MAIN STREET COCONUT CREEK, FL

Traffic Impact Analysis

VOLUME 2 – INTERNAL TRAFFIC EVALUATION

Prepared for: GSR RE Partners, LLC

November 6, 2023 Kimley-Horn Project #140924000



MAIN STREET COCONUT CREEK, FL

Traffic Impact Analysis

VOLUME 2 – INTERNAL TRAFFIC EVALUATION

Prepared by:

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Registry No. 35106

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Kimley-Horn Project #140924000

Christopher W. Heggen, P.E. Florida Registration Number 58636

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EXECUTIVE SUMMARY

Kimley-Horn and Associates has prepared a traffic study to evaluate traffic operations (level of service and driver delay) on roadways and intersections internal to the proposed Main Street Coconut Creek project. The Main Street Coconut Creek site is located on several contiguous parcels within the area bounded on the north by Wiles Road, on the east by Lyons Road, on the south by Sample Road and on the west by SR 7/US 441. The proposed plan calls for development of 605 low-rise multi-family residential units, 1,755 mid-rise multi-family residential units, 225,000 square feet of commercial retail uses.

A site-specific traffic impact analysis has also been undertaken to evaluate traffic impacts on the surrounding transportation network and was submitted under separate cover. However, this study specifically focused on the transportation network within the site boundaries. The trip paths on the internal roadways were determined taking into consideration the proximity of various areas within the overall site to the external transportation network and access provided to/from the external road network.

The analysis indicated that all the existing roads that were analyzed will continue to operate with an acceptable volume-to-capacity ratio within the range to meet adopted level of service C standards. The five intersections analyzed within the community were also determined to continue to operate at LOS B or better, including total future buildout of this project.

INTRODUCTION

The Main Street Coconut Creek site is located on several contiguous parcels within the area bounded on the north by Wiles Road, on the east by Lyons Road, on the south by Sample Road and on the west by SR 7/US 441. *Figure 1* illustrates the location of the project site. *Table 1* provides a summary of the proposed mix of uses for the site.

Use	Approved DRI	Proposed Plan
Multi-Family High-Rise	3,650 DU	
Multi-Family Mid-Rise		1,755 DU
Multi-Family Low-Rise	100 DU	605 DU
Commercial Retail	1,625,000 SF	225,000 SF
Office	525,000 SF	

Table 1: Proposed Site Development

As a part of the development of the site, certain roadway connections will be made to complete currently discontinuous portions of a transportation grid system. This will add certain road segments and will add (new) or modify (existing) intersections within the site boundary. Kimley-Horn and Associates, Inc. was retained to prepare a traffic impact analysis to evaluate the level of service and operations on this internal transportation system. This document presents the methodology used and the findings of the traffic impact analysis. A buildout date of 2030 was assumed in the analysis.

The study methodology for this internal traffic evaluation can be found in Appendix A.







FIGURE 1 Main Street Coconut Creek KH #140924000 Site Location



STUDY AREA

As noted, this project design is based upon an internal grid-like network that will be created within the site. Therefore, several new intersections/roadway segments will be created by development of this site and are the subject of this internal evaluation. *Figure 2* shows the future completed internal transportation network and the intersections and roadway segments that were evaluated for this study.







FIGURE 2 Main Street Coconut Creek KH #140924000 Study Intersections and Road Segments



PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project, and the distribution and assignment of that traffic over the study roadway network.

Trip Generation

The trip generation potential of the development was calculated based upon the trip generation rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual, 11th Edition*. The trip generation potential for the proposed uses is calculated using rates and equations published for the following land uses:

- Multi-Family Low-Rise (Land Use 220)
- Multi-family Mid-Rise (Land Use 221)
- Shopping Center (Land Use 820)

As indicated in *Table 2*, the net new trip generation potential of the proposed site is 17,250 net external daily trips, 1,139 net new external AM peak hour trips (+332 in, +807 out) and 1,364 net new external PM peak hour trips (+767 in, +597 out).

l and llso	Intensity	Daily	ļ	AM Peak Hour			PM Peak Hour		
	intensity	Duny	Total	In	Out	Total	In	Out	
Proposed Scenario									
Multifamily Low-Rise	605 DU	3,953	210	50	160	281	177	104	
Multifamily Mid-Rise	1755 DU	8,325	761	175	586	685	418	267	
General Commercial	225.000 KSF	11,738	266	165	101	1,012	486	526	
	Subtotal	24,016	1,237	390	847	1,978	1,081	897	
Internal Capture									
Multifamily Low-Rise		633	3	1	2	56	41	15	
Multifamily Mid-Rise		1333	9	4	5	132	97	35	
General Commercial		1,966	12	7	5	186	49	137	
	Subtotal	3,932	24	12	12	374	187	187	
Pass-By Capture									
Multifamily Low-Rise	0.0%	0	0	0	0	0	0	0	
Multifamily Mid-Rise	0.0%	0	0	0	0	0	0	0	
General Commercial	29.0%	2,834	74	46	28	240	127	113	
	Subtotal	2,834	74	46	28	240	127	113	
Driveway Vo	umes	20,084	1,213	378	835	1,604	894	710	
Net New Extern	al Trips	17,250	1,139	332	807	1,364	767	597	
Proposed Net External Trips-Existing Net New External Trips		17,250	1,139	332	807	1,364	767	597	
Land Use Daily		1	AM Peak Hou	r	PM Peak Hour			Pass By	
Multifamily Low-Rise T = 6.41(X)+75.31		T = .31(2	X)+22.85 (24% in,	76% out)	T = .43(X)+20.55 (63% in, 37% out)			0.0%	
Multifamily Mid-Rise	T = 4.77(X)-46.46	T = .44(X)-11.61 (23% in, 77% out)		77% out)	T = .39(X)+.34 (61% in, 39% out)			0.0%	
General Commercial	T = 26.11(X)+5,863.73	T = .59()	<)+133.55 (62% in,	38% out)	Ln(T) = 0.72	2*Ln(X)+3.02 (48%	in, 52% out)	29.0%	

Table 2: Trip Generation

Traffic Distribution

Traffic distribution is the pairing of trip ends from the subject site with other land uses in the area. These trips were assigned to the surrounding roadways based upon a review of the roadway network proposed to be in place at the time of buildout and its travel time characteristics.

The general distribution according to cardinal directions is:

NORTH	-	25 percent
EAST	-	36 percent
SOUTH	-	24 percent
WEST	-	15 percent

Figure 3 illustrates the project distribution on the surrounding roadways.

Traffic Assignment

The overall project is designed with an urban grid form, consisting of several distinct blocks. Based upon the overall size of the project, six groupings of adjacent blocks were created for the purposes of determining external and internal project traffic assignment. Traffic generated by each of these groupings was then assigned to the surrounding transportation network based upon the overall external traffic distribution and roadway network.

Project traffic distribution associated with each specific superblock are illustrated in Appendix A, for reference.







FIGURE 3 Main Street Coconut Creek KH #140924000 Trip Distribution



TOTAL FUTURE TRAFFIC

Total future traffic is defined as the traffic expected to be on the transportation network during the buildout year (2030), including the project traffic generated by development of this site. It includes the future background traffic volumes as the baseline, with project traffic assigned at each of the study intersections and roadway segments.

The determination of the Future Year 2030 traffic volumes is included in the volume development worksheets provided in *Appendix B. Figure 4* provides a summary of the future total traffic volumes at the study intersections.





LEGEND Site Location

XX / XX AM / PM Traffic

FIGURE 4 Main Street Coconut Creek KH #140924000 Future Total Intersection Volumes



CAPACITY ANALYSIS

A level of service evaluation was undertaken for the internal roadway network and internal intersections using thresholds established in the Highway Capacity Manual and by Broward County/ Following is a summary of the evaluations undertaken.

Roadway Link Evaluation

Section 5-195(b)(2) of the Broward County Land Development Code contains adopted generalized service volumes for local collectors and local roadways. Table 3 below provides the Generalized Volumes for non-Trafficway Roadways provided in this Section of the Broward County Land Development Code.

Table 3: Generalized Service Volumes

	4-Lane	2-Lane	2-Lane	2-Lane
	Local Collector	Local Collector	Local	Cul-de-sac
Generalized Volume (ADT)	6,500-20,400	3,000-8,500	800-4,000	0-300

The westernmost segment of Cullum Road that was studied was classified as a 4-lane local collector; otherwise, the remaining segments of Cullum Road, Banks Road, NW 54th Avenue and 40th Street have been classified as 2-lane local collector roadways for the purposes of this evaluation. Therefore, based on the Broward County Land Development Code, the ADT generalized service volume for the 4-lane collector is 20,400 trips per day and for the 2-lane collectors is 8,500 trips per day, which represents the maximum LOS D threshold for a road with these characteristics. Consistent with HCM methodologies, a 75% factor was applied to this upper limit LOS D maximum service volume to determine the appropriate LOS C maximum service volume. These ADT service volumes were used to determine the volume to capacity ratio and level of service for the study roadways during the proposed future conditions.

Baseline traffic volume projections were determined on these roadway links based on the approach/departure intersection volumes shown in *Figure 4*. To convert the peak hour volumes to an AADT future volume, a k-factor of 0.09 was applied to the higher of the two peak hour volumes (AM or PM peak hour volume). Using the future projected volumes and the generalized service volumes determined for each link, a volume-to-capacity ratio was calculated for both the existing and future conditions. These v/c ratios were then compared to tables in the Highway Capacity Manual (HCM) published by the Transportation Research Board to determine the volume to capacity ratio. Table 4 summarizes these calculations.

Table 4: Roadway Link Analysis

				AM Peak Hour		PM Peak Hour						
				Background	Project	Total Link	Background	Project	Total Link	Calculated	Max LOS D	
Link	Roadway	Segment	Capacity	Volume	Traffic	Volumes	Volume	Traffic	Volumes	AADT*	Svc. Vol.	v/c
А	Cullum Road	(W of NW 54th Ave)	2,920	305	318	623	567	340	907	10,078	20,400	0.49
В	Cullum Road	(NW 54th Ave to Banks Rd)	1,330	0	331	331	0	244	244	3,678	8,500	0.43
С	NW 54th Ave	(S of Cullum Road)	1,330	305	67	372	567	48	615	6,833	8,500	0.80
D	Banks Road	(Wiles Rd to Cullum Rd)	1,330	242	142	384	65	130	195	4,267	8,500	0.50
E	Banks Road	(Cullum Rd to NW 40th St)	1,330	0	206	206	0	238	238	2,644	8,500	0.31
F	Cullum Road	(Banks Rd to New Street)	1,330	371	240	611	208	214	422	6,789	8,500	0.80
G	Cullum Road	(New Street to Lyons Rd)	1,330	371	346	717	208	237	445	7,967	8,500	0.94
Н	New Street	(S of Cullum Rd)	1,330	0	32	32	0	32	32	356	8,500	0.04
Ι	Banks Rd	(NW 40th St to Sample Rd)	1,330	37	109	146	59	118	177	1,967	8,500	0.23
J	NW 40th St	(Banks Rd to City Market Rd)	1,330	0	159	159	0	261	261	2,900	8,500	0.34
K	NW 40th St	(City Market Rd to New St)	1,330	0	86	86	0	205	205	2,278	8,500	0.27
Ĺ	NW 40th St	(New St to Lyons Rd)	1,330	0	320	320	0	616	616	6,844	8,500	0.81
М	City Market Rd	(NW 40th St to Sample Rd)	1,330	0	30	30	0	40	40	444	8,500	0.05

* AADT calculated by applying K-factor = 0.09 to higher peak hour volume

As shown in this table, all roadways are anticipated to operate well within the LOS D maximum adopted service volume.

