

175 BRADLEY PLACE

Town of Palm Beach, FL

TRAFFIC IMPACT STATEMENT

PREPARED FOR:

**Fairfax & Sammons Architects, Inc.
214 Brazilian Avenue
Palm Beach, Florida 33480**

JOB NO. 24-164

DATE: 01/24/2025

Anna Lai, Professional Engineer, State of Florida, License No. 78138 This item has been digitally signed and sealed by Anna Lai, P.E., PTOE, on 01/24/25. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.	
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1.0 SITE DATA

The subject parcel is located at 175 Bradley Place in the Town of Palm Beach, Florida and contains approximately 0.08 acres. The Property Control Number (PCN) for the subject parcel is 50-43-43-15-08-000-0190. The site is currently vested with 2,145 SF of office space. The site is proposed to be modified to 2,049 SF of medical office space and 1 single family dwelling unit, with a project build-out of 2028. On-street parking is available fronting the property on Bradley Place and on Park Avenue. For additional information concerning the site, please refer to the Site Plan prepared by Fairfax & Sammons Architects, Inc.

2.0 PURPOSE OF STUDY

The purpose of this traffic study is to provide a transportation concurrency analysis of the Town of Palm Beach impacted roadway segments and intersections within the project area.

3.0 TRAFFIC GENERATION

The Palm Beach County Unified Land Development Code Article 12 requires that for any application for a site specific development order on property on which there are vested uses shall be subject to the Palm Beach County Traffic Performance Standards to the extent the traffic generation projected for the site specific development order exceeds the traffic generation of the vested uses. The generation rates and capture rates of the vested uses shall be updated to current pro forma traffic generation and passer-by rates and shall be used to calculate vested uses/current approval traffic.

The traffic currently vested to the parcel has been calculated in accordance with the traffic generation rates listed in the *ITE Trip Generation Manual, 11th Edition* and provided by the Palm Beach County Engineering Traffic Division as shown in Tables 1, 2, and 3. Table 1 shows the daily traffic generation associated with the existing/vested development in trips per day (tpd). Tables 2 and 3 show the AM and PM peak hour traffic generation, respectively, in peak hour trips (pht). The traffic generated by the vested development may be summarized as follows:

Existing/Vested Development

Daily Traffic Generation	=	28 tpd
AM Peak Hour Traffic Generation (In/Out)	=	4 pht (3 In/1 Out)
PM Peak Hour Traffic Generation (In/Out)	=	4 pht (2 In/2 Out)

The traffic to be generated by the proposed site modifications has also been calculated in accordance with the traffic generation rates listed in the *ITE Trip Generation Manual, 11th Edition* and rates published by the Palm Beach County Engineering Traffic Division as shown in Tables 4, 5, and 6. Table 4 shows the daily traffic generation associated with the proposed plan of development. Tables 5 and 6 show the AM and PM peak hour traffic generation, respectively. The traffic to be generated by the proposed plan of development may be summarized as follows:

Proposed Plan of Development

Daily Traffic Generation	=	10 tpd
AM Peak Hour Traffic Generation (In/Out)	=	6 pht (5 In/1 Out)
PM Peak Hour Traffic Generation (In/Out)	=	8 pht (3 In/5 Out)

The decrease in traffic generation as a result of the proposed site modifications is shown in Table 7 and may be summarized as follows:

Change to Vested Development

Daily Traffic Generation	=	18 tpd DECREASE
AM Peak Hour Traffic Generation (In/Out)	=	2 pht INCREASE
PM Peak Hour Traffic Generation (In/Out)	=	4 pht INCREASE

4.0 TRIP DISTRIBUTION

The project trips were distributed and assigned on the surrounding roadway network as shown in Figure 1 attached to this report.

5.0 LINK ANALYSIS

Link analysis was performed for links within the project radius and the levels of service were found to be within the 2028 background conditions, without project trips. See Appendix B for details.

6.0 INTERSECTION ANALYSIS

Intersection analysis was performed at the following intersections:

Sunrise Avenue at Bradley Place
Sunrise Avenue at North County Road

The analysis was performed using Synchro 12 software with HCM 7th Edition. The existing traffic counts were taken from the Town of Palm Beach Traffic Analyses completed by The Corradino Group. All traffic counts were collected in March 2024. The traffic counts were collected from 7:30 to 11:00 AM and from 3:00 to 5:30 PM. The highest one hour of traffic in the AM and PM was used in the analysis. The background traffic volumes were taken from the Paramount traffic study and included approved projects within the Town and also approved projects from the City of West Palm Beach. The background traffic used the highest of the historical growth rate of 2.33% or the committed trips plus 1%. The traffic analysis was performed for existing conditions, background conditions and total traffic conditions and is summarized as follows:

Table 10 – Existing Conditions (2024) Operational Analysis

Intersection	Intersection Control	Movement	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
Bradley Pl at Sunrise Ave	Signal	Intersection	11.8	B	18.3	B
N County Rd at Sunrise Ave	Signal	Intersection	19.9	B	11.7	B

Table 11 – Background Conditions Year (2028) Operational Analysis

Intersection	Intersection Control	Movement	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
Bradley Pl at Sunrise Ave	Signal	Intersection	12.1	B	19.4	B
N County Rd at Sunrise Ave	Signal	Intersection	20.7	C	12.2	B

Table 12 – Total Conditions Year (2028) Operational Analysis

Intersection	Intersection Control	Movement	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
Bradley Pl at Sunrise Ave	Signal	Intersection	12.1	B	19.4	B
N County Rd at Sunrise Ave	Signal	Intersection	20.7	C	12.2	B

As shown in Tables 10–12, all study intersections will operate at Level of C or better for both peak hours and for existing and future traffic scenarios.

7.0 SITE RELATED IMPROVEMENTS

The AM and PM peak hour volumes at the project entrances for the overall development with no reduction for pass by credits are shown in Tables 5 and 6 and may be summarized as follows:

**Directional
Distribution
(Trips In/Out)**

AM Peak Hour = 5 / 1
PM Peak Hour = 3 / 5

As previously mentioned, on-street parking is available fronting the property on Bradley Place and on Park Avenue. Based on the Palm Beach County Engineering Guidelines used in determining the need for turn lanes of 75 right turns or 30 left turns in the peak hour, no additional turn lanes are warranted or recommended.

8.0 CONCLUSION

As shown in Table 7, the proposed modifications will result in a decrease of 18 daily trips, an increase of 2 AM peak hour trips, and an increase of 4 PM peak hour trip from the existing/vested development. The proposed peak hour trips are negligible and will have an insignificant impact on the surrounding roadways and is therefore approvable with regard to the Palm Beach County Traffic Performance Standards. As less than 20 peak hour trips are estimated, additional analysis is not required.

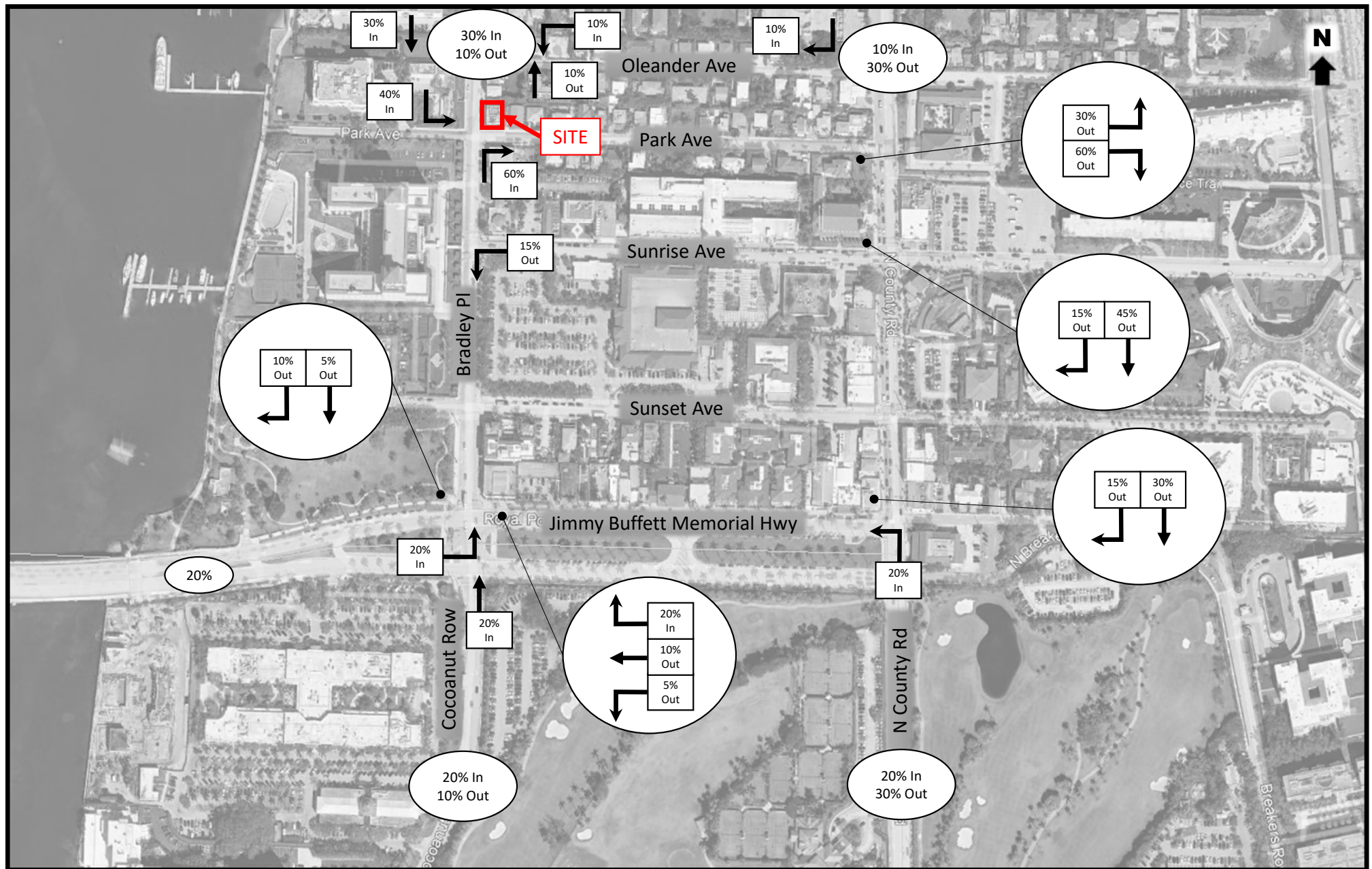


Figure 1 - Trip Distribution
 175 Bradley Place
 Project # 24-164

Legend	
XX	AM Peak Hour
(XX)	PM Peak Hour
XXX	ADT

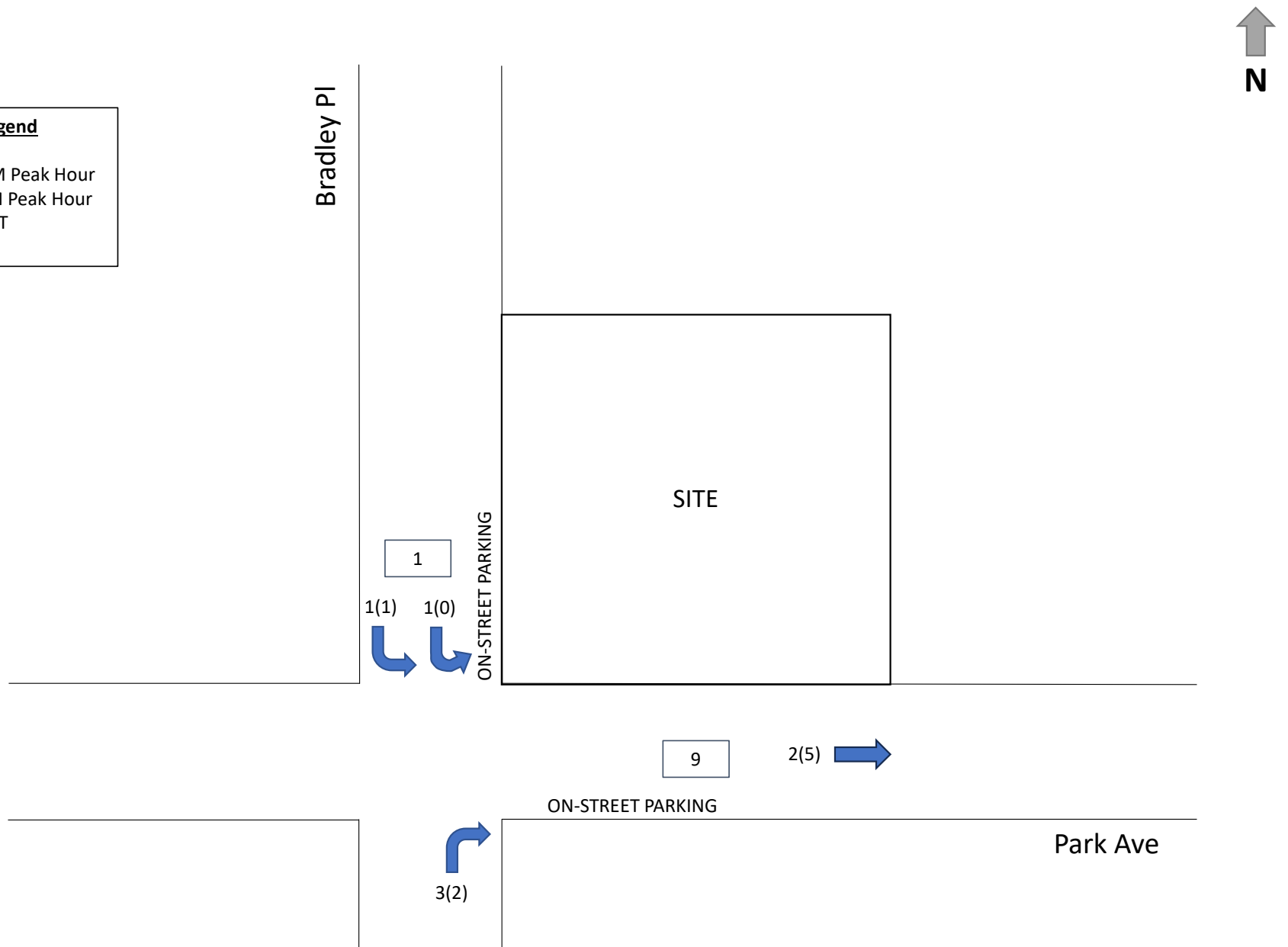


Figure 2 – Driveway Volumes
 175 Bradley Place
 Project # 24-164

EXISTING/VESTED DEVELOPMENT

TABLE 1 - Daily Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split		Gross Trips	Internalization		External Trips (Driveway Trips)	Pass-by		Net Trips
					In	Out		%	Total		%	Trips	
Small Office Building (≤10k SF GFA)	712	2,145	S.F.	14.39			31		0	31	10%	3	28
			Grand Totals:				31	0.0%	0	31	10%	3	28

