



McDonald's Hawthorne (Inglewood & 133rd) 4-5205 Traffic Impact Assessment

City of Hawthorne
4455 West 126th Street
Hawthorne, CA 90250

December 2024

Prepared By:

Kimley»Horn

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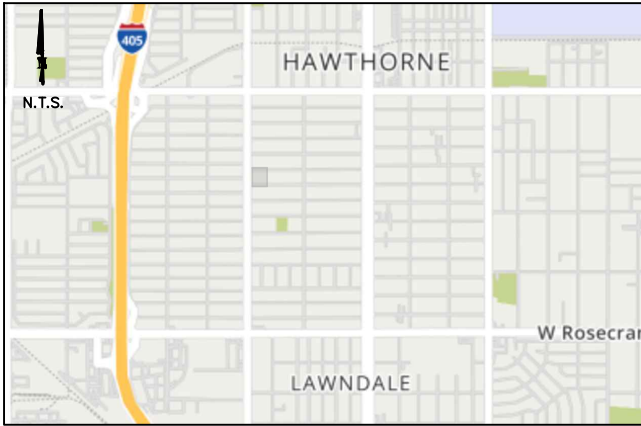
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I. Introduction

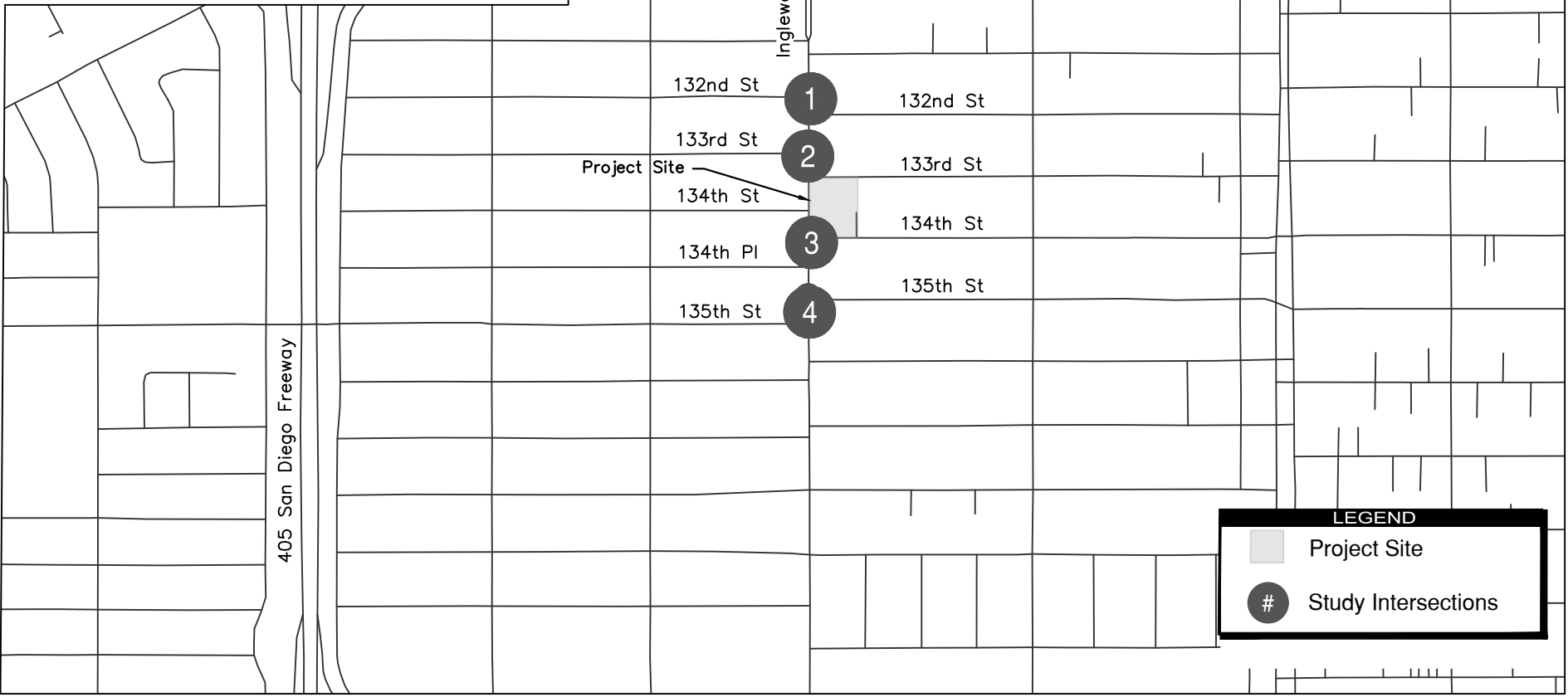
Kimley-Horn and Associates, Inc. (“Kimley-Horn”) was contracted by McDonalds (“Client”) to prepare a traffic study for the proposed McDonalds’ at 13324 South Inglewood Avenue (“Project”) in the City of Hawthorne (“City”). This traffic study was prepared in accordance with the scoping agreement which outlines the methodology, requirements, and impact criteria of the traffic operational and the Vehicle Miles Traveled (VMT) analysis. The scope of work is also based on a review of the Los Angeles County Transportation Impact Analysis Guidelines (July 2020) and discussions with City Staff. The Project study scoping agreement can be found in **Appendix A**.

Project Description

The proposed Project is to consist of a 3,781 square-foot Fast Food Restaurant with a Drive-Thru on an empty site on the east side of Inglewood Avenue, between 133rd Street and 134th Street. The Project location and study area is shown in **Figure 1** and is anticipated to have an Opening Year of 2025. The proposed preliminary site plan for the proposed Project is shown in **Figure 2**. As indicated on **Figure 2**, access to the Project site will be provided via driveways on W 133rd Street, W 134th Street, and on Inglewood Avenue.



VICINITY MAP

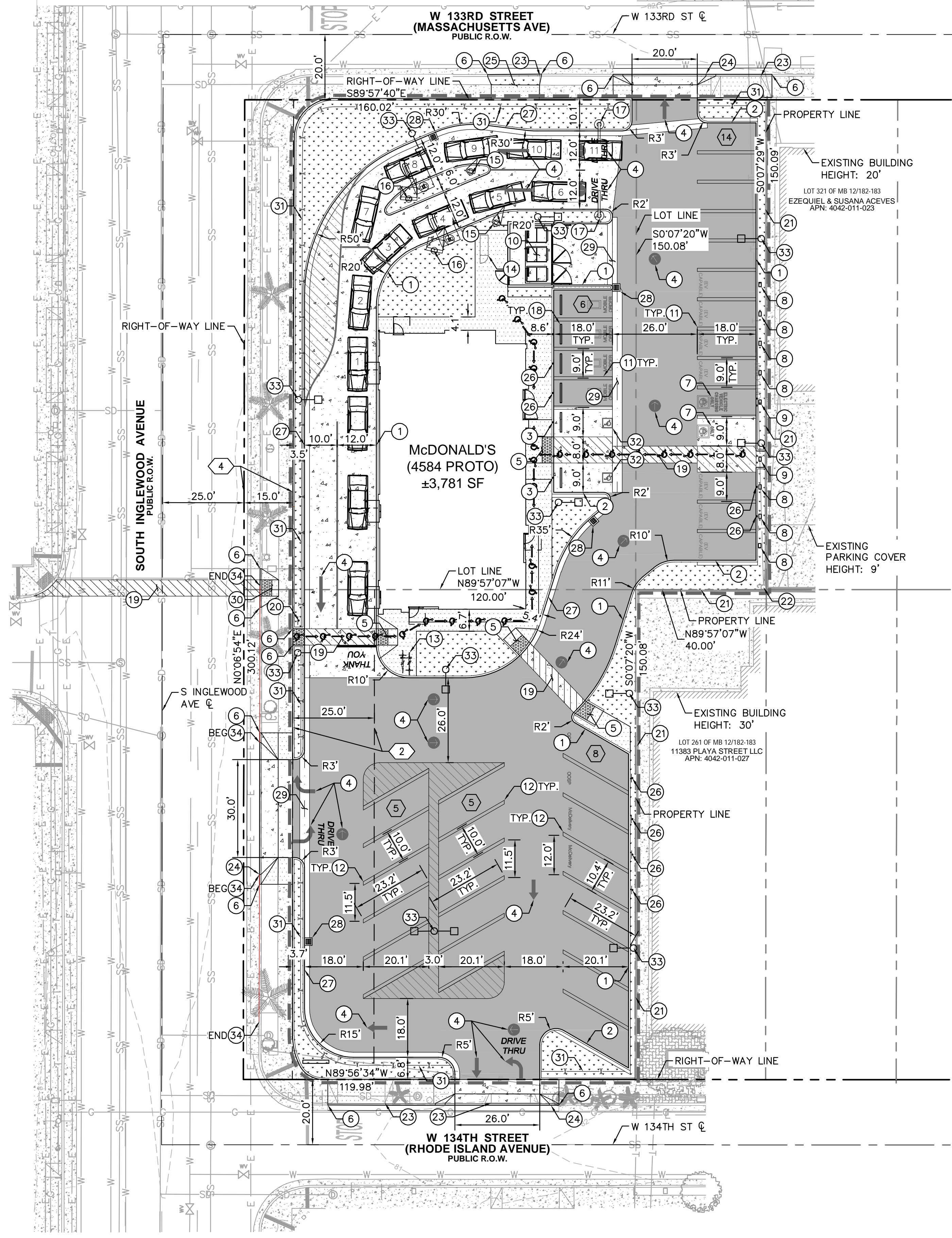


LEGEND

- Project Site
- # Study Intersections

FIGURE 1 - STUDY AREA

FIGURE 2 - SITE PLAN



LEGEND:

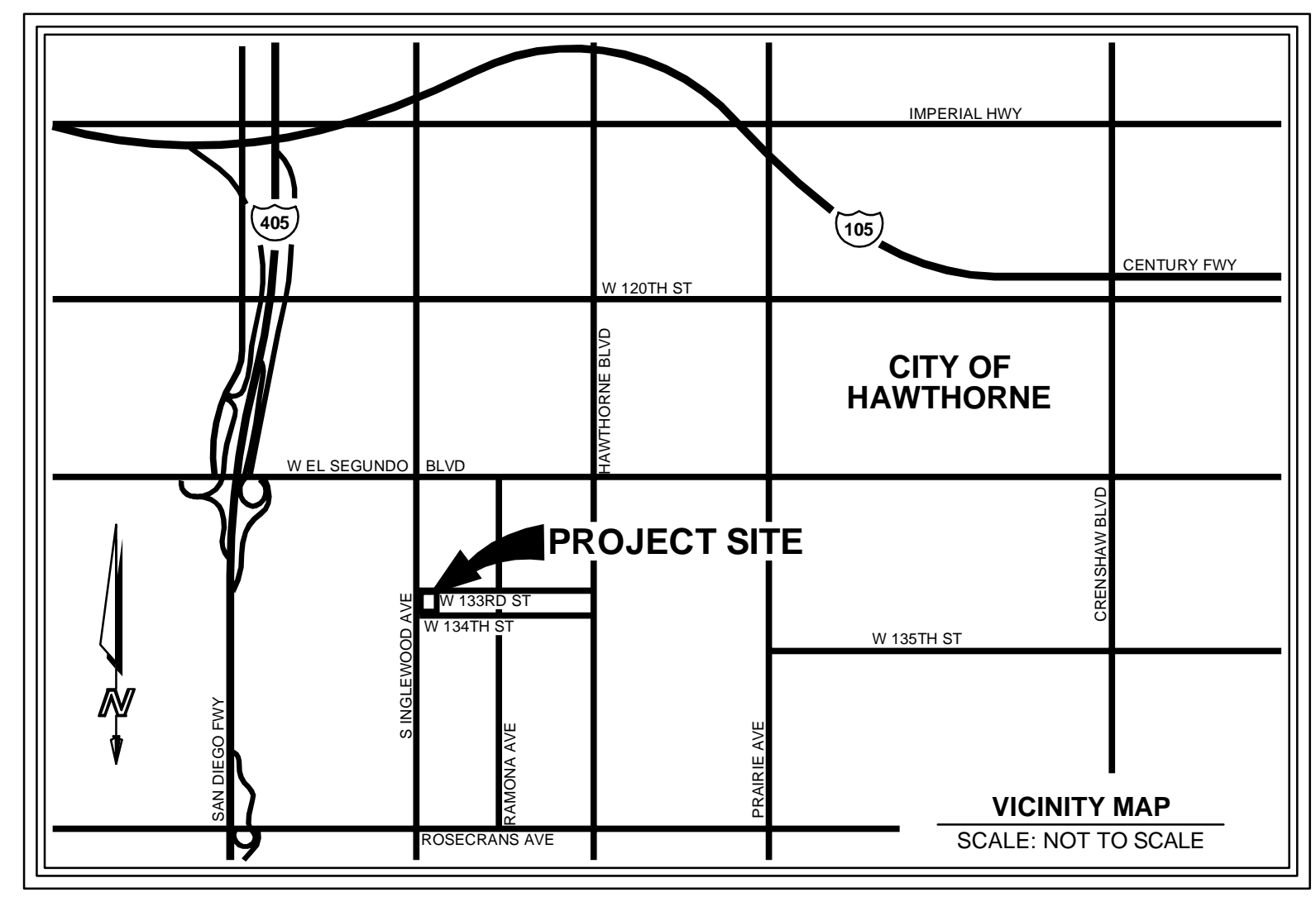
- CENTER LINE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE / LEASE LINE
 - EASEMENT LINE / SETBACK LINE
 - APPROXIMATE LIMIT OF WORK LINE
- [Pattern] STANDARD DUTY CONCRETE PAVEMENT
 - [Pattern] HEAVY DUTY CONCRETE PAVEMENT
 - [Pattern] LANDSCAPE/PLANTER AREA
 - [Pattern] HEAVY DUTY ASPHALT PAVEMENT
 - [Pattern] DETECTABLE WARNING SYSTEM
 - [Symbol] ACCESSIBLE ROUTE (LOCATION PURPOSES ONLY, DO NOT PAINT)
 - [Symbol] SIGN POST
 - [Symbol] ACCESSIBLE PARKING SPACE
 - [Symbol] NUMBER OF PARKING SPACES

LEGAL DESCRIPTION

SUBJECT PARCEL: APN: 4042-011-024 AND 4042-011-026

LOTS 260, 322 AND 323 OF INGLEDAL ACRES, IN THE CITY OF HAWTHORNE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 20, PAGES 182 AND 183 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTING THEREFROM ANY MOBILE/MANUFACTURED HOMES LOCATED THEREON.



SITE DATA

PROJECT DESCRIPTION: DEMOLITION OF EXISTING CONCRETE PADS AND WALLS. NEW CONSTRUCTION OF A MCDONALD'S DRIVE THRU RESTAURANT AND PARKING LOT.

ADDRESS: 13314 S INGLEWOOD AVE, HAWTHORNE, CA 90250

APN: 4042-011-024 AND 4042-011-026

ZONING DISTRICT: C-3 GENERAL COMMERCIAL (EXISTING & PROPOSED)

ADJACENT ZONING DISTRICTS: N: C-3 GENERAL COMMERCIAL
E: R-3 HIGH DENSITY RESIDENTIAL
S: C-3 GENERAL COMMERCIAL

EXISTING LAND USE: RESIDENTIAL

PROPOSED LAND USE: COMMERCIAL

ADJACENT LAND USE: N: COMMERCIAL
E: RESIDENTIAL
S: COMMERCIAL

FLOOD ZONE: ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.02% ANNUAL CHANCE FLOODPLAIN PER MAP NO. 06037C1790F EFFECTIVE 9/26/2008

TOTAL DISTURBED AREA:	38,298 S.F.	(0.88 AC)	
TOTAL PAD AREA:	3,781 S.F.	(0.09 AC)	
TOTAL LOT AREA:	42,020 S.F.	(0.96 AC)	

LOT COVERAGE			
TOTAL SITE AREA:	38,298 S.F.	(0.88 AC)	100%
BUILDING AREA:	3,781 S.F.	(0.09 AC)	9.9%
IMPERVIOUS AREA:	29,274 S.F.	(0.67 AC)	76.4%
LANDSCAPE AREA:	5,215 S.F.	(0.12 AC)	13.7%

PARKING/LANDSCAPE BUFFER:

FRONT:	0.0'
REAR:	0.0'
SIDE (N):	0.0'
SIDE (S):	0.0'

PARKING SUMMARY: MCDONALD'S: 3,781 S.F. (1 STALL/100 S.F.) = 38 STALLS REQUIRED PER CITY CODE

- ADA PARKING FOR 26-50 PARKING STALLS = 2 ADA PARKING STALLS REQUIRED, PER 2016 CBC.
- FUTURE EV FOR 26-50 PARKING STALLS = 8 FUTURE EV STALLS REQUIRED PER 2016 CALGREEN
- 1 FUTURE EV STALL MUST BE VAN ACCESSIBLE.

TOTAL NUMBER OF PARKING SPACES PROVIDED = 38

REQUIRED	PROVIDED	
28	28	
-	-	
8	8	(INCLUDING EV READY)
2	2	
38	38	

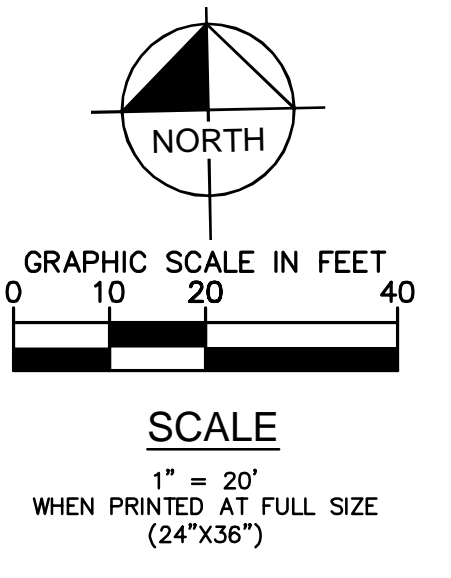
*MINIMUM 6 CAR STACK BEHIND THE ORDER BOARD HAS BEEN PROVIDED

CONSTRUCTION NOTES:

- 1 CONCRETE CURB
- 2 18" WALK-OFF CURB
- 3 ACCESSIBLE PARKING STALL SIGN
- 4 DIRECTIONAL MARKING PER PLAN
- 5 ACCESSIBLE RAMP WITH DETECTABLE WARNING (TRUNCATED DOMES)
- 6 JOIN EXISTING CURB, CURB & GUTTER, SIDEWALK.
- 7 "ELECTRIC VEHICLE CHARGING ONLY" IN 12" HIGH WHITE LETTERS AT THE END OF PARKING STALL
- 8 FUTURE E/V CHARGING STATION. CONDUIT TO BE RAN TO STALL FOR FUTURE CONNECTION
- 9 PROPOSED E/V CHARGING STATION.
- 10 COVERED TRASH ENCLOSURE AND RECYCLING BIN STORAGE
- 11 STANDARD 90° PARKING STALL STRIPING.
- 12 STANDARD 60° PARKING STALL STRIPING.
- 13 SHORT TERM BIKE RACK
- 14 LONG TERM BIKE RACK
- 15 PREVIEW BOARD
- 16 ORDER BOARD
- 17 HEIGHT DETECTOR POLE
- 18 INSTALL WHEELSTOPS FOR PARKING SPACES ADJACENT TO WALKWAYS
- 19 ACCESSIBLE PATH OF TRAVEL STRIPING. ACCESSIBLE PATHS SHALL BE ENHANCED PAVING.
- 20 ADA PATH OF TRAVEL SIGN
- 21 EXISTING CMU WALL TO REMAIN
- 22 EXISTING POWER POLE TO REMAIN
- 23 EXISTING DRIVEWAY TO BE REMOVED
- 24 PROPOSED DRIVEWAY
- 25 PROPOSED SIDEWALK, PARKWAY, CURB AND GUTTER TO MATCH EXISTING SURROUNDING
- 26 MCDONALD'S SITE SIGNAGE
- 27 CONCRETE CURB AND GUTTER
- 28 24" X 24" JENSEN PRECAST DROP INLET WITH CATCH BASIN FILTER INSERT FOR TRASH CAPTURE.
- 29 3.0' WIDE VALLEY GUTTER
- 30 PROPOSED CURB RAMP PER STD. PLAN RSP A88A.
- 31 WROUGHT IRON FENCE
- 32 ACCESSIBLE STALL STRIPING
- 33 SITE LIGHTING
- 34 NO PARKING RED CURB

TITLE REPORT EXCEPTIONS

- 2 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT:
- RESERVED BY: HOPPER-MCFARLAND-DUNCAN COMPANY
 PURPOSE: PERTAINING TO THE LAYING OF WATER PIPES
 RECORDING DATE: MARCH 17, 1913
 RECORDING NO: BOOK 5379, PAGE 316, OF DEEDS
 AFFECTS: SAID LAND
 AND RECORDING DATE: JULY 29, 1915
 AND RECORDING NO: BOOK 6064, PAGE 289, OF DEEDS (AFFECTS SUBJECT PARCEL, PLOTTABLE AS SHOWN)
- 4 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS CONDEMNED BY AN INSTRUMENT, ENTITLED: FINAL ORDER OF CONDEMNATION
- COURT: SUPERIOR COURT OF THE STATE OF CALIFORNIA
 CAUSE NO.: 671543
 IN FAVOR OF: COUNTY OF LOS ANGELES
 PURPOSE: PUBLIC ROAD AND HIGHWAY
 RECORDING DATE: JULY 10, 1958
 RECORDING NO: 1958-3356, IN BOOK M65, PAGE 133, OF OFFICIAL RECORDS
 AFFECTS: SAID LAND (AFFECTS SUBJECT PARCEL, PLOTTABLE AS SHOWN)



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ISSUE	DATE	DESCRIPTION

ENGINEERS SEAL

JS
 DRAWN BY
 AB
 CHECKED BY
 AB
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PREPARED UNDER THE DIRECT SUPERVISION OF:
 Amelia Beltran DATE: 9/23/2024
 AMELIA BELTRAN, R.C.E. NO. ### EXP. ###

CITY OF HAWTHORNE

APPROVED BY: _____ DATE: _____

CITY ENGINEER RCE # _____ EXP _____

McDonald's USA, LLC

13314 INGLEWOOD AVE
 HAWTHORNE, CA 90250

CITY OF HAWTHORNE

PRELIMINARY SITE PLAN

C1.0

II. Methodology

The Project study area, analysis scenarios, and analysis methodology were established in consultation with City of Hawthorne staff through a scoping letter agreement which was approved on June 27, 2024. The approved scoping letter is incorporated as a reference in **Appendix A**.

Study Area

Based on discussion with the City and review of the Project area, site, and access points, key intersections in the proximity of the Project site were identified for analysis. The study area included the following intersections shown in **Table 1**:

Table 1: Project Study Intersections

#	Intersection	Jurisdiction	Signalized
1	Inglewood Ave & W 132 nd Street	Hawthorne	Yes
2	Inglewood Ave & W 133 rd Street	Hawthorne	No
3	Inglewood Ave & 134 th Street	Hawthorne	No
4	Inglewood Ave & 135 th Street (E)	Hawthorne	Yes
	Inglewood Ave & 135 th Street (W)	Hawthorne	Yes

Three driveways are proposed for the site; one full access driveway is proposed on Inglewood Avenue, one exit only driveway on 133rd Street and one full access driveway on 134th Street per the site plan (**Figure 2**). A map depicting the study intersections is shown in **Figure 1**.

Analysis Scenarios

This traffic analysis provides an evaluation of weekday morning and evening peak hour operations for the following scenarios:

- Existing Year (2024) conditions
- Existing Year (2024) with Project conditions
- Cumulative without Project (2035) conditions
- Cumulative with Project (2035) conditions

Each study scenario will include weekday morning (AM) peak hour and weekday evening (PM) peak hour analysis.

Study Methodology and Analysis Criteria

Senate Bill 743 (SB 743), approved in 2013, mandated a change in the way transportation impacts are determined according to the California Environmental Quality Act (CEQA). The Governor's Office of Planning and Research (OPR) directed the use of VMT as the replacement for automobile delay-based level of service (LOS) for purposes of determining a significant transportation impact under CEQA. Although traffic delay is no longer considered a significant impact, cities can still use LOS to inform local analysis, such as traffic operations and traffic signal timing needs. Hence, the LOS analysis will be performed for the traffic operational assessment of the study intersections. A separate VMT analysis is included later in this report as part of the Project.

This traffic analysis focuses on the study intersections near the Project site during the weekday morning (AM) and evening (PM) peak hours. Level of service (LOS) analysis will be conducted for peak hour

intersection operations at signalized and unsignalized intersections using the methods prescribed in the Highway Capacity Manual (HCM) 7th Edition. The traffic analysis will be conducted using the latest version of the Synchro Software and the definitions for each level of service can be seen below in **Table 2**.

Table 2: Intersection Level of Service Definitions

LOS	Intersection	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easy and nearly all drivers find freedom of operation.	≤10	≤10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤20	>10 and ≤15
C	Good operation. Occasionally backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤35	>15 and ≤25
D	Fair operation. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	>35 and ≤55	>25 and ≤35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches.	>55 and ≤80	>35 and ≤50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movements of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	>80	>50 or v/c > 1

Source: Highway Capacity Manual, 7th Edition

For intersections within the City, LOS D or better will be considered as acceptable. If Project traffic causes operations at an intersection to go from acceptable (LOS D or better) to unacceptable (LOS E or F), the Project would have a significant project-related impact at the intersection. If the intersection is currently operating at an unacceptable LOS (LOS E or F) without Project traffic, it is assumed that there would be no impact to the intersection.

Existing Conditions

The roadway system in the study area is comprised of a network of arterials, collector streets, and local streets. A brief description of each roadway within the study area is provided below.

Existing Street System

The key roadways in the vicinity of the Project Site and study area are:

- **Inglewood Avenue** – Inglewood Avenue is classified as a Major Arterial in the City of Hawthorne. Oriented in the north-south direction, it is located along the west side of the Project Site. It has four travel lanes in the study area, two lanes in each direction. On-street parking is provided on both sides of the road along Inglewood Avenue within the study area.
- **W 132nd Street** – West 132nd Street is classified as a Local Street in the City of Hawthorne. Oriented in the east-west direction, it is located north of the Project Site with access to travel in both directions. On-street parking is provided on the south side of the road along 132nd Street within the study area (east of Inglewood Avenue) to provide parking for the residents.
- **W 133rd Street** – West 133rd Street is classified as a Local Street in the City of Hawthorne. Oriented in the east-west direction, it is fronting the northside of the Project Site with access to travel in both directions. On-street parking is provided on the north side of the road along 133rd Street within the study area (east of Inglewood Avenue) to provide parking for the residents.
- **W 134th Street** – West 134th Street is classified as a Local Street in the City of Hawthorne. Oriented in the east-west direction, it is fronting the southside of the Project Site with access to travel in both directions. On-street parking is provided on the south side of the road along 134th Street within the study area (east of Inglewood Avenue) to provide parking for the residents.
- **W 135th Street** – West 135th Street is classified as a Collector Street in the City of Hawthorne. Oriented in the east-west direction, it is located south of the Project Site with access to travel in both directions. On-street parking is provided on the north side of the road along 135th Street within the study area (east of Inglewood Avenue) to provide parking for the residents.

Existing (2024) Traffic Volumes

Weekday morning (7-9 AM) and evening (4-6 PM) peak period intersection turning movement counts were collected at the four (4) study intersections on July 9, 2024. A seasonal adjustment was applied to the traffic data to account for the summer season when schools are out of session. The seasonal adjustment factor was calculated using historical traffic data from Replica¹ by comparing volumes from Summer 2021 and Fall 2021. **Table 3** below compares the traffic volumes during the 2021 seasons and calculates the percent increase. A seasonal adjustment factor of 14.4% was applied to all existing traffic volumes.

Table 3: 2021 Seasonal Traffic Volumes

Volume		Location	Volume Change	Seasonal Factor (Percent Increase)
Summer 2021	Fall 2021			
22,200	25,400	Inglewood Ave	3,200	14.4%

Roadway Average Daily Traffic (ADT) counts were collected on Inglewood Avenue between 133rd Street and 134th Street on the same day as the intersection counts. The 24-hour ADT counts include lane utilization along Inglewood Avenue.

The existing intersection lane configurations and control type are shown in **Figure 3**. The existing morning (AM) and evening (PM) peak hour turning movement volumes with the seasonal adjustment factor are shown in **Figure 4**. **Appendix B** contains the intersection traffic count and ADT count sheets.

Existing (2024) Operations

Intersection level of service analysis was conducted for the weekday morning (AM) and evening (PM) peak hours using HCM methodology as previously described in this report. **Table 4** summarizes the projected delay and LOS at the signalized and unsignalized study intersections. For TWSC intersections, the worst stop-controlled approach lane group control delay is reported.

Table 4: Existing (2024) Intersection Level of Service

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s/veh)	LOS	Delay (s/veh)	LOS
1	Inglewood Ave & 132 nd Street	Signalized	11.70	B	14.4	B
2	Inglewood Ave & 133 rd Street	TWSC	14.02	B	37.25	E
3	Inglewood Ave & 134 th Street	TWSC	14.79	B	32.52	D
4	Inglewood Ave & 135 th Street (E)	Signalized	11.60	B	4.7	A
	Inglewood Ave & 135 th Street (W)	Signalized	10.20	B	28.1	C

¹ <https://studio.replicahq.com/>

As shown in **Table 4** above, most intersections within the Study area are operating at an acceptable LOS (D or better). However, the intersection of Inglewood Ave and 133rd Street is operating at LOS E during the existing PM peak hour. The detailed intersection analysis LOS worksheets for all conditions are shown in **Appendix C**.

