

Traffic Impact Study

Proposed Chase Bank
Block 3804, Lot 2.01
Village of Ridgewood
Bergen County, New Jersey

Prepared for:
55 North Broad LLC

Date: October 11, 2024
SE&D Job Number: RUT-230372



John R. Corak, PE
Senior Project Manager
NJ P.E. License No. 54973



Matthew J. Seckler, PE, PP, PTOE
Principal
NJ P.E. License No. 48731



STONEFIELD

92 Park Ave
Rutherford, NJ 07070

TABLE OF CONTENTS

INTRODUCTION I

METHODOLOGY I

2024 EXISTING CONDITION 2

 2024 Existing Roadway Conditions 2

 2024 Existing Traffic Volumes 4

 2024 Existing LOS/Capacity Analysis..... 4

2026 NO-BUILD CONDITION 5

 Background Growth..... 5

 2026 No-Build Traffic Volumes 5

 2026 No-Build LOS/Capacity Analysis..... 5

2026 BUILD CONDITION 6

 Trip Generation..... 6

 Trip Assignment/Distribution..... 7

 2026 Build Traffic Volumes..... 7

 2026 Build LOS/Capacity Analysis 7

SITE CIRCULATION/PARKING SUPPLY 8

CONCLUSIONS 9

TECHNICAL APPENDIX

LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA

Table A1: Comparative Level of Service (Delay) Table

TURNING MOVEMENT COUNT DATA

Intersection of North Broad Street, Benjamin Apartments Driveway and Franklin Avenue

Intersection of Franklin Avenue and Chestnut Street

FIGURES

Figure 1 – Site Location Map

Figure 2 – 2024 Existing Traffic Volumes

Figure 3 – 2026 No-Build Traffic Volumes

Figure 4 – “New” Site-Generated Traffic Volumes

Figure 5 – “Pass-By” Site-Generated Traffic Volumes

Figure 6 – Total Site-Generated Traffic Volumes

Figure 7 – 2026 Build Traffic Volumes

HIGHWAY CAPACITY ANALYSIS DETAIL SHEETS

2024 Existing Traffic Conditions

2026 No-Build Traffic Conditions

2026 Build Traffic Conditions

INTRODUCTION

This Traffic Impact Study was prepared to investigate the potential impacts of the proposed Chase Bank on the adjacent roadway network. The subject property is located along the southerly side of Franklin Avenue in between North Broad Street and Chestnut Street in the Village of Ridgewood, Bergen County, New Jersey. The site location is shown on appended **Figure 1**.

The subject property is designated as Block 3804, Lot 2.01 as depicted on the Village of Ridgewood Tax Map. The site has approximately 87 feet of frontage along Franklin Avenue, approximately 113 feet of frontage along Chestnut Street and approximately 75 feet of frontage along North Broad Street. The existing site is occupied by a 2,090-square-foot vacant bank with two (2) drive-through lanes. Access is presently provided via one (1) full-movement driveway along Chestnut Street, one (1) full-movement driveway along North Broad Street, and one (1) egress-only driveway along Franklin Avenue. Under the proposed development program, the existing structures would be razed, and a 3,344-square-foot Chase Bank with one (1) drive-through lane would be constructed. Access is proposed via one (1) full-movement driveway and one (1) egress-only driveway along Chestnut Street as well as one (1) full-movement driveway along North Broad Street.

METHODOLOGY

Stonefield Engineering & Design, LLC has prepared this Traffic Impact Study in accordance with the recommended guidelines and practices outlined by the Institute of Transportation Engineers (ITE) within Transportation Impact Analyses for Site Development. A detailed field investigation was performed to assess the existing conditions of the adjacent roadway network. A data collection effort was completed to identify the existing traffic volumes at the study intersections to serve as a base for the traffic analyses. Capacity analysis, a procedure used to estimate the traffic-carrying ability of roadway facilities over a range of defined operating conditions, was performed using the Highway Capacity Manual, 7th Edition (HCM) and Synchro 12 Software for all study conditions to assess the roadway operations.

For an unsignalized intersection, Level of Service (LOS) A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay of less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 80 seconds per vehicle. The Technical Appendix contains the Highway Capacity Analysis Detail Sheets for the study intersections analyzed in this assessment. The traffic signal timing utilized within the signalized analysis is based on field recordings.

2024 EXISTING CONDITION

2024 EXISTING ROADWAY CONDITIONS

The proposed Chase Bank is located along the southerly side of Franklin Avenue in between North Broad Street and Chestnut Street in the Village of Ridgewood, Bergen County, New Jersey. The subject property is designated as Block 3804, Lot 2.01 as depicted on the Village of Ridgewood Tax Map. The site has approximately 87 feet of frontage along Franklin Avenue, approximately 113 feet of frontage along Chestnut Street and approximately 75 feet of frontage along North Broad Street. Land uses in the area are a mix of commercial, medical, residential, religious, and educational uses.

Franklin Avenue (County Route 80) is classified as an Urban Principal Arterial roadway with a general east-west orientation and is under the jurisdiction of Bergen County. Franklin Avenue turns into Garber Square to the west of Erie Railroad. Along the site frontage, the roadway provides one (1) lane of travel in each direction with additional lanes provided at key intersections to facilitate turning movements and has no posted speed limit. Curb and sidewalk are provided along both sides of the roadway, shoulders are not provided, and on-street parking is generally permitted along both sides of the roadway, with various parking restrictions and limitations based on time and location. Franklin Avenue provides east-west mobility throughout the Village of Ridgewood until its westerly terminus at the Erie Railroad where it turns into Garber Square, serving a mix of commercial, medical, and residential uses along its length.

Chestnut Street is classified as an Urban Minor Arterial roadway with a general north-south orientation and is under the jurisdiction of the Village of Ridgewood. Along the site frontage, the roadway provides one (1) lane of travel in each direction and has no posted speed limit. Curb and sidewalk are provided along both sides of the roadway, shoulders are not provided, and on-street parking is generally permitted along both sides of the roadway, with various parking restrictions and limitations based on time and location. Chestnut Street provides north-south mobility within the Village of Ridgewood serving a mix of commercial, medical and residential uses along its length.

North Broad Street is classified as an Urban Major Collector roadway with a general north-south orientation and is under the jurisdiction of the Village of Ridgewood. Along the site frontage, the roadway provides one (1) lane of travel with additional lanes provided at key intersections to facilitate turning movements and has no posted speed limit. Curb sidewalk, and on-street angled parking spaces are provided along both sides of the roadway, shoulders are not provided, and on-street metered parking is permitted along both sides of the roadway with a three (3)-hour restriction in effect Monday through Friday from 9:00 a.m. to 8:00 p.m. and Saturday 10:00 a.m. to 6:00 p.m. North Broad Street provides north-south mobility within the Village of Ridgewood from its northerly terminus at Franklin Avenue to its southerly terminus at East

Ridgewood Avenue where it continues as South Broad Street, serving primarily commercial uses along its length.

The Village of Ridgewood Ordinance and street signage provides on-street parking restriction schedules for the adjacent roadway network. The on-street parking restrictions along Franklin Avenue/Garber Square, Chestnut Street, and North Broad Street within the vicinity of the site are summarized in **Table I**.

TABLE I – EXISTING ON-STREET PARKING RESTRICTIONS

Street	Side	Source	Restriction
Franklin Avenue	North	§ 265-65	Parking prohibited between Erie Railroad underpass to Chestnut Street.
	South	Street Signage	Metered parking with a three (3)-hour time limit restriction in effect Monday through Friday from 9:00 a.m. to 8:00 p.m. and Saturday 10:00 a.m. to 6:00 p.m. between North Broad Street and Chestnut Street.
	Both	§ 265-65	Parking prohibited between Oak Street and North Walnut Street.
		Street Signage	Metered parking with a three (3)-hour time limit restriction in effect Monday through Friday from 9:00 a.m. to 8:00 p.m. and Saturday 10:00 a.m. to 6:00 p.m. between Chestnut Street and Oak Street.
Garber Square	Both	§ 265-65	Parking prohibited between Erie Railroad underpass to West Ridgewood Avenue.
Chestnut Street	East	§ 265-65	Parking prohibited between Franklin Avenue and the northerly terminus.
	West	§ 265-65	Parking prohibited between Franklin Avenue and a point 600 feet south of its northerly terminus.
		Street Signage	Parking prohibited at select marked "valet-only" parking spaces daily from 5:00 p.m. to 3:00 a.m.
	Both	Street Signage	Metered parking with a three (3)-hour time limit restriction in effect Monday through Friday from 9:00 a.m. to 8:00 p.m. and Saturday 10:00 a.m. to 6:00 p.m. between East Ridgewood Avenue and Franklin Avenue.
North Broad Street	Both	Street Signage	Metered parking with a three (3)-hour time limit restriction in effect Monday through Friday from 9:00 a.m. to 8:00 p.m. and Saturday 10:00 a.m. to 6:00 p.m. between East Ridgewood Avenue and Franklin Avenue.

Franklin Avenue and Chestnut Street intersect to form an unsignalized four (4)-leg intersection with the northbound and southbound approaches of Chestnut Street operating under stop control. The eastbound and westbound approaches of Franklin Avenue each provide one (1) exclusive left-turn lane and one (1) shared through/right-turn lane. The northbound and southbound approaches of Chestnut Street each provide one (1) shared full-movement lane. Crosswalks and pedestrian ramps are provided across the easterly, northerly, and southerly legs of the intersection.

Franklin Avenue, North Broad Street, and the Benjamin Apartments complex driveway intersect to form a signalized four (4)-leg intersection controlled by a three (3)-phase traffic signal. The eastbound approach of Franklin Avenue provides one exclusive right-turn lane and one (1) shared left-turn/through lane. The westbound approach of Franklin Avenue provides one (1) exclusive left-turn lane and one (1) shared through/right-turn lane. The northbound approach of North Broad Street provides one (1) exclusive left-turn lane and one (1) shared through/right-turn lane. The southbound approach of the Benjamin Apartments driveway provides one (1) shared full-movement lane. Crosswalks, pedestrian ramps and pedestrian signals are provided across the easterly and southerly legs of the intersection.

2024 EXISTING TRAFFIC VOLUMES

Turning movement counts were collected during the typical weekday midday, weekday evening and Saturday midday time periods to evaluate existing traffic conditions and identify the specific hours when traffic activity on the adjacent roadways is at a maximum and could be potentially impacted by the development of the site. Turning movement counts were collected at the following intersections:

- ◆ Intersection of North Broad Street, Benjamin Apartments Driveway, and Franklin Avenue
- ◆ Intersection of Franklin Avenue and Chestnut Street

Specifically, turning movement counts were conducted on the following dates and during the following times:

- ◆ Friday, July 12, 2024, from 11:00 a.m. to 2:00 p.m.
- ◆ Thursday, July 18, 2024, from 4:00 p.m. to 6:00 p.m.
- ◆ Saturday, July 20, 2024, from 11:00 a.m. to 2:00 p.m.

The study time periods were chosen as they are representative of the peak periods of both the adjacent roadway network and the proposed development. The traffic volume data was collected and analyzed to identify the design peak hour in accordance with HCM and ITE guidelines. Based on the review of the count data the weekday midday peak hour occurred from 12:30 p.m. to 1:30 p.m.; the weekday evening peak hour occurred from 5:00 p.m. to 6:00 p.m.; and the Saturday midday peak hour occurred from 11:45 a.m. to 12:45 p.m. The Technical Appendix contains a summary of the turning movement count data. The 2024 Existing weekday midday, weekday evening, and Saturday midday peak-hour volumes are summarized on appended **Figure 2**.

2024 EXISTING LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was conducted for the 2024 Existing Condition during the weekday midday, weekday evening, and Saturday midday peak hours at the study intersections. Under the 2024 Existing Condition, the signalized intersection of North Broad Street, the Benjamin Apartments driveway and Franklin Avenue is calculated to operate at overall Level of Service C during each of the peak hours studied. The turning movements at the unsignalized intersection of Franklin Avenue and Chestnut Street are calculated to operate at Level of Service E or better during the weekday midday and weekday evening peak hours and at Level of Service D or better during the Saturday midday peak hour.

2026 NO-BUILD CONDITION

BACKGROUND GROWTH

The 2024 Existing Condition traffic volume data was grown to a future horizon year of 2026, which is a conservative estimate for when the proposed Chase Bank is expected to be fully constructed. In accordance with industry guidelines, the existing traffic volumes at the study intersections were increased by 2.75% annually. The 2.75% background growth rate was obtained from the NJDOT Annual Background Growth Rate Table.

OTHER PLANNED DEVELOPMENT PROJECTS

To evaluate the future traffic conditions, it is important to consider the potential site-generated traffic of other projects that could influence the traffic volume at the study intersections. Other planned development projects include those that are either in the entitlement process or have recently been approved for building permits in proximity to the proposed development. Based on consultations with Joyce Margo, the Village of Ridgewood Clerk, there are no planned development projects within the area of the subject site that would impact traffic volumes within the study area.

2026 NO-BUILD TRAFFIC VOLUMES

The background growth rate was applied to the 2024 Existing Traffic Volumes to calculate the 2026 No-Build Traffic Volumes for the weekday midday, weekday evening, and Saturday midday peak hour. These volumes are summarized on appended **Figure 3**.

2026 NO-BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2026 No-Build Condition during the weekday midday, weekday evening, and Saturday midday peak hours at the study intersections. The signalized intersection of North Broad Street, Benjamin Apartments Driveway, and Franklin Avenue is calculated to operate generally consistent with the findings of the 2024 Existing Condition during each of the peak hours studied. The turning movements at the unsignalized intersection of Franklin Avenue and Chestnut Street are calculated to operate generally consistent with the findings of the 2024 Existing Condition during the weekday evening and Saturday midday peak hours. The northbound approach of Chestnut Street is calculated to exceed capacity constraints during the weekday morning peak hour.

2026 BUILD CONDITION

The site-generated traffic volume of the proposed Chase Bank was estimated to identify the potential impacts of the project. For the purpose of this analysis, a complete project “build out” is assumed within two (2) years of the preparation of this study.

TRIP GENERATION

Trip generation projections for the proposed Chase Bank were prepared utilizing ITE's Trip Generation Manual, 11th Edition. Trip generation rates associated with Land Use 912 “Drive-in Bank” were cited for the proposed 3,344-square-foot Chase Bank with one (1) drive-through lane. Note that ITE provides vehicle time-of-day distribution factors for Land Use 912 “Drive-in Bank” which were utilized to calculate the Friday midday trip generation projections for the proposed development. **Table 2** provides the weekday midday, weekday evening, and Saturday midday trip generation volumes associated with the proposed development.