Intersection Evaluation

Intersection capacity and delay analyses was undertaken on six intersections within the project boundary to determine future level of service as well as evaluate the proposed intersection laneage and control measures. Following are the intersections at which the evaluations were undertaken:

- 15. 54th Avenue & Cullum Road
- 16. Banks Road & Cullum Road
- 17. Banks Road & 40th Street
- 18. City Market Avenue & 40th Street
- 19. New Street & 40th Street
- 20. N Retail Driveway & 40th Street

For the baseline/background conditions at each intersection, project traffic was calculated for each available movement at the analyzed intersections based upon distribution and assignment of project traffic to/from each of the block groupings within the project. *Figure 4* illustrates the total future traffic volumes at these intersections. Future total volumes were then analyzed for AM peak hour and PM peak hour conditions. *Synchro 11* was used to measure the LOS and delay for each of the intersections using methodologies from the *Highway Capacity Manual, 6th Edition.*

Table 5 provides a summary of anticipated peak hour LOS and delay at each of the study intersections.

		Control	Movement	AM Peak Hour		PM Peak Hour	
#	Intersection	Туре	wovernern	Delay (s)	LOS	Delay (s)	LOS
15	54th Avenue & Cullum Road	AWSC	EB WB NB SB Overall	9.0 9.8 9.9 -	A A A -	9.8 10.1 11.5 -	A B B -
16	Banks Road & Cullum Road	AWSC	EB WB NB SB Overall	8.9 8.3 8.8 8.1	A A A A	8.5 8.4 8.7 8.2	A A A A
17	Banks Road & 40th Street	AWSC	EB WB NB SB Overall	7.3 7.7 8.0 7.9	A A A A	7.8 8.2 8.3 8.4	A A A A
18	City Market Avenue & 40th Street	TWSC	EB WB NB SB Overall	- 8.7 -	- - A -	- 9.2 -	- A -
19	New Street & 40th Street	TWSC	EB WB NB SB Overall	- - 9.4 -	- - - A -	- - 9.6 -	- - - A -
20	N Retail Driveway & 40th Street	TWSC	EB WB NB SB Overall	- 9.4 -	- - A -	- 9.6 -	- - A -

Table 5: Peak Hour Intersection LOS and Delay

The Synchro output worksheets can be found in the Appendix C for reference.

INTERNAL TRANSPORTATION IMPROVEMENTS

The project is proposed to be built in phases. Concurrent with each phase of development, components of the public roadway network internal to the site boundaries are proposed to be constructed or improved/reconstructed. Exhibit I (Master Phasing Plan) has been prepared and is included in the plan set for the PMDD, which shows the improvements associated with each phase of development. A copy of it is included in this report as **Figure 5**. Some of the improvements occur on the external roadway network (e.g., Wiles Road, Lyons Road, and Sample Road), and are described in further detail in the external traffic study. Below is a summary of the proposed phasing of project-related improvements that affect Sample Road, Lyons Road and Wiles Road:

Phase 1:

- Block 1: Cullum Road expansion from NW 48th Avenue to Lyons Road, and NW 48th Avenue from Cullum Road to North Boundary of FPL Easement must be completed to the 1st lift of asphalt.
- Block 1: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for NW 48th Avenue between 40th Street and North Boundary of the FPL Easement
- Block 2: Cullum Road expansion from NW 48th Avenue to Lyons Road, and NW 48th Avenue from Cullum Road to North Boundary of FPL Easement must be completed to the 1st lift of asphalt.
- Block 2: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for NW 48th Avenue between 40th Street and North Boundary of the FPL Easement
- Block 3: 40th Street between Lyons Road and NW 48th Avenue, and NW 54th Terrace from Cullum Road to Wiles Road must be completed to the 1st lift of asphalt.
- Block 3: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for 40th Street between NW 48th Avenue to Banks Road
- Block 4: 40th Street between Lyons Road and City Market Avenue, City Market Avenue from 40th Street to project entry, and NW 54th Terrace from Cullum Road to Wiles Road must be completed to the 1st lift of asphalt. *(if Block 4 is constructed before Block 5)*
- Block 4: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for 40th Street between City Market Avenue to Banks Road *(if Block 4 is constructed before Block 5)*

Phase 2:

- Block 5: 40th Street between Lyons Road and City Market Avenue, City Market Avenue from 40th Street to project entry, and NW 54th Terrace from Cullum Road to Wiles Road must be completed to the 1st lift of asphalt. *(if Block 5 is constructed before Block 4)*
- Block 5: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for 40th Street between City Market Avenue to Banks Road (*if Block 5 is constructed before Block 4*)
- Block 6: 40th Street between Lyons Road and Banks Road, and Banks Road from the North Boundary of the FPL Easement to 40th Street must be completed to the 1st lift of asphalt. (*if Block 6 is constructed before Block 8 and Block 10*)

• Block 6: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for Banks Road from the North Boundary of the FPL Easement to Cullum Road. *(if Block 6 is constructed before Block 8)*

Phase 3:

- Block 8: 40th Street between Lyons Road and Banks Road, and Banks Road from the North Boundary of the FPL Easement to 40th Street must be completed to the 1st lift of asphalt. (*if Block 8 is constructed before Block 6*)
- Block 8: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for Banks Road from the North Boundary of the FPL Easement to Cullum Road. *(if Block 8 is constructed before Block 6 and Block 10)*
- Block 9: Cullum Road from Banks Road to the West Boundary of Block 9, and NW 54th Avenue from Cullum Road to the South Boundary of Block 9 must be completed to the 1st lift of asphalt. (*if Block 9 is constructed before Block 15B*)
- Block 9: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for Banks Road from 40th Street to Cullum Road
- Block 11: Banks Road from 40th Street to Cullum Road, and Cullum Road from Banks Road to Lyons Road must be completed to the 1st lift of asphalt.
- Block 11: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for Cullum Road from Banks Road to NW 54th Avenue
- Block 15B: Cullum Road from Banks Road to the West Boundary of Block 9, and NW 54th Terrace from Cullum Road to Wiles Road must be completed to the 1st lift of asphalt. (*if* Block 15B is constructed before Block 9)
- Block 16: Banks Road from 40th Street to Sample Road must be completed to the 1st lift of asphalt.

Phase 4:

- Block 10: Cullum Road from Banks Road to NW 54th Avenue, NW 54th Avenue from Cullum Road to South Boundary of Block 10, and Banks Road from Cullum Road to the North Boundary of FPL Easement must be completed to the 1st lift of asphalt.
- Block 10: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for Banks Road from the North Boundary of the FPL Easement to 40th Street *(if Block 10 is constructed before Block 6 and Block 8)*
- Block 15A: Banks Road from Cullum Road to Wiles Road must be completed to the 1st lift of asphalt.
- Block 15A: Travel lanes with associated curbing must be completed to the 1st lift of asphalt for Banks Road from Cullum Road to 40th Street, and Cullum Road from Banks Road to NW 54th Avenue.

Phase 5:

- Block 12A, 12B and 13: Village Square Drive on North, East, and West Sides of Village Green.
- Block 12A, 12B and 13: NW 54th Terrace (access road for Existing Lift Station in Block 15C) shall be constructed between Cullum Road and Wiles Road. *(if Block 12A, 12B and 13 is constructed before Block 14)*
- Block 14: Access road for Existing Lift Station in Block 15C shall be constructed through 15C between Cullum Road and Wiles Road *(if Block 14 is constructed before Block 12A, 12B and 13)*



FIGURE 5 Main Street Coconut Creek KH #140924000 Phasing Plan





SUMMARY

Kimley-Horn and Associates has prepared a traffic study to evaluate the anticipated LOS and delay on the internal roadways and intersections within the Main Street site following full development of the proposed project. This evaluation has been undertaken to assess the adequacy of the proposed laneage for roadways and intersections within the project and the also assess the intersection control at the intersections within the site.

The analysis evaluated impacts on a total of 13 local roadway collector segments within the site and 6 local (internal) intersections. The analysis of the local roadways determined that, with the addition of project traffic, the roadways will all have volumes within their maximum LOS D service volume (i.e., capacity). The intersection analysis concluded that all movements at the internal intersections that were evaluated would operate at LOS A or LOS B with the proposed laneage and intersection control. Therefore, the proposed plan of development and roadway crosssections are anticipated to accommodate future traffic volumes following buildout of the site.

As the project is proposed to be built in phases, the internal roadways and intersections will be built and/or reconstructed in phases such that the roadwork is occurring generally adjacent to the blocks that are under construction. The proposed phasing plan has been described in the "Internal Transportation Improvements" section of this report and is also illustrated in Figure 5.

APPENDIX A: PROJECT INFORMATION

Conceptual Site Plan Traffic Study Methodology Superblock Project Traffic Distribution

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MEMORANDUM

To:	Mike Righetti City of Coconut Creek
From:	Christopher W. Heggen, P.E.
	Kimley-Horn and Associates, Inc.
Date:	September 23, 2021
	Revised February 8, 2022
Subject:	Main Street Coconut Creek
	Study Methodology –Internal Traffic Impact Analysis
	Kimley-Horn #140924000

As a companion to the external traffic impact analysis prepared for the proposed Main Street Coconut Creek development, Kimley-Horn will undertake an analysis of the internal transportation facilities within the development site.

Following is a summary of the methodology that will be used to undertake this traffic analysis.

- 1. **Trip generation:** The trip generation potential determined for the external traffic analysis will be utilized for the transportation analysis of internal facilities. No pass-by trip credit will be applied for the volumes in the internal study.
- 2. Trip distribution/assignment: Overall trip distribution percentages determined in the external traffic analysis will provide the basis of the trip distribution for this study. Assignment to the internal roads will be determined based upon density/intensity/location of uses within the site and the location of access points to parking facilities within the site.
- 3. Study facilities: Six (6) internal intersections and thirteen (13) internal street segments will be evaluated. These facilities are identified in the attached Figure I-1 (shown overlaid on a current conceptual site plan).
- 4. Baseline traffic volumes: Baseline AM and PM peak hour volumes will be determined for the study roadways based upon existing traffic volumes collected as a part of the external traffic analysis and a diverted trip calculation based upon the creation of new roadway connections/extensions that will be created as a part of this development.
- 5. Buildout year: The buildout year assumed for the analysis is 2027.
- 6. Future Background (Non-Project) Volumes: Additionally, project traffic generated by relevant approved projects as identified by the City and its consultant will be assigned to the study intersections and roadways, if any of the future committed traffic is anticipated to travel through the internal transportation system within Main Street.
- 7. Total Future Volumes: Total future volumes will be determined by adding future background volumes and project traffic volumes on each of the internal study roadways and each of the internal study intersections.
- 8. Intersection LOS Analysis: Intersection LOS analyses will be conducted for Existing Peak Season, Future Background Peak Season and Future Total Peak Season Conditions using Synchro or HCS software. Summary tables will be prepared to report the Highway Capacity

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Manual (HCM)-based LOS and delay for each approach and the overall intersection (if available; no overall intersection LOS will be reported for two-way stop-controlled unsignalized intersections).

- **9.** Roadway LOS Analysis: Total future peak hour volumes will be compared to Generalized Service Volumes for Non-Trafficway Roadways in Section 5-195(b)(2) of the Broward County Land Development Code to determine roadway LOS and volume-to-capacity (v/c) ratios.
- **10. Multi-Modal Measures**: For the internal roadways, the proposed cross-sections for each will be identified and a corresponding figure will be shown. Non-vehicular elements and amenities (bicycle lanes, sidewalk widths, etc.) will be identified for each internal roadway in the package of materials submitted to the City.
- **11. Gated queuing**: If entry/exit gates are proposed within the site, the study will identify anticipated queueing needs at the gated locations based upon queuing calculations and data published by ITE and/or other transportation engineering resources.
- **12. Recommendations:** Following a determination of project impacts, the Applicant will provide recommendations regarding the configurations of the internal roadways and intersections. Specifically, for the intersections, the recommendations will include recommended lane configurations and intersection control (e.g., all-way stop vs. two-way stop control, etc.). For the roadways, the recommendations will include recommended numbers of lanes based upon the cross-section (e.g., 2-lane undivided vs. four-lane divided, etc.).

