LEVEL 2
TRAFFIC IMPACT ANALYSIS

FOR

NEW BRAUNFELS UTILITIES CAMPUS
NEW BRAUNFELS, TEXAS

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INTRODUCTION

This study evaluates the traffic impacts of the proposed New Braunfels Utilities Campus (Phase 1) to be constructed on approximately 50 acres within the City of New Braunfels, Texas. This report also includes a high-level planning evaluation for a potential New Braunfels Independent School District (ISD) Elementary School (Phase 2) to be constructed on the remaining land, which is approximately 28 acres. The existing land use is Agricultural/Pre-Development.

The proposed Phase 1 (2023) consists of up to 50,000 square feet of Government Office Building (ITE Code 730) and up to 57,000 square feet of Utility (ITE Code 170).

The Build-Out (2025) condition includes the above along with up to 100,000 square feet of Elementary School (ITE Code 520). *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only.*

A map of the impact area and existing land uses are shown in Figure 1.

An image of the site plan for the proposed New Braunfels Utilities Campus (Phase 1) is provided in Figure 2; a larger format is provided in Appendix A.

New Braunfels ISD does not yet know what they intend to use their property for; therefore, a site plan is not available. Within this report a 100,000 square foot Elementary School is considered for planning purposes.

For Phase 1 (2023), two access points are proposed:

- Access 1: A full access intersection that will connect with an extended Westpointe Drive approximately 2,900 feet southwest of Oak Run Parkway. This is the main access for the Utilities campus and will be used by Utility Vehicles, Employees, and Visitors.
- Access 2: A full access intersection that will connect with an extended Westpointe Drive approximately 3,400 feet southwest of Oak Run Parkway. This access will only be used by Employees.

For Build-Out (2025), two access points are considered.

- Access 3: The fourth leg of a full access intersection that connects with an extended Westpointe Drive approximately 2,900 feet southwest of Oak Run Parkway. This planning level evaluation presumes this would be the parent pick-up and drop-off access.
- Access 4: The fourth leg of a full access intersection that connects with an extended Westpointe Drive approximately 3,400 feet southwest of Oak Run Parkway. This planning level evaluation presumes this would be the teacher and school bus access.

Study Scope and Impact Area
Study scope and impact area were established during a scoping meeting that occurred on February 26, 2020. The scoping Meeting worksheet, the anticipated analyses, TIA Determination letter, and Determination form are provided in Appendix B.

Study Elements
This study includes the following elements.

Data Collection
- Turning movement count data were collected in February 2021.
- The proposed site plan was provided by HMT Engineering & Surveying.
- Lee Engineering staff conducted field observations and gathered other relevant information.

Traffic Analysis
- Assessed the general accessibility of the site.
- Estimated the number of trips that will be generated by the proposed development.
- Estimated the directional distribution of traffic approaching/departing the development.
- Assigned the estimated site traffic to the proposed street network.
- Performed capacity analyses at study intersections within the study area.

Recommendations
- Determined if any roadway improvements are needed to accommodate projected traffic generated by the proposed development.

Documentation
- Prepared this report documenting the study procedures and results.

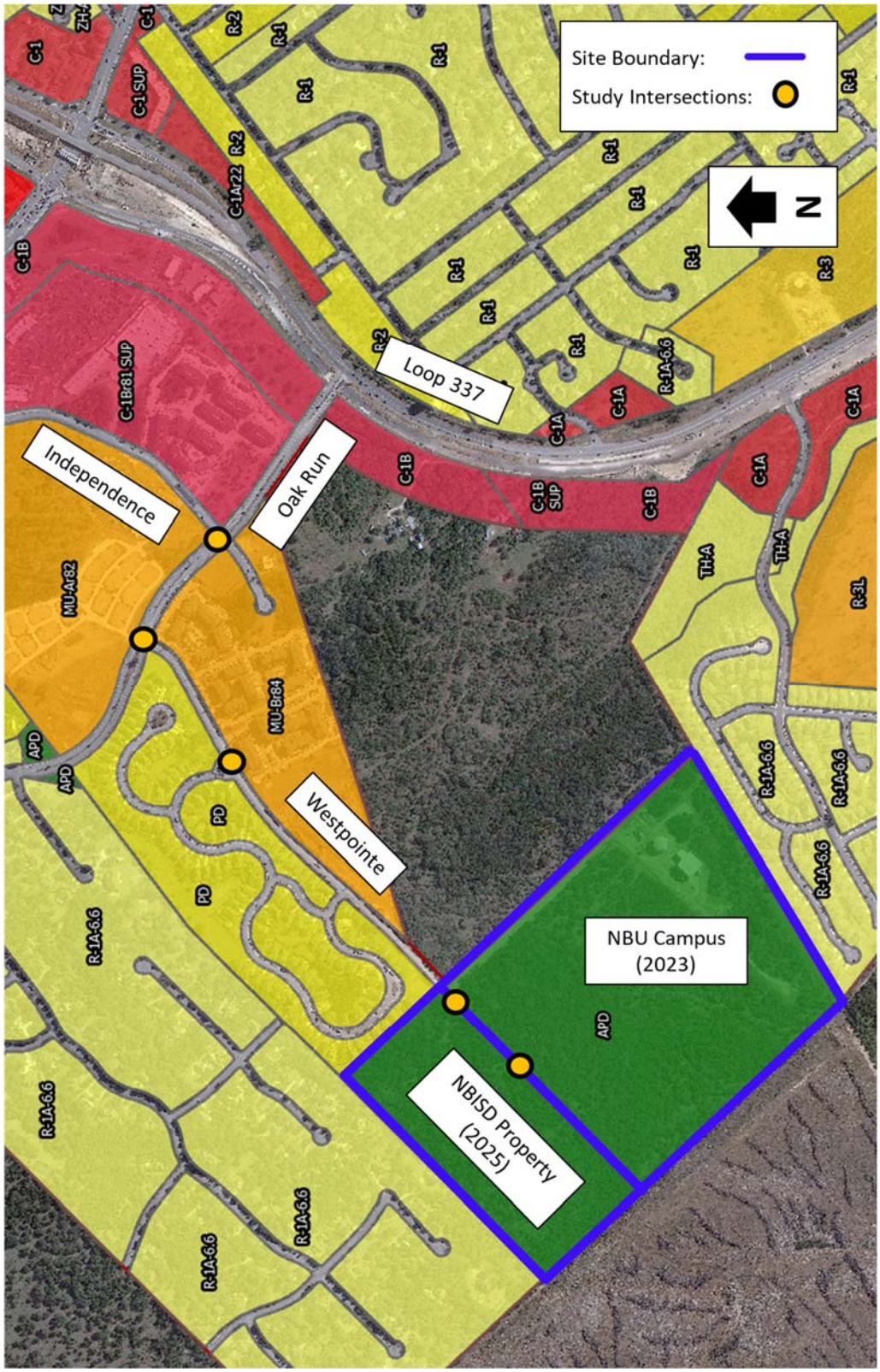

Figure 1. Impact Area and Existing Land Use.

