#### RTIP ID# (required) LA0G1562

#### TCWG Consideration Date: February 25, 2020

#### **Project Description**

Auxiliary lanes would be constructed on northbound and southbound I-405 and a lane extension would be constructed on southbound I-405 within Caltrans right-of-way (ROW) as described below.

#### I-405 Northbound

- Auxiliary lane between the Redondo Beach Boulevard on-ramp and Hawthorne Boulevard off-ramp
- Auxiliary lane between the Hawthorne Boulevard on-ramp and Inglewood Avenue off-ramp
- Auxiliary lane between the Inglewood Avenue on-ramp and Rosecrans Avenue off-ramp

#### I-405 Southbound

- Lane extension from the I-105 connector to south of the Rosecrans Avenue hook off-ramp and realignment of the hook off-ramp
- Auxiliary lane between the Rosecrans Avenue on-ramp and Inglewood Avenue off-ramp
- Auxiliary lane between the Inglewood Avenue on-ramp and Hawthorne Boulevard off-ramp
- Auxiliary lane between the Hawthorne Boulevard on-ramp and Redondo Beach Boulevard off-ramp

### Bridge Improvements

The following bridges would be widened:

- 166th Street Undercrossing (UC) (53-1230) both directions
- Manhattan Beach Boulevard UC (53-1232) both directions
- Marine Avenue UC (53-1234) both directions
- Lawndale OH (53-1235) northbound direction only
- Rosecrans Avenue UC (53-1236) southbound direction only
- 135th Street UC (53-1237) southbound direction only

#### Right-of-Way

The proposed project would not require the acquisition of any permanent Right-of-Way (ROW). Temporary construction easements (TCE) beyond the State ROW may be needed to construct the improvements outside the State's ROW at the parking lot of the Ayers Hotel Manhattan Beach, 14400 Hindry Avenue, Hawthorne, CA 90250 (APN# 4149-013-076).

Project limits are depicted in Figure 1.

## Type of Project (use Table 1 on instruction sheet)

Change to Existing State Highway

County	Narrative Location/Route & Postmiles:
Los Angeles	I-405 Auxiliary Lanes Improvement Project (Artesia Boulevard to I-405/105 Separation); PM 16.4 to 21.2R
	Caltrans Projects – EA# 07-35310

Lead Agency: Caltrans District 7

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Contact Person	Phone#	Fax#	Email
Andrew Yoon P.E.	213.897.6117	213.897.1634	Andrew.yoon@dot.ca.gov

Hot Spot Pollutant of Concern (check one or both) x PM2.5 x PM10

Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)									
х	Categorical Exclusion (NEPA)	EA Dra	or ft EIS	FONSI or Final EIS	PS&E or Construction		Other		
Sched	Scheduled Date of Federal Action: 2020								
NEPA	NEPA Assignment – Project Type (check appropriate box)								
			Section 326 –Catego Exemption	rical	Section 327 – Non- Categorical Exemption				
Curre	nt Programming	Dates (as	approp	riate)			_		
	PE/Environmental		ENG		ROW	CON			
Start	2019	2019		2020		2020	2023		
End	2020			2022		2022	2024		

# **Project Purpose and Need (Summary):**

The purpose of the proposed project is to achieve the following objectives:

- Improve traffic time reliability by reducing congestion on the Interstate 405 mainline between Artesia Boulevard and El Segundo Boulevard.
- Improve safety and minimize queuing and blocking through the enhancement of confluence areas and vehicular storage on the Interstate 405 mainline.
- Reduce peak period travel times along the I-405 between Artesia Boulevard and El Segundo Boulevard.

The need for the proposed project is derived from data that shows declining operational conditions and heavy congestion within project limits and during peak travel periods. These deficiencies are the result of insufficient vehicular storage at mainline exits and weaving from automobiles entering and exiting the roadway.