The data collection, calculations, analyses and results will be summarized in a written report for City review. Relevant tables, charts, figures, worksheets, and a current copy of the site plan will be included in the summary report.

Please review the methodology for this analysis as outlined above and indicate your concurrence by signing in the space below. Should you have questions or comments regarding the proposed methodology, please call me via phone at (561) 840-0248 or via e-mail at <u>chris.heggen@kimley-horn.com</u>.

Concur by:

Date:

Attachment

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Block Location

R Inbound Project Traffic %

Outbound Project Traffic % R

Main Street Coconut Creek KH #140924000 Superblock A Traffic Distribution











Inbound Project Traffic %

Cutbound Project Traffic %

Exhibit B Main Street Coconut Creek KH #140924000 Superblock B Traffic Distribution









Block Location

Inbound Project Traffic %

Cutbound Project Traffic %

Exhibit C Main Street Coconut Creek KH #140924000 Superblock C Traffic Distribution

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NORTH

Cutbound Project Traffic %

Main Street Coconut Creek KH #140924000 Superblock D Traffic Distribution









Block Location

Inbound Project Traffic %

Cutbound Project Traffic %

Exhibit E Main Street Coconut Creek KH #140924000 Superblock E Traffic Distribution









Block Location

Inbound Project Traffic %

Cutbound Project Traffic %

Exhibit F Main Street Coconut Creek KH #140924000 Superblock F Traffic Distribution



APPENDIX B: VOLUME DEVELOPMENT WORKSHEETS

Volume Development Sheets Internal Capture Worksheets

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK 54th Avenue & Cullum Road PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

AM Peak Hour Northbound Southbound Eastbound Westbound LT Thru RT LT Thru RT LT Thru RT LT Thru RT Existing Volume on 10/13/2021 107 0 0 0 0 0 0 0 192 0 0 0 2,021 Peak Season Volume 111 0 0 0 0 200 0 0 0 0 0 0 Traffic Volume Growth 5 0 0 0 0 0 0 0 9 0 0 0 Committed Development Background Traffic Volumes 0 0 0 0 0 0 0 116 0 209 0 0 Superblock A (Residential) Inbound Traffic Assignment 9.0% Inbound Inbound Traffic Volumes 17 2 Outbound Traffic Assignment 18.0% Outbound Outbound Traffic Volumes 10 58 Project Traffic 2 10 Superblock B (Commercial) Inbound Traffic Assignment 6.0% Inbound Inbound Traffic Volumes 158 9 Outbound Traffic Assignment 14.0% Outbound **Outbound Traffic Volumes** 96 13 Project Traffic 9 13 Superblock C (Residential) Inbound Traffic Assignment 2.0% 3.0% 2.0% 5.0% Inbound Inbound Traffic Volumes 22 1 Outbound Traffic Assignment 4.0% 5.0% 4.0% 8.0% Outbound Outbound Traffic Volumes 76 4 Project Traffic 3 4 3 7 1 Superblock D (Residential) Inbound Traffic Assignment 22.0% 6.0% 5.0% Inbound Inbound Traffic Volumes 22 6 5 101 Outbound Traffic Assignment 5.0% 9.0% 19.0% Outbound Outbound Traffic Volumes 17 31 64 339 Project Traffic 17 31 22 6 5 64 Superblock E (Residential) Inbound Traffic Assignment 1.0% 18.0% nbound Inbound Traffic Volumes 11 2 Outbound Traffic Assignment 1.0% 23.0% Outbound Outbound Traffic Volumes 35 8 Project Traffic 2 8 Superblock F (Residential) Inbound Traffic Assignment 17.0% Inbound Inbound Traffic Volumes 12 69 Outbound Traffic Assignment 17.0% Outbound Outbound Traffic Volumes 39 232 Project Traffic 12 39 Total Project Traffic 17 32 50 10 8 141 Cullum Road Connection Traffic Diversion 50 50 TOTAL TRAFFIC 133 0 32 0 0 0 0 100 219 8 191 0

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK 54th Avenue & Cullum Road PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

			<u>PM Pe</u>	<u>ak Hour</u>									
		Northbound	ł	Γ	Southbound			Eastbound	1		Westbound	1	1
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/13/2021	190	0	0	0	0	0	0	0	211	0	0	0	2,021
Peak Season Volume	198	0	0	0	0	0	0	0	219	0	0	0	
Frame Volume Growth	9	0	0	0	0	0	0	0	10	0	0	0	
Committed Development													
Background Traffic Volumes	207	0	0	0	0	0	0	0	229	0	0	0	
Superdiock A (Residential)	nt												
Inbound Traffic Volum	ni ne							9.0%					Inbound
	es nt							3			10.00/		32 Outbound
Outbound Traffic Volum	26										10.0%		22
Project Traf	fic							3			4		- 23
Superblock B (Commercial)								5			4		
Inbound Traffic Assignme	nt							6.0%					Inhound
Inbound Traffic Volum	es							26					436
Outbound Traffic Assignme	nt							20			14.0%		Outbound
Outbound Traffic Volum	es										54		388
Project Traf	ic							26			54		
Superblock C (Residential)													
Inbound Traffic Assignme	nt 2.0%		5.0%					2.0%			3.0%		Inbound
Inbound Traffic Volum	es 1		2					1			1		42
Outbound Traffic Assignme	nt							4.0%	5.0%	4.0%	8.0%		Outbound
Outbound Traffic Volum	es							1	2	1	2		30
Project Traf	fic 1		2					2	2	1	3		
Superblock D (Residential)													
Inbound Traffic Assignme	nt							22.0%	6.0%	5.0%			Inbound
Inbound Traffic Volum	es							45	12	10			204
Outbound Traffic Assignme	nt 5.0%		9.0%								19.0%		Outbound
Outbound Traffic Volum	es 7		13								28		145
Project Trai	IC 7		13					45	12	10	28		
Supervice (Residential)	nt		1.09/					10.00/					Inhound
Inbound Traffic Volum	20		1.0%					10.U%					20
	nt							э		1.0%	23.0%		JU Outbourd
Outbound Traffic Volum	es									1.070	5		20
Project Traf	îc							5			5		
Superblock F (Residential)								-			-		
Inbound Traffic Assignme	nt							17.0%					Inbound
Inbound Traffic Volum	es							25					148
Outbound Traffic Assignme	nt										17.0%		Outbound
Outbound Traffic Volum	es										18		104
Project Traf	îc							25			18		
Total Project Trafi	ic 8	0	15	0	0	0	0	106	14	11	112	0	
	Ū							.00	14	,,	.12		1
Cullum Road Connection Traffic Diversion								50			50		
TOTAL TRAFFIC	215	0	15	0	0	0	0	156	243	11	162	0]

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK Banks Road & Cullum Road PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

AM Peak Hour Northbound Southbound Eastbound Westbound LT Thru RT LT Thru RT LT Thru RT LT Thru RT Existing Volume on 10/13/2021 0 0 0 0 0 0 0 0 0 0 0 0 2,021 Peak Season Volume 0 0 0 0 0 0 0 0 0 0 0 0 Traffic Volume Growth 0 0 0 0 0 0 0 0 0 0 0 0 Committed Development Background Traffic Volumes 0 0 0 0 0 0 0 0 0 0 0 0 Superblock A (Residential) Inbound Traffic Assignment 18.0% 9.0% 15.0% Inbound Inbound Traffic Volumes 17 3 2 3 Outbound Traffic Assignment 18.0% 9.0% 15.0% Outbound Outbound Traffic Volumes 10 58 Project Traffic 10 5 9 3 2 3 Superblock B (Commercial) Inbound Traffic Assignment 1.0% 3.0% 1.0% 5.0% Inbound Inbound Traffic Volumes 158 2 5 2 8 Outbound Traffic Assignment 13.0% 2.0% 1.0% Outbound Outbound Traffic Volumes 96 12 Project Traffic 12 2 2 5 2 8 1 Superblock C (Residential) Inbound Traffic Assignment 1.0% 9.0% 7.0% 2.0% 21.0% Inbound Inbound Traffic Volumes 2 22 2 5 Outbound Traffic Assignment 16.0% 13.0% 12.0% 4.0% Outbound Outbound Traffic Volumes 12 10 76 9 Project Traffic 2 12 9 3 5 10 2 Superblock D (Residential) Inbound Traffic Assignment 7.0% 7.0% 6.0% 5.0% 11.0% Inbound Inbound Traffic Volumes 7 7 6 5 11 101 Outbound Traffic Assignment 5.0% 4.0% 5.0% 11.0% 17.0% Outbound Outbound Traffic Volumes 17 14 17 37 58 339 Project Traffic 17 14 17 7 7 37 58 5 11 6 Superblock E (Residential) Inbound Traffic Assignment 5.0% 19.0% nbound Inbound Traffic Volumes 11 1 2 Outbound Traffic Assignment 24.0% 3.0% Outbound Outbound Traffic Volumes 35 8 Project Traffic 1 2 8 1 Superblock F (Residential) Inbound Traffic Assignment 17.0% 6.0% Inbound Inbound Traffic Volumes 12 69 4 Outbound Traffic Assignment 17.0% 6.0% Outbound Outbound Traffic Volumes 39 14 232 Project Traffic 39 14 4 12 Total Project Traffic 37 26 15 29 16 65 28 20 6 78 39 8 Cullum Road Connection Traffic Diversion 50 50 TOTAL TRAFFIC 78 37 26 15 29 16 39 115 28 8 70 6

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK Banks Road & Cullum Road PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

				PM Pe	ak Hour									
			Northbound	ł		Southboun	d		Eastbound	1	Westbound			
		LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	_
Existing Volume on 10/13/2021		0	0	0	0	0	0	0	0	0	0	0	0	2,0
Peak Season Volume		0	0	0	0	0	0	0	0	0	0	0	0	
Troffic Volume Crouth														
Committed Development		0	0	0	0	0	0	0	0	0	0	0	0	
committed Development														
Background Traffic Volumes		0	0	0	0	0	0	0	0	0	0	0	0	
Superblock A (Residential)														
	Inbound Traffic Assignment					18.0%				9.0%	15.0%			Inbour
	Inbound Traffic Volumes					6				3	5			3
	Outbound Traffic Assignment	18.0%	9.0%	15.0%										Outbo
	Outbound Traffic Volumes	4	2	3										2
	Project Traffic	4	2	3		6				3	5			
Superblock B (Commercial)														
	Inbound Traffic Assignment				1.0%	3.0%			1.0%	5.0%				Inboun
	Inbound Traffic Volumes				4	13			4	22				43
	Outbound Traffic Assignment	13.0%	2.0%									1.0%		Outbou
	Outbound Traffic Volumes	50	8									4		38
	Project Traffic	50	8		4	13			4	22		4		
Superblock C (Residential)														
	Inbound Traffic Assignment	1.0%	9.0%					7.0%				2.0%	21.0%	Inboun
	Inbound Traffic Volumes		4					3				1	9	4
	Outbound Traffic Assignment				16.0%	13.0%	12.0%		4.0%					Outbou
	Outbound Traffic Volumes				5	4	4		1					- 3
Superblack D (Decidential)	Project Tranic		4		5	4	4	3	1			1	9	
Superblock D (Residential)	Inhound Traffic Accignment					7.00/	7.00/			(00)	F 00/	11.00/		
	Inbound Traffic Volumos					7.0%	7.0%			6.0%	5.0%	11.0%		Inboun
	Outhound Traffic Assignment	E 00/	4.09/	E 00/		14	14	11.00/	17.0%	12	10	22		2U Outbou
	Outbound Traffic Volumes	5.0%	4.0%	3.0%				16	25					
	Project Traffic	7	6	7		14	14	16	25	12	10	22		- "
Superblock F (Residential)	r tojoot r tallio	,	0	,		14	14	10	25	12	10	22		
	Inbound Traffic Assignment				5.0%				19.0%					Inhoun
	Inbound Traffic Volumes				2				6					3
	Outbound Traffic Assignment								-			24.0%	3.0%	Outbou
	Outbound Traffic Volumes											5	1	2
	Project Traffic				2				6			5	1	
Superblock F (Residential)														
	Inbound Traffic Assignment					6.0%				17.0%				Inboun
	Inbound Traffic Volumes					9				25				14
	Outbound Traffic Assignment	17.0%	6.0%											Outbou
	Outbound Traffic Volumes	18	6				ļ	ļ			ļ		ļ	10
	Project Traffic	18	6			9				25				1
	Total Project Traffic	79	26	10	11	46	18	19	36	62	15	32	10	
Cullum Road Connection Traffic Diversion	n								50			50		
TOTAL TRAFFIC		79	26	10	11	46	18	19	86	62	15	82	10	-
			20	10		70	10	17	00	02	15	02	10	1