TABLE 2 – PROPOSED TRIP GENERATION

Land Use	Weekday Midday Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
3,344 SF Drive-In Bank <i>ITE Land Use 912</i>	18	18	36	35	35	70	45	43	88

As stated within Chapter 10 of ITE's Trip Generation Handbook, 3rd Edition, there are instances when the total number of trips generated by a site is different from the amount of new traffic added to the street system by the generator. Drive-in banks are specifically located on or adjacent to busy streets to attract motorists already on the roadway. Therefore, the proposed Chase Bank development would be expected to attract a portion of its trips from the traffic passing the site on the way from an origin to an ultimate destination. These trips do not add new traffic to the adjacent roadway system and are referred to as pass-by trips.

Based upon the published ITE data for Land Use 912 “Drive-in Bank,” 26% of the site-generated traffic during the weekday midday peak period, 35% during the weekday evening peak period, and 38% during the Saturday midday peak period is comprised of pass-by traffic. **Table 3** shows the additional site generated traffic for the proposed development after applying the appropriate trip reductions to account for pass-by traffic.

TABLE 3– PROPOSED TRIP GENERATION – NEW & PASS-BY TRIPS

Trip Type	Weekday Midday Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
“New” Trips	13	14	27	23	23	46	28	27	55
“Pass-By” Trips	5	4	9	12	12	24	17	16	33
Total	18	18	36	35	35	70	45	43	88

At the site driveways, the calculated number of pass-by trips is shown as a negative number at the through movement as the vehicles are temporarily diverted from the through travel stream into and out of the site access point.

TRIP ASSIGNMENT/DISTRIBUTION

The trips generated by the proposed development were distributed according to the existing travel pattern along the adjacent roadways and the access management plan of the site. The “New” Site-Generated Traffic Volumes are illustrated on **Figure 4** and the “Pass-By” Site Generated Traffic volumes expected to access the site are depicted on **Figure 5**. The “New” and “Pass-By” traffic volumes were added together to calculate the Total Site-Generated Traffic Volumes and are summarized on appended **Figure 6**.

2026 BUILD TRAFFIC VOLUMES

The site-generated trips were added to the 2026 No-Build Traffic Volumes to calculate the 2026 Build Traffic Volumes and are shown on appended **Figure 7**.

2026 BUILD LOS/CAPACITY ANALYSIS

A Level of Service and Volume/Capacity analysis was also conducted for the 2026 Build Condition during the weekday midday, weekday evening, and Saturday midday peak hours at the study intersections and proposed site driveways. Appended **Table AI** compares the 2024 Existing, 2026 No-Build, and 2026 Build Conditions Level of Service and delay values.

The signalized intersection of North Broad Street, Benjamin Apartments Driveway, and Franklin Avenue is calculated to operate generally consistent with the findings of the 2026 No-Build Condition during each of the peak hours studied. The turning movements at the unsignalized intersection of Chestnut Street and Franklin Avenue are calculated to operate generally consistent with the findings of the 2026 No-Build Condition during the weekday midday peak hour and at Level of Service E or better during the Saturday midday peak hour. The northbound approach of Chestnut Street is calculated to exceed capacity constraints during the weekday evening peak hour. The unsignalized intersection of North Broad Street and the site driveway are calculated to operate at Level of Service B or better during each of the peak hours studied. The unsignalized intersection

of Chestnut Street and the southerly site driveway is calculated to operate at Level of Service A during the weekday midday and weekday evening peak hours and at Level of Service B during the Saturday midday peak hour. The unsignalized intersection of Chestnut Street and the northerly site driveway are calculated to operate at Level of Service A during each of the peak hours studied.

SITE CIRCULATION/PARKING SUPPLY

A review was conducted of the proposed Chase Bank using the Site Plan prepared by our office, dated October 11, 2024. In completing this review, particular attention was focused on site access, circulation, and parking supply.

Under the proposed development program, the existing structures would be razed, and a 3,344-square-foot Chase Bank with one (1) drive-through lane would be constructed. Access is proposed via one (1) full-movement driveway and one (1) egress-only driveway along Chestnut Street as well as one (1) full-movement driveway along North Broad Street. The proposed Chase Bank would be located at the northeasterly portion of the site. The proposed drive-through lane would be located along the easterly side of the building and would provide 10 feet in width. Vehicular circulation throughout the site would be facilitated via a minimum 10-foot-wide one (1)-way drive aisle and a minimum 24-foot-wide two (2)-way drive aisles.

Regarding the parking requirements for the proposed development, the Village of Ridgewood Ordinance requires drive-in banks to have one (1) parking space per 150 square feet of gross floor area. For the proposed 3,344-square-foot Chase Bank, this equates to 23 required parking spaces. The site would provide 22 total parking spaces, inclusive of two (2) ADA accessible parking spaces. The parking spaces would be nine (9) feet wide by 18 feet deep in accordance with the Village of Ridgewood Ordinance and industry standards.

Additionally, the site would provide two (2) make-ready spaces with one (1) being ADA accessible. The electric vehicle requirements consider electric vehicle spaces as a minimum of two (2) parking spaces for the purpose of satisfying parking requirements, up to a 10% reduction of the total requirement. As such, the development plan would be considered to provide 24 (22 + 2) total parking spaces, whereas 24 parking spaces are required, which meets the parking requirement and would be sufficient to support this project's parking demand.

The parking supply was evaluated with respect to data published within the ITE's Parking Generation, 6th Edition, for Land Use 912 "Drive-In Bank." The 85th percentile parking demand rate during the peak weekday period for Land Use 912 "Drive-In Bank" is 5.03 vehicles per 1,000 square feet of gross floor area. For the 3,344-square-foot Chase Bank, this equates to 17 parking spaces. As such, the proposed parking supply of 22 parking spaces would be sufficient to support the parking demand of the site.

Based on the Village of Ridgewood Ordinance parking requirements and published ITE parking demand rates, the proposed parking supply of 22 parking spaces would be sufficient to support the expected parking demand of the proposed development.

CONCLUSIONS

This report was prepared to examine the potential traffic impact of the proposed Chase Bank. The analysis findings, which have been based on industry-standard guidelines, indicate that the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. The site-generated trips of the proposed development would consist largely of “pass-by” trips, as opposed to new vehicles on the roadway, due to the land use, location, and access management plan. The site driveways and on-site layout have been designed to provide effective access to and from the subject property. Based on the Village of Ridgewood Ordinance parking requirements and published ITE parking demand rates, the parking supply would be sufficient to support this project.

Z:\Rutherford\RUT\2023\RUT-230372 VanRock Properties - 55 North Broad Street, Ridgewood, NJ\Calculations & Reports\Traffic\Reports\2024-10 TIS\2024-10 TIS.docx

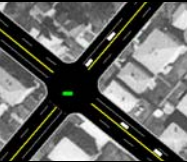
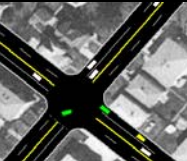
TECHNICAL APPENDIX

LEVEL OF SERVICE/AVERAGE CONTROL DELAY CRITERIA

LEVEL OF SERVICE /AVERAGE CONTROL DELAY CRITERIA

The ability of a roadway to effectively accommodate traffic demand is determined through an assessment of the volume-to-capacity ratio, delay and Level of Service of the lane group and/or intersection. The volume-to-capacity ratio is the ratio of traffic flow rate to capacity for a given transportation facility. As defined within the Highway Capacity Manual, 7th Edition (HCM), intersection delay is the total additional travel time experienced by drivers, passengers, or pedestrians as a result of control measures and interaction with other users of the facility, divided by the volume departing from the corresponding cross section of the facility. Level of service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

For an unsignalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle, while LOS F describes operations with delay in excess of 50 seconds per vehicle. For a signalized intersection, LOS A indicates operations with delay less than 10 seconds per vehicle and LOS F denotes operations with delay in excess of 80 seconds per vehicle.

	Level Of Service (LOS)	Signalized Delay Range (average control delay in sec/veh)	Unsignalized Delay Range (average control delay in sec/veh)
	A	≤ 10	≤ 10
	B	> 10 and ≤ 20	> 10 and ≤ 15
	C	> 20 and ≤ 35	> 15 and ≤ 25
	D	> 35 and ≤ 55	> 25 and ≤ 35
	E	> 55 and ≤ 80	> 35 and ≤ 50
	F	> 80	> 50

Source: Highway Capacity Manual, 7th Edition

STONEFIELD

Table A1: Comparative Level of Service (Delay) Table

Village of Ridgewood, Bergen County, New Jersey

X (n) = Level of Service (seconds of delay)

Intersection	Lane Group	Weekday Midday Peak Hour			Weekday Evening Peak Hour			Saturday Midday Peak Hour		
		2024 Existing Condition	2026 No-Build Condition	2026 Build Condition	2024 Existing Condition	2026 No-Build Condition	2026 Build Condition	2024 Existing Condition	2026 No-Build Condition	2026 Build Condition
Franklin Avenue (EB/WB) & North Broad Street/Benjamin Apartments Driveway (NB/SB)	EB Left/Through	C (23.9)	C (24.7)	C (24.7)	C (23.5)	C (24.2)	C (24.2)	C (23.7)	C (24.4)	C (24.4)
	EB Right	B (17.5)	B (17.7)	B (17.9)	B (17.5)	B (17.7)	B (17.8)	B (17.1)	B (17.2)	B (17.4)
	WB Left	B (13.4)	B (14.0)	B (14.0)	B (13.9)	B (14.6)	B (14.6)	B (13.8)	B (14.5)	B (14.5)
	WB Through/Right	B (12.9)	B (13.3)	B (13.4)	B (15.6)	B (16.4)	B (16.4)	B (11.4)	B (11.6)	B (11.6)
	NB Left	D (36.9)	D (38.1)	D (38.5)	D (35.3)	D (36.1)	D (36.4)	C (34.1)	C (34.8)	D (35.2)
	NB Through/Right	C (31.5)	C (31.8)	C (31.8)	C (30.6)	C (30.9)	C (30.9)	C (30.1)	C (30.4)	C (30.4)
Franklin Avenue (EB/WB) & Chestnut Street (NB/SB)	SB Left/Through/Right	C (27.0)	C (27.0)	C (27.0)	C (27.3)	C (27.3)	C (27.3)	C (27.0)	C (27.0)	C (27.0)
	Overall	C (21.7)	C (22.3)	C (22.4)	C (21.4)	C (22.1)	C (22.2)	C (21.1)	C (21.6)	C (21.7)
	EB Left	A (8.6)	A (8.7)	A (8.7)	A (8.8)	A (9.0)	A (9.0)	A (8.2)	A (8.3)	A (8.3)
	WB Left	A (8.5)	A (8.6)	A (8.6)	A (8.3)	A (8.4)	A (8.4)	A (8.5)	A (8.6)	A (8.6)
	NB Left/Through/Right	E (38.4)	F (51.1)	F (59.8)	E (37.2)	E (48.6)	F (51.3)	D (25.8)	D (30.8)	E (35.6)
	SB Left/Through/Right	C (19.8)	C (22.5)	C (23.7)	C (20.3)	C (22.7)	C (22.8)	B (14.5)	C (15.5)	C (16.3)
Site Driveway (WB) & North Broad Street (NB/SB)	NB Through/Right			B (12.4)			B (11.3)			B (11.6)
	SB Left/Through			A (8.0)			A (7.9)			A (7.9)
Southerly Site Driveway (EB) & Chestnut Street (NB/SB)	EB Left/Right			A (7.4)			A (7.4)			A (7.6)
	NB Through/Left			A (9.7)			A (9.5)			B (10.2)
Northerly Site Driveway (EB) & Chestnut Street (NB/SB)	EB Left/Right			A (9.6)			A (9.4)			A (10.0)

TURNING MOVEMENT COUNT DATA

Stonefield Engineering & Design, LLC

92 Park Avenue, Rutherford, NJ 07070

201.340.4468 t. 201.340.4472 f.

Intersection of Franklin Avenue (E/W)
and North Broad Street/The Benjamin Apartments Driveway (N/S)
Ridgewood, Bergen County, New Jersey
Friday, July 12, 2024

File Name : RUT-230372.01_FRI_01
Site Code : 00230372
Start Date : 7/12/2024
Page No : 1

Groups Printed- Auto - HV - B/SB

	Franklin Avenue Eastbound					Franklin Avenue Westbound					North Broad Street Northbound					The Benjamin Apartments Driveway Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
11:00 AM	0	122	24	12	158	21	102	2	0	125	61	1	23	1	86	0	3	4	0	7	376
11:15 AM	3	113	31	30	177	25	106	1	0	132	37	0	33	0	70	0	0	1	0	1	380
11:30 AM	1	121	46	20	188	29	112	0	0	141	59	1	25	1	86	1	1	0	0	2	417
11:45 AM	1	109	30	21	161	31	138	1	0	170	42	1	23	0	66	0	1	0	0	1	398
Total	5	465	131	83	684	106	458	4	0	568	199	3	104	2	308	1	5	5	0	11	1571
12:00 PM	2	110	25	18	155	20	131	0	0	151	66	0	33	0	99	1	2	2	1	6	411
12:15 PM	0	119	37	14	170	28	122	0	0	150	49	0	25	0	74	1	0	1	0	2	396
12:30 PM	1	127	43	17	188	17	130	0	0	147	60	0	36	1	97	1	0	0	1	2	434
12:45 PM	1	141	29	22	193	22	130	1	0	153	43	1	29	1	74	0	1	0	0	1	421
Total	4	497	134	71	706	87	513	1	0	601	218	1	123	2	344	3	3	3	2	11	1662
01:00 PM	0	101	35	25	161	24	146	0	0	170	47	0	39	3	89	0	2	0	0	2	422
01:15 PM	3	123	26	29	181	20	124	1	1	146	72	3	40	0	115	1	2	0	1	4	446
01:30 PM	1	103	30	19	153	19	107	0	0	126	66	1	30	0	97	2	1	0	1	4	380
01:45 PM	0	118	24	18	160	34	111	0	0	145	68	5	19	0	92	2	0	1	2	5	402
Total	4	445	115	91	655	97	488	1	1	587	253	9	128	3	393	5	5	1	4	15	1650
Grand Total	13	1407	380	245	2045	290	1459	6	1	1756	670	13	355	7	1045	9	13	9	6	37	4883
Apprch %	0.6	68.8	18.6	12		16.5	83.1	0.3	0.1		64.1	1.2	34	0.7		24.3	35.1	24.3	16.2		
Total %	0.3	28.8	7.8	5	41.9	5.9	29.9	0.1	0	36	13.7	0.3	7.3	0.1	21.4	0.2	0.3	0.2	0.1	0.8	
Auto	13	1385	378	245	2021	284	1445	6	1	1736	665	13	346	7	1031	9	13	9	6	37	4825
% Auto	100	98.4	99.5	100	98.8	97.9	99	100	100	98.9	99.3	100	97.5	100	98.7	100	100	100	100	100	98.8
HV	0	17	2	0	19	6	14	0	0	20	2	0	9	0	11	0	0	0	0	0	50
% HV	0	1.2	0.5	0	0.9	2.1	1	0	0	1.1	0.3	0	2.5	0	1.1	0	0	0	0	0	1
B/SB	0	5	0	0	5	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	8
% B/SB	0	0.4	0	0	0.2	0	0	0	0	0	0.4	0	0	0	0.3	0	0	0	0	0	0.2

	Franklin Avenue Eastbound					Franklin Avenue Westbound					North Broad Street Northbound					The Benjamin Apartments Driveway Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:30 PM																					
12:30 PM	1	127	43	17	188	17	130	0	0	147	60	0	36	1	97	1	0	0	1	2	434
12:45 PM	1	141	29	22	193	22	130	1	0	153	43	1	29	1	74	0	1	0	0	1	421
01:00 PM	0	101	35	25	161	24	146	0	0	170	47	0	39	3	89	0	2	0	0	2	422
01:15 PM	3	123	26	29	181	20	124	1	1	146	72	3	40	0	115	1	2	0	1	4	446
Total Volume	5	492	133	93	723	83	530	2	1	616	222	4	144	5	375	2	5	0	2	9	1723
% App. Total	0.7	68	18.4	12.9		13.5	86	0.3	0.2		59.2	1.1	38.4	1.3		22.2	55.6	0	22.2		
PHF	.417	.872	.773	.802	.937	.865	.908	.500	.250	.906	.771	.333	.900	.417	.815	.500	.625	.000	.500	.563	.966
Auto	5	486	131	93	715	81	528	2	1	612	219	4	139	5	367	2	5	0	2	9	1703
% Auto	100	98.8	98.5	100	98.9	97.6	99.6	100	100	99.4	98.6	100	96.5	100	97.9	100	100	0	100	100	98.8
HV	0	4	2	0	6	2	2	0	0	4	2	0	5	0	7	0	0	0	0	0	17
% HV	0	0.8	1.5	0	0.8	2.4	0.4	0	0	0.6	0.9	0	3.5	0	1.9	0	0	0	0	0	1.0
B/SB	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3

Stonefield Engineering & Design, LLC

92 Park Avenue, Rutherford, NJ 07070

201.340.4468 t. 201.340.4472 f.