## **Surrounding Land Use/Traffic Generators** (especially effect on diesel traffic)

Nearby land uses consist of a mix of land uses, including commercial, industrial, public, and residential uses. The nearest residential land uses are located adjacent to the I-405 corridor.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility Opening Year AADT, including truck AADT and truck percentages, for build and no-build conditions are summarized in Table 1 and Table 2, respectively. Opening Year LOS data for build and no-build conditions are summarized in Table 5 and Table 6, respectively. As indicated, the proposed project would not result in significant increases in traffic volumes, would not result in changes in truck volumes, nor worsen levels of service along primarily affected roadway segments.

# RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Horizon Year AADT, including truck AADT and truck percentages, for build and no-build conditions are summarized in Table 3 and Table 4, respectively. Horizon Year LOS data for build and no-build conditions are summarized in Table 7 and Table 8, respectively. Pursuant to Caltrans policy, traffic data was forecasted for a design year of 2045 (i.e., 20 years from opening year). The Southern California Association of Government 2016 Regional Transportation Plan and associated traffic forecasting model have a travel forecast horizon year of 2040. There is no significant difference in projected traffic volumes/data between year 2040 and year 2045. Therefore, 2045 traffic data is presented as the Horizon/Design Year (2040) for purposes of this form. As indicated, the proposed project would not result in significant increases in traffic volumes, would not result in changes in truck volumes, nor worsen levels of service along primarily affected roadway segments.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Not Applicable.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Not Applicable.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

The proposed improvements would improve vehicle congestion. The project would not result in significant increases in traffic volumes along area roadways.

Table 1. Opening Year (2024) Peak Period Freeway Demand Volumes – I-405 Northbound

	No-Build				Build		
Description	ADT		ADT ADT		T	Tours le 0/	
	Total	Trucks	Truck %	Total	Trucks	Truck %	
South of Artesia Blvd Off-Ramp	138,920	5,560	4%	140,420	5,620	4%	
Off-Ramp to Artesia Blvd	10,040	400	4%	10,170	410	4%	
North of Artesia Blvd Off-Ramp	128,890	5,160	4%	130,250	5,210	4%	
On-Ramp from Artesia Blvd	7,550	300	4%	7,650	310	4%	
North of Artesia Blvd On-Ramp	136,430	5,460	4%	137,900	5,520	4%	
On-Ramp from Redondo Beach Blvd	11,530	460	4%	11,670	470	4%	
North of Redondo Beach Blvd On-Ramp	147,960	5,920	4%	149,570	5,980	4%	
Off-Ramp to Hawthorne Blvd	8,860	350	4%	8,970	360	4%	
North of Hawthorne Blvd Off-Ramp	139,100	5,560	4%	140,600	5,620	4%	
On-Ramp from Hawthorne Blvd	13,850	550	4%	14,020	560	4%	
North of Hawthorne Blvd On-Ramp	152,950	6,120	4%	154,620	6,180	4%	
Off-Ramp to Inglewood Ave	10,740	430	4%	10,870	430	4%	
North of Inglewood Ave Off-Ramp	142,220	5,690	4%	143,750	5,750	4%	
On-Ramp from NB Inglewood Ave	14,120	560	4%	14,290	570	4%	
North of NB Inglewood Ave On-Ramp	156,330	6,250	4%	158,040	6,320	4%	
On-Ramp from SB Inglewood Ave	5,460	220	4%	5,530	220	4%	
North of SB Inglewood Ave On-Ramp	161,780	6,470	4%	163,570	6,540	4%	
Off-Ramp to Rosecrans Ave	13,460	540	4%	13,630	550	4%	
North of Rosecrans Ave Off-Ramp	148,330	5,930	4%	149,940	6,000	4%	
On-Ramp from EB Rosecrans Ave	12,050	480	4%	12,200	490	4%	
North of EB Rosecrans Ave On-Ramp	160,380	6,420	4%	162,140	6,490	4%	
On-Ramp from WB Rosecrans Ave	8,270	330	4%	8,370	330	4%	
North of WB Rosecrans Ave On-Ramp	168,640	6,750	4%	170,510	6,820	4%	
Off-Ramp to El Segundo Blvd	11,290	450	4%	11,430	460	4%	
North of El Segundo Blvd Off-Ramp	157,360	6,290	4%	159,080	6,360	4%	
Off-Ramp to I-105	39,120	1,560	4%	39,590	1,580	4%	
North of I-105 Off-Ramp	118,250	4,730	4%	119,490	4,780	4%	