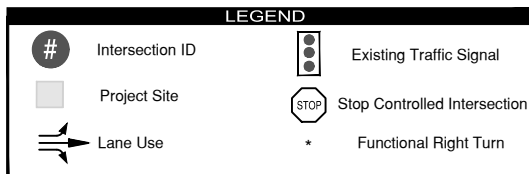
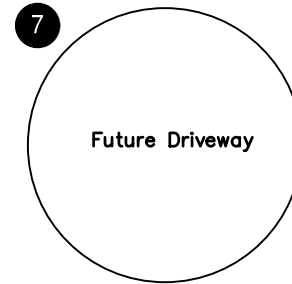
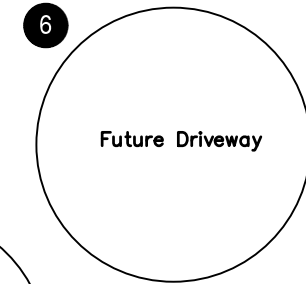
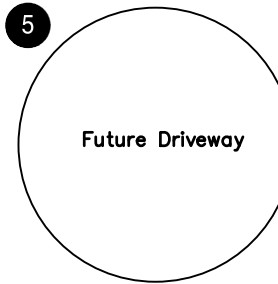
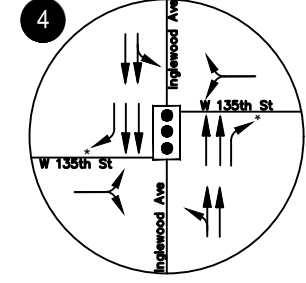
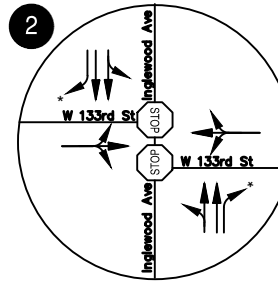
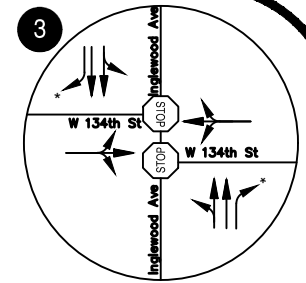
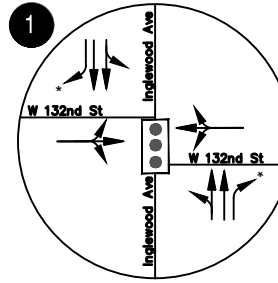
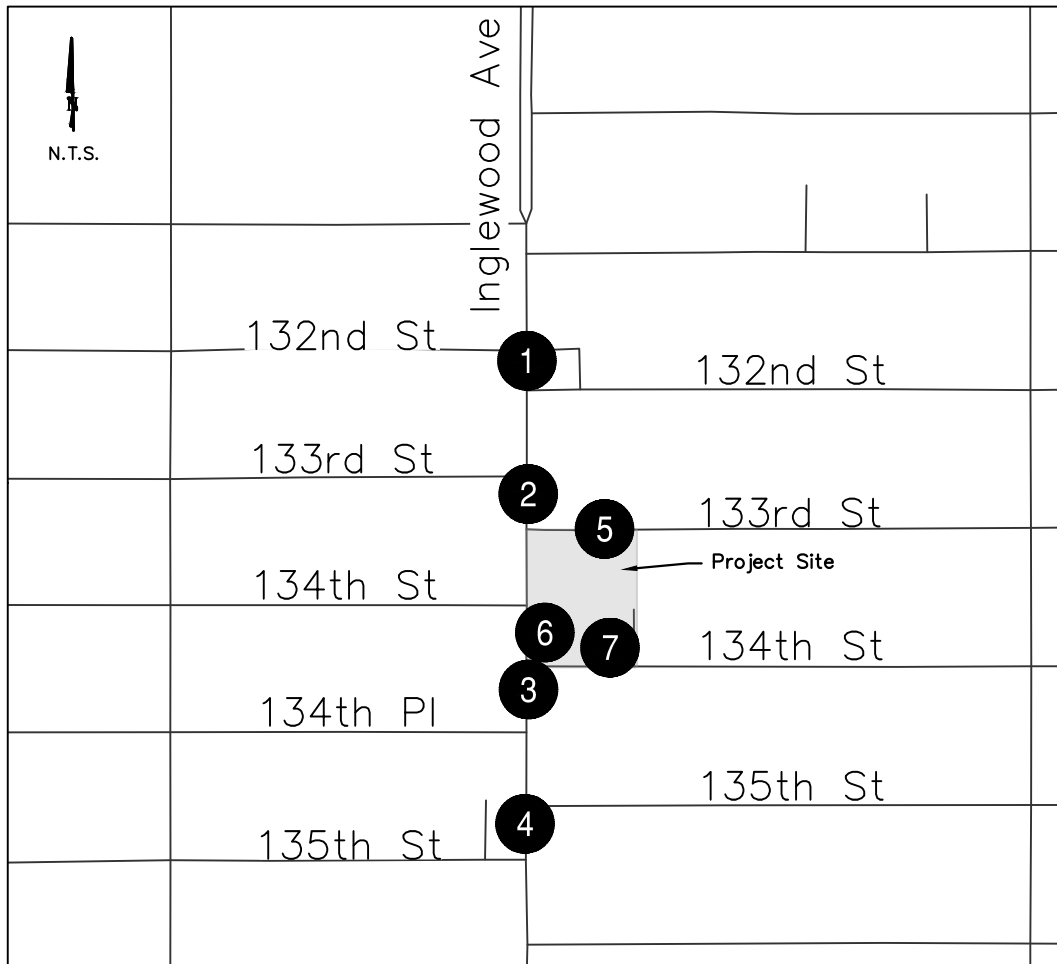


FIGURE 3 - EXISTING INTERSECTION LANE CONFIGURATION

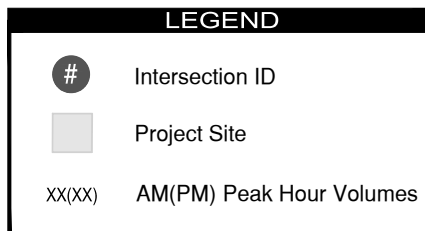
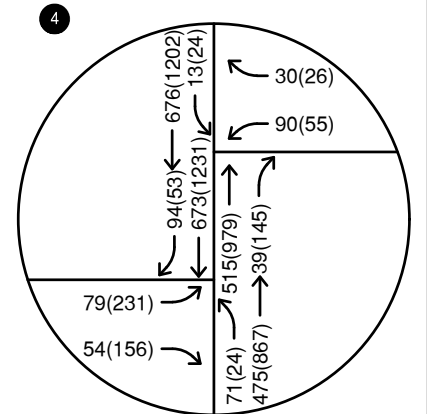
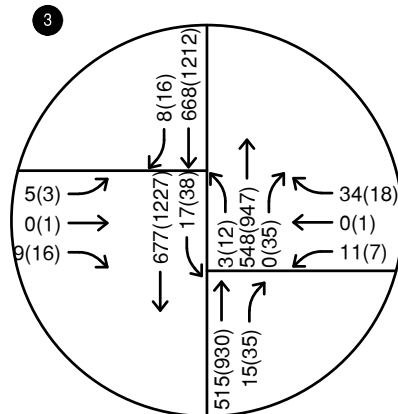
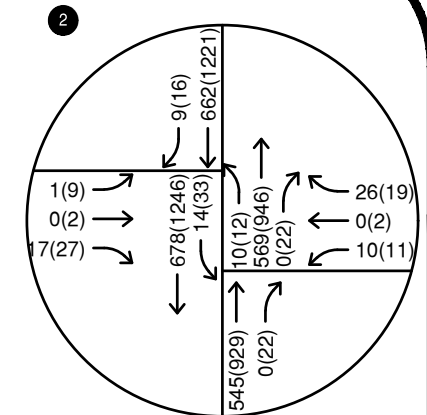
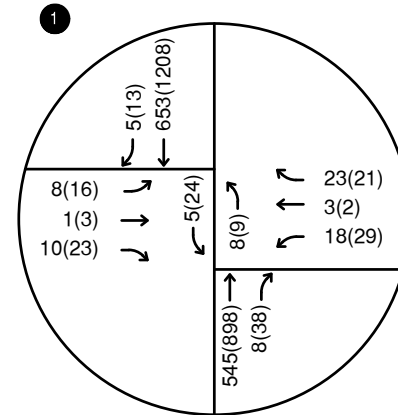
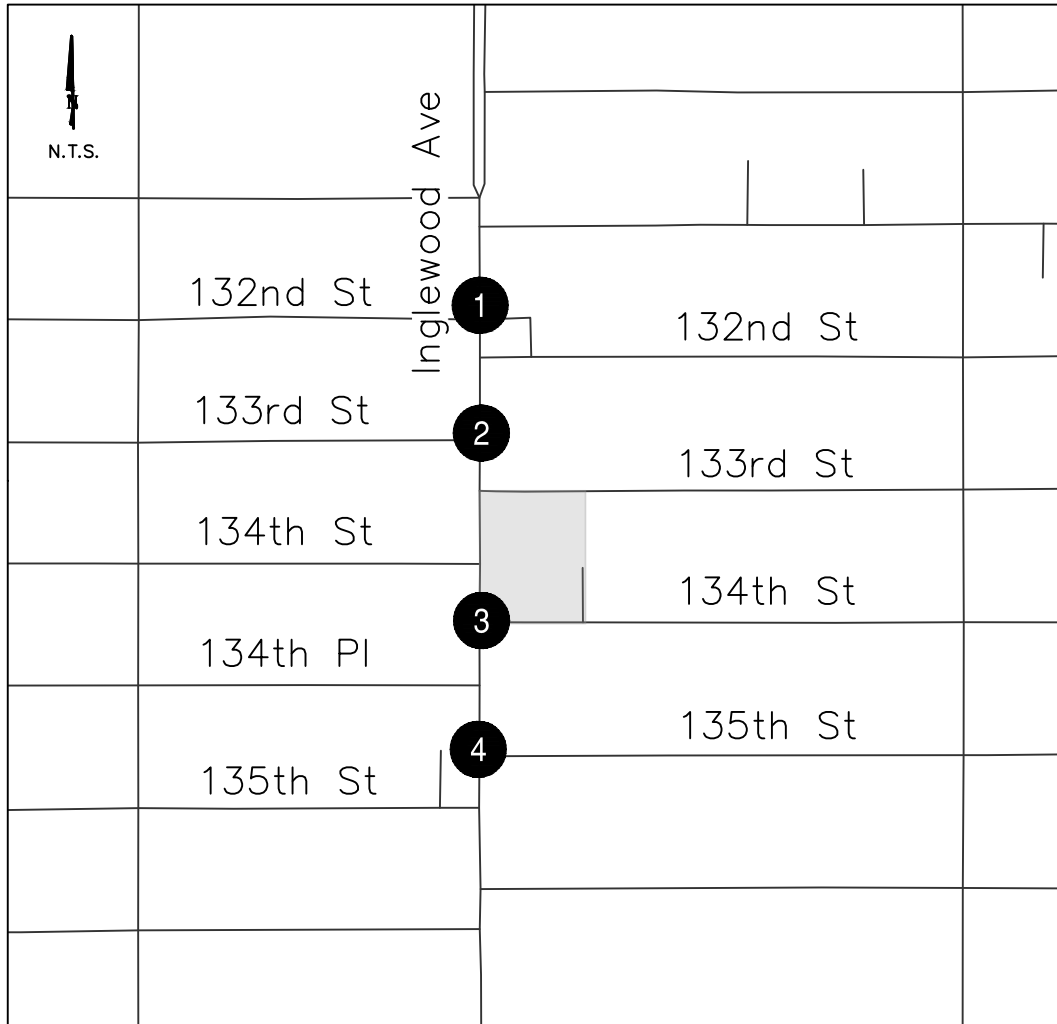


FIGURE 4 - EXISTING (2024) INTERSECTION AM & PM PEAK HOUR VOLUMES

III. Cumulative (2035) Conditions Without Project

Volume Development and Ambient (2035) Growth

Future volumes were determined by applying an ambient growth factor to the existing 2024 traffic volumes. An annual growth factor of 0.2% was used based on City of Hawthorne population data provided by the Southern California Association of Governments' (SCAG) *Demographics and Growth Forecast* technical report adopted on September 3, 2020.

Cumulative Project Trip Generation

In addition to ambient growth, traffic volumes from cumulative projects (approved or pending projects expected to be built by the year 2035 within ½ mile of the proposed Project Site) were added to the study intersections to simulate future traffic conditions with expected new development in the area. The list of related projects was provided by LA County in an email on July 25th, 2024. The City of Hawthorne did not have any approved or pending projects within ½ mile of the Project site. **Appendix D** lists the cumulative projects and total trip generation that was assigned to the Project study intersections. The cumulative projects' traffic volumes were added to both the cumulative with and without project scenarios as part of this analysis. As shown in **Appendix D**, the cumulative projects in the area are expected to generate 1,234 daily trips, 91 during the morning (AM) peak hour, and 122 during the evening (PM) peak hour.

Cumulative (2035) Operations

Intersection LOS analysis for the future horizon year was conducted for the weekday morning and evening peak hours using the HCM methodology. The resulting Project morning (AM) peak and evening (PM) peak traffic volumes are shown in **Figure 5**.

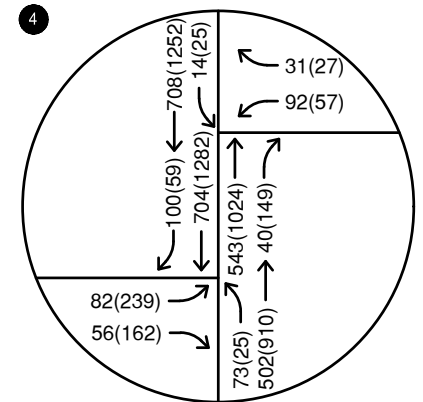
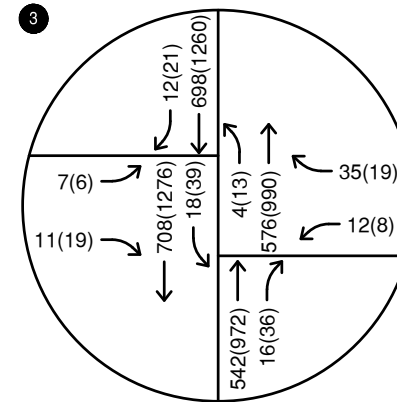
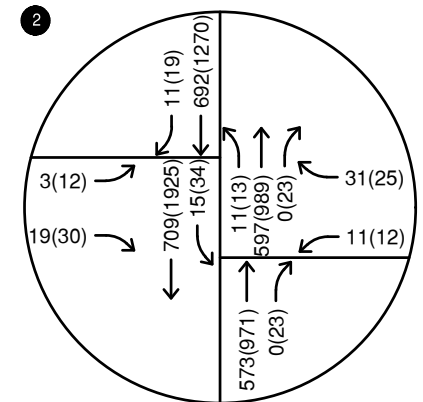
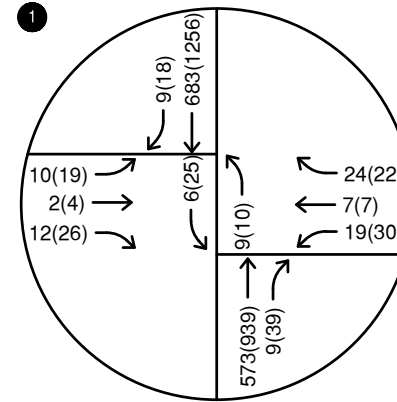
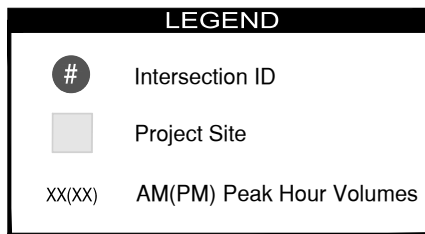
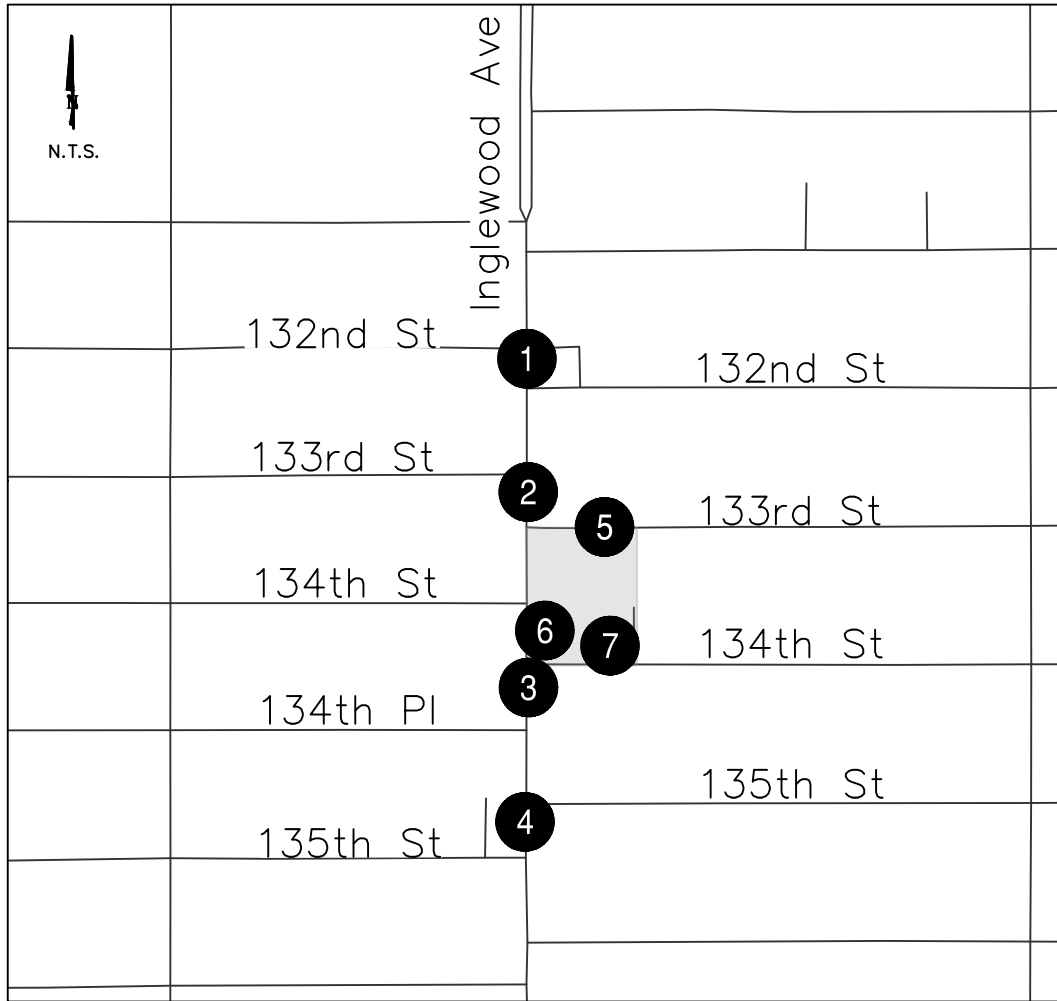


FIGURE 5 - FUTURE YEAR (2035) INTERSECTION AM & PM PEAK HOUR VOLUMES

Table 5 below summarizes the projected LOS at the signalized study intersections for the future horizon year conditions without the planned McDonalds.

Table 5: Cumulative (2035) Level of Service

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s/veh)	LOS	Delay (s/veh)	LOS
1	Inglewood Ave & 132 nd Street	Signalized	11.60	B	13.60	B
2	Inglewood Ave & 133 rd Street	TWSC	14.17	B	44.01	E
3	Inglewood Ave & 134 th Street	TWSC	15.92	C	33.79	D
4	Inglewood Ave & 135 th Street (E)	Signalized	8.10	A	4.10	A
	Inglewood Ave & 135 th Street (W)	Signalized	7.10	A	27.00	C

As shown in **Table 5** above, most intersections within the Study area are operating at an acceptable LOS (D or better). However, the intersection of Inglewood Ave and 133rd Street is operating at LOS E during the PM peak hour. The improvement in LOS from Existing conditions to Cumulative conditions is because of the peak hour factor (PHF). The PHFs that were calculated from the counts ranged from approximately 0.6 to 0.9, which is considerably lower than the 0.92 default for future analysis. The detailed intersection analysis LOS worksheets for all conditions are shown in **Appendix C**.

IV. Proposed Project Conditions

Project Traffic

The first step in analyzing the traffic conditions with the Project is to estimate the number of new trips expected to be generated by the proposed Project. Trip generation estimates for the Project are based on daily and peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition). **Table 6** summarizes trip generation estimates for the Project and lists the specific land use for the Project.

Table 6: Net Project Trip Generation

Land Use	Units	Amount	AM Peak Hour			PM Peak Hour			ADT ¹
			In	Out	Total	In	Out	Total	
Proposed Project Trips									
Fast-Food Restaurant w/ Drive-thru (ITE Code: 934)	KSF	3.781	86	83	169	65	60	125	1768
Pass-by Trips (52.5% Daily, 50% AM, 55% PM)			-43	-42	-85	-36	-33	-69	-928
Total Trip Generation			43	41	84	29	27	56	840
Trip Generation Rates									
Fast-Food Restaurant w/ Drive-thru	KSF		22.71	21.859	44.61	17.176	15.854	33.03	467.48

¹ADT=Average Daily Traffic, the daily trips generated by a site, in vehicles.

Since the Project is a fast food restaurant with drive-thru, a trip reduction was applied to account for the pass-by trips for the commercial (restaurant) land use component of the Project. A pass-by trip is when a driver makes a stop on the way to their primary destination without changing their route. The driver is already on the road and is attracted to the site by passing it on an adjacent street. The pass-by trip reduction was calculated using ITE guidelines. Based on **Table 6** shown above, the proposed Project is anticipated to generate 840 net daily trips, 84 weekday morning (AM) peak hour trips, and 56 weekday evening (PM) peak hour trips.

Project Trip Distribution and Assignment

Trip distribution patterns were developed to assign the Project trips across the roadway network within the study area. **Figure 6** shows the new Project driveways and lane configurations. **Figure 7** shows the trip distribution percentages at each of the study intersections and **Figure 8** shows the corresponding Project trips at the intersections.

Existing (2024) With Project Operations

Existing (2024) with Project conditions add the Project traffic shown in **Table 6** to the existing conditions to identify potential traffic impacts associated with the proposed Project. The resulting existing with project morning (AM) peak and evening (PM) peak traffic volumes are shown in **Figure 9**. **Table 7** summarizes the projected delay and LOS at the signalized and unsignalized study intersections and compares it to without Project existing conditions to assess any significant traffic impacts of the Project. The intersection analysis worksheets are provided in **Appendix C**.

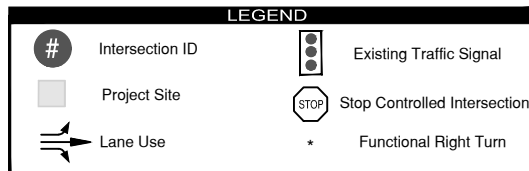
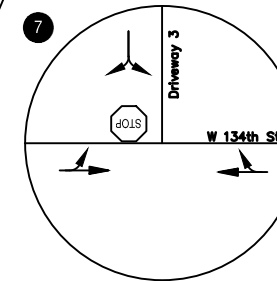
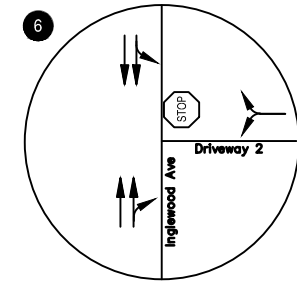
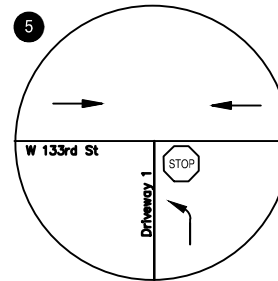
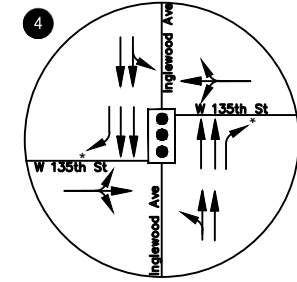
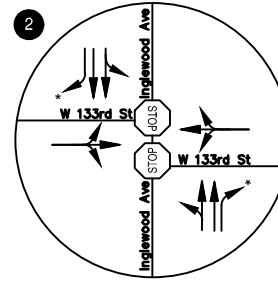
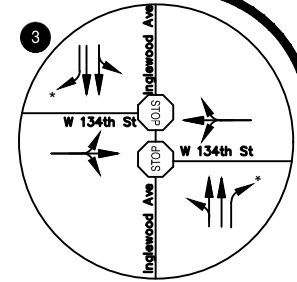
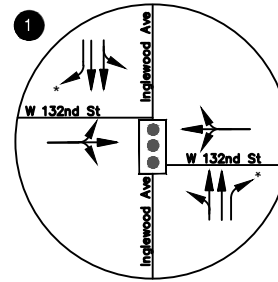
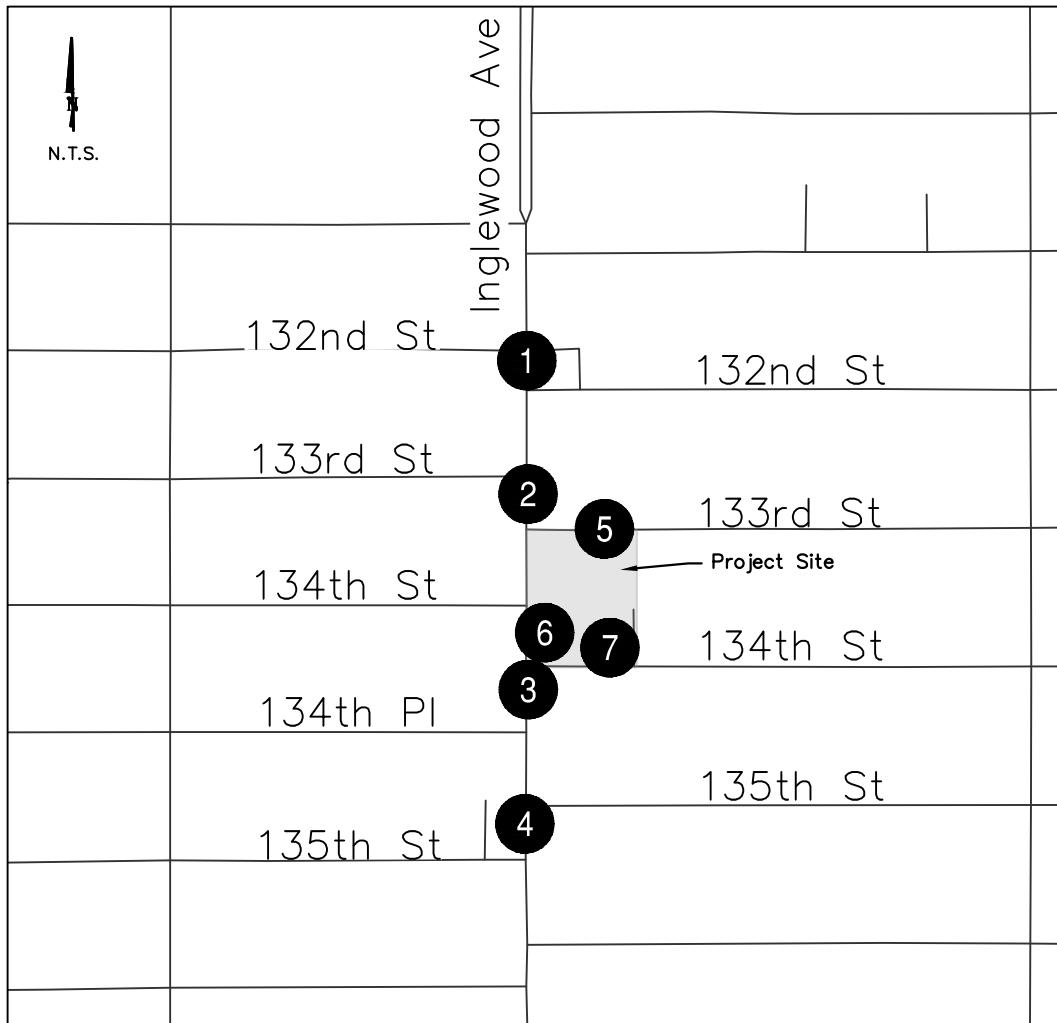
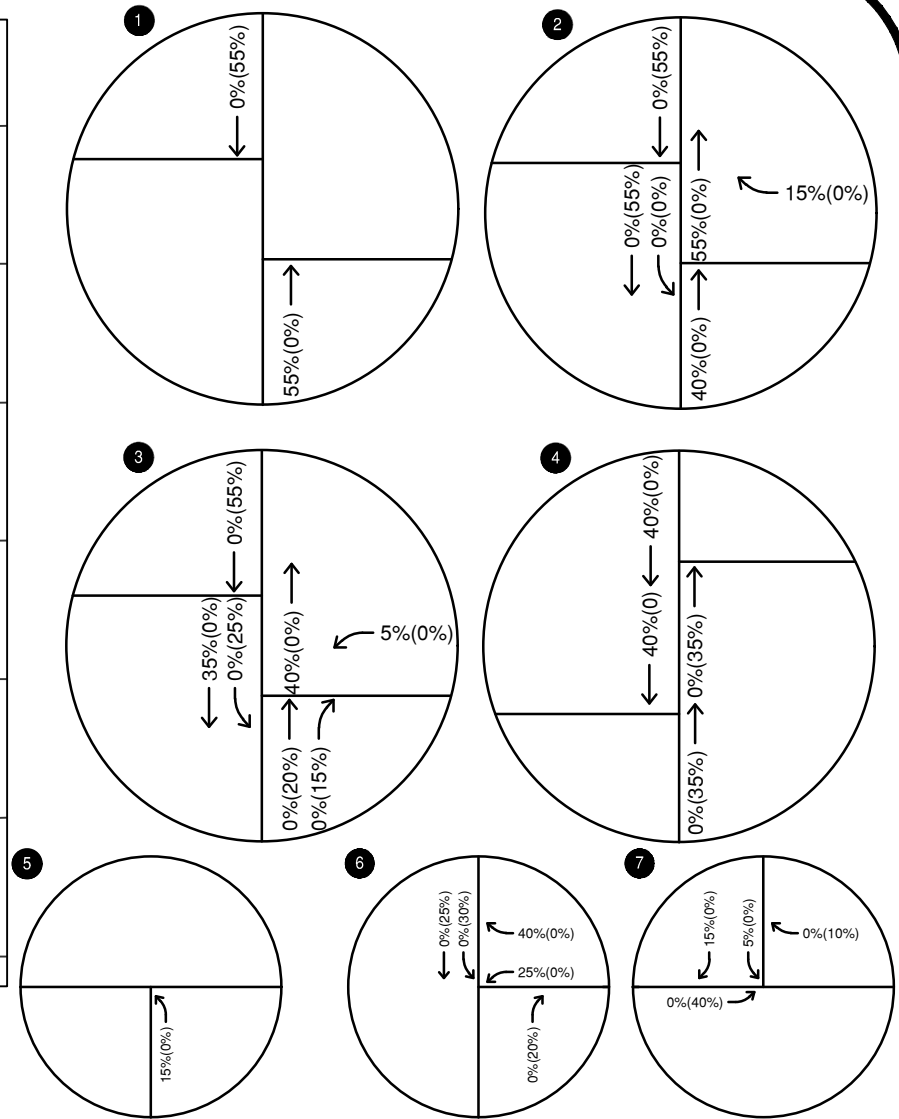
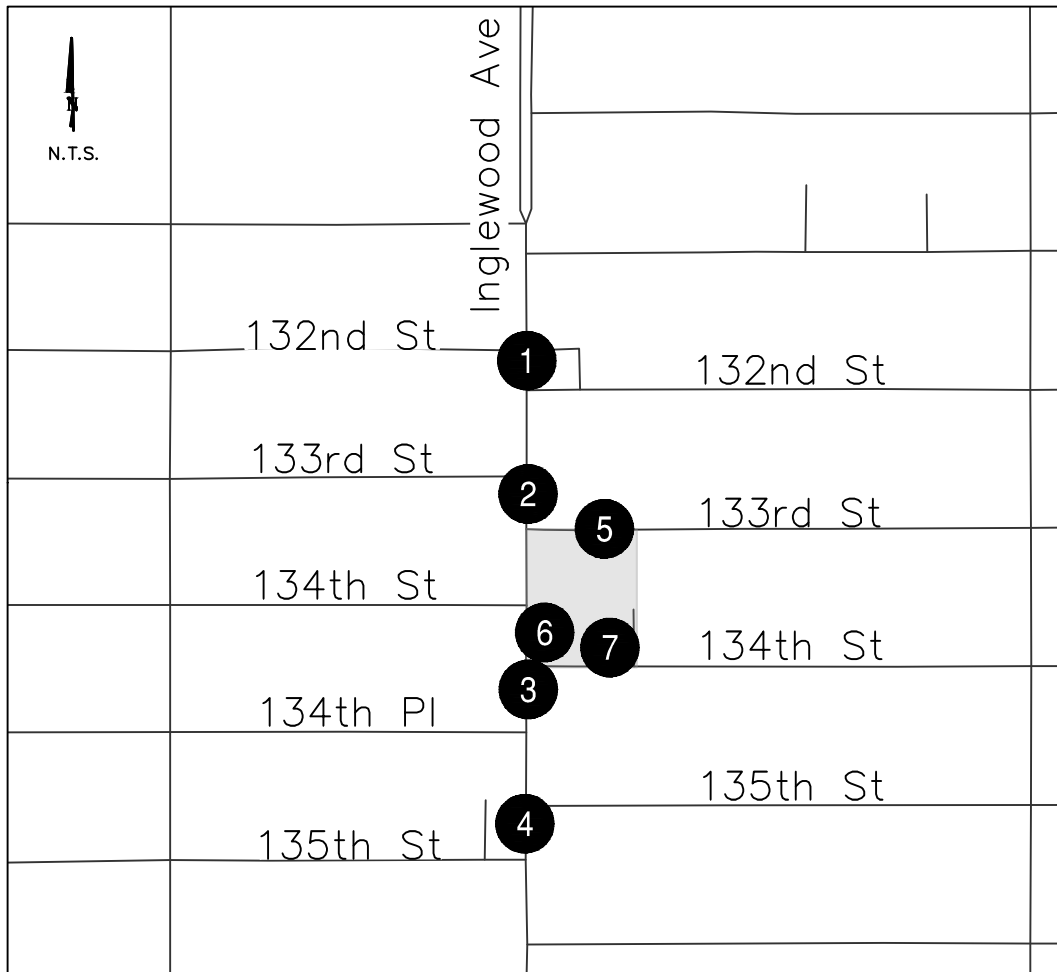