Intersection of Franklin Avenue (E/W)
and Chestnut Street (N/S)
Ridgewood, Bergen County, New Jersey
Friday, July 12, 2024

File Name : RUT-230372.01_FRI_02
Site Code : 00230372
Start Date : 7/12/2024
Page No : 1

Groups Printed- Auto - HV - B/SB

	Franklin Avenue Eastbound				Franklin Avenue Westbound				Chestnut Street Northbound				Chestnut Street Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	18	107	13	138	15	105	10	130	5	2	18	25	4	3	10	17	310
11:15 AM	15	111	15	141	13	116	9	138	7	2	10	19	6	3	15	24	322
11:30 AM	18	120	10	148	5	117	8	130	5	1	8	14	9	2	20	31	323
11:45 AM	24	91	11	126	9	139	12	160	8	0	10	18	5	0	12	17	321
Total	75	429	49	553	42	477	39	558	25	5	46	76	24	8	57	89	1276
12:00 PM	23	114	14	151	18	134	12	164	4	1	20	25	12	4	14	30	370
12:15 PM	13	114	15	142	12	113	5	130	5	6	12	23	2	3	19	24	319
12:30 PM	27	105	14	146	12	107	3	122	13	0	21	34	6	1	20	27	329
12:45 PM	26	121	14	161	15	110	7	132	10	1	13	24	1	0	23	24	341
Total	89	454	57	600	57	464	27	548	32	8	66	106	21	8	76	105	1359
01:00 PM	27	111	12	150	20	133	9	162	6	0	26	32	3	1	33	37	381
01:15 PM	28	127	12	167	13	125	3	141	5	1	20	26	2	2	19	23	357
01:30 PM	20	112	13	145	12	101	5	118	10	5	14	29	4	2	23	29	321
01:45 PM	14	106	9	129	10	110	9	129	8	2	13	23	1	3	24	28	309
Total	89	456	46	591	55	469	26	550	29	8	73	110	10	8	99	117	1368
Grand Total	253	1339	152	1744	154	1410	92	1656	86	21	185	292	55	24	232	311	4003
Apprch %	14.5	76.8	8.7		9.3	85.1	5.6		29.5	7.2	63.4		17.7	7.7	74.6		
Total %	6.3	33.4	3.8	43.6	3.8	35.2	2.3	41.4	2.1	0.5	4.6	7.3	1.4	0.6	5.8	7.8	
Auto	245	1324	152	1721	153	1396	90	1639	83	21	183	287	55	24	230	309	3956
% Auto	96.8	98.9	100	98.7	99.4	99	97.8	99	96.5	100	98.9	98.3	100	100	99.1	99.4	98.8
HV	8	11	0	19	1	10	2	13	3	0	2	5	0	0	2	2	39
% HV	3.2	0.8	0	1.1	0.6	0.7	2.2	0.8	3.5	0	1.1	1.7	0	0	0.9	0.6	1
B/SB	0	4	0	4	0	4	0	4	0	0	0	0	0	0	0	0	8
% B/SB	0	0.3	0	0.2	0	0.3	0	0.2	0	0	0	0	0	0	0	0	0.2

	Franklin Avenue Eastbound				Franklin Avenue Westbound				Chestnut Street Northbound				Chestnut Street Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:30 PM																	
12:30 PM	27	105	14	146	12	107	3	122	13	0	21	34	6	1	20	27	329
12:45 PM	26	121	14	161	15	110	7	132	10	1	13	24	1	0	23	24	341
01:00 PM	27	111	12	150	20	133	9	162	6	0	26	32	3	1	33	37	381
01:15 PM	28	127	12	167	13	125	3	141	5	1	20	26	2	2	19	23	357
Total Volume	108	464	52	624	60	475	22	557	34	2	80	116	12	4	95	111	1408
% App. Total	17.3	74.4	8.3		10.8	85.3	3.9		29.3	1.7	69		10.8	3.6	85.6		
PHF	.964	.913	.929	.934	.750	.893	.611	.860	.654	.500	.769	.853	.500	.500	.720	.750	.924
Auto	106	458	52	616	59	470	22	551	34	2	78	114	12	4	94	110	1391
% Auto	98.1	98.7	100	98.7	98.3	98.9	100	98.9	100	100	97.5	98.3	100	100	98.9	99.1	98.8
HV	2	4	0	6	1	4	0	5	0	0	2	2	0	0	1	1	14
% HV	1.9	0.9	0	1.0	1.7	0.8	0	0.9	0	0	2.5	1.7	0	0	1.1	0.9	1.0
B/SB	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
% B/SB	0	0.4	0	0.3	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0.2

Stonefield Engineering & Design, LLC

92 Park Avenue, Rutherford, NJ 07070

201.340.4468 t. 201.340.4472 f.

Intersection of Franklin Avenue (E/W)
and North Broad Street/The Benjamin Apartments Driveway (N/S)
Ridgewood, Bergen County, New Jersey
Thursday, July 18, 2024

File Name : RUT-230372.01_THU_01
Site Code : 00230372
Start Date : 7/18/2024
Page No : 1

Groups Printed- Auto - HV - B/SB

	Franklin Avenue Eastbound					Franklin Avenue Westbound					North Broad Street Northbound					The Benjamin Apartments Driveway Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
04:00 PM	0	113	26	11	150	25	171	1	0	197	50	2	32	1	85	1	1	1	0	3	435
04:15 PM	1	96	28	15	140	34	161	0	0	195	55	4	20	0	79	0	3	0	0	3	417
04:30 PM	0	113	56	10	179	28	150	0	0	178	56	0	26	0	82	0	4	4	0	8	447
04:45 PM	0	101	26	11	138	29	171	0	0	200	51	1	24	1	77	0	0	2	2	4	419
Total	1	423	136	47	607	116	653	1	0	770	212	7	102	2	323	1	8	7	2	18	1718
05:00 PM	3	92	30	11	136	18	171	0	0	189	52	1	32	3	88	1	2	3	2	8	421
05:15 PM	1	96	30	15	142	30	174	0	0	204	67	1	24	0	92	1	2	3	0	6	444
05:30 PM	0	118	28	10	156	34	142	1	0	177	49	1	33	0	83	0	1	2	0	3	419
05:45 PM	3	137	37	14	191	34	171	0	0	205	49	1	27	1	78	0	1	3	0	4	478
Total	7	443	125	50	625	116	658	1	0	775	217	4	116	4	341	2	6	11	2	21	1762
Grand Total	8	866	261	97	1232	232	1311	2	0	1545	429	11	218	6	664	3	14	18	4	39	3480
Apprch %	0.6	70.3	21.2	7.9		15	84.9	0.1	0		64.6	1.7	32.8	0.9		7.7	35.9	46.2	10.3		
Total %	0.2	24.9	7.5	2.8	35.4	6.7	37.7	0.1	0	44.4	12.3	0.3	6.3	0.2	19.1	0.1	0.4	0.5	0.1	1.1	
Auto	8	855	256	97	1216	231	1303	2	0	1536	416	11	211	6	644	2	14	18	4	38	3434
% Auto	100	98.7	98.1	100	98.7	99.6	99.4	100	0	99.4	97	100	96.8	100	97	66.7	100	100	100	97.4	98.7
HV	0	5	3	0	8	1	7	0	0	8	2	0	6	0	8	1	0	0	0	1	25
% HV	0	0.6	1.1	0	0.6	0.4	0.5	0	0	0.5	0.5	0	2.8	0	1.2	33.3	0	0	0	2.6	0.7
B/SB	0	6	2	0	8	0	1	0	0	1	11	0	1	0	12	0	0	0	0	0	21
% B/SB	0	0.7	0.8	0	0.6	0	0.1	0	0	0.1	2.6	0	0.5	0	1.8	0	0	0	0	0	0.6

	Franklin Avenue Eastbound					Franklin Avenue Westbound					North Broad Street Northbound					The Benjamin Apartments Driveway Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	3	92	30	11	136	18	171	0	0	189	52	1	32	3	88	1	2	3	2	8	421
05:15 PM	1	96	30	15	142	30	174	0	0	204	67	1	24	0	92	1	2	3	0	6	444
05:30 PM	0	118	28	10	156	34	142	1	0	177	49	1	33	0	83	0	1	2	0	3	419
05:45 PM	3	137	37	14	191	34	171	0	0	205	49	1	27	1	78	0	1	3	0	4	478
Total Volume	7	443	125	50	625	116	658	1	0	775	217	4	116	4	341	2	6	11	2	21	1762
% App. Total	1.1	70.9	20	8		15	84.9	0.1	0		63.6	1.2	34	1.2		9.5	28.6	52.4	9.5		
PHF	.583	.808	.845	.833	.818	.853	.945	.250	.000	.945	.810	1.00	.879	.333	.927	.500	.750	.917	.250	.656	.922
Auto	7	436	123	50	616	116	655	1	0	772	211	4	116	4	335	2	6	11	2	21	1744
% Auto	100	98.4	98.4	100	98.6	100	99.5	100	0	99.6	97.2	100	100	100	98.2	100	100	100	100	100	99.0
HV	0	4	1	0	5	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	7
% HV	0	0.9	0.8	0	0.8	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0.4
B/SB	0	3	1	0	4	0	1	0	0	1	6	0	0	0	6	0	0	0	0	0	11
% B/SB	0	0.7	0.8	0	0.6	0	0.2	0	0	0.1	2.8	0	0	0	1.8	0	0	0	0	0	0.6

Stonefield Engineering & Design, LLC

92 Park Avenue, Rutherford, NJ 07070

201.340.4468 t. 201.340.4472 f.

Intersection of Franklin Avenue (E/W)
and Chestnut Street (N/S)
Ridgewood, Bergen County, New Jersey
Thursday, July 18, 2024

File Name : RUT-230372.01_THU_02
Site Code : 00230372
Start Date : 7/18/2024
Page No : 1

Groups Printed- Auto - HV - B/SB

	Franklin Avenue Eastbound				Franklin Avenue Westbound				Chestnut Street Northbound				Chestnut Street Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	31	121	5	157	11	156	2	169	2	0	8	10	3	5	38	46	382
04:15 PM	13	97	3	113	12	166	2	180	6	3	15	24	2	5	43	50	367
04:30 PM	12	112	4	128	16	145	4	165	2	3	15	20	0	1	37	38	351
04:45 PM	8	84	4	96	16	151	3	170	6	1	5	12	3	2	42	47	325
Total	64	414	16	494	55	618	11	684	16	7	43	66	8	13	160	181	1425
05:00 PM	21	89	5	115	10	124	6	140	9	2	8	19	2	3	42	47	321
05:15 PM	14	98	5	117	8	155	3	166	5	0	12	17	2	0	51	53	353
05:30 PM	25	112	6	143	10	135	6	151	2	1	11	14	0	1	39	40	348
05:45 PM	19	122	7	148	23	156	6	185	4	1	18	23	0	3	38	41	397
Total	79	421	23	523	51	570	21	642	20	4	49	73	4	7	170	181	1419
Grand Total	143	835	39	1017	106	1188	32	1326	36	11	92	139	12	20	330	362	2844
Apprch %	14.1	82.1	3.8		8	89.6	2.4		25.9	7.9	66.2		3.3	5.5	91.2		
Total %	5	29.4	1.4	35.8	3.7	41.8	1.1	46.6	1.3	0.4	3.2	4.9	0.4	0.7	11.6	12.7	
Auto	143	831	39	1013	106	1185	32	1323	35	11	92	138	12	20	330	362	2836
% Auto	100	99.5	100	99.6	100	99.7	100	99.8	97.2	100	100	99.3	100	100	100	100	99.7
HV	0	4	0	4	0	3	0	3	1	0	0	1	0	0	0	0	8
% HV	0	0.5	0	0.4	0	0.3	0	0.2	2.8	0	0	0.7	0	0	0	0	0.3
B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Franklin Avenue Eastbound				Franklin Avenue Westbound				Chestnut Street Northbound				Chestnut Street Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
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	21	89	5	115	10	124	6	140	9	2	8	19	2	3	42	47	321
05:15 PM	14	98	5	117	8	155	3	166	5	0	12	17	2	0	51	53	353
05:30 PM	25	112	6	143	10	135	6	151	2	1	11	14	0	1	39	40	348
05:45 PM	19	122	7	148	23	156	6	185	4	1	18	23	0	3	38	41	397
Total Volume	79	421	23	523	51	570	21	642	20	4	49	73	4	7	170	181	1419
% App. Total	15.1	80.5	4.4		7.9	88.8	3.3		27.4	5.5	67.1		2.2	3.9	93.9		
PHF	.790	.863	.821	.883	.554	.913	.875	.868	.556	.500	.681	.793	.500	.583	.833	.854	.894
Auto	79	420	23	522	51	570	21	642	20	4	49	73	4	7	170	181	1418
% Auto	100	99.8	100	99.8	100	100	100	100	100	100	100	100	100	100	100	100	99.9
HV	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% HV	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.1
B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% B/SB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Stonefield Engineering & Design, LLC

92 Park Avenue, Rutherford, NJ 07070

201.340.4468 t. 201.340.4472 f.