Figure 2. Site Plan.

SITE ACCESSIBILITY AND STUDY IMPACT AREA

Site accessibility describes the means by which people (vehicles) arrive at or depart a development. A site's accessibility is affected by the geographical location of the development with respect to other activity areas, the roadway system, and other physical constraints.

For Phase 1 (2023), two access points are proposed:

- Access 1: A full access intersection that will connect with an extended Westpointe Drive approximately 2,900 feet southwest of Oak Run Parkway. This is the main access for the Utilities campus and will be used by Utility Vehicles, Employees, and Visitors.
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For Build-Out (2025), two access points are considered.

- Access 3: The fourth leg of a full access intersection that connects with an extended Westpointe Drive approximately 2,900 feet southwest of Oak Run Parkway. This planning level evaluation presumes this would be the parent pick-up and drop-off access.
- Access 4: The fourth leg of a full access intersection that connects with an extended Westpointe Drive approximately 3,400 feet southwest of Oak Run Parkway. This planning level evaluation presumes this would be the teacher and school bus access.

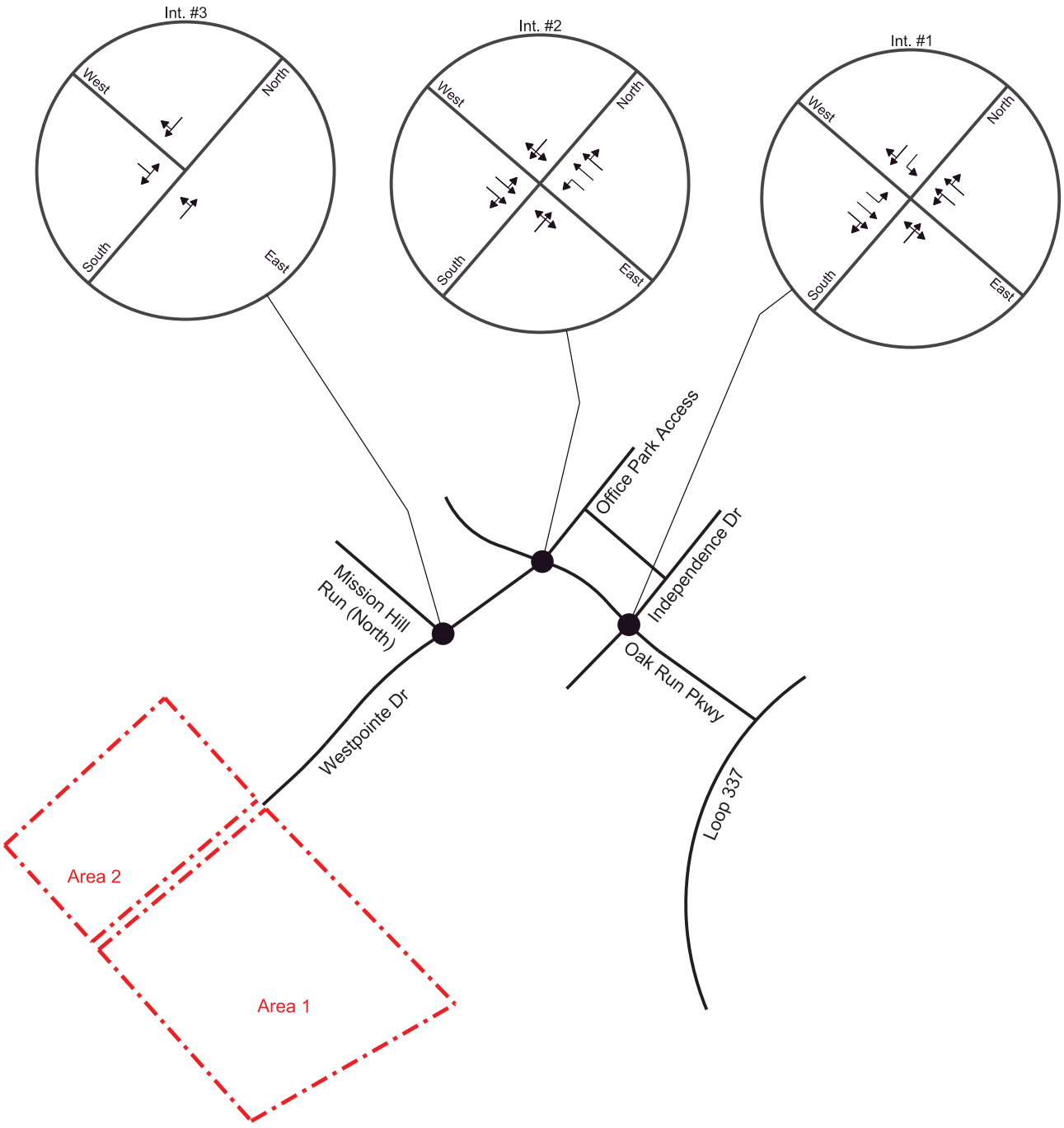
Study Scope and Impact Area

Study scope and impact area were established during a scoping meeting that occurred on February 26, 2020. The scoping Meeting worksheet, the anticipated analyses, TIA Determination letter, and Determination form are provided in Appendix B.

Based upon the scoping meeting, the impact area of the proposed development includes the following proposed intersections associated with this development:

- Oak Run Parkway at Independence Drive.
- Oak Run Parkway at Westpointe Drive.
- Westpointe Drive at Mission Hill Run (northeast intersection).
- Westpointe Drive at Access 1 (New Braunfels Utilities)/Access 3 (New Braunfels ISD).
- Westpointe Drive at Access 2 (New Braunfels Utilities)/Access 4 (New Braunfels ISD).

