TRAFFIC IMPACT STUDY

For

Proposed Residential Building

Property Located at:

70 Mallory Avenue
Block 21801 – Lot 2
City of Jersey City, Hudson County, NJ

Prepared by:

1904 Main Street | **245 Main Street, Suite #110**
Lake Como, NJ 07719 | **Chester, NJ 07930**
(732) 681-0760

Corey M. Chase, PE
NJ PE License #47470

Connor G. Hughes, PE
NJ PE License #57245

September 17, 2021
Revised: November 24, 2021
Revised: December 2, 2022

1138-99-019TE

MJB; CGH

INTRODUCTION

It is proposed to construct a 189-unit 6-story residential building with 6,123 SF of ground floor commercial space on a parcel of land currently developed with a light warehouse building, located on the northeast corner of the Mallory Avenue intersection with Claremont Avenue in the City of Jersey City, Hudson County, New Jersey (see Figure 1 in Appendix A). The site is designated as Block 21801 – Lot 2 on the City of Jersey City Tax Maps. It is proposed to raze the existing site and construct a 189-unit residential building served by 125 parking spaces ("The Project"). The site is located within the Route 440-Culver Redevelopment Plan. Access to the site is currently provided via multiple curb cuts along the Claremont Avenue and Mallory Avenue frontages. It is proposed to close the existing access points and provide access to the site via one (1) full movement driveway along Claremont Avenue. Additionally, an internal connection will be provided between the adjacent recently constructed residential building to the east known as 3 Acres.

Dynamic Traffic, LLC has been retained to prepare this study to assess the traffic impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.

- Existing traffic data was collected via manual turning movement (MTM) counts during the weekday AM and weekday PM peak periods at the intersections of:

    - Mallory Avenue and Claremont Avenue
    - Mallory Avenue and Yale Avenue

- Projections of traffic to be generated by the proposed development were prepared utilizing trip generation data as published by the Institute of Transportation Engineers. Site traffic was then assigned to the adjacent street system based upon the anticipated directional distribution.

- Capacity analyses were conducted for the Existing, No Build, and Build conditions for the study intersections.

- The proposed points of ingress and egress were inspected for adequacy of geometric design, spacing and/or alignment to streets and driveways on the opposite side of the street, relationship to other driveways adjacent to the development, and conformance with accepted design standards.

- The site plan as designed was reviewed for sufficiency in accommodating large wheel base vehicles such as delivery trucks, refuse trucks, and emergency vehicles.

- The parking layout and supply was assessed based on accepted design standards, local requirements, and demand experienced at similar developments.

EXISTING CONDITIONS

A review of the existing roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the development. This included field investigations of the surrounding roadways and intersections, collection of traffic volume data, and extensive analyses.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

Mallory Avenue is an Urban Major Collector roadway under Jersey City jurisdiction with a general north/south orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane and one bike lane in each direction with additional left turn lanes at the intersection with Claremont Avenue. On-street parking, curb, and sidewalk are generally provided along both sides of the roadway. Mallory Avenue provides a straight horizontal alignment along the site frontage and a relatively flat vertical alignment. The land uses along Mallory Avenue in the vicinity of The Project are mixed residential and commercial.

Claremont Avenue is a Local roadway under Jersey City jurisdiction with a general east/west orientation. In the vicinity of the site the posted speed limit is 25 MPH and the roadway provides one travel lane in each direction. On-street parking is not permitted. Curb and sidewalk are provided along both sides of the roadway. Claremont Avenue provides a straight horizontal alignment along the site frontage and a relatively flat vertical alignment. The land uses along Claremont Avenue in the vicinity of The Project are primarily residential with the West Side Avenue park and ride located opposite the site.

Yale Avenue is a Local roadway under Jersey City jurisdiction with a general east/west orientation. In the vicinity of the site the speed limit is unposted and the roadway provides one travel lane in the eastbound direction. On-street parking is permitted along both sides of the roadway. Curb and sidewalk are provided along both sides of the roadway. Yale Avenue provides a straight horizontal alignment along the site frontage and a relatively flat vertical alignment. The land uses along Yale Avenue in the vicinity of The Project are primarily residential.

Existing Mass Transit Facilities

NJ Transit provides significant bus and train service in the immediate area surrounding the site. Bus service within ¾ of a mile from the site is provided via lines 1, 10, 80 and 119 which provide service to destinations such as Journal Square, Exchange Place, Bayonne, Newark and New York City. The nearest bus stop is located approximately 1,150 feet southeast of the site along West Side Avenue. Train service is provided at the West Side Avenue Light Rail Station, located approximately 1,000 feet southeast of the site. This station provides service to various locations throughout downtown Jersey City as well as Hoboken Terminal, which provides access to numerous modes of mass transportation such as NJ Transit bus and rail lines, the Hoboken PATH station and the Hoboken ferry. These mass transportation options collectively provide service to various destinations throughout central and northern New Jersey as well as World Trade Center and 33rd Street in New York City.

Existing Pedestrian and Bicycle Facilities

Pedestrian and bicycle facilities are provided in the form of sidewalk along both sides of Mallory Avenue, Yale Avenue and Claremont Avenue. The sidewalks along each of these roadways extend throughout the immediate area surrounding the site and are interconnected with other streets well beyond the block in which the site is located, providing a very accessible network of pedestrian and bicycle facilities. Additionally, a dedicated bike lane is provided along both sides of Mallory Avenue and along both sides of Claremont Avenue. The Mallory Avenue bike lane traverses from Culver Avenue to the south to Communipaw Avenue to the north while the Claremont Avenue bike lane traverses from West Side Avenue to the east to Mallory Avenue to the west. The Jersey City Bicycle Master Plan also proposes a new bike lane along the north side of Claremont Avenue and a new shared use lane along the south side of Claremont Avenue to the west of Mallory Avenue.

Jersey City School Travel Plan

The Jersey City School Travel Plan does not propose any improvements in the immediate vicinity of the site, however numerous improvement measures throughout the City are identified which could potentially be implemented. According to the School Travel Plan, these improvements could include updated crosswalk markings, updated curb ramps and truncated domes, and installing delineators.

Vision Zero Action Report

The Vision Zero Action Report identifies roadways within the City where fatal and serious injury crashes are most common, which is referred to as the High Injury Network (HIN). To note is that none of the roadways in the immediate area surrounding the site are included on the HIN. However, numerous improvement measures throughout the City are identified which could potentially be implemented. According to the Vision Zero Action Report, these improvements could include the installation of traffic calming devices, neighborhood slow zones and crosswalk visibility features.

Pedestrian Enhancement Plan

The Pedestrian Enhancement Plan does not propose any specific improvements in the immediate vicinity of the site, however numerous improvement measures throughout the City are identified which could potentially be implemented. According to the Pedestrian Enhancement Plan, these improvements could include pedestrian countdown timers and audible signals at traffic signals, pedestrian activated Rectangular Rapid Flash Beacons (RRFB) at mid-block crosswalks, updated crosswalk visibility features, raised intersections, curb extensions, improved bicycle and transit facilities and streetscape enhancements.

On-Street Parking

The on-street parking was reviewed along the block in which the subject property is located. The following are descriptions of the surrounding roadways:

- Mallory Avenue from Claremont Avenue to Yale Avenue can park 6 cars.
- Mallory Avenue from Yale Avenue to Clarke Avenue can park 13 cars.
- Yale Avenue from Mallory Avenue to the east for 425' can park 30 cars.

The following Figure 1 illustrates the existing parking regulations along the surrounding roadways.

Figure 1 – Surrounding Roadways On-Street Parking Restrictions

Existing Traffic Volumes

Manual turning movement (MTM) counts were conducted on Thursday, August 26, 2021 from 7:00 to 9:00 AM and from 4:30 to 6:30 PM at the following intersections:

- Mallory Avenue & Claremont Avenue
- Mallory Avenue & Yale Avenue

Review of the collected traffic data reveals that the weekday morning peak street hour (PSH) occurs between 8:00 - 9:00 AM and the weekday evening PSH occurs between 5:00 - 6:00 PM.

Note that the 2021 counts were increased to better represent existing 2022 traffic volumes by applying a growth rate of 1.5% per year obtained from the NJDOT Annual Background Growth Rate Table for a period of one (1) year. Figure 2, located in the Appendix, shows the existing peak hour traffic volumes at the study intersections. All traffic counts are contained in Appendix B.

Existing Capacity Analysis

The methodology utilized in the capacity analyses is described in the *Highway Capacity Manual*, published by the Transportation Research Board. In general, the term Level of Service (LOS) is used to provide a "qualitative" evaluation of capacity based upon certain "quantitative" calculations related to empirical values, such as traffic volume and intersection control.

At signalized intersections, factors that affect the various approach capacities include width of approach, number of lanes, signal "green time", turning percentages, truck volumes, etc. However, delays cannot be related to capacity in a simple one-to-one fashion. For example, it is possible to have delays in the Level of Service "F" range without exceeding roadway capacity. Substantial delays can exist without exceeding capacity if one or more of the following conditions exist: long signal cycle lengths; a particular traffic movement experiences a long red time; or progressive movement for a particular lane group is poor. Table I describes the Level of Service ranges for signalized intersections.