Intersection of Franklin Avenue (E/W)
and North Broad Street/The Benjamin Apartments Driveway (N/S)
Ridgewood, Bergen County, New Jersey
Saturday, July 20, 2024

File Name : RUT-230372.01_SAT_01
Site Code : 00230372
Start Date : 7/20/2024
Page No : 1

Groups Printed- Auto - HV - B/SB

	Franklin Avenue Eastbound					Franklin Avenue Westbound					North Broad Street Northbound					The Benjamin Apartments Driveway Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
11:00 AM	2	120	25	15	162	34	97	0	0	131	40	0	24	3	67	0	0	0	0	0	360
11:15 AM	1	100	28	11	140	26	102	1	0	129	46	0	34	0	80	0	0	0	0	0	349
11:30 AM	0	122	30	9	161	26	92	0	0	118	44	0	27	0	71	1	0	1	0	2	352
11:45 AM	0	134	22	12	168	22	101	0	0	123	37	1	28	0	66	0	0	0	1	1	358
Total	3	476	105	47	631	108	392	1	0	501	167	1	113	3	284	1	0	1	1	3	1419
12:00 PM	4	106	25	22	157	35	97	0	0	132	53	0	27	0	80	1	1	2	0	4	373
12:15 PM	0	133	23	13	169	29	92	0	0	121	64	0	29	0	93	1	1	0	1	3	386
12:30 PM	0	116	38	16	170	25	99	1	0	125	56	0	27	0	83	0	1	2	0	3	381
12:45 PM	0	110	22	18	150	22	105	0	0	127	38	0	26	1	65	0	0	0	0	0	342
Total	4	465	108	69	646	111	393	1	0	505	211	0	109	1	321	2	3	4	1	10	1482
01:00 PM	1	117	31	16	165	25	88	0	0	113	51	1	38	2	92	1	0	0	0	1	371
01:15 PM	2	131	20	11	164	25	91	0	0	116	34	0	31	1	66	0	0	0	0	0	346
01:30 PM	0	104	14	20	138	21	77	0	0	98	45	0	26	2	73	0	0	0	0	0	309
01:45 PM	0	103	19	19	141	42	91	1	0	134	32	0	25	0	57	0	1	0	0	1	333
Total	3	455	84	66	608	113	347	1	0	461	162	1	120	5	288	1	1	0	0	2	1359
Grand Total	10	1396	297	182	1885	332	1132	3	0	1467	540	2	342	9	893	4	4	5	2	15	4260
Apprch %	0.5	74.1	15.8	9.7		22.6	77.2	0.2	0		60.5	0.2	38.3	1		26.7	26.7	33.3	13.3		
Total %	0.2	32.8	7	4.3	44.2	7.8	26.6	0.1	0	34.4	12.7	0	8	0.2	21	0.1	0.1	0.1	0	0.4	
Auto	10	1385	297	182	1874	331	1128	3	0	1462	537	2	337	9	885	4	4	5	2	15	4236
% Auto	100	99.2	100	100	99.4	99.7	99.6	100	0	99.7	99.4	100	98.5	100	99.1	100	100	100	100	100	99.4
HV	0	7	0	0	7	1	3	0	0	4	0	0	5	0	5	0	0	0	0	0	16
% HV	0	0.5	0	0	0.4	0.3	0.3	0	0	0.3	0	0	1.5	0	0.6	0	0	0	0	0	0.4
B/SB	0	4	0	0	4	0	1	0	0	1	3	0	0	0	3	0	0	0	0	0	8
% B/SB	0	0.3	0	0	0.2	0	0.1	0	0	0.1	0.6	0	0	0	0.3	0	0	0	0	0	0.2

	Franklin Avenue Eastbound					Franklin Avenue Westbound					North Broad Street Northbound					The Benjamin Apartments Driveway Southbound					
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	0	134	22	12	168	22	101	0	0	123	37	1	28	0	66	0	0	0	1	1	358
12:00 PM	4	106	25	22	157	35	97	0	0	132	53	0	27	0	80	1	1	2	0	4	373
12:15 PM	0	133	23	13	169	29	92	0	0	121	64	0	29	0	93	1	1	0	1	3	386
12:30 PM	0	116	38	16	170	25	99	1	0	125	56	0	27	0	83	0	1	2	0	3	381
Total Volume	4	489	108	63	664	111	389	1	0	501	210	1	111	0	322	2	3	4	2	11	1498
% App. Total	0.6	73.6	16.3	9.5		22.2	77.6	0.2	0		65.2	0.3	34.5	0		18.2	27.3	36.4	18.2		
PHF	.250	.912	.711	.716	.976	.793	.963	.250	.000	.949	.820	.250	.957	.000	.866	.500	.750	.500	.500	.688	.970
Auto	4	488	108	63	663	111	387	1	0	499	209	1	110	0	320	2	3	4	2	11	1493
% Auto	100	99.8	100	100	99.8	100	99.5	100	0	99.6	99.5	100	99.1	0	99.4	100	100	100	100	100	99.7
HV	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
% HV	0	0	0	0	0	0	0.3	0	0	0.2	0	0	0.9	0	0.3	0	0	0	0	0	0.1
B/SB	0	1	0	0	1	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	3

Stonefield Engineering & Design, LLC

92 Park Avenue, Rutherford, NJ 07070

201.340.4468 t. 201.340.4472 f.

Intersection of Franklin Avenue (E/W)
and Chestnut Street (N/S)
Ridgewood, Bergen County, New Jersey
Saturday, July 20, 2024

File Name : RUT-230372.01_SAT_02
Site Code : 00230372
Start Date : 7/20/2024
Page No : 1

Groups Printed- Auto - HV - B/SB

	Franklin Avenue Eastbound				Franklin Avenue Westbound				Chestnut Street Northbound				Chestnut Street Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:00 AM	13	110	20	143	17	99	3	119	11	3	10	24	1	1	22	24	310
11:15 AM	14	102	11	127	10	111	4	125	8	0	16	24	1	1	9	11	287
11:30 AM	11	111	12	134	17	98	1	116	5	0	13	18	0	1	16	17	285
11:45 AM	10	114	15	139	17	103	2	122	4	1	27	32	0	1	21	22	315
Total	48	437	58	543	61	411	10	482	28	4	66	98	2	4	68	74	1197
12:00 PM	9	97	15	121	20	94	7	121	9	2	18	29	1	3	22	26	297
12:15 PM	22	107	24	153	25	103	6	134	9	0	18	27	1	5	18	24	338
12:30 PM	15	116	9	140	14	106	2	122	11	1	15	27	1	0	16	17	306
12:45 PM	9	103	9	121	22	95	6	123	10	0	9	19	2	6	17	25	288
Total	55	423	57	535	81	398	21	500	39	3	60	102	5	14	73	92	1229
01:00 PM	20	109	16	145	16	90	3	109	10	0	23	33	0	0	15	15	302
01:15 PM	16	118	12	146	15	107	3	125	12	1	22	35	0	2	12	14	320
01:30 PM	12	92	13	117	7	89	9	105	10	0	8	18	2	2	12	16	256
01:45 PM	17	82	16	115	16	103	5	124	8	2	16	26	0	0	16	16	281
Total	65	401	57	523	54	389	20	463	40	3	69	112	2	4	55	61	1159
Grand Total	168	1261	172	1601	196	1198	51	1445	107	10	195	312	9	22	196	227	3585
Apprch %	10.5	78.8	10.7		13.6	82.9	3.5		34.3	3.2	62.5		4	9.7	86.3		
Total %	4.7	35.2	4.8	44.7	5.5	33.4	1.4	40.3	3	0.3	5.4	8.7	0.3	0.6	5.5	6.3	
Auto	168	1256	172	1596	194	1193	51	1438	107	10	195	312	9	22	196	227	3573
% Auto	100	99.6	100	99.7	99	99.6	100	99.5	100	100	100	100	100	100	100	100	99.7
HV	0	4	0	4	2	4	0	6	0	0	0	0	0	0	0	0	10
% HV	0	0.3	0	0.2	1	0.3	0	0.4	0	0	0	0	0	0	0	0	0.3
B/SB	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
% B/SB	0	0.1	0	0.1	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0.1

	Franklin Avenue Eastbound				Franklin Avenue Westbound				Chestnut Street Northbound				Chestnut Street Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	10	114	15	139	17	103	2	122	4	1	27	32	0	1	21	22	315
12:00 PM	9	97	15	121	20	94	7	121	9	2	18	29	1	3	22	26	297
12:15 PM	22	107	24	153	25	103	6	134	9	0	18	27	1	5	18	24	338
12:30 PM	15	116	9	140	14	106	2	122	11	1	15	27	1	0	16	17	306
Total Volume	56	434	63	553	76	406	17	499	33	4	78	115	3	9	77	89	1256
% App. Total	10.1	78.5	11.4		15.2	81.4	3.4		28.7	3.5	67.8		3.4	10.1	86.5		
PHF	.636	.935	.656	.904	.760	.958	.607	.931	.750	.500	.722	.898	.750	.450	.875	.856	.929
Auto	56	433	63	552	75	403	17	495	33	4	78	115	3	9	77	89	1251
% Auto	100	99.8	100	99.8	98.7	99.3	100	99.2	100	100	100	100	100	100	100	100	99.6
HV	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	3
% HV	0	0	0	0	1.3	0.5	0	0.6	0	0	0	0	0	0	0	0	0.2
B/SB	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
% B/SB	0	0.2	0	0.2	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0.2