TABLE 2 - AM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity	Rate/Equation	Dir Split		Gross Trips			Internalization				External Trips (Driveway Trips)			Pass-by		Net Trips		
				In	Out	In	Out	Total	%	In	Out	Total	In	Out	Total	%	Trips	In	Out	Total
Small Office Building (≤10k SF GFA)	712	2,145	S.F.	0.82	0.18	3	1	4	0.0%	0	0	0	3	1	4	10%	0	3	1	4
		Grand Totals:				3	1	4	0.0%	0	0	0	3	1	4	0%	0	3	1	4

TABLE 3 - PM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity	Rate/Equation	Dir Split		Gross Trips			Internalization				External Trips (Driveway Trips)			Pass-by		Net Trips		
				In	Out	In	Out	Total	%	In	Out	Total	In	Out	Total	%	Trips	In	Out	Total
Small Office Building (≤10k SF GFA)	712	2,145	S.F.	0.34	0.66	2	3	5	0.0%	0	0	0	2	3	5	10%	1	2	2	4
		Grand Totals:				2	3	5	0.0%	0	0	0	2	3	5	20%	1	2	2	4

PROPOSED DEVELOPMENT

TABLE 4 - Daily Traffic Generation

Landuse	ITE Code	Intensity	Rate/Equation	Dir Split		Gross Trips	Internalization		External Trips (Driveway Trips)	Pass-by		Net Trips
				In	Out		%	Total		%	Trips	
Single Family Detached	210	1	Dwelling Units	10		10		0	10	0%	0	10
Medical Office (Stand-Alone)	720	2,049	S.F.	T=42.97(X)-108.01		0		0	0	10%	0	0
				Grand Totals:		10	0.0%	0	10	0%	0	10

TABLE 5 - AM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity	Rate/Equation	Dir Split		Gross Trips			Internalization				External Trips (Driveway Trips)			Pass-by		Net Trips		
				In	Out	In	Out	Total	%	In	Out	Total	In	Out	Total	%	Trips	In	Out	Total
Single Family Detached	210	1	Dwelling Units	0.26	0.74	0	1	1	0.0%	0	0	0	0	1	1	0%	0	0	1	1
Medical Office (Stand-Alone)	720	2,049	S.F.	0.79	0.21	5	1	6	0.0%	0	0	0	5	1	6	10%	1	5	0	5
Grand Totals:						5	2	7	0.0%	0	0	0	5	2	7	14%	1	5	1	6

TABLE 6 - PM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity	Rate/Equation	Dir Split		Gross Trips			Internalization				External Trips (Driveway Trips)			Pass-by		Net Trips		
				In	Out	In	Out	Total	%	In	Out	Total	In	Out	Total	%	Trips	In	Out	Total
Single Family Detached	210	1	Dwelling Units	0.63	0.37	1	0	1	0.0%	0	0	0	1	0	1	0%	0	1	0	1
Medical Office (Stand-Alone)	720	2,049	S.F.	0.30	0.70	2	6	8	0.0%	0	0	0	2	6	8	10%	1	2	5	7
Grand Totals:						3	6	9	0.0%	0	0	0	3	6	9	11%	1	3	5	8

TABLE 7
TRAFFIC GENERATION INCREASE

	DAILY	AM PEAK HOUR			PM PEAK HOUR		
		TOTAL	IN	OUT	TOTAL	IN	OUT
EXISTING DEVELOPMENT =	28	4	3	1	4	2	2
PROPOSED DEVELOPMENT =	10	6	5	1	8	3	5
INCREASE =	-18	2	2	0	4	1	3



APPENDIX A

SITE PLAN

Property Detail

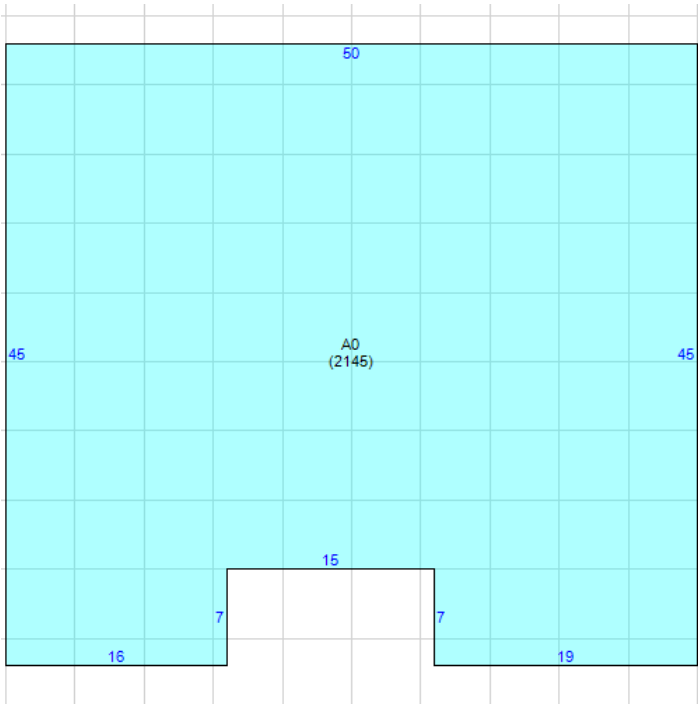
Parcel Control Number : 50-43-43-15-08-000-0190
Owners : DOCPALMBEACH PLLC
Mailing Address : 175 BRADLEY PL
PALM BEACH FL 33480 3785
Location Address : 175 BRADLEY PL
Book/Page : 34986 / 52
Sale Date : APR-2024
Legal Description : BUNGALOW PARK ADD LT 19
Property Use Code : 1700—OFFICE BLDG-NON MEDICAL 1 TO 3 STORIES
Zoning : C-TS—COMMERCIAL TOWN SERVING (50-PALM BEACH)
Total Square Feet : 2145
Acres : .08

Building Details

Subarea and Square Footage for Building 1

Description	square Footage
OFFICES	2145
Total Square Footage	2145

Sketch for Building 1



Property Extra Feature

Description	Year Built	Units
No Extra Feature Available		

Structural Element for Building 1

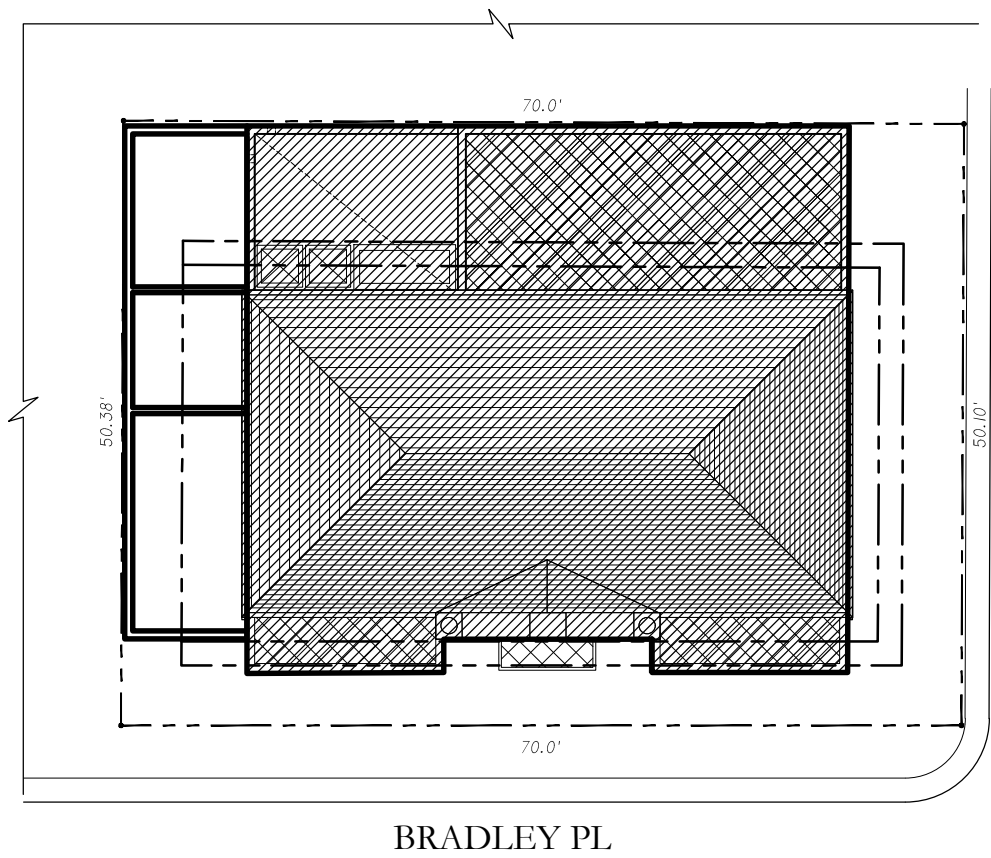
Year Built	1932
OFFICE BLDG L/R 1-4S	2145

Tax Year		2024	
Improvement Value	\$904,190		
Land Value	\$2,109,600	AD VALOREM	\$38,405
Total Market Value	\$3,013,790	NON AD VALOREM	\$1,635
Assessed Value	\$2,264,502	TOTAL TAX	\$40,040
Exemption Amount	\$0		
Taxable Value	\$2,264,502		

AREA CALCULATIONS:

	CONDITIONED	UNCONDITIONED
FIRST FLOOR - MED. OFFICE INTERIOR	2,049 FT ²	
SECOND FLOOR - RESIDENTIAL INTERIOR	1,250 FT ²	
TERRACES		426 FT ²
BALCONY		18 FT ²
SUBTOTAL	3,299 FT ²	444 FT ²

TOTAL AREA: APPROX. 3,743 FT²



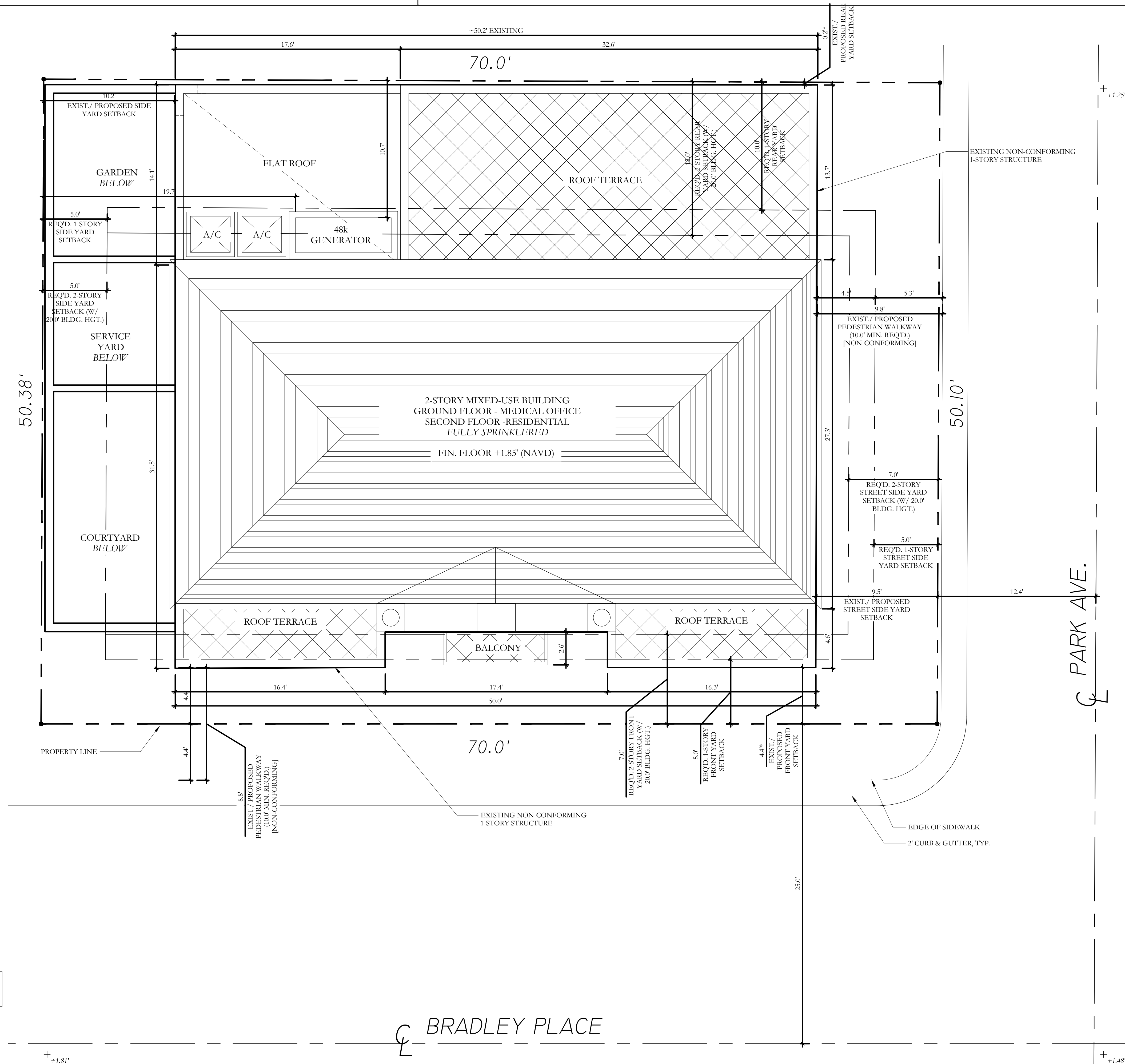
LOT AREA: 3500 SF
BUILDING AREA: 2249 SF
64% LOT COVERAGE

2 LOT COVERAGE DIAGRAM

1/16"=1'-0"

1 PROPOSED SITE PLAN

1/4"=1'-0"



NOTE: ELEVATIONS
REFERENCED TO NAVD
SURVEY ELEVATIONS

LEGEND:

+5.50'	EXISTING SPOT ELEVATION
+5'-6"	PROPOSED SPOT ELEVATION

NOTE:
REFER TO CIVIL
ENGINEERING DRAWINGS
FOR ADDITIONAL GRADING
INFORMATION

DRC SECOND SUBMITTAL	12/30/2024
DRC FIRST SUBMITTAL	11/14/2024
DRC PRE-APPLICATION	10/21/2024

ZONING CASE NUMBER:
ZON-24-0067

FILE NUMBER:
ARC-24-0111

175 BRADLEY
PLACE
PALM BEACH, FLORIDA 33480

SHEET TITLE
PROPOSED SITE PLAN

DATE 9/30/2024	SHEET NO. A-001
SCALE 1/4"=1'-0"	
BY MC, MRM	



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APPENDIX B

LINK ANALYSIS

TABLE 8
TOWN ROADWAY SEGMENT ANALYSIS
AM PEAK HOUR

2028 BUILD OUT
TOTAL AM PEAK HOUR PROJECT TRIPS (ENTERING) = 2
TOTAL AM PEAK HOUR PROJECT TRIPS (EXITING) = 0

ROADWAY	FROM	TO	FACILITY TYPE	2024 PEAK HOUR VOLUME	ROAD CLASS	LOS C		LOS D		LOS E		EXISTING		2028		PROJECT DISTRIBUTION	IN/OUT	AM PEAK HOUR		
						PEAK HOUR CAPACITY	V/C RATIO	PEAK HOUR CAPACITY	V/C RATIO	PEAK HOUR CAPACITY	V/C RATIO	PEAK HOUR LOS	BCKGRD TRAFFIC ³	TOTAL BCKGRD TRAFFIC	2028 BCKGRD LOS			DIRECTIONAL PROJECT TRIPS	2028 TOTAL TRAFFIC	2028 TOTAL LOS
SUNRISE AVENUE ^{1,4}	BRADLEY PLACE	COUNTY ROAD	1L COL - One Way	201	II	333	0.60	675	0.30	720	0.28	C	19	220	C	15%	OUT	0	220	C
SUNSET AVENUE ^{1,4}	BRADLEY PLACE	COUNTY ROAD	1L COL - One Way	201	II	333	0.60	675	0.30	720	0.28	C	19	220	C	0%	IN	0	220	C
JIMMY BUFFETT MEMORIAL HIGHWAY ²	BRADLEY PLACE	COUNTY ROAD	4L ART - Divided	1307	II	1310	1.00	2920	0.45	3040	0.43	C	282	1589	D	20% IN + 15% OUT		0	1589	D
BRADLEY PLACE ²	SEMINOLE AVENUE	PARK AVENUE	2L COL - Undivided	1249	II	594	2.10	1197	1.04	1269	0.98	E	79	1328	F	40% IN + 10% OUT		1	1329	F
BRADLEY PLACE ²	PARK AVENUE	SUNRISE AVENUE	2L COL - Undivided	1249	II	594	2.10	1197	1.04	1269	0.98	E	79	1328	F	60%	IN	1	1329	F
BRADLEY PLACE ²	SUNRISE AVENUE	SUNSET AVENUE	2L COL - Undivided	1249	II	594	2.10	1197	1.04	1269	0.98	E	79	1328	F	60% IN + 15% OUT		1	1329	F
BRADLEY PLACE ²	SUNSET AVENUE	JIMMY BUFFETT MEMORIAL HWY	2L COL - Undivided	1249	II	594	2.10	1197	1.04	1269	0.98	E	100	1349	F	60% IN + 15% OUT		1	1350	F
COUNTY ROAD ²	SEMINOLE AVENUE	PARK AVENUE	4L ART - Undivided	1594	II	983	1.62	2190	0.73	2280	0.70	D	125	1719	D	10% IN + 30% OUT		0	1719	D
COUNTY ROAD ²	PARK AVENUE	SUNRISE AVENUE	4L ART - Undivided	1594	II	983	1.62	2190	0.73	2280	0.70	D	125	1719	D	60%	OUT	0	1719	D
COUNTY ROAD ²	SUNRISE AVENUE	SUNSET AVENUE	4L ART - Undivided	1594	II	983	1.62	2190	0.73	2280	0.70	D	125	1719	D	45%	OUT	0	1719	D
COUNTY ROAD ²	SUNSET AVENUE	JIMMY BUFFETT MEMORIAL HWY	4L ART - Undivided	1594	II	983	1.62	2190	0.73	2280	0.70	D	136	1730	D	45%	OUT	0	1730	D

Notes:
1. 2020 FDOT Q/LOS Tables utilized for Levels of Service thresholds.
2. Existing traffic volumes and levels of service from 2024 Annual Traffic Count Update Report completed by Kimley Horn.
3. Background traffic derived from intersection development sheets and from the Palm Beach Synagogue Traffic Impact Statement by Simmons & White, dated 12/20/24.
4. Sunrise Avenue and Sunset Avenue existing volumes derived from intersection counts.

TABLE 9
TOWN ROADWAY SEGMENT ANALYSIS
PM PEAK HOUR

2028 BUILD OUT
TOTAL PM PEAK HOUR PROJECT TRIPS (ENTERING) = 1
TOTAL PM PEAK HOUR PROJECT TRIPS (EXITING) = 3

ROADWAY	FROM	TO	FACILITY TYPE	2024 PEAK HOUR VOLUME	ROAD CLASS	LOS C		LOS D		LOS E		EXISTING PEAK HOUR LOS	2028 BCKGRD TRAFFIC ³	2028 TOTAL BCKGRD TRAFFIC	2028 BCKGRD LOS	PROJECT DISTRIBUTION	IN/OUT	PM PEAK HOUR		
						PEAK HOUR CAPACITY	V/C RATIO	PEAK HOUR CAPACITY	V/C RATIO	PEAK HOUR CAPACITY	V/C RATIO							DIRECTIONAL PROJECT TRIPS	2028 TOTAL TRAFFIC	2028 TOTAL LOS
SUNRISE AVENUE ^{1,4}	BRADLEY PLACE	COUNTY ROAD	1L COL - One Way	364	II	333	1.09	675	0.54	720	0.51	C	35	399	D	15%	OUT	0	399	D
SUNSET AVENUE ^{1,4}	BRADLEY PLACE	COUNTY ROAD	1L COL - One Way	227	II	333	0.68	675	0.34	720	0.32	C	22	249	C	0%	IN	0	249	C
JIMMY BUFFETT MEMORIAL HIGHWAY ²	BRADLEY PLACE	COUNTY ROAD	4L ART - Divided	1325	II	1310	1.01	2920	0.45	3040	0.44	D	350	1675	D	20% IN + 15% OUT		1	1676	D
BRADLEY PLACE ²	SEMINOLE AVENUE	PARK AVENUE	2L COL - Undivided	1260	II	594	2.12	1197	1.05	1269	0.99	E	91	1351	F	40% IN + 10% OUT		1	1352	F
BRADLEY PLACE ²	PARK AVENUE	SUNRISE AVENUE	2L COL - Undivided	1260	II	594	2.12	1197	1.05	1269	0.99	E	91	1351	F	60%	IN	1	1352	F
BRADLEY PLACE ²	SUNRISE AVENUE	SUNSET AVENUE	2L COL - Undivided	1260	II	594	2.12	1197	1.05	1269	0.99	E	91	1351	F	60% IN + 15% OUT		1	1352	F
BRADLEY PLACE ²	SUNSET AVENUE	JIMMY BUFFETT MEMORIAL HWY	2L COL - Undivided	1260	II	594	2.12	1197	1.05	1269	0.99	E	117	1377	F	60% IN + 15% OUT		1	1378	F
COUNTY ROAD ²	SEMINOLE AVENUE	PARK AVENUE	4L ART - Undivided	1486	II	983	1.51	2190	0.68	2280	0.65	D	130	1616	D	10% IN + 30% OUT		1	1617	D
COUNTY ROAD ²	PARK AVENUE	SUNRISE AVENUE	4L ART - Undivided	1486	II	983	1.51	2190	0.68	2280	0.65	D	130	1616	D	60%	OUT	2	1618	D
COUNTY ROAD ²	SUNRISE AVENUE	SUNSET AVENUE*	4L ART - Undivided	1486	II	983	1.51	2190	0.68	2280	0.65	D	130	1616	D	45%	OUT	1	1617	D
COUNTY ROAD ²	SUNSET AVENUE	JIMMY BUFFETT MEMORIAL HWY	4L ART - Undivided	1486	II	983	1.51	2190	0.68	2280	0.65	D	138	1624	D	45%	OUT	1	1625	D

Notes:
1. 2020 FDOT Q/LOS Tables utilized for Levels of Service thresholds.
2. Existing traffic volumes and levels of service from 2024 Annual Traffic Count Update Report completed by Kimley Horn.
3. Background traffic derived from intersection development sheets and from the Palm Beach Synagogue Traffic Impact Statement by Simmons & White, dated 12/20/24.
4. Sunrise Avenue and Sunset Avenue existing volumes derived from intersection counts.

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's
Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
1	Undivided	*	830	880	**	2	2,230	3,100	3,740	4,080	
2	Divided	*	1,910	2,000	**	3	3,280	4,570	5,620	6,130	
3	Divided	*	2,940	3,020	**	4	4,310	6,030	7,490	8,170	
4	Divided	*	3,970	4,040	**	5	5,390	7,430	9,370	10,220	
						6	6,380	8,990	11,510	12,760	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
1	Undivided	*	370	750	800	2	2,270	3,100	3,890	4,230	
2	Divided	*	730	1,630	1,700	3	3,410	4,650	5,780	6,340	
3	Divided	*	1,170	2,520	2,560	4	4,550	6,200	7,680	8,460	
4	Divided	*	1,610	3,390	3,420	5	5,690	7,760	9,520	10,570	
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						Freeway Adjustments					
Non-State Signalized Roadways - 10%						Auxiliary Lane + 1,000 Ramp Metering + 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
1	Divided	Yes	No	+5%		1	Undivided	580	890	1,200	1,610
1	Undivided	No	No	-20%		2	Divided	1,800	2,600	3,280	3,730
Multi	Undivided	Yes	No	-5%		3	Divided	2,700	3,900	4,920	5,600
Multi	Undivided	No	No	-25%							
—	—	—	Yes	+5%							
One-Way Facility Adjustment Multiply the corresponding directional volumes in this table by 1.2						Uninterrupted Flow Highway Adjustments					
						Lanes	Median	Exclusive left lanes	Adjustment factors		
						1	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
BICYCLE MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.					
Paved Shoulder/Bicycle						² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.					
Lane Coverage	B	C	D	E		³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
0-49%	*	150	390	1,000		* Cannot be achieved using table input value defaults.					
50-84%	110	340	1,000	>1,000		** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
85-100%	470	1,000	>1,000	**		Source: Florida Department of Transportation Systems Implementation Office https://www.fdot.gov/planning/systems/					
PEDESTRIAN MODE² (Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Sidewalk Coverage	B	C	D	E							
0-49%	*	*	140	480							
50-84%	*	80	440	800							
85-100%	200	540	880	>1,000							
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)											
Sidewalk Coverage	B	C	D	E							
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's
Urbanized Areas¹

January 2020

January 2025

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES					
STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (40 mph or higher posted speed limit)						Core Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	1,510	1,600	**	4	4,050	5,640	6,800	7,420	
4	Divided	*	3,420	3,580	**	6	5,960	8,310	10,220	11,150	
6	Divided	*	5,250	5,390	**	8	7,840	10,960	13,620	14,850	
8	Divided	*	7,090	7,210	**	10	9,800	13,510	17,040	18,580	
						12	11,600	16,350	20,930	23,200	
Class II (35 mph or slower posted speed limit)						Urbanized					
Lanes	Median	B	C	D	E	Lanes	B	C	D	E	
2	Undivided	*	660	1,330	1,410	4	4,130	5,640	7,070	7,690	
4	Divided	*	1,310	2,920	3,040	6	6,200	8,450	10,510	11,530	
6	Divided	*	2,090	4,500	4,590	8	8,270	11,270	13,960	15,380	
8	Divided	*	2,880	6,060	6,130	10	10,350	14,110	17,310	19,220	
Non-State Signalized Roadway Adjustments						Freeway Adjustments					
(Alter corresponding state volumes by the indicated percent.)						Auxiliary Lanes					
Non-State Signalized Roadways						Present in Both Directions					
						+ 1,800					
Ramp Metering						+ 5%					
Median & Turn Lane Adjustments						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		Lanes	Median	B	C	D	E
2	Divided	Yes	No	+5%		2	Undivided	1,050	1,620	2,180	2,930
2	Undivided	No	No	-20%		4	Divided	3,270	4,730	5,960	6,780
Multi	Undivided	Yes	No	-5%		6	Divided	4,910	7,090	8,950	10,180
Multi	Undivided	No	No	-25%							
–	–	–	Yes	+ 5%							
One-Way Facility Adjustment						Uninterrupted Flow Highway Adjustments					
Multiply the corresponding two-directional volumes in this table by 0.6						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
BICYCLE MODE ²						¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.					
(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						² Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.					
Paved						³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.					
Shoulder/Bicycle						* Cannot be achieved using table input value defaults.					
Lane Coverage	B	C	D	E		** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.					
0-49%	*	260	680	1,770		Source:					
50-84%	190	600	1,770	>1,770		Florida Department of Transportation					
85-100%	830	1,700	>1,770			Systems Implementation Office					
						https://www.fdot.gov/planning/systems/					
PEDESTRIAN MODE ²											
(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)											
Sidewalk Coverage	B	C	D	E							
0-49%	*	*	250	850							
50-84%	*	150	780	1,420							
85-100%	340	960	1,560	>1,770							
BUS MODE (Scheduled Fixed Route) ³											
(Buses in peak hour in peak direction)											
Sidewalk Coverage	B	C	D	E							
0-84%	> 5	≥ 4	≥ 3	≥ 2							
85-100%	> 4	≥ 3	≥ 2	≥ 1							