An unsignalized (STOP sign controlled) driveway or side street along a through route is seldom critical from an overall capacity standpoint, however, it may be of great significance to the capacity of the minor cross-route, and it may influence the quality of traffic flow on both. When analyzing an unsignalized intersection, it is assumed that both the major street through and right turn movements are unimpeded and have the right-of-way over all side street traffic and left turns from the major street. All other turning movements in the intersection cross, merge with, or are otherwise impeded by major street movements. Traffic delays at unsignalized intersections are determined by sequentially processing these impeded movements. Table II describes the Level of Service ranges for unsignalized (stop controlled) intersections.

Table I
Level of Service Criteria
for Signalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
A	0.0 to 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	greater than 80.0

Table II
Level of Service Criteria
for Unsignalized Intersections

Level of Service	Average Control Delay (seconds per vehicle)
a	0.0 to 10.0
b	10.1 to 15.0
c	15.1 to 25.0
d	25.1 to 35.0
e	35.1 to 50.0
f	greater than 50.0

It should be noted that the analyses within the *Highway Capacity Manual* assume a random arrival for all the movements, which may not be the case if an adjacent traffic signal is present that platoons vehicles.

All capacity analyses were performed utilizing Synchro 11 software. Table III summarizes the existing Levels of Service (LOS) and delays. All capacity analysis calculation worksheets are contained in Appendix C.

Table III
Existing Levels of Service

Intersection	Direction/ Movement		AM PSH	PM PSH
Mallory Avenue & Claremont Avenue	EB	LTR	C (23)	B (19)
		PED	B	B
	WB	LTR	B (19)	B (17)
		PED	B	B
	NB	L	A (3)	A (5)
		TR	A (5)	A (9)
		PED	B	B
	SB	L	A (3)	A (5)
		TR	A (5)	A (7)
		PED	B	B
	Overall		**A (7)**	**A (9)**
Mallory Avenue & Yale Avenue	EB	LTR	b (12)	b (12)
	NB	L	a (8)	a (8)
	SB	L	a (8)	a (8)

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)
A – Pedestrian Level of Service

The following are discussions pertaining to each of the existing intersections analyzed. It should be noted that the existing percentage of trucks and peak hour factors were used in the existing analysis.

Mallory Avenue and Claremont Avenue

Claremont Avenue intersects Mallory Avenue to form a four-leg intersection controlled by a three-phase traffic signal. Both approaches of Mallory Avenue provide a dedicated left turn lane and a shared through/right turn lane, while both approaches of Claremont Avenue provide a shared lane for all movements.

A review of the existing analysis reveals that the intersection operates at overall Level of Service "A" during the analyzed peak periods. See Table III for the individual movement Levels of Service and delays.

Mallory Avenue and Yale Avenue

Yale Avenue intersects Mallory Avenue to form an unsignalized four-leg intersection with the eastbound approach of Yale Avenue operating under stop control. Both approaches of Mallory Avenue provide a shared lane for all movements. The eastbound approach of Yale Avenue provides a shared lane for all movements, while the eastern approach of Yale Avenue provides one lane for travel away from the intersection.

A review of the existing analysis reveals that the individual intersection movements operate at Levels of Service "B" or better during the analyzed peak periods. See Table III for the individual movement Levels of Service and delays.

FUTURE CONDITIONS

Traffic volumes and operational analyses were developed for both the 2024 No Build and Build conditions. The No Build conditions provide a baseline for assessing the impact of the site development traffic on the roadway system. The process of developing the No Build and Build traffic volumes and the subsequent analyses is outlined below.

Regardless of whether the subject site is developed or not, traffic volumes on the surrounding roadways are expected to increase as a result of developments throughout the region. A growth rate for roadways within the study area was obtained from the NJDOT Annual Background Growth Rate Table, which indicates a growth rate of 1.5% per year.

Through consultation with the Jersey City Planning Board staff, there was one development in the vicinity of the site that was approved but not yet constructed at the time the traffic counts were conducted which was identified as a potential significant traffic generator, shown below. The Adjacent Development Traffic Volumes passing the site are shown on Figure 3. It was assumed that the background growth rate was adequate to account for the traffic associated with any other projects not listed herein.

- A development consisting of a 631-unit residential building known as 3 Acres, located at 400 Claremont Avenue, was approved at the time the counts were conducted.

Future 2024 No Build traffic volumes were developed by applying the background growth rate of 1.5% for two (2) years to the study area roadways existing traffic volumes. Figure 4, in Appendix A, shows the 2024 No Build traffic volumes.

Traffic Generation

Trip generation projections for The Project were prepared utilizing trip generation research data as published under Land Use Code 231 – Mid-Rise Residential with 1st Floor Commercial (1-25k) in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation, 11th Edition.* This publication sets forth trip generation rates based on traffic counts conducted at research sites throughout the country. The following table summarizes new trips generated from the Project.

Table IV
Trip Generation

Land Use	AM PSH			PM PSH		
	In	Out	Total	In	Out	Total
189 Unit Residential Building	15	23	38	23	30	53

Once the magnitude of traffic to be generated by the site is known, it is necessary to assign that traffic to the adjacent street system. The distribution of new traffic to the surrounding roadways is based on the location of primary arterial roadways, major signalized intersections and existing traffic patterns.

Located in Appendix A, Figures 5 and 6 illustrate the Site Generated Trip Distribution and Site Generated Volumes, respectively. The Total Site Generated Volumes assigned to the study area network were added to the No Build traffic volumes to generate the Build traffic volumes, which are shown in Figure 7.

It should be noted that as described previously, there is substantial availability of convenient, diverse and desirable mass transit service available to the site including the Hudson-Bergen Light Rail station at the corner of Claremont Avenue and West Side Avenue just east of the site and the New Jersey Transit bus Route 80 which runs parallel to Mallory Avenue along West Side Avenue. Based on the proximity to the mass transit, it can be expected that a significant portion of the residents will utilize mass transit as their primary means of commuting thereby reducing the vehicular impact on the adjacent roadway network. In an effort to provide a conservative analysis, no credit was taken for the availability of mass transit.

Future Capacity Analysis

Operational conditions at the study intersections were analyzed under the No Build and Build conditions and are summarized in Table V below.

Table V
Future Levels of Service

Intersection	Direction/ Movement		AM PSH		PM PSH	
			No Build	Build	No Build	Build
Mallory Avenue & Claremont Avenue	EB	LTR	C (20)	C (20)	B (18)	B (18)
		PED	B	B	B	B
	WB	LTR	B (19)	B (20)	B (18)	B (19)
		PED	B	B	B	B
	NB	L	A (4)	A (4)	A (5)	A (5)
		TR	A (7)	A (7)	B (10)	B (11)
		PED	B	B	B	B
	SB	L	A (4)	A (4)	A (5)	A (5)
		TR	A (6)	A (7)	A (8)	A (8)
		PED	B	B	B	B
	Overall		**A (10)**	**B (10)**	**B (10)**	**B (11)**
Mallory Avenue & Yale Avenue	EB	LTR	b (13)	b (13)	b (13)	b (13)
	NB	L	a (8)	a (8)	a (8)	b (8)
	SB	L	a (8)	a (8)	a (8)	b (8)
Claremont Avenue & Site Driveway	EB	L	-	a (8)	-	a (8)
	SB	LR	-	a (10)	-	a (10)

a (#) - Unsignalized Intersection Level of Service (seconds of delay per vehicle)
A (#) - Signalized Intersection Level of Service (seconds of delay per vehicle)
A – Pedestrian Level of Service

Mallory Avenue and Claremont Avenue

With the addition of site generated traffic, the intersection is anticipated to continue to operate at overall No Build Level of Service "B" during the analyzed peak hours. See Table V for the individual movement Levels of Service and delays.

Mallory Avenue and Yale Avenue

With the addition of site generated traffic, the individual intersection movements are anticipated to continue to operate at No Build Levels of Service "B" or better during the analyzed peak hours. See Table V for the individual movement Levels of Service and delays.

Claremont Avenue and Site Driveway

The site driveway is proposed to intersect Claremont Avenue to form an unsignalized T-intersection with the southbound approach of the site driveway operating under stop control. The eastbound approach of Claremont Avenue is proposed to provide a shared left turn/through lane, while the westbound approach is proposed to provide a shared through/right turn lane. The southbound approach of the site driveway is proposed to provide a shared left turn/right turn lane.

As designed, the individual intersection movements are anticipated to operate at Level of Service "A" during the studied peak hours. See Table V for the individual movement Levels of Service and delays.

SITE PLAN

Site Access and Circulation

The site plan was reviewed with respect to the site access and on-site circulation design. As noted previously, access to The Project will be provided via one (1) full movement driveway along Claremont Avenue. Additionally, an internal connection will be provided between the adjacent 3 Acres residential building. The development proposal will also eliminate the existing curb cuts along Mallory Avenue and reduce the number of curb cuts along Claremont Avenue from three to one, which represents an improvement over existing conditions as it will reduce the number of pedestrian and vehicle conflicts.

The parking garage will be serviced by parking aisles with minimum widths of 22', which satisfy the Redevelopment Plan's minimum requirement of 22' and is consistent with similar designs for parking garages. These aisles will allow for two-way circulation and 90-degree parking.

Parking

The City of Jersey City Route 440-Culver Redevelopment Plan sets forth a minimum parking requirement of 0.33 spaces per dwelling unit and a maximum parking requirement of 0.66 spaces per dwelling unit for Mid-Rise Apartment Buildings in the Mid-Rise-A (MR-A) district. Additionally, the Redevelopment Plan sets forth no minimum parking requirement and a maximum parking requirement of 1 space per 1,000 SF of GFA for retail uses. This equates to a minimum parking requirement of 62 spaces and a maximum of 125 spaces for the proposed 189 residential units, and a minimum parking requirement of 0 spaces and a maximum of 6 spaces for the proposed 6,123 SF of retail space. The site as proposed provides 125 residential parking spaces, and as such the Redevelopment Plan requirements are satisfied.