Table 2. Opening Year (2024) Peak Period Freeway Demand Volumes – I-405 Southbound

	No-Build			Build		
Description	AI	т	Truck %	AI	т	Truck %
	Total	Trucks	TIUCK /6	Total	Trucks	TTUCK /0
North of I-105 On-Ramp	128,630	5,150	4%	129,970	5,200	4%
On-Ramp from I-105	24,370	970	4%	24,670	990	4%
South of I-105 On-Ramp	153,000	6,120	4%	154,640	6,190	4%
On-Ramp from EB El Segundo Blvd	8,600	340	4%	8,710	350	4%
South of El Segundo Blvd On-Ramp	161,600	6,460	4%	163,350	6,530	4%
Off-Ramp to WB Rosecrans Ave	11,460	460	4%	11,600	460	4%
South of WB Rosecrans Ave Off-Ramp	150,140	6,010	4%	151,750	6,070	4%
Off-Ramp to Rosecrans Ave/Hindry Ave	7,960	320	4%	8,060	320	4%
South of Rosecrans/Hindry Ave Off-Ramp	142,190	5,690	4%	143,690	5,750	4%
On-Ramp from Rosecrans Ave/Hindry Ave	9,940	400	4%	10,060	400	4%
South of Rosecrans Ave On-Ramp	152,120	6,080	4%	153,750	6,150	4%
Off-Ramp to Inglewood Ave	14,740	590	4%	14,920	600	4%
South of Inglewood Ave Off-Ramp	137,380	5,500	4%	138,830	5,550	4%
On-Ramp from SB Inglewood Ave	5,750	230	4%	5,820	230	4%
South of SB Inglewood Ave On-Ramp	143,130	5,730	4%	144,650	5,790	4%
On-Ramp from NB Inglewood Ave	4,830	190	4%	4,890	200	4%
South of NB Inglewood Ave On-Ramp	147,950	5,920	4%	149,540	5,980	4%
Off-Ramp to Hawthorne Blvd	14,370	570	4%	14,550	580	4%
South of Hawthorne Blvd Off-Ramp	133,590	5,340	4%	134,990	5,400	4%
On-Ramp from Hawthorne Blvd	7,580	300	4%	7,680	310	4%
South of Hawthorne Blvd On-Ramp	141,170	5,650	4%	142,670	5,710	4%
Off-Ramp to Redondo Beach Blvd	9,980	400	4%	10,100	400	4%
South of Redondo Beach Blvd Off-Ramp	131,190	5,250	4%	132,570	5,300	4%
Off-Ramp to Artesia Blvd	5,850	230	4%	5,930	240	4%
South of Artesia Blvd Off-Ramp	125,340	5,010	4%	126,640	5,070	4%
On-Ramp from Artesia Blvd	11,500	460	4%	11,640	470	4%
South of Artesia Blvd On-Ramp	136,840	5,470	4%	138,280	5,530	4%

Table 3. Horizon/Design Year (2040) Peak Period Freeway Demand Volumes – I-405 Northbound