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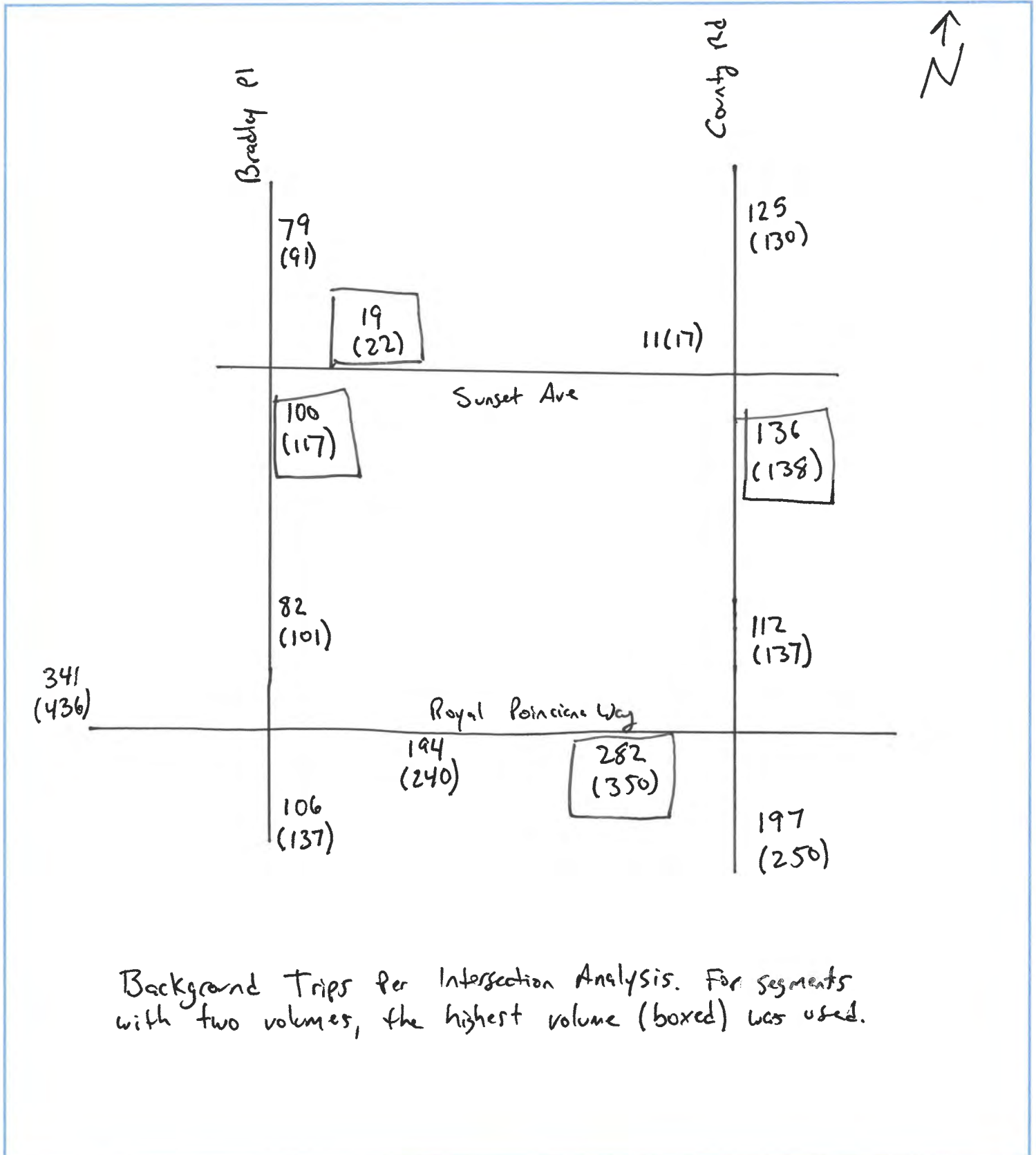
JOB NAME: _____

JOB NO: _____

BY: _____

DATE: _____

SHEET NO: _____ OF: _____





APPENDIX C

INTERSECTION ANALYSIS

CMA INTERSECTION ANALYSIS
175 BRADLEY PLACE
SUNRISE AVENUE AND BRADLEY PLACE

INPUT DATA

Growth Rate = 2.33% Peak Season = 1.00 Current Year = 2024 Buildout Year = 2028

AM Peak Hour

INTERSECTION VOLUME DEVELOPMENT

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2024)		459	60	14	214					73		40
Peak Season Adjustment		0	0	0	0					0		0
Background Traffic Growth		44	6	1	21					7		4
1.0% Background Growth		19	2	1	9					3		2
Major Projects Traffic		7	3	0	6					2		0
Background Traffic Used		44	6	1	21					7		4
2028 Background Traffic		503	66	15	235					80		44
Project Traffic		0	0	0	0					0		0
Total		503	66	15	235					80		44

860 Existing Total

83 BG Total

53 1% + MP Total

PM Peak Hour

INTERSECTION VOLUME DEVELOPMENT

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2024)		240	73	27	372					223		40
Peak Season Adjustment		0	0	0	0					0		0
Background Traffic Growth		23	7	3	36					22		4
1.0% Background Growth		10	3	1	15					9		2
Major Projects Traffic		8	3	0	10					4		0
Background Traffic Used		23	7	3	36					22		4
2028 Background Traffic		263	80	30	408					245		44
Project Traffic		0	0	0	0					0		0
Total		263	80	30	408					245		44

975 Existing Total

94 BG Total

65 1% + MP Total

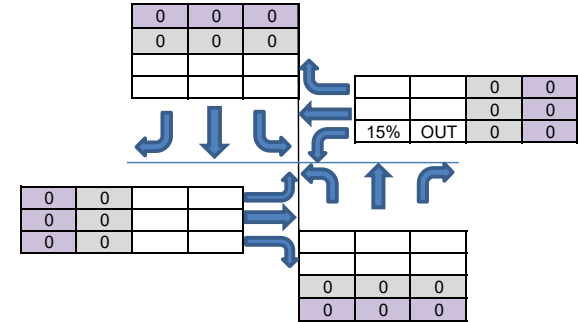
Notes:

Background growth based on the higher of 1.0% plus major project or historical growth rate of 2.33%.

2.33% growth rate and major project traffic from the Paramount Theater Redevelopment Traffic Impact Evaluation by Kimley-Horn and Associates, dated 07/08/24.

TRIPS

	IN	OUT
AM	2	0
PM	1	3



BACKGROUND TRAFFIC CALCS FOR ROADWAY SEGMENTS (2 DIR)

Sunrise Ave E of Bradley Pl

AM	18
PM	35

CMA INTERSECTION ANALYSIS
175 BRADLEY PLACE
SUNRISE AVENUE AND COUNTY ROAD

INPUT DATA

Growth Rate = 2.33% Peak Season = 1.00 Current Year = 2024 Buildout Year = 2028

AM Peak Hour

INTERSECTION VOLUME DEVELOPMENT

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2024)	68	655	116	14	341	31	41	11	32	90	18	12
Peak Season Adjustment	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	7	63	11	1	33	3	4	1	3	9	2	1
1.0% Background Growth	3	27	5	1	14	1	2	0	1	4	1	0
Major Projects Traffic	4	26	0	0	18	0	0	0	5	0	0	0
Background Traffic Used	7	63	11	1	33	3	4	1	3	9	2	1
2028 Background Traffic	75	718	127	15	374	34	45	12	35	99	20	13
Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Total	75	718	127	15	374	34	45	12	35	99	20	13

1429 Existing Total

138 BG Total
111 1% + MP Total

PM Peak Hour

INTERSECTION VOLUME DEVELOPMENT

	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volume (2024)	111	382	115	21	578	65	41	30	61	100	56	19
Peak Season Adjustment	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	11	37	11	2	56	6	4	3	6	10	5	2
1.0% Background Growth	5	16	5	1	23	3	2	1	2	4	2	1
Major Projects Traffic	6	24	0	0	38	0	0	0	6	0	0	0
Background Traffic Used	11	37	11	2	56	6	4	3	6	10	5	2
2028 Background Traffic	122	419	126	23	634	71	45	33	67	110	61	21
Project Traffic	0	0	0	0	1	0	0	0	0	0	0	0
Total	122	419	126	23	635	71	45	33	67	110	61	21

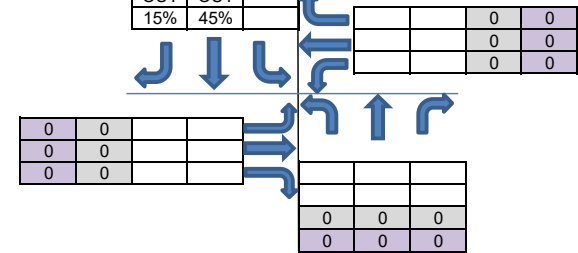
1579 Existing Total

152 BG Total
138 1% + MP Total

TRIPS

	IN	OUT
AM	2	0
PM	1	3

0	1	0
0	0	0
OUT	OUT	
15%	45%	



BACKGROUND TRAFFIC CALCS FOR ROADWAY SEGMENTS (2 DIR)

Sunrise Ave W of County Rd

AM 19
PM 35

Notes:

Background growth based on the higher of 1.0% plus major project or historical growth rate of 2.33%.

2.33% growth rate and major project traffic from the Paramount Theater Redevelopment Traffic Impact Evaluation by Kimley-Horn and Associates, dated 07/08/24.



APPENDIX D

2024 EXISTING CONDITIONS SYNCHRO PRINTOUTS

Timings

15: Bradley PI & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	73	459	14	214
Future Volume (vph)	73	459	14	214
Turn Type	Prot	NA	Prot	NA
Protected Phases	4	6	5	2
Permitted Phases				
Detector Phase	4	6	5	2
Switch Phase				
Minimum Initial (s)	10.0	12.0	5.0	12.0
Minimum Split (s)	25.9	26.9	16.5	23.9
Total Split (s)	29.0	49.0	12.0	61.0
Total Split (%)	32.2%	54.4%	13.3%	67.8%
Yellow Time (s)	3.4	3.4	3.0	3.4
All-Red Time (s)	2.5	2.5	1.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	4.0	5.9
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	11.4	64.4	6.3	66.8
Actuated g/C Ratio	0.13	0.72	0.07	0.74
v/c Ratio	0.50	0.42	0.12	0.16
Control Delay (s/veh)	31.3	7.4	40.9	4.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.3	7.4	40.9	4.0
LOS	C	A	D	A
Approach Delay (s/veh)	31.3	7.4		6.3
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 10.3

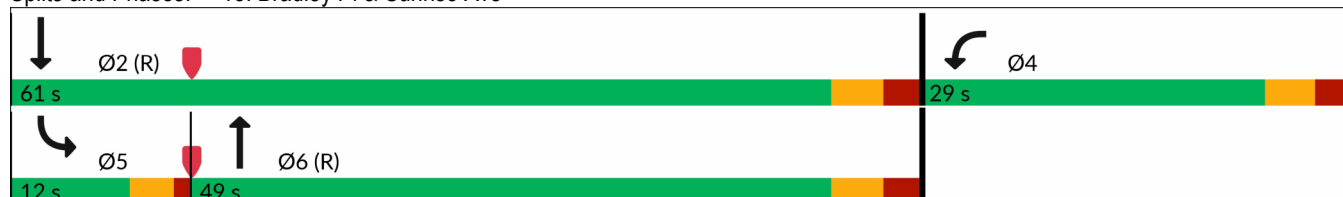
Intersection LOS: B

Intersection Capacity Utilization 46.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 15: Bradley PI & Sunrise Ave



Queues

15: Bradley Pl & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	123	546	15	225
v/c Ratio	0.50	0.42	0.12	0.16
Control Delay (s/veh)	31.3	7.4	40.9	4.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.3	7.4	40.9	4.0
Queue Length 50th (ft)	54	84	8	29
Queue Length 95th (ft)	110	256	27	61
Internal Link Dist (ft)	940	320		586
Turn Bay Length (ft)				
Base Capacity (vph)	464	1314	157	1381
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.27	0.42	0.10	0.16
Intersection Summary				

HCM 7th Signalized Intersection Summary

15: Bradley PI & Sunrise Ave

01/24/2025

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	73	44	459	60	14	214
Future Volume (veh/h)	73	44	459	60	14	214
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	77	35	483	52	15	225
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	122	56	1103	119	99	1430
Arrive On Green	0.10	0.10	0.66	0.66	0.06	0.76
Sat Flow, veh/h	1169	532	1660	179	1781	1870
Grp Volume(v), veh/h	113	0	0	535	15	225
Grp Sat Flow(s),veh/h/ln	1716	0	0	1838	1781	1870
Q Serve(g_s), s	5.7	0.0	0.0	12.4	0.7	2.9
Cycle Q Clear(g_c), s	5.7	0.0	0.0	12.4	0.7	2.9
Prop In Lane	0.68	0.31		0.10	1.00	
Lane Grp Cap(c), veh/h	179	0	0	1221	99	1430
V/C Ratio(X)	0.63	0.00	0.00	0.44	0.15	0.16
Avail Cap(c_a), veh/h	440	0	0	1221	158	1430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	0.0	0.0	7.1	40.5	2.8
Incr Delay (d2), s/veh	3.6	0.0	0.0	1.1	0.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	0.0	0.0	8.0	0.6	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.2	0.0	0.0	8.3	41.2	3.1
LnGrp LOS	D			A	D	A
Approach Vol, veh/h	113		535			240
Approach Delay, s/veh	42.2		8.3			5.5
Approach LOS	D		A			A
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	74.7		15.3		9.0	65.7
Change Period (Y+Rc), s	5.9		5.9		4.0	5.9
Max Green Setting (Gmax), s	55.1		23.1		8.0	43.1
Max Q Clear Time (g_c+l1), s	4.9		7.7		2.7	14.4
Green Ext Time (p_c), s	1.4		0.2		0.0	3.8
Intersection Summary						
HCM 7th Control Delay, s/veh			11.8			
HCM 7th LOS			B			

Timings

13: N County Rd & Sunrise Ave

01/24/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	11	90	18	68	655	14	341
Future Volume (vph)	41	11	90	18	68	655	14	341
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases		8	7	4		2		6
Permitted Phases	8		4		2		6	
Detector Phase	8	8	7	4	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	7.0	10.0	20.0	20.0	20.0	20.0
Minimum Split (s)	31.0	31.0	13.0	31.0	26.0	26.0	26.0	26.0
Total Split (s)	31.0	31.0	17.0	48.0	42.0	42.0	42.0	42.0
Total Split (%)	34.4%	34.4%	18.9%	53.3%	46.7%	46.7%	46.7%	46.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0		6.0		6.0
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)		10.7	23.1	23.7		58.7		58.7
Actuated g/C Ratio		0.12	0.26	0.26		0.65		0.65
v/c Ratio		0.43	0.27	0.07		0.45		0.19
Control Delay (s/veh)		33.9	25.5	15.3		9.5		8.9
Queue Delay		0.0	0.0	0.0		0.1		0.0
Total Delay (s/veh)		33.9	25.5	15.3		9.5		8.9
LOS		C	C	B		A		A
Approach Delay (s/veh)		33.9		22.9		9.5		8.9
Approach LOS		C		C		A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay (s/veh): 11.9