The existing impact area lane configuration is provided in Exhibit 1.



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Existing (2021) Impact Area Lane Configuration

Exhibit 1

Existing Roadway Configurations and Adjacent Land Use
The existing public roadways within the impact area are:

- Independence Drive.
- Oak Run Parkway.
- Westpointe Drive.

The following sections discuss the existing roadways, the land uses adjacent to these roadways, and any assumptions associated with these roadways that influence the analysis within this TIA.

Independence Drive
Independence Drive is a 2-lane divided roadway with one lane in each direction and a continuous two-way left-turn lane. It has a paved width of approximately 40 feet and a speed limit of 30 mph. It is classified as a Major Collector in the City of New Braunfels 2012 Regional Transportation Plan. A photo of the existing roadway is provided in Figure 3. As shown in Figure 1, the existing land use along Independence Drive within the impact area are:

- General Business District (C1-B).
- High Intensity Mixed Use District (MU-B).
- Low Intensity Mixed Use District (MU-A).

Figure 3. Northeast Bound Independence Drive Northeast of Oak Run Parkway.

Oak Run Parkway

Oak Run Parkway within the impact area is a 4-lane divided roadway with two lanes in each direction and a raised median. Some intersection approaches have dedicated left-turn lanes. It has a paved width of approximately 48 feet and a speed limit of 30 mph. It is classified as a Major Collector in the City of New Braunfels 2012 Regional Transportation Plan. A photo of the existing roadway is provided in Figure 4. As shown in Figure 1, the existing land use along Independence Drive within the impact area are:

- Agricultural/Pre-development (APD).
- General Business District (C1-B).
- High Intensity Mixed Use District (MU-B).
- Low Intensity Mixed Use District (MU-A).
- Planned Development District (PD).
- Single-Family District (R-1A).

Figure 4. Northwest Bound Oak Run Parkway Northwest of Independence Drive.

Westpointe Drive

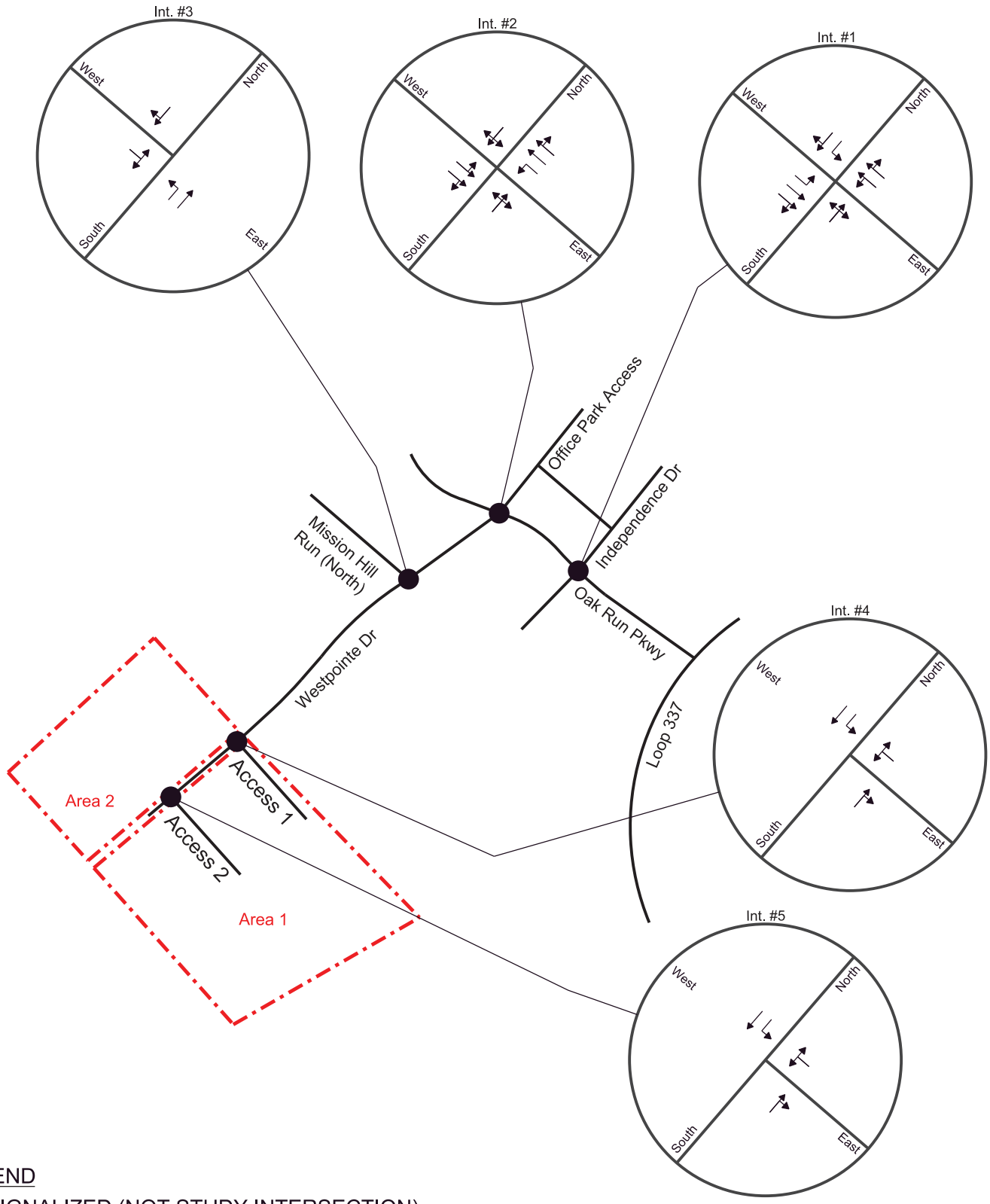
Westpointe Drive is a 2-lane undivided roadway with one lane in each direction. It has a paved width of approximately 33 feet and a speed limit of 30 mph. It does not have a classification within the City of New Braunfels 2012 Regional Transportation Plan. A photo of the existing roadway is provided in Figure 5. As shown in Figure 1, the existing land use along Independence Drive within the impact area are:

- Agricultural/Pre-development (APD).
- High Intensity Mixed Use District (MU-B).
- Planned Development District (PD).