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK Banks Road & 40th Street PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

AM Peak Hour														
			Northbound	ł		Southboun	d		Eastbound			Westbound	i	1
		LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	1
Existing Volume on 10/13/2021		22	0	0	0	0	0	0	0	12	0	0	0	2,021
Peak Season Volume		23	0	0	0	0	0	0	0	12	0	0	0	
Traffic Volume Growth Committed Development		1	0	0	0	0	0	0	0	1	0	0	0	
Background Traffic Volumes		24	0	0	0	0	0	0	0	13	0	0	0	
Superblock A (Residential)	Inbound Traffic Assignment					42.0%					4.0%			Inbound
	Outbound Traffic Assignment Outbound Traffic Volumes		42.0% 24	4.0%		,								Outbound 58
Superblock B (Commercial)	Project Tranic		24	2		7					1			
	Inbound Traffic Assignment Inbound Traffic Volumes Outbound Traffic Assignment Outbound Traffic Volumes			2.0% 3	8.0% 13				4.0% 6		5.0% 5	8.0% 8	15.0% 14	Inbound 158 Outbound 96
Superblock C (Residential)	Project Traffic			3	13				6		5	8	14	-
	Inbound Traffic Assignment Inbound Traffic Volumes Outbound Traffic Assignment Outbound Traffic Volumes Project Traffic		8.0%		3.0% 2	4.0%	6.0% 5			2.0%				Inbound 22 Outbound 76
Superblock D (Residential)	Inbound Traffic Assignment Inbound Traffic Volumes Outbound Traffic Volumes Outbound Traffic Volumes		2 14.0% 14		2 3.0% 10	3 6.0% 20	5 7.0% 24							Inbound 101 Outbound 339
Superblock E (Residential)	Project Traffic		14		10	20	24		2.0%					Inhound
	Inbound Traffic Volumes Outbound Traffic Assignment Outbound Traffic Volumes								2.070		2.0%	7.0%		11 Outbound 35
Superblock F (Residential)	Inbound Traffic Assignment			9.0%	15.0%				12.0%			2		Inbound
	Outbound Traffic Assignment Outbound Traffic Volumes			6	10				ŏ		9.0% 21	5.0% 12	15.0% 35	09 Outbound 232
	Project Traffic	0	40	6	10 25	20	20	0	8	0	21	12	35	
Cullum Road Connection Traffic Diversion			40	11	30	30	29	0	14	- 0	28	22	49	
TOTAL TRAFFIC		24	40	11	35	30	29	0	14	13	28	22	49	1

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK Banks Road & 40th Street PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

Outbound Traffic Assignment

Cullum Road Connection Traffic Diversion

TOTAL TRAFFIC

Outbound Traffic Volumes

Project Traffic

Total Project Traffic

PM Peak Hour Eastbound Northbound Southbound Westbound LT Thru RT LT Thru RT LT Thru RT LT Thru Existing Volume on 10/13/2021 0 0 0 0 15 0 40 0 0 0 0 Peak Season Volume 42 0 0 0 0 0 0 0 16 0 0 Traffic Volume Growth 2 0 0 0 0 0 0 0 1 0 0 Committed Development Background Traffic Volumes 44 0 0 0 0 0 0 0 17 0 0 Superblock A (Residential) Inbound Traffic Assignment 42.0% 4.0% Inbound Traffic Volumes 13 Outbound Traffic Assignment 42.0% 4.0% Outbound Traffic Volumes 10 Project Traffic 10 1 13 Superblock B (Commercial) Inbound Traffic Assignment 2.0% 8.0% Inbound Traffic Volumes 9 35 Outbound Traffic Assignment Outbound Traffic Volumes Project Traffic 9 35 Superblock C (Residential) Inbound Traffic Assignment 8.0% Inbound Traffic Volumes 3 Outbound Traffic Assignment 3.0% 4.0% 6.0% Outbound Traffic Volumes Project Traffic 3 1 1 2 Superblock D (Residential) Inbound Traffic Assignment 14.0% Inbound Traffic Volumes 29 Outbound Traffic Assignment 3.0% 6.0% 7.0% **Outbound Traffic Volumes** 9 10 Project Traffic 29 4 9 10 Superblock E (Residential) Inbound Traffic Assignment 2.0% Inbound Traffic Volumes 1 Outbound Traffic Assignment 2.0% 7.0% **Outbound Traffic Volumes** 1 Project Traffic 1 1 Superblock F (Residential) Inbound Traffic Assignment 15.0% 9.0% 12.0% Inbound Traffic Volumes 13 22 18

22

62

62

23

23

12

12

0

13

23

23

42

42

44

				23
	1	8.0%	15.0%	Inbound 436 Outbound 299
	19	31	58	500
2.0% 1				Inbound 42 Outbound 30
1				Inbound 204 Outbound 145
	2.0% 1	2.0% 1 1 1	1 5.0% 8.0% 19 31 19 31 2.0% 1 1 1	1 5.0% 8.0% 15.0% 19 31 58 2.0% 19 31 58 1 1 1 1 1 1 1 1 1 1 1

9.0%

9

9

29

29

18

36

36

1

18

5.0%

5

5

37

37

RT

0

0

0

0

2.021

Inbound

32

Outbound

Inbound

30

20

Outbound

Inbound

15.0%

16

16

74

74

148

104

Outbound

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK City Market Avenue & 40th Street PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

AM Peak Hour Northbound Southbound Eastbound Westbound LT Thru RT LT Thru RT LT Thru RT LT Thru RT Existing Volume on 10/13/2021 0 0 0 0 0 0 0 0 0 0 0 0 2,021 Peak Season Volume 0 0 0 0 0 0 0 0 0 0 0 0 Traffic Volume Growth 0 0 0 0 0 0 0 0 0 0 0 0 Committed Development Background Traffic Volumes 0 0 0 0 0 0 0 0 0 0 0 0 Superblock A (Residential) Inbound Traffic Assignment 4.0% Inbound Inbound Traffic Volumes 17 1 Outbound Traffic Assignment 4.0% Outbound Outbound Traffic Volumes 58 Project Traffic 2 1 Superblock B (Commercial) Inbound Traffic Assignment 14.0% Inbound Inbound Traffic Volumes 22 158 Outbound Traffic Assignment 28.0% Outbound Outbound Traffic Volumes 96 27 Project Traffic 22 27 Superblock C (Residential) Inbound Traffic Assignment 1.0% 1.0% Inbound Inbound Traffic Volumes 22 Outbound Traffic Assignment 3.0% Outbound Outbound Traffic Volumes 76 Project Traffic 2 Superblock D (Residential) Inbound Traffic Assignment Inbound Inbound Traffic Volumes 101 Outbound Traffic Assignment 3.0% Outbound Outbound Traffic Volumes 10 339 Project Traffic 10 Superblock E (Residential) Inbound Traffic Assignment 2.0% nbound Inbound Traffic Volumes 11 Outbound Traffic Assignment 9.0% Outbound Outbound Traffic Volumes 35 Project Traffic 3 Superblock F (Residential) Inbound Traffic Assignment 9.0% 14.0% Inbound Inbound Traffic Volumes 10 69 6 Outbound Traffic Assignment 2.0% 4.0% Outbound Outbound Traffic Volumes 9 232 Project Traffic 9 10 5 6 Total Project Traffic 10 36 5 9 31 6 Cullum Road Connection Traffic Diversion TOTAL TRAFFIC 6 0 10 0 0 0 0 36 5 9 31 0

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK City Market Avenue & 40th Street PROPOSED GEOMETRY

0.50%	
1.04	1.04
2030	2030
9	9
	0.50% 1.04 2030 9

				<u>PM Pe</u>	<u>ak Hour</u>									
		I	Northbound	1		Southboun	d		Eastbound		Westbound			
	I	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/13/2021		0	0	0	0	0	0	0	0	0	0	0	0	2,0
Peak Season Volume		0	0	0	0	0	0	0	0	0	0	0	0	
Traffic Volume Growth		0	0	0	0	0	0	0	0	0	0	0	0	
Committed Development														
Rackground Traffic Volumos		0	0	0	0	0	0	0	0	0	0	0	0	
		0	U	0	0	0	0	0	0	0	0	0	0	
Superblock A (Residential)														
Inbound T	raffic Assignment											4.0%		Inboun
Inboun	d Traffic Volumes											1		3
Outbound T	raffic Assignment								4.0%			· ·		Outhou
Outhoun	d Traffic Volumes								1					20000
Cubbul	Project Traffic								1	<u> </u>	<u> </u>	1		
Superblock B (Commercial)	i toject traine								1			1		
Inhound T	raffic Assignment								14.0%					Inhour
Inhound	d Traffic Volumes								61					
Outbound T	raffic Assignment								01			20.00/		43
Outbound 1	d Traffic Volumos											28.0%		
Garbourn	Project Traffic								(1			109		- 38
Suporblack C (Posidontial)	FIOJECETTAILIC								01			109		
SuperDiock C (Residential)	roffic Accignment											1.00/		
	d Traffic Volumoc	1.0%										1.0%		Inboun
Ulbouri Outhound T	in Trainic Volumes								2.00/					4
	ranic Assignment								3.0%					Outbou
Outbourn	u Trainc Volumes								1					- 30
Cuparblack D (Desidential)	Project franc								1					
Superdiock D (Residential)														
I bnuodni	raffic Assignment													Inboun
Inboun	d Traffic Volumes													20
Outbound T	raffic Assignment								3.0%					Outbou
Outboun	d Traffic Volumes								4					- 14
	Project Traffic								4					
Superblock E (Residential)														
Inbound T	raffic Assignment								2.0%					Inboun
Inbound	d Traffic Volumes								1					30
Outbound T	raffic Assignment											9.0%		Outbou
Outbound	d Traffic Volumes											2		20
	Project Traffic								1			2		1
Superblock F (Residential)														1
Inbound T	raffic Assignment 9.	9.0%		14.0%										Inboun
Inbound	d Traffic Volumes	13		21										14
Outbound T	raffic Assignment									2.0%	4.0%			Outbou
Outboun	d Traffic Volumes									2	4			10
	Project Traffic	13		21						2	4			1
	tel Desiret T													
То	ai Project Traffic	13	0	21	0	0	0	0	68	2	4	112	0	
Cullum Road Connection Traffic Diversion														
		13	0	21	0	0	0	0	68	2	4	112	0	-
I U AL INALI IU	1	10	J	<u> </u>	0	U	0	U	00	- 4	4	1 112	v	1

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK New Street & 40th Street PROPOSED GEOMETRY

Growth Rate =	0.50%		
Peak Season =	1.04	1.04	
Buildout Year =	2030	2030	
Years =	9	9	