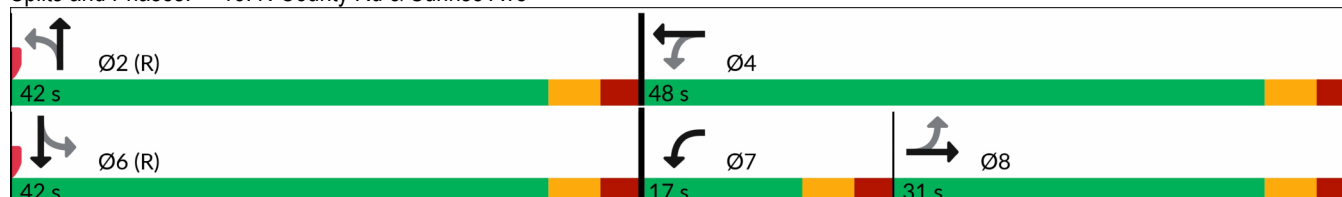
Intersection LOS: B

Intersection Capacity Utilization 66.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: N County Rd & Sunrise Ave



Queues

13: N County Rd & Sunrise Ave

01/24/2025

	→	↘	←	↑	↓
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	89	95	32	883	407
v/c Ratio	0.43	0.27	0.07	0.45	0.19
Control Delay (s/veh)	33.9	25.5	15.3	9.5	8.9
Queue Delay	0.0	0.0	0.0	0.1	0.0
Total Delay (s/veh)	33.9	25.5	15.3	9.5	8.9
Queue Length 50th (ft)	35	40	8	66	53
Queue Length 95th (ft)	83	73	27	56	86
Internal Link Dist (ft)	940		620	322	599
Turn Bay Length (ft)					
Base Capacity (vph)	431	376	823	1978	2088
Starvation Cap Reductn	0	0	0	168	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.25	0.04	0.49	0.19
Intersection Summary					

HCM 7th Signalized Intersection Summary

13: N County Rd & Sunrise Ave

01/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	11	32	90	18	12	68	655	116	14	341	31
Future Volume (veh/h)	41	11	32	90	18	12	68	655	116	14	341	31
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	43	12	23	95	19	2	72	689	111	15	359	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	42	47	382	402	42	182	1667	264	89	1964	120
Arrive On Green	0.10	0.10	0.10	0.07	0.24	0.24	0.21	0.21	0.21	0.62	0.62	0.62
Sat Flow, veh/h	686	408	458	1781	1664	175	217	2669	423	73	3144	191
Grp Volume(v), veh/h	78	0	0	95	0	21	445	0	427	204	0	192
Grp Sat Flow(s),veh/h/ln	1552	0	0	1781	0	1839	1683	0	1626	1742	0	1668
Q Serve(g_s), s	2.5	0.0	0.0	4.1	0.0	0.8	9.4	0.0	20.5	0.0	0.0	4.4
Cycle Q Clear(g_c), s	4.1	0.0	0.0	4.1	0.0	0.8	19.7	0.0	20.5	4.1	0.0	4.4
Prop In Lane	0.55		0.29	1.00		0.10	0.16		0.26	0.07		0.11
Lane Grp Cap(c), veh/h	220	0	0	382	0	445	1098	0	1016	1131	0	1042
V/C Ratio(X)	0.35	0.00	0.00	0.25	0.00	0.05	0.41	0.00	0.42	0.18	0.00	0.18
Avail Cap(c_a), veh/h	485	0	0	469	0	858	1098	0	1016	1131	0	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	1.00	0.96	0.00	0.96	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	0.0	30.6	0.0	26.2	20.9	0.0	21.6	7.1	0.0	7.2
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.3	0.0	0.0	1.1	0.0	1.2	0.4	0.0	0.4
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(95%),veh/ln	3.0	0.0	0.0	3.2	0.0	0.6	14.5	0.0	14.0	2.9	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.0	0.0	0.0	31.0	0.0	26.2	22.0	0.0	22.8	7.5	0.0	7.5
LnGrp LOS	D			C			C	C	C		A	A
Approach Vol, veh/h	78			116			872			396		
Approach Delay, s/veh	39.0			30.1			22.4			7.5		
Approach LOS	D			C			C			A		
Timer - Assigned Phs	2			4			6	7	8			
Phs Duration (G+Y+Rc), s	62.2			27.8			62.2	12.6	15.2			
Change Period (Y+Rc), s	6.0			6.0			6.0	6.0	6.0			
Max Green Setting (Gmax), s	36.0			42.0			36.0	11.0	25.0			
Max Q Clear Time (g_c+l1), s	22.5			2.8			6.4	6.1	6.1			
Green Ext Time (p_c), s	4.9			0.1			2.6	0.1	0.3			
Intersection Summary												
HCM 7th Control Delay, s/veh	19.9											
HCM 7th LOS	B											

Timings

15: Bradley PI & Sunrise Ave

01/24/2025

	↙	↑	↘	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↘	↘	↘	↘
Traffic Volume (vph)	223	240	27	372
Future Volume (vph)	223	240	27	372
Turn Type	Prot	NA	Prot	NA
Protected Phases	4	6	5	2
Permitted Phases				
Detector Phase	4	6	5	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	25.9	26.9	9.5	23.9
Total Split (s)	32.0	46.0	12.0	58.0
Total Split (%)	35.6%	51.1%	13.3%	64.4%
Yellow Time (s)	3.4	3.4	3.0	3.4
All-Red Time (s)	2.5	2.5	1.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	4.0	5.9
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	18.9	54.4	6.9	59.3
Actuated g/C Ratio	0.21	0.60	0.08	0.66
v/c Ratio	0.74	0.30	0.21	0.32
Control Delay (s/veh)	43.3	11.3	42.1	8.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.3	11.3	42.1	8.4
LOS	D	B	D	A
Approach Delay (s/veh)	43.3	11.3		10.6
Approach LOS	D	B		B

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay (s/veh): 19.7

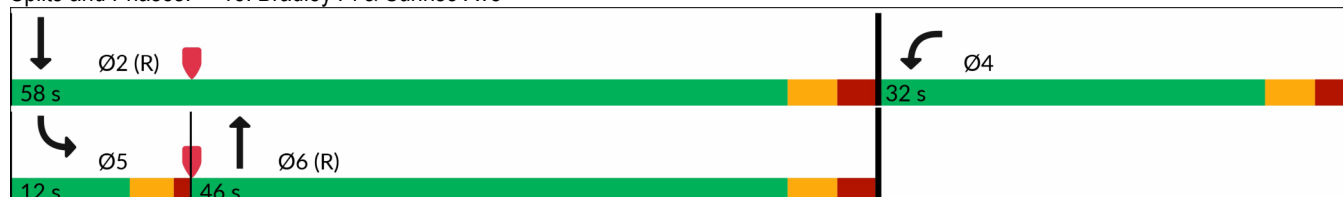
Intersection LOS: B

Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 15: Bradley PI & Sunrise Ave



Queues

15: Bradley Pl & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	277	330	28	392
v/c Ratio	0.74	0.30	0.21	0.32
Control Delay (s/veh)	43.3	11.3	42.1	8.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.3	11.3	42.1	8.4
Queue Length 50th (ft)	143	64	15	86
Queue Length 95th (ft)	208	182	41	165
Internal Link Dist (ft)	940	320		586
Turn Bay Length (ft)				
Base Capacity (vph)	514	1098	159	1226
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.54	0.30	0.18	0.32
Intersection Summary				

HCM 7th Signalized Intersection Summary

15: Bradley PI & Sunrise Ave

01/24/2025

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	223	40	240	73	27	372
Future Volume (veh/h)	223	40	240	73	27	372
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	235	31	253	66	28	392
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	272	36	848	221	99	1295
Arrive On Green	0.18	0.18	0.59	0.59	0.06	0.69
Sat Flow, veh/h	1546	204	1430	373	1781	1870
Grp Volume(v), veh/h	267	0	0	319	28	392
Grp Sat Flow(s),veh/h/ln	1756	0	0	1803	1781	1870
Q Serve(g_s), s	13.3	0.0	0.0	7.9	1.4	7.3
Cycle Q Clear(g_c), s	13.3	0.0	0.0	7.9	1.4	7.3
Prop In Lane	0.88	0.12		0.21	1.00	
Lane Grp Cap(c), veh/h	310	0	0	1069	99	1295
V/C Ratio(X)	0.86	0.00	0.00	0.30	0.28	0.30
Avail Cap(c_a), veh/h	509	0	0	1069	158	1295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	0.0	0.0	9.1	40.8	5.4
Incr Delay (d2), s/veh	8.0	0.0	0.0	0.7	1.5	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.3	0.0	0.0	5.5	1.1	4.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	44.0	0.0	0.0	9.8	42.3	6.0
LnGrp LOS	D			A	D	A
Approach Vol, veh/h	267		319			420
Approach Delay, s/veh	44.0		9.8			8.4
Approach LOS	D		A			A
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	68.2		21.8		9.0	59.2
Change Period (Y+Rc), s	5.9		5.9		4.0	5.9
Max Green Setting (Gmax), s	52.1		26.1		8.0	40.1
Max Q Clear Time (g_c+l1), s	9.3		15.3		3.4	9.9
Green Ext Time (p_c), s	2.7		0.6		0.0	2.1
Intersection Summary						
HCM 7th Control Delay, s/veh			18.3			
HCM 7th LOS			B			

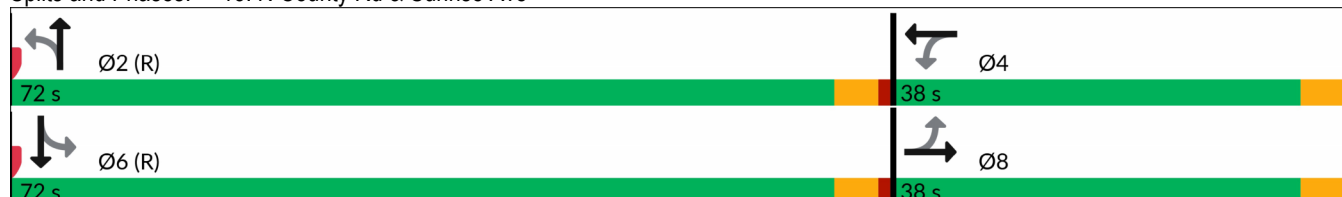
Timings

13: N County Rd & Sunrise Ave

01/24/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	30	100	56	111	382	21	578
Future Volume (vph)	41	30	100	56	111	382	21	578
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		2		6
Permitted Phases	8		4		2		6	
Detector Phase	8	8	4	4	2	2	6	6
Switch Phase								
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0	10.0	10.0
Minimum Split (s)	30.5	30.5	30.5	30.5	25.5	25.5	25.5	25.5
Total Split (s)	38.0	38.0	38.0	38.0	72.0	72.0	72.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	34.5%	65.5%	65.5%	65.5%	65.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		17.0	17.0	17.0		84.0		84.0
Actuated g/C Ratio		0.15	0.15	0.15		0.76		0.76
v/c Ratio		0.51	0.67	0.27		0.34		0.28
Control Delay (s/veh)		36.5	64.9	34.4		4.6		4.4
Queue Delay		0.0	0.0	0.0		0.5		0.0
Total Delay (s/veh)		36.5	64.9	34.4		5.2		4.4
LOS		D	E	C		A		A
Approach Delay (s/veh)		36.5		51.8		5.2		4.4
Approach LOS		D		D		A		A
Intersection Summary								
Cycle Length: 110								
Actuated Cycle Length: 110								
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green								
Natural Cycle: 60								
Control Type: Actuated-Coordinated								
Maximum v/c Ratio: 0.67								
Intersection Signal Delay (s/veh): 12.6					Intersection LOS: B			
Intersection Capacity Utilization 61.6%					ICU Level of Service B			
Analysis Period (min) 15								

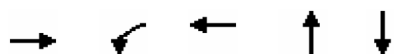
Splits and Phases: 13: N County Rd & Sunrise Ave



Queues

13: N County Rd & Sunrise Ave

01/24/2025



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	139	105	79	640	698
v/c Ratio	0.51	0.67	0.27	0.34	0.28
Control Delay (s/veh)	36.5	64.9	34.4	4.6	4.4
Queue Delay	0.0	0.0	0.0	0.5	0.0
Total Delay (s/veh)	36.5	64.9	34.4	5.2	4.4
Queue Length 50th (ft)	65	72	40	51	56
Queue Length 95th (ft)	121	125	80	99	103
Internal Link Dist (ft)	940		620	322	599
Turn Bay Length (ft)					
Base Capacity (vph)	496	307	556	1860	2463
Starvation Cap Reductn	0	0	0	752	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.34	0.14	0.58	0.28
Intersection Summary					

HCM 7th Signalized Intersection Summary

13: N County Rd & Sunrise Ave

01/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	30	61	100	56	19	111	382	115	21	578	65
Future Volume (veh/h)	41	30	61	100	56	19	111	382	115	21	578	65
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	43	32	53	105	59	9	117	402	110	22	608	57
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	71	88	222	216	33	407	1401	392	91	2411	224
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	392	523	647	1313	1585	242	461	1792	501	72	3084	286
Grp Volume(v), veh/h	128	0	0	105	0	68	275	0	354	358	0	329
Grp Sat Flow(s),veh/h/ln	1562	0	0	1313	0	1827	1142	0	1612	1791	0	1651
Q Serve(g_s), s	4.7	0.0	0.0	1.9	0.0	3.7	3.6	0.0	6.8	0.0	0.0	6.0
Cycle Q Clear(g_c), s	8.4	0.0	0.0	10.3	0.0	3.7	9.6	0.0	6.8	5.7	0.0	6.0
Prop In Lane	0.34		0.41	1.00		0.13	0.43		0.31	0.06		0.17
Lane Grp Cap(c), veh/h	257	0	0	222	0	249	940	0	1260	1435	0	1290
V/C Ratio(X)	0.50	0.00	0.00	0.47	0.00	0.27	0.29	0.00	0.28	0.25	0.00	0.26
Avail Cap(c_a), veh/h	517	0	0	443	0	556	940	0	1260	1435	0	1290
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)	0.99	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	0.0	45.7	0.0	42.6	3.5	0.0	3.4	3.2	0.0	3.3
Incr Delay (d2), s/veh	1.5	0.0	0.0	1.6	0.0	0.6	0.8	0.0	0.6	0.4	0.0	0.5
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(95%),veh/ln	6.1	0.0	0.0	5.1	0.0	3.1	2.6	0.0	3.4	3.3	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	0.0	0.0	47.2	0.0	43.2	4.3	0.0	3.9	3.7	0.0	3.7
LnGrp LOS	D			D		D	A		A	A		A
Approach Vol, veh/h	128			173			629			687		
Approach Delay, s/veh	46.0			45.6			4.1			3.7		
Approach LOS	D			D			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	90.5			19.5			90.5			19.5		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	67.5			33.5			67.5			33.5		
Max Q Clear Time (g_c+I1), s	11.6			12.3			8.0			10.4		
Green Ext Time (p_c), s	5.4			0.6			5.1			0.7		
Intersection Summary												
HCM 7th Control Delay, s/veh				11.7								
HCM 7th LOS				B								