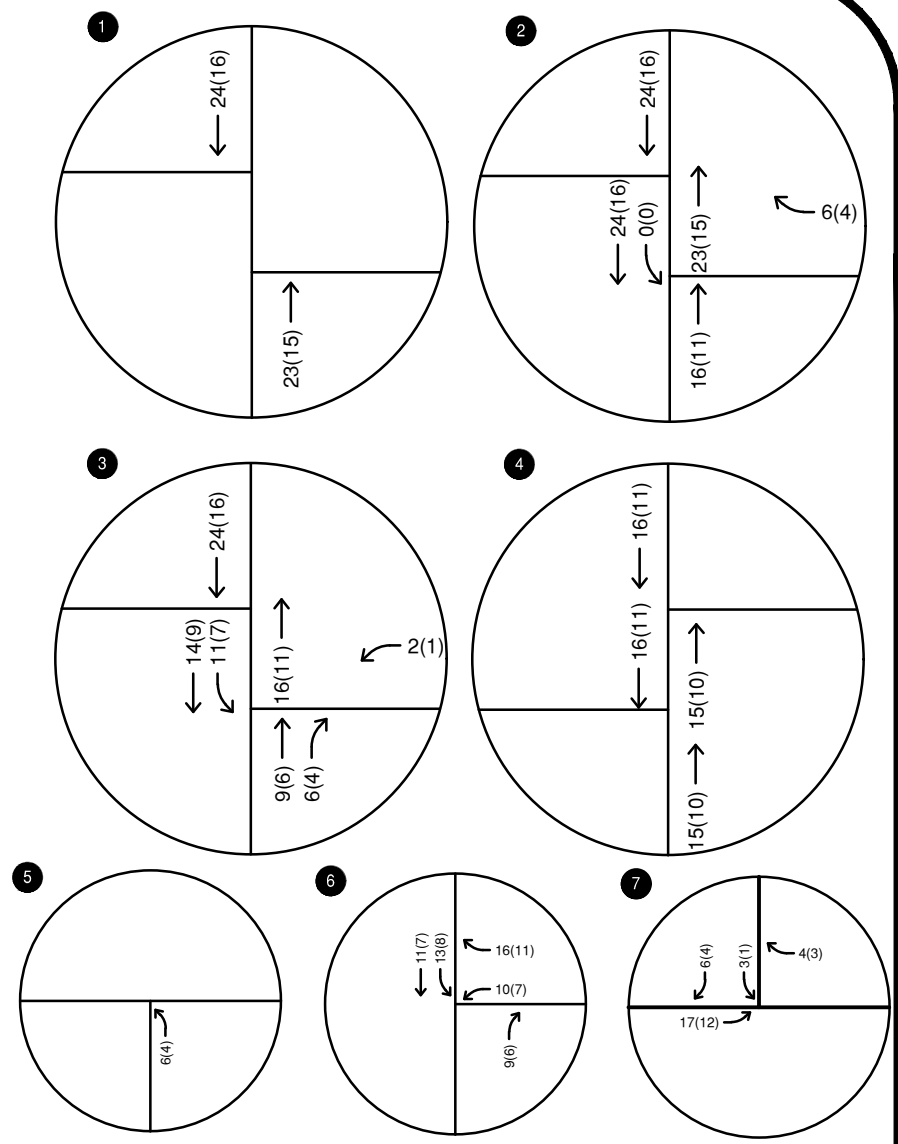
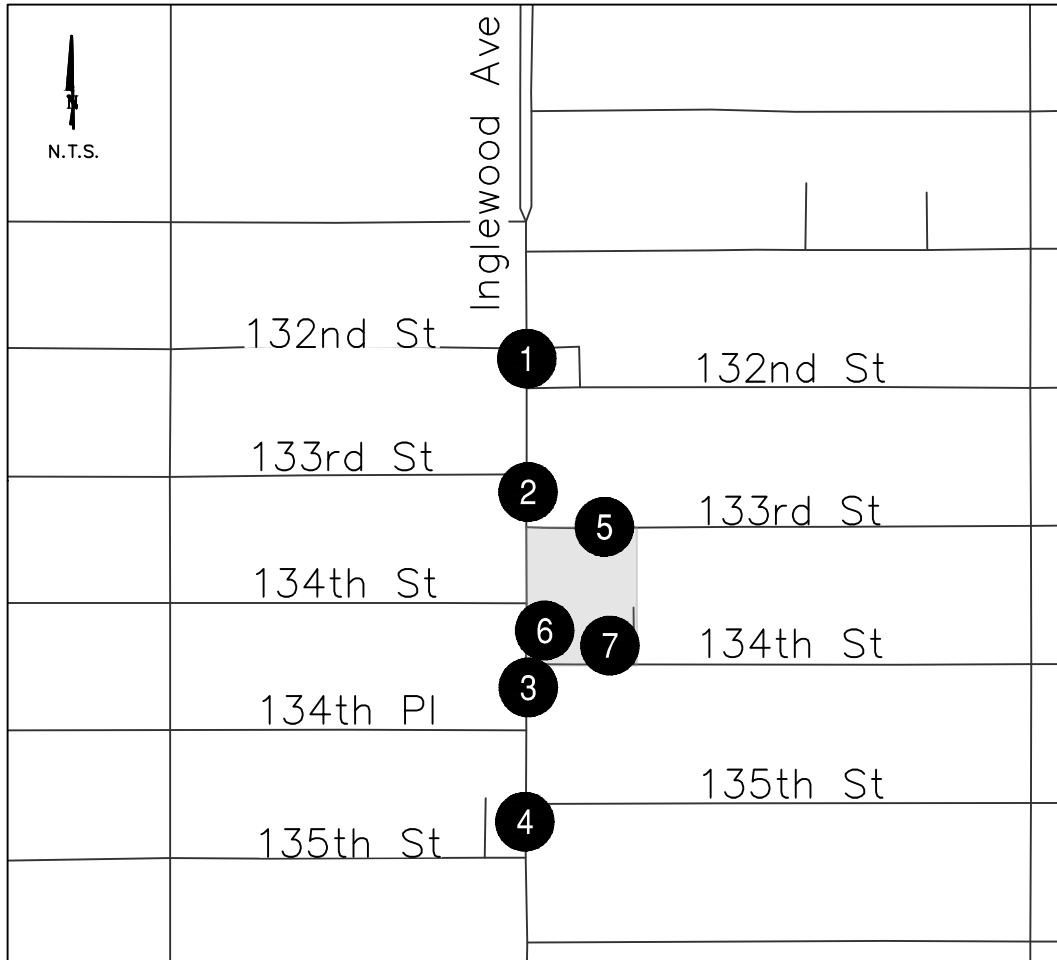
FIGURE 6 - WITH PROJECT LANE CONFIGURATIONS



LEGEND

- # Intersection ID
- Project Site
- xx(xx) AM(PM) Peak Hour Volumes

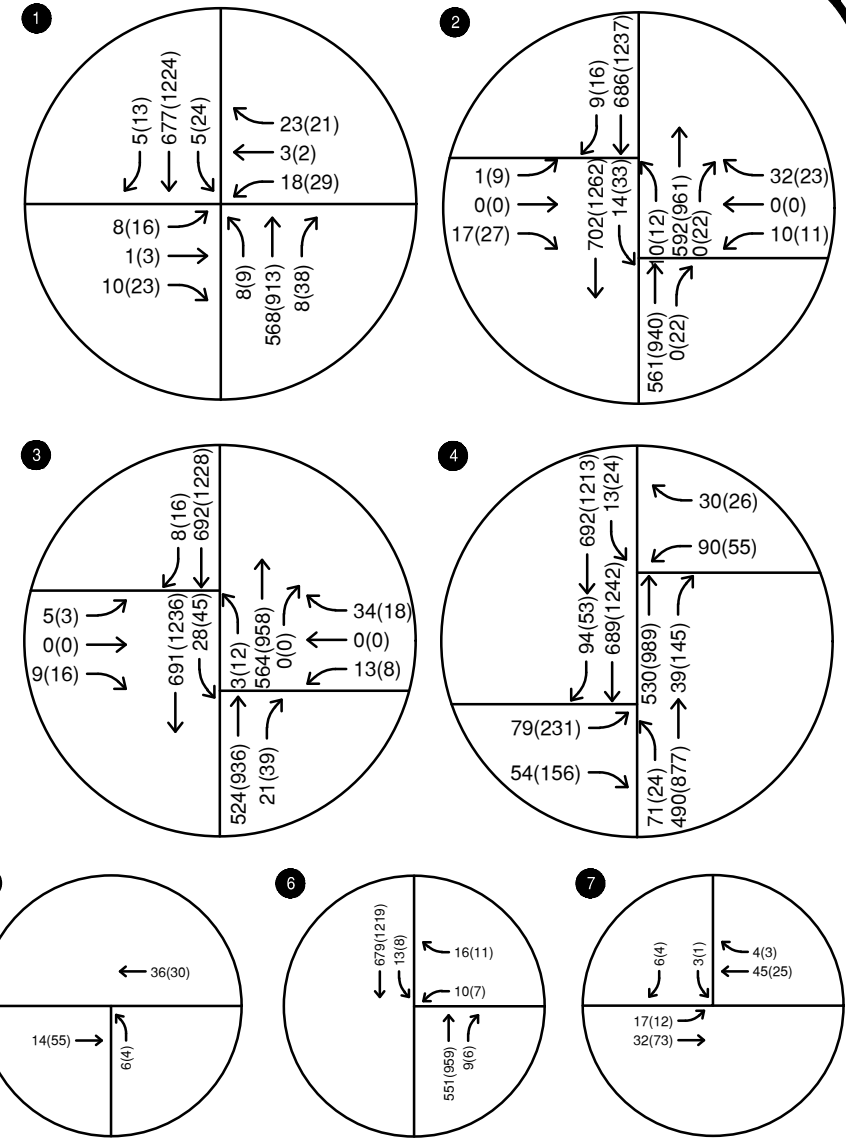
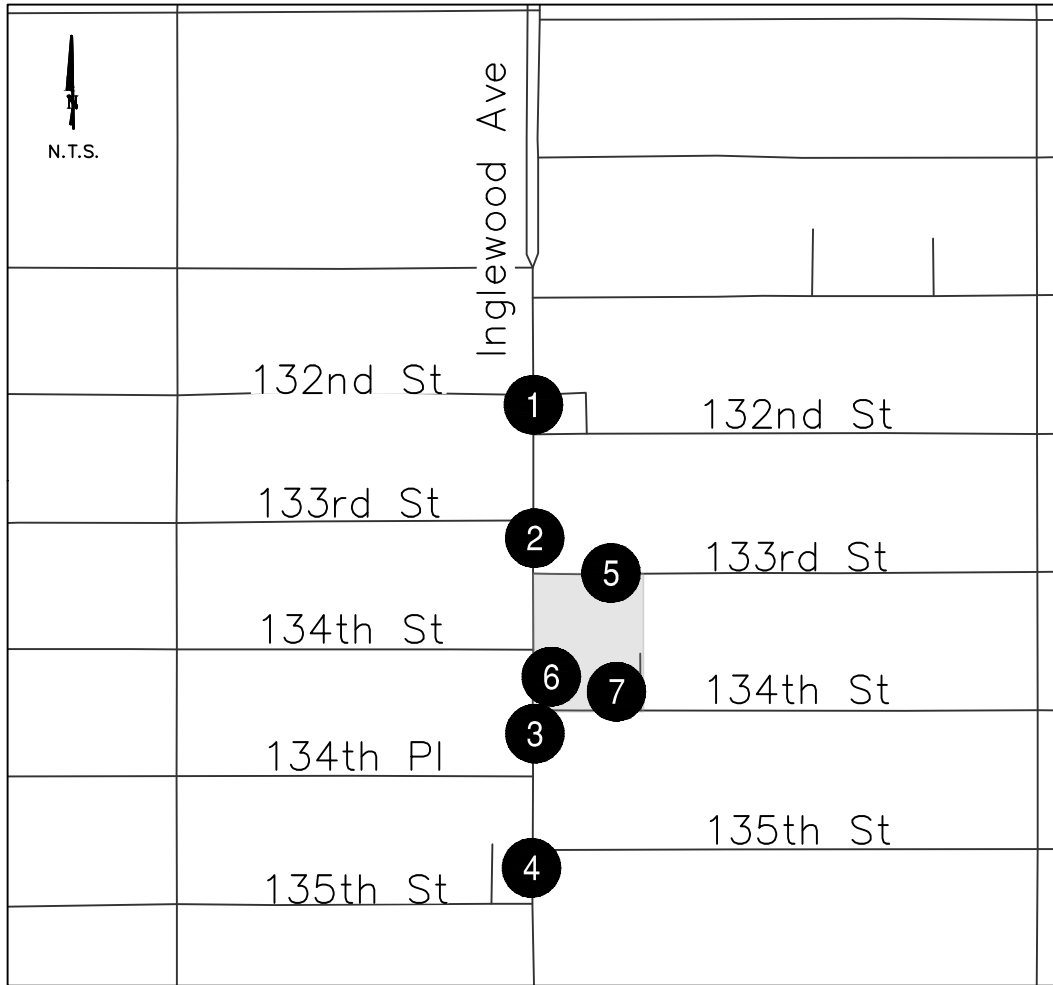
FIGURE 7 - PROJECT TRIP DISTRIBUTION



LEGEND

- # Intersection ID
- Project Site
- xx(xx) AM(PM) Peak Hour Volumes

FIGURE 8 - PROJECT TRIPS



LEGEND	
#	Intersection ID
■	Project Site
xx(xx)	AM(PM) Peak Hour Volumes

FIGURE 9 - EXISTING (2024) WITH PROJECT INTERSECTION AM & PM PEAK HOUR VOLUMES

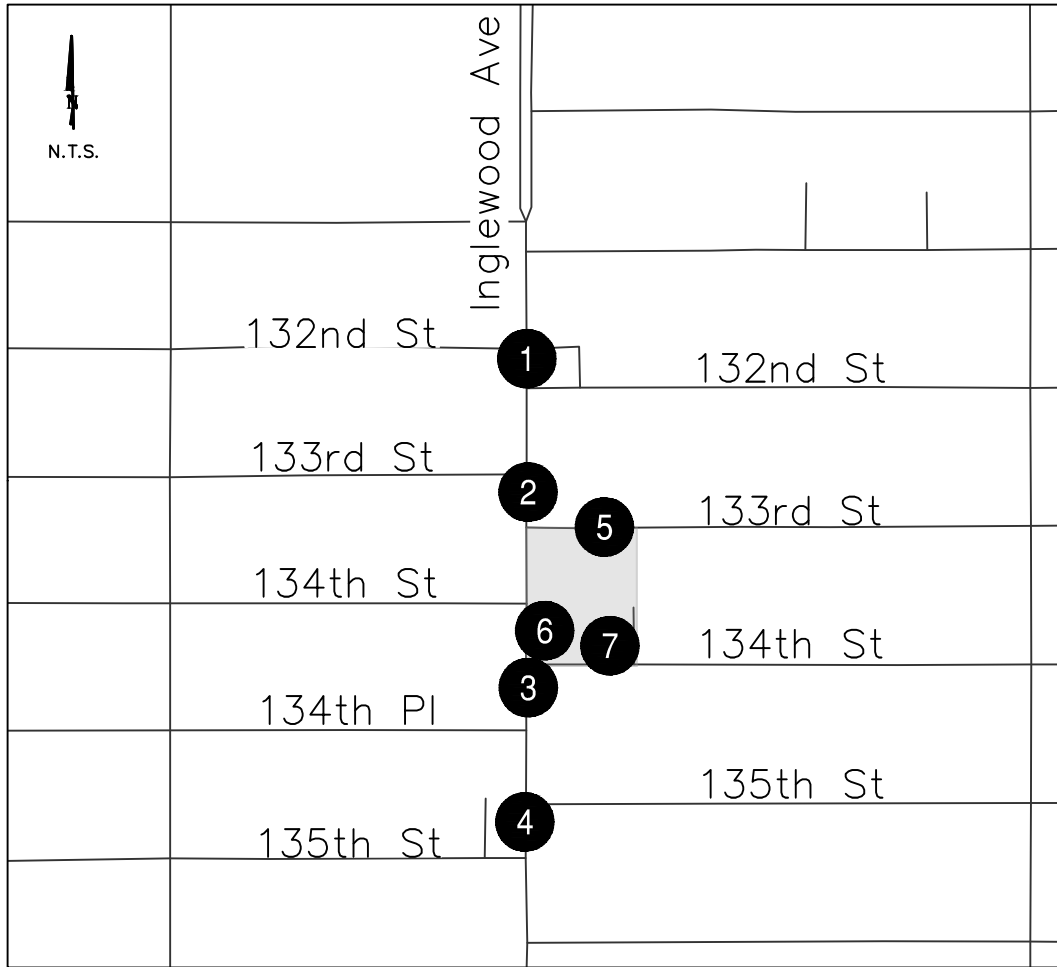
Table 7: Intersection LOS Comparison – Existing (2024) Without Project vs With Project

No.	Intersection	AM Peak Hour						PM Peak Hour					
		Existing		Existing with Project		Change In Delay	Project Related Effect?	Existing		Existing with Project		Change in Delay	Project Related Effect?
		Delay (s/veh)	LOS	Delay (s/veh)	LOS			Delay (s/veh)	LOS	Delay (s/veh)	LOS		
1	Inglewood Ave & 132 nd Street	11.70	B	11.80	B	0.10	No	14.40	B	14.50	B	0.10	No
2	Inglewood Ave & 133 rd Street	14.02	B	14.4	B	0.38	No	37.25	E	38.72	E	1.47	No
3	Inglewood Ave & 134 th Street	14.79	B	14.99	B	0.20	No	32.52	D	36.17	E	3.65	No
4	Inglewood Ave & 135 th Street (E)	11.60	B	11.50	B	-0.10	No	4.70	A	4.7	A	0.00	No
	Inglewood Ave & 135 th Street (W)	10.20	B	10.10	B	-0.10	No	28.1	C	28.0	C	-0.1	No
5	Project Driveway 1 – 133 rd Street	-	-	8.73	A	8.80	No	-	-	8.94	A	8.94	No
6	Project Driveway 2 – Inglewood Ave	-	-	15.67	C	14.79	No	-	-	33.5	D	33.5	No
7	Project Driveway 3 – 134 th Street	-	-	8.84	A	8.79	No	-	-	8.89	A	8.89	No

As shown in **Table 7** above, most intersections within the study area are projected to operate at an acceptable LOS (D or better). The proposed Project is anticipated to result in the intersection of Inglewood Avenue and 134th Street being degraded from LOS D to LOS E during the PM peak hour. The additional Project volumes during the PM peak hour would result in the increased delay of 3.65 seconds for the intersection. The detailed intersection analysis worksheets for all conditions are shown in **Appendix C**.

Cumulative (2035) With Project Operations

Cumulative (2035) with Project conditions add the Project traffic shown in **Table 6** to the cumulative without Project conditions to identify potential traffic impacts associated with the proposed Project. The resulting Cumulative with Project morning (AM) peak and evening (PM) peak traffic volumes are shown in **Figure 10**. **Table 8** summarizes the projected delay and LOS at the signalized and unsignalized study intersections and compares it to without Project cumulative conditions to assess any significant traffic impacts of the Project. The intersection analysis worksheets are provided in **Appendix C**.



LEGEND	
#	Intersection ID
■	Project Site
xx(xx)	AM(PM) Peak Hour Volumes

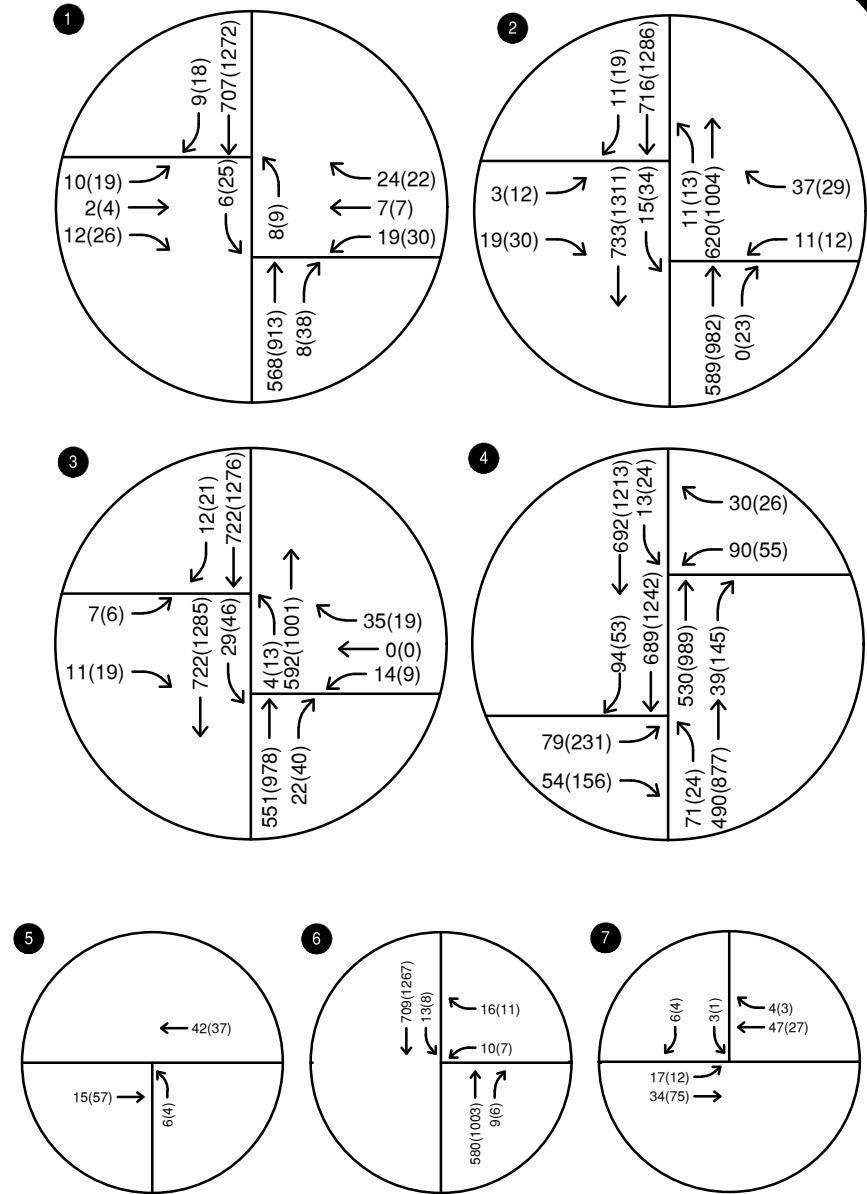


FIGURE 10 - FUTURE YEAR (2035) WITH PROJECT INTERSECTION AM & PM PEAK HOUR VOLUMES

Table 8: Intersection LOS Comparison – Cumulative (2035) Without Project vs With Project

No.	Intersection	AM Peak Hour						PM Peak Hour					
		Cumulative		Cumulative with Project		Change In Delay	Project Related Effect?	Cumulative		Cumulative with Project		Change in Delay	Project Related Effect?
		Delay (s/veh)	LOS	Delay (s/veh)	LOS			Delay (s/veh)	LOS	Delay (s/veh)	LOS		
1	Inglewood Ave & 132 nd Street	11.60	B	11.60	B	0.00	No	13.60	B	13.70	B	0.10	No
2	Inglewood Ave & 133 rd Street	14.17	B	14.15	B	-0.02	No	44.01	E	45.94	E	1.93	No
3	Inglewood Ave & 134 th Street	15.92	C	16.40	C	0.48	No	33.79	D	38.23	E	4.44	No
4	Inglewood Ave & 135 th Street (E)	8.10	A	8.00	A	-0.10	No	4.10	A	4.10	A	0.00	No
	Inglewood Ave & 135 th Street (W)	7.10	A	7.00	A	-0.10	No	27.00	C	26.80	C	-0.20	No
5	Project Driveway 1 – 133 rd Street	-	-	8.84	A	8.84	No	-	-	8.98	A	8.98	No
6	Project Driveway 2 – Inglewood Ave	-	-	15.40	C	15.40	No	-	-	37.16	E	37.16	No
7	Project Driveway 3 – 134 th Street	-	-	8.81	A	8.81	No	-	-	8.91	A	8.91	No

As shown in **Table 8**, most intersections within the study area are projected to operate at an acceptable LOS (D or better). The proposed Project is anticipated to result in the intersection of Inglewood Avenue and 134th Street being degraded from LOS D to LOS E during the PM peak hour. The additional Project volumes during the PM peak hour would result in the increased delay of 4.4 seconds for the intersection. The detailed intersection analysis worksheets for all conditions are shown in **Appendix C**.

Vehicle Miles Traveled Analysis

Senate Bill 743 (SB 743)

Senate Bill 743 (SB 743) requires project reviews under CEQA to evaluate the transportation impacts of new developments in terms of greenhouse gas emissions using VMT. As of December 2018, the Natural Resources Agency finalized updates to the State CEQA Guidelines to incorporate SB 743 (i.e., VMT). To assist in implementation of VMT as the primary measure of a transportation impact under CEQA, the OPR published an updated Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR Technical Advisory) in December 2018. Statewide application of the new guidelines went into effect on July 1, 2020. The City of Hawthorne adopted their VMT policy on May 23, 2023.

Screening Criteria

To identify when a project may be presumed to have a less than significant transportation impact concerning VMT without conducting a detailed study, the OPR Guidelines provide screening criteria for land development projects that meet one of the screening criteria below:

- **Non-Retail Project Trip Generation Screening:** The development project generates a net increase of fewer than 110 daily vehicle trips.
- **Projects Near High Quality Transit:** The development project is located near (within one-half mile) an existing major transit stop² or a high-quality transit corridor³. This presumption would not apply, however, if project-specific or location-specific information indicates that the project will still generate significant levels of VMT. For example, the presumption might not be appropriate if the project:
 - Has a floor area ratio of less than 0.75;
 - Includes more parking than required by the jurisdiction;
 - Is inconsistent with the applicable Sustainable Communities Strategy;
 - Replaces affordable residential units with a smaller number of market-rate residential units.
- **Affordable Housing:** The development project has 100% affordable units excluding manager's units.
- **Local-Serving Retail/Essential Service:** The development project contains retail or local essential services uses fewer than 50,000 SF of gross floor area.
- **Low VMT-Generation Area Screening:** The development project is located in a low VMT area.

A development project needs to meet only one of the above screening criteria to be presumed to have a less than significant impact on transportation and circulation, under CEQA and pursuant to SB 743.

Retail Project Trip Generation Screening

The Project includes only a retail component (3,781 SF Fast Food Restaurant). Based on the above screening criteria, the Project would screen out of VMT analysis because the 3,781 SF restaurant is less

² The OPR Technical Advisory defines a "major transit stop" as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (California Public Resources Code §21064.3).

³ The OPR Technical Advisory defines a "high-quality transit corridor" as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (California Public Resources Code §21155).

than the 50,000 gross SF screening criterion. The retail component of the Project can be local-serving in nature and presumed to have a less than significant VMT impact.

Proximity to Transit-Based Screening

Currently, there are no transit routes near the proposed Project that meet the criteria to be considered a major transit stop or high-quality transit corridor. Therefore, the Project does not screen out of a VMT analysis based on transit priority area screening.

Residential Land Use Based Screening

Residential development projects with 100% affordable units would screen out of VMT analysis and presumed to have a less than significant VMT impact. However, the proposed Project does not propose any residential land uses. Therefore, the Project does not screen out of a VMT analysis based on affordable units.

Low VMT-Generation Area Screening

The City of Hawthorne's VMT calculator was used to estimate the Project VMT to compare it to the county threshold (15% below the average). The results from the VMT calculator are shown in **Appendix E**. Because the proposed Project is in a low VMT area, the Project screens out of a VMT analysis based on the low VMT-Generation Area screening criteria.

Screening Conclusion

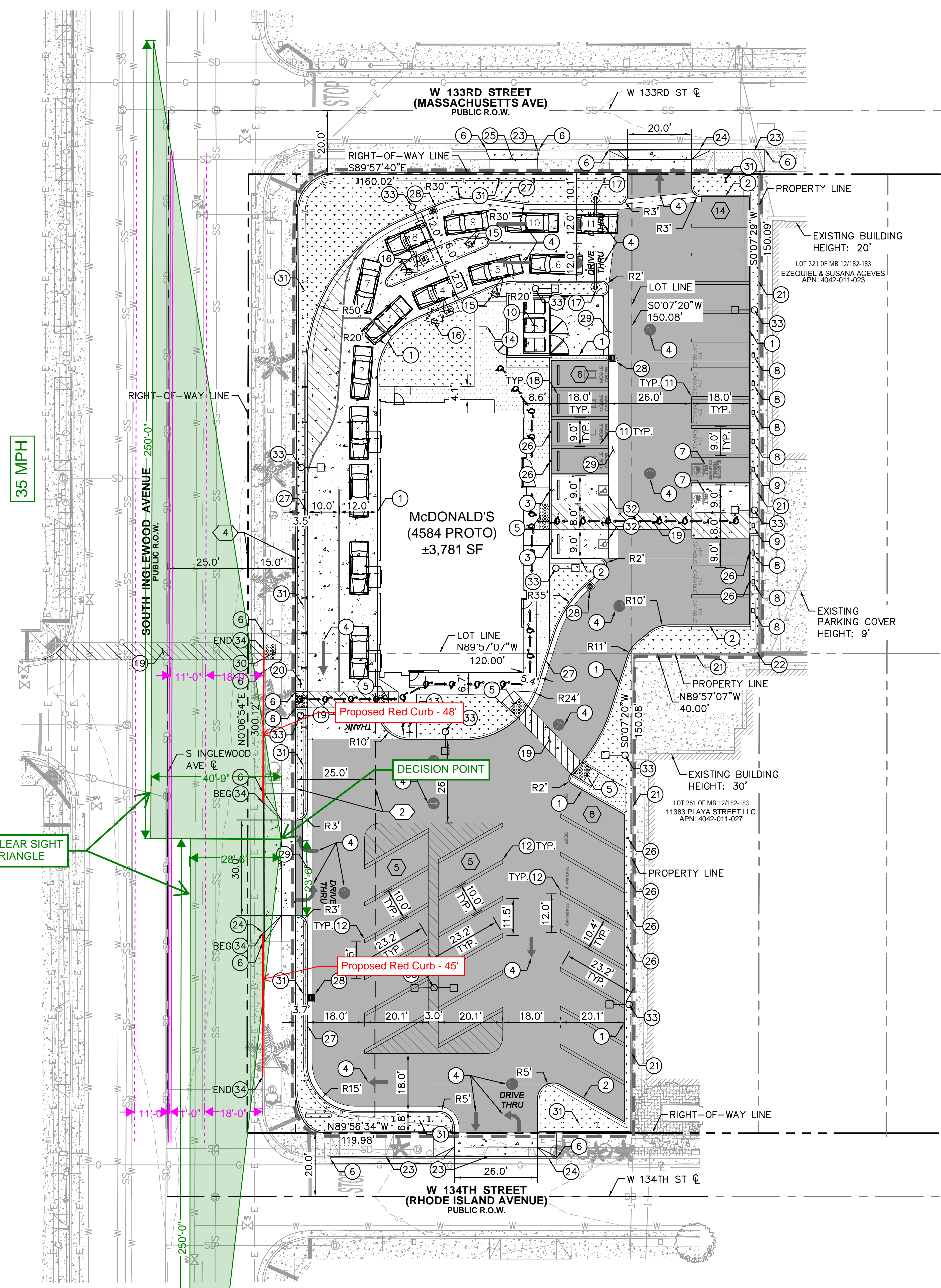
The proposed Project meets two of the above screening criteria (Retail Project Site Plan Screening and Low VMT-Generation Area screening). The Project would screen out of further VMT analysis based on the land-use, size, and low VMT area and is presumed to have a less than significant transportation impact under CEQA pursuant to SB 743.