Figure 5. Southwest Bound Westpointe Drive Southwest of Westpointe Drive.

Phase 1 (2023) and Build-Out (2025) Impact Area Roadway Configurations

The Phase 1 (2023) Impact Area Lane Configuration is provided in Exhibit 2. The Build-Out (2025) impact area lane configuration is provided in Exhibit 3. Differences between Existing (2020) lane configuration and the Phase 1 (2023) and Build-Out (2025) impact area lane configurations are a result of mitigations identified within this report's analyses.



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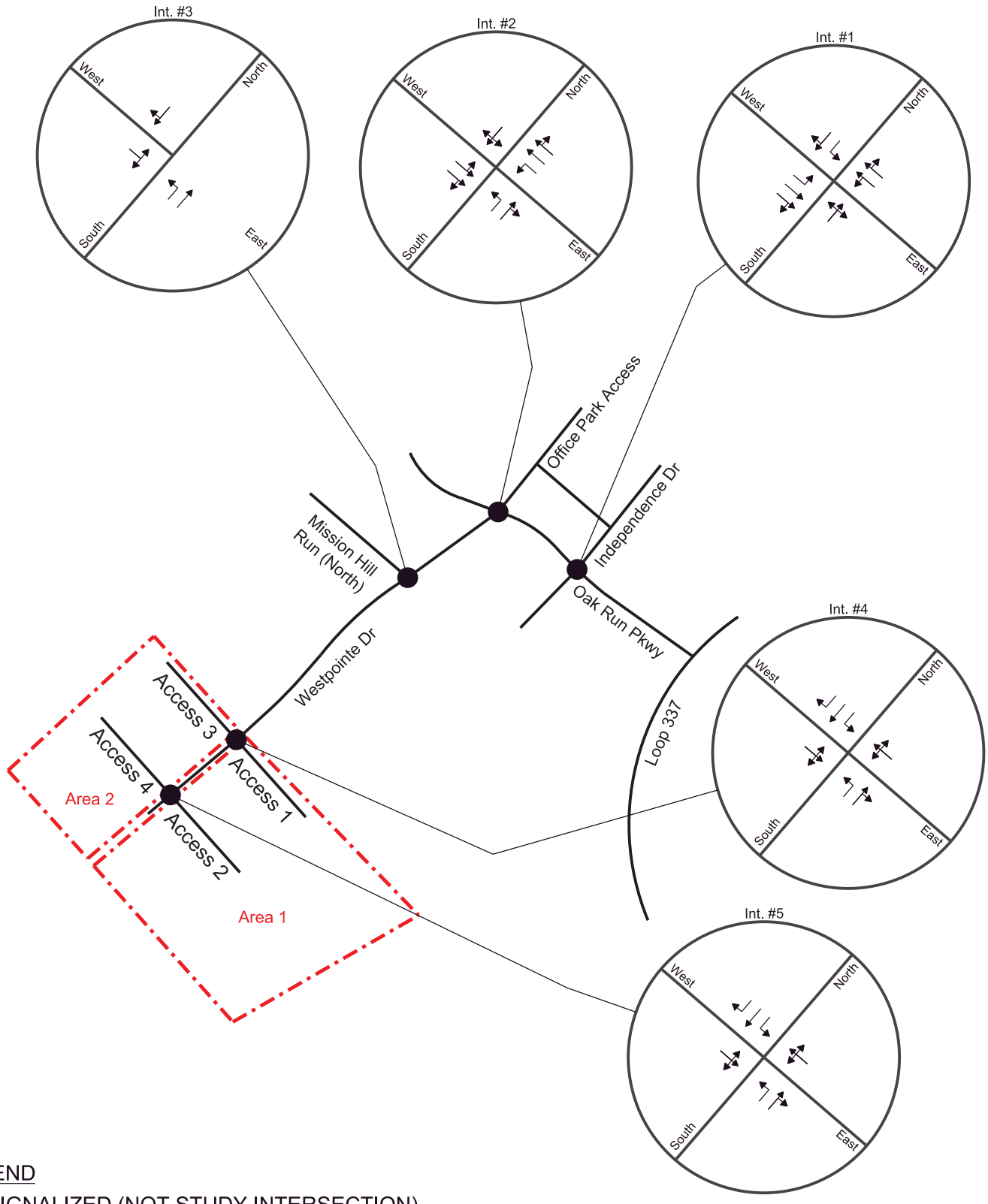
Phase 1 (2023) Impact Area Lane Configuration

Exhibit 2



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Build-Out (2025) Lane Configuration

Exhibit 3

PROPOSED DEVELOPMENT

This study evaluates the traffic impacts of the proposed New Braunfels Utilities Campus (Phase 1) to be constructed on approximately 50 acres within the City of New Braunfels, Texas. This report also includes a planning level evaluation for a potential New Braunfels Independent School District (ISD) Elementary School (Phase 2) to be constructed on the remaining land, which is approximately 28 acres. The existing land use is Agricultural/Pre-Development.

The proposed Phase 1 (2023) consists of up to 50,000 square feet of Government Office Building (ITE Code 730) and up to 57,000 square feet of Utility (ITE Code 170).

The Build-Out (2025) condition includes the above along with up to 100,000 square feet of Elementary School (ITE Code 520). *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only.*

The number of vehicle trips generated by the proposed development were estimated based on the trip generation rates provided in the *Trip Generation Manual, Tenth Edition*, which is published by the Institute of Transportation Engineers (ITE). The number of trips generated by the development is a function of the type and quantity of the land use characteristics within the development.

Estimates of the number of trips generated by the site were made for the Average Weekday, the AM peak hour of the adjacent street, and the PM peak hour of the adjacent street. Table 1 shows the weekday trip generation rates, directional splits, and estimated number of trips for the proposed land uses.

The City of New Braunfels Trip Generation Worksheet is provided in Appendix C.

Table 1. Trip Generation Characteristics for Proposed Development.