It is proposed to provide standard parking stalls with dimensions of 9'x18' and compact parking stalls with dimensions of 8'x16', both of which satisfy the Redevelopment Plan's minimum requirements. It should also be noted that industry standards recommend standard stall widths of between 8'3" and 8'6" and a length of 18' for low-turnover residential type land uses such as The Project, which is met as designed.

FINDINGS & CONCLUSIONS

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- The proposed 189-unit residential building, is projected to generate 15 entering trips and 23 exiting trips during the weekday morning peak hour and 23 entering trips and 30 exiting trips during the weekday evening peak hour that are "new" to the adjacent roadway network.

- Access to the site is proposed to be provided via one (1) full movement driveway along Claremont Avenue. Additionally, an internal connection will be provided between the adjacent 3 Acres residential building.

- With the addition of site generated traffic, the intersection of Mallory Avenue and Claremont Avenue is anticipated to continue to operate at overall No Build Level of Service "B" during the peak hours studied.

- With the addition of site generated traffic, the individual intersection movements of Mallory Avenue and Yale Avenue are anticipated to continue to operate at No Build Levels of Service "B" or better during the peak hours studied.

- As designed, the individual intersection movements of Claremont Avenue and the site driveway are anticipated to operate at Level of Service "A" during the peak hours studied.

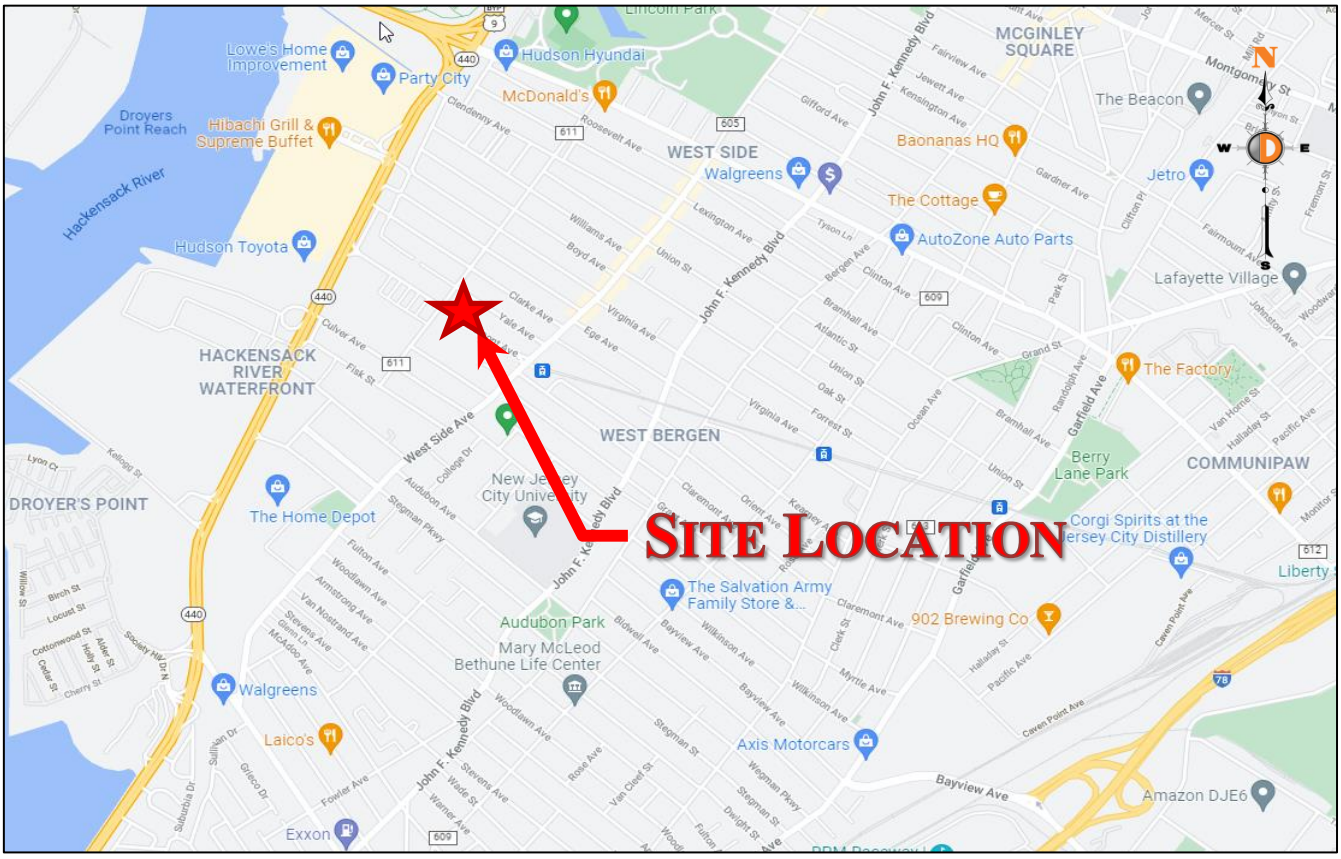
- As proposed, The Project's site driveway and internal circulation have been designed to provide for safe and efficient movement of automobiles.

- The proposed parking supply and design is sufficient to support the projected demand and satisfies the Redevelopment Plan requirements.

Conclusions

Based upon our Traffic Impact Study as detailed in the body of this report, it is the professional opinion of Dynamic Traffic, LLC that the adjacent street system of the City of Jersey City will not experience any significant degradation in operating conditions with the construction of The Project. The site driveway is located to provide safe and efficient access to the adjacent roadway system. The site plan as proposed provides for good circulation throughout the site and provides adequate parking to accommodate The Project's needs.

