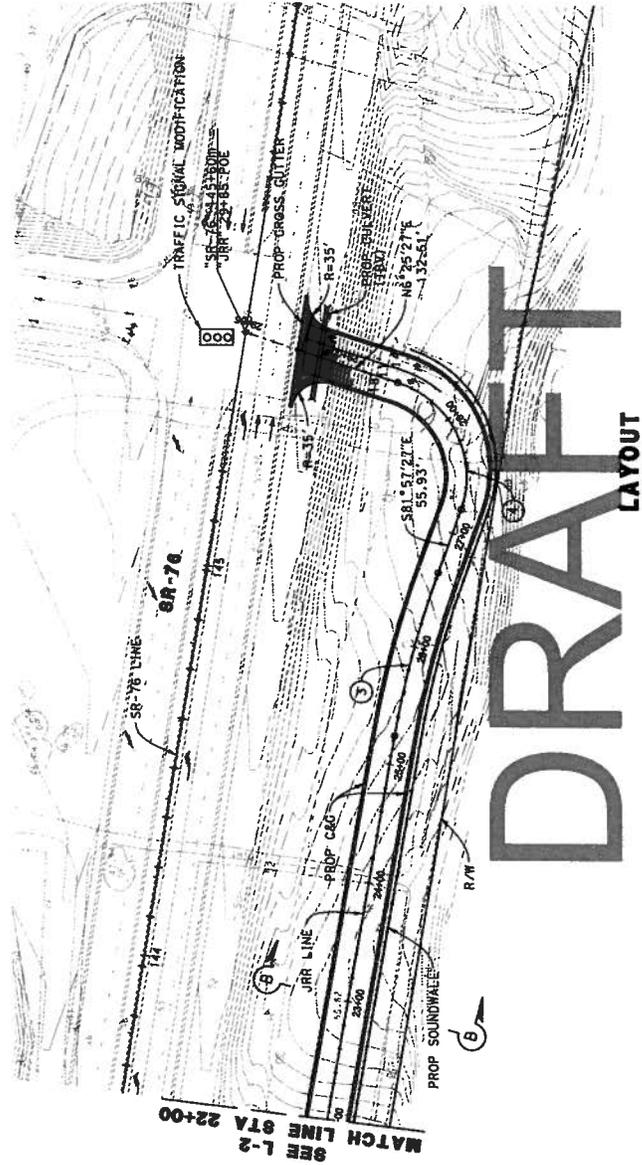
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA, BY ITS OFFICERS
THE REGISTERED CIVIL ENGINEERS OF SAID
COUNTY OF THIS PLAN SHEET.

CITY OF OCEANSIDE
300 NORTH COAST HWY
OCEANSIDE, CA 92054

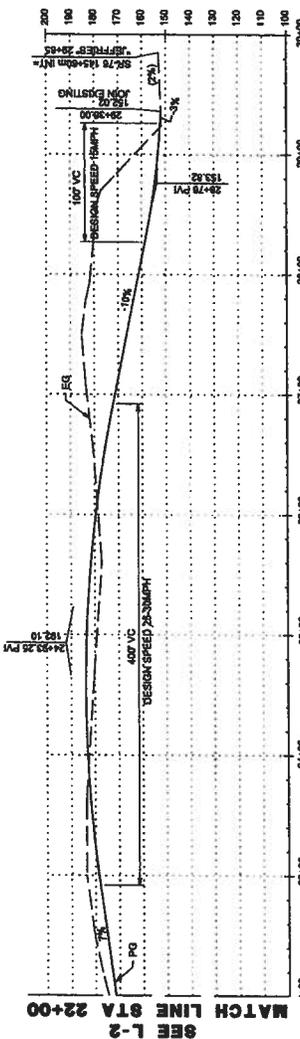
181 GROUP
701 B STREET
SUNLAND, CA 91760
SAN DIEGO, CA 92101



DRAFT LAYOUT

CURVE DATA

No.	R	L	SPEED
3	820.00'	141.00'	40 MPH
4	82.00'	131.00'	15 MPH



JEFFRIES RANCH ROAD PROFILE

OPTION 2 - FRONTAGE LAYOUT AND PROFILE

SCALE: HORIZ 1"=50'
VERT 1"=25'

L-3