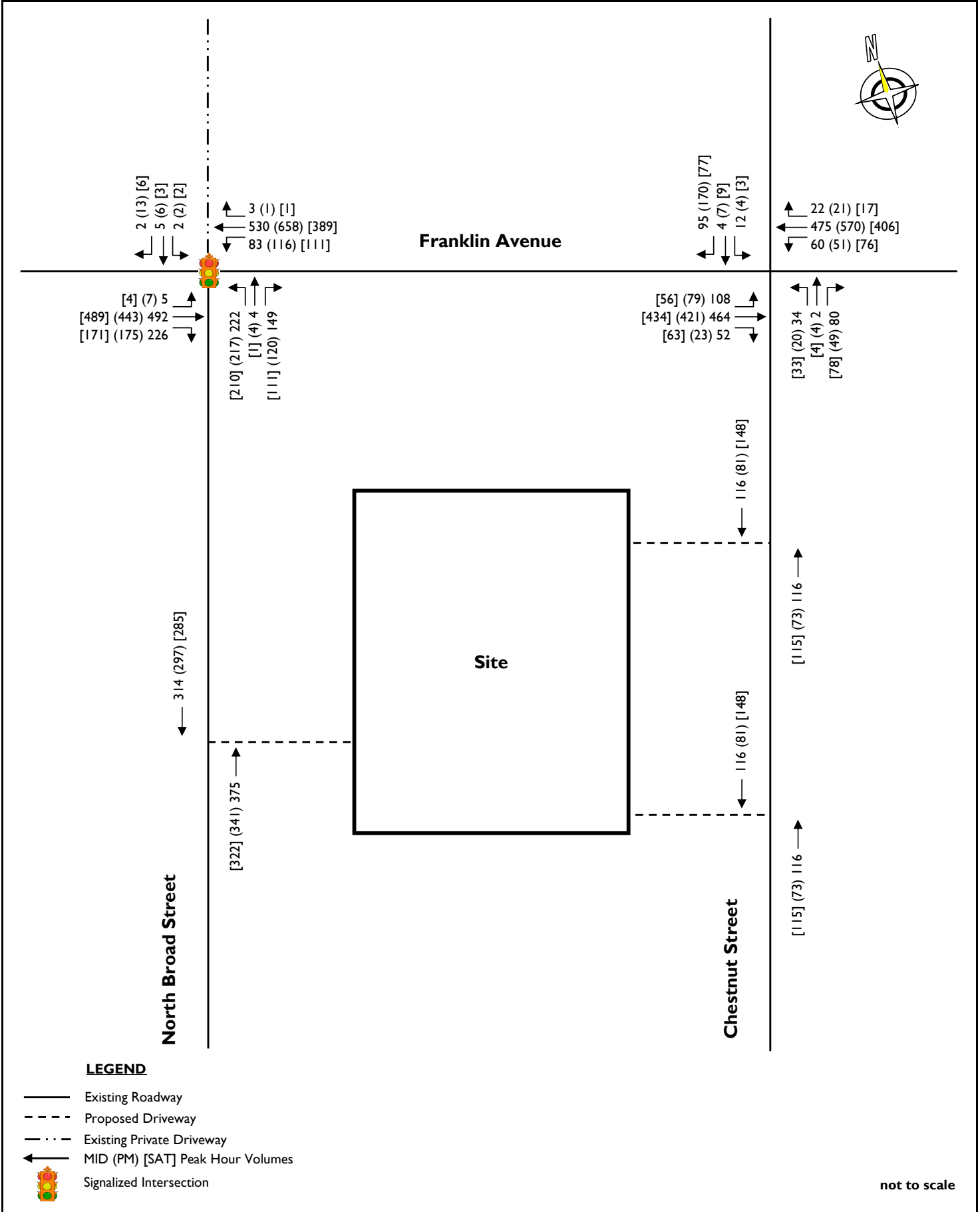
FIGURES

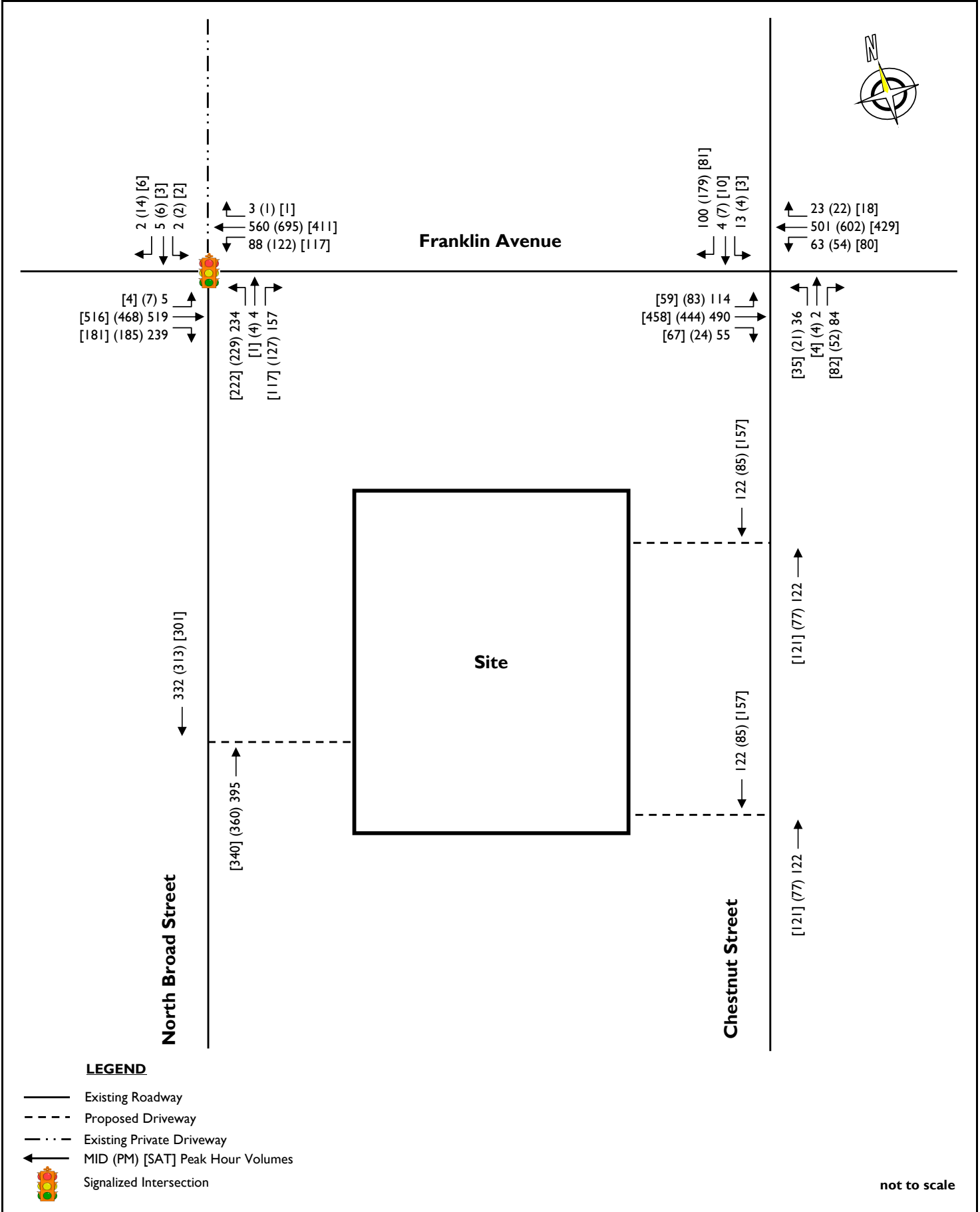


STONEFIELD

**Proposed Chase Bank
55 North Broad Street
Village of Ridgewood, Bergen County, New Jersey
Traffic Impact Study**

**FIGURE I
Site Location Map**

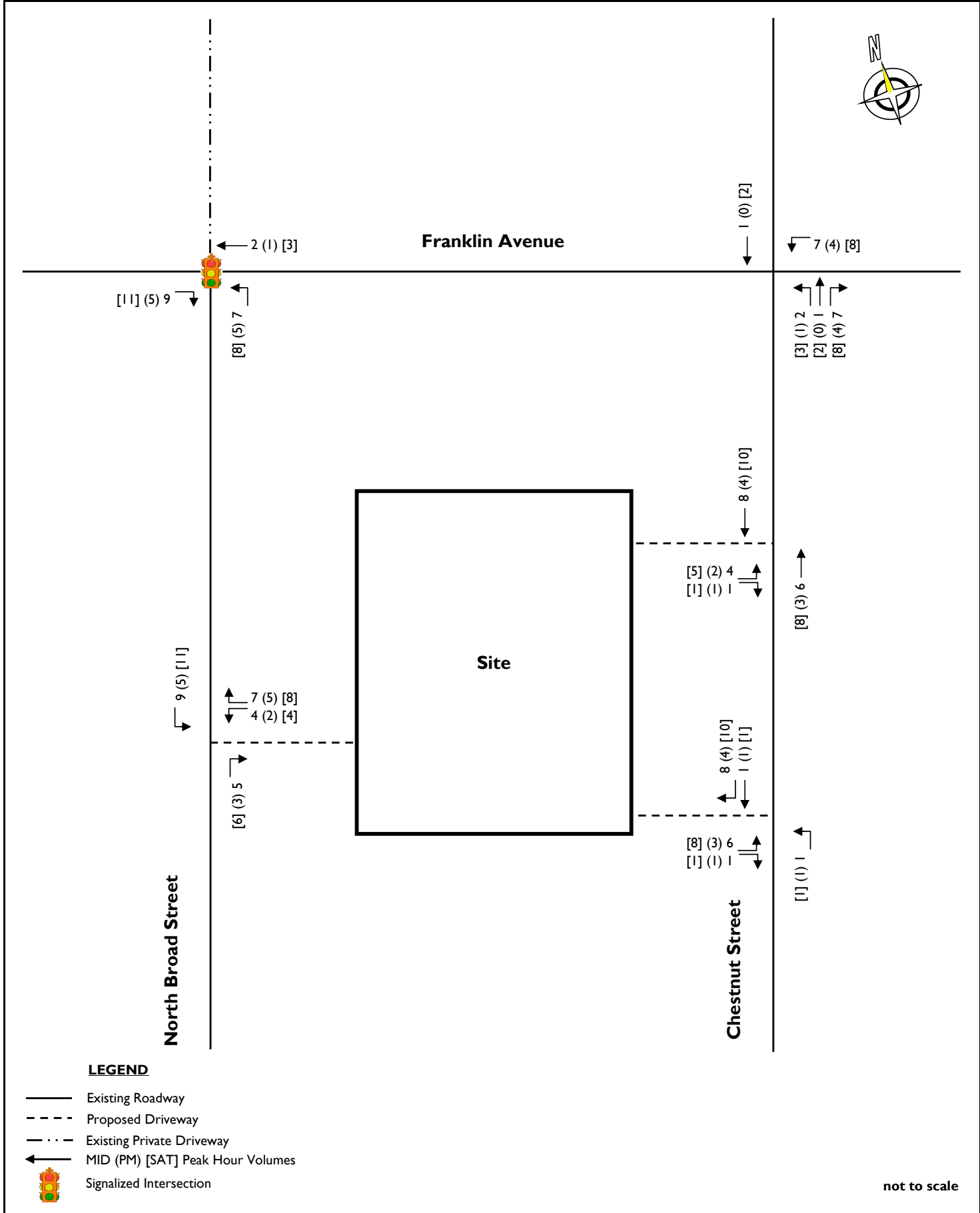




STONEFIELD

Proposed Chase Bank
55 North Broad Street
Village of Ridgewood, Bergen County, New Jersey
Traffic Impact Study

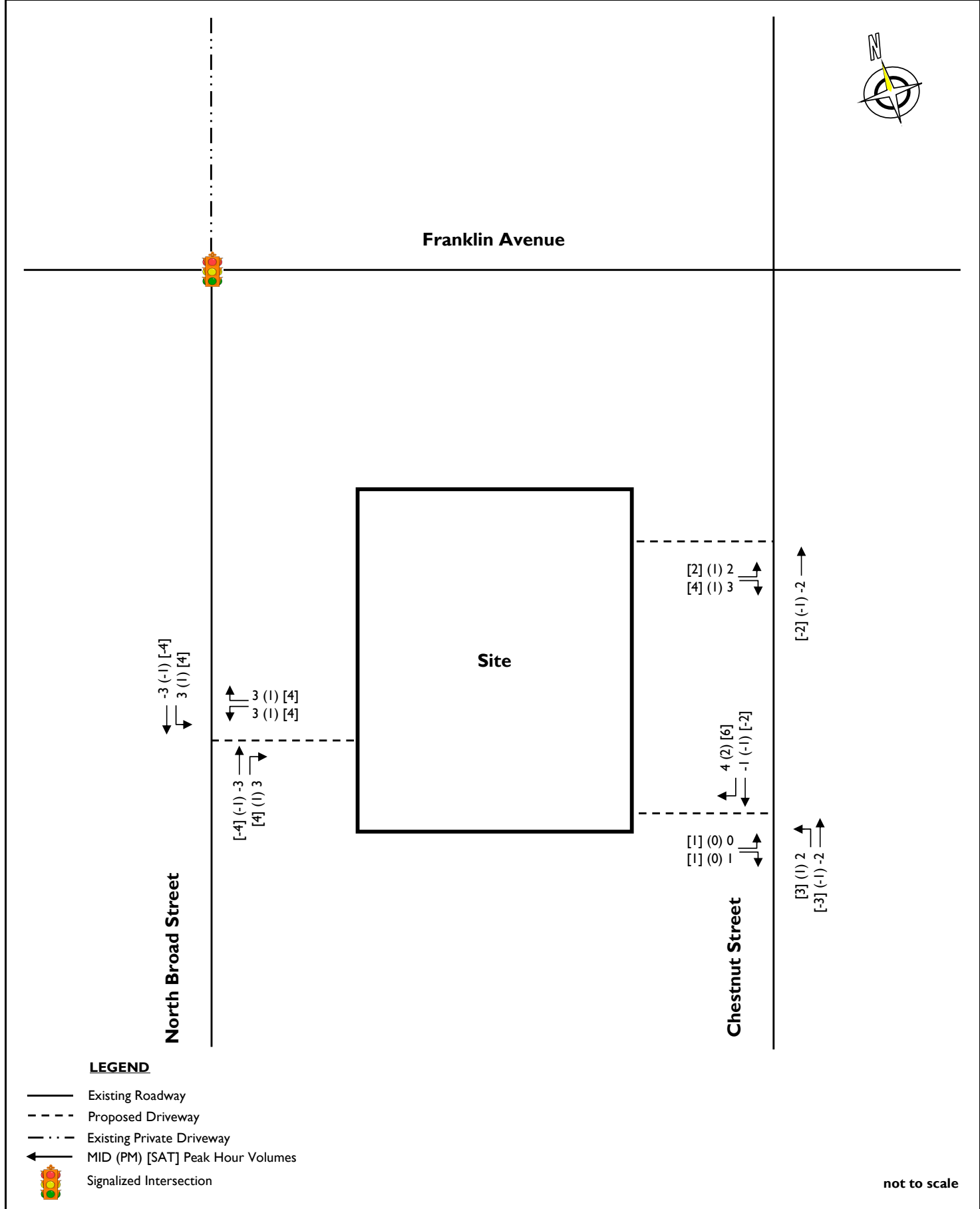
FIGURE 3
2026 No-Build Traffic
Volumes



STONEFIELD

Proposed Chase Bank
55 North Broad Street
Village of Ridgewood, Bergen County, New Jersey
Traffic Impact Study

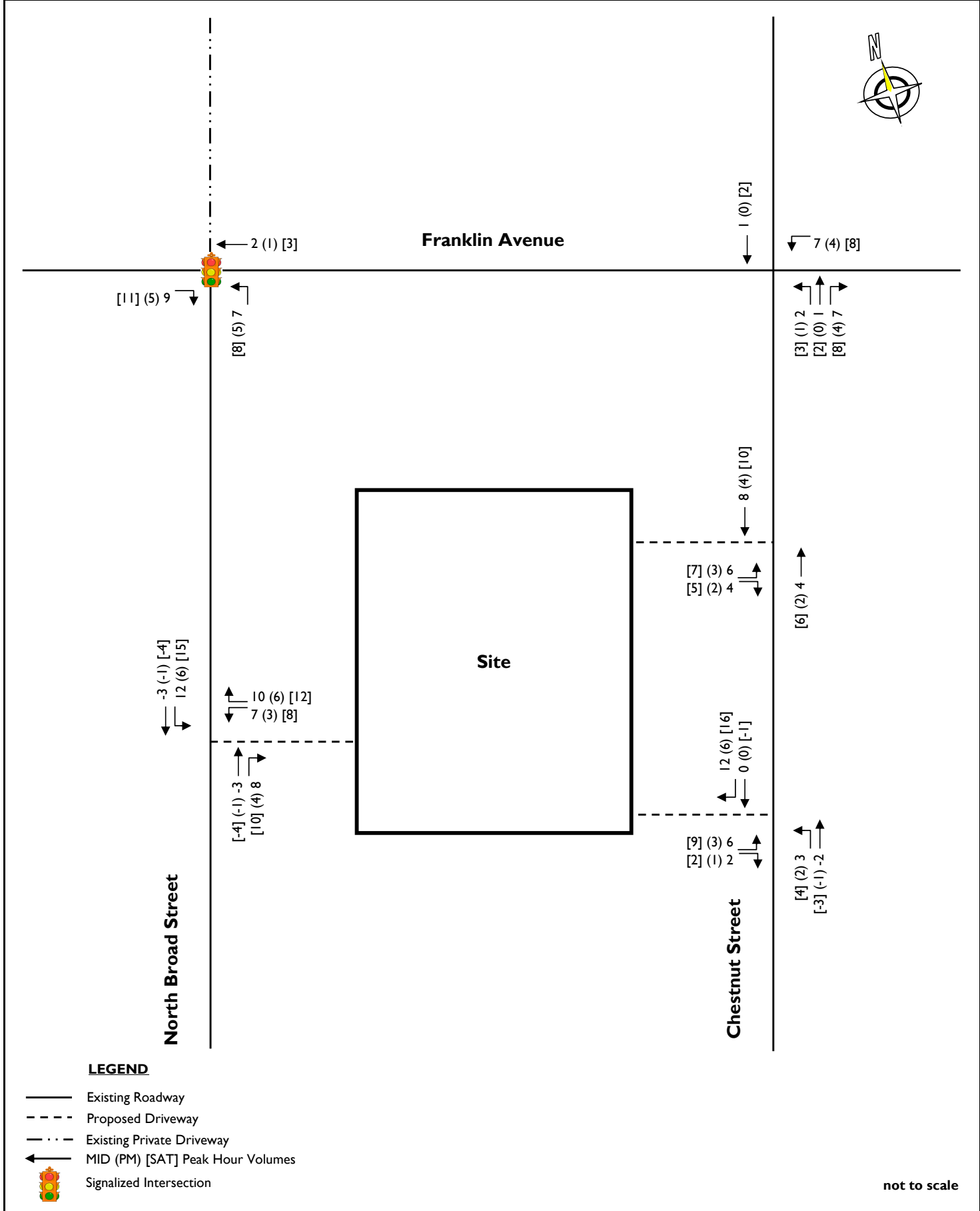
FIGURE 4
"New" Site-Generated
Traffic Volumes



STONEFIELD

Proposed Chase Bank
55 North Broad Street
Village of Ridgewood, Bergen County, New Jersey
Traffic Impact Study