				<u>AM Pe</u>	ak Hour									
		[Northbound	1	Γ	Southbound	d	Γ	Eastbound		Γ	Westbound	1	
		LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/13/2021		0	0	0	0	0	0	0	0	0	0	0	0	2,021
Peak Season Volume		0	0	0	0	0	0	0	0	0	0	0	0	
Traffic Volumo Crowth				0		<u> </u>					0	0		
Committed Development		U	U	U	0	0	U	U	U	U	0	U	U	
Committee Development														
Background Traffic Volumes		0	0	0	0	0	0	0	0	0	0	0	0	
Cumarklaak A (Daaidantial)														
Superblock A (Residential)	Inhound Traffic Assignment											4.0%		Inhound
	Inbound Traffic Volumes											4.0%		Indound 17
	Outbound Traffic Assignment								4.0%			'		Outbourg
	Outbound Traffic Volumes								4.070					58
	Project Traffic								2			1		50
Superblock B (Commercial)	rigot riano								2					
	Inbound Traffic Assignment								14.0%					Inbound
	Inbound Traffic Volumes								22					158
	Outbound Traffic Assignment											28.0%		Outbound
	Outbound Traffic Volumes											27		96
	Project Traffic								22			27		1
Superblock C (Residential)														
	Inbound Traffic Assignment											1.0%		Inbound
	Inbound Traffic Volumes													22
	Outbound Traffic Assignment								3.0%					Outbound
	Outbound Traffic Volumes								2					76
	Project Traffic								2					
Superblock D (Residential)														
	Inbound Traffic Assignment													Inbound
	Inbound Traffic Volumes													101
	Outbound Traffic Assignment								3.0%					Outbound
	Outbound Traffic Volumes								10					339
	Project Traffic								10					
Superblock E (Residential)														
	Inbound Traffic Assignment							2.0%					35.0%	Inbound
	Inbound Traffic Volumes												4	11
	Outbound Traffic Assignment				29.0%		9.0%							Outbound
	Outbound Traffic Volumes				10		3							35
	Project Traffic				10		3						4	
Superblock F (Residential)														
	Inbound Traffic Assignment						5.0%					26.0%		Inbound
	Inbound Traffic Volumes						3					18		69
	Outbound Traffic Assignment							5.0%	49.0%					Outbound
	Outbound Trainc volumes							12	114					232
	Project Traffic						3	12	114			18		
	Total Project Traffic	0	0	0	10	0	6	12	150	0	0	46	4	
														1
Cullum Road Connection Traffic Diversion														
TOTAL TRAFFIC		0	0	0	10	0	6	12	150	0	0	46	4	

		VOLUM MAIN S Ne PR	IE DEVEI TREET C w Street OPOSED	LOPMEN COCONU & 40th S GEOME	T SHEET T CREEK treet TRY								-
Growth Rate :	.50%												
Peak Season :	1.04	1.04											
Buildout Year	= 2030	2030											
Years	= 9	9											
			<u>PM Pe</u>	<u>ak Hour</u>									
		Northbound	ł		Southboun	d		Eastbound	1		Westbound	l	
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing volume on 10/13/2021 Peak Season Volume	0	0	0	0	0	0	0	0	0	0	0	0	2,02
	0	0	0	0	0	0	0	0	0	0	0	0	
Traffic Volume Growth	0	0	0	0	0	0	0	0	0	0	0	0	
Committed Development													
Background Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Superblock A (Residential)													
Inbound Traffic Assignment	nt										4.0%		Inbound
Inbound Traffic Volume	s										1		32
Outbound Traffic Volume	nt							4.0%					Outbour
Project Traff	с							1			1		- 23
Superblock B (Commercial)	-												
Inbound Traffic Assignment	nt							14.0%					Inbound
Inbound Traffic Volume	s							61					436
Outbound Traffic Assignmen	nt										28.0%		Outbour
Outbound Traffic Volume Project Traffi	s c							61			109		388
Superblock C (Residential)								01			109		
Inbound Traffic Assignmen	nt										1.0%		Inbound
Inbound Traffic Volume	s												42
Outbound Traffic Assignmen	t							3.0%					Outbour
Outbound Traffic Volume	s							1					30
Superblock D (Residential)	L												
Inbound Traffic Assignmen	nt												Inbound
Inbound Traffic Volume	s												204
Outbound Traffic Assignmen	ıt							3.0%					Outboun
Outbound Traffic Volume	s							4					145
Project Traff Superblock E (Residential)	C							4					1
Inbound Traffic Assignment	t						2.0%					35.0%	Inbound
Inbound Traffic Volume	s						1					11	30
Outbound Traffic Assignment	ıt			29.0%		9.0%							Outbour
Outbound Traffic Volume	s			6		2							20
Project Traffi Superblock E (Residential)	с			6		2	1					11	
Inhound Traffic Assignment	ıt					5.0%					26.0%		Inhound
Inbound Traffic Volume	s					7					38		148
Outbound Traffic Assignmen	ıt						5.0%	49.0%					Outboun
Outbound Traffic Volume	s						5	51					104
Project Traffi	с					7	5	51			38		
Total Project Traffi	0	0	0	6	0	9	6	118	0	0	148	11	
Cullum Road Connection Traffic Diversion													
TOTAL TRAFFIC	0	0	0	6	0	9	6	118	0	0	148	11	1

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK N Retail Dwy & 40th Street PROPOSED GEOMETRY

Growth Rate =	0.50%	
Peak Season =	1.04	1.04
Buildout Year =	2030	2030
Years =	9	9

			<u>AM Pe</u>	<u>ak Hour</u>									
		Northbound	ł		Southboun	d		Eastbound			Westbound	1	
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	2,021
Peak Season Volume	0	0	0	0	0	0	0	0	0	0	0	0	
Traffic Volume Growth Committed Development	0	0	0	0	0	0	0	0	0	0	0	0	
Background Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Superblock A (Residential) Inbound Traffic Assignn Inbound Traffic Volu Outbound Traffic Assignn Outbound Traffic Volu	nent mes nent mes							4.0%			4.0% 1		Inbound 17 Outbound
Project Tr	affic							2			1	<u> </u>	- 30
Superblock B (Commercial) Inbound Traffic Assignn Inbound Traffic Volu Outbound Traffic Assignn Outbound Traffic Volu	nent mes nent 7.0% mes 7		12.0% 12						7.0% 11	12.0% 19			Inbound 158 Outbound 96
Project Tr.	affic 7		12						11	19			
Inbound Traffic Assign Inbound Traffic Volu Outbound Traffic Assign Outbound Traffic Volu Project Tr	nent mes nent mes affic							3.0% 2 2			1.0%		Inbound 22 Outbound 76
Superblock D (Residential) Inbound Traffic Assignn Inbound Traffic Volu Outbound Traffic Assignn Outbound Traffic Volu	nent mes nent mes							3.0% 10					Inbound 101 Outbound 339
Project 1r. Suporblack E (Dosidontial)	attic							10					
Inbound Traffic Assign Inbound Traffic Volu Outbound Traffic Assign Outbound Traffic Volu Project Tr	nent mes nent mes							29.0% 10			35.0%		Inbound 11 Outbound 35
Superblock F (Residential)								10			4		
Inbound Traffic Assignn Inbound Traffic Volu Outbound Traffic Assignn Outbound Traffic Volu	nent mes nent mes							49.0% 114			26.0% 18		Inbound 69 Outbound 232
Project Tr	affic							114			18		
Total Project Tra	affic 7	0	12	0	0	0	0	138	11	19	23	0	
TOTAL TRAFFIC	7	0	12	0	0	0	0	138	11	19	23	0	1

VOLUME DEVELOPMENT SHEET MAIN STREET COCONUT CREEK N Retail Dwy & 40th Street PROPOSED GEOMETRY

Growth Rate = 0.50%

	Peak Season =	1.04	1.04											
	Years =	9	9											
				<u>PM Pe</u>	ak Hour									
			Northbound	4		Southboun	d	r –	Easthound		<u> </u>	Westhoung	4	4
		LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	-
Existing Volume on 10/13/2021		0	0	0	0	0	0	0	0	0	0	0	0	2,02
Peak Season Volume		0	0	0	0	0	0	0	0	0	0	0	0	
Troffia Volumo Crouth														
Committed Development		0	0	0	0	0	0	0	0	0	0	0	0	
commuce Development														
Background Traffic Volumes		0	0	0	0	0	0	0	0	0	0	0	0	
Superblock A (Residential)														
	Inbound Traffic Assignment											4.0%		Inbound
	Inbound Traffic Volumes											1		32
	Outbound Traffic Assignment								4.0%					Outbour
	Outbound Traffic Volumes								1					23
	Project Traffic								1			1		
Superblock B (Commercial)														
	Inbound Traffic Assignment									7.0%	12.0%			Inbound
	Outhound Traffic Assignment	7.0%		12.0%						31	52			436 Outbour
	Outbound Traffic Volumes	7.0%		12.0%										Outbour
	Project Traffic	27		47						31	52	-		- 300
Superblock C (Residential)		27								0.	02			
	Inbound Traffic Assignment											1.0%		Inbound
	Inbound Traffic Volumes													42
	Outbound Traffic Assignment								3.0%					Outbour
	Outbound Traffic Volumes		_						1					30
	Project Traffic								1					
Superblock D (Residential)	Internet Traffic Assistants													
	Inbound Traffic Volumos													Inbound
	Outbound Traffic Assignment								3.0%					204 Outbour
	Outbound Traffic Volumes								4					14F
	Project Traffic								4					-
Superblock E (Residential)														
	Inbound Traffic Assignment											35.0%		Inbound
	Inbound Traffic Volumes											11		30
	Outbound Traffic Assignment								29.0%					Outbour
	Outbound Traffic Volumes								6				<u> </u>	20
Superblack E (Decidential)	Project Traffic								6			11		
SuperDiock r (Residential)	Inhound Traffic Assignment											26.0%		Inhound
	Inbound Traffic Volumes											20.0%		1/19
	Outbound Traffic Assignment								49.0%			30		Outbour
	Outbound Traffic Volumes								51					104
	Project Traffic								51			38		1
	Total Project Traffic	27	0	47	0	0	0	0	63	31	52	50	0	
Cullum Road Connection Traffic Diversio	on													
TOTAL TRAFFIC		27	0	47	0	0	0	0	63	31	52	50	0	-

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour based on the *Trip Generation Handbook*, 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

			SUMMAR	RY			
			GROSS TRIP	GENERATION			
	Lond Llos	Da	ily	A.M. Pe	eak Hour	P.M. Pe	ak Hour
	Land Use	Enter	Exit	Enter	Exit	Enter	Exit
⊢	Office						
\supset	Retail	5,869	5,869	165	101	486	526
≝	Restaurant						
=	Cinema/Entertainment						
	Residential	6,139	6,139	225	746	595	371
	Hotel						
		12,008	12,008	390	847	1,081	897
			INTERNA	AL TRIPS			
	Land Lico	Da	ily	A.M. Pe	eak Hour	P.M. Pe	ak Hour
	Lanu Use	Enter	Exit	Enter	Exit	Enter	Exit
5	Office	0	0	0	0	0	0
Ы	Retail	792	1,174	7	5	49	137
5	Restaurant	0	0	0	0	0	0
б	Cinema/Entertainment	0	0	0	0	0	0
-	Residential	1,174	792	5	7	137	49
	Hotel	0	0	0	0	0	0
		1,966	1,966	12	12	186	186
	% Reduction	16.	4%	1.	9%	18.	8%
			EXTERN	AL TRIPS			
	Land Lico	Da	ily	A.M. Pe	eak Hour	P.M. Pe	ak Hour
	Lanu Use	Enter	Exit	Enter	Exit	Enter	Exit
5	Office	0	0	0	0	0	0
Ы	Retail	5,077	4,695	158	96	437	389
5	Restaurant	0	0	0	0	0	0
б	Cinema/Entertainment	0	0	0	0	0	0
-	Residential	4,965	5,347	220	739	458	322
	Hotel	0	0	0	0	0	0
		10.042	10.042	270	0.25	005	711