V. Sight Distance Analysis

A sight distance analysis was conducted for the Project driveway along Inglewood Avenue. The analysis identified the potential parking restrictions that will be needed as a part of the Project and will be based on the stopping sight distance criteria established in the latest American Association of State Highway and Transportation Officials (AASHTO) guidelines, *A Policy on Geometric Design of Highways and Streets, 2018*. For Inglewood Avenue, the sight distance analysis assumed a design speed of 35 miles per hour (mph) based on the posted speed limit, which requires 250 feet of stopping sight distance. The sight triangles for the three Project driveways are shown in **Figure 11** on the next page. To provide a clear line of sight for vehicles exiting the Inglewood Avenue driveway, 48 feet of red curb north of the driveway and 45 feet of red curb south of the driveway is recommended.

Along 133rd Street, existing on street parking is only allowed on the north side of the street. Along 134th Street, existing on street parking is only allowed on the south side of the street. Since on-street parking is restricted on the driveway sides of the streets, no sight distance analysis was required for the driveways along 133rd Street and 134th Street. Therefore, no additional parking restrictions are required for the driveways along 133rd Street and 134th Street.

Drawing name: K:\ORA\DEV\mcdonalds\194015042 - hawthorne (4-5205)\CADD\Exhibits\entitlement_package\C1.0 - Preliminary Site Plan.dwg C1.0 - Preliminary Site Plan Sep 23, 2024 1:55pm by: jenny.sheng
 This document, together with the concept and design presented herein, is an instrument of service, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



35 MPH

CLEAR SIGHT TRIANGLE

LEGEND:

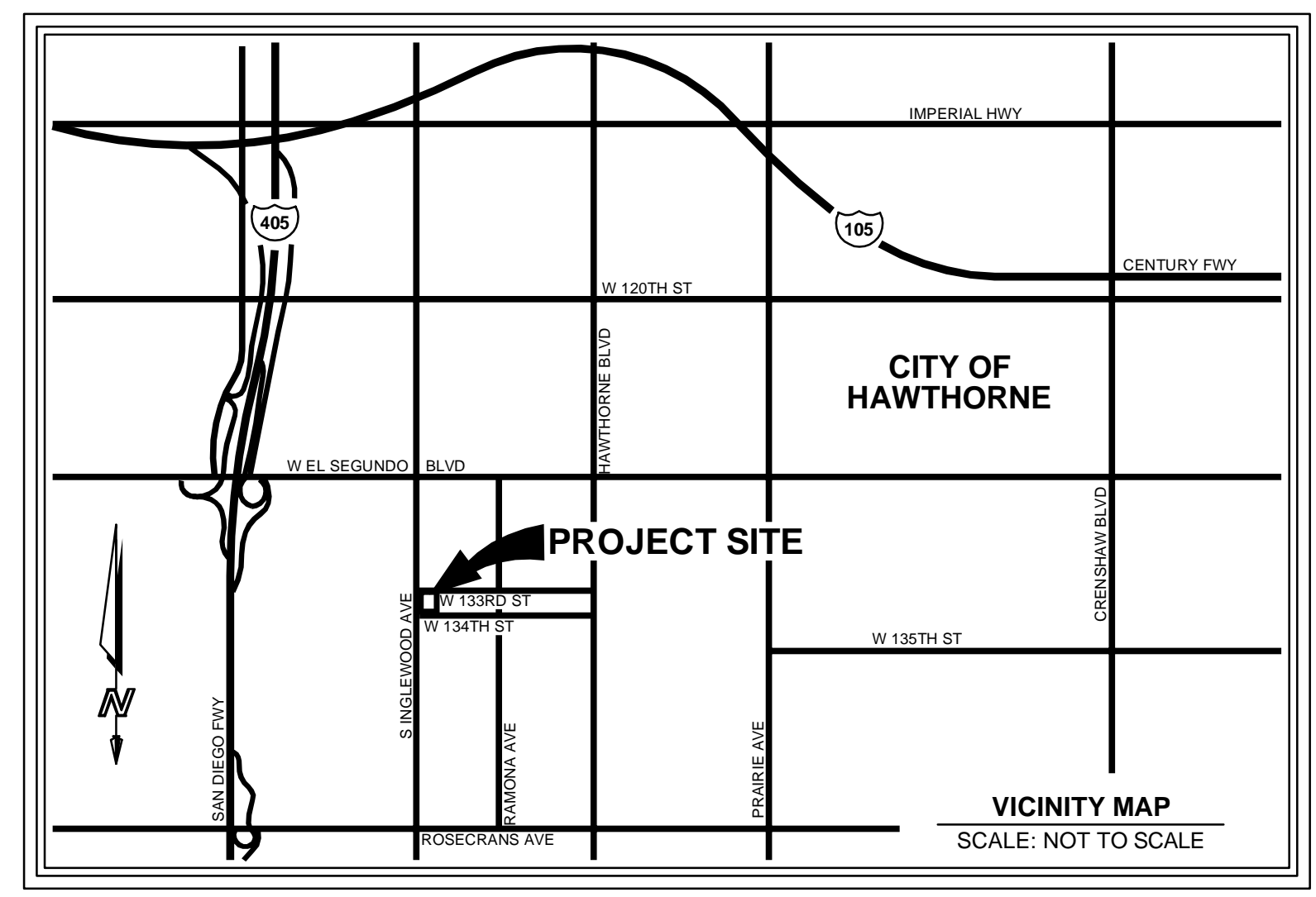
- CENTER LINE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE / LEASE LINE
 - EASEMENT LINE / SETBACK LINE
 - APPROXIMATE LIMIT OF WORK LINE
- [Pattern] STANDARD DUTY CONCRETE PAVEMENT
 - [Pattern] HEAVY DUTY CONCRETE PAVEMENT
 - [Pattern] LANDSCAPE/PLANTER AREA
 - [Pattern] HEAVY DUTY ASPHALT PAVEMENT
 - [Pattern] DETECTABLE WARNING SYSTEM
 - [Symbol] ACCESSIBLE ROUTE (LOCATION PURPOSES ONLY, DO NOT PAINT)
 - [Symbol] SIGN POST
 - [Symbol] ACCESSIBLE PARKING SPACE
 - [Symbol] NUMBER OF PARKING SPACES

LEGAL DESCRIPTION

SUBJECT PARCEL: APN: 4042-011-024 AND 4042-011-026

LOTS 260, 322 AND 323 OF INGLEDAL ACRES, IN THE CITY OF HAWTHORNE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 20, PAGES 182 AND 183 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPTING THEREFROM ANY MOBILE/MANUFACTURED HOMES LOCATED THEREON.



SITE DATA

PROJECT DESCRIPTION: DEMOLITION OF EXISTING CONCRETE PADS AND WALLS. NEW CONSTRUCTION OF A MCDONALD'S DRIVE THRU RESTAURANT AND PARKING LOT.

ADDRESS: 13314 S INGLEWOOD AVE, HAWTHORNE, CA 90250

APN: 4042-011-024 AND 4042-011-026

ZONING DISTRICT: C-3 GENERAL COMMERCIAL (EXISTING & PROPOSED)

ADJACENT ZONING DISTRICTS:
 N: C-3 GENERAL COMMERCIAL
 E: R-3 HIGH DENSITY RESIDENTIAL
 S: C-3 GENERAL COMMERCIAL

EXISTING LAND USE: RESIDENTIAL

PROPOSED LAND USE: COMMERCIAL

ADJACENT LAND USE:
 N: COMMERCIAL
 E: RESIDENTIAL
 S: COMMERCIAL

FLOOD ZONE: ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.02% ANNUAL CHANCE FLOODPLAIN PER MAP NO. 06037C1790F EFFECTIVE 9/26/2008

TOTAL DISTURBED AREA:	38,298 S.F.	(0.88 AC)	
TOTAL PAD AREA:	3,781 S.F.	(0.09 AC)	
TOTAL LOT AREA:	42,020 S.F.	(0.96 AC)	

LOT COVERAGE			
TOTAL SITE AREA:	38,298 S.F.	(0.88 AC)	100%
BUILDING AREA:	3,781 S.F.	(0.09 AC)	9.9%
IMPERVIOUS AREA:	29,274 S.F.	(0.67 AC)	76.4%
LANDSCAPE AREA:	5,215 S.F.	(0.12 AC)	13.7%

PARKING/LANDSCAPE BUFFER:
 FRONT: 0.0'
 REAR: 0.0'
 SIDE (N): 0.0'
 SIDE (S): 0.0'

PARKING SUMMARY: MCDONALD'S: 3,781 S.F. (1 STALL/100 S.F.) = 38 STALLS REQUIRED PER CITY CODE

- ADA PARKING FOR 26-50 PARKING STALLS = 2 ADA PARKING STALLS REQUIRED, PER 2016 CBC.
- FUTURE EV FOR 26-50 PARKING STALLS = 8 FUTURE EV STALLS REQUIRED PER 2016 CALGREEN
- 1 FUTURE EV STALL MUST BE VAN ACCESSIBLE.

TOTAL NUMBER OF PARKING SPACES PROVIDED = 38

PARKING TABLE:		
STANDARD COMPACT (C)	28	28
MOTORCYCLE	-	-
EV CHARGING	8	8 (INCLUDING EV READY)
EV READY	2	2
ACCESSIBLE	2	2
TOTAL:	38	38

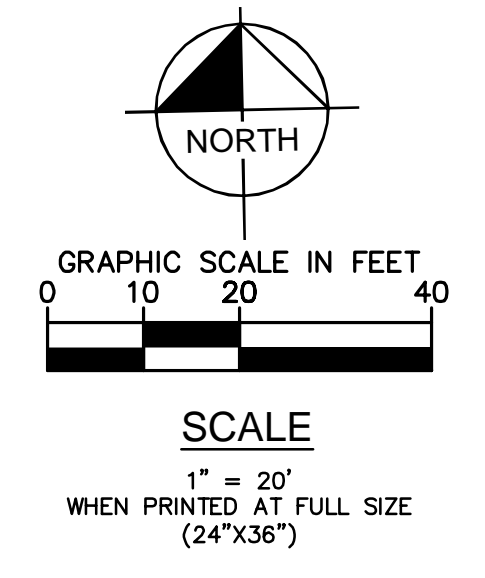
*MINIMUM 6 CAR STACK BEHIND THE ORDER BOARD HAS BEEN PROVIDED

CONSTRUCTION NOTES:

- CONCRETE CURB
- 18" WALK-OFF CURB
- ACCESSIBLE PARKING STALL SIGN
- DIRECTIONAL MARKING PER PLAN
- ACCESSIBLE RAMP WITH DETECTABLE WARNING (TRUNCATED DOMES)
- JOIN EXISTING CURB, CURB & GUTTER, SIDEWALK.
- "ELECTRIC VEHICLE CHARGING ONLY" IN 12" HIGH WHITE LETTERS AT THE END OF PARKING STALL
- FUTURE E/V CHARGING STATION. CONDUIT TO BE RAN TO STALL FOR FUTURE CONNECTION
- PROPOSED E/V CHARGING STATION.
- COVERED TRASH ENCLOSURE AND RECYCLING BIN STORAGE
- STANDARD 90° PARKING STALL STRIPING.
- STANDARD 60° PARKING STALL STRIPING.
- SHORT TERM BIKE RACK
- LONG TERM BIKE RACK
- PREVIEW BOARD
- ORDER BOARD
- HEIGHT DETECTOR POLE
- INSTALL WHEELSTOPS FOR PARKING SPACES ADJACENT TO WALKWAYS
- ACCESSIBLE PATH OF TRAVEL STRIPING. ACCESSIBLE PATHS SHALL BE ENHANCED PAVING.
- ADA PATH OF TRAVEL SIGN
- EXISTING CMU WALL TO REMAIN
- EXISTING POWER POLE TO REMAIN
- EXISTING DRIVEWAY TO BE REMOVED
- PROPOSED DRIVEWAY
- PROPOSED SIDEWALK, PARKWAY, CURB AND GUTTER TO MATCH EXISTING SURROUNDING
- MCDONALD'S SITE SIGNAGE
- CONCRETE CURB AND GUTTER
- 24" X 24" JENSEN PRECAST DROP INLET WITH CATCH BASIN FILTER INSERT FOR TRASH CAPTURE.
- 3.0' WIDE VALLEY GUTTER
- PROPOSED CURB RAMP PER STD. PLAN RSP A88A.
- WROUGHT IRON FENCE
- ACCESSIBLE STALL STRIPING
- SITE LIGHTING
- NO PARKING RED CURB

TITLE REPORT EXCEPTIONS

- EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT:
 RESERVED BY: HOPPER-MCFARLAND-DUNCAN COMPANY
 PURPOSE: PERTAINING TO THE LAYING OF WATER PIPES
 RECORDING DATE: MARCH 17, 1913
 BOOK 5379, PAGE 316, OF DEEDS
 RECORDING NO: SAID LAND
 AFFECTS: JULY 10, 1958
 AND RECORDING DATE: JULY 29, 1915
 AND RECORDING NO: BOOK 6064, PAGE 289, OF DEEDS (AFFECTS SUBJECT PARCEL, PLOTTABLE AS SHOWN)
- EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS CONDEMNED BY AN INSTRUMENT, ENTITLED: FINAL ORDER OF CONDEMNATION
 COURT: SUPERIOR COURT OF THE STATE OF CALIFORNIA
 CAUSE NO.: 671543
 IN FAVOR OF: COUNTY OF LOS ANGELES
 PURPOSE: PUBLIC ROAD AND HIGHWAY
 RECORDING DATE: JULY 10, 1958
 RECORDING NO: 1958-3356, IN BOOK M65, PAGE 133, OF OFFICIAL RECORDS
 AFFECTS: SAID LAND (AFFECTS SUBJECT PARCEL, PLOTTABLE AS SHOWN)



ISSUE	DATE	DESCRIPTION

ENGINEERS SEAL

DRAWN BY: JS
 CHECKED BY: AB
 RECOMMENDED: AB

Kimley»Horn

245 E THIRD ST
 LONG BEACH, CA 90802
 562-549-2142

PREPARED UNDER THE DIRECT SUPERVISION OF:
 Amelia Beltran DATE: 9/23/2024
 AMELIA BELTRAN, R.C.E. NO. ### EXP. ###

CITY OF HAWTHORNE

APPROVED BY: _____ DATE: _____

CITY ENGINEER RCE # _____ EXP _____

McDonald's USA, LLC

13314 INGLEWOOD AVE
 HAWTHORNE, CA 90250

CITY OF HAWTHORNE

PRELIMINARY SITE PLAN

C1.0

VI. Left Turn Pocket Analysis

An analysis was completed to determine if a southbound left-turn pocket is warranted on Inglewood Avenue at the Project Driveway. The analysis references the existing conditions and the Project trip generation. Guidelines included in the National Cooperative Highway Research Program (NCHRP) Report 745 Left-Turn Accommodations at Unsignalized Intersections (2013) were also referenced to evaluate the need for a left turn pocket.

Average Daily Traffic (ADT) counts with lane utilization information were collected along Inglewood Avenue. Based on the counts (shown in **Appendix B**), vehicles utilize the #1 and #2 lanes along Inglewood Avenue evenly, with the southbound direction being the higher volume direction. Additionally, the Project traffic used in the operational analysis (**Figure 8**) shows that the volume of vehicles making a southbound left into the proposed site are under 10 vehicles per hour for both the morning (AM) and evening (PM) time periods.

Based on guidance from the NCHRP Report 745, the following information is considered when determining the need for a left turn pocket.

- Development (urban/suburban)
- Number of lanes and approaches
- Peak-hour left turn and major roadway volume
- Design consistency within the corridor

After consideration of NCHRP guidance and review of the existing conditions and Project traffic, it is not recommended to provide a southbound left-turn pocket into the Project site. Inglewood Avenue (within the study area) provides two lanes with on-street parking in each direction. The average daily traffic along Inglewood Avenue is 21,619 vehicle per day and the existing roadway configuration is consistent within other locations in the study area.

With the addition of an exclusive left turn pocket, on-street parking in both directions would need to be removed and would result in design inconsistencies along Inglewood Avenue within the study area. The offset legs at the intersection of Inglewood Avenue and 134th Street in addition to a left turn pocket into the Project site would result in poor access management due to reduced spacing between intersections.

The additional traffic generated by the Project could be accommodated without the addition of a left turn pocket, since the low volume of vehicles turning into the site would be able to queue in the travel lane without significantly increasing delay for through vehicle traffic. Adequate access to the site would still be provided via the driveways on 133rd Street and 134th Street.

VII. Crosswalk Warrant Analysis

Based on coordination with City staff, a crosswalk treatment warrant analysis at the intersection of Inglewood Avenue and W 134th Street was performed to determine the most suitable crosswalk treatment. The two possible crosswalk treatments considered include Pedestrian Hybrid Beacons (PHBs) and Rectangular Rapid Flashing Beacons (RRFBs). Because PHBs and RRFBs operate similarly, only criteria for PHB's were analyzed as a more conservative approach. Additionally, the proximity to the signalized intersections at Inglewood Avenue and 132nd/135th Street would make PHB's more appropriate for traffic flow and coordination.

The analysis references the existing conditions including traffic volumes, speed limit, and roadway configuration, as well as the Project trip generation. The Federal Highway Administration's (FHWA) *Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations* and the California Manual of Uniform Traffic Control Devices (CA MUTCD) were used as guidance for determining the appropriate treatment at the intersection.

FHWA Analysis

The FHWA guidelines identify the following three criteria to determine the type of crosswalk treatment:

1. Roadway Configuration
2. Vehicle Average Daily Traffic (ADT)
3. Speed Limit

Table 9 below shows the criteria for the different types of countermeasures along a roadway segment or at an intersection.

Table 9: FHWA Countermeasures

Roadway Configuration	Speed Limit								
	≤30 mph			35 mph			≥40 mph		
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
2 lanes*	1 2 3 4 5 6	1 3 5 6 7	1 3 5 6 7	1 3 4 5 6	1 3 5 6 7	1 3 5 6 7	1 3 4 5 6 7	1 3 5 6 7	1 3 5 6 7
3 lanes with raised median*	1 2 3 4 5	1 3 5 7	1 3 5 7	1 3 4 5 7	1 3 5 7	1 3 5 7	1 3 4 5 7	1 3 5 7	1 3 5 7
3 lanes w/o raised median†	1 2 3 4 5 6 7	1 3 5 6 7	1 3 5 6 7	1 3 4 5 6 7	1 3 5 6 7	1 3 5 6 7	1 3 4 5 6 7	1 3 5 6 7	1 3 5 6 7
4+ lanes with raised median‡	1 3 5	1 3 5 7	1 3 5 7	1 3 5 7	1 3 5 7	1 3 5 7	1 3 5 7	1 3 5 7	1 3 5 7
4+ lanes w/o raised median‡	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8	1 3 5 6 7 8

*One lane in each direction †One lane in each direction with two-way left-turn lane ‡Two or more lanes in each direction

Given the set of conditions in a cell,

- 1 High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Pedestrian Hybrid Beacon
- 8 Road Diet

● Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.

Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

This table was developed using information from: Zegeer, C. V., Stewart, J. R., Huang, H. H., Lagerwey, P. A., Feaganes, J., & Campbell, B. J. (2005). Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines (No. FHWA-HRT-04-100); Manual on Uniform Traffic Control Devices, 2009 Edition, Chapter 4F. Pedestrian Hybrid Beacons; the Crash Modification Factors (CMF) Clearinghouse website (<http://www.cmfclearinghouse.org>); and the Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE) website (<http://www.pedbikesafe.org/PEDSAFE/>).

Inglewood Avenue at 134th street is a 4 lane, 35 MPH roadway without a raised median and ADT of 21,000 vehicles (**Appendix B**).

From **Table 9** above, the appropriate countermeasures would include a high-visibility crosswalk, advance yield striping and signage, a pedestrian refuge island, and a PHB.

CA MUTCD Analysis

The CA MUTCD guidelines identify the following four criteria to determine if a PHB is warranted:

1. Major Street Pedestrian Volume
2. Major Street Vehicle Volume
3. Speed Limit
4. Crosswalk Length

Appendix F shows the application of the guidelines based on the information along Inglewood Avenue. Based on the CA MUTCD guidelines, a PHB would not be warranted at the intersection of Inglewood Avenue and 134th Street.

Although existing conditions and roadway configuration allow for the installation of a PHB or RRFB, the peak hour pedestrian volumes do not warrant the installation of crosswalk with a RRFB or PHB. Therefore, a crosswalk at the intersection of Inglewood Avenue and 134th Street is not recommended.

VIII. Summary and Conclusions

This report documents the results of a Traffic Impact Assessment completed for the Project. The following summarizes the results of assessment:

Traffic Operation Analysis

- The traffic study includes an analysis of four (4) existing intersections which were selected as per discussions with the City.
- The Project is estimated to generate approximately 840 new daily trips, 84 new trips during the morning (AM) peak hour and 56 new trips during the evening (PM) peak hour.
- Weekday peak hour intersection analysis was conducted for four (4) scenarios including Existing (2024) without Project, Existing (2024) with Project, Future (2035) Year without Project conditions, and Future (2035) Year without Project conditions.
- Under existing conditions, all intersections operate at LOS D or better during the morning (AM) and evening (PM) peak periods, except for the intersection of Inglewood Avenue and 133rd Street, which operates at LOS E during the evening (PM) peak hour.
- Under existing conditions with Project, all intersections operate at LOS D or better during the morning (AM) and evening (PM) peak periods, except for the intersection of Inglewood Avenue and 134th Street, which operates at LOS E during the evening (PM) peak hour.
- Under future without Project conditions, all intersections operate at LOS D or better during the morning (AM) and evening (PM) peak periods, except for the intersection of Inglewood Avenue and 133rd Street, which operates at LOS E during the evening (PM) peak hour.
- Under future conditions with Project, all intersections operate at LOS D or better during the morning (AM) and evening (PM) peak periods, except for the intersection of Inglewood Avenue and 134th Street, which operates at LOS E during the evening (PM) peak hour.

VMT Analysis

- The Project proposes a 3,781 square feet (SF) Fast Food Restaurant with a Drive-Thru. The Project would screen out of further VMT analysis based on the local-serving land-use and the Project being in a low VMT area. Therefore, the Project is presumed to have a less than significant transportation impact concerning VMT.

Sight Distance Analysis

- The Project proposes three driveways to access the Project Site. One full access driveway along Inglewood Avenue, one exit-only along 133rd Street, and one full access along 134th Street.

- The stopping sight distance along Inglewood Avenue is 250 feet based on the latest American Association of State Highway and Transportation Officials (AASHTO) guidelines, *A Policy on Geometric Design of Highways and Streets, 2018*.
- To provide a clear line of sight for vehicles exiting the Inglewood Avenue driveway, 48 feet of red curb north of the driveway and 45 feet south of the driveway is recommended.
- Since on-street parking is restricted on the driveway sides of the streets, no sight distance analysis was required for the driveways along 133rd Street and 134th Street. Therefore, no additional parking restrictions are required for the driveways along 133rd Street and 134th Street.

Left-turn Pocket Analysis

- Based on guidance from the NCHRP Report 745, a southbound left-turn pocket on Inglewood Avenue is not recommended due to the roadway configuration, vehicle average daily traffic (ADT), and speed limit.

Crosswalk Warrant Analysis

- Based on guidance from the FHWA, the location of the crosswalk would require a controlled crossing such as a PHB. However, the pedestrian demand does not warrant a PHB.

Appendix A – Approved Project Scoping Agreement



June 26, 2024

Dweejal Torado, T.E
Assistant Engineer
City of Hawthorne
4455 West 126th Street
Hawthorne, CA 90250

RE: *Traffic Study Scope of Work for the Proposed McDonald's at 13324 South Inglewood Avenue in the City of Hawthorne*

Kimley-Horn and Associates, Inc. is pleased to submit this traffic study Scope of Work for the proposed McDonald's at 13324 South Inglewood Avenue in the City of Hawthorne. The scope of the traffic study is summarized below. This scope of work is based on the review of the *Los Angeles County (LA County) Transportation Impact Analysis Guidelines* (July 2020) and discussions with City Staff.

Project Description

The applicant proposes to develop a 3,781 square-foot Fast Food Restaurant with a Drive-Thru. The site is currently vacant. The following traffic study scope of work has been prepared in accordance with the *LA County Transportation Impact Analysis Guidelines*. The project site plan is shown on **Attachment 1**. The project is anticipated to open in 2025.

Study Scenarios

The following study scenarios will be included for analysis:

- Existing Conditions Without Project (2024)
- Existing With Project (2024)
- Cumulative Without Project (2035)
- Cumulative With Project (2035)

Each study scenario will include weekday morning peak hour and weekday evening peak hour analysis.

Study Methodology

Level of Service (LOS) analysis will be conducted for peak hour intersection operations at signalized and unsignalized intersections using the methods prescribed in the Highway Capacity Manual (HCM) 7th Edition. The traffic analysis will be conducted using the latest version of the Synchro software.

Impact Criteria

For intersections within the City, LOS D or better will be considered as acceptable. If project traffic causes operations at an intersection to go from acceptable (LOS D or better) to unacceptable (LOS E or F), the project would have a significant project-related effect at the intersection. If the

intersection is currently operating at an unacceptable LOS (LOS E or F) without Project traffic it is assumed that there would be no impact to the intersection.

Study Intersections

In addition to the three primary Project driveways shown in **Attachment 1**, the following study intersections are proposed:

1. 132nd Street & Inglewood Avenue (signalized)
2. 133rd Street & Inglewood Avenue (unsignalized)
3. 134th Street & Inglewood Avenue (unsignalized)
4. 135th Street & Inglewood Avenue (signalized)

Existing Traffic Counts

New weekday morning (7-9AM) and evening (4-6PM) intersection peak hour traffic counts at the study intersections will be collected. A seasonal factor for traffic counts will be applied for the summer season since schools are out of session. Average Daily Traffic (ADT) 24-hour counts along Inglewood Avenue will also be collected on the same day as the intersection counts. The 24-hour count will also provide the lane utilization along Inglewood Avenue.

Future Traffic Volumes

Traffic volumes for the future cumulative scenario (2035) will be developed by applying a growth rate based on the Southern California Coalition of Governments' (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.

Project Trip Generation

The trips expected to be generated by the project were calculated using trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (2021). Pass-by reduction factors were applied to the proposed land use. Trip rates are based on the ITE land use category 934 - Fast-Food Restaurant w/ Drive-Thru.

The trip rates and the estimated vehicle trips for the proposed uses are shown in **Attachment 2**. The proposed project is estimated to generate 1,768 daily trips, with 169 trips in the AM peak hour, and 125 trips in the PM peak hour.

After applying a pass-by reduction factor, the project is estimated to generate approximately 840 daily trips, with 84 trips in the AM peak hour, and 56 trips in the PM peak hour.

Project Trip Distribution

Project trip distribution assumptions are shown on **Attachment 3**.

Cumulative Traffic

City staff will provide a list of cumulative projects for use in the traffic study, which will include eligible developments within one half-mile of the project. For cumulative projects, it is requested that address, land use, quantities, and other pertinent information for each project be provided if available. If this information is not available, an ambient growth factor based the SCAG RTP/SCS model will be used to develop traffic volumes for the cumulative scenario.

Left Turn Pocket Analysis

A queueing analysis will be completed to determine if a southbound left-turn pocket is warranted on Inglewood Avenue at the Project Driveway. The analysis will reference the existing conditions including traffic volumes and lane utilization as well as the Project trip generation and distribution. Guidelines included in the National Cooperative Highway Research Program (NCHRP) Report 745 Left-Turn Accommodations at Unsignalized Intersections (2013) will also be referenced.

Crosswalk Warrant and Treatment Analysis

Based on coordination with City staff, the installation of a crosswalk at the intersection of Inglewood Avenue and W 134th Street will be evaluated to determine the most suitable crosswalk treatment. The two possible crosswalk treatments that will be considered include Pedestrian Hybrid Beacons (PHB's) and Rectangular Rapid Flashing Beacons (RRFBs).

The analysis will reference the existing conditions including traffic volumes, speed limit, roadway configuration, and trip generation and distribution. The Federal Highway Administration's (FHWA) *Field Guide for Selecting Countermeasures at Uncontrolled Pedestrian Crossing Locations* will be used as guidance for determining the appropriate treatment at the intersection. Guidance from the California Manual of Uniform Traffic Control Devices (CA MUTCD) will also be used to determine if a RRFB or PHB is warranted.

VMT Screening

With the passage of Senate Bill (SB) 743 by the California Legislature in September 2013, VMT has become an important indicator for determining if a new development will result in a "significant transportation impact" as required by the California Environmental Quality Act (CEQA). Under SB 743, the state Office of Planning and Research (OPR) was charged with developing new guidelines for evaluating transportation impacts under CEQA in order to replace methods measuring automobile delay and Level of Service. In response to this mandate, the Office of Planning and Research proposed, and the California Natural Resources Agency adopted CEQA Guidelines Section 15064.3, which indicates that VMT exceeding an applicable threshold of significance is the most appropriate measure for evaluating a project's transportation impacts. Section 15064.3 goes on to clarify that except for projects regarding roadway capacity, "...a project's effect on automobile delay does not constitute a significant environmental impact." The

OPR further elaborates on VMT metrics within the *Technical Advisory on Evaluating Transportation Impacts in CEQA* document, published in December 2018. Subsequently, LA County, via the *Transportation Impact Analysis Guidelines* (July 2020) has established VMT screening thresholds of significance for projects within the City.