APPENDIX E

2028 BACKGROUND CONDITIONS SYNCHRO PRINTOUTS

Timings

15: Bradley PI & Sunrise Ave

01/24/2025

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖	↑	↗	↓
Traffic Volume (vph)	80	503	15	235
Future Volume (vph)	80	503	15	235
Turn Type	Prot	NA	Prot	NA
Protected Phases	4	6	5	2
Permitted Phases				
Detector Phase	4	6	5	2
Switch Phase				
Minimum Initial (s)	10.0	12.0	5.0	12.0
Minimum Split (s)	25.9	26.9	16.5	23.9
Total Split (s)	29.0	49.0	12.0	61.0
Total Split (%)	32.2%	54.4%	13.3%	67.8%
Yellow Time (s)	3.4	3.4	3.0	3.4
All-Red Time (s)	2.5	2.5	1.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	4.0	5.9
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	11.8	64.1	6.4	66.4
Actuated g/C Ratio	0.13	0.71	0.07	0.74
v/c Ratio	0.52	0.46	0.13	0.18
Control Delay (s/veh)	32.1	8.1	40.9	4.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	8.1	40.9	4.2
LOS	C	A	D	A
Approach Delay (s/veh)	32.1	8.1		6.4
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay (s/veh): 10.8

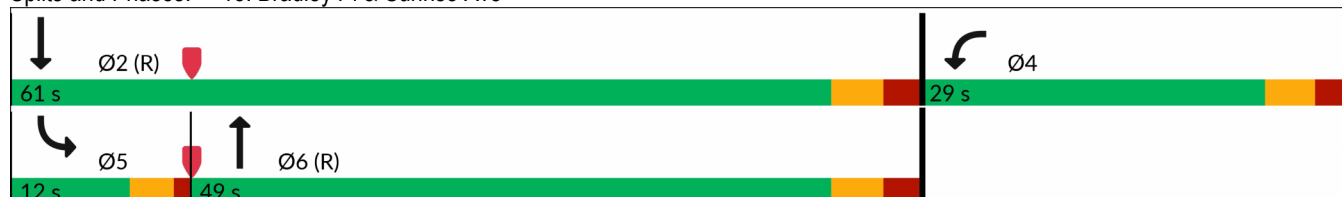
Intersection LOS: B

Intersection Capacity Utilization 48.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 15: Bradley PI & Sunrise Ave



Queues

15: Bradley Pl & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	598	16	247
v/c Ratio	0.52	0.46	0.13	0.18
Control Delay (s/veh)	32.1	8.1	40.9	4.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	8.1	40.9	4.2
Queue Length 50th (ft)	60	100	9	33
Queue Length 95th (ft)	118	299	28	68
Internal Link Dist (ft)	940	320		586
Turn Bay Length (ft)				
Base Capacity (vph)	462	1307	157	1374
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.46	0.10	0.18
Intersection Summary				

HCM 7th Signalized Intersection Summary

15: Bradley PI & Sunrise Ave

01/24/2025

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	44	503	66	15	235
Future Volume (veh/h)	80	44	503	66	15	235
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	84	35	529	58	16	247
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	127	53	1099	120	99	1428
Arrive On Green	0.11	0.11	0.66	0.66	0.06	0.76
Sat Flow, veh/h	1204	502	1656	182	1781	1870
Grp Volume(v), veh/h	120	0	0	587	16	247
Grp Sat Flow(s),veh/h/ln	1720	0	0	1838	1781	1870
Q Serve(g_s), s	6.0	0.0	0.0	14.2	0.8	3.2
Cycle Q Clear(g_c), s	6.0	0.0	0.0	14.2	0.8	3.2
Prop In Lane	0.70	0.29		0.10	1.00	
Lane Grp Cap(c), veh/h	182	0	0	1219	99	1428
V/C Ratio(X)	0.66	0.00	0.00	0.48	0.16	0.17
Avail Cap(c_a), veh/h	441	0	0	1219	158	1428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	0.0	7.5	40.5	2.9
Incr Delay (d2), s/veh	4.1	0.0	0.0	1.4	0.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	0.0	9.0	0.6	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.8	0.0	0.0	8.9	41.3	3.2
LnGrp LOS	D			A	D	A
Approach Vol, veh/h	120		587			263
Approach Delay, s/veh	42.8		8.9			5.5
Approach LOS	D		A			A
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	74.6		15.4		9.0	65.6
Change Period (Y+Rc), s	5.9		5.9		4.0	5.9
Max Green Setting (Gmax), s	55.1		23.1		8.0	43.1
Max Q Clear Time (g_c+l1), s	5.2		8.0		2.8	16.2
Green Ext Time (p_c), s	1.6		0.3		0.0	4.3
Intersection Summary						
HCM 7th Control Delay, s/veh			12.1			
HCM 7th LOS			B			

Timings

13: N County Rd & Sunrise Ave

01/24/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	12	99	20	75	718	15	374
Future Volume (vph)	45	12	99	20	75	718	15	374
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases		8	7	4		2		6
Permitted Phases	8		4		2		6	
Detector Phase	8	8	7	4	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	7.0	10.0	20.0	20.0	20.0	20.0
Minimum Split (s)	31.0	31.0	13.0	31.0	26.0	26.0	26.0	26.0
Total Split (s)	31.0	31.0	17.0	48.0	42.0	42.0	42.0	42.0
Total Split (%)	34.4%	34.4%	18.9%	53.3%	46.7%	46.7%	46.7%	46.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0		6.0		6.0
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)		11.0	23.6	24.2		58.2		58.2
Actuated g/C Ratio		0.12	0.26	0.27		0.65		0.65
v/c Ratio		0.46	0.29	0.07		0.50		0.22
Control Delay (s/veh)		35.5	25.5	15.1		10.8		9.4
Queue Delay		0.0	0.0	0.0		0.1		0.0
Total Delay (s/veh)		35.5	25.5	15.1		10.8		9.4
LOS		D	C	B		B		A
Approach Delay (s/veh)		35.5		22.8		10.8		9.4
Approach LOS		D		C		B		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 12.9

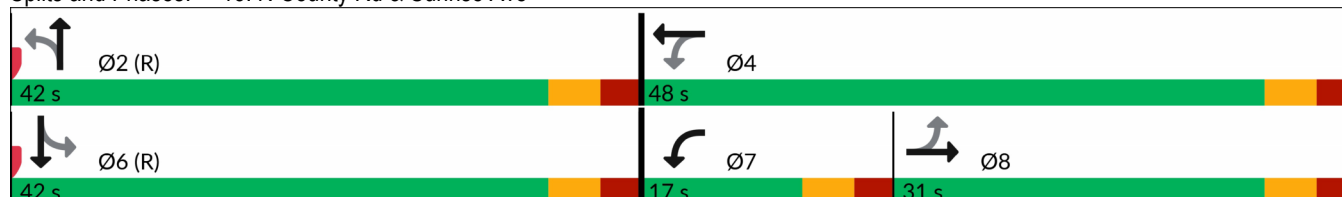
Intersection LOS: B

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

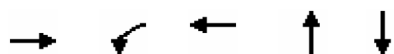
Splits and Phases: 13: N County Rd & Sunrise Ave



Queues

13: N County Rd & Sunrise Ave

01/24/2025



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	97	104	35	969	446
v/c Ratio	0.46	0.29	0.07	0.50	0.22
Control Delay (s/veh)	35.5	25.5	15.1	10.8	9.4
Queue Delay	0.0	0.0	0.0	0.1	0.0
Total Delay (s/veh)	35.5	25.5	15.1	10.8	9.4
Queue Length 50th (ft)	40	44	8	154	60
Queue Length 95th (ft)	90	78	28	220	97
Internal Link Dist (ft)	940		620	322	599
Turn Bay Length (ft)					
Base Capacity (vph)	431	379	824	1942	2060
Starvation Cap Reductn	0	0	0	131	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.27	0.04	0.54	0.22
Intersection Summary					

HCM 7th Signalized Intersection Summary

13: N County Rd & Sunrise Ave

01/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	12	35	99	20	13	75	718	127	15	374	34
Future Volume (veh/h)	45	12	35	99	20	13	75	718	127	15	374	34
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	47	13	26	104	21	3	79	756	123	16	394	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	42	49	383	393	56	180	1650	264	86	1943	122
Arrive On Green	0.10	0.10	0.10	0.07	0.25	0.25	0.21	0.21	0.21	0.62	0.62	0.62
Sat Flow, veh/h	680	401	468	1781	1601	229	215	2655	425	69	3127	197
Grp Volume(v), veh/h	86	0	0	104	0	24	487	0	471	224	0	211
Grp Sat Flow(s),veh/h/ln	1549	0	0	1781	0	1829	1670	0	1626	1727	0	1667
Q Serve(g_s), s	3.0	0.0	0.0	4.5	0.0	0.9	11.8	0.0	22.9	0.0	0.0	4.9
Cycle Q Clear(g_c), s	4.6	0.0	0.0	4.5	0.0	0.9	22.1	0.0	22.9	22.9	0.0	4.9
Prop In Lane	0.55		0.30	1.00		0.13	0.16		0.26	0.07		0.12
Lane Grp Cap(c), veh/h	223	0	0	383	0	449	1084	0	1010	1116	0	1036
V/C Ratio(X)	0.39	0.00	0.00	0.27	0.00	0.05	0.45	0.00	0.47	0.20	0.00	0.20
Avail Cap(c_a), veh/h	484	0	0	468	0	854	1084	0	1010	1116	0	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.96	0.00	0.96	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	0.0	30.5	0.0	26.0	22.0	0.0	22.7	7.3	0.0	7.4
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.4	0.0	0.0	1.3	0.0	1.5	0.4	0.0	0.4
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(95%),veh/ln	3.3	0.0	0.0	3.5	0.0	0.7	15.8	0.0	15.4	3.2	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.2	0.0	0.0	30.9	0.0	26.0	23.3	0.0	24.1	7.7	0.0	7.8
LnGrp LOS	D			C		C	C		C	A		A
Approach Vol, veh/h	86			128			958			435		
Approach Delay, s/veh	39.2			30.0			23.7			7.8		
Approach LOS	D			C			C			A		
Timer - Assigned Phs	2			4			6			7		
Phs Duration (G+Y+Rc), s	61.9			28.1			61.9			12.7		
Change Period (Y+Rc), s	6.0			6.0			6.0			6.0		
Max Green Setting (Gmax), s	36.0			42.0			36.0			11.0		
Max Q Clear Time (g_c+I1), s	24.9			2.9			24.9			6.5		
Green Ext Time (p_c), s	4.8			0.1			2.0			0.3		
Intersection Summary												
HCM 7th Control Delay, s/veh	20.7											
HCM 7th LOS	C											

Timings

15: Bradley PI & Sunrise Ave

01/24/2025

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖	↑	↗	↓
Traffic Volume (vph)	245	263	30	408
Future Volume (vph)	245	263	30	408
Turn Type	Prot	NA	Prot	NA
Protected Phases	4	6	5	2
Permitted Phases				
Detector Phase	4	6	5	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	25.9	26.9	9.5	23.9
Total Split (s)	32.0	46.0	12.0	58.0
Total Split (%)	35.6%	51.1%	13.3%	64.4%
Yellow Time (s)	3.4	3.4	3.0	3.4
All-Red Time (s)	2.5	2.5	1.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	4.0	5.9
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	20.1	51.1	6.9	58.1
Actuated g/C Ratio	0.22	0.57	0.08	0.65
v/c Ratio	0.76	0.35	0.24	0.36
Control Delay (s/veh)	44.0	13.3	42.9	9.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.0	13.3	42.9	9.2
LOS	D	B	D	A
Approach Delay (s/veh)	44.0	13.3		11.6
Approach LOS	D	B		B

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay (s/veh): 20.9

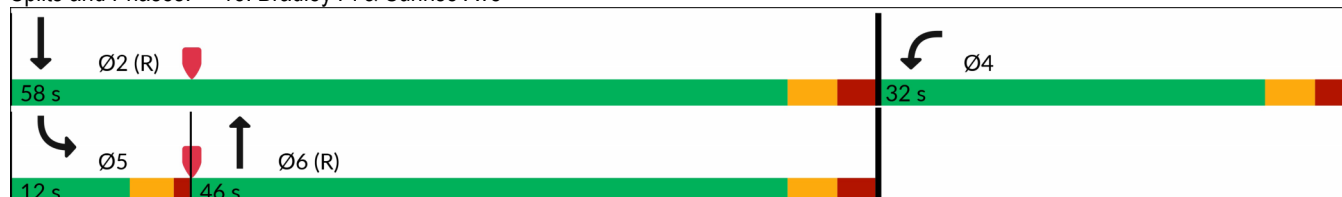
Intersection LOS: C

Intersection Capacity Utilization 51.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 15: Bradley PI & Sunrise Ave



Queues

15: Bradley Pl & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	304	361	32	429
v/c Ratio	0.76	0.35	0.24	0.36
Control Delay (s/veh)	44.0	13.3	42.9	9.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.0	13.3	42.9	9.2
Queue Length 50th (ft)	157	108	17	101
Queue Length 95th (ft)	228	202	45	187
Internal Link Dist (ft)	940	320		586
Turn Bay Length (ft)				
Base Capacity (vph)	514	1034	157	1203
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.59	0.35	0.20	0.36
Intersection Summary				