Rates				
Description	**ITE Code**	**Average Weekday**	**AM Peak Hour**	**PM Peak Hour**
Government Office Building (2023)	730	22.59	3.34	1.71
Utility (2023)	170	13.24	2.31	2.27
Elementary School (2025)	520	19.52	6.97	1.37

Directional Split													
Description	**ITE Code**	**Average Weekday**				**AM Peak Hour**				**PM Peak Hour**			
Government Office Building (2023)	730	In	50%	Out	50%	In	75%	Out	25%	In	25%	Out	75%
Utility (2023)	170	In	50%	Out	50%	In	80%	Out	20%	In	20%	Out	80%
Elementary School (2025)	520	In	50%	Out	50%	In	55%	Out	45%	In	45%	Out	55%

Number of Trips										
Land Use	**Varriable**	**Average Weekday**			**AM Peak Hour**			**PM Peak Hour**		
		Total	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**
Government Office Building (2023)	50.0 1000 Sq. Ft. GFA	1,130	565	565	167	125	42	86	22	64
Utility (2023)	57.0 1000 Sq. Ft. GFA	755	378	377	132	106	26	130	26	104
Elementary School (2025)	100.0 1000 Sq. Ft. GFA	1,952	976	976	697	383	314	137	62	75
Total Volume Added to Adjacent Streets		**3,837**	**1,919**	**1,918**	**996**	**614**	**382**	**353**	**110**	**243**

TRAFFIC VOLUMES

Existing (2021) Traffic Volumes

Existing (2021) Traffic count data were collected on February 4, 2021 during the AM Peak Period (7:00 AM to 9:00 AM) and PM Peak Period (4:00 PM to 6:00 PM) at the following intersections:

1. Oak Run Parkway at Independence Drive.
2. Oak Run Parkway at Westpointe Drive/Office Park Access.
3. Westpointe Drive at Mission Hill Run (Northeast Intersection).

The raw traffic count data are provided in Appendix D.

Weekday Peak Hour Traffic Volumes obtained from these count data are shown in Exhibit 4.

COVID-19 Adjustments

Traffic count data used within this report was collected in January 2020, before the effects of the COVID-19 pandemic. Therefore, no adjustments for COVID-19 are necessary.

Background (2023) and Background (2025) Office Park Traffic

As requested at the scoping meeting, this traffic study estimated the anticipated traffic from the office park currently being constructed north of Oak Run Parkway at Westpointe Drive. The estimated trip generation characteristics for this development are provided in Table 2. The estimated traffic includes the following assumptions:

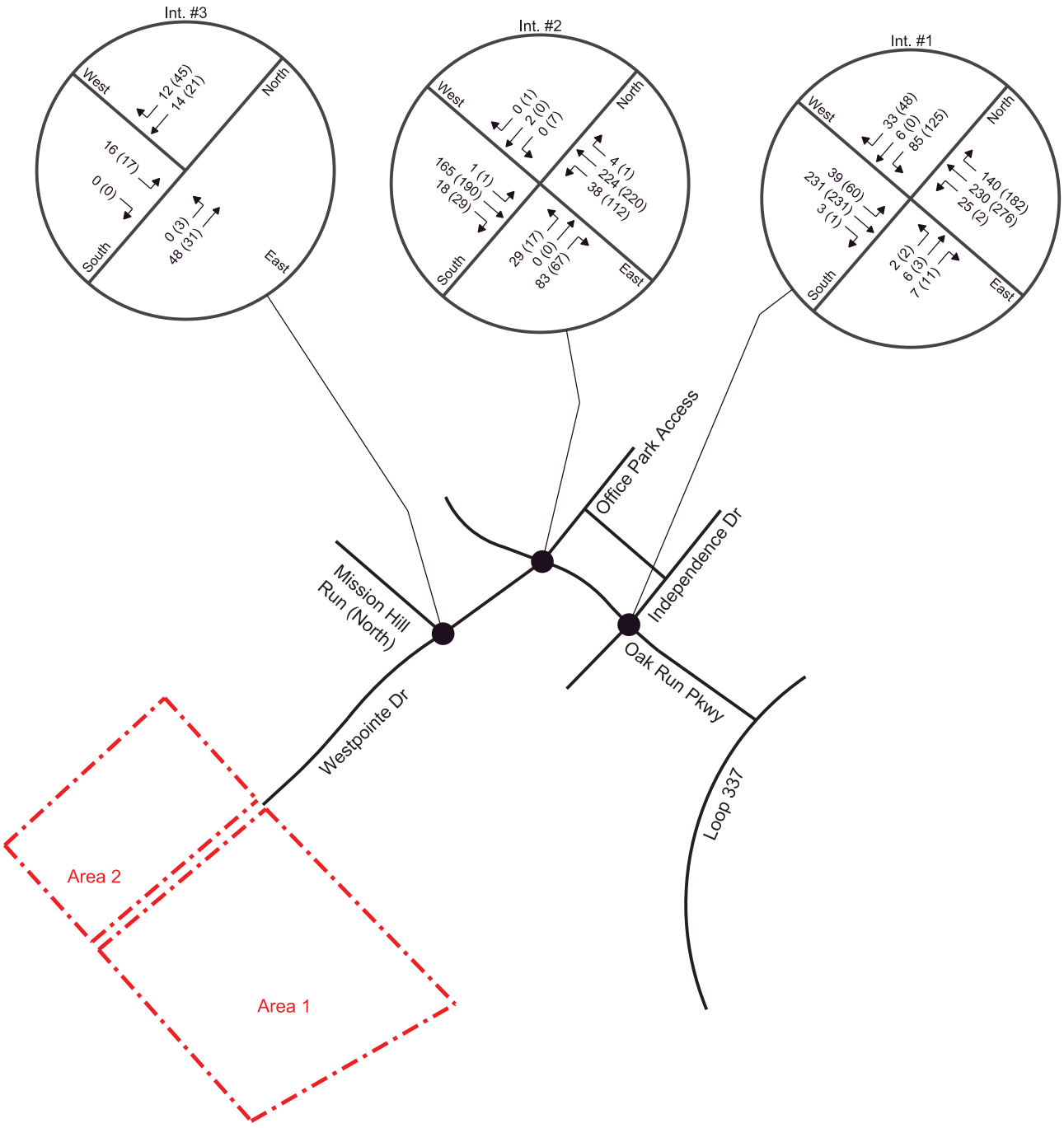
- Land Use of Office Park since the area is zoned low-density mix use.
- 20% of the available land (15.8 acres) will become a gross floor area of 139,000 square feet.
- The Office Park will have the same global distribution discussed at the scoping meeting.

The trip distribution for the office park is provided in Exhibit 5. The anticipated Office Park traffic assigned to the roadway network is provided in Exhibit 6.