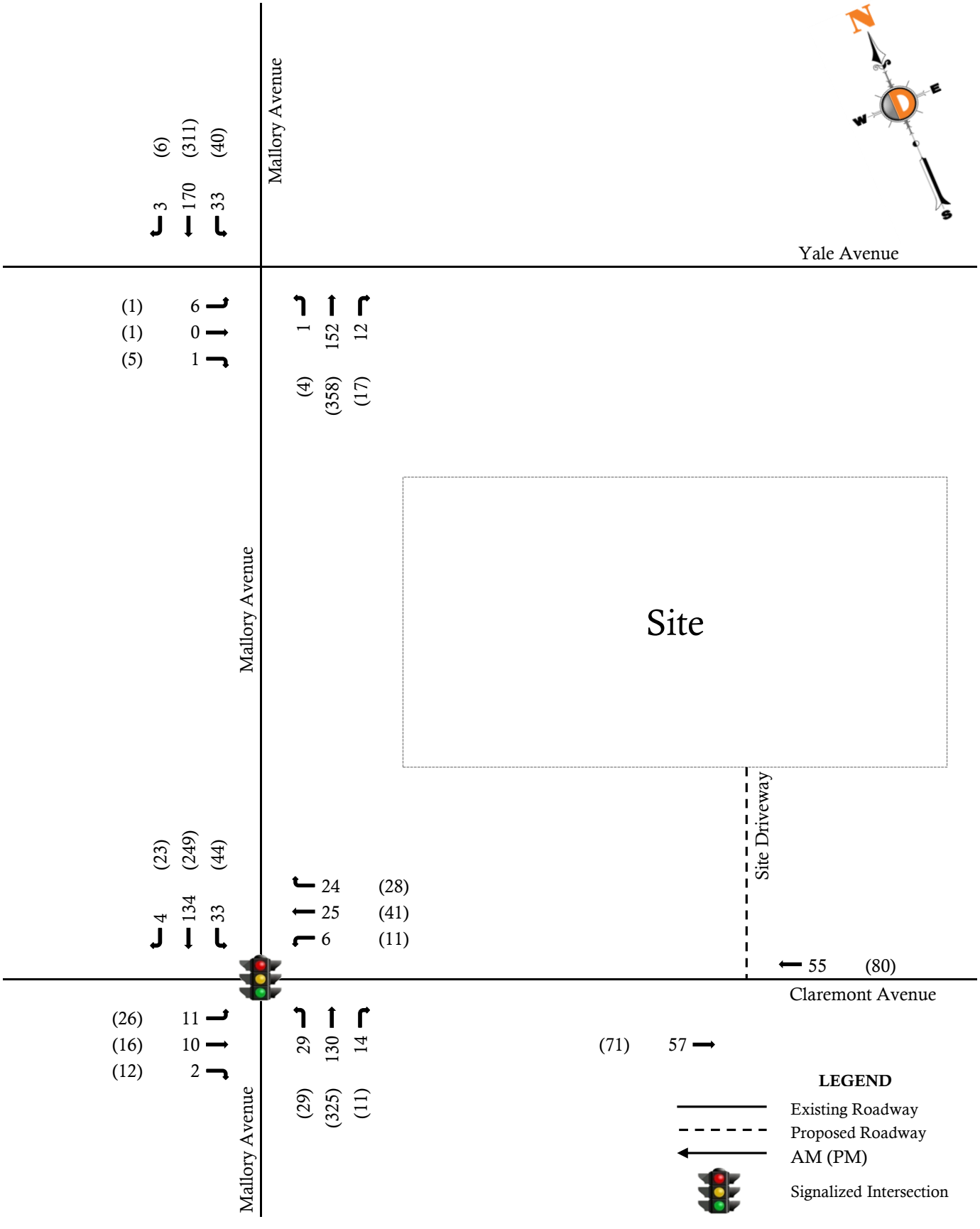
Appendix A
Traffic Volume Figures



Proposed Residential Development
Traffic Impact Study
1138-99-019TE

Figure 1

Site Location Map



Proposed Residential Development
Traffic Impact Study
1138-99-019TE

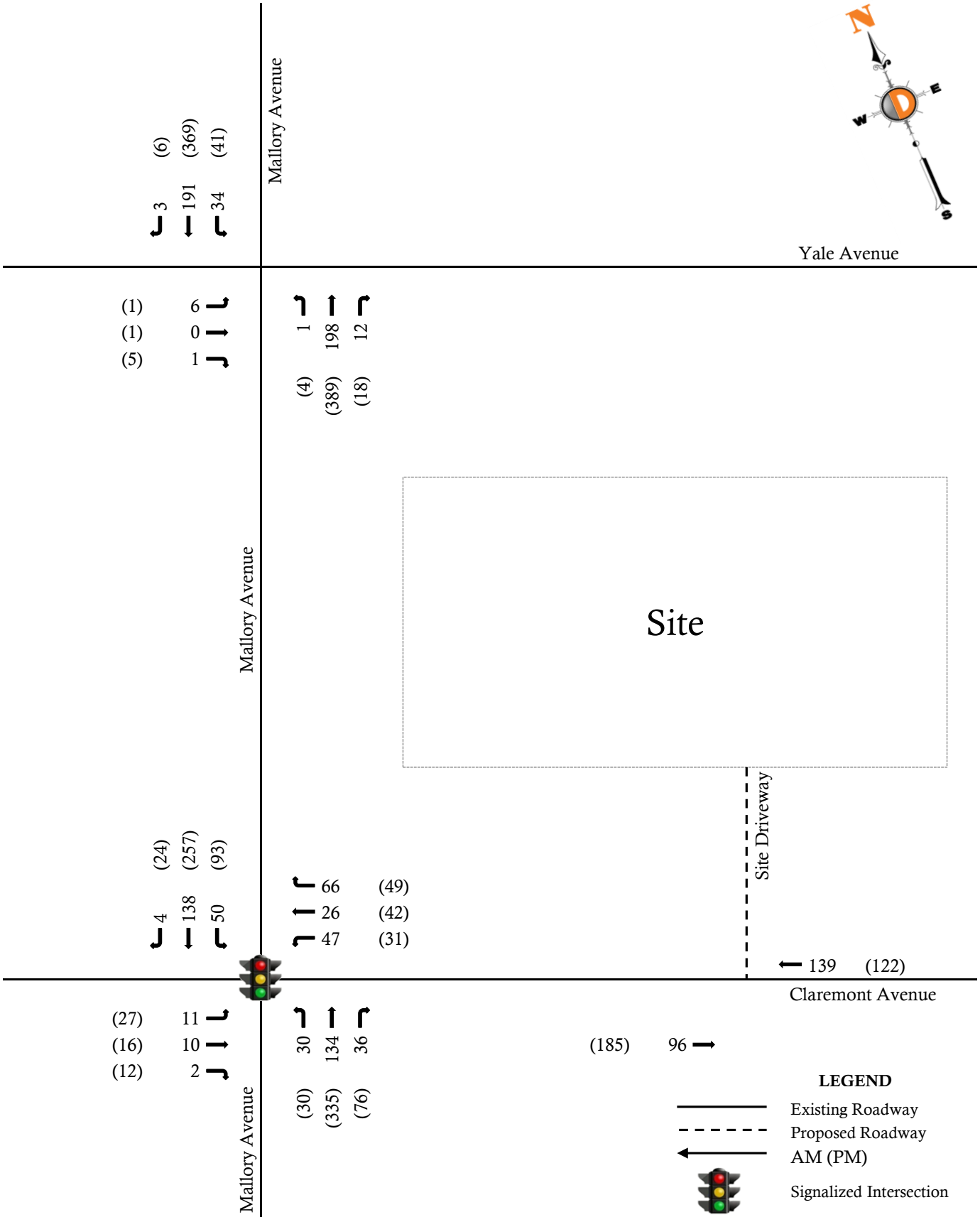
Figure 2

Existing Traffic Volumes

Proposed Residential Development
Traffic Impact Study
1138-99-019TE

Figure 3

Adjacent Development Traffic Volumes [3 Acres]



Proposed Residential Development
Traffic Impact Study
1138-99-019TE

Figure 4

No Build Traffic Volumes

Proposed Residential Development
Traffic Impact Study
1138-99-019TE

Figure 5

Percent Distribution (Site Generated)

Proposed Residential Development
Traffic Impact Study
1138-99-019TE

Figure 6

Site Generated Trips

Proposed Residential Development
Traffic Impact Study
1138-99-019TE

Figure 7

Build Traffic Volumes

Appendix B
Project Information

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Clarmont Ave
N/S: Mallory Ave
Town/County: Jersey City/Hudson
Job #: 1138-99-019TE

File Name : Mallory Ave & Clarmont Ave - AMPM
Site Code : 00000000
Start Date : 8/26/2021
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

	Clarmont Ave Eastbound					Clarmont Ave Westbound					Mallory Ave Northbound					Mallory Ave Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	4	1	0	1	6	3	5	2	4	14	6	23	2	4	35	9	36	1	2	48	103
07:15 AM	1	1	0	0	2	0	4	5	3	12	5	23	2	0	30	7	24	2	0	33	77
07:30 AM	5	6	0	0	11	0	8	1	3	12	4	33	2	0	39	14	28	0	0	42	104
07:45 AM	2	3	0	0	5	1	8	4	0	13	3	29	0	2	34	8	23	0	0	31	83
Total	12	11	0	1	24	4	25	12	10	51	18	108	6	6	138	38	111	3	2	154	367
08:00 AM	2	1	0	1	4	1	4	3	5	13	10	29	7	4	50	8	27	1	2	38	105
08:15 AM	1	1	0	1	3	1	6	5	3	15	5	31	2	2	40	8	38	0	0	46	104
08:30 AM	5	5	1	1	12	1	6	8	2	17	11	26	4	2	43	12	27	2	0	41	113
08:45 AM	3	2	1	3	9	3	9	8	7	27	3	42	1	5	51	3	28	1	1	33	120
Total	11	9	2	6	28	6	25	24	17	72	29	128	14	13	184	31	120	4	3	158	442
09:00 AM	2	3	0	1	6	2	6	8	1	17	3	22	1	2	28	5	29	4	2	40	91
*** BREAK ***																					
Total	2	3	0	1	6	2	6	8	1	17	3	22	1	2	28	5	29	4	2	40	91
*** BREAK ***																					
04:30 PM	2	4	1	4	11	2	16	4	2	24	4	55	3	3	65	10	49	2	0	61	161
04:45 PM	4	5	1	4	14	3	14	7	1	25	16	47	1	7	71	10	50	1	1	62	172
Total	6	9	2	8	25	5	30	11	3	49	20	102	4	10	136	20	99	3	1	123	333
05:00 PM	4	8	2	4	18	3	17	7	2	29	7	63	4	7	81	15	59	2	0	76	204
05:15 PM	13	1	1	6	21	6	11	7	4	28	7	85	1	2	95	9	48	9	5	71	215
05:30 PM	1	3	5	3	12	2	7	5	2	16	10	112	4	5	131	6	54	8	4	72	231
05:45 PM	8	4	4	2	18	0	5	9	3	17	5	60	2	10	77	10	66	4	2	82	194
Total	26	16	12	15	69	11	40	28	11	90	29	320	11	24	384	40	227	23	11	301	844
06:00 PM	6	4	2	4	16	2	14	5	7	28	3	43	2	9	57	12	48	5	0	65	166
06:15 PM	4	7	1	2	14	3	15	3	3	24	13	44	6	5	68	9	64	5	1	79	185
Grand Total	67	59	19	37	182	33	155	91	52	331	115	767	44	69	995	155	698	47	20	920	2428
Apprch %	36.8	32.4	10.4	20.3		10	46.8	27.5	15.7		11.6	77.1	4.4	6.9		16.8	75.9	5.1	2.2		
Total %	2.8	2.4	0.8	1.5	7.5	1.4	6.4	3.7	2.1	13.6	4.7	31.6	1.8	2.8	41	6.4	28.7	1.9	0.8	37.9	
Cars	67	59	19	37	182	33	152	85	52	322	115	767	44	69	995	155	698	43	20	916	2415
% Cars	100	100	100	100	100	100	98.1	93.4	100	97.3	100	100	100	100	100	100	100	91.5	100	99.6	99.5
Trucks (SU)	0	0	0	0	0	0	1	6	0	7	0	0	0	0	0	0	0	4	0	4	11
% Trucks (SU)	0	0	0	0	0	0	0.6	6.6	0	2.1	0	0	0	0	0	0	0	8.5	0	0.4	0.5
Trucks (TT)	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Trucks (TT)	0	0	0	0	0	0	1.3	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0.1

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Clarmont Ave
N/S: Mallory Ave
Town/County: Jersey City/Hudson
Job #: 1138-99-019TE

File Name : Mallory Ave & Clarmont Ave - AMPM
Site Code : 00000000
Start Date : 8/26/2021
Page No : 2