The VMT guidelines provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed analysis. The screening criteria are as follows:

1. Project Size
2. Locally Serving Retail
3. Project Located in a Low VMT Area
4. Transit Proximity
5. Affordable Housing
6. Transportation Facilities

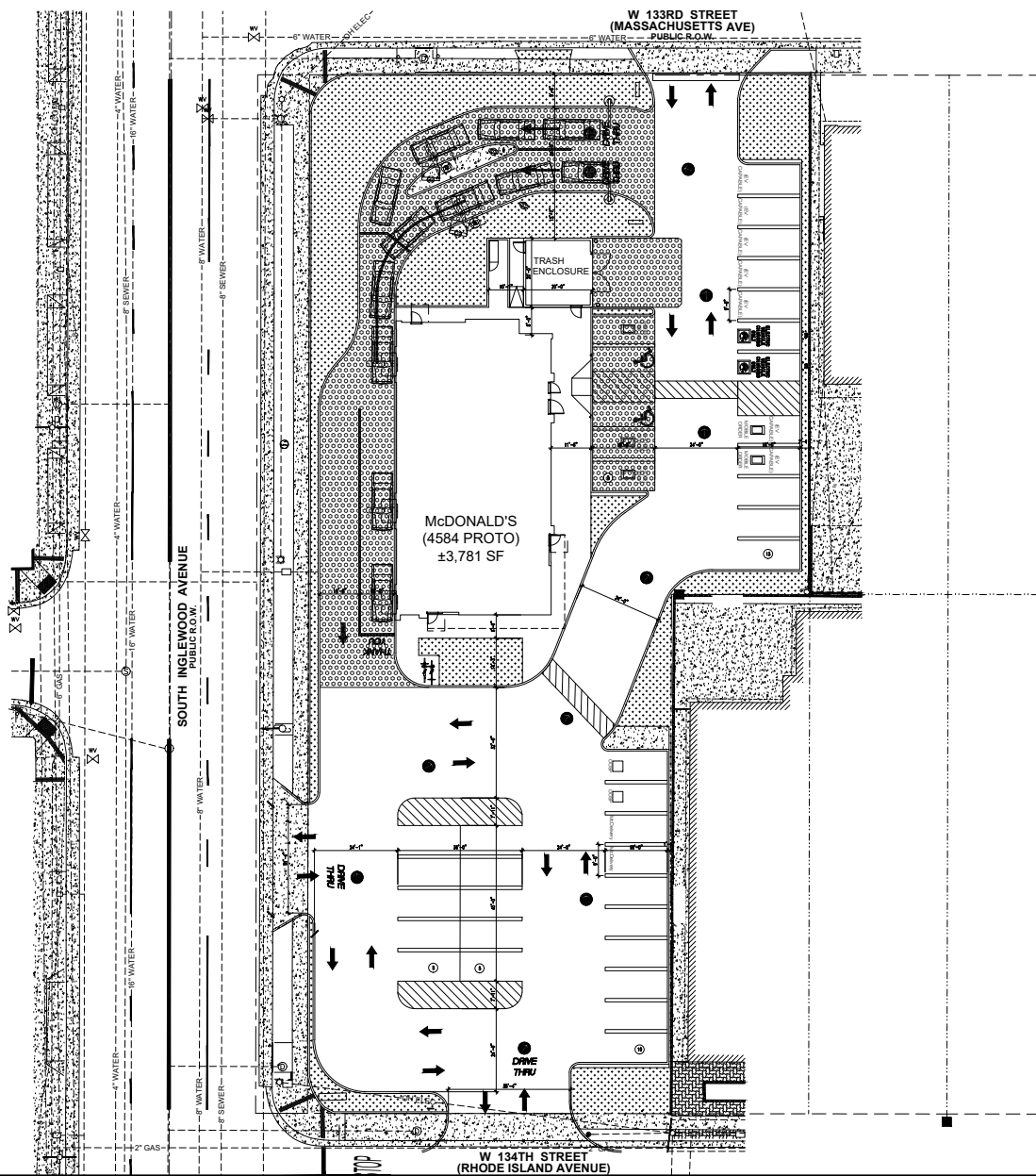
A local-serving retail project with space of less than 50,000 square feet would be considered to have a less-than-significant impact. Since the project involves local-serving retail fast food restaurant and coffee shop the project would screen out of VMT under Locally Serving Retail criteria.

In accordance with the Technical Advisory and with Los Angeles County Guidelines, the proposed project is presumed to result in a less-than-significant VMT impact and support the goals of SB 743. No further VMT assessment is anticipated.

Mitigation Measures

Based on the results of the traffic analysis, mitigation on the basis of LOS will be discussed, if applicable.

Attachment 1 - Site Plan



SITE INFORMATION	
SITE AREA:	37,500 SF(0.86 ACRES)
ZONING	C3, GENERAL COMMERCIAL
APPROVED USE#	CONDITIONAL USE
PARKING TABLE	
REQUIRED SPACES =	3,781 SF = 38
STANDARD SPACES	38
ADA SPACES	2
TOTAL SPACES	=38
DRIVE THRU	
STACKING AS SHOWN	
LANDSCAPE	TO BE DETERMINED



PROPOSED SITE PLAN | SCALE: 1/16"=1'-0"

M. McDonald's USA, LLC

These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared for use on this specific site in conjunction with its issue date and are not available for use on a different site or at a later time. Use of these drawings for reference or similar projects requires the services of properly licensed architects and engineers. Reproduction of the contract documents for reuse on another project is not authorized.



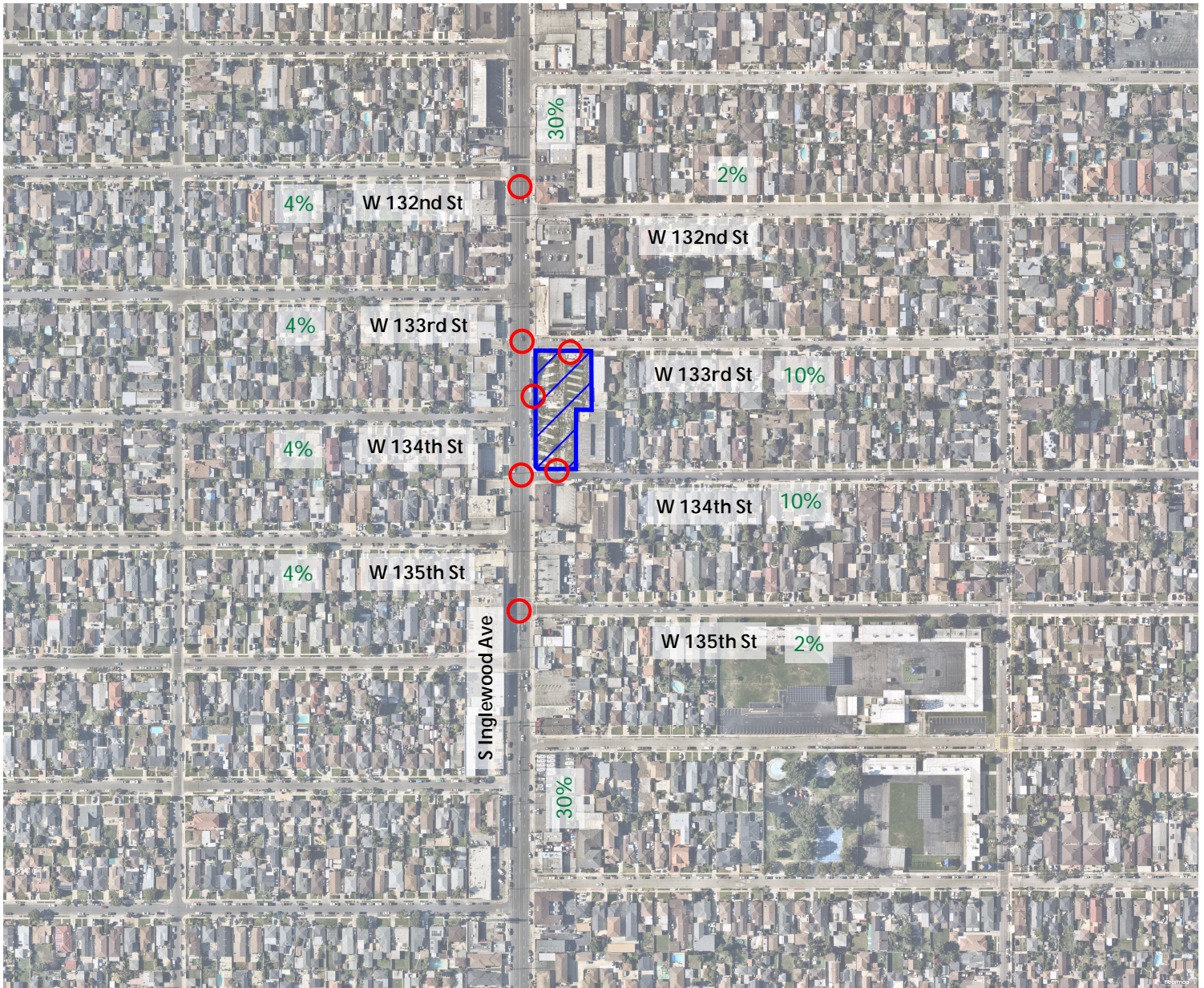
Proposed McDonald's Restaurant #004-5205

13324 W. 133rd St.
Hawthorne, CA 90250
29 May 2024

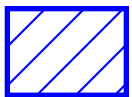
**ATTACHMENT 2
SUMMARY OF PROJECT TRIP GENERATION
13324 S Inglewood Avenue McDonalds Project**

Land Use	ITE Code	Unit	Trip Generation Rates ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Fast-Food Restaurant w/ Drive-thru	934	KSF	467.48	22.751	21.859	44.61	17.176	15.854	33.03
Trip Generation Estimates									
Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
			Fast-Food Restaurant w/ Drive-thru	3.781	KSF	1,768	86	83	169
<i>Pass-by Trips (52.5% Daily, 50% AM, 55% PM) ^{1,2}</i>			-928	-43	-42	-85	-36	-33	-69
Net Trips			840	43	41	84	29	27	56
Total Project Trips			840	43	41	84	29	27	56
¹ Source: Institute of Transportation Engineers (ITE) <u>Trip Generation Manual</u> , 11 th Edition ² Note: <u>The Trip Generation Manual</u> does not provide pass-by rates for daily trip generation. The daily pass-by trips shown are the average of the AM and the PM pass-by percentage.									

ATTACHMENT 3 TRIP DISTRIBUTION AND STUDY AREA



LEGEND:



PROJECT SITE



STUDY INTERSECTION/DRIVEWAY



TRIP DISTRIBUTION PERCENTAGE



N
NTS

Appendix B - Turning Movement Counts and Average Daily Traffic Counts

Inglewood Ave & 132nd St

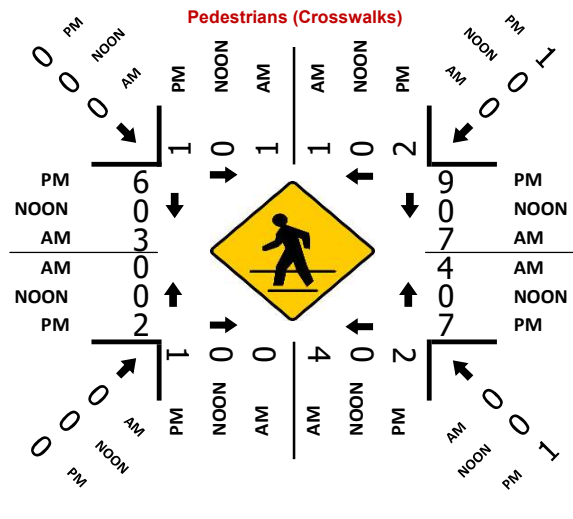
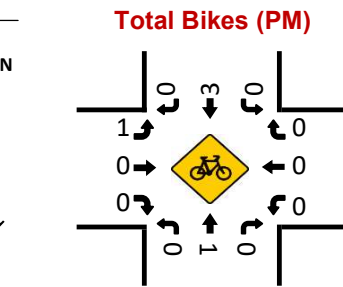
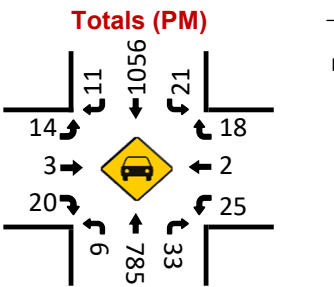
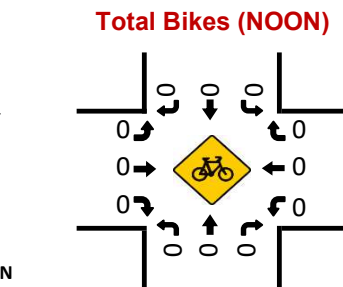
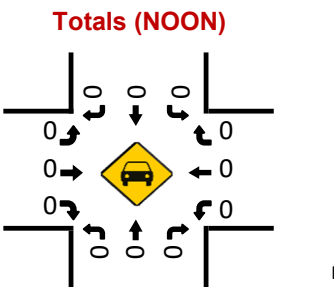
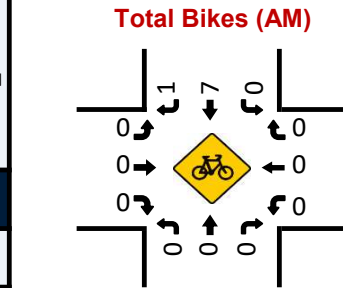
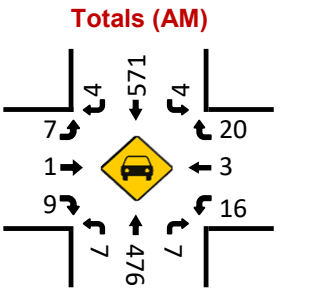
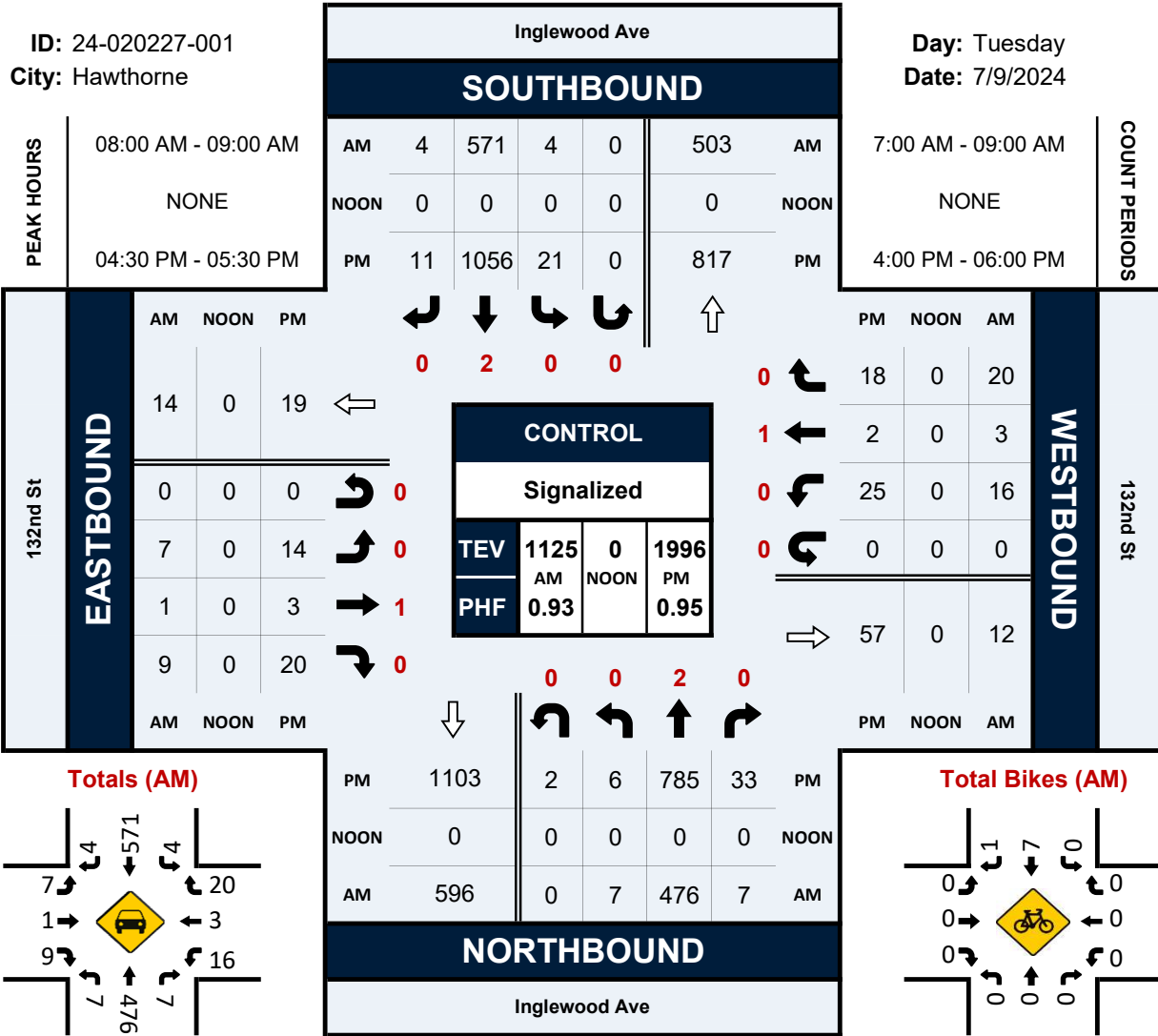
Peak Hour Turning Movement Count

ID: 24-020227-001

City: Hawthorne

Day: Tuesday

Date: 7/9/2024



Inglewood Ave & 133rd St

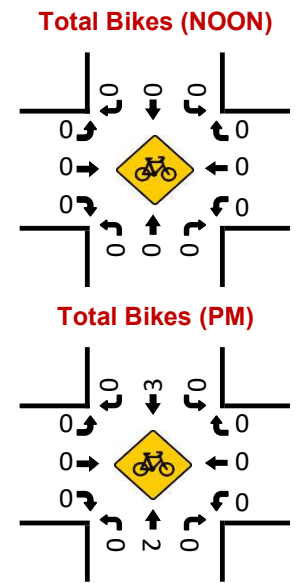
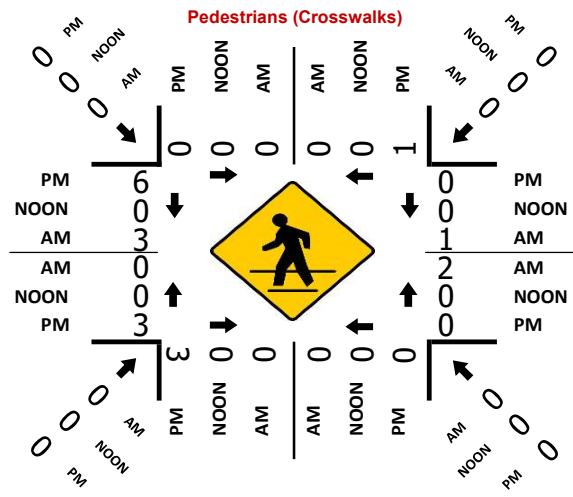
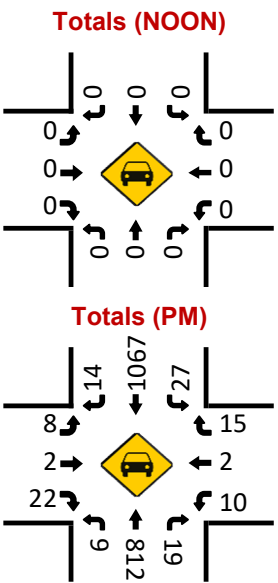
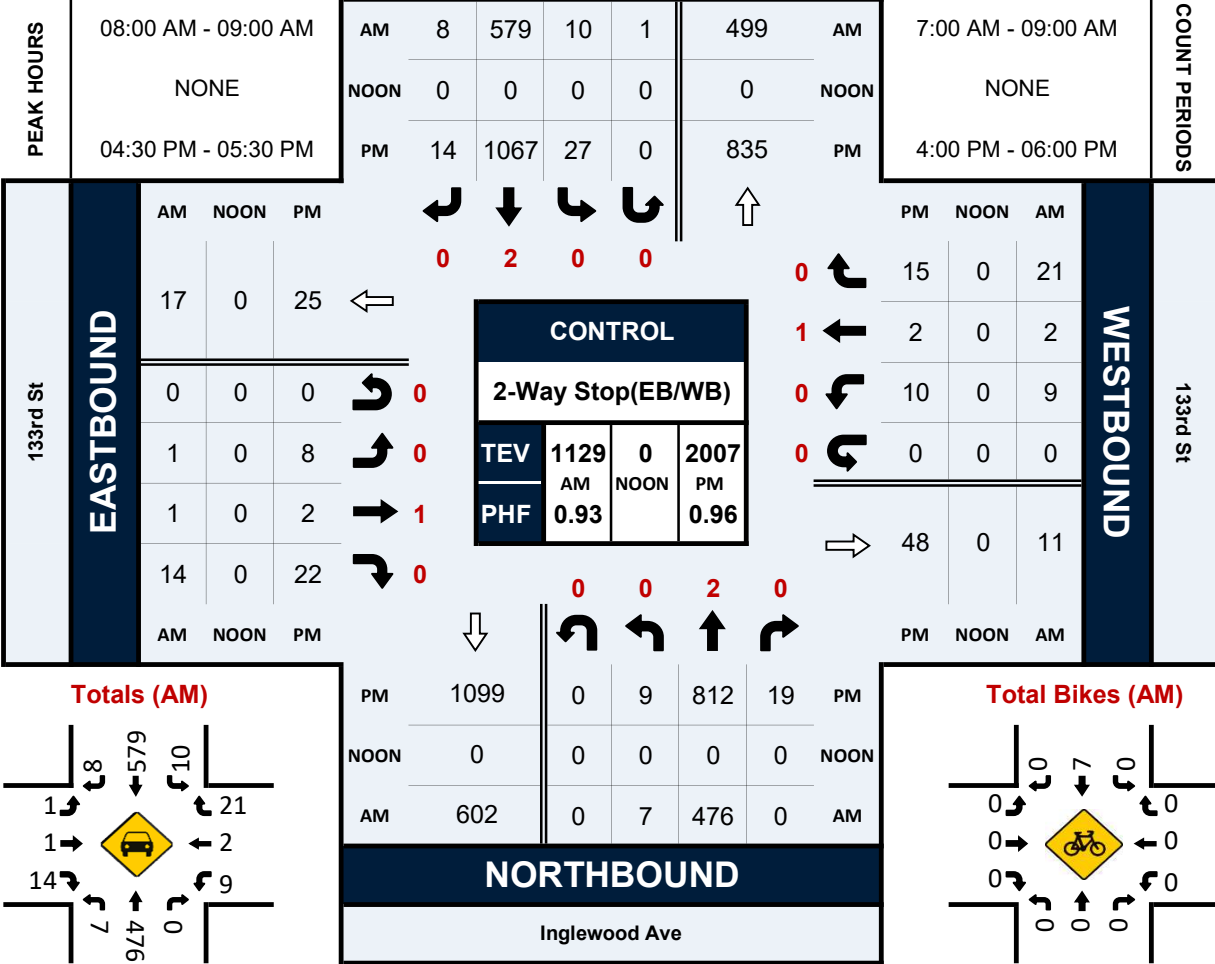
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City: Hawthorne

Day: Tuesday

Date: 7/9/2024

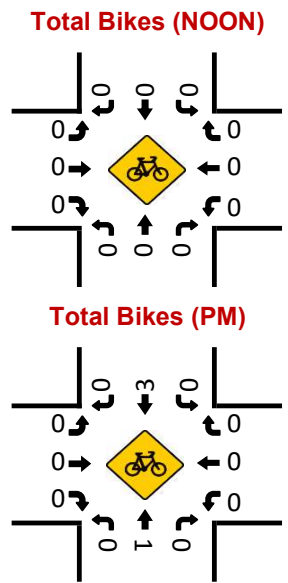
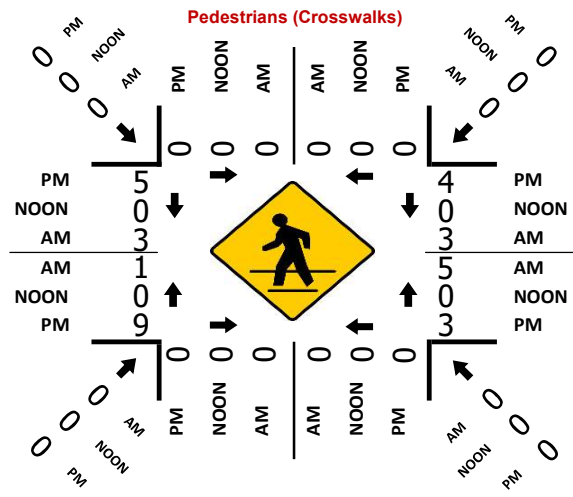
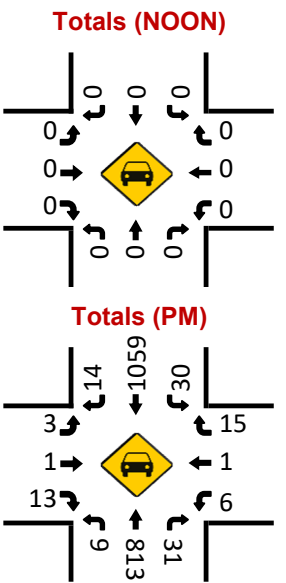
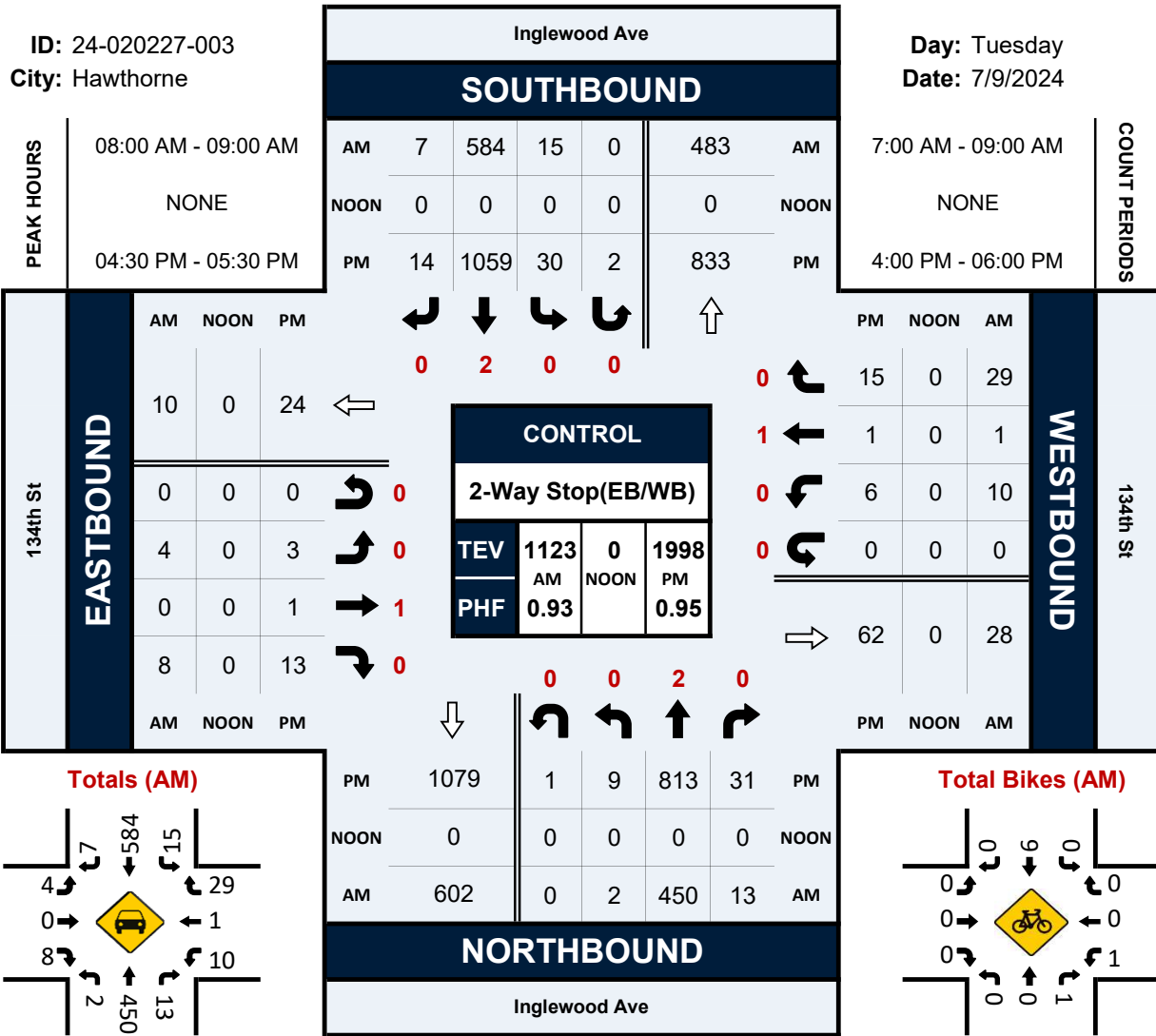


Inglewood Ave & 134th St

Peak Hour Turning Movement Count

ID: 24-020227-003
City: Hawthorne

Day: Tuesday
Date: 7/9/2024

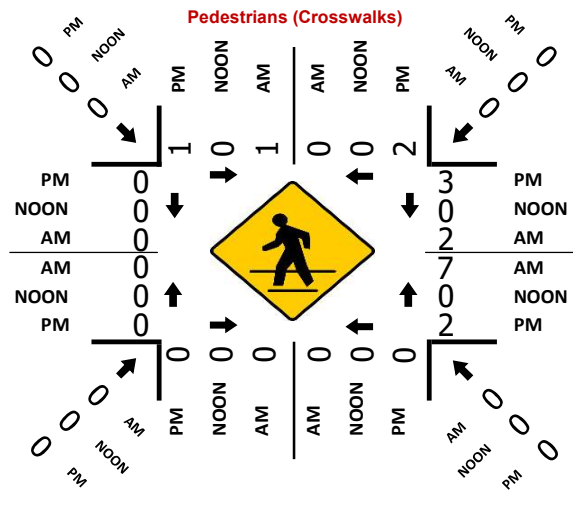
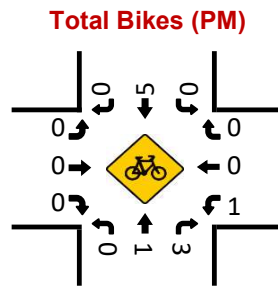
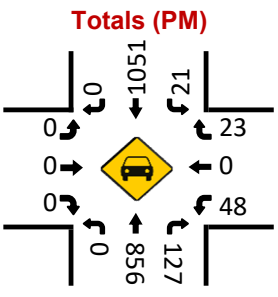
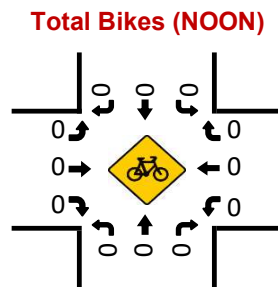
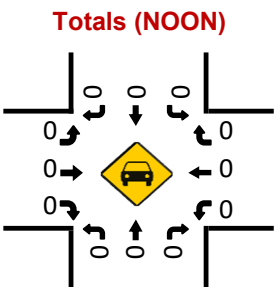
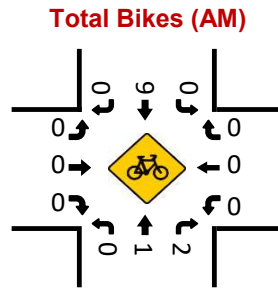
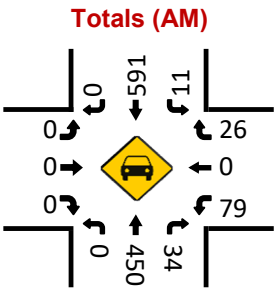
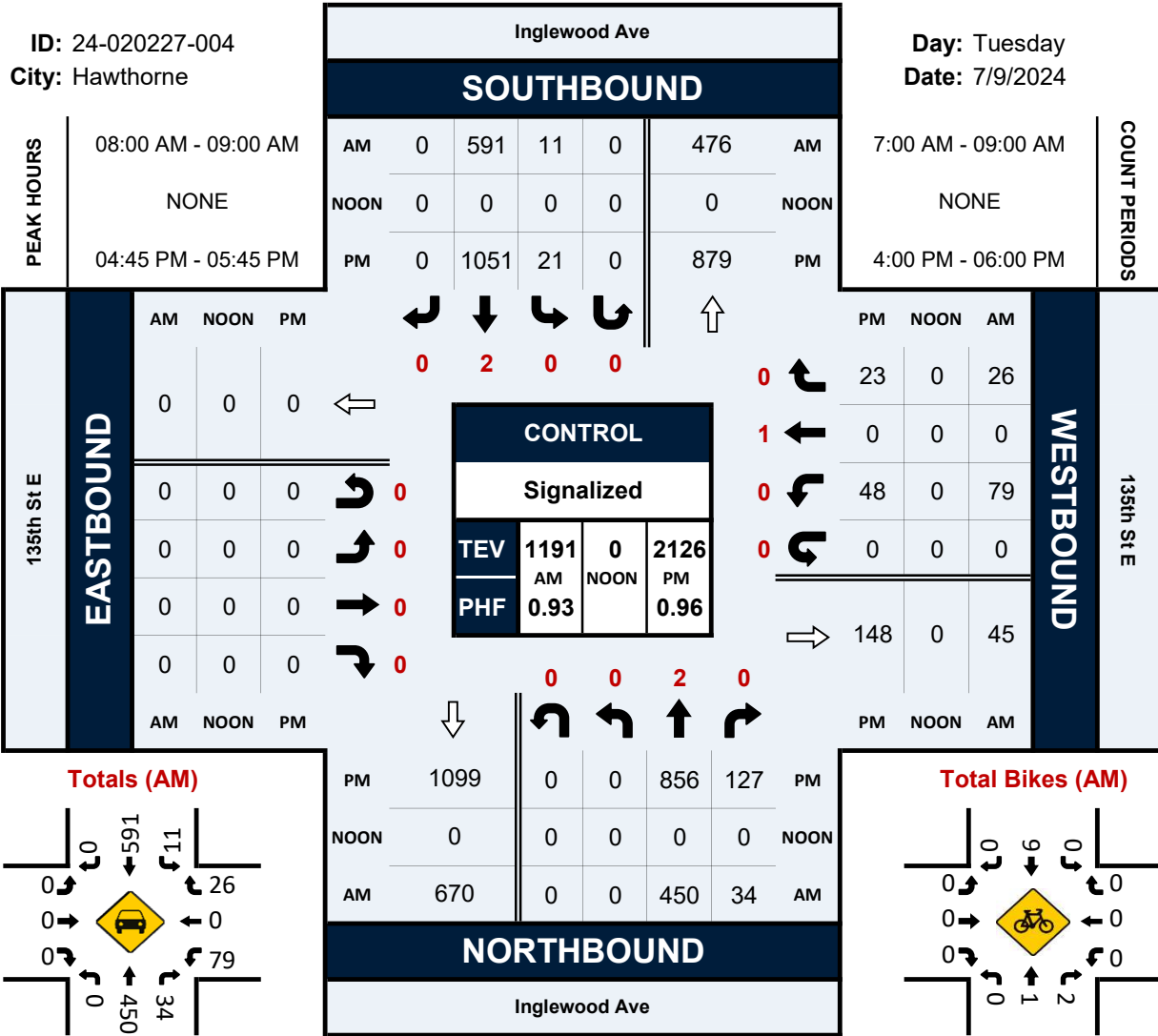