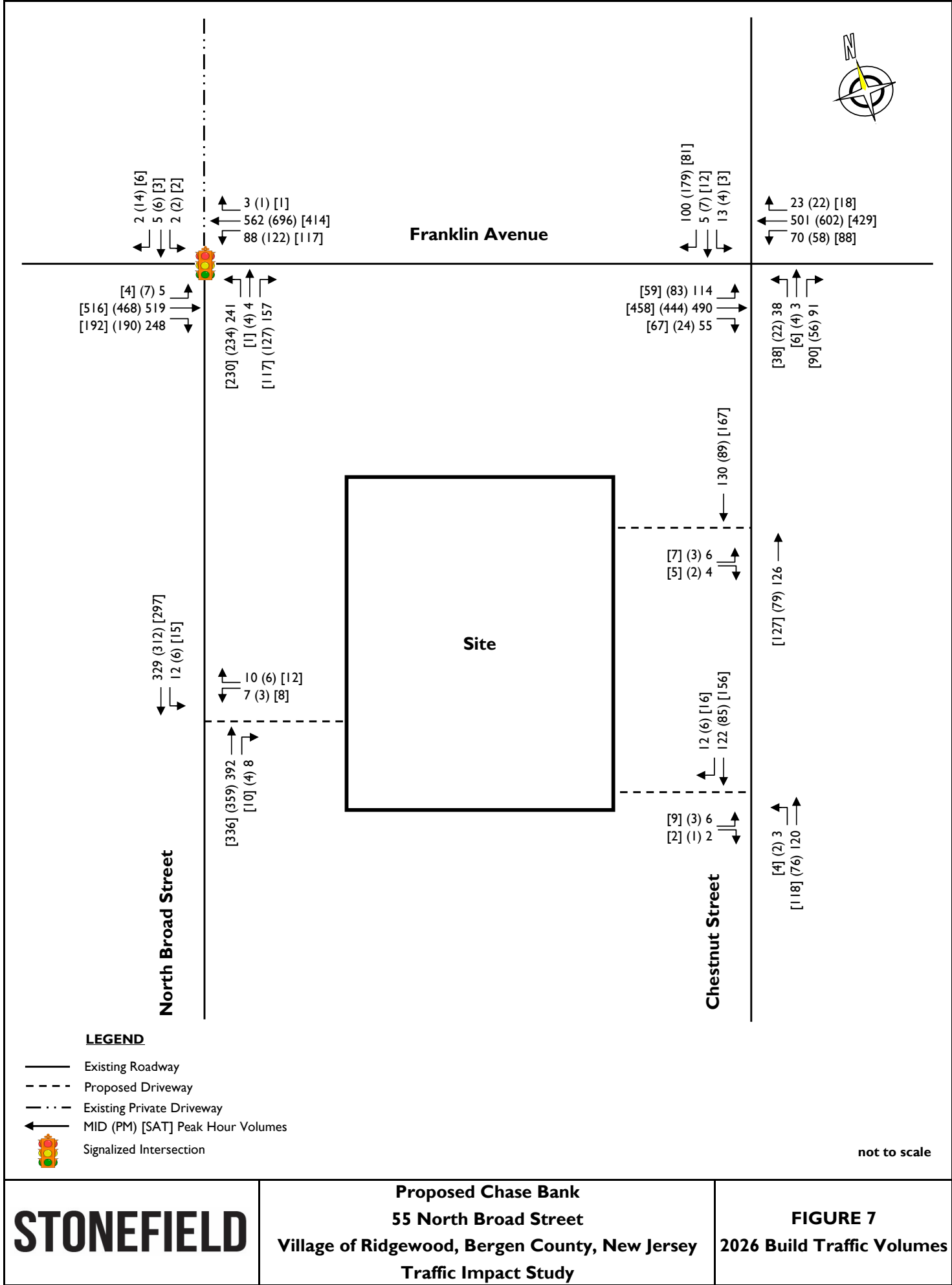
FIGURE 5
"Pass-By" Site-Generated
Traffic Volumes



STONEFIELD

Proposed Chase Bank
55 North Broad Street
Village of Ridgewood, Bergen County, New Jersey
Traffic Impact Study

FIGURE 6
Total Site-Generated
Traffic Volumes



STONEFIELD

Proposed Chase Bank
55 North Broad Street
Village of Ridgewood, Bergen County, New Jersey
Traffic Impact Study

FIGURE 7
2026 Build Traffic Volumes

HIGHWAY CAPACITY ANALYSIS DETAIL SHEETS

HCM 7th Signalized Intersection Summary

2024 Existing Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Weekday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	492	226	83	530	3	222	4	149	2	5	2
Future Volume (veh/h)	5	492	226	83	530	3	222	4	149	2	5	2
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	1.04	1.04	1.00	1.04	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	1900	1885	1870	1945	1976	1900	1961	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	5	507	137	86	546	2	229	4	149	2	5	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	2	2	0	0	1	0	3	0	0	0
Cap, veh/h	37	857	725	471	1180	4	461	12	450	144	340	0
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.00
Sat Flow, veh/h	4	1876	1585	1853	1967	7	1479	42	1574	349	1188	0
Grp Volume(v), veh/h	512	0	137	86	0	548	229	0	153	7	0	0
Grp Sat Flow(s),veh/h/ln	1880	0	1585	1853	0	1975	1479	0	1617	1538	0	0
Q Serve(g_s), s	0.0	0.0	5.4	2.1	0.0	16.1	8.4	0.0	7.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	21.3	0.0	5.4	2.1	0.0	16.1	16.3	0.0	7.8	7.9	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	1.00		0.97	0.29		0.00
Lane Grp Cap(c), veh/h	894	0	725	471	0	1185	461	0	462	483	0	0
V/C Ratio(X)	0.57	0.00	0.19	0.18	0.00	0.46	0.50	0.00	0.33	0.01	0.00	0.00
Avail Cap(c_a), veh/h	894	0	725	471	0	1185	461	0	462	483	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.2	0.0	16.9	12.5	0.0	11.6	33.1	0.0	29.6	26.9	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.6	0.9	0.0	1.3	3.8	0.0	1.9	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	0.0	2.1	1.0	0.0	7.2	5.6	0.0	3.3	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.9	0.0	17.5	13.4	0.0	12.9	36.9	0.0	31.5	27.0	0.0	0.0
LnGrp LOS	C		B	B		B	D		C	C		
Approach Vol, veh/h	649			634			382			7		
Approach Delay, s/veh	22.6			13.0			34.8			27.0		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2		3	4		6		8				
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0		36.0		69.0				
Change Period (Y+Rc), s	6.0		4.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	30.0		11.0	48.0		30.0		63.0				
Max Q Clear Time (g_c+I1), s	18.3		4.1	23.3		9.9		18.1				
Green Ext Time (p_c), s	1.3		0.1	4.2		0.0		4.4				
Intersection Summary												
HCM 7th Control Delay, s/veh				21.7								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2024 Existing Condition
Weekday Midday Peak Hour

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	108	464	52	60	475	22	34	2	80	12	4	95
Future Vol, veh/h	108	464	52	60	475	22	34	2	80	12	4	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	1	0	2	1	0	0	0	3	0	0	1
Mvmt Flow	117	504	57	65	516	24	37	2	87	13	4	103

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	540	0	0	561	0	0	1416	1438	533	1399	1454	528
Stage 1	-	-	-	-	-	-	767	767	-	659	659	-
Stage 2	-	-	-	-	-	-	649	671	-	740	796	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.327	3.5	4	3.309
Pot Cap-1 Maneuver	1112	-	-	1096	-	-	141	164	590	145	161	595
Stage 1	-	-	-	-	-	-	398	414	-	456	464	-
Stage 2	-	-	-	-	-	-	462	458	-	412	402	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1112	-	-	1096	-	-	95	138	590	102	135	595
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	138	-	102	135	-
Stage 1	-	-	-	-	-	-	356	370	-	429	436	-
Stage 2	-	-	-	-	-	-	355	431	-	312	360	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.49			0.91			38.39			19.82		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	229	1112	-	-	1096	-	-	362
HCM Lane V/C Ratio	0.55	0.106	-	-	0.06	-	-	0.333
HCM Control Delay (s/veh)	38.4	8.6	-	-	8.5	-	-	19.8
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3	0.4	-	-	0.2	-	-	1.4

HCM 7th Signalized Intersection Summary

2024 Existing Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue Weekday Evening Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	443	175	116	658	1	217	4	120	2	6	13
Future Volume (veh/h)	7	443	175	116	658	1	217	4	120	2	6	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.04	1.04	1.00	1.04	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	1900	1870	1870	1976	1961	1900	1930	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	482	136	126	715	1	236	4	126	2	7	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	1	0	3	0	0	0	0	0
Cap, veh/h	39	844	725	491	1174	2	483	14	448	60	184	276
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	9	1847	1585	1882	1957	3	1438	50	1568	80	643	964
Grp Volume(v), veh/h	490	0	136	126	0	716	236	0	130	21	0	0
Grp Sat Flow(s),veh/h/ln	1856	0	1585	1882	0	1960	1438	0	1618	1688	0	0
Q Serve(g_s), s	0.0	0.0	5.3	3.2	0.0	24.2	13.5	0.0	6.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.2	0.0	5.3	3.2	0.0	24.2	14.4	0.0	6.6	0.9	0.0	0.0
Prop In Lane	0.02		1.00	1.00		0.00	1.00		0.97	0.10		0.57
Lane Grp Cap(c), veh/h	883	0	725	491	0	1176	483	0	462	520	0	0
V/C Ratio(X)	0.55	0.00	0.19	0.26	0.00	0.61	0.49	0.00	0.28	0.04	0.00	0.00
Avail Cap(c_a), veh/h	883	0	725	491	0	1176	483	0	462	520	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.0	0.0	16.9	12.6	0.0	13.2	31.8	0.0	29.1	27.1	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.6	1.3	0.0	2.4	3.5	0.0	1.5	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	2.1	1.5	0.0	10.9	5.6	0.0	2.8	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.5	0.0	17.5	13.9	0.0	15.6	35.3	0.0	30.6	27.3	0.0	0.0
LnGrp LOS	C		B	B		B	D		C	C		
Approach Vol, veh/h	626			842			366			21		
Approach Delay, s/veh	22.2			15.3			33.7			27.3		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2		3	4		6		8				
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0		36.0		69.0				
Change Period (Y+Rc), s	6.0		4.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	30.0		11.0	48.0		30.0		63.0				
Max Q Clear Time (g_c+I1), s	16.4		5.2	22.2		2.9		26.2				
Green Ext Time (p_c), s	1.3		0.1	4.0		0.1		6.4				
Intersection Summary												
HCM 7th Control Delay, s/veh				21.4								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2024 Existing Condition
Weekday Evening Peak Hour

Intersection												
Int Delay, s/veh	5.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	421	23	51	570	21	20	4	49	4	7	170
Future Vol, veh/h	79	421	23	51	570	21	20	4	49	4	7	170
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	89	473	26	57	640	24	22	4	55	4	8	191

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	664	0	0	499	0	0	1422	1442	486	1420	1443	652
Stage 1	-	-	-	-	-	-	663	663	-	767	767	-
Stage 2	-	-	-	-	-	-	759	779	-	653	676	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1025	-	-	1153	-	-	140	163	626	140	163	516
Stage 1	-	-	-	-	-	-	453	462	-	398	414	-
Stage 2	-	-	-	-	-	-	402	409	-	460	455	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1025	-	-	1153	-	-	73	142	626	108	141	516
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	142	-	108	141	-
Stage 1	-	-	-	-	-	-	414	422	-	378	394	-
Stage 2	-	-	-	-	-	-	236	389	-	379	416	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.34			0.66			37.2			20.32		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	191	1025	-	-	1153	-	-	435
HCM Lane V/C Ratio	0.428	0.087	-	-	0.05	-	-	0.467
HCM Control Delay (s/veh)	37.2	8.8	-	-	8.3	-	-	20.3
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2	0.3	-	-	0.2	-	-	2.4

HCM 7th Signalized Intersection Summary

2024 Existing Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	489	171	111	389	1	210	1	111	2	3	6
Future Volume (veh/h)	4	489	171	111	389	1	210	1	111	2	3	6
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	1.04	1.04	1.00	1.04	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	1900	1900	1900	1976	1961	1900	1961	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	4	504	111	114	401	1	216	1	114	2	3	4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	1	0	1	0	1	0	0	0
Cap, veh/h	36	866	736	487	1173	3	492	4	457	121	182	208
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	3	1894	1610	1882	1955	5	1477	14	1598	276	636	729
Grp Volume(v), veh/h	508	0	111	114	0	402	216	0	115	9	0	0
Grp Sat Flow(s),veh/h/ln	1897	0	1610	1882	0	1960	1477	0	1612	1641	0	0
Q Serve(g_s), s	0.0	0.0	4.2	2.8	0.0	10.8	12.3	0.0	5.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.8	0.0	4.2	2.8	0.0	10.8	12.7	0.0	5.8	0.4	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	1.00		0.99	0.22		0.44
Lane Grp Cap(c), veh/h	902	0	736	487	0	1176	492	0	461	511	0	0
V/C Ratio(X)	0.56	0.00	0.15	0.23	0.00	0.34	0.44	0.00	0.25	0.02	0.00	0.00
Avail Cap(c_a), veh/h	902	0	736	487	0	1176	492	0	461	511	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.1	0.0	16.6	12.7	0.0	10.6	31.3	0.0	28.8	26.9	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.4	1.1	0.0	0.8	2.8	0.0	1.3	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	1.7	1.3	0.0	4.8	5.0	0.0	2.4	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.7	0.0	17.1	13.8	0.0	11.4	34.1	0.0	30.1	27.0	0.0	0.0
LnGrp LOS	C		B	B		B	C		C	C		
Approach Vol, veh/h	619			516			331			9		
Approach Delay, s/veh	22.5			11.9			32.7			27.0		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2		3	4		6		8				
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0		36.0		69.0				
Change Period (Y+Rc), s	6.0		4.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	30.0		11.0	48.0		30.0		63.0				
Max Q Clear Time (g_c+I1), s	14.7		4.8	22.8		2.4		12.8				
Green Ext Time (p_c), s	1.2		0.1	4.0		0.0		3.0				
Intersection Summary												
HCM 7th Control Delay, s/veh				21.1								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2024 Existing Condition
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	434	63	76	406	17	33	4	78	3	9	77
Future Vol, veh/h	56	434	63	76	406	17	33	4	78	3	9	77
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	60	467	68	82	437	18	35	4	84	3	10	83

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	455	0	0	534	0	0	1226	1239	501	1198	1264	446
Stage 1	-	-	-	-	-	-	621	621	-	609	609	-
Stage 2	-	-	-	-	-	-	605	618	-	589	655	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1189	-	-	1120	-	-	186	210	616	194	204	656
Stage 1	-	-	-	-	-	-	478	482	-	486	488	-
Stage 2	-	-	-	-	-	-	488	484	-	498	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1189	-	-	1120	-	-	136	185	616	144	179	656
Mov Cap-2 Maneuver	-	-	-	-	-	-	136	185	-	144	179	-
Stage 1	-	-	-	-	-	-	454	458	-	450	453	-
Stage 2	-	-	-	-	-	-	387	449	-	404	442	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.83			1.29			25.79			14.54		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	294	1189	-	-	1120	-	-	473
HCM Lane V/C Ratio	0.42	0.051	-	-	0.073	-	-	0.203
HCM Control Delay (s/veh)	25.8	8.2	-	-	8.5	-	-	14.5
HCM Lane LOS	D	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	2	0.2	-	-	0.2	-	-	0.7

