CONFORMITY EXEMPTION FORM - PROJECT SUMMARY FOR INTERAGENCY CONSULTATION

For projects that correct, improve, or eliminate a hazardous location or feature

<table>
<thead>
<tr>
<th>Dist.-Co.-Rte.-PM</th>
<th>EA/EFIS ID (Caltrans Projects)</th>
<th>Fed. Aid. No. (Local Projects)</th>
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<tbody>
<tr>
<td>12-ORA-405-0.0/11.4</td>
<td>12-0Q970/1218000010</td>
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FTIP ID# (required)
ORA001103

TCWG Consideration Date: 8/25/2020

Lead Agency: Caltrans
Contact Person: Rabindra Bade
Phone#: (657)328 6573
Fax#: Email: rabindra.bade@dot.ca.gov

Pollutant of Concern: PM 2.5 and PM 10

Anticipated Federal Environmental Approval (check appropriate box)

☑ 23 USC 326 CE
☐ 23 USC 327 CE
☐ EA
☐ EIS

Anticipated Date of Federal Environmental Approval: 2020

Current Programming Dates (as appropriate)

<table>
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<tr>
<th></th>
<th>PA&amp;ED</th>
<th>PS&amp;E</th>
<th>ROW</th>
<th>CON</th>
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<tr>
<td>Start</td>
<td>April 01, 2020</td>
<td>Oct 2, 2021</td>
<td>Nov 5, 2021</td>
<td>Jan 5, 2027</td>
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<td>End</td>
<td>Oct 01, 2021</td>
<td>April 4, 2023</td>
<td>Jan 20, 2022</td>
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Project Description

The Interstate 405 (I-405) improvement project from Interstate 5 (I-5) to Harbor Boulevard (Blvd.) (PM 0.0/11.4) was initiated by District 12 Maintenance Engineering Branch. The project location is within the jurisdictions of the Cities of Irvine, Costa Mesa, and a portion of unincorporated area of Orange County.

This project proposes to extend the life expectancy of pavement, improve safety for all modes of travelers as well as maintenance crews, enhance traffic operation, manage congestion, and provide the ability to collect, analyze, and utilize data for efficient systems performance along I-405 corridor within the project limits.

Following maps are attached along with this document.

1. Vicinity Map
2. Exhibit 4 to Exhibit 8

Purpose

The purpose of this project is to do the following:

1. Extend the service life of the existing pavement and to improve the ride quality, pavement, serviceability, and safe characteristics according to the pavement preservation program of the Federal guidelines.
2. Replace bridges’ approach and departure slabs, and upgrade railing at various locations.
3. Remove and replace plant materials that are deficient and deteriorated.
4. Minimize exposure of highway workers to traffic and reduce recurrent maintenance activities.
5. Provide safe access by relocating electrical fixtures away from recovery zone.
6. Incorporate Intelligent Transportation Systems (ITS) element for traffic system management for future improvement.
7. Improve operations for motorists and pedestrians.
8. Upgrade safety devices to current standards

Need
This Section of I-405 is operating under the following conditions:
1. Need for pavement rehabilitation through a Capital Preventive Maintenance (CAPM) strategy to prevent further deterioration.
2. Bridge approach and departure slabs are cracked and settled. Bridge railing are not standard.
3. Existing plantings, and irrigation systems are damaged.
4. Within the project limits there are unpaved areas, graffiti, minimal maintenance access, and inefficient irrigation facilities adjacent to the shoulders.
5. Maintenance crews are often exposed to live traffic during their routine work.
6. Lack of traffic system management network connectivity.
7. Ramp queuing, mainline delay, and non-standard access for pedestrians.
8. Existing safety devices are not up to current standards.

Project Description of proposed alternate
Alternative 1 would extend the life expectancy of the pavement, improve safety and rideability for all mode of travelers as well as maintenance crews, enhance traffic operation, manage congestion, and provide ability to collect, analyze, and utilize data for systems performance along I-405 corridor by improving the following:
1. Pavement Class I
2. Bridge health
3. Roadside Rehabilitation
4. Roadside Safety Improvement
5. Lighting Rehabilitation
6. Transportation Management Systems
7. Operational Improvements
   a. **Construct 1,000’ of acceleration lane and an additional lane on the NB I-405 on-ramp from SB Culver Dr. (Exhibit 4).**
      - Excavate existing eight-feet asphalt concrete (AC) shoulder and construct AC pavement to provide additional twelve-feet lane and an eight-feet right shoulder for the on-ramp.
      - Excavate existing ten-feet AC shoulder and construct additional pavement with Portland Concrete Cement (PCC) to accommodate acceleration lane.
Widen Bridge (55-0522) up to ten-feet on the NB side at San Diego Creek.
Construct a maintenance vehicle pullout (MVP) on the left side of the onramp.