Inglewood Ave & 135th St E

Peak Hour Turning Movement Count

ID: 24-020227-004
City: Hawthorne

Day: Tuesday
Date: 7/9/2024



VOLUME

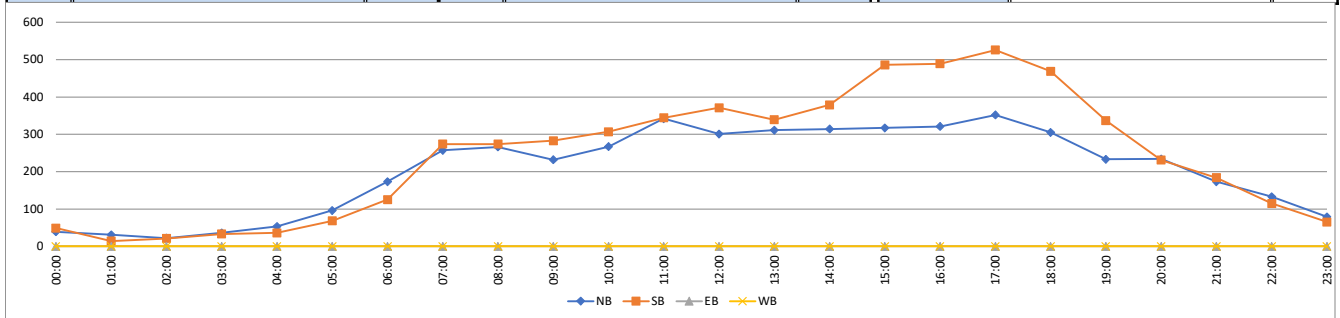
Inglewood Ave Bet 133rd St & 134th St

Day: Tuesday
Date: 7/9/2024

City: Hawthorne
Project #: CA24_020226_001

DAILY TOTALS					NB	SB	EB	WB	Total	DAILY TOTALS				
					9,974	11,645	0	0	21,619					

15-Minutes Interval						Hourly Intervals											
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00	11	14			25	12:00	63	99			162	00:00 01:00	39	49			88
0:15	9	10			19	12:15	79	100			179	01:00 02:00	31	14			45
0:30	11	12			23	12:30	78	90			168	02:00 03:00	22	21			43
0:45	8	13			21	12:45	81	82			163	03:00 04:00	36	33			69
1:00	6	7			13	13:00	86	87			173	04:00 05:00	53	36			89
1:15	9	1			10	13:15	70	93			163	05:00 06:00	96	68			164
1:30	10	1			11	13:30	75	81			156	06:00 07:00	173	125			298
1:45	6	5			11	13:45	80	78			158	07:00 08:00	257	274			531
2:00	5	4			9	14:00	78	95			173	08:00 09:00	266	274			540
2:15	5	5			10	14:15	71	94			165	09:00 10:00	232	283			515
2:30	6	4			10	14:30	83	83			166	10:00 11:00	267	307			574
2:45	6	8			14	14:45	82	107			189	11:00 12:00	342	344			686
3:00	6	5			11	15:00	79	117			196	12:00 13:00	301	371			672
3:15	7	5			12	15:15	72	112			184	13:00 14:00	311	339			650
3:30	13	14			27	15:30	83	111			194	14:00 15:00	314	379			693
3:45	10	9			19	15:45	83	146			229	15:00 16:00	317	486			803
4:00	10	2			12	16:00	70	125			195	16:00 17:00	321	489			810
4:15	14	8			22	16:15	69	119			188	17:00 18:00	352	526			878
4:30	13	13			26	16:30	84	118			202	18:00 19:00	305	469			774
4:45	16	13			29	16:45	98	127			225	19:00 20:00	233	337			570
5:00	19	8			27	17:00	91	147			238	20:00 21:00	234	231			465
5:15	22	19			41	17:15	96	127			223	21:00 22:00	173	184			357
5:30	29	17			46	17:30	78	115			193	22:00 23:00	133	115			248
5:45	26	24			50	17:45	87	137			224	23:00 00:00	79	65			144
6:00	40	28			68	18:00	84	132			216	STATISTICS					
6:15	40	26			66	18:15	73	112			185		NB	SB	EB	WB	TOTAL
6:30	38	32			70	18:30	76	115			191	Peak Period	00:00	to	12:00		
6:45	55	39			94	18:45	72	110			182	Volume	1814	1828			3642
7:00	62	52			114	19:00	60	105			165	Peak Hour	11:00	11:00			11:00
7:15	58	72			130	19:15	57	86			143	Peak Volume	342	344			686
7:30	73	73			146	19:30	62	73			135	Peak Hour Factor	0.814	0.804			0.903
7:45	64	77			141	19:45	54	73			127	Peak Period	12:00	to	00:00		
8:00	67	70			137	20:00	61	55			116	Volume	3073	3991			7064
8:15	66	75			141	20:15	62	52			114	Peak Hour	16:30	17:00			16:30
8:30	67	60			127	20:30	55	64			119	Peak Volume	369	526			888
8:45	66	69			135	20:45	56	60			116	Peak Hour Factor	0.941	0.895			0.933
9:00	53	65			118	21:00	46	50			96	Peak Period	07:00	to	09:00		
9:15	60	77			137	21:15	45	46			91	Volume	523	548			1071
9:30	56	66			122	21:30	41	38			79	Peak Hour	7:30	7:30			7:30
9:45	63	75			138	21:45	41	50			91	Peak Volume	270	295			565
10:00	69	75			144	22:00	41	34			75	Peak Hour Factor	0.925	0.958			0.967
10:15	64	102			166	22:15	37	24			61	Peak Period	16:00	to	18:00		
10:30	64	59			123	22:30	31	25			56	Volume	673	1015			1688
10:45	70	71			141	22:45	24	32			56	Peak Hour	16:30	17:00			16:30
11:00	71	66			137	23:00	30	20			50	Peak Volume	369	526			888
11:15	83	86			169	23:15	19	17			36	Peak Hour Factor	0.941	0.895			0.933
11:30	105	85			190	23:30	22	19			41						
11:45	83	107			190	23:45	8	9			17						
TOTALS	1814	1828	0	0	3642	TOTALS	3073	3991	0	0	7064						
SPLIT %	50%	50%	0%	0%	34%	SPLIT %	44%	56%	0%	0%	66%						



Appendix C - LOS Worksheets

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

09/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↗		↕	↗
Traffic Volume (veh/h)	8	1	10	18	3	23	8	545	8	5	653	5
Future Volume (veh/h)	8	1	10	18	3	23	8	545	8	5	653	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1	14	24	4	31	9	592	9	5	695	5
Peak Hour Factor	0.71	0.71	0.71	0.75	0.75	0.75	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	4	57	82	14	106	99	1164	535	94	1172	535
Arrive On Green	0.06	0.06	0.06	0.12	0.12	0.12	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	708	64	901	682	114	881	15	3449	1585	6	3473	1585
Grp Volume(v), veh/h	26	0	0	59	0	0	321	280	9	375	325	5
Grp Sat Flow(s),veh/h/ln	1673	0	0	1678	0	0	1847	1617	1585	1862	1617	1585
Q Serve(g_s), s	0.6	0.0	0.0	1.3	0.0	0.0	0.0	5.5	0.1	0.0	6.6	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.3	0.0	0.0	5.4	5.5	0.1	6.6	6.6	0.1
Prop In Lane	0.42		0.54	0.41		0.53	0.03		1.00	0.01		1.00
Lane Grp Cap(c), veh/h	105	0	0	202	0	0	717	545	535	720	545	535
V/C Ratio(X)	0.25	0.00	0.00	0.29	0.00	0.00	0.45	0.51	0.02	0.52	0.60	0.01
Avail Cap(c_a), veh/h	1013	0	0	931	0	0	2601	2243	2199	2651	2243	2199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	0.0	0.0	15.9	0.0	0.0	10.5	10.5	8.8	10.9	10.9	8.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.0	0.4	0.7	0.0	0.6	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.5	0.0	0.0	1.7	1.5	0.0	2.1	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.9	0.0	0.0	16.7	0.0	0.0	10.9	11.3	8.8	11.5	11.9	8.7
LnGrp LOS	B			B			B	B	A	B	B	A
Approach Vol, veh/h		26			59			610			705	
Approach Delay, s/veh		18.9			16.7			11.1			11.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.4		10.8		20.4		8.5				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		7.5		3.3		8.6		2.6				
Green Ext Time (p_c), s		4.0		0.2		4.8		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.7								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

09/24/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	1	17	10	569	662	9
Future Vol, veh/h	1	17	10	569	662	9
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	21	11	625	720	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1057	363	732	0	-	0
Stage 1	723	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	220	634	868	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	697	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	216	632	866	-	-	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	695	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.57	0.29	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	62	-	571	-	-
HCM Lane V/C Ratio	0.013	-	0.039	-	-
HCM Control Delay (s/veh)	9.2	0.1	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

09/24/2024

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	10	26	545	0	14	678
Future Vol, veh/h	10	26	545	0	14	678
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	73	73	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	36	599	0	15	737

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1001	302	0	0	602	0
Stage 1	602	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	239	694	-	-	972	-
Stage 1	510	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	234	692	-	-	969	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	508	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	14.02	0	0.34
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	448	73
HCM Lane V/C Ratio	-	-	0.11	0.016
HCM Control Delay (s/veh)	-	-	14	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0

HCM 7th TWSC
4: Inglewood Ave & 134th St

09/24/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	5	9	3	548	668	8
Future Vol, veh/h	5	9	3	548	668	8
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	12	3	596	718	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1027	363	731	0	-	0
Stage 1	722	-	-	-	-	-
Stage 2	304	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	230	634	869	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	228	631	866	-	-	-
Mov Cap-2 Maneuver	228	-	-	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	719	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	14.79	0.09	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	20	-	386	-	-
HCM Lane V/C Ratio	0.004	-	0.048	-	-
HCM Control Delay (s/veh)	9.2	0	14.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th Street

09/24/2024

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	11	34	515	15	17	677
Future Vol, veh/h	11	34	515	15	17	677
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	44	560	16	18	728

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	968	288	0	0	584	0
Stage 1	568	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	251	709	-	-	987	-
Stage 1	531	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	244	703	-	-	979	-
Mov Cap-2 Maneuver	244	-	-	-	-	-
Stage 1	527	-	-	-	-	-
Stage 2	630	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	13.51	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	481	88
HCM Lane V/C Ratio	-	-	0.121	0.019
HCM Control Delay (s/veh)	-	-	13.5	8.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

09/24/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑↑	↗		↘↘
Traffic Volume (veh/h)	90	30	515	39	13	676
Future Volume (veh/h)	90	30	515	39	13	676
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	50	548	41	14	735
Peak Hour Factor	0.60	0.60	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	173	58	2767	1234	57	2657
Arrive On Green	0.13	0.13	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1290	430	3647	1585	33	3498
Grp Volume(v), veh/h	201	0	548	41	398	351
Grp Sat Flow(s),veh/h/ln	1728	0	1777	1585	1829	1617
Q Serve(g_s), s	13.7	0.0	4.8	0.7	0.0	7.4
Cycle Q Clear(g_c), s	13.7	0.0	4.8	0.7	7.2	7.4
Prop In Lane	0.75	0.25		1.00	0.04	
Lane Grp Cap(c), veh/h	231	0	2767	1234	1455	1259
V/C Ratio(X)	0.87	0.00	0.20	0.03	0.27	0.28
Avail Cap(c_a), veh/h	375	0	2767	1234	1455	1259
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.91	0.91	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	3.5	3.0	3.7	3.8
Incr Delay (d2), s/veh	11.7	0.0	0.1	0.0	0.5	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	1.4	0.2	2.3	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.6	0.0	3.6	3.1	4.2	4.3
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	201		589			749
Approach Delay, s/veh	62.6		3.6			4.3
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		98.9			98.9	21.1
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		6.8			9.4	15.7
Green Ext Time (p_c), s		4.2			5.3	0.4
Intersection Summary						
HCM 7th Control Delay, s/veh			11.6			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

09/24/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	79	54	71	475	673	94
Future Volume (veh/h)	79	54	71	475	673	94
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	87	77	516	732	102
Peak Hour Factor	0.62	0.62	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	145	99	294	1954	2730	1218
Arrive On Green	0.14	0.14	0.77	0.77	1.00	1.00
Sat Flow, veh/h	1002	687	332	2629	3647	1585
Grp Volume(v), veh/h	215	0	268	325	732	102
Grp Sat Flow(s),veh/h/ln	1697	0	1259	1617	1777	1585
Q Serve(g_s), s	14.9	0.0	0.0	7.0	0.0	0.0
Cycle Q Clear(g_c), s	14.9	0.0	4.7	7.0	0.0	0.0
Prop In Lane	0.59	0.40	0.29			1.00
Lane Grp Cap(c), veh/h	245	0	1006	1242	2730	1218
V/C Ratio(X)	0.88	0.00	0.27	0.26	0.27	0.08
Avail Cap(c_a), veh/h	368	0	1006	1242	2730	1218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.93	0.93
Uniform Delay (d), s/veh	50.3	0.0	3.8	4.0	0.0	0.0
Incr Delay (d2), s/veh	14.6	0.0	0.7	0.5	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.6	2.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	64.9	0.0	4.4	4.5	0.2	0.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	215			593	834	
Approach Delay, s/veh	64.9			4.5	0.2	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		97.7		22.3		97.7
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		9.0		16.9		2.0
Green Ext Time (p_c), s		4.6		0.4		6.3
Intersection Summary						
HCM 7th Control Delay, s/veh			10.2			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

09/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕	↗		↕↕	↗
Traffic Volume (veh/h)	16	3	23	29	2	21	9	898	38	24	1208	13
Future Volume (veh/h)	16	3	23	29	2	21	9	898	38	24	1208	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	4	32	45	3	32	10	955	40	27	1373	15
Peak Hour Factor	0.73	0.73	0.73	0.65	0.65	0.65	0.94	0.94	0.94	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	11	88	107	7	76	57	1808	833	68	1780	833
Arrive On Green	0.10	0.10	0.10	0.11	0.11	0.11	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	634	115	923	956	64	680	10	3439	1585	30	3387	1585
Grp Volume(v), veh/h	58	0	0	80	0	0	513	452	40	741	659	15
Grp Sat Flow(s),veh/h/ln	1673	0	0	1700	0	0	1832	1617	1585	1800	1617	1585
Q Serve(g_s), s	2.3	0.0	0.0	3.1	0.0	0.0	0.0	13.1	0.9	3.2	23.2	0.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	3.1	0.0	0.0	12.8	13.1	0.9	22.6	23.2	0.3
Prop In Lane	0.38		0.55	0.56		0.40	0.02		1.00	0.04		1.00
Lane Grp Cap(c), veh/h	160	0	0	190	0	0	1015	850	833	999	850	833
V/C Ratio(X)	0.36	0.00	0.00	0.42	0.00	0.00	0.51	0.53	0.05	0.74	0.78	0.02
Avail Cap(c_a), veh/h	564	0	0	525	0	0	1445	1249	1225	1425	1249	1225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.0	29.5	0.0	0.0	11.0	11.1	8.2	13.3	13.5	8.1
Incr Delay (d2), s/veh	1.4	0.0	0.0	1.5	0.0	0.0	0.4	0.5	0.0	1.3	1.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.3	0.0	0.0	4.5	4.1	0.3	8.0	7.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.5	0.0	0.0	31.0	0.0	0.0	11.4	11.6	8.2	14.5	15.4	8.1
LnGrp LOS	C			C			B	B	A	B	B	A
Approach Vol, veh/h		58			80			1005			1415	
Approach Delay, s/veh		31.5			31.0			11.4			14.9	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.4		13.9		44.4		12.8				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		15.1		5.1		25.2		4.3				
Green Ext Time (p_c), s		7.6		0.3		12.2		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			14.4									
HCM 7th LOS			B									

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

09/24/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	↑
Traffic Vol, veh/h	9	27	12	946	1221	16
Future Vol, veh/h	9	27	12	946	1221	16
Conflicting Peds, #/hr	0	0	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	96	96	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	34	13	985	1388	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1914	703	1415	0	-	0
Stage 1	1397	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	60	380	478	-	-	-
Stage 1	195	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	56	377	474	-	-	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	186	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v37.25		0.61	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	45	-	156	-	-
HCM Lane V/C Ratio	0.026	-	0.289	-	-
HCM Control Delay (s/veh)	12.8	0.5	37.2	-	-
HCM Lane LOS	B	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

09/24/2024

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	11	19	929	22	33	1246
Future Vol, veh/h	11	19	929	22	33	1246
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	96	96	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	25	968	23	38	1416

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1751	484	0	0	991	0
Stage 1	968	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	77	529	-	-	694	-
Stage 1	329	-	-	-	-	-
Stage 2	411	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	70	529	-	-	694	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	329	-	-	-	-	-
Stage 2	374	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v36.06		0	1.14
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	155	93
HCM Lane V/C Ratio	-	-	0.258	0.054
HCM Control Delay (s/veh)	-	-	36.1	10.5
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1	0.2

HCM 7th TWSC
4: Inglewood Ave & 134th St

09/24/2024

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	3	16	12	947	1212	16
Future Vol, veh/h	3	16	12	947	1212	16
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	23	13	997	1362	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1899	695	1394	0	-	0
Stage 1	1376	-	-	-	-	-
Stage 2	524	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	61	385	487	-	-	-
Stage 1	200	-	-	-	-	-
Stage 2	559	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	57	380	480	-	-	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	190	-	-	-	-	-
Stage 2	551	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v25.67		0.6	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	45	-	201	-	-
HCM Lane V/C Ratio	0.026	-	0.133	-	-
HCM Control Delay (s/veh)	12.7	0.5	25.7	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th Street

09/24/2024

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	7	18	930	35	38	1227
Future Vol, veh/h	7	18	930	35	38	1227
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	36	979	37	43	1379

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1761	496	0	0	1023
Stage 1	986	-	-	-	-
Stage 2	775	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	76	519	-	-	674
Stage 1	322	-	-	-	-
Stage 2	415	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	67	516	-	-	670
Mov Cap-2 Maneuver	67	-	-	-	-
Stage 1	320	-	-	-	-
Stage 2	372	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	32.52	0	1.34
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	180	108
HCM Lane V/C Ratio	-	-	0.278	0.064
HCM Control Delay (s/veh)	-	-	32.5	10.7
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	1.1	0.2

HCM 7th Signalized Intersection Summary
6: Inglewood Ave & 135th St

09/24/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Volume (veh/h)	55	26	979	145	24	1202
Future Volume (veh/h)	55	26	979	145	24	1202
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	34	1009	149	26	1307
Peak Hour Factor	0.77	0.77	0.97	0.97	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	89	42	2969	1324	61	2798
Arrive On Green	0.08	0.08	1.00	1.00	0.84	0.84
Sat Flow, veh/h	1148	550	3647	1585	36	3434
Grp Volume(v), veh/h	106	0	1009	149	699	634
Grp Sat Flow(s),veh/h/ln	1714	0	1777	1585	1768	1617
Q Serve(g_s), s	7.3	0.0	0.0	0.0	0.0	12.7
Cycle Q Clear(g_c), s	7.3	0.0	0.0	0.0	11.8	12.7
Prop In Lane	0.67	0.32		1.00	0.04	
Lane Grp Cap(c), veh/h	132	0	2969	1324	1508	1351
V/C Ratio(X)	0.80	0.00	0.34	0.11	0.46	0.47
Avail Cap(c_a), veh/h	371	0	2969	1324	1508	1351
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.70	0.70	1.00	1.00
Uniform Delay (d), s/veh	54.5	0.0	0.0	0.0	2.6	2.7
Incr Delay (d2), s/veh	10.7	0.0	0.2	0.1	1.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.1	0.0	3.1	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	65.1	0.0	0.2	0.1	3.6	3.8
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	106		1158			1333
Approach Delay, s/veh	65.1		0.2			3.7
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		105.7			105.7	14.3
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		2.0			14.7	9.3
Green Ext Time (p_c), s		10.0			13.6	0.2
Intersection Summary						
HCM 7th Control Delay, s/veh			4.7			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

09/24/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	↑
Traffic Volume (veh/h)	231	156	24	867	1231	53
Future Volume (veh/h)	231	156	24	867	1231	53
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	262	177	26	942	1368	59
Peak Hour Factor	0.88	0.88	0.92	0.92	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	219	148	67	2252	2473	1103
Arrive On Green	0.22	0.22	0.70	0.70	1.00	1.00
Sat Flow, veh/h	1010	683	50	3322	3647	1585
Grp Volume(v), veh/h	440	0	492	476	1368	59
Grp Sat Flow(s),veh/h/ln	1697	0	1670	1617	1777	1585
Q Serve(g_s), s	26.0	0.0	0.0	15.2	0.0	0.0
Cycle Q Clear(g_c), s	26.0	0.0	13.0	15.2	0.0	0.0
Prop In Lane	0.60	0.40	0.05			1.00
Lane Grp Cap(c), veh/h	368	0	1194	1125	2473	1103
V/C Ratio(X)	1.20	0.00	0.41	0.42	0.55	0.05
Avail Cap(c_a), veh/h	368	0	1194	1125	2473	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.85	0.85
Uniform Delay (d), s/veh	47.0	0.0	7.5	7.9	0.0	0.0
Incr Delay (d2), s/veh	112.0	0.0	1.1	1.2	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	0.0	5.0	5.1	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	159.0	0.0	8.6	9.0	0.8	0.1
LnGrp LOS	F		A	A	A	A
Approach Vol, veh/h	440			968	1427	
Approach Delay, s/veh	159.0			8.8	0.7	
Approach LOS	F			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		89.0		31.0		89.0
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		17.2		28.0		2.0
Green Ext Time (p_c), s		8.2		0.0		16.0
Intersection Summary						
HCM 7th Control Delay, s/veh			28.1			
HCM 7th LOS			C			

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

08/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕	↗		↕↕	↗
Traffic Volume (veh/h)	10	2	12	19	7	24	9	573	9	6	683	9
Future Volume (veh/h)	10	2	12	19	7	24	9	573	9	6	683	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	2	13	21	8	26	10	623	10	7	742	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	8	53	74	28	91	97	1223	563	93	1231	563
Arrive On Green	0.06	0.06	0.06	0.11	0.11	0.11	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	712	129	842	647	246	801	16	3445	1585	9	3467	1585
Grp Volume(v), veh/h	26	0	0	55	0	0	338	295	10	401	348	10
Grp Sat Flow(s),veh/h/ln	1683	0	0	1694	0	0	1844	1617	1585	1859	1617	1585
Q Serve(g_s), s	0.6	0.0	0.0	1.2	0.0	0.0	0.0	5.8	0.2	0.0	7.2	0.2
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.2	0.0	0.0	5.8	5.8	0.2	7.1	7.2	0.2
Prop In Lane	0.42		0.50	0.38		0.47	0.03		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	105	0	0	193	0	0	746	574	563	750	574	563
V/C Ratio(X)	0.25	0.00	0.00	0.29	0.00	0.00	0.45	0.51	0.02	0.53	0.61	0.02
Avail Cap(c_a), veh/h	996	0	0	919	0	0	2532	2193	2149	2579	2193	2149
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	0.0	16.5	0.0	0.0	10.3	10.3	8.5	10.7	10.7	8.5
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.0	0.4	0.7	0.0	0.6	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.5	0.0	0.0	1.8	1.6	0.0	2.2	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.3	0.0	0.0	17.3	0.0	0.0	10.7	11.0	8.5	11.3	11.8	8.5
LnGrp LOS	B			B			B	B	A	B	B	A
Approach Vol, veh/h		26			55			643			759	
Approach Delay, s/veh		19.3			17.3			10.8			11.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.4		10.6		21.4		8.5				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		7.8		3.2		9.2		2.6				
Green Ext Time (p_c), s		4.3		0.2		5.2		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.6								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd St

08/16/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	3	19	11	597	692	11
Future Vol, veh/h	3	19	11	597	692	11
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	21	12	649	752	12

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1104	379	767	0	-	0
Stage 1	755	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	205	619	842	-	-	-
Stage 1	425	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	201	617	840	-	-	-
Mov Cap-2 Maneuver	201	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	684	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.88	0.32	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	65	-	481	-	-
HCM Lane V/C Ratio	0.014	-	0.05	-	-
HCM Control Delay (s/veh)	9.3	0.2	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

08/16/2024

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	11	31	573	0	15	709
Future Vol, veh/h	11	31	573	0	15	709
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	34	623	0	16	771

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1044	314	0	0	626	0
Stage 1	626	-	-	-	-	-
Stage 2	418	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	225	681	-	-	952	-
Stage 1	495	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	219	679	-	-	949	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	619	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v14.17		0	0.37
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	438	75
HCM Lane V/C Ratio	-	-	0.104	0.017
HCM Control Delay (s/veh)	-	-	14.2	8.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1

HCM 7th TWSC
4: Inglewood Ave & 134th St

08/16/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	↑
Traffic Vol, veh/h	7	11	4	576	698	12
Future Vol, veh/h	7	11	4	576	698	12
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	12	4	626	759	13

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1084	383	776	0	-	0
Stage 1	763	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	211	615	836	-	-	-
Stage 1	421	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	208	612	833	-	-	-
Mov Cap-2 Maneuver	208	-	-	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	705	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v15.92		0.12	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	25	-	349	-	-
HCM Lane V/C Ratio	0.005	-	0.056	-	-
HCM Control Delay (s/veh)	9.3	0.1	15.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th St

08/16/2024

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	12	35	542	16	18	708
Future Vol, veh/h	12	35	542	16	18	708
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	589	17	20	770

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1021	303	0	0	615	0
Stage 1	597	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	232	693	-	-	961	-
Stage 1	513	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	225	688	-	-	954	-
Mov Cap-2 Maneuver	225	-	-	-	-	-
Stage 1	509	-	-	-	-	-
Stage 2	612	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v14.01		0	0.43
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	451	89
HCM Lane V/C Ratio	-	-	0.113	0.021
HCM Control Delay (s/veh)	-	-	14	8.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

08/16/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵		↕	↵		↕
Traffic Volume (veh/h)	92	31	543	40	14	708
Future Volume (veh/h)	92	31	543	40	14	708
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	34	590	43	15	770
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	121	41	2906	1296	60	2784
Arrive On Green	0.09	0.09	0.82	0.82	0.82	0.82
Sat Flow, veh/h	1280	435	3647	1585	35	3490
Grp Volume(v), veh/h	135	0	590	43	416	369
Grp Sat Flow(s),veh/h/ln	1728	0	1777	1585	1823	1617
Q Serve(g_s), s	9.2	0.0	4.4	0.6	0.0	6.5
Cycle Q Clear(g_c), s	9.2	0.0	4.4	0.6	6.3	6.5
Prop In Lane	0.74	0.25		1.00	0.04	
Lane Grp Cap(c), veh/h	164	0	2906	1296	1522	1322
V/C Ratio(X)	0.82	0.00	0.20	0.03	0.27	0.28
Avail Cap(c_a), veh/h	374	0	2906	1296	1522	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	53.3	0.0	2.4	2.0	2.6	2.6
Incr Delay (d2), s/veh	9.9	0.0	0.1	0.0	0.4	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	1.1	0.1	1.8	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	63.2	0.0	2.5	2.1	3.0	3.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	135		633			785
Approach Delay, s/veh	63.2		2.5			3.1
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		103.6			103.6	16.4
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		6.4			8.5	11.2
Green Ext Time (p_c), s		4.6			5.6	0.3
Intersection Summary						
HCM 7th Control Delay, s/veh			8.1			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

08/16/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Volume (veh/h)	82	57	73	502	704	100
Future Volume (veh/h)	82	57	73	502	704	100
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	62	79	546	765	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	106	74	299	2043	2863	1277
Arrive On Green	0.11	0.11	0.81	0.81	1.00	1.00
Sat Flow, veh/h	993	692	323	2620	3647	1585
Grp Volume(v), veh/h	152	0	280	345	765	109
Grp Sat Flow(s),veh/h/ln	1696	0	1241	1617	1777	1585
Q Serve(g_s), s	10.6	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	10.6	0.0	4.1	6.3	0.0	0.0
Prop In Lane	0.59	0.41	0.28			1.00
Lane Grp Cap(c), veh/h	181	0	1038	1303	2863	1277
V/C Ratio(X)	0.84	0.00	0.27	0.27	0.27	0.09
Avail Cap(c_a), veh/h	368	0	1038	1303	2863	1277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.95	0.95
Uniform Delay (d), s/veh	52.6	0.0	2.7	2.9	0.0	0.0
Incr Delay (d2), s/veh	9.9	0.0	0.6	0.5	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	1.3	1.7	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.5	0.0	3.3	3.4	0.2	0.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	152			625	874	
Approach Delay, s/veh	62.5			3.3	0.2	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		102.2		17.8		102.2
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		8.3		12.6		2.0
Green Ext Time (p_c), s		4.9		0.3		6.7
Intersection Summary						
HCM 7th Control Delay, s/veh			7.1			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