	Clarmont Ave Eastbound					Clarmont Ave Westbound					Mallory Ave Northbound					Mallory Ave Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	2	1	0	1	4	1	4	3	5	13	10	29	7	4	50	8	27	1	2	38	105
08:15 AM	1	1	0	1	3	1	6	5	3	15	5	31	2	2	40	8	38	0	0	46	104
08:30 AM	5	5	1	1	12	1	6	8	2	17	11	26	4	2	43	12	27	2	0	41	113
08:45 AM	3	2	1	3	9	3	9	8	7	27	3	42	1	5	51	3	28	1	1	33	120
Total Volume	11	9	2	6	28	6	25	24	17	72	29	128	14	13	184	31	120	4	3	158	442
% App. Total	39.3	32.1	7.1	21.4		8.3	34.7	33.3	23.6		15.8	69.6	7.6	7.1		19.6	75.9	2.5	1.9		
PHF	.550	.450	.500	.500	.583	.500	.694	.750	.607	.667	.659	.762	.500	.650	.902	.646	.789	.500	.375	.859	.921
Cars	11	9	2	6	28	6	24	22	17	69	29	128	14	13	184	31	120	3	3	157	438
% Cars	100	100	100	100	100	100	96.0	91.7	100	95.8	100	100	100	100	100	100	100	75.0	100	99.4	99.1
Trucks (SU)	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	1	0	1	4
% Trucks (SU)	0	0	0	0	0	0	4.0	8.3	0	4.2	0	0	0	0	0	0	0	25.0	0	0.6	0.9
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	4	8	2	4	18	3	17	7	2	29	7	63	4	7	81	15	59	2	0	76	204
05:15 PM	13	1	1	6	21	6	11	7	4	28	7	85	1	2	95	9	48	9	5	71	215
05:30 PM	1	3	5	3	12	2	7	5	2	16	10	112	4	5	131	6	54	8	4	72	231
05:45 PM	8	4	4	2	18	0	5	9	3	17	5	60	2	10	77	10	66	4	2	82	194
Total Volume	26	16	12	15	69	11	40	28	11	90	29	320	11	24	384	40	227	23	11	301	844
% App. Total	37.7	23.2	17.4	21.7		12.2	44.4	31.1	12.2		7.6	83.3	2.9	6.2		13.3	75.4	7.6	3.7		
PHF	.500	.500	.600	.625	.821	.458	.588	.778	.688	.776	.725	.714	.688	.600	.733	.667	.860	.639	.550	.918	.913
Cars	26	16	12	15	69	11	39	26	11	87	29	320	11	24	384	40	227	22	11	300	840
% Cars	100	100	100	100	100	100	97.5	92.9	100	96.7	100	100	100	100	100	100	100	95.7	100	99.7	99.5
Trucks (SU)	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	1	0	1	3
% Trucks (SU)	0	0	0	0	0	0	0	7.1	0	2.2	0	0	0	0	0	0	0	4.3	0	0.3	0.4
Trucks (TT)	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Trucks (TT)	0	0	0	0	0	0	2.5	0	0	1.1	0	0	0	0	0	0	0	0	0	0	0.1

Dynamic Traffic, LLC

1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Yale Ave
N/S: Mallory Ave
Town/County: Jersey City/Hudson
Job #:1138-99-019TE

File Name : Mallory Ave & Yale Ave - AMPM
Site Code : 00000000
Start Date : 8/26/2021
Page No : 1

Groups Printed- Cars - Trucks (SU) - Trucks (TT)

	Yale Ave Eastbound					Yale Ave Westbound					Mallory Ave Northbound					Mallory Ave Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	0	0	1	2	0	0	0	10	10	1	30	1	0	32	14	36	0	0	50	94
07:15 AM	0	0	0	1	1	0	0	0	5	5	0	36	2	0	38	7	47	0	1	55	99
07:30 AM	0	1	1	2	4	0	0	0	4	4	0	31	2	0	33	8	32	0	2	42	83
07:45 AM	1	0	1	4	6	0	0	0	8	8	0	34	4	0	38	12	41	1	0	54	106
Total	2	1	2	8	13	0	0	0	27	27	1	131	9	0	141	41	156	1	3	201	382
08:00 AM	5	0	0	0	5	0	0	0	9	9	1	36	3	1	41	9	55	2	0	66	121
08:15 AM	1	0	1	6	8	0	0	0	4	4	0	35	2	0	37	8	40	1	2	51	100
08:30 AM	0	0	0	4	4	0	0	0	3	3	0	49	4	1	54	7	35	0	0	42	103
08:45 AM	0	0	0	1	1	0	0	0	4	4	0	30	3	0	33	9	37	0	1	47	85
Total	6	0	1	11	18	0	0	0	20	20	1	150	12	2	165	33	167	3	3	206	409
*** BREAK ***																					
04:30 PM	1	0	0	7	8	0	0	0	6	6	0	59	2	1	62	8	62	2	1	73	149
04:45 PM	1	0	1	3	5	0	0	0	1	1	2	52	5	1	60	5	62	1	0	68	134
Total	2	0	1	10	13	0	0	0	7	7	2	111	7	2	122	13	124	3	1	141	283
05:00 PM	0	0	1	3	4	0	0	0	6	6	0	65	7	0	72	9	86	1	0	96	178
05:15 PM	0	0	2	12	14	0	0	0	2	2	1	98	4	0	103	10	70	1	2	83	202
05:30 PM	1	0	2	5	8	0	0	0	6	6	1	113	3	1	118	9	70	2	3	84	216
05:45 PM	0	1	0	8	9	0	1	0	2	3	2	72	3	0	77	11	80	2	2	95	184
Total	1	1	5	28	35	0	1	0	16	17	4	348	17	1	370	39	306	6	7	358	780
06:00 PM	0	0	1	6	7	0	0	0	3	3	0	53	1	1	55	14	75	1	1	91	156
06:15 PM	2	0	1	2	5	0	0	0	7	7	0	48	2	0	50	9	75	3	0	87	149
Grand Total	13	2	11	65	91	0	1	0	80	81	8	841	48	6	903	149	903	17	15	1084	2159
Apprch %	14.3	2.2	12.1	71.4		0	1.2	0	98.8		0.9	93.1	5.3	0.7		13.7	83.3	1.6	1.4		
Total %	0.6	0.1	0.5	3	4.2	0	0	0	3.7	3.8	0.4	39	2.2	0.3	41.8	6.9	41.8	0.8	0.7	50.2	
Cars	13	2	11	65	91	0	1	0	80	81	8	829	48	6	891	147	883	17	15	1062	2125
% Cars	100	100	100	100	100	0	100	0	100	100	100	98.6	100	100	98.7	98.7	97.8	100	100	98	98.4
Trucks (SU)																					
% Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	1.4	0	0	1.3	1.3	2.2	0	0	2	1.6
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Dynamic Traffic, LLC

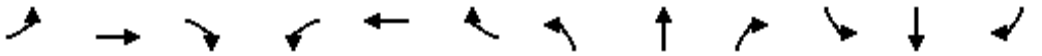
1904 Main Street, Lake Como, NJ 07719
245 Main Street - Suite #110, Chester, NJ 07930
732-681-0760

E/W: Yale Ave
N/S: Mallory Ave
Town/County: Jersey City/Hudson
Job #:1138-99-019TE

File Name : Mallory Ave & Yale Ave - AMPM
Site Code : 00000000
Start Date : 8/26/2021
Page No : 2

	Yale Ave Eastbound					Yale Ave Westbound					Mallory Ave Northbound					Mallory Ave Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	5	0	0	0	5	0	0	0	9	9	1	36	3	1	41	9	55	2	0	66	121
08:15 AM	1	0	1	6	8	0	0	0	4	4	0	35	2	0	37	8	40	1	2	51	100
08:30 AM	0	0	0	4	4	0	0	0	3	3	0	49	4	1	54	7	35	0	0	42	103
08:45 AM	0	0	0	1	1	0	0	0	4	4	0	30	3	0	33	9	37	0	1	47	85
Total Volume	6	0	1	11	18	0	0	0	20	20	1	150	12	2	165	33	167	3	3	206	409
% App. Total	33.3	0	5.6	61.1		0	0	0	100		0.6	90.9	7.3	1.2		16	81.1	1.5	1.5		
PHF	.300	.000	.250	.458	.563	.000	.000	.000	.556	.556	.250	.765	.750	.500	.764	.917	.759	.375	.375	.780	.845
Cars	6	0	1	11	18	0	0	0	20	20	1	146	12	2	161	33	161	3	3	200	399
% Cars	100	0	100	100	100	0	0	0	100	100	100	97.3	100	100	97.6	100	96.4	100	100	97.1	97.6
Trucks (SU)																					
% Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	2.7	0	0	2.4	0	3.6	0	0	2.9	2.4
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	1	3	4	0	0	0	6	6	0	65	7	0	72	9	86	1	0	96	178
05:15 PM	0	0	2	12	14	0	0	0	2	2	1	98	4	0	103	10	70	1	2	83	202
05:30 PM	1	0	2	5	8	0	0	0	6	6	1	113	3	1	118	9	70	2	3	84	216
05:45 PM	0	1	0	8	9	0	1	0	2	3	2	72	3	0	77	11	80	2	2	95	184
Total Volume	1	1	5	28	35	0	1	0	16	17	4	348	17	1	370	39	306	6	7	358	780
% App. Total	2.9	2.9	14.3	80		0	5.9	0	94.1		1.1	94.1	4.6	0.3		10.9	85.5	1.7	2		
PHF	.250	.250	.625	.583	.625	.000	.250	.000	.667	.708	.500	.770	.607	.250	.784	.886	.890	.750	.583	.932	.903
Cars	1	1	5	28	35	0	1	0	16	17	4	344	17	1	366	39	300	6	7	352	770
% Cars	100	100	100	100	100	0	100	0	100	100	100	98.9	100	100	98.9	100	98.0	100	100	98.3	98.7
Trucks (SU)																					
% Trucks (SU)	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0	1.1	0	2.0	0	0	1.7	1.3
Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks (TT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix C
Capacity Analysis