Note: The estimated number of trips shown in Table 2 may not match the values shown in the Exhibits. Additionally, there could be minor variations in volumes between intersections. These differences are a result of rounding partial trips up to the nearest whole trip within the trip distribution tables in Appendix E and Appendix F.

Table 2. Trip Generation Characteristics for Office Park.

Rates													
Description	**ITE Code**	**Average Weekday**				**AM Peak Hour**				**PM Peak Hour**			
Office Park (2023) Background Traffic	750	11.07				1.44				1.07			
Directional Split													
Description	**ITE Code**	**Average Weekday**				**AM Peak Hour**				**PM Peak Hour**			
Office Park (2023) Background Traffic	750	In	50%	Out	50%	In	89%	Out	11%	In	7%	Out	93%
Number of Trips													
Land Use	**Varriable**	**Average Weekday**			**AM Peak Hour**			**PM Peak Hour**					
		Total	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**			
Office Park (2023) Background Traffic	139.0 1000 Sq. Ft. GFA	1,539	770	769	201	179	22	149	10	139			
Total Volume Added to Adjacent Streets		**1,539**	**770**	**769**	**201**	**179**	**22**	**149**	**10**	**139**			



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AM (PM) PEAK HOUR VOLUMES

N

NOT TO SCALE

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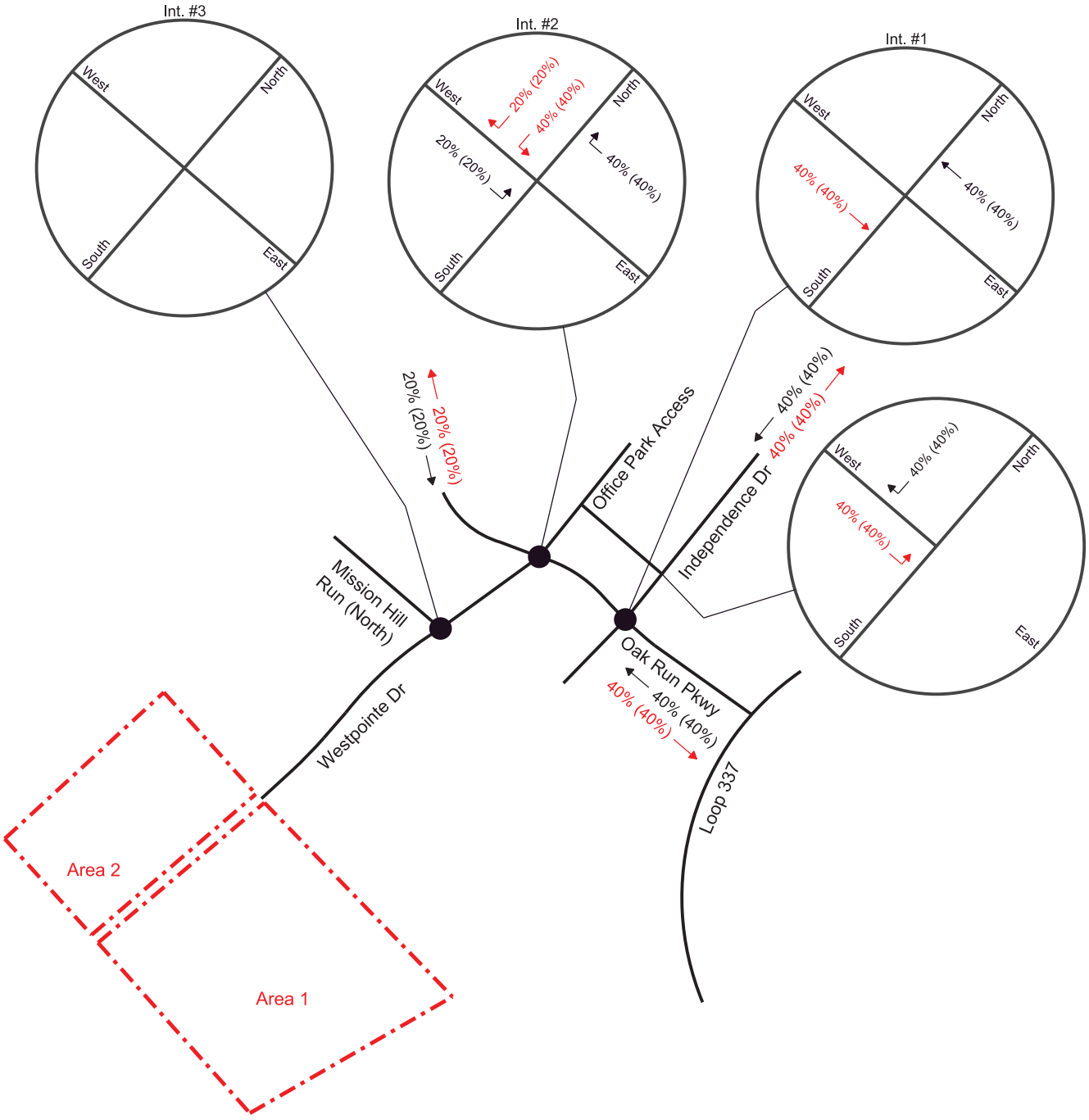
Existing (February 2021) Traffic Volumes