b. Construct 1,000’ of acceleration lane and an additional lane on the NB I-405 on-ramp from SB Jeffrey Road. (Exhibit 5)
   - Excavate existing eight-foot AC shoulder along on-ramp and construct AC pavement to provide additional of a twelve-foot lane and an eight-foot right shoulder for the on-ramp.
   - Excavate existing ten-foot AC shoulder along mainline and construct additional pavement to accommodate a twelve-foot acceleration lane in PCC and a ten-foot shoulder in AC from NB on-ramp from Jeffrey Rd. to NB offramp to Culver Dr.
   - Widen Bridge number 55-0521 up to twelve-foot in the NB direction.

c. Provide an auxiliary lane from NB I-405 off-ramp to Sand Canyon Ave. to NB I-405 on-ramp from Sand Canyon Ave. (loop on-ramp) (Exhibit 6).
   - Excavate existing ten-foot AC shoulder along NB mainline (between Sand Canyon Ave. off-ramp and Sand Canyon Ave. loop on-ramp) and construct additional pavement to accommodate a twelve-foot auxiliary lane in PCC and a ten-foot shoulder in AC.
   - Excavate existing eight-foot AC shoulder along Sand Canyon Ave. loop onramp and construct additional pavement to accommodate a twelve-foot lane and an eight-foot shoulder in AC.
   - Construct MVP

d. Construct 1,000 feet of deceleration lane for the SB I-405 off-ramp to Irvine Center Dr. and add a right turn lane at ramp termini. (Exhibit 7)
   - Excavate existing ten-foot AC pavement along mainline and construct additional pavement to accommodate a twelve-foot auxiliary lane, a twelve-foot deceleration lane (thousand feet long) in PCC, and a ten-foot shoulder in AC.
   - Excavate existing eight-foot AC shoulder and construct additional pavement to provide a twelve-foot right turn lane and an eight-foot shoulder in AC at ramp termini.

8. Collision severity reduction

Traffic Collisions
There are 1,879 accidents, which were reviewed as part of this project within the project limits. Caltrans’ Traffic Accident Surveillance and Analysis System (TASAS) data indicates that the
accident rates were lower than the statewide average for similar types in the three-year period from July 01, 2012 to June 30, 2015.

Traffic Accident Surveillance Analysis System (TASAS) – Table B

<table>
<thead>
<tr>
<th>Direction</th>
<th>Number of Accidents (MVM)</th>
<th>Accident Rate</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>F + 1</td>
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<tr>
<td>NB</td>
<td>1</td>
<td>279</td>
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<tr>
<td>SB</td>
<td>5</td>
<td>265</td>
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MVM: Million Vehicles Mile - F: Fatal - I: Injury

A total of 1,002 accidents in the NB and 877 accidents in the SB from the TASAS were reviewed as part of this project and are summarized as below:

• NB direction: there were 72.9% Rear End, 17.1% Sideswipe, 5.5% Hit Object, and 1.0% Broadside accidents. Also, 70.1% of these accidents were primarily caused by Speeding, 18.3% Other Violations, 5.7% Improper Turn, 3.0% Influence Alcohol, and 1.1% Follow Too Close.

• SB direction: there were 67.4% Rear End, 20.0% Sideswipe, 8.9% Hit Object, and 1.3% Broadside accidents. Also, 63.4% of these accidents were primarily caused by Speeding, 20.2% Other Violations, 9.4% Improper Turn, 3.4% Influence Alcohol, and 1.3% Follow Too Close.

It should be noted that most of these accidents occurred in daylight and under dry roadway conditions.

Comments/Explanation/Details (attach additional sheets as necessary):

The project adds auxiliary lanes of less than 1 mile, that would provide enough merging space for vehicles to safely change the lane. More vehicle storage will be available at the freeway ramp by adding lanes in a part of the freeway-ramps (NB I-405 on-ramp from SB Culver Dr and NB I-405 on-ramp from SB Jeffery Dr) and adding turning lanes at the termini at the exit (SB I-405 off ramp to Irvine Center Dr and SB I-405 off-ramp to Jamboree Rd). Addition of lane on the freeway ramp does not extend to the mainline of the Freeway and is only a part of the ramp length. Addition of lane on the part of the lane length does not increase the capacity of freeway system. The accident rate is also less than the average, however, it reduces the accident rate.
Vicinity Map