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	10	2	6	25	24	29	130	14	33	134	4
Future Volume (vph)	11	10	2	6	25	24	29	130	14	33	134	4
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			-1%			1%			-1%	
Storage Length (ft)	0		0	0		0	90		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor		0.99			0.99		0.99	1.00		0.99	1.00	
Frt		0.989			0.941			0.986			0.996	
Flt Protected		0.977			0.994		0.950			0.950		
Satd. Flow (prot)	0	1955	0	0	1793	0	1919	1984	0	1938	2017	0
Flt Permitted		0.825			0.954		0.662			0.658		
Satd. Flow (perm)	0	1647	0	0	1717	0	1330	1984	0	1323	2017	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			26			10			3	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		962			249			723			255	
Travel Time (s)		26.2			6.8			19.7			7.0	
Confl. Peds. (#/hr)	3		13	13		3	6		17	17		6
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
Heavy Vehicles (%)	0%	0%	0%	0%	4%	8%	0%	0%	0%	0%	0%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	60	0	32	156	0	36	150	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	28.0		9.5	28.0	
Total Split (%)	37.5%	37.5%		37.5%	37.5%		15.8%	46.7%		15.8%	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)	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	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		6.9			6.9		46.3	46.1		46.3	46.1	
Actuated g/C Ratio		0.12			0.12		0.77	0.77		0.77	0.77	
v/c Ratio		0.13			0.27		0.03	0.10		0.03	0.10	
Control Delay		23.3			18.8		2.6	4.7		2.6	4.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		23.3			18.8		2.6	4.7		2.6	4.8	
LOS		C			B		A	A		A	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		23.3			18.8			4.3			4.4	
Approach LOS		C			B			A			A	
Queue Length 50th (ft)		8			11		2	11		2	11	
Queue Length 95th (ft)		26			39		8	48		9	47	
Internal Link Dist (ft)		882			169			643			175	
Turn Bay Length (ft)							90			75		
Base Capacity (vph)		495			533		1076	1528		1073	1551	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.05			0.11		0.03	0.10		0.03	0.10	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 7.3		Intersection LOS: A	
Intersection Capacity Utilization 26.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Mallory Avenue & Claremont Avenue

Approach	EB	WB	NB	SB
Crosswalk Length (ft)	22.9	23.0	34.0	34.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.74	1.76	2.03	2.03
Pedestrian Crosswalk LOS	B	B	B	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	6	0	1	0	0	0	1	152	12	33	170	3
Future Vol, veh/h	6	0	1	0	0	0	1	152	12	33	170	3
Conflicting Peds, #/hr	3	0	2	0	0	0	11	0	20	20	0	11
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	7	0	1	0	0	0	1	179	14	39	200	4

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	482	506	215			215	0	0	213	0	0
Stage 1	291	291	-			-	-	-	-	-	-
Stage 2	191	215	-			-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4			4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.9	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.9	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	518	446	820			1367	-	-	1369	-	-
Stage 1	739	654	-			-	-	-	-	-	-
Stage 2	828	711	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	489	0	808			1350	-	-	1369	-	-
Mov Cap-2 Maneuver	489	0	-			-	-	-	-	-	-
Stage 1	729	0	-			-	-	-	-	-	-
Stage 2	792	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.1	0	1.2
HCM LOS	B		

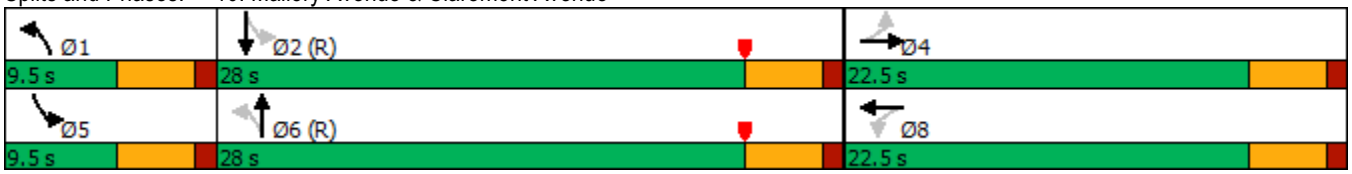
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1350	-	-	518	1369	-	-
HCM Lane V/C Ratio	0.001	-	-	0.016	0.028	-	-
HCM Control Delay (s)	7.7	0	-	12.1	7.7	0	-
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	16	12	11	41	28	29	325	11	44	249	23
Future Volume (vph)	26	16	12	11	41	28	29	325	11	44	249	23
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			-1%			1%			-1%	
Storage Length (ft)	0		0	0		0	90		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor		0.98			0.98		0.98	1.00		0.99	1.00	
Frt		0.971			0.952			0.995			0.987	
Flt Protected		0.976			0.993		0.950			0.950		
Satd. Flow (prot)	0	1899	0	0	1830	0	1919	2007	0	1938	1999	0
Flt Permitted		0.869			0.950		0.578			0.500		
Satd. Flow (perm)	0	1678	0	0	1742	0	1150	2007	0	1010	1999	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			31			3			9	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		962			249			723			255	
Travel Time (s)		26.2			6.8			19.7			7.0	
Confl. Peds. (#/hr)	11		24	24		11	15		11	11		15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	3%	7%	0%	0%	0%	0%	0%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	60	0	0	88	0	32	369	0	48	299	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	28.0		9.5	28.0	
Total Split (%)	37.5%	37.5%		37.5%	37.5%		15.8%	46.7%		15.8%	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)	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	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		9.1			9.1		41.2	39.1		42.1	41.0	
Actuated g/C Ratio		0.15			0.15		0.69	0.65		0.70	0.68	
v/c Ratio		0.23			0.30		0.04	0.28		0.06	0.22	
Control Delay		18.6			17.2		4.6	8.8		4.5	7.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.6			17.2		4.6	8.8		4.5	7.4	
LOS		B			B		A	A		A	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		18.6			17.2			8.4			7.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		16			19		2	62		4	24	
Queue Length 95th (ft)		35			43		14	161		19	126	
Internal Link Dist (ft)		882			169			643			175	
Turn Bay Length (ft)							90			75		
Base Capacity (vph)		512			544		853	1308		786	1369	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.12			0.16		0.04	0.28		0.06	0.22	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Mallory Avenue & Claremont Avenue



Approach	EB	WB	NB	SB
Crosswalk Length (ft)	22.9	23.0	34.0	34.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.77	1.78	2.12	2.14
Pedestrian Crosswalk LOS	B	B	B	B

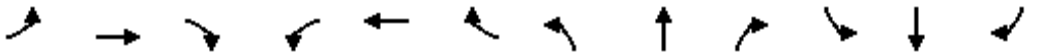
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	1	1	5	0	0	0	4	358	17	40	311	6
Future Vol, veh/h	1	1	5	0	0	0	4	358	17	40	311	6
Conflicting Peds, #/hr	7	0	1	0	0	0	28	0	16	16	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	1	1	6	0	0	0	4	398	19	44	346	7

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	889	907	379			381	0	0	433	0	0
Stage 1	466	466	-			-	-	-	-	-	-
Stage 2	423	441	-			-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4			4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.9	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.9	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	287	251	658			1189	-	-	1137	-	-
Stage 1	604	537	-			-	-	-	-	-	-
Stage 2	635	553	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	255	0	637			1152	-	-	1137	-	-
Mov Cap-2 Maneuver	255	0	-			-	-	-	-	-	-
Stage 1	582	0	-			-	-	-	-	-	-
Stage 2	585	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.1	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1152	-	-	510	1137	-	-
HCM Lane V/C Ratio	0.004	-	-	0.015	0.039	-	-
HCM Control Delay (s)	8.1	0	-	12.2	8.3	0	-
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	-	-