HCM 7th Signalized Intersection Summary

2026 No Build Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Weekday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	519	239	88	560	3	234	4	157	2	5	2
Future Volume (veh/h)	5	519	239	88	560	3	234	4	157	2	5	2
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	1.04	1.04	1.00	1.04	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	1900	1885	1870	1945	1976	1900	1961	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	5	535	150	91	577	2	241	4	157	2	5	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	2	2	0	0	1	0	3	0	0	0
Cap, veh/h	37	858	725	451	1181	4	456	11	450	142	334	0
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.00
Sat Flow, veh/h	4	1876	1585	1853	1968	7	1479	40	1576	341	1168	0
Grp Volume(v), veh/h	540	0	150	91	0	579	241	0	161	7	0	0
Grp Sat Flow(s),veh/h/ln	1880	0	1585	1853	0	1975	1479	0	1616	1509	0	0
Q Serve(g_s), s	0.0	0.0	6.0	2.3	0.0	17.4	9.3	0.0	8.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	22.9	0.0	6.0	2.3	0.0	17.4	17.6	0.0	8.3	8.3	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	1.00		0.98	0.29		0.00
Lane Grp Cap(c), veh/h	894	0	725	451	0	1185	456	0	462	475	0	0
V/C Ratio(X)	0.60	0.00	0.21	0.20	0.00	0.49	0.53	0.00	0.35	0.01	0.00	0.00
Avail Cap(c_a), veh/h	894	0	725	451	0	1185	456	0	462	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.7	0.0	17.1	13.0	0.0	11.9	33.7	0.0	29.7	26.9	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.6	1.0	0.0	1.4	4.3	0.0	2.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	2.3	1.0	0.0	7.8	6.0	0.0	3.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.7	0.0	17.7	14.0	0.0	13.3	38.1	0.0	31.8	27.0	0.0	0.0
LnGrp LOS	C		B	B		B	D		C	C		
Approach Vol, veh/h	690			670			402			7		
Approach Delay, s/veh	23.2			13.4			35.6			27.0		
Approach LOS	C			B			D			C		
Timer - Assigned Phs	2		3	4		6		8				
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0		36.0		69.0				
Change Period (Y+Rc), s	6.0		4.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	30.0		11.0	48.0		30.0		63.0				
Max Q Clear Time (g_c+I1), s	19.6		4.3	24.9		10.3		19.4				
Green Ext Time (p_c), s	1.3		0.1	4.4		0.0		4.7				
Intersection Summary												
HCM 7th Control Delay, s/veh				22.3								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2026 No Build Condition
Weekday Midday Peak Hour

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	114	490	55	63	501	23	36	2	84	13	4	100
Future Vol, veh/h	114	490	55	63	501	23	36	2	84	13	4	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	1	0	2	1	0	0	0	3	0	0	1
Mvmt Flow	124	533	60	68	545	25	39	2	91	14	4	109

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	570	0	0	592	0	0	1494	1517	563	1476	1534	557
Stage 1	-	-	-	-	-	-	810	810	-	694	694	-
Stage 2	-	-	-	-	-	-	684	707	-	782	840	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.327	3.5	4	3.309
Pot Cap-1 Maneuver	1089	-	-	1071	-	-	126	149	569	130	145	575
Stage 1	-	-	-	-	-	-	377	396	-	436	447	-
Stage 2	-	-	-	-	-	-	442	441	-	391	384	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1089	-	-	1071	-	-	82	123	569	89	121	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	82	123	-	89	121	-
Stage 1	-	-	-	-	-	-	334	351	-	408	419	-
Stage 2	-	-	-	-	-	-	332	413	-	289	340	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.51			0.92			51.08			22.48		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	203	1089	-	-	1071	-	-	331
HCM Lane V/C Ratio	0.654	0.114	-	-	0.064	-	-	0.384
HCM Control Delay (s/veh)	51.1	8.7	-	-	8.6	-	-	22.5
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.9	0.4	-	-	0.2	-	-	1.7

HCM 7th Signalized Intersection Summary

2026 No Build Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue Weekday Evening Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	468	185	122	695	1	229	4	127	2	6	14
Future Volume (veh/h)	7	468	185	122	695	1	229	4	127	2	6	14
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	1.04	1.04	1.00	1.04	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	1900	1870	1870	1976	1961	1900	1930	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	509	147	133	755	1	249	4	134	2	7	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	1	0	3	0	0	0	0	0
Cap, veh/h	39	845	725	471	1175	2	483	13	449	59	176	284
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	9	1847	1585	1882	1958	3	1436	47	1570	74	615	995
Grp Volume(v), veh/h	517	0	147	133	0	756	249	0	138	22	0	0
Grp Sat Flow(s),veh/h/ln	1856	0	1585	1882	0	1960	1436	0	1617	1684	0	0
Q Serve(g_s), s	0.0	0.0	5.8	3.3	0.0	26.4	14.4	0.0	7.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	21.8	0.0	5.8	3.3	0.0	26.4	15.4	0.0	7.0	1.0	0.0	0.0
Prop In Lane	0.02		1.00	1.00		0.00	1.00		0.97	0.09		0.59
Lane Grp Cap(c), veh/h	883	0	725	471	0	1176	483	0	462	519	0	0
V/C Ratio(X)	0.59	0.00	0.20	0.28	0.00	0.64	0.52	0.00	0.30	0.04	0.00	0.00
Avail Cap(c_a), veh/h	883	0	725	471	0	1176	483	0	462	519	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.4	0.0	17.1	13.1	0.0	13.7	32.2	0.0	29.3	27.1	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.6	1.5	0.0	2.7	3.9	0.0	1.7	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	0.0	2.3	1.6	0.0	12.0	6.0	0.0	3.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.2	0.0	17.7	14.6	0.0	16.4	36.1	0.0	30.9	27.3	0.0	0.0
LnGrp LOS	C		B	B	B		D	C		C		
Approach Vol, veh/h	664		889			387			22			
Approach Delay, s/veh	22.8		16.1			34.2			27.3			
Approach LOS	C		B			C			C			
Timer - Assigned Phs	2		3	4	6		8					
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0	36.0		69.0					
Change Period (Y+Rc), s	6.0		4.0	6.0	6.0		6.0					
Max Green Setting (Gmax), s	30.0		11.0	48.0	30.0		63.0					
Max Q Clear Time (g_c+I1), s	17.4		5.3	23.8	3.0		28.4					
Green Ext Time (p_c), s	1.3		0.1	4.3	0.1		6.8					
Intersection Summary												
HCM 7th Control Delay, s/veh			22.1									
HCM 7th LOS			C									

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2026 No Build Condition
Weekday Evening Peak Hour

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	444	24	54	602	22	21	4	52	4	7	179
Future Vol, veh/h	83	444	24	54	602	22	21	4	52	4	7	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	93	499	27	61	676	25	24	4	58	4	8	201

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	701	0	0	526	0	0	1501	1521	512	1498	1522	689
Stage 1	-	-	-	-	-	-	699	699	-	810	810	-
Stage 2	-	-	-	-	-	-	802	822	-	688	712	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	998	-	-	1131	-	-	125	148	607	125	148	494
Stage 1	-	-	-	-	-	-	434	445	-	377	396	-
Stage 2	-	-	-	-	-	-	381	391	-	440	439	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	998	-	-	1131	-	-	60	127	607	94	127	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	60	127	-	94	127	-
Stage 1	-	-	-	-	-	-	393	403	-	356	375	-
Stage 2	-	-	-	-	-	-	209	370	-	356	398	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.35			0.67			48.6			22.66		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	165	998	-	-	1131	-	-	413
HCM Lane V/C Ratio	0.524	0.093	-	-	0.054	-	-	0.517
HCM Control Delay (s/veh)	48.6	9	-	-	8.4	-	-	22.7
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.6	0.3	-	-	0.2	-	-	2.9

HCM 7th Signalized Intersection Summary

2024 No Build Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	516	181	117	411	1	222	1	117	2	3	6
Future Volume (veh/h)	4	516	181	117	411	1	222	1	117	2	3	6
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	1.04	1.04	1.00	1.04	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	1900	1900	1900	1976	1961	1900	1961	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	4	532	122	121	424	1	229	1	121	2	3	4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	1	0	1	0	1	0	0	0
Cap, veh/h	36	866	736	466	1173	3	492	4	457	120	182	208
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	3	1894	1610	1882	1955	5	1477	13	1599	275	635	728
Grp Volume(v), veh/h	536	0	122	121	0	425	229	0	122	9	0	0
Grp Sat Flow(s),veh/h/ln	1897	0	1610	1882	0	1960	1477	0	1612	1639	0	0
Q Serve(g_s), s	0.0	0.0	4.7	3.0	0.0	11.6	13.3	0.0	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	22.4	0.0	4.7	3.0	0.0	11.6	13.6	0.0	6.1	0.4	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	1.00		0.99	0.22		0.44
Lane Grp Cap(c), veh/h	902	0	736	466	0	1176	492	0	461	510	0	0
V/C Ratio(X)	0.59	0.00	0.17	0.26	0.00	0.36	0.47	0.00	0.26	0.02	0.00	0.00
Avail Cap(c_a), veh/h	902	0	736	466	0	1176	492	0	461	510	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.6	0.0	16.7	13.2	0.0	10.7	31.6	0.0	29.0	26.9	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.5	1.3	0.0	0.9	3.1	0.0	1.4	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	1.8	1.4	0.0	5.2	5.3	0.0	2.6	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.4	0.0	17.2	14.5	0.0	11.6	34.8	0.0	30.4	27.0	0.0	0.0
LnGrp LOS	C		B	B		B	C		C	C		
Approach Vol, veh/h	658			546			351			9		
Approach Delay, s/veh	23.1			12.2			33.2			27.0		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2		3	4		6		8				
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0		36.0		69.0				
Change Period (Y+Rc), s	6.0		4.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	30.0		11.0	48.0		30.0		63.0				
Max Q Clear Time (g_c+l1), s	15.6		5.0	24.4		2.4		13.6				
Green Ext Time (p_c), s	1.2		0.1	4.3		0.0		3.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				21.6								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2024 No Build Condition
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	458	67	80	429	18	35	4	82	3	10	81
Future Vol, veh/h	59	458	67	80	429	18	35	4	82	3	10	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	63	492	72	86	461	19	38	4	88	3	11	87

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	481	0	0	565	0	0	1294	1308	528	1265	1334	471
Stage 1	-	-	-	-	-	-	655	655	-	643	643	-
Stage 2	-	-	-	-	-	-	639	653	-	622	691	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1168	-	-	1096	-	-	169	193	596	176	187	637
Stage 1	-	-	-	-	-	-	458	466	-	465	472	-
Stage 2	-	-	-	-	-	-	468	467	-	478	448	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1168	-	-	1096	-	-	119	168	596	128	163	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	168	-	128	163	-
Stage 1	-	-	-	-	-	-	433	440	-	429	435	-
Stage 2	-	-	-	-	-	-	363	430	-	381	424	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.83	1.3	30.77	15.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	266	1168	-	-	1096	-	-	443
HCM Lane V/C Ratio	0.489	0.054	-	-	0.078	-	-	0.228
HCM Control Delay (s/veh)	30.8	8.3	-	-	8.6	-	-	15.5
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.5	0.2	-	-	0.3	-	-	0.9

HCM 7th Signalized Intersection Summary

2026 Build Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Weekday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	519	248	88	562	3	241	4	157	2	5	2
Future Volume (veh/h)	5	519	248	88	562	3	241	4	157	2	5	2
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	1.04	1.04	1.00	1.04	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	1900	1885	1870	1945	1976	1900	1961	1900	1856	1900	1900	1900
Adj Flow Rate, veh/h	5	535	160	91	579	2	248	4	157	2	5	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	2	2	0	0	1	0	3	0	0	0
Cap, veh/h	37	858	725	449	1181	4	456	11	450	142	334	0
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.00
Sat Flow, veh/h	4	1876	1585	1853	1968	7	1479	40	1576	341	1168	0
Grp Volume(v), veh/h	540	0	160	91	0	581	248	0	161	7	0	0
Grp Sat Flow(s),veh/h/ln	1880	0	1585	1853	0	1975	1479	0	1616	1509	0	0
Q Serve(g_s), s	0.0	0.0	6.4	2.3	0.0	17.5	9.8	0.0	8.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	22.9	0.0	6.4	2.3	0.0	17.5	18.1	0.0	8.3	8.3	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	1.00		0.98	0.29		0.00
Lane Grp Cap(c), veh/h	894	0	725	449	0	1185	456	0	462	475	0	0
V/C Ratio(X)	0.60	0.00	0.22	0.20	0.00	0.49	0.54	0.00	0.35	0.01	0.00	0.00
Avail Cap(c_a), veh/h	894	0	725	449	0	1185	456	0	462	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.7	0.0	17.2	13.0	0.0	11.9	33.9	0.0	29.7	26.9	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.7	1.0	0.0	1.5	4.6	0.0	2.1	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	2.5	1.0	0.0	7.9	6.2	0.0	3.5	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.7	0.0	17.9	14.0	0.0	13.4	38.5	0.0	31.8	27.0	0.0	0.0
LnGrp LOS	C		B	B		B	D		C	C		
Approach Vol, veh/h	700			672			409			7		
Approach Delay, s/veh	23.1			13.4			35.9			27.0		
Approach LOS	C			B			D			C		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	36.0			15.0			54.0			36.0		
Change Period (Y+Rc), s	6.0			4.0			6.0			6.0		
Max Green Setting (Gmax), s	30.0			11.0			48.0			30.0		
Max Q Clear Time (g_c+I1), s	20.1			4.3			24.9			10.3		
Green Ext Time (p_c), s	1.3			0.1			4.5			0.0		
Intersection Summary												
HCM 7th Control Delay, s/veh				22.4								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2026 Build Condition
Weekday Midday Peak Hour

Intersection												
Int Delay, s/veh	8.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	114	490	55	70	501	23	38	3	91	13	5	100
Future Vol, veh/h	114	490	55	70	501	23	38	3	91	13	5	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	1	0	2	1	0	0	0	3	0	0	1
Mvmt Flow	124	533	60	76	545	25	41	3	99	14	5	109