08/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕	↗		↕↕	↗
Traffic Volume (veh/h)	19	4	26	30	7	22	10	939	39	25	1256	18
Future Volume (veh/h)	19	4	26	30	7	22	10	939	39	25	1256	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	4	28	33	8	24	11	1021	42	27	1365	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	12	82	90	22	65	59	1818	839	70	1789	839
Arrive On Green	0.09	0.09	0.09	0.10	0.10	0.10	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	665	127	886	870	211	633	11	3436	1585	30	3382	1585
Grp Volume(v), veh/h	53	0	0	65	0	0	548	484	42	736	656	20
Grp Sat Flow(s),veh/h/ln	1678	0	0	1713	0	0	1830	1617	1585	1795	1617	1585
Q Serve(g_s), s	2.0	0.0	0.0	2.4	0.0	0.0	0.0	13.9	0.9	2.3	22.2	0.4
Cycle Q Clear(g_c), s	2.0	0.0	0.0	2.4	0.0	0.0	13.5	13.9	0.9	21.4	22.2	0.4
Prop In Lane	0.40		0.53	0.51		0.37	0.02		1.00	0.04		1.00
Lane Grp Cap(c), veh/h	155	0	0	177	0	0	1021	855	839	1003	855	839
V/C Ratio(X)	0.34	0.00	0.00	0.37	0.00	0.00	0.54	0.57	0.05	0.73	0.77	0.02
Avail Cap(c_a), veh/h	583	0	0	546	0	0	1487	1289	1263	1462	1289	1263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	0.0	28.8	0.0	0.0	10.8	10.9	7.9	12.6	12.9	7.8
Incr Delay (d2), s/veh	1.3	0.0	0.0	1.3	0.0	0.0	0.4	0.6	0.0	1.1	1.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	1.0	0.0	0.0	4.7	4.2	0.3	7.5	6.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.6	0.0	0.0	30.1	0.0	0.0	11.3	11.5	7.9	13.7	14.5	7.8
LnGrp LOS	C			C			B	B	A	B	B	A
Approach Vol, veh/h		53			65			1074			1412	
Approach Delay, s/veh		30.6			30.1			11.2			14.0	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.5		13.1		43.5		12.4				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		15.9		4.4		24.2		4.0				
Green Ext Time (p_c), s		8.4		0.2		12.3		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				13.6								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

08/16/2024

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	12	30	13	989	1270	19
Future Vol, veh/h	12	30	13	989	1270	19
Conflicting Peds, #/hr	0	0	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	33	14	1075	1380	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1955	699	1410	0	-	0
Stage 1	1389	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	56	382	480	-	-	-
Stage 1	196	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	53	379	476	-	-	-
Mov Cap-2 Maneuver	53	-	-	-	-	-
Stage 1	186	-	-	-	-	-
Stage 2	527	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v44.01		0.69	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	47	-	137	-	-
HCM Lane V/C Ratio	0.03	-	0.334	-	-
HCM Control Delay (s/veh)	12.8	0.5	44	-	-
HCM Lane LOS	B	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

08/16/2024

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	12	25	971	23	34	1295
Future Vol, veh/h	12	25	971	23	34	1295
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	27	1055	25	37	1408

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1833	528	0	0	1080
Stage 1	1055	-	-	-	-
Stage 2	778	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	68	495	-	-	641
Stage 1	296	-	-	-	-
Stage 2	414	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	61	495	-	-	641
Mov Cap-2 Maneuver	61	-	-	-	-
Stage 1	296	-	-	-	-
Stage 2	374	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	37.57	0	1.24
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	150	92
HCM Lane V/C Ratio	-	-	0.268	0.058
HCM Control Delay (s/veh)	-	-	37.6	11
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1	0.2

HCM 7th TWSC
4: Inglewood Ave & 134th St

08/16/2024

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	6	19	13	990	1260	21
Future Vol, veh/h	6	19	13	990	1260	21
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	21	14	1076	1370	23

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1950	699	1406	0	-	0
Stage 1	1384	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	56	382	481	-	-	-
Stage 1	198	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	53	377	475	-	-	-
Mov Cap-2 Maneuver	53	-	-	-	-	-
Stage 1	187	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	33.79	0.69	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	47	-	152	-	-
HCM Lane V/C Ratio	0.03	-	0.179	-	-
HCM Control Delay (s/veh)	12.8	0.5	33.8	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th St

08/16/2024

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘		↑↑	↑		↑↑
Traffic Vol, veh/h	8	19	972	36	39	1276
Future Vol, veh/h	8	19	972	36	39	1276
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	21	1057	39	42	1387

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1842	535	0	0	1103
Stage 1	1064	-	-	-	-
Stage 2	778	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	67	490	-	-	629
Stage 1	293	-	-	-	-
Stage 2	413	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	59	486	-	-	625
Mov Cap-2 Maneuver	59	-	-	-	-
Stage 1	291	-	-	-	-
Stage 2	368	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	3.71	0	1.46
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	154	107
HCM Lane V/C Ratio	-	-	0.19	0.068
HCM Control Delay (s/veh)	-	-	33.7	11.2
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.7	0.2

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

08/16/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Volume (veh/h)	57	27	1024	149	25	1252
Future Volume (veh/h)	57	27	1024	149	25	1252
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	29	1113	162	27	1361
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	78	37	3002	1339	61	2815
Arrive On Green	0.07	0.07	1.00	1.00	0.84	0.84
Sat Flow, veh/h	1156	541	3647	1585	36	3418
Grp Volume(v), veh/h	92	0	1113	162	726	662
Grp Sat Flow(s),veh/h/ln	1715	0	1777	1585	1752	1617
Q Serve(g_s), s	6.3	0.0	0.0	0.0	0.0	12.9
Cycle Q Clear(g_c), s	6.3	0.0	0.0	0.0	11.8	12.9
Prop In Lane	0.67	0.32		1.00	0.04	
Lane Grp Cap(c), veh/h	116	0	3002	1339	1511	1366
V/C Ratio(X)	0.79	0.00	0.37	0.12	0.48	0.48
Avail Cap(c_a), veh/h	372	0	3002	1339	1511	1366
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	55.1	0.0	0.0	0.0	2.4	2.5
Incr Delay (d2), s/veh	11.3	0.0	0.2	0.1	1.1	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.1	0.0	2.9	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	66.4	0.0	0.2	0.1	3.5	3.7
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	92		1275			1388
Approach Delay, s/veh	66.4		0.2			3.6
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		106.9			106.9	13.1
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		2.0			14.9	8.3
Green Ext Time (p_c), s		11.8			14.8	0.2
Intersection Summary						
HCM 7th Control Delay, s/veh			4.1			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

08/16/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Volume (veh/h)	239	162	25	910	1282	59
Future Volume (veh/h)	239	162	25	910	1282	59
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	260	176	27	989	1393	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	219	148	66	2251	2473	1103
Arrive On Green	0.22	0.22	0.70	0.70	1.00	1.00
Sat Flow, veh/h	1010	683	49	3320	3647	1585
Grp Volume(v), veh/h	437	0	516	500	1393	64
Grp Sat Flow(s),veh/h/ln	1697	0	1667	1617	1777	1585
Q Serve(g_s), s	26.0	0.0	0.0	16.3	0.0	0.0
Cycle Q Clear(g_c), s	26.0	0.0	13.9	16.3	0.0	0.0
Prop In Lane	0.59	0.40	0.05			1.00
Lane Grp Cap(c), veh/h	368	0	1192	1125	2473	1103
V/C Ratio(X)	1.19	0.00	0.43	0.44	0.56	0.06
Avail Cap(c_a), veh/h	368	0	1192	1125	2473	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.83	0.83
Uniform Delay (d), s/veh	47.0	0.0	7.7	8.0	0.0	0.0
Incr Delay (d2), s/veh	108.9	0.0	1.1	1.3	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	0.0	5.4	5.5	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	155.9	0.0	8.8	9.3	0.8	0.1
LnGrp LOS	F		A	A	A	A
Approach Vol, veh/h	437			1016	1457	
Approach Delay, s/veh	155.9			9.1	0.7	
Approach LOS	F			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		89.0		31.0		89.0
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		18.3		28.0		2.0
Green Ext Time (p_c), s		8.8		0.0		16.6
Intersection Summary						
HCM 7th Control Delay, s/veh			27.0			
HCM 7th LOS			C			

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

09/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕	↗		↕↕	↗
Traffic Volume (veh/h)	8	1	10	18	3	23	8	566	8	5	677	5
Future Volume (veh/h)	8	1	10	18	3	23	8	566	8	5	677	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	1	14	24	4	31	9	615	9	5	720	5
Peak Hour Factor	0.71	0.71	0.71	0.75	0.75	0.75	0.92	0.92	0.92	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	4	56	82	14	106	97	1192	548	93	1200	548
Arrive On Green	0.06	0.06	0.06	0.12	0.12	0.12	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	708	64	901	682	114	881	15	3450	1585	6	3474	1585
Grp Volume(v), veh/h	26	0	0	59	0	0	334	290	9	388	337	5
Grp Sat Flow(s),veh/h/ln	1673	0	0	1678	0	0	1848	1617	1585	1862	1617	1585
Q Serve(g_s), s	0.6	0.0	0.0	1.3	0.0	0.0	0.0	5.8	0.2	0.0	6.9	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.3	0.0	0.0	5.7	5.8	0.2	6.9	6.9	0.1
Prop In Lane	0.42		0.54	0.41		0.53	0.03		1.00	0.01		1.00
Lane Grp Cap(c), veh/h	105	0	0	201	0	0	730	559	548	734	559	548
V/C Ratio(X)	0.25	0.00	0.00	0.29	0.00	0.00	0.46	0.52	0.02	0.53	0.60	0.01
Avail Cap(c_a), veh/h	997	0	0	917	0	0	2561	2209	2165	2610	2209	2165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	16.2	0.0	0.0	10.5	10.5	8.7	10.9	10.9	8.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.0	0.4	0.8	0.0	0.6	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.5	0.0	0.0	1.8	1.6	0.0	2.2	1.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.2	0.0	0.0	17.0	0.0	0.0	10.9	11.3	8.7	11.5	11.9	8.7
LnGrp LOS	B			B			B	B	A	B	B	A
Approach Vol, veh/h		26			59			633			730	
Approach Delay, s/veh		19.2			17.0			11.1			11.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.9		10.8		20.9		8.5				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		7.8		3.3		8.9		2.6				
Green Ext Time (p_c), s		4.2		0.2		5.0		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.8								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

09/24/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	1	17	10	590	686	9
Future Vol, veh/h	1	17	10	590	686	9
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	21	11	648	746	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1095	376	758	0	-	0
Stage 1	749	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	208	622	849	-	-	-
Stage 1	428	-	-	-	-	-
Stage 2	688	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	204	620	846	-	-	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	686	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	11.74	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	60	-	557	-	-
HCM Lane V/C Ratio	0.013	-	0.04	-	-
HCM Control Delay (s/veh)	9.3	0.1	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

09/24/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	10	30	561	0	29	687
Future Vol, veh/h	10	30	561	0	29	687
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	73	73	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	41	616	0	32	747

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1056	311	0	0	619
Stage 1	619	-	-	-	-
Stage 2	436	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	221	685	-	-	957
Stage 1	499	-	-	-	-
Stage 2	619	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	211	683	-	-	954
Mov Cap-2 Maneuver	211	-	-	-	-
Stage 1	498	-	-	-	-
Stage 2	593	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	14.4	0	0.69
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	438	146
HCM Lane V/C Ratio	-	-	0.125	0.033
HCM Control Delay (s/veh)	-	-	14.4	8.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

HCM 7th TWSC
4: Inglewood Ave & 134th St

09/24/2024

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	5	9	3	564	677	8
Future Vol, veh/h	5	9	3	564	677	8
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	12	3	613	728	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1045	368	741	0	-	0
Stage 1	732	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	224	629	862	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	221	627	859	-	-	-
Mov Cap-2 Maneuver	221	-	-	-	-	-
Stage 1	433	-	-	-	-	-
Stage 2	712	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v14.99		0.09	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	19	-	379	-	-
HCM Lane V/C Ratio	0.004	-	0.049	-	-
HCM Control Delay (s/veh)	9.2	0	15	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th St

09/24/2024

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	13	34	524	21	17	691
Future Vol, veh/h	13	34	524	21	17	691
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	44	570	23	18	743

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	986	293	0	0	600	0
Stage 1	578	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	245	704	-	-	973	-
Stage 1	524	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	237	698	-	-	965	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	625	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v14.15		0	0.41
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	454	86
HCM Lane V/C Ratio	-	-	0.134	0.019
HCM Control Delay (s/veh)	-	-	14.2	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

09/24/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵		↑↑	↱		↵↵
Traffic Volume (veh/h)	90	30	530	39	13	692
Future Volume (veh/h)	90	30	530	39	13	692
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	150	50	564	41	14	752
Peak Hour Factor	0.60	0.60	0.94	0.94	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	173	58	2767	1234	56	2658
Arrive On Green	0.13	0.13	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1290	430	3647	1585	32	3499
Grp Volume(v), veh/h	201	0	564	41	407	359
Grp Sat Flow(s),veh/h/ln	1728	0	1777	1585	1829	1617
Q Serve(g_s), s	13.7	0.0	5.0	0.7	0.0	7.6
Cycle Q Clear(g_c), s	13.7	0.0	5.0	0.7	7.4	7.6
Prop In Lane	0.75	0.25		1.00	0.03	
Lane Grp Cap(c), veh/h	231	0	2767	1234	1455	1259
V/C Ratio(X)	0.87	0.00	0.20	0.03	0.28	0.29
Avail Cap(c_a), veh/h	375	0	2767	1234	1455	1259
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.91	0.91	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	3.5	3.0	3.8	3.8
Incr Delay (d2), s/veh	11.7	0.0	0.2	0.0	0.5	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	1.5	0.2	2.4	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.6	0.0	3.6	3.1	4.2	4.4
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	201		605			766
Approach Delay, s/veh	62.6		3.6			4.3
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		98.9			98.9	21.1
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		7.0			9.6	15.7
Green Ext Time (p_c), s		4.4			5.5	0.4
Intersection Summary						
HCM 7th Control Delay, s/veh			11.5			
HCM 7th LOS			B			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

09/24/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Volume (veh/h)	79	54	71	490	689	94
Future Volume (veh/h)	79	54	71	490	689	94
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	87	77	533	749	102
Peak Hour Factor	0.62	0.62	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	145	99	286	1963	2730	1218
Arrive On Green	0.14	0.14	0.77	0.77	1.00	1.00
Sat Flow, veh/h	1002	687	323	2640	3647	1585
Grp Volume(v), veh/h	215	0	276	334	749	102
Grp Sat Flow(s),veh/h/ln	1697	0	1261	1617	1777	1585
Q Serve(g_s), s	14.9	0.0	0.0	7.2	0.0	0.0
Cycle Q Clear(g_c), s	14.9	0.0	4.8	7.2	0.0	0.0
Prop In Lane	0.59	0.40	0.28			1.00
Lane Grp Cap(c), veh/h	245	0	1007	1242	2730	1218
V/C Ratio(X)	0.88	0.00	0.27	0.27	0.27	0.08
Avail Cap(c_a), veh/h	368	0	1007	1242	2730	1218
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.93	0.93
Uniform Delay (d), s/veh	50.3	0.0	3.8	4.1	0.0	0.0
Incr Delay (d2), s/veh	14.6	0.0	0.7	0.5	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.7	2.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	64.9	0.0	4.5	4.6	0.2	0.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	215			610	851	
Approach Delay, s/veh	64.9			4.5	0.2	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		97.7		22.3		97.7
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		9.2		16.9		2.0
Green Ext Time (p_c), s		4.8		0.4		6.4
Intersection Summary						
HCM 7th Control Delay, s/veh			10.1			
HCM 7th LOS			B			

HCM 7th TWSC
8: Driveway 1 & 133rd St

09/24/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	14	15	2	36	4	2
Future Vol, veh/h	14	15	2	36	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	16	2	39	4	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	32	0	67 23
Stage 1	-	-	-	-	23 -
Stage 2	-	-	-	-	43 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1581	-	938 1053
Stage 1	-	-	-	-	999 -
Stage 2	-	-	-	-	979 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1581	-	937 1053
Mov Cap-2 Maneuver	-	-	-	-	937 -
Stage 1	-	-	-	-	999 -
Stage 2	-	-	-	-	978 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.38	8.73
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	973	-	-	1581	-
HCM Lane V/C Ratio	0.007	-	-	0.001	-
HCM Control Delay (s/veh)	8.7	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 7th TWSC
 9: Inglewood Ave & Driveway 2

09/24/2024

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	14	16	551	9	9	668
Future Vol, veh/h	14	16	551	9	9	668
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	17	599	10	10	726

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	986	304	0	0	609	0
Stage 1	604	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	245	692	-	-	966	-
Stage 1	508	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	242	692	-	-	966	-
Mov Cap-2 Maneuver	242	-	-	-	-	-
Stage 1	508	-	-	-	-	-
Stage 2	651	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v15.67		0	0.22
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	370	48
HCM Lane V/C Ratio	-	-	0.088	0.01
HCM Control Delay (s/veh)	-	-	15.7	8.8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4		4	
Traffic Vol, veh/h	6	32	45	2	3	2
Future Vol, veh/h	6	32	45	2	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	35	49	2	3	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	51	0	-	0	98
Stage 1	-	-	-	-	50
Stage 2	-	-	-	-	48
Critical Hdwy	4.12	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	2.218	-	-	-	3.518
Pot Cap-1 Maneuver	1555	-	-	-	901
Stage 1	-	-	-	-	972
Stage 2	-	-	-	-	975
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1555	-	-	-	897
Mov Cap-2 Maneuver	-	-	-	-	897
Stage 1	-	-	-	-	968
Stage 2	-	-	-	-	975

Approach	EB	WB	SB
HCM Control Delay, s/v	1.16	0	8.84
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	284	-	-	-	942
HCM Lane V/C Ratio	0.004	-	-	-	0.006
HCM Control Delay (s/veh)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

09/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↗		↕	↗
Traffic Volume (veh/h)	16	3	23	29	2	21	9	912	38	24	1224	13
Future Volume (veh/h)	16	3	23	29	2	21	9	912	38	24	1224	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	4	32	45	3	32	10	970	40	27	1391	15
Peak Hour Factor	0.73	0.73	0.73	0.65	0.65	0.65	0.94	0.94	0.94	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	11	88	106	7	75	56	1822	840	68	1794	840
Arrive On Green	0.10	0.10	0.10	0.11	0.11	0.11	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	634	115	923	956	64	680	10	3439	1585	30	3386	1585
Grp Volume(v), veh/h	58	0	0	80	0	0	521	459	40	750	668	15
Grp Sat Flow(s),veh/h/ln	1673	0	0	1700	0	0	1832	1617	1585	1800	1617	1585
Q Serve(g_s), s	2.3	0.0	0.0	3.2	0.0	0.0	0.0	13.4	0.9	3.5	23.8	0.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	3.2	0.0	0.0	13.1	13.4	0.9	23.1	23.8	0.3
Prop In Lane	0.38		0.55	0.56		0.40	0.02		1.00	0.04		1.00
Lane Grp Cap(c), veh/h	160	0	0	189	0	0	1021	856	840	1005	856	840
V/C Ratio(X)	0.36	0.00	0.00	0.42	0.00	0.00	0.51	0.54	0.05	0.75	0.78	0.02
Avail Cap(c_a), veh/h	558	0	0	520	0	0	1430	1236	1212	1410	1236	1212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	29.8	0.0	0.0	11.0	11.1	8.2	13.3	13.6	8.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	1.5	0.0	0.0	0.4	0.5	0.0	1.4	2.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.3	0.0	0.0	4.7	4.2	0.3	8.3	7.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.9	0.0	0.0	31.4	0.0	0.0	11.4	11.6	8.2	14.7	15.6	8.0
LnGrp LOS	C			C			B	B	A	B	B	A
Approach Vol, veh/h		58			80			1020			1433	
Approach Delay, s/veh		31.9			31.4			11.4			15.0	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		45.1		14.0		45.1		12.9				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		15.4		5.2		25.8		4.3				
Green Ext Time (p_c), s		7.8		0.3		12.3		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				14.5								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

09/24/2024

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	↑
Traffic Vol, veh/h	9	27	12	960	1237	16
Future Vol, veh/h	9	27	12	960	1237	16
Conflicting Peds, #/hr	0	0	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	96	96	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	34	13	1000	1406	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1940	712	1433	0	-	0
Stage 1	1415	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	57	375	470	-	-	-
Stage 1	190	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	54	372	466	-	-	-
Mov Cap-2 Maneuver	54	-	-	-	-	-
Stage 1	182	-	-	-	-	-
Stage 2	553	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	38.72	0.62	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	44	-	151	-	-
HCM Lane V/C Ratio	0.027	-	0.298	-	-
HCM Control Delay (s/veh)	12.9	0.5	38.7	-	-
HCM Lane LOS	B	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

09/24/2024

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	11	22	940	22	43	1252
Future Vol, veh/h	11	22	940	22	43	1252
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	96	96	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	29	979	23	49	1423

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1788	490	0	0	1002
Stage 1	979	-	-	-	-
Stage 2	809	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	72	524	-	-	687
Stage 1	325	-	-	-	-
Stage 2	398	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	64	524	-	-	687
Mov Cap-2 Maneuver	64	-	-	-	-
Stage 1	325	-	-	-	-
Stage 2	351	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	37.43	0	1.49
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	154	120
HCM Lane V/C Ratio	-	-	0.285	0.071
HCM Control Delay (s/veh)	-	-	37.4	10.6
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1.1	0.2

HCM 7th TWSC
4: Inglewood Ave & 134th St

09/24/2024

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	3	16	12	958	1218	16
Future Vol, veh/h	3	16	12	958	1218	16
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	23	13	1008	1369	18

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1912	698	1401	0	-	0
Stage 1	1383	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	60	383	484	-	-	-
Stage 1	198	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	56	378	477	-	-	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	188	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v25.99		0.61	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	45	-	198	-	-
HCM Lane V/C Ratio	0.026	-	0.135	-	-
HCM Control Delay (s/veh)	12.7	0.5	26	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th St

09/24/2024

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑		↑↑
Traffic Vol, veh/h	8	18	936	39	38	1236
Future Vol, veh/h	8	18	936	39	38	1236
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	36	985	41	43	1389

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1772	500	0	0	1033
Stage 1	992	-	-	-	-
Stage 2	780	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	74	517	-	-	668
Stage 1	319	-	-	-	-
Stage 2	413	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	66	513	-	-	664
Mov Cap-2 Maneuver	66	-	-	-	-
Stage 1	317	-	-	-	-
Stage 2	369	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v36.17		0	1.36
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	166	107
HCM Lane V/C Ratio	-	-	0.312	0.064
HCM Control Delay (s/veh)	-	-	36.2	10.8
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1.3	0.2

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

09/24/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Volume (veh/h)	55	26	989	145	24	1213
Future Volume (veh/h)	55	26	989	145	24	1213
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	34	1020	149	26	1318
Peak Hour Factor	0.77	0.77	0.97	0.97	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	89	42	2969	1324	61	2798
Arrive On Green	0.08	0.08	1.00	1.00	0.84	0.84
Sat Flow, veh/h	1148	550	3647	1585	35	3434
Grp Volume(v), veh/h	106	0	1020	149	705	639
Grp Sat Flow(s),veh/h/ln	1714	0	1777	1585	1768	1617
Q Serve(g_s), s	7.3	0.0	0.0	0.0	0.0	12.9
Cycle Q Clear(g_c), s	7.3	0.0	0.0	0.0	11.9	12.9
Prop In Lane	0.67	0.32		1.00	0.04	
Lane Grp Cap(c), veh/h	132	0	2969	1324	1508	1351
V/C Ratio(X)	0.80	0.00	0.34	0.11	0.47	0.47
Avail Cap(c_a), veh/h	371	0	2969	1324	1508	1351
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	54.5	0.0	0.0	0.0	2.6	2.7
Incr Delay (d2), s/veh	10.7	0.0	0.2	0.1	1.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.1	0.0	3.1	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	65.1	0.0	0.2	0.1	3.7	3.9
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	106		1169			1344
Approach Delay, s/veh	65.1		0.2			3.8
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		105.7			105.7	14.3
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		2.0			14.9	9.3
Green Ext Time (p_c), s		10.2			13.8	0.2
Intersection Summary						
HCM 7th Control Delay, s/veh			4.7			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

09/24/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Volume (veh/h)	231	156	24	877	1242	57
Future Volume (veh/h)	231	156	24	877	1242	57
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	262	177	27	974	1350	62
Peak Hour Factor	0.88	0.88	0.90	0.90	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	219	148	67	2254	2473	1103
Arrive On Green	0.22	0.22	0.70	0.70	1.00	1.00
Sat Flow, veh/h	1010	683	51	3324	3647	1585
Grp Volume(v), veh/h	440	0	509	492	1350	62
Grp Sat Flow(s),veh/h/ln	1697	0	1672	1617	1777	1585
Q Serve(g_s), s	26.0	0.0	0.0	15.9	0.0	0.0
Cycle Q Clear(g_c), s	26.0	0.0	13.7	15.9	0.0	0.0
Prop In Lane	0.60	0.40	0.05			1.00
Lane Grp Cap(c), veh/h	368	0	1195	1125	2473	1103
V/C Ratio(X)	1.20	0.00	0.43	0.44	0.55	0.06
Avail Cap(c_a), veh/h	368	0	1195	1125	2473	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.84	0.84
Uniform Delay (d), s/veh	47.0	0.0	7.6	8.0	0.0	0.0
Incr Delay (d2), s/veh	112.0	0.0	1.1	1.2	0.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	0.0	5.3	5.3	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	159.0	0.0	8.7	9.2	0.7	0.1
LnGrp LOS	F		A	A	A	A
Approach Vol, veh/h	440			1001	1412	
Approach Delay, s/veh	159.0			9.0	0.7	
Approach LOS	F			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		89.0		31.0		89.0
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		17.9		28.0		2.0
Green Ext Time (p_c), s		8.6		0.0		15.6
Intersection Summary						
HCM 7th Control Delay, s/veh			28.0			
HCM 7th LOS			C			

HCM 7th TWSC
8: Driveway 1 & 133rd St

09/24/2024

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	55	10	2	30	3	1
Future Vol, veh/h	55	10	2	30	3	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	11	2	33	3	1

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	71	0	102 65
Stage 1	-	-	-	-	65 -
Stage 2	-	-	-	-	37 -
Critical Hdwy	-	-	4.12	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.318
Pot Cap-1 Maneuver	-	-	1530	-	896 999
Stage 1	-	-	-	-	957 -
Stage 2	-	-	-	-	986 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1530	-	895 999
Mov Cap-2 Maneuver	-	-	-	-	895 -
Stage 1	-	-	-	-	957 -
Stage 2	-	-	-	-	984 -

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.46	8.94
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	919	-	-	1530	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s/veh)	8.9	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 7th TWSC
 9: Inglewood Ave & Driveway 2

09/24/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	9	11	959	6	6	1212
Future Vol, veh/h	9	11	959	6	6	1212
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	12	1042	7	7	1317

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1717	524	0	0	1049
Stage 1	1046	-	-	-	-
Stage 2	672	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	81	498	-	-	659
Stage 1	299	-	-	-	-
Stage 2	469	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	80	498	-	-	659
Mov Cap-2 Maneuver	80	-	-	-	-
Stage 1	299	-	-	-	-
Stage 2	462	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	33.5	0	0.21
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	148	18
HCM Lane V/C Ratio	-	-	0.147	0.01
HCM Control Delay (s/veh)	-	-	33.5	10.5
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4		4	
Traffic Vol, veh/h	4	73	25	1	2	1
Future Vol, veh/h	4	73	25	1	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	79	27	1	2	1

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	28	0	-	0	116 28
Stage 1	-	-	-	-	28 -
Stage 2	-	-	-	-	88 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1585	-	-	-	880 1048
Stage 1	-	-	-	-	995 -
Stage 2	-	-	-	-	935 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1585	-	-	-	878 1048
Mov Cap-2 Maneuver	-	-	-	-	878 -
Stage 1	-	-	-	-	992 -
Stage 2	-	-	-	-	935 -

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	8.89
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	94	-	-	-	928
HCM Lane V/C Ratio	0.003	-	-	-	0.004
HCM Control Delay (s/veh)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

09/23/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕	↗		↕↕	↗
Traffic Volume (veh/h)	10	2	12	19	7	24	9	596	9	6	707	9
Future Volume (veh/h)	10	2	12	19	7	24	9	596	9	6	707	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	2	13	21	8	26	10	648	10	7	768	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	8	53	73	28	91	95	1252	576	92	1260	576
Arrive On Green	0.06	0.06	0.06	0.11	0.11	0.11	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	712	129	842	647	246	801	15	3446	1585	8	3467	1585
Grp Volume(v), veh/h	26	0	0	55	0	0	351	307	10	415	360	10
Grp Sat Flow(s),veh/h/ln	1683	0	0	1694	0	0	1844	1617	1585	1859	1617	1585
Q Serve(g_s), s	0.6	0.0	0.0	1.2	0.0	0.0	0.0	6.1	0.2	0.0	7.5	0.2
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.2	0.0	0.0	6.1	6.1	0.2	7.5	7.5	0.2
Prop In Lane	0.42		0.50	0.38		0.47	0.03		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	105	0	0	192	0	0	760	588	576	764	588	576
V/C Ratio(X)	0.25	0.00	0.00	0.29	0.00	0.00	0.46	0.52	0.02	0.54	0.61	0.02
Avail Cap(c_a), veh/h	980	0	0	904	0	0	2491	2157	2114	2537	2157	2114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	0.0	16.8	0.0	0.0	10.3	10.3	8.4	10.7	10.7	8.4
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.0	0.4	0.7	0.0	0.6	1.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.5	0.0	0.0	1.9	1.7	0.0	2.4	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.6	0.0	0.0	17.6	0.0	0.0	10.7	11.0	8.4	11.3	11.8	8.4
LnGrp LOS	B			B			B	B	A	B	B	A
Approach Vol, veh/h		26			55			668			785	
Approach Delay, s/veh		19.6			17.6			10.8			11.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.0		10.7		22.0		8.6				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		8.1		3.2		9.5		2.6				
Green Ext Time (p_c), s		4.5		0.2		5.5		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				11.6								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

09/23/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	↑
Traffic Vol, veh/h	3	19	11	620	716	11
Future Vol, veh/h	3	19	11	620	716	11
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	21	12	674	778	12

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1142	392	793	0	-	0
Stage 1	781	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	194	607	824	-	-	-
Stage 1	412	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	189	605	821	-	-	-
Mov Cap-2 Maneuver	189	-	-	-	-	-
Stage 1	403	-	-	-	-	-
Stage 2	674	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v13.15		0.33	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	63	-	466	-	-
HCM Lane V/C Ratio	0.015	-	0.051	-	-
HCM Control Delay (s/veh)	9.4	0.2	13.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

09/23/2024

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	11	37	589	0	15	733
Future Vol, veh/h	11	37	589	0	15	733
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	40	640	0	16	797

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1074	323	0	0	643	0
Stage 1	643	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	215	673	-	-	938	-
Stage 1	485	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	209	671	-	-	935	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	484	-	-	-	-	-
Stage 2	609	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v14.15		0	0.37
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	445	72
HCM Lane V/C Ratio	-	-	0.117	0.017
HCM Control Delay (s/veh)	-	-	14.2	8.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

HCM 7th TWSC
4: Inglewood Ave & 134th St

09/23/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	↑
Traffic Vol, veh/h	7	11	4	592	722	12
Future Vol, veh/h	7	11	4	592	722	12
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	12	4	643	785	13