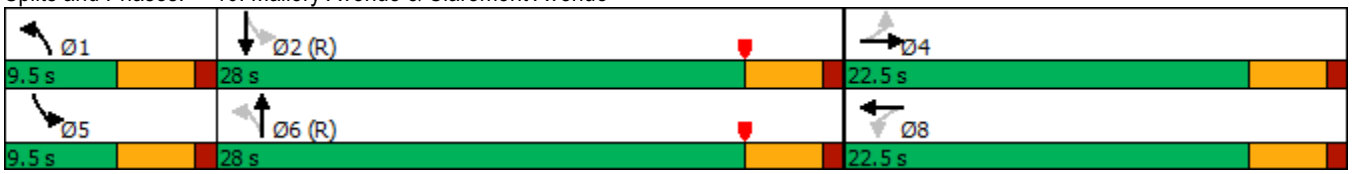


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	10	2	47	26	66	30	134	36	50	138	4
Future Volume (vph)	11	10	2	47	26	66	30	134	36	50	138	4
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			-1%			1%			-1%	
Storage Length (ft)	0		0	0		0	90		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor		0.99			0.98		0.99	0.99		0.99	1.00	
Frt		0.989			0.936			0.968			0.996	
Flt Protected		0.977			0.983		0.950			0.950		
Satd. Flow (prot)	0	1955	0	0	1774	0	1919	1938	0	1938	2017	0
Flt Permitted		0.832			0.878		0.659			0.624		
Satd. Flow (perm)	0	1662	0	0	1573	0	1324	1938	0	1255	2017	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			72			26			3	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		962			249			723			255	
Travel Time (s)		26.2			6.8			19.7			7.0	
Confl. Peds. (#/hr)	3		13	13		3	6		17	17		6
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
Heavy Vehicles (%)	0%	0%	0%	0%	4%	8%	0%	0%	0%	0%	0%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	151	0	33	185	0	54	154	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	28.0		9.5	28.0	
Total Split (%)	37.5%	37.5%		37.5%	37.5%		15.8%	46.7%		15.8%	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)	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	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		8.7			8.7		41.6	39.5		42.5	41.4	
Actuated g/C Ratio		0.14			0.14		0.69	0.66		0.71	0.69	
v/c Ratio		0.10			0.52		0.03	0.14		0.06	0.11	
Control Delay		20.2			19.4		3.7	6.5		3.7	6.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		20.2			19.4		3.7	6.5		3.7	6.4	
LOS		C			B		A	A		A	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		20.2			19.4			6.1			5.7	
Approach LOS		C			B			A			A	
Queue Length 50th (ft)		7			26		3	25		4	13	
Queue Length 95th (ft)		23			67		11	62		16	57	
Internal Link Dist (ft)		882			169			643			175	
Turn Bay Length (ft)							90			75		
Base Capacity (vph)		500			522		966	1283		944	1391	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.05			0.29		0.03	0.14		0.06	0.11	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 9.9		Intersection LOS: A	
Intersection Capacity Utilization 32.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Mallory Avenue & Claremont Avenue



Approach	EB	WB	NB	SB
Crosswalk Length (ft)	22.9	23.0	34.0	34.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.75	1.81	2.05	2.05
Pedestrian Crosswalk LOS	B	B	B	B

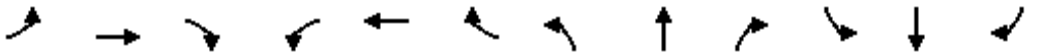
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	1	0	0	0	1	198	12	34	191	3
Future Vol, veh/h	6	0	1	0	0	0	1	198	12	34	191	3
Conflicting Peds, #/hr	3	0	2	0	0	0	11	0	20	20	0	11
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	7	0	1	0	0	0	1	233	14	40	225	4

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	563	587	240			240	0	0	267	0	0
Stage 1	318	318	-			-	-	-	-	-	-
Stage 2	245	269	-			-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4			4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.9	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.9	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	461	398	793			1339	-	-	1308	-	-
Stage 1	716	634	-			-	-	-	-	-	-
Stage 2	779	670	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	434	0	782			1323	-	-	1308	-	-
Mov Cap-2 Maneuver	434	0	-			-	-	-	-	-	-
Stage 1	707	0	-			-	-	-	-	-	-
Stage 2	742	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0	1.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1323	-	-	463	1308	-	-
HCM Lane V/C Ratio	0.001	-	-	0.018	0.031	-	-
HCM Control Delay (s)	7.7	0	-	12.9	7.8	0	-
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	-	-

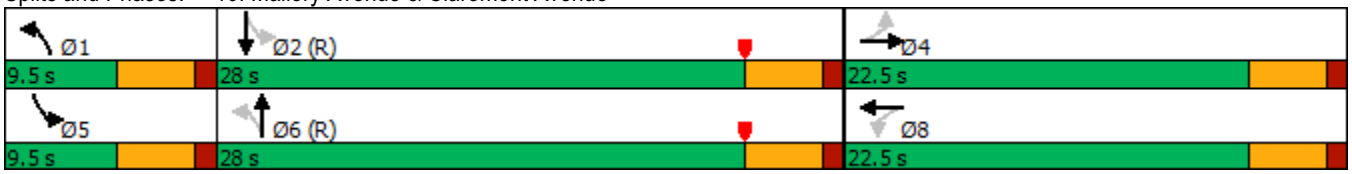


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	16	12	31	42	49	30	335	76	93	257	24
Future Volume (vph)	27	16	12	31	42	49	30	335	76	93	257	24
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			-1%			1%			-1%	
Storage Length (ft)	0		0	0		0	90		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor		0.98			0.98		0.99	0.99		0.99	1.00	
Frt		0.971			0.946			0.972			0.987	
Flt Protected		0.976			0.987		0.950			0.950		
Satd. Flow (prot)	0	1900	0	0	1806	0	1919	1949	0	1938	1999	0
Flt Permitted		0.815			0.896		0.573			0.414		
Satd. Flow (perm)	0	1575	0	0	1624	0	1140	1949	0	838	1999	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			54			23			9	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		962			249			723			255	
Travel Time (s)		26.2			6.8			19.7			7.0	
Confl. Peds. (#/hr)	11		24	24		11	15		11	11		15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	3%	7%	0%	0%	0%	0%	0%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	134	0	33	452	0	102	308	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	28.0		9.5	28.0	
Total Split (%)	37.5%	37.5%		37.5%	37.5%		15.8%	46.7%		15.8%	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)	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	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		9.7			9.7		39.7	36.6		41.5	40.4	
Actuated g/C Ratio		0.16			0.16		0.66	0.61		0.69	0.67	
v/c Ratio		0.23			0.44		0.04	0.38		0.15	0.23	
Control Delay		18.3			17.6		4.8	10.1		5.0	7.8	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.3			17.6		4.8	10.1		5.0	7.8	
LOS		B			B		A	B		A	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		18.3			17.6			9.8			7.1	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		16			27		3	79		9	28	
Queue Length 95th (ft)		36			57		15	198		34	130	
Internal Link Dist (ft)		882			169			643			175	
Turn Bay Length (ft)							90			75		
Base Capacity (vph)		481			525		819	1198		671	1349	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.13			0.26		0.04	0.38		0.15	0.23	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Mallory Avenue & Claremont Avenue



Approach	EB	WB	NB	SB
Crosswalk Length (ft)	22.9	23.0	34.0	34.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.78	1.85	2.15	2.17
Pedestrian Crosswalk LOS	B	B	B	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	1	1	5	0	0	0	4	389	18	41	369	6
Future Vol, veh/h	1	1	5	0	0	0	4	389	18	41	369	6
Conflicting Peds, #/hr	7	0	1	0	0	0	28	0	16	16	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	1	1	6	0	0	0	4	432	20	46	410	7

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	991	1010	443			445	0	0	468	0	0
Stage 1	534	534	-			-	-	-	-	-	-
Stage 2	457	476	-			-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4			4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.9	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.9	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	247	216	604			1126	-	-	1104	-	-
Stage 1	558	497	-			-	-	-	-	-	-
Stage 2	610	531	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	218	0	585			1091	-	-	1104	-	-
Mov Cap-2 Maneuver	218	0	-			-	-	-	-	-	-
Stage 1	538	0	-			-	-	-	-	-	-
Stage 2	559	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0.1	0.8
HCM LOS	B		

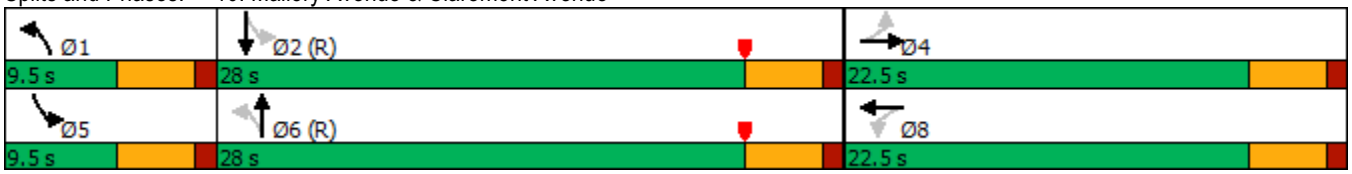
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1091	-	-	457	1104	-	-
HCM Lane V/C Ratio	0.004	-	-	0.017	0.041	-	-
HCM Control Delay (s)	8.3	0	-	13	8.4	0	-
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	10	2	56	26	75	30	134	42	56	138	4
Future Volume (vph)	11	10	2	56	26	75	30	134	42	56	138	4
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			-1%			1%			-1%	
Storage Length (ft)	0		0	0		0	90		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor		0.99			0.98		0.99	0.99		0.99	1.00	
Frt		0.989			0.935			0.964			0.996	
Flt Protected		0.977			0.982		0.950			0.950		
Satd. Flow (prot)	0	1955	0	0	1771	0	1919	1928	0	1938	2017	0
Flt Permitted		0.823			0.872		0.659			0.619		
Satd. Flow (perm)	0	1644	0	0	1561	0	1324	1928	0	1246	2017	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			79			31			3	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		962			178			723			255	
Travel Time (s)		26.2			4.9			19.7			7.0	
Confl. Peds. (#/hr)	3		13	13		3	6		17	17		6
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
Heavy Vehicles (%)	0%	0%	0%	0%	4%	8%	0%	0%	0%	0%	0%	25%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	171	0	33	192	0	61	154	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	28.0		9.5	28.0	
Total Split (%)	37.5%	37.5%		37.5%	37.5%		15.8%	46.7%		15.8%	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)	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	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		9.2			9.2		41.1	39.0		42.0	40.9	
Actuated g/C Ratio		0.15			0.15		0.68	0.65		0.70	0.68	
v/c Ratio		0.10			0.56		0.03	0.15		0.07	0.11	
Control Delay		19.5			19.9		4.0	6.7		4.0	6.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		19.5			19.9		4.0	6.7		4.0	6.7	
LOS		B			B		A	A		A	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		19.5			19.9			6.3			6.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		7			31		3	26		5	14	
Queue Length 95th (ft)		23			74		12	66		18	59	
Internal Link Dist (ft)		882			98			643			175	
Turn Bay Length (ft)							90			75		
Base Capacity (vph)		494			523		955	1262		928	1374	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.05			0.33		0.03	0.15		0.07	0.11	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 34.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Mallory Avenue & Claremont Avenue