Exhibit 4



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AM (PM) % ENTER

AM (PM) % EXIT

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NOT TO SCALE

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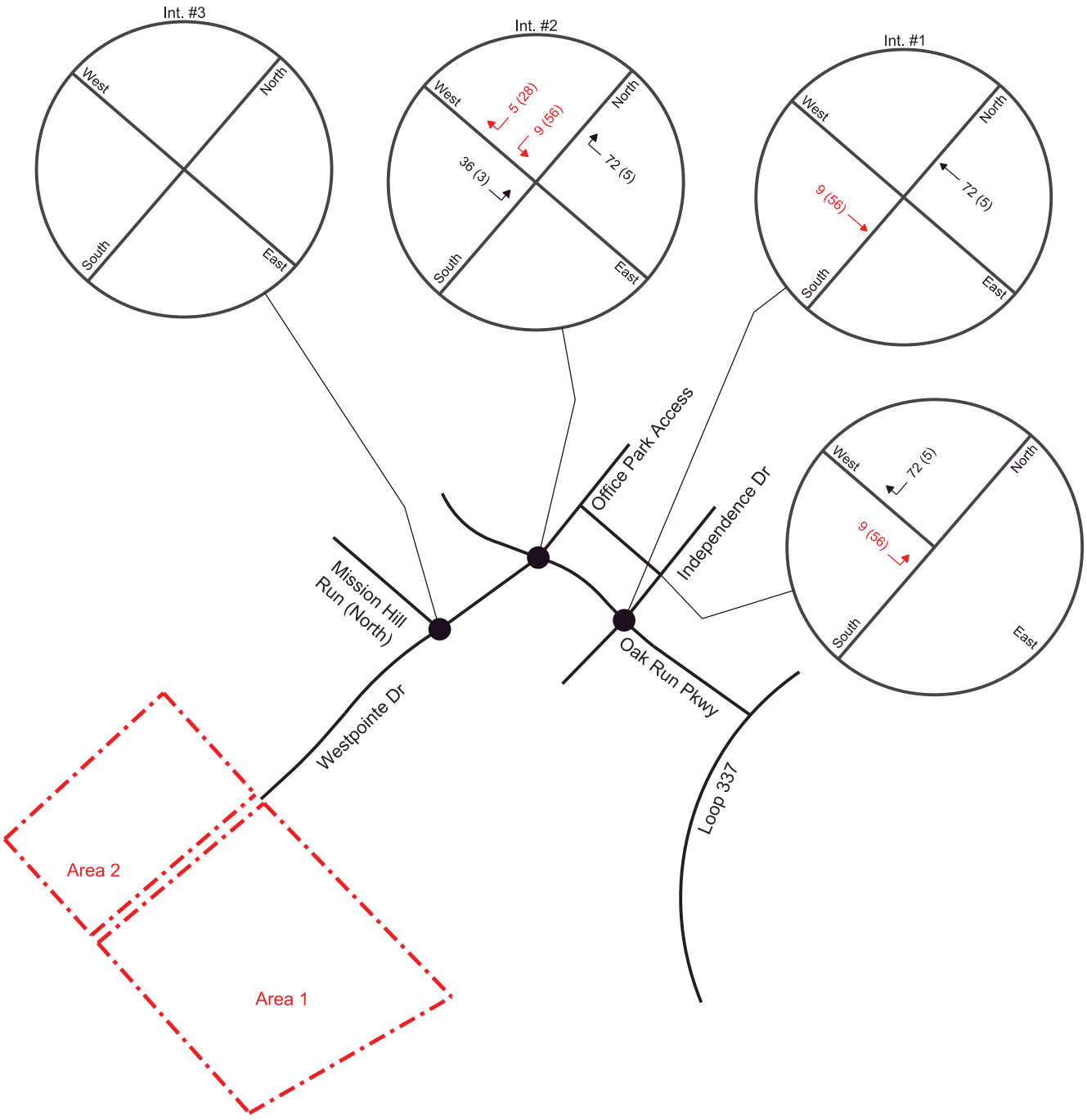
Background (2023) Traffic Distribution
for Office Park Northeast of Oak Run Parkway

Exhibit 5



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AM (PM) ENTERING PK. HR. VOLUMES

AM (PM) EXITING PK. HR. VOLUMES

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NOT TO SCALE

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Background (2023) Traffic Volumes
for Office Park Northeast of Oak Run Parkway

Exhibit 6

Background (2023) and Background (2025) Traffic Volumes

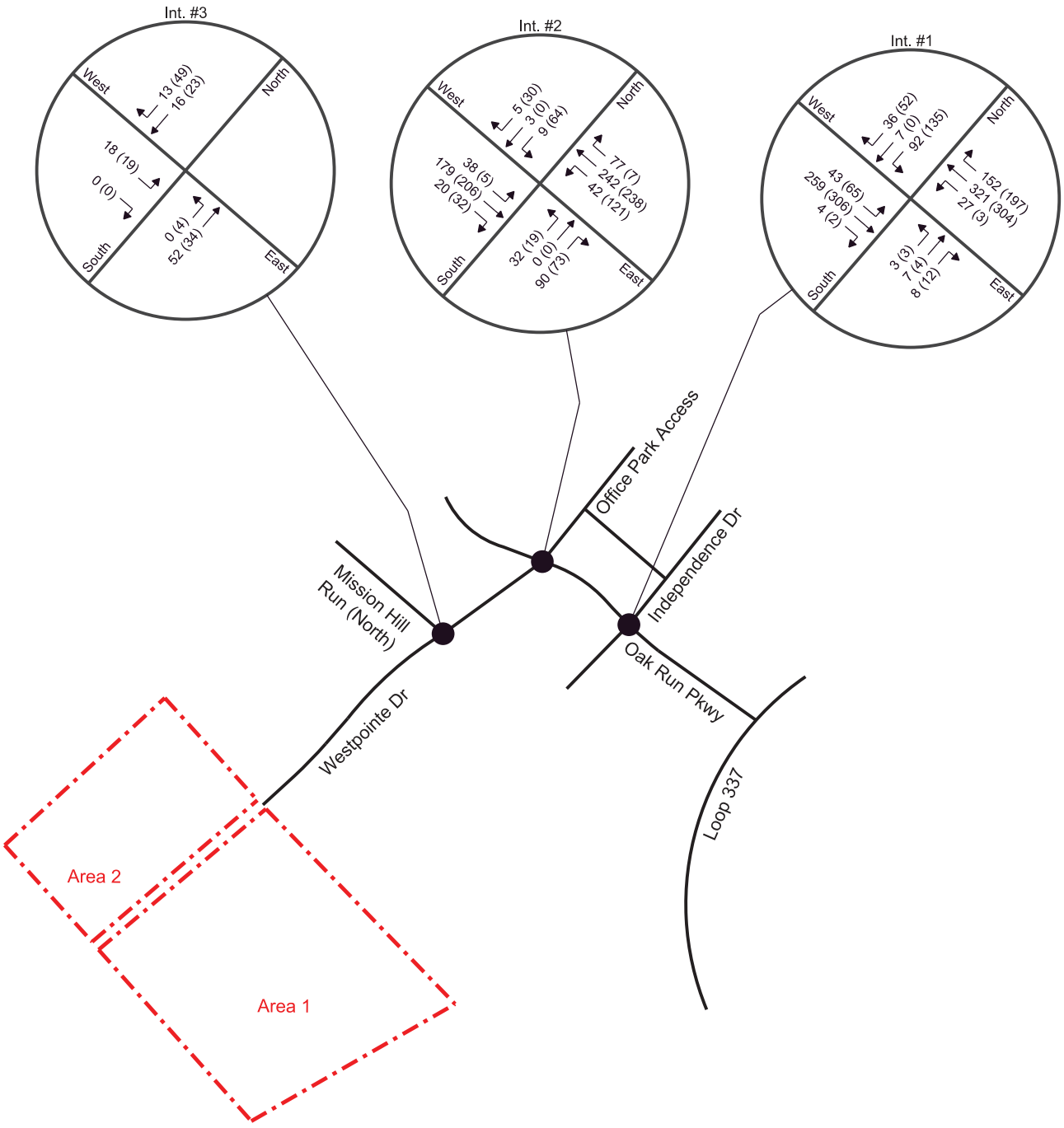
As discussed during project scoping, a growth rate of 3.8% is used to determine anticipated Background (2023) and Background (2025) traffic volumes. A basis for the growth rate is provided in Table 3.