	No-Build			Build		
Description	ΑI	DΤ	Truck 0/	Al	ADT Truck	
	Total	Trucks	Truck %	Total	Trucks	Truck %
South of Artesia Blvd Off-Ramp	141,900	5,680	4%	143,400	5,740	4%
Off-Ramp to Artesia Blvd	10,250	410	4%	10,380	420	4%
North of Artesia Blvd Off-Ramp	131,650	5,270	4%	133,020	5,320	4%
On-Ramp from Artesia Blvd	7,710	310	4%	7,810	310	4%
North of Artesia Blvd On-Ramp	139,360	5,570	4%	140,830	5,630	4%
On-Ramp from Redondo Beach Blvd	11,780	470	4%	11,930	480	4%
North of Redondo Beach Blvd On-Ramp	151,140	6,050	4%	152,760	6,110	4%
Off-Ramp to Hawthorne Blvd	9,050	360	4%	9,160	370	4%
North of Hawthorne Blvd Off-Ramp	142,090	5,680	4%	143,600	5,740	4%
On-Ramp from Hawthorne Blvd	14,150	570	4%	14,320	570	4%
North of Hawthorne Blvd On-Ramp	156,240	6,250	4%	157,920	6,320	4%
Off-Ramp to Inglewood Ave	10,970	440	4%	11,110	440	4%
North of Inglewood Ave Off-Ramp	145,270	5,810	4%	146,810	5,870	4%
On-Ramp from NB Inglewood Ave	14,420	580	4%	14,600	580	4%
North of NB Inglewood Ave On-Ramp	159,690	6,390	4%	161,410	6,460	4%
On-Ramp from SB Inglewood Ave	5,580	220	4%	5,650	230	4%
North of SB Inglewood Ave On-Ramp	165,270	6,610	4%	167,060	6,680	4%
Off-Ramp to Rosecrans Ave	13,750	550	4%	13,920	560	4%
North of Rosecrans Ave Off-Ramp	151,520	6,060	4%	153,140	6,130	4%
On-Ramp from EB Rosecrans Ave	12,310	490	4%	12,460	500	4%
North of EB Rosecrans Ave On-Ramp	163,830	6,550	4%	165,600	6,620	4%
On-Ramp from WB Rosecrans Ave	8,440	340	4%	8,550	340	4%
North of WB Rosecrans Ave On-Ramp	172,270	6,890	4%	174,150	6,970	4%
Off-Ramp to El Segundo Blvd	11,530	460	4%	11,670	470	4%
North of El Segundo Blvd Off-Ramp	160,740	6,430	4%	162,480	6,500	4%
Off-Ramp to I-105	39,950	1,600	4%	40,430	1,620	4%
North of I-105 Off-Ramp	120,790	4,830	4%	122,050	4,880	4%

<sup>\*</sup>No significant difference in projected traffic volumes/data identified between year 2040 and year 2045.

Table 4. Horizon/Design Year (2040) Peak Period Freeway Demand Volumes – I-405 Southbound

		No-Build				
Description	ΑI	OT .	Truck 9/	ADT		Truck 9/
	Total	Trucks	Truck %	Total	Trucks	Truck %
North of I-105 On-Ramp	131,380	5,260	4%	132,750	5,310	4%
On-Ramp from I-105	24,890	1,000	4%	25,190	1,010	4%
South of I-105 On-Ramp	156,270	6,250	4%	157,940	6,320	4%
On-Ramp from EB El Segundo Blvd	8,800	350	4%	8,910	360	4%
South of El Segundo Blvd On-Ramp	165,070	6,600	4%	166,850	6,670	4%
Off-Ramp to WB Rosecrans Ave	11,700	470	4%	11,850	470	4%
South of WB Rosecrans Ave Off-Ramp	153,370	6,130	4%	155,000	6,200	4%
Off-Ramp to Rosecrans Ave/Hindry Ave	8,200	330	4%	8,300	330	4%
South of Rosecrans/Hindry Ave Off- Ramp	145,170	5,810	4%	146,700	5,870	4%
On-Ramp from Rosecrans Ave/Hindry Ave	10,200	410	4%	10,330	410	4%
South of Rosecrans Ave On-Ramp	155,370	6,210	4%	157,030	6,280	4%
Off-Ramp to Inglewood Ave	15,100	600	4%	15,290	610	4%
South of Inglewood Ave Off-Ramp	140,270	5,610	4%	141,740	5,670	4%
On-Ramp from SB Inglewood Ave	5,900	240	4%	5,980	240	4%
South of SB Inglewood Ave On-Ramp	146,170	5,850	4%	147,720	5,910	4%
On-Ramp from NB Inglewood Ave	5,000	200	4%	5,060	200	4%
South of NB Inglewood Ave On-Ramp	151,170	6,050	4%	152,780	6,110	4%
Off-Ramp to Hawthorne Blvd	14,700	590	4%	14,880	600	4%
South of Hawthorne Blvd Off-Ramp	136,470	5,460	4%	137,900	5,520	4%
On-Ramp from Hawthorne Blvd	7,800	310	4%	7,900	320	4%
South of Hawthorne Blvd On-Ramp	144,270	5,770	4%	145,800	5,830	4%
Off-Ramp to Redondo Beach Blvd	10,200	410	4%	10,330	410	4%
South of Redondo Beach Blvd Off-Ramp	134,070	5,360	4%	135,470	5,420	4%
Off-Ramp to Artesia Blvd	6,000	240	4%	6,080	240	4%
South of Artesia Blvd Off-Ramp	128,070	5,120	4%	129,390	5,180	4%
On-Ramp from Artesia Blvd	11,800	470	4%	11,950	480	4%
South of Artesia Blvd On-Ramp	139,870	5,590	4%	141,340	5,650	4%