Approach	EB	WB	NB	SB
Crosswalk Length (ft)	22.9	23.0	34.0	34.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.75	1.83	2.05	2.06
Pedestrian Crosswalk LOS	B	B	B	B

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	6	0	1	0	0	0	1	207	12	34	197	3
Future Vol, veh/h	6	0	1	0	0	0	1	207	12	34	197	3
Conflicting Peds, #/hr	3	0	2	0	0	0	11	0	20	20	0	11
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	7	0	1	0	0	0	1	244	14	40	232	4

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	581	605	247			247	0	0	278	0	0
Stage 1	325	325	-			-	-	-	-	-	-
Stage 2	256	280	-			-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4			4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.9	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.9	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	449	388	786			1331	-	-	1296	-	-
Stage 1	711	629	-			-	-	-	-	-	-
Stage 2	769	662	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	422	0	775			1315	-	-	1296	-	-
Mov Cap-2 Maneuver	422	0	-			-	-	-	-	-	-
Stage 1	702	0	-			-	-	-	-	-	-
Stage 2	732	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1315	-	-	451	1296	-	-
HCM Lane V/C Ratio	0.001	-	-	0.018	0.031	-	-
HCM Control Delay (s)	7.7	0	-	13.1	7.9	0	-
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	96	139	3	5	18
Future Vol, veh/h	12	96	139	3	5	18
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	-1	-	0	-
Peak Hour Factor	76	76	76	76	92	92
Heavy Vehicles, %	0	0	6	0	0	0
Mvmt Flow	16	126	183	4	5	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	187	0	-	0	343	185
Stage 1	-	-	-	-	185	-
Stage 2	-	-	-	-	158	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1399	-	-	-	657	862
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	875	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1399	-	-	-	649	862
Mov Cap-2 Maneuver	-	-	-	-	649	-
Stage 1	-	-	-	-	842	-
Stage 2	-	-	-	-	875	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	9.6
HCM LOS			A

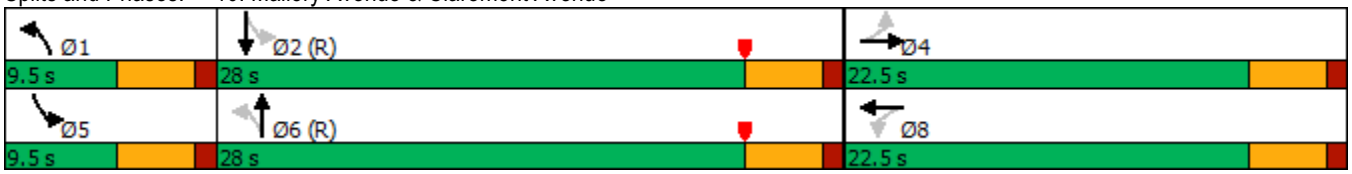
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1399	-	-	-	805
HCM Lane V/C Ratio	0.011	-	-	-	0.031
HCM Control Delay (s)	7.6	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	16	12	43	42	61	30	335	85	102	257	24
Future Volume (vph)	27	16	12	43	42	61	30	335	85	102	257	24
Ideal Flow (vphpl)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			-1%			1%			-1%	
Storage Length (ft)	0		0	0		0	90		0	75		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	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 Factor		0.98			0.97		0.99	0.99		0.99	1.00	
Frt		0.971			0.943			0.970			0.987	
Flt Protected		0.976			0.986		0.950			0.950		
Satd. Flow (prot)	0	1900	0	0	1799	0	1919	1944	0	1938	1999	0
Flt Permitted		0.785			0.879		0.573			0.405		
Satd. Flow (perm)	0	1518	0	0	1586	0	1140	1944	0	820	1999	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			62			25			9	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		962			178			723			255	
Travel Time (s)		26.2			4.9			19.7			7.0	
Confl. Peds. (#/hr)	11		24	24		11	15		11	11		15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	0%	3%	7%	0%	0%	0%	0%	0%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	160	0	33	461	0	112	308	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		1	6		5	2	
Permitted Phases	4			8			6			2		
Detector Phase	4	4		8	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	22.5	22.5		22.5	22.5		9.5	28.0		9.5	28.0	
Total Split (%)	37.5%	37.5%		37.5%	37.5%		15.8%	46.7%		15.8%	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)	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	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)		10.1			10.1		39.3	36.2		41.1	40.0	
Actuated g/C Ratio		0.17			0.17		0.66	0.60		0.68	0.67	
v/c Ratio		0.23			0.50		0.04	0.39		0.17	0.23	
Control Delay		18.0			18.8		4.9	10.5		5.2	8.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.0			18.8		4.9	10.5		5.2	8.0	
LOS		B			B		A	B		A	A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		18.0			18.8			10.1			7.2	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)		16			33		3	84		10	29	
Queue Length 95th (ft)		36			66		15	203		37	130	
Internal Link Dist (ft)		882			98			643			175	
Turn Bay Length (ft)							90			75		
Base Capacity (vph)		464			519		811	1182		654	1335	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.13			0.31		0.04	0.39		0.17	0.23	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 60			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 47.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: Mallory Avenue & Claremont Avenue



Approach	EB	WB	NB	SB
Crosswalk Length (ft)	22.9	23.0	34.0	34.1
Crosswalk Width (ft)	12.0	12.0	12.0	12.0
Total Number of Lanes Crossed	2	2	3	3
Number of Right-Turn Islands	0	0	0	0
Type of Control	None	None	None	None
Corresponding Signal Phase	2	6	4	8
Effective Walk Time (s)	0.0	0.0	0.0	0.0
Right Corner Size A (ft)	9.0	9.0	9.0	9.0
Right Corner Size B (ft)	9.0	9.0	9.0	9.0
Right Corner Curb Radius (ft)	0.0	0.0	0.0	0.0
Right Corner Total Area (sq.ft)	81.00	81.00	81.00	81.00
Ped. Left-Right Flow Rate (p/h)	0	0	0	0
Ped. Right-Left Flow Rate (p/h)	0	0	0	0
Ped. R. Sidewalk Flow Rate (p/h)	0	0	0	0
Veh. Perm. L. Flow in Walk (v/h)	0	0	0	0
Veh. Perm. R. Flow in Walk (v/h)	0	0	0	0
Veh. RTOR Flow in Walk (v/h)	0	0	0	0
85th percentile speed (mph)	25	25	25	25
Right Corner Area per Ped (sq.ft)	0.0	0.0	0.0	0.0
Right Corner Quality of Service	-	-	-	-
Ped. Circulation Area (sq.ft)	0.0	0.0	0.0	0.0
Crosswalk Circulation Code	-	-	-	-
Pedestrian Delay (s/p)	30.0	30.0	30.0	30.0
Pedestrian Compliance Code	Fair	Fair	Fair	Fair
Pedestrian Crosswalk Score	1.78	1.86	2.16	2.17
Pedestrian Crosswalk LOS	B	B	B	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕						↕			↕	
Traffic Vol, veh/h	1	1	5	0	0	0	4	401	18	41	378	6
Future Vol, veh/h	1	1	5	0	0	0	4	401	18	41	378	6
Conflicting Peds, #/hr	7	0	1	0	0	0	28	0	16	16	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	2	0
Mvmt Flow	1	1	6	0	0	0	4	446	20	46	420	7

Major/Minor	Minor2					Major1			Major2		
Conflicting Flow All	1015	1034	453			455	0	0	482	0	0
Stage 1	544	544	-			-	-	-	-	-	-
Stage 2	471	490	-			-	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4			4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5.8	5.9	-			-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	5.9	-			-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3			2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	238	209	596			1116	-	-	1091	-	-
Stage 1	551	492	-			-	-	-	-	-	-
Stage 2	600	523	-			-	-	-	-	-	-
Platoon blocked, %							-	-		-	-
Mov Cap-1 Maneuver	210	0	577			1081	-	-	1091	-	-
Mov Cap-2 Maneuver	210	0	-			-	-	-	-	-	-
Stage 1	531	0	-			-	-	-	-	-	-
Stage 2	550	0	-			-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.1	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1081	-	-	447	1091	-	-
HCM Lane V/C Ratio	0.004	-	-	0.017	0.042	-	-
HCM Control Delay (s)	8.3	0	-	13.2	8.4	0	-
HCM Lane LOS	A	A	-	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	185	122	5	6	24
Future Vol, veh/h	18	185	122	5	6	24
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	-1	-	0	-
Peak Hour Factor	68	68	68	68	92	92
Heavy Vehicles, %	0	0	4	0	0	0
Mvmt Flow	26	272	179	7	7	26

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	186	0	-	0	507	183
Stage 1	-	-	-	-	183	-
Stage 2	-	-	-	-	324	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1401	-	-	-	529	865
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1401	-	-	-	517	865
Mov Cap-2 Maneuver	-	-	-	-	517	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	738	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1401	-	-	-	762
HCM Lane V/C Ratio	0.019	-	-	-	0.043
HCM Control Delay (s)	7.6	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1