HCM 7th Signalized Intersection Summary

15: Bradley PI & Sunrise Ave

01/24/2025

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	245	44	263	80	30	408
Future Volume (veh/h)	245	44	263	80	30	408
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	258	35	277	73	32	429
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	295	40	824	217	99	1267
Arrive On Green	0.19	0.19	0.58	0.58	0.06	0.68
Sat Flow, veh/h	1541	209	1427	376	1781	1870
Grp Volume(v), veh/h	294	0	0	350	32	429
Grp Sat Flow(s),veh/h/ln	1756	0	0	1803	1781	1870
Q Serve(g_s), s	14.6	0.0	0.0	9.2	1.6	8.6
Cycle Q Clear(g_c), s	14.6	0.0	0.0	9.2	1.6	8.6
Prop In Lane	0.88	0.12		0.21	1.00	
Lane Grp Cap(c), veh/h	336	0	0	1041	99	1267
V/C Ratio(X)	0.87	0.00	0.00	0.34	0.32	0.34
Avail Cap(c_a), veh/h	509	0	0	1041	158	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	0.0	10.0	40.9	6.1
Incr Delay (d2), s/veh	10.3	0.0	0.0	0.9	1.9	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	0.0	0.0	6.5	1.3	5.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	45.6	0.0	0.0	10.9	42.7	6.8
LnGrp LOS	D			B	D	A
Approach Vol, veh/h	294		350			461
Approach Delay, s/veh	45.6		10.9			9.3
Approach LOS	D		B			A
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	66.9		23.1		9.0	57.9
Change Period (Y+Rc), s	5.9		5.9		4.0	5.9
Max Green Setting (Gmax), s	52.1		26.1		8.0	40.1
Max Q Clear Time (g_c+I1), s	10.6		16.6		3.6	11.2
Green Ext Time (p_c), s	3.0		0.6		0.0	2.3
Intersection Summary						
HCM 7th Control Delay, s/veh			19.4			
HCM 7th LOS			B			

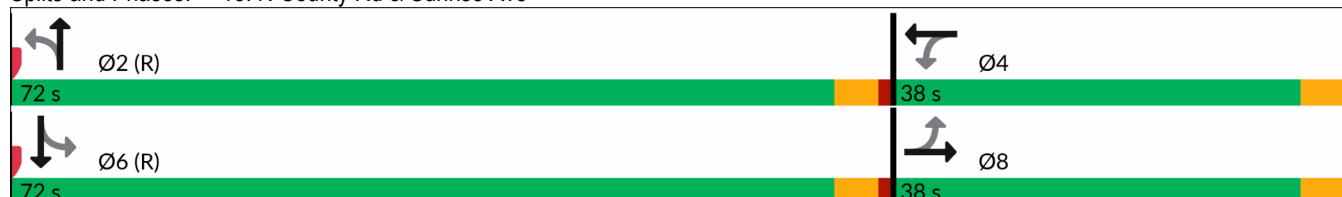
Timings

13: N County Rd & Sunrise Ave

01/24/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	33	110	61	122	419	23	634
Future Volume (vph)	45	33	110	61	122	419	23	634
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		2		6
Permitted Phases	8		4		2		6	
Detector Phase	8	8	4	4	2	2	6	6
Switch Phase								
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0	10.0	10.0
Minimum Split (s)	30.5	30.5	30.5	30.5	25.5	25.5	25.5	25.5
Total Split (s)	38.0	38.0	38.0	38.0	72.0	72.0	72.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	34.5%	65.5%	65.5%	65.5%	65.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		18.0	18.0	18.0		83.0		83.0
Actuated g/C Ratio		0.16	0.16	0.16		0.75		0.75
v/c Ratio		0.54	0.73	0.28		0.39		0.32
Control Delay (s/veh)		37.2	68.5	34.0		5.5		4.9
Queue Delay		0.0	0.0	0.0		0.6		0.0
Total Delay (s/veh)		37.2	68.5	34.0		6.0		4.9
LOS		D	E	C		A		A
Approach Delay (s/veh)		37.2		53.8		6.0		4.9
Approach LOS		D		D		A		A
Intersection Summary								
Cycle Length: 110								
Actuated Cycle Length: 110								
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green								
Natural Cycle: 60								
Control Type: Actuated-Coordinated								
Maximum v/c Ratio: 0.73								
Intersection Signal Delay (s/veh): 13.5					Intersection LOS: B			
Intersection Capacity Utilization 65.9%					ICU Level of Service C			
Analysis Period (min) 15								

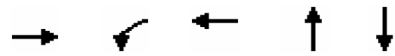
Splits and Phases: 13: N County Rd & Sunrise Ave



Queues

13: N County Rd & Sunrise Ave

01/24/2025



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	153	116	86	702	766
v/c Ratio	0.54	0.73	0.28	0.39	0.32
Control Delay (s/veh)	37.2	68.5	34.0	5.5	4.9
Queue Delay	0.0	0.0	0.0	0.6	0.0
Total Delay (s/veh)	37.2	68.5	34.0	6.0	4.9
Queue Length 50th (ft)	74	80	44	64	68
Queue Length 95th (ft)	131	135	84	124	124
Internal Link Dist (ft)	940		620	322	599
Turn Bay Length (ft)					
Base Capacity (vph)	494	298	556	1780	2422
Starvation Cap Reductn	0	0	0	650	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.39	0.15	0.62	0.32
Intersection Summary					

HCM 7th Signalized Intersection Summary

13: N County Rd & Sunrise Ave

01/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	33	67	110	61	21	122	419	126	23	634	71
Future Volume (veh/h)	45	33	67	110	61	21	122	419	126	23	634	71
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	47	35	60	116	64	11	128	441	122	24	667	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	68	88	210	216	37	394	1362	385	90	2395	227
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	375	488	631	1301	1555	267	445	1748	494	71	3072	291
Grp Volume(v), veh/h	142	0	0	116	0	75	292	0	399	393	0	362
Grp Sat Flow(s),veh/h/ln	1494	0	0	1301	0	1822	1074	0	1613	1785	0	1650
Q Serve(g_s), s	6.1	0.0	0.0	2.5	0.0	4.1	5.3	0.0	8.0	0.0	0.0	6.8
Cycle Q Clear(g_c), s	10.1	0.0	0.0	12.6	0.0	4.1	12.1	0.0	8.0	6.4	0.0	6.8
Prop In Lane	0.33		0.42	1.00		0.15	0.44		0.31	0.06		0.18
Lane Grp Cap(c), veh/h	251	0	0	210	0	253	884	0	1257	1426	0	1286
V/C Ratio(X)	0.57	0.00	0.00	0.55	0.00	0.30	0.33	0.00	0.32	0.28	0.00	0.28
Avail Cap(c_a), veh/h	507	0	0	426	0	555	884	0	1257	1426	0	1286
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)	0.98	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.2	0.0	0.0	46.6	0.0	42.6	3.9	0.0	3.6	3.4	0.0	3.4
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.3	0.0	0.6	1.0	0.0	0.7	0.5	0.0	0.5
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(95%),veh/ln	6.9	0.0	0.0	5.8	0.0	3.4	2.8	0.0	4.1	3.8	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	0.0	0.0	48.8	0.0	43.2	4.9	0.0	4.2	3.9	0.0	4.0
LnGrp LOS	D			D		D	A		A	A		A
Approach Vol, veh/h	142			191			691			755		
Approach Delay, s/veh	47.1			46.6			4.5			3.9		
Approach LOS	D			D			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	90.2			19.8			90.2			19.8		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	67.5			33.5			67.5			33.5		
Max Q Clear Time (g_c+I1), s	14.1			14.6			8.8			12.1		
Green Ext Time (p_c), s	6.2			0.7			5.8			0.7		
Intersection Summary												
HCM 7th Control Delay, s/veh				12.2								
HCM 7th LOS				B								



APPENDIX F

2028 TOTAL CONDITIONS SYNCHRO PRINTOUTS

Timings

13: N County Rd & Sunrise Ave

01/24/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	12	99	20	75	718	15	374
Future Volume (vph)	45	12	99	20	75	718	15	374
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases		8	7	4		2		6
Permitted Phases	8		4		2		6	
Detector Phase	8	8	7	4	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	7.0	10.0	20.0	20.0	20.0	20.0
Minimum Split (s)	31.0	31.0	13.0	31.0	26.0	26.0	26.0	26.0
Total Split (s)	31.0	31.0	17.0	48.0	42.0	42.0	42.0	42.0
Total Split (%)	34.4%	34.4%	18.9%	53.3%	46.7%	46.7%	46.7%	46.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0		6.0		6.0
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)		11.0	23.6	24.2		58.2		58.2
Actuated g/C Ratio		0.12	0.26	0.27		0.65		0.65
v/c Ratio		0.46	0.29	0.07		0.50		0.22
Control Delay (s/veh)		35.5	25.5	15.1		10.8		9.4
Queue Delay		0.0	0.0	0.0		0.1		0.0
Total Delay (s/veh)		35.5	25.5	15.1		10.8		9.4
LOS		D	C	B		B		A
Approach Delay (s/veh)		35.5		22.8		10.8		9.4
Approach LOS		D		C		B		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay (s/veh): 12.9

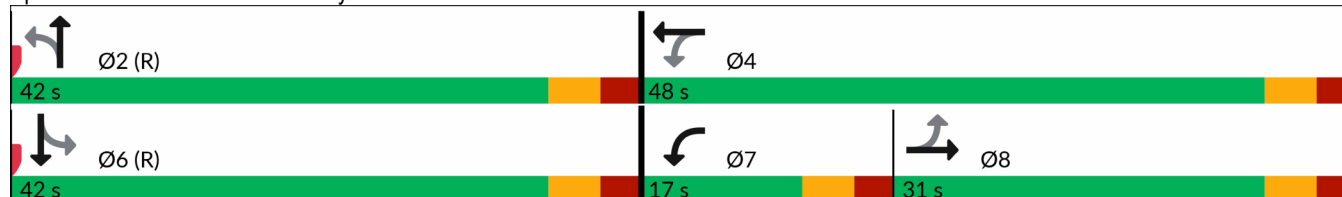
Intersection LOS: B

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: N County Rd & Sunrise Ave



2028 AM Peak Total Conditions

Synchro 12 Light Report

Page 1

Queues

13: N County Rd & Sunrise Ave

01/24/2025

	→	↘	←	↑	↓
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	97	104	35	969	446
v/c Ratio	0.46	0.29	0.07	0.50	0.22
Control Delay (s/veh)	35.5	25.5	15.1	10.8	9.4
Queue Delay	0.0	0.0	0.0	0.1	0.0
Total Delay (s/veh)	35.5	25.5	15.1	10.8	9.4
Queue Length 50th (ft)	40	44	8	154	60
Queue Length 95th (ft)	90	78	28	220	97
Internal Link Dist (ft)	940		620	322	599
Turn Bay Length (ft)					
Base Capacity (vph)	431	379	824	1942	2060
Starvation Cap Reductn	0	0	0	131	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.27	0.04	0.54	0.22
Intersection Summary					

HCM 7th Signalized Intersection Summary

13: N County Rd & Sunrise Ave

01/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	12	35	99	20	13	75	718	127	15	374	34
Future Volume (veh/h)	45	12	35	99	20	13	75	718	127	15	374	34
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	47	13	26	104	21	3	79	756	123	16	394	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	42	49	383	393	56	180	1650	264	86	1943	122
Arrive On Green	0.10	0.10	0.10	0.07	0.25	0.25	0.21	0.21	0.21	0.62	0.62	0.62
Sat Flow, veh/h	680	401	468	1781	1601	229	215	2655	425	69	3127	197
Grp Volume(v), veh/h	86	0	0	104	0	24	487	0	471	224	0	211
Grp Sat Flow(s),veh/h/ln	1549	0	0	1781	0	1829	1670	0	1626	1727	0	1667
Q Serve(g_s), s	3.0	0.0	0.0	4.5	0.0	0.9	11.8	0.0	22.9	0.0	0.0	4.9
Cycle Q Clear(g_c), s	4.6	0.0	0.0	4.5	0.0	0.9	22.1	0.0	22.9	22.9	0.0	4.9
Prop In Lane	0.55		0.30	1.00		0.13	0.16		0.26	0.07		0.12
Lane Grp Cap(c), veh/h	223	0	0	383	0	449	1084	0	1010	1116	0	1036
V/C Ratio(X)	0.39	0.00	0.00	0.27	0.00	0.05	0.45	0.00	0.47	0.20	0.00	0.20
Avail Cap(c_a), veh/h	484	0	0	468	0	854	1084	0	1010	1116	0	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.96	0.00	0.96	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	0.0	30.5	0.0	26.0	22.0	0.0	22.7	7.3	0.0	7.4
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.4	0.0	0.0	1.3	0.0	1.5	0.4	0.0	0.4
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(95%),veh/ln	3.3	0.0	0.0	3.5	0.0	0.7	15.8	0.0	15.4	3.2	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.2	0.0	0.0	30.9	0.0	26.0	23.3	0.0	24.1	7.7	0.0	7.8
LnGrp LOS	D			C		C	C		C	A		A
Approach Vol, veh/h	86			128			958			435		
Approach Delay, s/veh	39.2			30.0			23.7			7.8		
Approach LOS	D			C			C			A		
Timer - Assigned Phs	2			4			6			7		
Phs Duration (G+Y+Rc), s	61.9			28.1			61.9			12.7		
Change Period (Y+Rc), s	6.0			6.0			6.0			6.0		
Max Green Setting (Gmax), s	36.0			42.0			36.0			11.0		
Max Q Clear Time (g_c+I1), s	24.9			2.9			24.9			6.5		
Green Ext Time (p_c), s	4.8			0.1			2.0			0.1		
Intersection Summary												
HCM 7th Control Delay, s/veh	20.7											
HCM 7th LOS	C											

Timings

15: Bradley PI & Sunrise Ave

01/24/2025

	↖	↑	↗	↓
Lane Group	WBL	NBT	SBL	SBT
Lane Configurations	↖	↑	↗	↓
Traffic Volume (vph)	245	263	30	408
Future Volume (vph)	245	263	30	408
Turn Type	Prot	NA	Prot	NA
Protected Phases	4	6	5	2
Permitted Phases				
Detector Phase	4	6	5	2
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	25.9	26.9	9.5	23.9
Total Split (s)	32.0	46.0	12.0	58.0
Total Split (%)	35.6%	51.1%	13.3%	64.4%
Yellow Time (s)	3.4	3.4	3.0	3.4
All-Red Time (s)	2.5	2.5	1.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	4.0	5.9
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	20.1	51.1	6.9	58.1
Actuated g/C Ratio	0.22	0.57	0.08	0.65
v/c Ratio	0.76	0.35	0.24	0.36
Control Delay (s/veh)	44.0	13.3	42.9	9.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.0	13.3	42.9	9.2
LOS	D	B	D	A
Approach Delay (s/veh)	44.0	13.3		11.6
Approach LOS	D	B		B