			DAILY	/			
			GROSS TRIF	GENERATION			
ſ	Land Use	Da	ily E-it]			
	Office	Enter 0	Exit 0	-			
	Retail	5,869	5,869				
AC	Restaurant	0	0	_			
_	Residential	6 139	6 139	-			
-	Hotel	0	0				
		12,008	12,008]			
		Estimated Tri (Avera	p Origins within a ge of A.M. Peak	a Mixed-Use Devel Hour and P.M. Pe	lopment (Daily) ak Hour)		
	Origin			Destinatio	n Land Use		
-	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
>_	Office	16%	24%	34%	0%	2%	2%
All	Retail	10%	28%	2170	2%	20%	3% 5%
Ō	Cinema/Entertainment	1%	11%	16%	170	4%	1%
	Residential	3%	22%	21%	0%		2%
	Hotel	38%	15%	39%	0%	1%	
		Estimated Trip I (Avera	Destinations withi ge of A.M. Peak	n a Mixed-Use De Hour and P.M. Pe	velopment (Daily) ak Hour)		
	Origin	06	Det-"	Destinatio	n Land Use	Desidential	Hetel
	Office	Uffice	Retail 20%	Restaurant	Unema/Ent. 1%	2%	Hotel 0%
	Retail	18%	2070	40%	13%	24%	9%
M	Restaurant	22%	29%		16%	11%	38%
	Cinema/Entertainment	3%	2%	2%		2%	1%
-	Residential	30%	14%	17%	0%		6%
	Hotel	2%	3%	6%	0%	0%	
			*** BASED	ON EXIT ***			
	(Exit)			(Enter) I	and Use		
	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
>_	Office	010	0	0	0	0	0
	Retail	910	0	1,232	117	1,1/4	147
	Cinema/Entertainment	0	0	0	U	0	0
1	Residential	184	1,320	1,258	0		92
-	Hotel	0	0	0	0	0	
		T	*** BASED	ON ENTER ***			
	(Exit)	Office	Dotail	(Enter)	_and Use	Docidoptial	Hotol
	Office	Unice	1,174	nesiaurani	Omerna/Ent.	123	notel
	Retail	0	1,174	0	0	1,473	0
M	Restaurant	0	1,702		0	645	0
	Cinema/Entertainment	0	117	0		123	0
_	Residential	0	792	0	0		0
	Hotel	0	176	0 IIMUM ***	0	U	
		1					
	(Exit)	Office	Detail	(Enter) I	and Use	Docidential	Hetel
	Office	Unice	n n	nesiaurani	Omerna/Ent.	nesidentiai 0	noiel
	Retail	0	5	0	0	1,174	0
M	Restaurant	0	0		0	0	0
	Cinema/Entertainment	0	0	0		0	0
	Residential	0	792	0	0		0
	Hotel	0	0	0	0	0	
		Da	INTERN	IAL TRIPS			
	Land Use	Enter	Exit]			
\succ	Office	0	0				
4	Retail	792	1,174	4			
AO	Restaurant	0	0	4			
	Cinema/Entertainment Residential	0	0 702	-			
	Hotel	0	0	1			
		1,966	1,966]			
			-				

		A.M	M. PEAK	HOUR			
			GROSS TRI	P GENERATION			
	Land Lise	A.M. Pe	ak Hour				
\leq	Edita 050	Enter	Exit	_			
EA	Office	0	0	-			
₫	Retairant	105	101	-			
Ξ	Cinema/Entertainment	0	0	1			
Ä.	Residential	225	746	-			
-	Hotel	0	0	_			
		390	847]			
		Table 6.1 Ur for Trip Origins	nconstrained Inte within a Mixed-U	ernal Person Trip (Ise Development (Capture Rates (A.M. Peak Hour)		
	Origin	0/7		Destinatio	n Land Use		
×	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
E,	Office	209/	28%	63%	0%	1%	0%
<u>ط</u>	Retail	29%	1.49/	13%	0%	14%	20%
≤ I	Cinoma/Entortainmont	31/0	14%	0%	076	4 /0	3 /0
4	Decidential	29/	19/	20%	0%	0%	0%
	Hotel	75%	14%	9%	0%	0%	0%
	Origin	for Trip Destinatio	nconstrained Inte ins within a Mixe	d-Use Developmer	Capture Rates nt (A.M. Peak Hou n Land Use	r)	
\leq	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
	Office		32%	23%	0%	0%	0%
РЕ	Retail	4%		50%	0%	2%	0%
5	Restaurant	14%	8%		0%	5%	4%
4	Cinema/Entertainment	0%	0%	0%		0%	0%
4	Residential	3%	17%	20%	0%		0%
	Hotel	3%	4%	6%	0%	0%	
	(Fxit)		*** BASEE	ON EXIT ***	Land Use		
\leq	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
A	Office		0	0	0	0	0
E I	Retail	29		13	0	14	0
	Restaurant	0	0		0	0	0
2	Cinema/Entertainment	0	0	0		0	0
4	Residential	15	7	149	0	â	0
	Hotel	0	0	0	0	0	
			*** BASED	ON ENTER ***			
	(Exit)	04.	D-1-7	(Enter) I	Land Use	Desident	11.2.2
Y V	Lanu Use	Utfice	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
Ц	Dotoil	٥	33	U	U	U 5	0
с	Postauropt	U A	10	U	U A	5	0
Ξ	Cinema/Entortainmont	0	13	٥	U	0	0
4	Residential	n	28	0	0	v	0
	Hotel	0	7	0	0	0	J
			*** MIP	IIMUM ***			
	(Exit)		= -	(Enter) I	Land Use		
¥	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
ΕŻ	Uffice	^	0	0	0	U	0
с	Retail	U	0	U	U	5	U
Ś	Cinome/Entortainmont	0	0	٥	U	0	0
Ä	Docidoptial	0	U 7	0	0	v	0
-	Isuneucen Isuneucen	U A	/	0	0	0	U
	nulei	U	U	U	U	v	
			INTER	IAL TRIPS			
	paral line	A. M. Pe	eak Hour	1			
$\mathbf{\mathbf{x}}$	Land Use	Enter	Exit	1			
\triangleleft	Office	0	0]			
Ц	Retail	7	5				
_	Restaurant	0	0				
2	Cinema/Entertainment	0	0	1			
4	Residential	5	7	-			
	Hotel	0	0	-			
		12	12]			