<sup>\*</sup>No significant difference in projected traffic volumes/data identified between year 2040 and year 2045.

Table 5. Opening Year (2024) No-Build Intersection Levels of Service Summary

Intersection		Control	AM Peak Hour		PM Peak Hour	
	intersection	Туре	Delay	LOS	Delay	LOS
1	I-405 SB Ramps and Redondo Beach Blvd	Signal	15.5	В	16.2	В
2	I-405 NB Ramps and Redondo Beach Blvd	Uncontrolled	24.3	С	16.6	В
3	Hawthorne Blvd and I-405 SB Ramps	Signal	17.3	В	20.4	С
4	Hawthorne Blvd and I-405 NB Ramps	Signal	11.1	В	15	В
5	Inglewood Ave and I-405 SB Ramps	Signal	9.4	Α	11.8	В
6	Inglewood Ave and I-405 NB Ramps	Signal	8.8	Α	10.8	В
7	Hindry Ave and I-405 SB Ramps	Signal	38.9	D	42.2	D
8	I-405 SB Off Ramp and Rosecrans Ave	TWSC	35.5	E	35.8	E
9	I-405 NB Ramps and Rosecrans Ave	Signal	16.9	В	9	Α

Table 6. Opening Year (2024) Build Intersection Levels of Service Summary

Intersection		Control	AM Peak Hour		PM Peak Hour	
	intersection	Туре	Delay	LOS	Delay	LOS
1	I-405 SB Ramps and Redondo Beach Blvd	Signal	15.2	В	17	В
2	I-405 NB Ramps and Redondo Beach Blvd	Uncontrolled	22.1	С	13.2	В
3	Hawthorne Blvd and I-405 SB Ramps	Signal	17	В	18.9	В
4	Hawthorne Blvd and I-405 NB Ramps	Signal	10.7	В	14.5	В
5	Inglewood Ave and I-405 SB Ramps	Signal	9	Α	11.7	В
6	Inglewood Ave and I-405 NB Ramps	Signal	8.8	Α	10.9	В
7	Hindry Ave and I-405 SB Ramps	Signal	41.2	D	45.2	D
8	I-405 SB Off Ramp and Rosecrans Ave	TWSC	42.9	Е	39	E
9	I-405 NB Ramps and Rosecrans Ave	Signal	16.9	В	9.3	А

Table 7. Horizon/Design Year (2040) No-Build Intersection Levels of Service Summary

Intersection		Control AM Peak Hour		ak Hour	PM Peak Hour	
	intersection	Туре	Delay	LOS	Delay	LOS
1	I-405 SB Ramps and Redondo Beach Blvd	Signal	15.6	В	16.8	В
2	I-405 NB Ramps and Redondo Beach Blvd	Uncontrolled	23.4	С	13.6	В
3	Hawthorne Blvd and I-405 SB Ramps	Signal	17.7	В	20.3	С
4	Hawthorne Blvd and I-405 NB Ramps	Signal	12.1	В	16.2	В
5	Inglewood Ave and I-405 SB Ramps	Signal	10.1	В	12.7	В
6	Inglewood Ave and I-405 NB Ramps	Signal	9.2	Α	12.4	В
7	Hindry Ave and I-405 SB Ramps	Signal	40.3	D	45.9	D
8	I-405 SB Off Ramp and Rosecrans Ave	TWSC	44.1	E	40	E
9	I-405 NB Ramps and Rosecrans Ave	Signal	17.7	В	9.3	Α

<sup>\*</sup>No significant difference in projected traffic volumes/data identified between year 2040 and year 2045.