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay (s/veh): 20.9

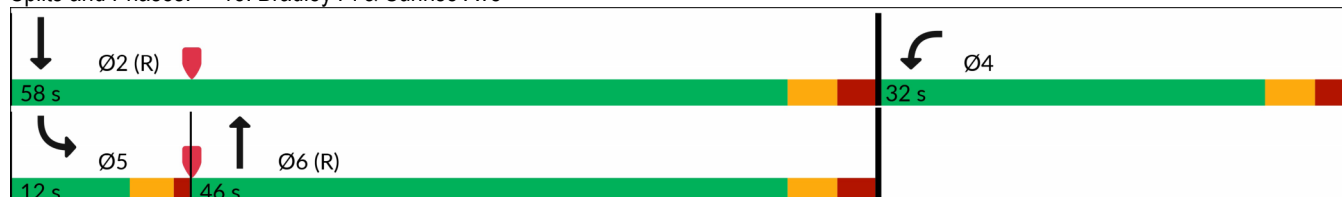
Intersection LOS: C

Intersection Capacity Utilization 51.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 15: Bradley PI & Sunrise Ave



Queues

15: Bradley Pl & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	304	361	32	429
v/c Ratio	0.76	0.35	0.24	0.36
Control Delay (s/veh)	44.0	13.3	42.9	9.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.0	13.3	42.9	9.2
Queue Length 50th (ft)	157	108	17	101
Queue Length 95th (ft)	228	202	45	187
Internal Link Dist (ft)	940	320		586
Turn Bay Length (ft)				
Base Capacity (vph)	514	1034	157	1203
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.59	0.35	0.20	0.36
Intersection Summary				

HCM 7th Signalized Intersection Summary

15: Bradley PI & Sunrise Ave

01/24/2025

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	245	44	263	80	30	408
Future Volume (veh/h)	245	44	263	80	30	408
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	258	35	277	73	32	429
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	295	40	824	217	99	1267
Arrive On Green	0.19	0.19	0.58	0.58	0.06	0.68
Sat Flow, veh/h	1541	209	1427	376	1781	1870
Grp Volume(v), veh/h	294	0	0	350	32	429
Grp Sat Flow(s),veh/h/ln	1756	0	0	1803	1781	1870
Q Serve(g_s), s	14.6	0.0	0.0	9.2	1.6	8.6
Cycle Q Clear(g_c), s	14.6	0.0	0.0	9.2	1.6	8.6
Prop In Lane	0.88	0.12		0.21	1.00	
Lane Grp Cap(c), veh/h	336	0	0	1041	99	1267
V/C Ratio(X)	0.87	0.00	0.00	0.34	0.32	0.34
Avail Cap(c_a), veh/h	509	0	0	1041	158	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	0.0	10.0	40.9	6.1
Incr Delay (d2), s/veh	10.3	0.0	0.0	0.9	1.9	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	0.0	0.0	6.5	1.3	5.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	45.6	0.0	0.0	10.9	42.7	6.8
LnGrp LOS	D			B	D	A
Approach Vol, veh/h	294		350			461
Approach Delay, s/veh	45.6		10.9			9.3
Approach LOS	D		B			A
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	66.9		23.1		9.0	57.9
Change Period (Y+Rc), s	5.9		5.9		4.0	5.9
Max Green Setting (Gmax), s	52.1		26.1		8.0	40.1
Max Q Clear Time (g_c+I1), s	10.6		16.6		3.6	11.2
Green Ext Time (p_c), s	3.0		0.6		0.0	2.3
Intersection Summary						
HCM 7th Control Delay, s/veh			19.4			
HCM 7th LOS			B			

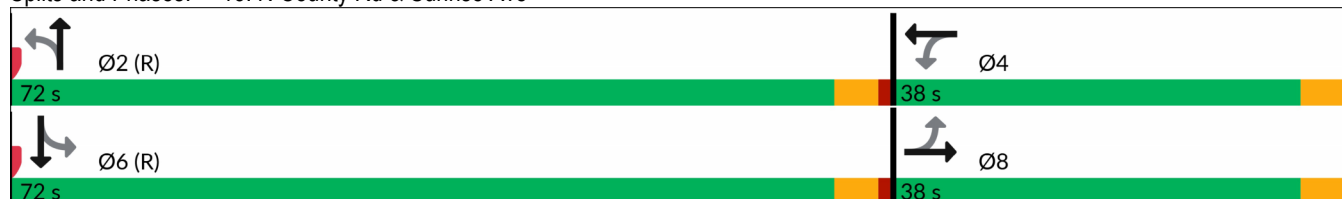
Timings

13: N County Rd & Sunrise Ave

01/24/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	45	33	110	61	122	419	23	635
Future Volume (vph)	45	33	110	61	122	419	23	635
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		8		4		2		6
Permitted Phases	8		4		2		6	
Detector Phase	8	8	4	4	2	2	6	6
Switch Phase								
Minimum Initial (s)	15.0	15.0	15.0	15.0	10.0	10.0	10.0	10.0
Minimum Split (s)	30.5	30.5	30.5	30.5	25.5	25.5	25.5	25.5
Total Split (s)	38.0	38.0	38.0	38.0	72.0	72.0	72.0	72.0
Total Split (%)	34.5%	34.5%	34.5%	34.5%	65.5%	65.5%	65.5%	65.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		18.0	18.0	18.0		83.0		83.0
Actuated g/C Ratio		0.16	0.16	0.16		0.75		0.75
v/c Ratio		0.54	0.73	0.28		0.39		0.32
Control Delay (s/veh)		37.2	68.5	34.0		5.5		4.9
Queue Delay		0.0	0.0	0.0		0.6		0.0
Total Delay (s/veh)		37.2	68.5	34.0		6.0		4.9
LOS		D	E	C		A		A
Approach Delay (s/veh)		37.2		53.8		6.0		4.9
Approach LOS		D		D		A		A
Intersection Summary								
Cycle Length: 110								
Actuated Cycle Length: 110								
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green								
Natural Cycle: 60								
Control Type: Actuated-Coordinated								
Maximum v/c Ratio: 0.73								
Intersection Signal Delay (s/veh): 13.5				Intersection LOS: B				
Intersection Capacity Utilization 65.9%				ICU Level of Service C				
Analysis Period (min) 15								

Splits and Phases: 13: N County Rd & Sunrise Ave



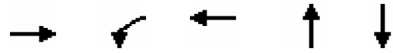
2028 PM Peak Total Conditions

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Queues

13: N County Rd & Sunrise Ave

01/24/2025



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	153	116	86	702	767
v/c Ratio	0.54	0.73	0.28	0.39	0.32
Control Delay (s/veh)	37.2	68.5	34.0	5.5	4.9
Queue Delay	0.0	0.0	0.0	0.6	0.0
Total Delay (s/veh)	37.2	68.5	34.0	6.0	4.9
Queue Length 50th (ft)	74	80	44	64	68
Queue Length 95th (ft)	131	135	84	124	125
Internal Link Dist (ft)	940		620	322	599
Turn Bay Length (ft)					
Base Capacity (vph)	494	298	556	1780	2422
Starvation Cap Reductn	0	0	0	650	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.39	0.15	0.62	0.32
Intersection Summary					

HCM 7th Signalized Intersection Summary

13: N County Rd & Sunrise Ave

01/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	33	67	110	61	21	122	419	126	23	635	71
Future Volume (veh/h)	45	33	67	110	61	21	122	419	126	23	635	71
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	47	35	60	116	64	11	128	441	122	24	668	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	68	88	210	216	37	394	1362	385	90	2395	227
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	375	488	631	1301	1555	267	445	1747	494	71	3073	291
Grp Volume(v), veh/h	142	0	0	116	0	75	292	0	399	393	0	363
Grp Sat Flow(s),veh/h/ln	1494	0	0	1301	0	1822	1073	0	1613	1785	0	1650
Q Serve(g_s), s	6.1	0.0	0.0	2.5	0.0	4.1	5.3	0.0	8.0	0.0	0.0	6.8
Cycle Q Clear(g_c), s	10.1	0.0	0.0	12.6	0.0	4.1	12.1	0.0	8.0	6.5	0.0	6.8
Prop In Lane	0.33		0.42	1.00		0.15	0.44		0.31	0.06		0.18
Lane Grp Cap(c), veh/h	251	0	0	210	0	253	883	0	1257	1426	0	1286
V/C Ratio(X)	0.57	0.00	0.00	0.55	0.00	0.30	0.33	0.00	0.32	0.28	0.00	0.28
Avail Cap(c_a), veh/h	507	0	0	426	0	555	883	0	1257	1426	0	1286
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)	0.98	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.2	0.0	0.0	46.6	0.0	42.6	3.9	0.0	3.6	3.4	0.0	3.4
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.3	0.0	0.6	1.0	0.0	0.7	0.5	0.0	0.5
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(95%),veh/ln	6.9	0.0	0.0	5.8	0.0	3.4	2.8	0.0	4.1	3.8	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	0.0	0.0	48.8	0.0	43.2	4.9	0.0	4.2	3.9	0.0	4.0
LnGrp LOS	D			D		D	A		A	A		A
Approach Vol, veh/h	142			191			691			756		
Approach Delay, s/veh	47.1			46.6			4.5			3.9		
Approach LOS	D			D			A			A		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	90.2			19.8			90.2			19.8		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	67.5			33.5			67.5			33.5		
Max Q Clear Time (g_c+I1), s	14.1			14.6			8.8			12.1		
Green Ext Time (p_c), s	6.2			0.7			5.8			0.7		
Intersection Summary												
HCM 7th Control Delay, s/veh	12.2											
HCM 7th LOS	B											

2028 PM Peak Total Conditions

Synchro 12 Light Report

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Timings

15: Bradley PI & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	80	503	15	235
Future Volume (vph)	80	503	15	235
Turn Type	Prot	NA	Prot	NA
Protected Phases	4	6	5	2
Permitted Phases				
Detector Phase	4	6	5	2
Switch Phase				
Minimum Initial (s)	10.0	12.0	5.0	12.0
Minimum Split (s)	25.9	26.9	16.5	23.9
Total Split (s)	29.0	49.0	12.0	61.0
Total Split (%)	32.2%	54.4%	13.3%	67.8%
Yellow Time (s)	3.4	3.4	3.0	3.4
All-Red Time (s)	2.5	2.5	1.0	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.9	5.9	4.0	5.9
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	C-Max	None	C-Max
Act Effect Green (s)	11.8	64.1	6.4	66.4
Actuated g/C Ratio	0.13	0.71	0.07	0.74
v/c Ratio	0.52	0.46	0.13	0.18
Control Delay (s/veh)	32.1	8.1	40.9	4.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	8.1	40.9	4.2
LOS	C	A	D	A
Approach Delay (s/veh)	32.1	8.1		6.4
Approach LOS	C	A		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay (s/veh): 10.8

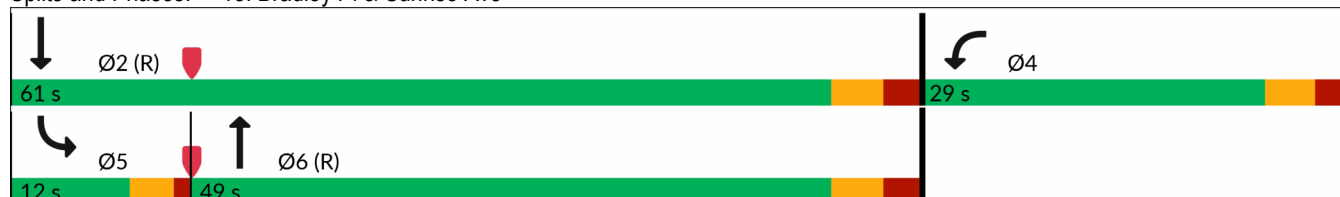
Intersection LOS: B

Intersection Capacity Utilization 48.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 15: Bradley PI & Sunrise Ave



Queues

15: Bradley Pl & Sunrise Ave

01/24/2025



Lane Group	WBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	598	16	247
v/c Ratio	0.52	0.46	0.13	0.18
Control Delay (s/veh)	32.1	8.1	40.9	4.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.1	8.1	40.9	4.2
Queue Length 50th (ft)	60	100	9	33
Queue Length 95th (ft)	118	299	28	68
Internal Link Dist (ft)	940	320		586
Turn Bay Length (ft)				
Base Capacity (vph)	462	1307	157	1374
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.46	0.10	0.18
Intersection Summary				

HCM 7th Signalized Intersection Summary

15: Bradley PI & Sunrise Ave

01/24/2025

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	44	503	66	15	235
Future Volume (veh/h)	80	44	503	66	15	235
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	84	35	529	58	16	247
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	127	53	1099	120	99	1428
Arrive On Green	0.11	0.11	0.66	0.66	0.06	0.76
Sat Flow, veh/h	1204	502	1656	182	1781	1870
Grp Volume(v), veh/h	120	0	0	587	16	247
Grp Sat Flow(s),veh/h/ln	1720	0	0	1838	1781	1870
Q Serve(g_s), s	6.0	0.0	0.0	14.2	0.8	3.2
Cycle Q Clear(g_c), s	6.0	0.0	0.0	14.2	0.8	3.2
Prop In Lane	0.70	0.29		0.10	1.00	
Lane Grp Cap(c), veh/h	182	0	0	1219	99	1428
V/C Ratio(X)	0.66	0.00	0.00	0.48	0.16	0.17
Avail Cap(c_a), veh/h	441	0	0	1219	158	1428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	0.0	0.0	7.5	40.5	2.9
Incr Delay (d2), s/veh	4.1	0.0	0.0	1.4	0.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	0.0	0.0	9.0	0.6	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.8	0.0	0.0	8.9	41.3	3.2
LnGrp LOS	D			A	D	A
Approach Vol, veh/h	120		587			263
Approach Delay, s/veh	42.8		8.9			5.5
Approach LOS	D		A			A
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	74.6		15.4		9.0	65.6
Change Period (Y+Rc), s	5.9		5.9		4.0	5.9
Max Green Setting (Gmax), s	55.1		23.1		8.0	43.1
Max Q Clear Time (g_c+I1), s	5.2		8.0		2.8	16.2
Green Ext Time (p_c), s	1.6		0.3		0.0	4.3
Intersection Summary						
HCM 7th Control Delay, s/veh			12.1			
HCM 7th LOS			B			