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1119	396	802	0	-	0
Stage 1	789	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	201	603	817	-	-	-
Stage 1	408	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	601	814	-	-	-
Mov Cap-2 Maneuver	198	-	-	-	-	-
Stage 1	404	-	-	-	-	-
Stage 2	698	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	16.4	0.12	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	24	-	335	-	-
HCM Lane V/C Ratio	0.005	-	0.058	-	-
HCM Control Delay (s/veh)	9.4	0.1	16.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th St

09/23/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	14	35	551	22	29	722
Future Vol, veh/h	14	35	551	22	29	722
Conflicting Peds, #/hr	0	0	0	8	8	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	38	599	24	32	785

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1062	307	0	0	631	0
Stage 1	607	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	218	688	-	-	948	-
Stage 1	507	-	-	-	-	-
Stage 2	605	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	207	683	-	-	940	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	503	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v15.01		0	0.69
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	413	139
HCM Lane V/C Ratio	-	-	0.129	0.034
HCM Control Delay (s/veh)	-	-	15	9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

09/23/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Volume (veh/h)	92	31	558	40	14	724
Future Volume (veh/h)	92	31	558	40	14	724
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	100	34	607	43	15	787
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	121	41	2906	1296	59	2785
Arrive On Green	0.09	0.09	0.82	0.82	0.82	0.82
Sat Flow, veh/h	1280	435	3647	1585	34	3491
Grp Volume(v), veh/h	135	0	607	43	425	377
Grp Sat Flow(s),veh/h/ln	1728	0	1777	1585	1823	1617
Q Serve(g_s), s	9.2	0.0	4.5	0.6	0.0	6.6
Cycle Q Clear(g_c), s	9.2	0.0	4.5	0.6	6.4	6.6
Prop In Lane	0.74	0.25		1.00	0.04	
Lane Grp Cap(c), veh/h	164	0	2906	1296	1522	1322
V/C Ratio(X)	0.82	0.00	0.21	0.03	0.28	0.28
Avail Cap(c_a), veh/h	374	0	2906	1296	1522	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	53.3	0.0	2.4	2.0	2.6	2.6
Incr Delay (d2), s/veh	9.9	0.0	0.2	0.0	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	1.1	0.1	1.8	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	63.2	0.0	2.6	2.1	3.0	3.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	135		650			802
Approach Delay, s/veh	63.2		2.5			3.1
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		103.6			103.6	16.4
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		6.5			8.6	11.2
Green Ext Time (p_c), s		4.8			5.8	0.3
Intersection Summary						
HCM 7th Control Delay, s/veh			8.0			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

09/23/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Volume (veh/h)	82	57	73	517	720	100
Future Volume (veh/h)	82	57	73	517	720	100
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	62	79	562	783	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	106	74	292	2049	2863	1277
Arrive On Green	0.11	0.11	0.81	0.81	1.00	1.00
Sat Flow, veh/h	993	692	315	2628	3647	1585
Grp Volume(v), veh/h	152	0	286	355	783	109
Grp Sat Flow(s),veh/h/ln	1696	0	1241	1617	1777	1585
Q Serve(g_s), s	10.6	0.0	0.0	6.6	0.0	0.0
Cycle Q Clear(g_c), s	10.6	0.0	4.2	6.6	0.0	0.0
Prop In Lane	0.59	0.41	0.28			1.00
Lane Grp Cap(c), veh/h	181	0	1038	1303	2863	1277
V/C Ratio(X)	0.84	0.00	0.28	0.27	0.27	0.09
Avail Cap(c_a), veh/h	368	0	1038	1303	2863	1277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.95	0.95
Uniform Delay (d), s/veh	52.6	0.0	2.7	2.9	0.0	0.0
Incr Delay (d2), s/veh	9.9	0.0	0.7	0.5	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	1.3	1.7	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	62.5	0.0	3.3	3.4	0.2	0.1
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	152			641	892	
Approach Delay, s/veh	62.5			3.4	0.2	
Approach LOS	E			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		102.2		17.8		102.2
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		8.6		12.6		2.0
Green Ext Time (p_c), s		5.1		0.3		6.9
Intersection Summary						
HCM 7th Control Delay, s/veh			7.0			
HCM 7th LOS			A			

HCM 7th TWSC
8: Driveway 1 & 133rd St

09/23/2024

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	15	0	0	42	6	0
Future Vol, veh/h	15	0	0	42	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	0	0	46	7	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	62
Stage 1	-	-	-	-	16
Stage 2	-	-	-	-	46
Critical Hdwy	-	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	-	-	3.518
Pot Cap-1 Maneuver	-	0	0	-	944
Stage 1	-	0	0	-	1006
Stage 2	-	0	0	-	977
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	944
Mov Cap-2 Maneuver	-	-	-	-	944
Stage 1	-	-	-	-	1006
Stage 2	-	-	-	-	977

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	8.84
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	944	-	-
HCM Lane V/C Ratio	0.007	-	-
HCM Control Delay (s/veh)	8.8	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

HCM 7th TWSC
 9: Inglewood Ave & Driveway 2

09/23/2024

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	16	580	9	13	709
Future Vol, veh/h	10	16	580	9	13	709
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	17	630	10	14	771

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1049	320	0	0	640	0
Stage 1	635	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	223	676	-	-	940	-
Stage 1	490	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	676	-	-	940	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	624	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.4	0	0.32
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	375	65
HCM Lane V/C Ratio	-	-	0.075	0.015
HCM Control Delay (s/veh)	-	-	15.4	8.9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4		4	
Traffic Vol, veh/h	17	34	47	4	3	6
Future Vol, veh/h	17	34	47	4	3	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	37	51	4	3	7

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	55	0	-	0	127 53
Stage 1	-	-	-	-	53 -
Stage 2	-	-	-	-	74 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1549	-	-	-	867 1014
Stage 1	-	-	-	-	969 -
Stage 2	-	-	-	-	949 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1549	-	-	-	857 1014
Mov Cap-2 Maneuver	-	-	-	-	857 -
Stage 1	-	-	-	-	957 -
Stage 2	-	-	-	-	949 -

Approach	EB	WB	SB
HCM Control Delay, s/v	2.45	0	8.81
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	600	-	-	-	956
HCM Lane V/C Ratio	0.012	-	-	-	0.01
HCM Control Delay (s/veh)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

HCM 7th Signalized Intersection Summary

1: Inglewood Ave & 132nd St

09/23/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕↕	↗		↕↕	↗
Traffic Volume (veh/h)	19	4	26	30	7	22	10	954	39	25	1272	18
Future Volume (veh/h)	19	4	26	30	7	22	10	954	39	25	1272	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	4	28	33	8	24	11	1037	42	27	1383	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	12	82	89	22	65	58	1832	845	69	1802	845
Arrive On Green	0.09	0.09	0.09	0.10	0.10	0.10	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	665	127	886	870	211	633	11	3436	1585	30	3381	1585
Grp Volume(v), veh/h	53	0	0	65	0	0	557	491	42	745	665	20
Grp Sat Flow(s),veh/h/ln	1678	0	0	1713	0	0	1830	1617	1585	1794	1617	1585
Q Serve(g_s), s	2.1	0.0	0.0	2.5	0.0	0.0	0.0	14.2	0.9	2.6	22.7	0.4
Cycle Q Clear(g_c), s	2.1	0.0	0.0	2.5	0.0	0.0	13.8	14.2	0.9	22.0	22.7	0.4
Prop In Lane	0.40		0.53	0.51		0.37	0.02		1.00	0.04		1.00
Lane Grp Cap(c), veh/h	154	0	0	176	0	0	1028	862	845	1010	862	845
V/C Ratio(X)	0.34	0.00	0.00	0.37	0.00	0.00	0.54	0.57	0.05	0.74	0.77	0.02
Avail Cap(c_a), veh/h	577	0	0	540	0	0	1471	1274	1249	1446	1274	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	0.0	29.2	0.0	0.0	10.8	10.9	7.8	12.7	12.9	7.7
Incr Delay (d2), s/veh	1.3	0.0	0.0	1.3	0.0	0.0	0.4	0.6	0.0	1.2	1.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	1.1	0.0	0.0	4.8	4.3	0.3	7.7	7.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.0	0.0	0.0	30.5	0.0	0.0	11.3	11.5	7.8	13.9	14.6	7.7
LnGrp LOS	C			C			B	B	A	B	B	A
Approach Vol, veh/h		53			65			1090			1430	
Approach Delay, s/veh		31.0			30.5			11.3			14.1	
Approach LOS		C			C			B			B	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.2		13.2		44.2		12.4				
Change Period (Y+Rc), s		7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s		55.0		22.0		55.0		24.0				
Max Q Clear Time (g_c+I1), s		16.2		4.5		24.7		4.1				
Green Ext Time (p_c), s		8.6		0.2		12.5		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				13.7								
HCM 7th LOS				B								

HCM 7th TWSC
2: Inglewood Ave & 133rd Street

09/23/2024

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Vol, veh/h	12	30	13	1004	1286	19
Future Vol, veh/h	12	30	13	1004	1286	19
Conflicting Peds, #/hr	0	0	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	33	14	1091	1398	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1981	708	1427	0	-	0
Stage 1	1407	-	-	-	-	-
Stage 2	574	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	54	377	472	-	-	-
Stage 1	192	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	51	374	468	-	-	-
Mov Cap-2 Maneuver	51	-	-	-	-	-
Stage 1	182	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v45.98		0.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	46	-	132	-	-
HCM Lane V/C Ratio	0.03	-	0.345	-	-
HCM Control Delay (s/veh)	12.9	0.5	46	-	-
HCM Lane LOS	B	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-

HCM 7th TWSC
3: Inglewood Ave & 133rd St

09/23/2024

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Vol, veh/h	12	29	982	23	34	1311
Future Vol, veh/h	12	29	982	23	34	1311
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	32	1067	25	37	1425

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1854	534	0	0	1092
Stage 1	1067	-	-	-	-
Stage 2	786	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	65	491	-	-	635
Stage 1	292	-	-	-	-
Stage 2	409	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	59	491	-	-	635
Mov Cap-2 Maneuver	59	-	-	-	-
Stage 1	292	-	-	-	-
Stage 2	370	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	36.93	0	1.26
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	156	91
HCM Lane V/C Ratio	-	-	0.285	0.058
HCM Control Delay (s/veh)	-	-	36.9	11
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1.1	0.2

HCM 7th TWSC
4: Inglewood Ave & 134th St

09/23/2024

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘			↕	↕	↗
Traffic Vol, veh/h	6	19	13	1001	1276	21
Future Vol, veh/h	6	19	13	1001	1276	21
Conflicting Peds, #/hr	0	0	14	0	0	14
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	21	14	1088	1387	23

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1973	707	1424	0	-	0
Stage 1	1401	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	54	377	474	-	-	-
Stage 1	194	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	51	372	468	-	-	-
Mov Cap-2 Maneuver	51	-	-	-	-	-
Stage 1	183	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	34.86	0.71	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	46	-	147	-	-
HCM Lane V/C Ratio	0.03	-	0.184	-	-
HCM Control Delay (s/veh)	12.9	0.5	34.9	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

HCM 7th TWSC
5: Inglewood Ave & 134th St

09/23/2024

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑		↑↑
Traffic Vol, veh/h	9	19	978	40	46	1285
Future Vol, veh/h	9	19	978	40	46	1285
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	25	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	21	1063	43	50	1397

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1868	539	0	0	1114
Stage 1	1070	-	-	-	-
Stage 2	798	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	64	487	-	-	623
Stage 1	291	-	-	-	-
Stage 2	403	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	55	484	-	-	619
Mov Cap-2 Maneuver	55	-	-	-	-
Stage 1	289	-	-	-	-
Stage 2	350	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	38.23	0	1.74
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	138	124
HCM Lane V/C Ratio	-	-	0.22	0.081
HCM Control Delay (s/veh)	-	-	38.2	11.3
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	0.8	0.3

HCM 7th Signalized Intersection Summary

6: Inglewood Ave & 135th St

09/23/2024



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑	↑		↑↑
Traffic Volume (veh/h)	57	27	1034	149	25	1263
Future Volume (veh/h)	57	27	1034	149	25	1263
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	29	1124	162	27	1373
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	78	37	3002	1339	61	2815
Arrive On Green	0.07	0.07	1.00	1.00	0.84	0.84
Sat Flow, veh/h	1156	541	3647	1585	35	3418
Grp Volume(v), veh/h	92	0	1124	162	732	668
Grp Sat Flow(s),veh/h/ln	1715	0	1777	1585	1751	1617
Q Serve(g_s), s	6.3	0.0	0.0	0.0	0.0	13.1
Cycle Q Clear(g_c), s	6.3	0.0	0.0	0.0	12.0	13.1
Prop In Lane	0.67	0.32		1.00	0.04	
Lane Grp Cap(c), veh/h	116	0	3002	1339	1510	1366
V/C Ratio(X)	0.79	0.00	0.37	0.12	0.48	0.49
Avail Cap(c_a), veh/h	372	0	3002	1339	1510	1366
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.69	0.69	1.00	1.00
Uniform Delay (d), s/veh	55.1	0.0	0.0	0.0	2.4	2.5
Incr Delay (d2), s/veh	11.3	0.0	0.2	0.1	1.1	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.1	0.0	3.0	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	66.4	0.0	0.2	0.1	3.5	3.7
LnGrp LOS	E		A	A	A	A
Approach Vol, veh/h	92		1286			1400
Approach Delay, s/veh	66.4		0.2			3.6
Approach LOS	E		A			A
Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		106.9			106.9	13.1
Change Period (Y+Rc), s		5.5			5.5	5.0
Max Green Setting (Gmax), s		83.5			83.5	26.0
Max Q Clear Time (g_c+I1), s		2.0			15.1	8.3
Green Ext Time (p_c), s		12.0			15.1	0.2
Intersection Summary						
HCM 7th Control Delay, s/veh			4.1			
HCM 7th LOS			A			

HCM 7th Signalized Intersection Summary

7: Inglewood Ave & 135th St

09/23/2024



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	↑
Traffic Volume (veh/h)	239	162	25	920	1293	59
Future Volume (veh/h)	239	162	25	920	1293	59
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	260	176	27	1000	1405	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	219	148	65	2252	2473	1103
Arrive On Green	0.22	0.22	0.70	0.70	1.00	1.00
Sat Flow, veh/h	1010	683	48	3321	3647	1585
Grp Volume(v), veh/h	437	0	522	505	1405	64
Grp Sat Flow(s),veh/h/ln	1697	0	1668	1617	1777	1585
Q Serve(g_s), s	26.0	0.0	0.0	16.6	0.0	0.0
Cycle Q Clear(g_c), s	26.0	0.0	14.1	16.6	0.0	0.0
Prop In Lane	0.59	0.40	0.05			1.00
Lane Grp Cap(c), veh/h	368	0	1192	1125	2473	1103
V/C Ratio(X)	1.19	0.00	0.44	0.45	0.57	0.06
Avail Cap(c_a), veh/h	368	0	1192	1125	2473	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.83	0.83
Uniform Delay (d), s/veh	47.0	0.0	7.7	8.1	0.0	0.0
Incr Delay (d2), s/veh	108.9	0.0	1.2	1.3	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	0.0	5.5	5.6	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	155.9	0.0	8.9	9.4	0.8	0.1
LnGrp LOS	F		A	A	A	A
Approach Vol, veh/h	437			1027	1469	
Approach Delay, s/veh	155.9			9.1	0.8	
Approach LOS	F			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		89.0		31.0		89.0
Change Period (Y+Rc), s		5.5		5.0		5.5
Max Green Setting (Gmax), s		83.5		26.0		83.5
Max Q Clear Time (g_c+I1), s		18.6		28.0		2.0
Green Ext Time (p_c), s		9.0		0.0		16.9
Intersection Summary						
HCM 7th Control Delay, s/veh			26.8			
HCM 7th LOS			C			

HCM 7th TWSC
8: Driveway 1 & 133rd St

09/23/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↑	
Traffic Vol, veh/h	57	0	0	37	4	0
Future Vol, veh/h	57	0	0	37	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	0	0	40	4	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	-	-	-	102
Stage 1	-	-	-	-	62
Stage 2	-	-	-	-	40
Critical Hdwy	-	-	-	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	-	-	3.518
Pot Cap-1 Maneuver	-	0	0	-	896
Stage 1	-	0	0	-	961
Stage 2	-	0	0	-	982
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	896
Mov Cap-2 Maneuver	-	-	-	-	896
Stage 1	-	-	-	-	961
Stage 2	-	-	-	-	982

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	9.04
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	896	-	-
HCM Lane V/C Ratio	0.005	-	-
HCM Control Delay (s/veh)	9	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

HCM 7th TWSC
 9: Inglewood Ave & Driveway 2

09/23/2024

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	7	11	1003	6	8	1267
Future Vol, veh/h	7	11	1003	6	8	1267
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	12	1090	7	9	1377

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1799	548	0	0	1097
Stage 1	1093	-	-	-	-
Stage 2	706	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	71	480	-	-	632
Stage 1	283	-	-	-	-
Stage 2	450	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	70	480	-	-	632
Mov Cap-2 Maneuver	70	-	-	-	-
Stage 1	283	-	-	-	-
Stage 2	440	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	33.49	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	146	23
HCM Lane V/C Ratio	-	-	0.134	0.014
HCM Control Delay (s/veh)	-	-	33.5	10.8
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.5	0

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4		4	
Traffic Vol, veh/h	12	75	27	3	1	4
Future Vol, veh/h	12	75	27	3	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	82	29	3	1	4

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	33	0	-	0	139 31
Stage 1	-	-	-	-	31 -
Stage 2	-	-	-	-	108 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1579	-	-	-	855 1043
Stage 1	-	-	-	-	992 -
Stage 2	-	-	-	-	917 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1579	-	-	-	847 1043
Mov Cap-2 Maneuver	-	-	-	-	847 -
Stage 1	-	-	-	-	983 -
Stage 2	-	-	-	-	917 -

Approach	EB	WB	SB
HCM Control Delay, s/v	1.01	0	8.63
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	248	-	-	-	997
HCM Lane V/C Ratio	0.008	-	-	-	0.005
HCM Control Delay (s/veh)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Appendix D – Cumulative Projects List

No.	ITE #	Project Name	Address	Unit	Qty	Daily	AM Peak Hour			PM Peak Hour		
							IN	OUT	TOTAL	IN	OUT	TOTAL
1	210	Detached ADU	5170 W 131st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
2	210	Detached ADU	5107 W 129th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
3	210	Detached ADU	5328 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
4	210	Detached ADU	4840 W 133rd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
5	210	Detached ADU	4833 W 134th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
6	210	Detached ADU	4829 W 134th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
7	210	Detached ADU	5100 W 139th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
8	210	Detached ADU	5013 W 132nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
9	210	Detached ADU	4829 W 137th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
10	210	Detached ADU	4881 W 139th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
11	210	Detached ADU	5522 W 119th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
12	210	Detached ADU	5521 W 119th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
13	210	Detached ADU	5519 W 120th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
14	210	Detached ADU	5506 W 117th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
15	210	Detached ADU	5322 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
16	210	Detached ADU	5501 W 119th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
17	210	Detached ADU	5152 W 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
18	210	Detached ADU	13511 S Shoup Avenue, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
19	210	Detached ADU	5445 W 117th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
20	210	Detached ADU	5403 W 119th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
21	210	Detached ADU	5448 W 118th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
22	210	Detached ADU	4823 141st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
23	210	Detached ADU	5361 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
24	210	Detached ADU	4871 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
25	210	Detached ADU	5173 W 133rd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
26	210	Detached ADU	5318 W 119th Place, Inglewood CA 90304	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57
27	210	Detached ADU	5156 W 134th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
28	210	Detached ADU	5443 W 120th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
29	210	Detached ADU	4817 W 134th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
30	210	Detached ADU	5036 W 123rd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
31	210	Detached ADU	5027 W 135th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
32	210	Detached ADU	5011 W 122nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
33	210	Detached ADU	4869 W 142nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
34	210	Detached ADU	13518 Ocean Gate Avenue, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94

35	210	Detached ADU	5501 W 118th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
36	210	Detached ADU	5425 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
37	210	Detached ADU	5319 W 123rd Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
38	210	Detached ADU	4929 W 129th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
39	210	Detached ADU	5322 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
40	210	Detached ADU	5401 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
41	210	Detached ADU	5007 W 131st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
42	210	Detached ADU	5118 W 124th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
43	210	Detached ADU	5508 W 118th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
44	210	Detached ADU	4847 W 137th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
45	210	Detached ADU	5017 W 122nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
46	210	Detached ADU	5455 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
47	210	Detached ADU	5001 W 138th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
48	210	Detached ADU	5103 Stacy Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
49	210	Detached ADU	4812 W 138th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
50	210	Detached ADU	4818 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
51	210	Detached ADU	4875 W 138th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
52	210	Detached ADU	5026 W 141st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
53	210	Detached ADU	12108 S La Cienega Boulevard, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
54	210	Detached ADU	5106 W 131st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
55	210	Detached ADU	4864 W 134th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
56	210	Detached ADU	4871 W 137th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
57	210	Detached ADU	13100 S Shoup Avenue, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
58	210	Detached ADU	4852 131st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
59	210	Detached ADU	5506 W 123rd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
60	210	Detached ADU	5319 W 122nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
61	210	Detached ADU	14127 S Shoup Avenue, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
62	210	Detached ADU	5158 W 141st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
63	210	Detached ADU	4817 W 134th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
64	210	Detached ADU	13811 S Inglewood Avenue, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
65	210	Detached ADU	5354 W 118th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
66	210	Detached ADU	5103 W 137th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
67	210	Detached ADU	5135 W 138th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
68	210	Detached ADU	5424 W 120th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
69	210	Detached ADU	5164 W 139th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
70	210	Detached ADU	5501 W 119th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94

71	210	Detached ADU	5345 W 118th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
72	210	Detached ADU	5017 W 123rd Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
73	210	Detached ADU	5239 W 120th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
74	210	Detached ADU	5028 W 135th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
75	210	Detached ADU	5407 W 117th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
76	210	Detached ADU	4828 W 134th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
77	210	Detached ADU	14107 Ocean Gate Avenue, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
78	210	Detached ADU	5526 W 118th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
79	210	Detached ADU	4907 W 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
80	210	Detached ADU	5034 W 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
81	210	Detached ADU	5106 W 136th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
82	210	Detached ADU	4916 W 137th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
83	210	Detached ADU	4928 W 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
84	210	Detached ADU	5012 W 137th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
85	210	Detached ADU	5045 W 126th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
86	210	Detached ADU	4848 W 135th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
87	210	Detached ADU	4844 W 132nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
88	215	Attached ADU	5540 W 124th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
89	210	Detached ADU	5102 W 123rd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
90	210	Detached ADU	4847 W 139th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
91	210	Detached ADU	5245 Pacific Concourse Drive, Los Angeles CA 90045	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
92	210	Detached ADU	5315 W 126th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
93	210	Detached ADU	5037 W 124th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
94	210	Detached ADU	5408 W 118th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
95	210	Detached ADU	4939 W 138th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
96	210	Detached ADU	4914 W 132nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
97	215	Attached ADU	5256 W 123rd Place, Hawthorne CA 90250	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57
98	215	Attached ADU	5247 W 124th Place, Hawthorne CA 90250	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57
99	210	Detached ADU	5445 W 117th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
100	210	Detached ADU	4819 W 137th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
101	210	Detached ADU	5342 W 126th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
102	210	Detached ADU	5230 Pacific Concourse Drive, Los Angeles CA 90045	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
103	210	Detached ADU	11819 Judah Avenue, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
104	210	Detached ADU	5133 W 131st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94
105	210	Detached ADU	5447 W 123rd Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94

106	210+215	Attached and Detached ADU	5313 W 120th Street, Inglewood CA 90304	DU	1	17	0.33	0.85	1.18	0.92	0.59	1.51	
107	210	Detached ADU	4902 W 132nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
108	210+215	Attached and Detached ADU	14113 S Shoup Avenue, Hawthorne CA 90250	DU	1	17	0.33	0.85	1.18	0.92	0.59	1.51	
109	210	Detached ADU	4841 W 137th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
110	210	Detached ADU	5523 W 119th Place, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
111	210	Detached ADU	4943 W 141st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
112	210	Detached ADU	5457 W 117th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
113	215	Detached ADU	5131 W 140th Street, Hawthorne CA 90250	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57	
114	210	Detached ADU	5179 W 137th Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
115	215	Detached ADU	4871 W 137th Street, Hawthorne CA 90250	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57	
116	210	Detached ADU	4864 129th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
117	210	Detached ADU	5443 W 120th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
118	210	Detached ADU	5257 W 123rd Place, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
119	215	Attached ADU	4881 W 134th Street, Hawthorne CA 90250	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57	
120	210	Detached ADU	4861 W 134th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
121	210	Detached ADU	4841 W 134th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
122	210	Detached ADU	5442 W 119th Street, Inglewood CA 90304	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
123	210	Detached ADU	4918 W 141st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
124	215	Attached ADU	4877 W 134th Street, Hawthorne CA 90250	DU	1	7	0.15	0.33	0.48	0.33	0.25	0.57	
125	210	Detached ADU	5146 W 132nd Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
126	210	Detached ADU	5123 W 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
127	210	Detached ADU	4903 W 141st Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
128	210	Detached ADU	5002 W 129th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
129	210	Detached ADU	4906 W 130th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
130	210	Detached ADU	5030 W 140th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
131	210	Detached ADU	5156 W 134th Street, Hawthorne CA 90250	DU	1	9	0.18	0.52	0.7	0.59	0.35	0.94	
Total							1,234	24	67	91	76	45	122

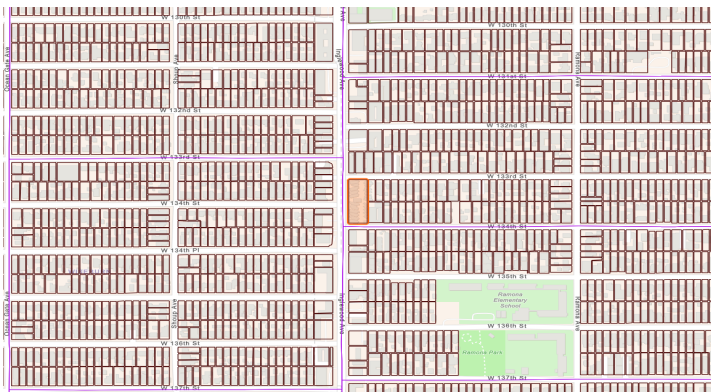
Appendix E – VMT Calculator

PROJECT NAME **McDonalds**
LOCATION Hawthorne
ANALYSIS YEAR 2024

Project Land Uses & Intensities

ITE Trip Gen Land Use	Qty.	Units	Per Capita/ Employee VMT	VMT With Mitigation	Total VMT	Threshold	Significant Impact
934 - Fast-Food Restaurant w/ D.T.	3.781	1,000 Sq Ft	15.74	15.74	616.2	18.67	No
Total			15.74	15.74	616.2		

Land Use Parcel Selection



APN: 404-201-102-6

Total Emissions Estimates

Pollutant	Mobile	Mitigation	With Mitigation	Non Mobile	Total
CO (lb/day)	0	0	0	0	0
ROG (lb/day)	0	0	0	0	0
NOX (lb/day)	0	0	0	0	0
SOX (lb/day)	0	0	0	0	0
PM2.5 (lb/day)	0	0	0	0	0
PM10 (lb/day)	0	0	0	0	0
CO2 (mt/year)	0	0	0	0	0

Project Presumptions of Less than Significant Impact

- Within a 1/2 mile of Major Transit Stop
- Less than 110 Trips per Day

934 - Fast-Food Restaurant w/ D.T.

Land Use Metrics

Metric	Project	Mitigation	With Mitigation
HBW VMT/Emp	15.7	0	15.7
Daily Trips	1781	0	0

Land Use Emission Estimates

Pollutant	Project	Mitigation	With Mitigation	Non Mobile	Total
CO (lb/day)	0	0	0	0	0
ROG (lb/day)	0	0	0	0	0
NOX (lb/day)	0	0	0	0	0
SOX (lb/day)	0	0	0	0	0
PM2.5 (lb/day)	0	0	0	0	0
PM10 (lb/day)	0	0	0	0	0
CO2 (mt/year)	0	0	0	0	0

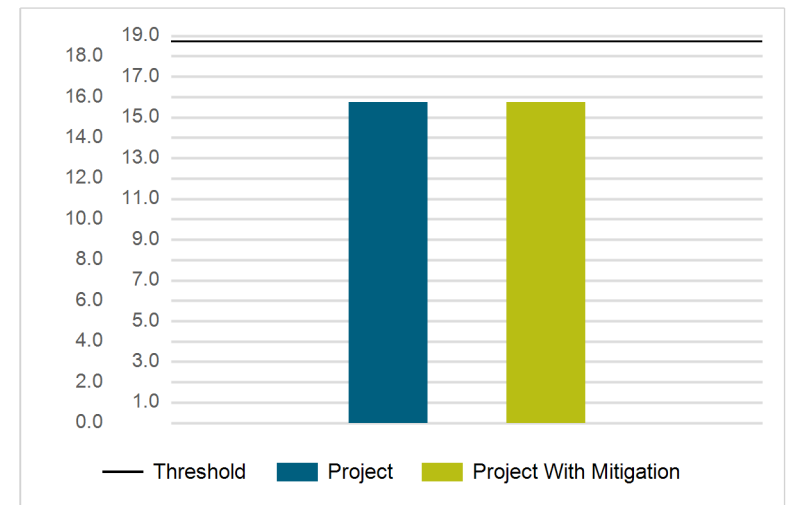
Selected TDM

TDM	Input	Result
No TDM strategies selected.		

Land Use Presumptions of Less than Significant Impact

- Affordable Housing
- Local Serving Land Use

HBW VMT/Emp



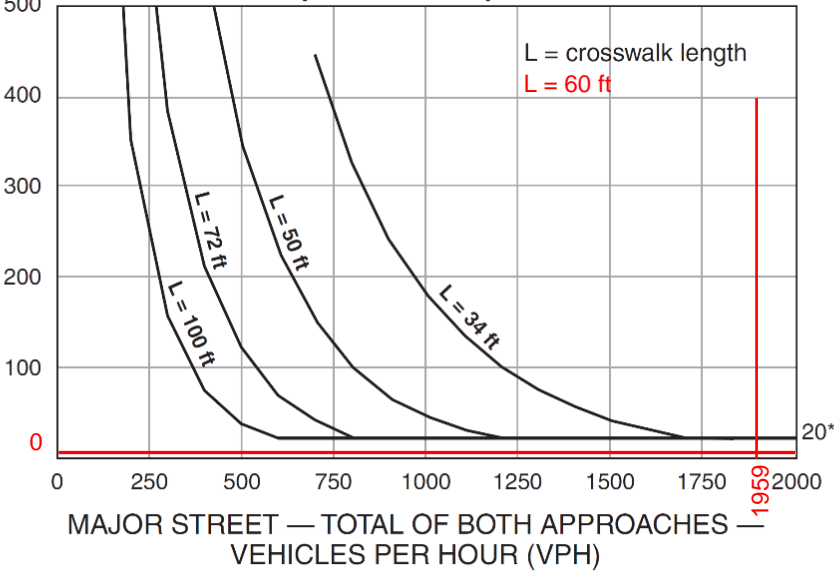
Regional Avg: 21.97

Threshold (15% below Average): 18.67

Appendix F: CA MUTCD PHB Guidelines

Speeds of 35 mph or less

TOTAL OF ALL
PEDESTRIANS CROSSING
THE MAJOR STREET - PEDESTRIANS
PER HOUR (PPH)



* Note: 20 pph applies as the lower threshold volume