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	570	0	0	592	0	0	1510	1532	563	1491	1549	557
Stage 1	-	-	-	-	-	-	810	810	-	709	709	-
Stage 2	-	-	-	-	-	-	699	722	-	782	840	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.5	4	3.327	3.5	4	3.309
Pot Cap-1 Maneuver	1089	-	-	1071	-	-	123	146	569	127	143	575
Stage 1	-	-	-	-	-	-	377	396	-	428	440	-
Stage 2	-	-	-	-	-	-	433	434	-	390	384	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1089	-	-	1071	-	-	79	120	569	84	117	575
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	120	-	84	117	-
Stage 1	-	-	-	-	-	-	334	351	-	398	409	-
Stage 2	-	-	-	-	-	-	322	404	-	283	340	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.51			1.02			59.75			23.75		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	198	1089	-	-	1071	-	-	318
HCM Lane V/C Ratio	0.723	0.114	-	-	0.071	-	-	0.403
HCM Control Delay (s/veh)	59.8	8.7	-	-	8.6	-	-	23.7
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	4.7	0.4	-	-	0.2	-	-	1.9

HCM 7th TWSC
3: North Broad Street & Site Driveway

2026 Build Condition
Weekday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	10	392	8	12	329
Future Vol, veh/h	7	10	392	8	12	329
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	8	11	436	9	13	366
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	832	440	0	0	444	0
Stage 1	440	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	5.9	5.7	-	-	3.6	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	384	661	-	-	1198	-
Stage 1	653	-	-	-	-	-
Stage 2	687	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	378	661	-	-	1198	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	12.4	0		0.28		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	505	63	-	
HCM Lane V/C Ratio	-	-	0.037	0.011	-	
HCM Control Delay (s/veh)	-	-	12.4	8	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

HCM 7th TWSC
4: Chestnut Street & Southerly Site Driveway

2026 Build Condition
Weekday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	3	120	122	12
Future Vol, veh/h	6	2	3	120	122	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	3	1	0
Mvmt Flow	7	2	3	135	137	13

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	285	144	151	0	-	0
Stage 1	144	-	-	-	-	-
Stage 2	142	-	-	-	-	-
Critical Hdwy	5.9	5.7	3.6	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	738	927	1473	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	890	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	736	927	1473	-	-	-
Mov Cap-2 Maneuver	736	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.69	0.18	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	44	-	776	-	-
HCM Lane V/C Ratio	0.002	-	0.012	-	-
HCM Control Delay (s/veh)	7.4	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 7th TWSC
5: Chestnut Street & Northerly Site Driveway

2026 Build Condition
Weekday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	4	0	126	130	0
Future Vol, veh/h	6	4	0	126	130	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	3	1	0
Mvmt Flow	7	4	0	142	146	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	288	146	-	0	-	0
Stage 1	146	-	-	-	-	-
Stage 2	142	-	-	-	-	-
Critical Hdwy	5.9	5.7	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	736	925	0	-	-	0
Stage 1	886	-	0	-	-	0
Stage 2	890	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	736	925	-	-	-	-
Mov Cap-2 Maneuver	736	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.56	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT
Capacity (veh/h)	- 801	-
HCM Lane V/C Ratio	- 0.014	-
HCM Control Delay (s/veh)	- 9.6	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0	-

HCM 7th Signalized Intersection Summary

2026 Build Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Weekday Evening Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	468	190	122	696	1	234	4	127	2	6	14
Future Volume (veh/h)	7	468	190	122	696	1	234	4	127	2	6	14
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	1.04	1.04	1.00	1.04	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	1900	1870	1870	1976	1961	1900	1930	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	509	153	133	757	1	254	4	134	2	7	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	0	1	0	3	0	0	0	0	0
Cap, veh/h	39	844	725	470	1175	2	483	13	449	59	176	284
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	9	1847	1585	1882	1958	3	1436	47	1570	74	615	995
Grp Volume(v), veh/h	517	0	153	133	0	758	254	0	138	22	0	0
Grp Sat Flow(s),veh/h/ln	1856	0	1585	1882	0	1960	1436	0	1617	1684	0	0
Q Serve(g_s), s	0.0	0.0	6.1	3.3	0.0	26.5	14.8	0.0	7.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	21.8	0.0	6.1	3.3	0.0	26.5	15.8	0.0	7.0	1.0	0.0	0.0
Prop In Lane	0.02		1.00	1.00		0.00	1.00		0.97	0.09		0.59
Lane Grp Cap(c), veh/h	883	0	725	470	0	1176	483	0	462	519	0	0
V/C Ratio(X)	0.59	0.00	0.21	0.28	0.00	0.64	0.53	0.00	0.30	0.04	0.00	0.00
Avail Cap(c_a), veh/h	883	0	725	470	0	1176	483	0	462	519	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.4	0.0	17.1	13.1	0.0	13.7	32.3	0.0	29.3	27.1	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.7	1.5	0.0	2.7	4.1	0.0	1.7	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	0.0	2.4	1.6	0.0	12.0	6.1	0.0	3.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.2	0.0	17.8	14.6	0.0	16.4	36.4	0.0	30.9	27.3	0.0	0.0
LnGrp LOS	C		B	B		B	D		C	C		
Approach Vol, veh/h	670			891			392			22		
Approach Delay, s/veh	22.7			16.2			34.5			27.3		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	36.0			15.0			54.0			36.0		
Change Period (Y+Rc), s	6.0			4.0			6.0			6.0		
Max Green Setting (Gmax), s	30.0			11.0			48.0			30.0		
Max Q Clear Time (g_c+l1), s	17.8			5.3			23.8			3.0		
Green Ext Time (p_c), s	1.3			0.1			4.3			0.1		
Intersection Summary												
HCM 7th Control Delay, s/veh				22.2								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2026 Build Condition
Weekday Evening Peak Hour

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	444	24	58	602	22	22	4	56	4	7	179
Future Vol, veh/h	83	444	24	58	602	22	22	4	56	4	7	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	93	499	27	65	676	25	25	4	63	4	8	201

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	701	0	0	526	0	0	1510	1530	512	1507	1531	689
Stage 1	-	-	-	-	-	-	699	699	-	819	819	-
Stage 2	-	-	-	-	-	-	811	831	-	688	712	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	998	-	-	1131	-	-	123	146	607	124	146	494
Stage 1	-	-	-	-	-	-	434	445	-	372	392	-
Stage 2	-	-	-	-	-	-	376	387	-	440	439	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	998	-	-	1131	-	-	59	125	607	92	125	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	125	-	92	125	-
Stage 1	-	-	-	-	-	-	393	403	-	351	370	-
Stage 2	-	-	-	-	-	-	206	365	-	353	398	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.35			0.71			51.34			22.81		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	165	998	-	-	1131	-	-	411
HCM Lane V/C Ratio	0.558	0.093	-	-	0.058	-	-	0.519
HCM Control Delay (s/veh)	51.3	9	-	-	8.4	-	-	22.8
HCM Lane LOS	F	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	2.9	0.3	-	-	0.2	-	-	2.9

HCM 7th TWSC
3: North Broad Street & Site Driveway

2026 Build Condition
Weekday Evening Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	6	359	4	6	312
Future Vol, veh/h	3	6	359	4	6	312
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	3	6	382	4	6	332

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	729	384	0	0	386
Stage 1	384	-	-	-	-
Stage 2	345	-	-	-	-
Critical Hdwy	5.9	5.7	-	-	3.6
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	435	705	-	-	1249
Stage 1	693	-	-	-	-
Stage 2	722	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	432	705	-	-	1249
Mov Cap-2 Maneuver	432	-	-	-	-
Stage 1	693	-	-	-	-
Stage 2	717	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.29		0	0.15
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	582	34
HCM Lane V/C Ratio	-	-	0.016	0.005
HCM Control Delay (s/veh)	-	-	11.3	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 7th TWSC
4: Chestnut Street & Southerly Site Driveway

2026 Build Condition
Weekday Evening Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1	2	76	85	6
Future Vol, veh/h	3	1	2	76	85	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	1	3	110	123	9

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	243	128	132	0	-	0
Stage 1	128	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	5.9	5.7	3.6	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	775	945	1493	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	773	945	1493	-	-	-
Mov Cap-2 Maneuver	773	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	914	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.48	0.19	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	46	-	810	-	-
HCM Lane V/C Ratio	0.002	-	0.007	-	-
HCM Control Delay (s/veh)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 7th TWSC
5: Chestnut Street & Northerly Site Driveway

2026 Build Condition
Weekday Evening Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	0	79	89	0
Future Vol, veh/h	3	2	0	79	89	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	3	0	114	129	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	243	129	-	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	5.9	5.7	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	775	943	0	-	-	0
Stage 1	902	-	0	-	-	0
Stage 2	915	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	775	943	-	-	-	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	915	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.35	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT
Capacity (veh/h)	- 834	-
HCM Lane V/C Ratio	- 0.009	-
HCM Control Delay (s/veh)	- 9.4	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0	-

HCM 7th Signalized Intersection Summary

2026 Build Condition

1: North Broad Street/Benjamin Apartments Driveway & Franklin Avenue

Saturday Midday Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	516	192	117	414	1	230	1	117	2	3	6
Future Volume (veh/h)	4	516	192	117	414	1	230	1	117	2	3	6
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	1.04	1.04	1.00	1.04	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	1900	1900	1900	1976	1961	1900	1961	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	4	532	133	121	427	1	237	1	121	2	3	4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	1	0	1	0	1	0	0	0
Cap, veh/h	36	866	736	464	1173	3	492	4	457	120	182	208
Arrive On Green	0.46	0.46	0.46	0.10	0.60	0.60	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	3	1894	1610	1882	1955	5	1477	13	1599	275	635	728
Grp Volume(v), veh/h	536	0	133	121	0	428	237	0	122	9	0	0
Grp Sat Flow(s),veh/h/ln	1897	0	1610	1882	0	1960	1477	0	1612	1639	0	0
Q Serve(g_s), s	0.0	0.0	5.1	3.0	0.0	11.7	13.8	0.0	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	22.4	0.0	5.1	3.0	0.0	11.7	14.2	0.0	6.1	0.4	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	1.00		0.99	0.22		0.44
Lane Grp Cap(c), veh/h	902	0	736	464	0	1176	492	0	461	510	0	0
V/C Ratio(X)	0.59	0.00	0.18	0.26	0.00	0.36	0.48	0.00	0.26	0.02	0.00	0.00
Avail Cap(c_a), veh/h	902	0	736	464	0	1176	492	0	461	510	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.6	0.0	16.9	13.2	0.0	10.7	31.8	0.0	29.0	26.9	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.5	1.4	0.0	0.9	3.4	0.0	1.4	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	2.0	1.4	0.0	5.2	5.6	0.0	2.6	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.4	0.0	17.4	14.5	0.0	11.6	35.2	0.0	30.4	27.0	0.0	0.0
LnGrp LOS	C		B	B		B	D		C	C		
Approach Vol, veh/h	669			549			359			9		
Approach Delay, s/veh	23.0			12.3			33.5			27.0		
Approach LOS	C			B			C			C		
Timer - Assigned Phs	2		3	4		6		8				
Phs Duration (G+Y+Rc), s	36.0		15.0	54.0		36.0		69.0				
Change Period (Y+Rc), s	6.0		4.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	30.0		11.0	48.0		30.0		63.0				
Max Q Clear Time (g_c+l1), s	16.2		5.0	24.4		2.4		13.7				
Green Ext Time (p_c), s	1.2		0.1	4.3		0.0		3.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				21.7								
HCM 7th LOS				C								

HCM 7th TWSC
2: Chestnut Street & Franklin Avenue

2026 Build Condition
Saturday Midday Peak Hour

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	59	458	67	88	429	18	38	6	90	3	12	81
Future Vol, veh/h	59	458	67	88	429	18	38	6	90	3	12	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	63	492	72	95	461	19	41	6	97	3	13	87

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	481	0	0	565	0	0	1312	1325	528	1283	1352	471
Stage 1	-	-	-	-	-	-	655	655	-	660	660	-
Stage 2	-	-	-	-	-	-	657	670	-	623	691	-
Critical Hdwy	3.6	-	-	3.6	-	-	6.6	6	5.7	6.6	6	5.7
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1168	-	-	1096	-	-	164	189	596	171	183	637
Stage 1	-	-	-	-	-	-	458	466	-	455	463	-
Stage 2	-	-	-	-	-	-	457	459	-	477	448	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1168	-	-	1096	-	-	114	163	596	120	158	637
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	163	-	120	158	-
Stage 1	-	-	-	-	-	-	433	440	-	416	423	-
Stage 2	-	-	-	-	-	-	350	419	-	373	424	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.83	1.41	35.56	16.31
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	257	1168	-	-	1096	-	-	421
HCM Lane V/C Ratio	0.561	0.054	-	-	0.086	-	-	0.245
HCM Control Delay (s/veh)	35.6	8.3	-	-	8.6	-	-	16.3
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	3.1	0.2	-	-	0.3	-	-	1

HCM 7th TWSC
3: North Broad Street & Site Driveway

2026 Build Condition
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	12	336	10	15	297
Future Vol, veh/h	8	12	336	10	15	297
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	0	0	0
Mvmt Flow	9	13	361	11	16	319

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	718	367	0	0	372	0
Stage 1	367	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Critical Hdwy	5.9	5.7	-	-	3.6	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	440	719	-	-	1261	-
Stage 1	705	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	434	719	-	-	1261	-
Mov Cap-2 Maneuver	434	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	705	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.57		0	0.38
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	569	87
HCM Lane V/C Ratio	-	-	0.038	0.013
HCM Control Delay (s/veh)	-	-	11.6	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 7th TWSC
4: Chestnut Street & Southerly Site Driveway

2026 Build Condition
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	2	4	118	156	16
Future Vol, veh/h	9	2	4	118	156	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	2	5	146	193	20

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	358	202	212	0	-	0
Stage 1	202	-	-	-	-	-
Stage 2	156	-	-	-	-	-
Critical Hdwy	5.9	5.7	3.6	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	677	867	1411	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	878	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	675	867	1411	-	-	-
Mov Cap-2 Maneuver	675	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	878	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v10.22		0.25	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	59	-	703	-	-
HCM Lane V/C Ratio	0.003	-	0.019	-	-
HCM Control Delay (s/veh)	7.6	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 7th TWSC
5: Chestnut Street & Northerly Site Driveway

2026 Build Condition
Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	5	0	127	167	0
Future Vol, veh/h	7	5	0	127	167	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	6	0	157	206	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	363	206	-	0	-	0
Stage 1	206	-	-	-	-	-
Stage 2	157	-	-	-	-	-
Critical Hdwy	5.9	5.7	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	673	864	0	-	-	0
Stage 1	833	-	0	-	-	0
Stage 2	877	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	673	864	-	-	-	-
Mov Cap-2 Maneuver	673	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	877	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.95	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT EBLn1	SBT
Capacity (veh/h)	- 741	-
HCM Lane V/C Ratio	- 0.02	-
HCM Control Delay (s/veh)	- 10	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.1	-