		P.I	VI. PEAK	HOUR			
			GROSS TRIF	P GENERATION			
	Land Lico	P.M. Pe	ak Hour]			
¥	Lanu Ose	Enter	Exit				
Ч	Office	0	0	-			
P	Retail	486	526	-			
Ś	Cinema/Entertainment	0	0	4			
<u> </u>	Residential	595	371	1			
	Hotel	0	0	1			
		1,081	897	1			
		Table 6.1 U for Trip Origins	nconstrained Inte within a Mixed-U	ernal Person Trip C Jse Development (Capture Rates P.M. Peak Hour)		
	Origin			Destination	n Land Use		
$\mathbf{\mathbf{x}}$	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel
< V	Office		20%	4%	0%	2%	0%
РЕ	Retail	2%		29%	4%	26%	5%
Ś	Restaurant	3%	41%	010/	8%	18%	7%
<u> </u>	Cinema/Entertainment	2%	21%	31%	00/	8%	2%
	Residential	4%	42%	21%	0%	20/	3%
		for Trip Destination	ons within a wixe	a-ose Developmen	it (F.W. Feak Hou	1)	
	Origin	for Trip Destination	ons within a mixe	Destination	n Land Lise)	
~	Origin Land Use	Office	Retail	Destination Restaurant	n Land Use Cinema/Ent.	Residential	Hotel
AK	Origin Land Use Office	Office	Retail 8%	Destination Restaurant 2%	n Land Use Cinema/Ent. 1%	Residential 4%	Hotel 0%
PEAK	Origin Land Use Office Retail	Office 31%	Retail 8%	Destination Restaurant 2% 29%	n Land Use Cinema/Ent. 1% 26%	Residential 4% 46%	Hotel 0% 17%
A. PEAK	Origin Land Use Office Retail Restaurant	Office 31% 30%	Retail 8% 50%	Destination Restaurant 2% 29%	n Land Use Cinema/Ent. 1% 26% 32%	Residential 4% 46% 16%	Hotel 0% 17% 71%
P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment	Office 31% 30% 6%	Retail 8% 50% 4%	Destination Restaurant 2% 29% 3%	n Land Use Cinema/Ent. 1% 26% 32%	Residential 4% 46% 16% 4%	Hotel 0% 17% 71% 1%
P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel	Office 31% 30% 6% 57% 0%	Retail 8% 50% 4% 10% 2%	Destination Restaurant 2% 29% 3% 14% 5%	n Land Use Cinema/Ent. 1% 26% 32% 0% 0%	Residential 4% 46% 16% 4% 0%	Hotel 0% 17% 71% 1% 12%
P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel	Office 31% 30% 6% 57% 0%	Retail 8% 50% 4% 10% 2%	Destination Restaurant 2% 29% 3% 14% 5% D ON EXIT ***	n Land Use Cinema/Ent. 1% 26% 32% 0% 0%	Residential 4% 46% 16% 4% 0%	Hotel 0% 17% 71% 1% 12%
P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit)	07 Thp Desunaux Office 31% 30% 6% 57% 0%	Retail 8% 50% 4% 10% 2%	Destination Restaurant 2% 29% 3% 14% 5% 0 ON EXIT *** (Enter) I	n Land Use Cinema/Ent. 1% 26% 32% 0% 0%	Residential 4% 46% 16% 4% 0%	Hotel 0% 17% 71% 1% 12%
K P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use	Office 0% 0% 0% 0%	Retail 8% 50% 4% 10% 2% *** BASED Retail	Destination Restaurant 2% 29% 3% 14% 5% 2 ON EXIT *** (Enter) I Restaurant	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0%	Residential 4% 46% 16% 4% 0% 0%	Hotel 0% 17% 71% 1% 12% Hotel
EAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office	Office 31% 30% 6% 57% 0% Office	Retail 8% 50% 4% 10% 2% *** BASED Retail 0	Destination Restaurant 2% 29% 3% 14% 5% 0 ON EXIT *** (Enter) I Restaurant 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% Cinema/Ent. 0	Residential 4% 46% 16% 4% 0% Residential 0	Hotel 0% 17% 71% 1% 12% Hotel 0
PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail	Office 31% 30% 6% 57% 0% Office 0flice 11	Retail 8% 50% 4% 10% 2% *** BASED Retail 0	Destination Restaurant 2% 29% 3% 14% 5% D ON EXIT *** (Enter) I Restaurant 0 153	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% Cinema/Ent. 0 2 Cinema/Ent. 0	Residential 4% 46% 16% 4% 0% Residential 0 137	Hotel 0% 17% 1% 1% 12% Hotel 0 26
A. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant	Office 31% 30% 6% 57% 0% Office 11 0	Retail 8% 50% 4% 10% 2% *** BASED Retail 0	Destination Restaurant 2% 29% 3% 14% 5% D ON EXIT *** (Enter) I Restaurant 0 153	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0%	Residential 4% 46% 16% 4% 0% Residential 0 137 0	Hotel 0% 17% 1% 12% Hotel 0 26 0
P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment	Office 31% 30% 6% 57% 0% Office 0% 0%	Retail 8% 50% 4% 10% 2% *** BASEI Retail 0 0 0 0 0 0 0	Destination Restaurant 2% 29% 3% 14% 5% DON EXIT *** (Enter) I Restaurant 0 153	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0%	Residential 4% 46% 16% 0% 0% Residential 0 137 0 0 0	Hotel 0% 17% 1% 12% Hotel 0 26 0
P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel	Office 31% 30% 6% 57% 0% Office 11 0 0 15 0	Retail 8% 50% 4% 10% 2% *** BASEC Retail 0 0 0 0 156 0	Destination Restaurant 2% 29% 3% 14% 5% 0 ON EXIT *** (Enter) I Restaurant 0 153 0 78 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% 21 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential 4% 46% 16% 4% 0% Residential 0 137 0 0 0 0 0	Hotel 0% 17% 1% 12% Hotel 0 26 0 0 11
P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel	Office 31% 30% 6% 57% 0% Office 0% 11 0 0 15 0	Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 156 0 *** BASED	Destination Pestination Pertination Pertinatio Pertination Pertination Pertination Pertination Pertina	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% Cinema/Ent. 0 21 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential 4% 46% 16% 4% 0% Residential 0 137 0 0 0 0 0	Hotel 0% 17% 17% 12% Hotel 0 26 0 0 11
P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel	Office 31% 30% 6% 57% 0% Office 11 0 0 15 0 Office	Retail Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 156 0 *** BASED Retail	Destination Restaurant 2% 29% 3% 14% 5% 0 ON EXIT *** (Enter) I Restaurant 0 153 0 78 0 ON ENTER *** (Enter) I	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% cinema/Ent. 0 21 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential 4% 46% 16% 4% 0% 0% Residential 0 137 0 0 0 0 0 0 0 0 0 0 0 0 0	Hotel 0% 17% 71% 12% Hotel 0 26 0 0 0 11
ak P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office	Office Office 31% 30% 6% 57% 0% 0% 0% 0% 0 11 0 0 15 0 0 0 0 0 0 0 0 0 0 0 0 0	Retail Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 156 0 *** BASED Retail 39	Destination Restaurant 2% 29% 3% 14% 5% 20N EXIT *** (Enter) I Restaurant 0 153 0 0 0N ENTER *** (Enter) I Restaurant 0 0 0 0 0 0 0 0 0 0 0 0 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% 21 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential 4% 46% 16% 4% 0% 0% Residential 0 0 0 0 0 0 0 0 0 0 0 0 0	Hotel 0% 17% 71% 12% Hotel 0 0 0 11 Hotel 0 0 0 11 Hotel 0
P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Retail	Office 31% 30% 6% 57% 0% Office 0 0 15 0 Office 0 0 0 0 0 0 0 0 0 0 0 0 0	Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 156 0 *** BASED Retail 39	Destination Restaurant 2% 3% 14% 5% ON EXIT *** (Enter) I Restaurant 0 153 0 78 0 (Enter) I Restaurant 0 0 0 0 0 0 0 0 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% Cinema/Ent. 0 21 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential 4% 46% 16% 4% 0% 0% Residential 0 0 0 Residential 24 274	Hotel 0% 17% 17% 12% Hotel 0 Hotel 0 0 0 0 0 0 0 0 0 0 0 0 0
. PEAK P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant	Office 31% 30% 6% 57% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 156 0 *** BASED Retail 39 243	Destination Restaurant 2% 29% 3% 14% 5% O ON EXIT *** (Enter) I Restaurant 0 153 0 78 0 0 0 0 0 0 0 0 0 0 0 0 0 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	Residential 4% 46% 16% 4% 0% Residential 0 137 0 0 0 0 Residential 24 274 95	Hotel 0% 17% 71% 12% 12% 0 0 0 0 11 11 Hotel 0 0 0 0 0 0
.M. PEAK P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment	Office 31% 30% 6% 57% 0% 0% 0% 0% 0% 0 0 0 0 0 0 0 0 0 0 0 0 0	Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 156 0 *** BASED Retail 39 243 19	Destination Restaurant 2% 29% 3% 14% 5% O ON EXIT *** (Enter) I Restaurant 0 153 0 78 0 (Enter) I Restaurant 0 153 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% Cinema/Ent. 0 0 0 0 0 0 0 0 0 0 0 0 0	Residential 4% 46% 16% 4% 0% 0% Residential 0 137 0 0 0 0 Residential 24 274 95 24	Hotel 0% 17% 71% 17% 12% Hotel 0 0 26 0 0 11 Hotel 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
P.M. PEAK P.M. PEAK P.M. PEAK	Origin Land Use Office Retail Restaurant Cinema/Entertainment Residential Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Hotel (Exit) Land Use Office Retail Restaurant Cinema/Entertainment Restaurant Cinema/Entertainment Restaurant Cinema/Entertainment Restaurant	Office 31% 30% 6% 57% 0% Office 11 0 0 15 0 Office 0 0 0 0 0 0 0 0 0 0 0 0 0	Retail 8% 50% 4% 10% 2% *** BASED Retail 0 0 0 0 156 0 *** BASED *** BASED *** BASED *** BASED	Destination Restaurant 2% 3% 14% 5% 0 ON EXIT *** (Enter) I Restaurant 0 153 0 778 0 0 778 0	n Land Use Cinema/Ent. 1% 26% 32% 0% 0% 0% 0% 2% 2% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	Residential 4% 46% 16% 4% 0% 0% Residential 0 137 0 0 0 0 Residential 24 274 95 24	Hotel 0% 17% 71% 12% Hotel 0 0 0 11 Hotel 0 0 0 0 0 0 0 0 0 0 0 0 0

	(Exit)	(Enter) Land Use										
\leq	Land Use	Office	Retail	Restaurant	Cinema/Ent.	Residential	Hotel					
A.	Office		0	0	0	0	0					
Щ Ш	Retail	0		0	0	137	0					
_	Restaurant	0	0		0	0	0					
≥.	Cinema/Entertainment	0	0	0		0	0					
д_	Residential	0	49	0	0		0					
	Hotel	0	0	0	0	0						

INTERNAL TRIPS

	مماللهمما	P.M. Pe	ak Hour
$\mathbf{\mathbf{x}}$	Land Use	Enter	Exit
A	Office	0	0
Ш	Retail	49	137
<u> </u>	Restaurant	0	0
Σ	Cinema/Entertainment	0	0
д_	Residential	137	49
	Hotel	0	0
		186	186

APPENDIX C: INTERSECTION ANALYSIS OUTPUT WORKSHEETS

Total Future Conditions – AM Peak Hour Total Future Conditions – PM Peak Hour

Intersection Delay, s/veh Intersection LOS

eh 9.5 A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		\$			4			\$	
Traffic Vol, veh/h	0	100	219	8	191	0	133	0	32	0	0	0
Future Vol, veh/h	0	100	219	8	191	0	133	0	32	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	105	231	8	201	0	140	0	34	0	0	0
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach		EB		WB			NB				SB	
Opposing Approach		WB		EB			SB				NB	
Opposing Lanes		1		2			1				1	
Conflicting Approach Left		SB		NB			EB				WB	
Conflicting Lanes Left		1		1			2				1	
Conflicting Approach Right		NB		SB			WB				EB	
Conflicting Lanes Right		1		1			1				2	
HCM Control Delay		9		9.8			9.9				0	
HCM LOS		А		А			А				-	

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	81%	0%	0%	4%	0%	
Vol Thru, %	0%	100%	0%	96%	100%	
Vol Right, %	19%	0%	100%	0%	0%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	165	100	219	199	0	
LT Vol	133	0	0	8	0	
Through Vol	0	100	0	191	0	
RT Vol	32	0	219	0	0	
Lane Flow Rate	174	105	231	209	0	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.249	0.152	0.287	0.283	0	
Departure Headway (Hd)	5.16	5.188	4.483	4.857	5.404	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	693	689	800	737	0	
Service Time	3.217	2.932	2.226	2.906	3.486	
HCM Lane V/C Ratio	0.251	0.152	0.289	0.284	0	
HCM Control Delay	9.9	8.9	9	9.8	8.5	
HCM Lane LOS	А	А	А	А	Ν	
HCM 95th-tile Q	1	0.5	1.2	1.2	0	

Intersection Delay, s/veh 8.7 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		¢			\$			\$			¢		
Traffic Vol, veh/h	39	115	28	8	70	6	78	37	26	15	29	16	
Future Vol, veh/h	39	115	28	8	70	6	78	37	26	15	29	16	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	41	121	29	8	74	6	82	39	27	16	31	17	
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0	
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB			SB			NB			
Opposing Lanes	1			1			1			1			
Conflicting Approach Le	eft SB			NB			EB			WB			
Conflicting Lanes Left	1			1			1			1			
Conflicting Approach Ri	ghNB			SB			WB			EB			
Conflicting Lanes Right	1			1			1			1			
HCM Control Delay	8.9			8.3			8.8			8.1			
HCM LOS	А			А			А			А			

Lane	NBLn1	SBLn1		
Vol Left, %	55%	21%	10%	25%
Vol Thru, %	26%	63%	83%	48%
Vol Right, %	18%	15%	7%	27%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	141	182	84	60
LT Vol	78	39	8	15
Through Vol	37	115	70	29
RT Vol	26	28	6	16
Lane Flow Rate	148	192	88	63
Geometry Grp	1	1	1	1
Degree of Util (X)	0.192	0.239	0.114	0.082
Departure Headway (Hd)	4.66	4.493	4.635	4.655
Convergence, Y/N	Yes	Yes	Yes	Yes
Сар	770	799	773	769
Service Time	2.69	2.521	2.668	2.691
HCM Lane V/C Ratio	0.192	0.24	0.114	0.082
HCM Control Delay	8.8	8.9	8.3	8.1
HCM Lane LOS	А	А	А	А
HCM 95th-tile Q	0.7	0.9	0.4	0.3

Intersection Delay, s/veh 7.8 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		¢			\$		1	el el			¢		
Traffic Vol, veh/h	0	14	13	28	22	49	24	40	11	35	30	29	
Future Vol, veh/h	0	14	13	28	22	49	24	40	11	35	30	29	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	15	14	29	23	52	25	42	12	37	32	31	
Number of Lanes	0	1	0	0	1	0	1	1	0	0	1	0	
Approach		EB		WB			NB			SB			
Opposing Approach		WB		EB			SB			NB			
Opposing Lanes		1		1			1			2			
Conflicting Approach Lef	ť	SB		NB			EB			WB			
Conflicting Lanes Left		1		2			1			1			
Conflicting Approach Rig	jht	NB		SB			WB			EB			
Conflicting Lanes Right		2		1			1			1			
HCM Control Delay		7.3		7.7			8			7.9			
HCM LOS		А		А			А			А			

Lane	NBLn1	NBLn2	EBLn1	NBLn1	SBLn1
Vol Left, %	100%	0%	0%	28%	37%
Vol Thru, %	0%	78%	52%	22%	32%
Vol Right, %	0%	22%	48%	49%	31%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	51	27	99	94
LT Vol	24	0	0	28	35
Through Vol	0	40	14	22	30
RT Vol	0	11	13	49	29
Lane Flow Rate	25	54	28	104	99
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.037	0.07	0.033	0.12	0.119
Departure Headway (Hd)	5.321	4.669	4.172	4.142	4.316
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	666	757	861	869	835
Service Time	3.112	2.459	2.182	2.148	2.316
HCM Lane V/C Ratio	0.038	0.071	0.033	0.12	0.119
HCM Control Delay	8.3	7.8	7.3	7.7	7.9
HCM Lane LOS	А	А	А	А	А
HCM 95th-tile Q	0.1	0.2	0.1	0.4	0.4

Int Delay, s/veh	2.1							
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	4			- स ी	۰¥			
Traffic Vol, veh/h	36	5	9	31	6	10		
Future Vol, veh/h	36	5	9	31	6	10		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	-		
Veh in Median Storage	,# 0	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	95	95	95	95	95	95		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	38	5	9	33	6	11		