Table 8. Horizon/Design Year (2040) Build Intersection Levels of Service Summary

Intersection		Control	AM Pe	ak Hour	PM Pea	ak Hour
	intersection	Туре	Delay	LOS	Delay	LOS
1	I-405 SB Ramps and Redondo Beach Blvd	Signal	16.3	В	16.5	В
2	I-405 NB Ramps and Redondo Beach Blvd	Uncontrolled	26.4	С	13.4	В
3	Hawthorne Blvd and I-405 SB Ramps	Signal	18.1	В	21.2	С
4	Hawthorne Blvd and I-405 NB Ramps	Signal	12.1	В	17.5	В
5	Inglewood Ave and I-405 SB Ramps	Signal	10.9	В	12.6	В
6	Inglewood Ave and I-405 NB Ramps	Signal	9.3	Α	12.7	В
7	Hindry Ave and I-405 SB Ramps	Signal	40.4	D	46.3	D
8	I-405 SB Off Ramp and Rosecrans Ave	TWSC	48.5	E	48.9	E
9	I-405 NB Ramps and Rosecrans Ave	Signal	18.5	В	9.3	А

<sup>\*</sup>No significant difference in projected traffic volumes/data identified between year 2040 and year 2045.

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

Under 40 CFR 93.123(b)—PM10 and PM2.5 Hot Spots—the following criteria are utilized to determine the potential for the proposed project to qualify as a Project of Air Quality Concern (POAQC):

- (i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
  - The project is an expanded highway project. However, the project would not significantly increase the number of diesel vehicles operating within the project study area.
- (ii) Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
  - As previously noted, the project would not result in significant increases in traffic volumes along area roadways. The project would not significantly increase the number of diesel vehicles operating within the project study area and would not adversely impact nearby intersections that are at LOS D, or worse, and that have a significant number of diesel vehicles.
- (iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
  - The project is not a new or expanded bus or rail terminal, nor would the project adversely impact transfer points that have a significant number of diesel vehicles congregating at a single location.
- (iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
  - The project is not a new or expanded bus or rail terminal, nor would the project adversely impact transfer points that have a significant number of diesel vehicles congregating at a single location.
- (v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM10 or PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.
  - The proposed build alternatives are not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

For the reasons noted above, the proposed project would not be considered a POAQC.