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	43	0	92	41
Stage 1	-	-	-	-	41	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1566	-	908	1030
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1566	-	903	1030
Mov Cap-2 Maneuver	-	-	-	-	903	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	965	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.6		8.7	
HCM LOS					А	
Minor Lano/Major Myr	nt	MDI n1	EDT	EDD	\//DI	
	m		LDI	LDN		VVDI
		9/8	-	-	1000	-
HCM Cantrol Delay (a	\	0.017	-	-	0.006	-
HCM Long LOS)	٥. <i>١</i>	-	-	1.3	0
HCM OF the Willo Office	1)	A	-	-	A	A
	1)	0.1	-	-	0	-

Int Delay, s/veh	1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		÷	4		Y		
Traffic Vol, veh/h	12	150	46	4	10	6	
Future Vol, veh/h	12	150	46	4	10	6	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage,	# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	13	158	48	4	11	6	

Major/Minor	Major1	Ν	1ajor2		Vinor2	
Conflicting Flow All	52	0	-	0	234	50
Stage 1	-	-	-	-	50	-
Stage 2	-	-	-	-	184	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1554	-	-	-	754	1018
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1554	-	-	-	747	1018
Mov Cap-2 Maneuver	-	-	-	-	747	-
Stage 1	-	-	-	-	963	-
Stage 2	-	-	-	-	848	-
Approach	EB		WB		SB	
HCM Control Delay, s	6 0.5		0		9.4	
HCM LOS					А	
Minor Lane/Maior Mv	mt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1554	-		_	830
HCM Lane V/C Ratio		0.008	-	-	-	0.02
HCM Control Delay (s	5)	7.3	0	-	-	9.4
HCM Lane LOS	/	A	A	-	-	A
HCM 95th %tile Q(ve	h)	0	-	-	-	0.1

Int Delay, s/veh	1.5						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	1			्स	۰¥		
Traffic Vol, veh/h	138	11	19	23	7	12	
Future Vol, veh/h	138	11	19	23	7	12	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage,	# 0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	145	12	20	24	7	13	

Major/Minor	Major1	ſ	Vajor2		Vinor1	
Conflicting Flow All	0	0	157	0	215	151
Stage 1	-	-	-	-	151	-
Stage 2	-	-	-	-	64	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1423	-	773	895
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	· -	-	1423	-	762	895
Mov Cap-2 Maneuver	۰ -	-	-	-	762	-
Stage 1	-	-	-	-	877	-
Stage 2	-	-	-	-	946	-
Ŭ						
Ammanah						
Approach	EB		WB		NB	
HCM Control Delay, s	s 0		3.4		9.4	
HCM LOS					A	
Minor Lane/Maior Mv	mt N	VBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		841		-	1423	-
HCM Lane V/C Ratio		0.024	-	-	0.014	-
HCM Control Delay (5)	9.4	-	_	7.6	0
HCM Lane LOS	-,	A	-	-	A	A

0

0.1

HCM 95th %tile Q(veh)

Intersection Delay, s/veh Intersection LOS

h 10.4 B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ب ا ا	1		\$			4			4	
Traffic Vol, veh/h	0	156	243	11	162	0	215	0	15	0	0	0
Future Vol, veh/h	0	156	243	11	162	0	215	0	15	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	164	256	12	171	0	226	0	16	0	0	0
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach		EB		WB			NB				SB	
Opposing Approach		WB		EB			SB				NB	
Opposing Lanes		1		2			1				1	
Conflicting Approach Left		SB		NB			EB				WB	
Conflicting Lanes Left		1		1			2				1	
Conflicting Approach Right		NB		SB			WB				EB	
Conflicting Lanes Right		1		1			1				2	
HCM Control Delay		9.8		10.1			11.5				0	
HCM LOS		А		В			В				-	

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	93%	0%	0%	6%	0%	
Vol Thru, %	0%	100%	0%	94%	100%	
Vol Right, %	7%	0%	100%	0%	0%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	230	156	243	173	0	
LT Vol	215	0	0	11	0	
Through Vol	0	156	0	162	0	
RT Vol	15	0	243	0	0	
Lane Flow Rate	242	164	256	182	0	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.362	0.246	0.333	0.262	0	
Departure Headway (Hd)	5.384	5.392	4.686	5.173	5.791	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	663	662	760	688	0	
Service Time	3.465	3.162	2.456	3.255	3.791	
HCM Lane V/C Ratio	0.365	0.248	0.337	0.265	0	
HCM Control Delay	11.5	9.9	9.8	10.1	8.8	
HCM Lane LOS	В	А	А	В	Ν	
HCM 95th-tile Q	1.7	1	1.5	1	0	

Intersection Delay, s/veh 8.5 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		¢			4			\$			\$		
Traffic Vol, veh/h	19	86	62	15	82	10	79	26	10	11	46	18	
Future Vol, veh/h	19	86	62	15	82	10	79	26	10	11	46	18	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	20	91	65	16	86	11	83	27	11	12	48	19	
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0	
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB			SB			NB			
Opposing Lanes	1			1			1			1			
Conflicting Approach Le	eft SB			NB			EB			WB			
Conflicting Lanes Left	1			1			1			1			
Conflicting Approach R	ighNB			SB			WB			EB			
Conflicting Lanes Right	1			1			1			1			
HCM Control Delay	8.5			8.4			8.7			8.2			
HCM LOS	А			А			А			А			

Lane	NBLn1	EBLn1V	VBLn1	SBLn1
Vol Left, %	69%	11%	14%	15%
Vol Thru, %	23%	51%	77%	61%
Vol Right, %	9%	37%	9%	24%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	115	167	107	75
LT Vol	79	19	15	11
Through Vol	26	86	82	46
RT Vol	10	62	10	18
Lane Flow Rate	121	176	113	79
Geometry Grp	1	1	1	1
Degree of Util (X)	0.16	0.212	0.143	0.101
Departure Headway (Hd)	4.767	4.346	4.583	4.623
Convergence, Y/N	Yes	Yes	Yes	Yes
Сар	752	826	783	774
Service Time	2.798	2.371	2.61	2.656
HCM Lane V/C Ratio	0.161	0.213	0.144	0.102
HCM Control Delay	8.7	8.5	8.4	8.2
HCM Lane LOS	А	А	А	А
HCM 95th-tile Q	0.6	0.8	0.5	0.3

Intersection Delay, s/veh 8.2 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		¢			\$		ľ	4Î			¢		
Traffic Vol, veh/h	0	36	18	29	37	74	44	42	23	62	23	12	
Future Vol, veh/h	0	36	18	29	37	74	44	42	23	62	23	12	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	38	19	31	39	78	46	44	24	65	24	13	
Number of Lanes	0	1	0	0	1	0	1	1	0	0	1	0	
Approach		EB		WB			NB			SB			
Opposing Approach		WB		EB			SB			NB			
Opposing Lanes		1		1			1			2			
Conflicting Approach Let	ft	SB		NB			EB			WB			
Conflicting Lanes Left		1		2			1			1			
Conflicting Approach Rig	ght	NB		SB			WB			EB			
Conflicting Lanes Right		2		1			1			1			
HCM Control Delay		7.8		8.2			8.3			8.4			
HCM LOS		А		А			А			А			

Lane	NBLn1	NBLn2	EBLn1	VBLn1	SBLn1
Vol Left, %	100%	0%	0%	21%	64%
Vol Thru, %	0%	65%	67%	26%	24%
Vol Right, %	0%	35%	33%	53%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	65	54	140	97
LT Vol	44	0	0	29	62
Through Vol	0	42	36	37	23
RT Vol	0	23	18	74	12
Lane Flow Rate	46	68	57	147	102
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.072	0.092	0.07	0.174	0.133
Departure Headway (Hd)	5.582	4.83	4.429	4.255	4.686
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	643	743	809	844	766
Service Time	3.305	2.553	2.453	2.275	2.71
HCM Lane V/C Ratio	0.072	0.092	0.07	0.174	0.133
HCM Control Delay	8.7	8	7.8	8.2	8.4
HCM Lane LOS	А	А	А	А	А
HCM 95th-tile Q	0.2	0.3	0.2	0.6	0.5

Int Delay, s/veh	1.6						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	4			्र	۰¥		
Traffic Vol, veh/h	68	2	4	112	13	21	
Future Vol, veh/h	68	2	4	112	13	21	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage,	# 0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	72	2	4	118	14	22	

Major/Minor	Maio	r1	Ν	Jaior2		Minor1	
	waju	0	0	7/		100	20
Connicting Flow All		U	U	74	0	199	/3
Stage I		-	-	-	-	/3	-
Stage 2		-	-	-	-	126	-
Critical Hdwy		-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1		-	-	-	-	5.42	-
Critical Hdwy Stg 2		-	-	-	-	5.42	-
Follow-up Hdwy		-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver		-	-	1526	-	790	989
Stage 1		-	-	-	-	950	-
Stage 2		-	-	-	-	900	-
Platoon blocked. %		-	-		-		
Mov Cap-1 Maneuver	-	-	-	1526	-	788	989
Mov Cap-2 Maneuver		-	-	-		788	-
1 Anot 2 Guo 1		_	_	_	_	950	-
Stage 2						930 807	
Staye 2		-	-	-	-	077	-
Approach	E	B		WB		NB	
HCM Control Delay, s	S	0		0.3		9.2	
HCM LOS						A	
Minor Lane/Major Mv	mt	NE	3Ln1	EBT	EBR	WBL	WBT
Capacity (veh/h)			901	-	-	1526	-
HCM Lane V/C Ratio			0.04	-	-	0.003	-
HCM Control Delay (s	s)		9.2	-	-	7.4	0
HCM Lane LOS	,		Α	-	-	A	A
HCM 95th %tile Q(ve	h)		0.1	-	-	0	-

Intersection						
Int Delay, s/veh	0.6					
		FDT	WDT		0.51	000
Movement	FRF	FRI	WRI	WBK	SBL	SBR
Lane Configurations		- କୀ	ef 👘		۰¥	
Traffic Vol, veh/h	6	118	148	11	6	9
Future Vol, veh/h	6	118	148	11	6	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	,# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	124	156	12	6	9

Major/Minor	Major1	N	/lajor2		Minor ₂	
Conflicting Flow All	168	0	_	0	298	162
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1410	-	-	-	693	883
Stage 1	-	-	-	-	867	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1410	-	-	-	690	883
Mov Cap-2 Maneuver	-	-	-	-	690	-
Stage 1	-	-	-	-	863	-
Stage 2	-	-	-	-	890	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.4		0		9.6	
HCM LOS					А	
Minor Lane/Major Mvr	nt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)		1410	-	-	-	794
HCM Lane V/C Ratio		0.004	-	-	-	0.02
HCM Control Delay (s	5)	7.6	0	-	-	9.6
HCM Lane LOS	-	А	А	-	-	А
HCM 95th %tile O(vel	h)	0	-	-	-	0.1

Int Delay, s/veh	4.1						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	- î÷			୍ କ	۰¥		
Traffic Vol, veh/h	63	31	52	50	27	47	
Future Vol, veh/h	63	31	52	50	27	47	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	-	-	0	-	
Veh in Median Storage	, # 0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	66	33	55	53	28	49	

Major/Minor I	Major1	ļ	Major2	[Vinor1	
Conflicting Flow All	0	0	99	0	246	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	163	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1494	-	742	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	866	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1494	-	714	976
Mov Cap-2 Maneuver	-	-	-	-	714	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	833	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.8		9.6	
HCM LOS					A	
Minor Lane/Maior Mym	nt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	861	_	-	1494	-
HCM Lane V/C Ratio		0.09	-	-	0.037	-
HCM Control Delay (s))	9.6	-	-	7.5	0

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0.3

HCM Lane LOS