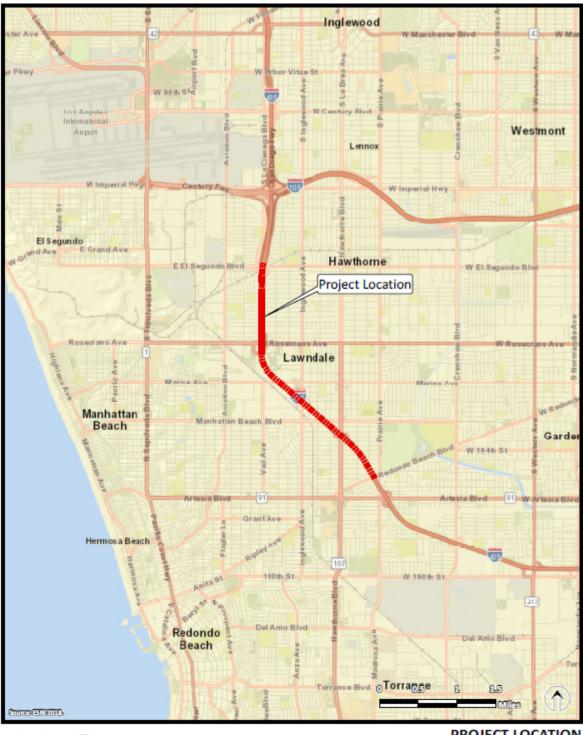
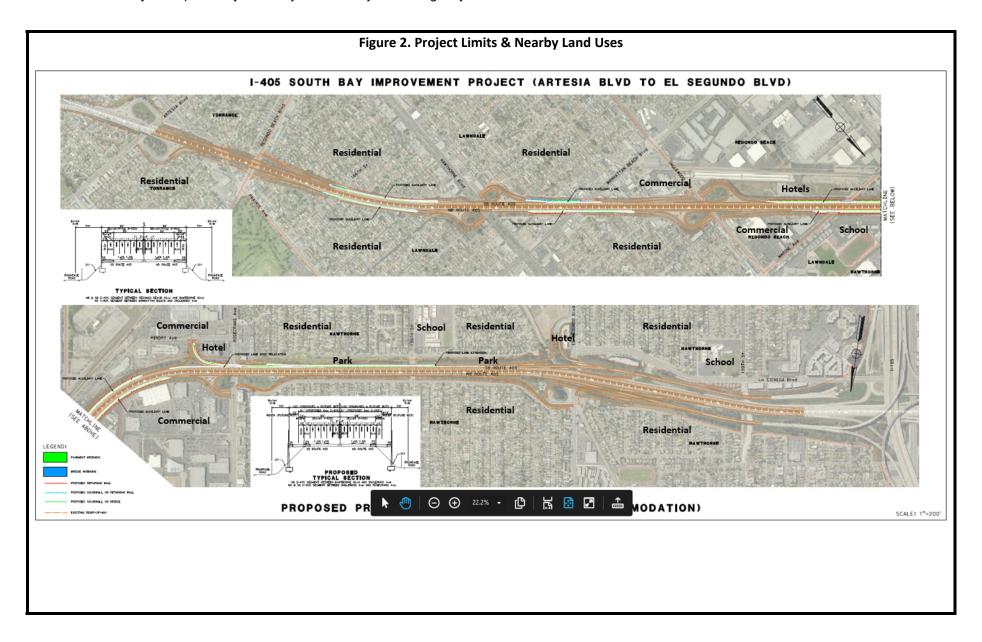


Figure 1. Project Location



PROJECT LOCATION I-405 Auxiliary Lanes Improvement Project (Artesia Boulevard to I-405/105 Separation)



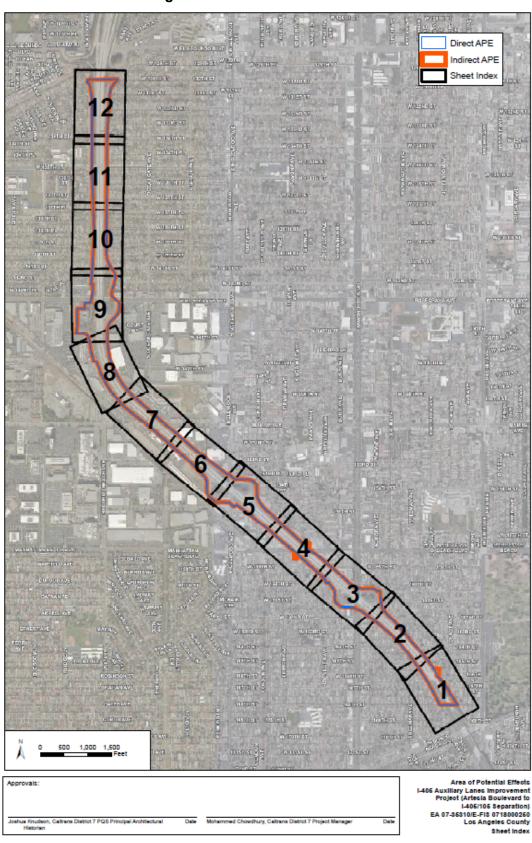


Figure 3. Area of Potential Effects