Table 3. Basis for Growth Rate.

Buisness 46 South of Loop 337			Buisness 46 North of Wood Road		
Station Flag: 46H29A			Station Flag: 46T13		
Year	AADT	Growth Percent	Year	AADT	Growth Percent
2019	17,187	0.0%	2019	19,850	23.0%
2018	17,187	-4.2%	2018	16,140	-3.9%
2017	17,934	15.6%	2017	16,799	0.3%
2016	15,518	--	2016	16,747	--
	Average:	3.8%		Average:	6.5%

Background (2023) traffic volumes are provided in Exhibit 7. These volumes were determined by growing the Existing (2021) traffic volumes to the background year of 2023 using a compound growth rate of 2% and adding the Office Park Traffic to this value.

Background (2025) traffic volumes are provided in Exhibit 8. These volumes were determined by growing the Existing (2021) traffic volumes to the background year of 2025 using a compound growth rate of 2% and adding the Office Park Traffic to this value.



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AM (PM) PEAK HOUR VOLUMES

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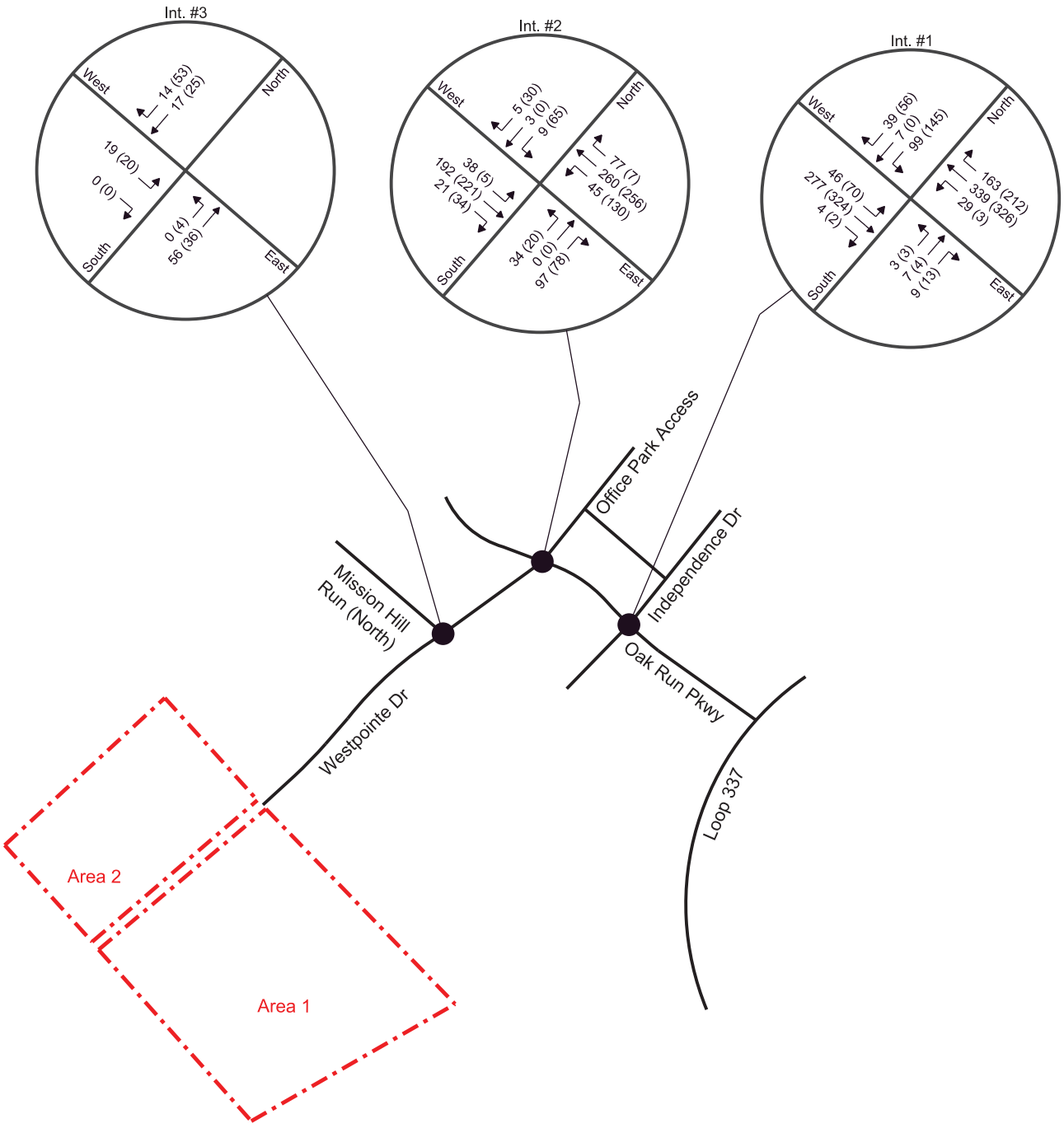
Background (2023) Traffic Voumes

Exhibit 7



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AM (PM) PEAK HOUR VOLUMES

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Background (2025) Traffic Volumes

Exhibit 8

TRIP DISTRIBUTION AND ASSIGNMENT

Distribution tables for 2023 volumes are provided in Appendix E. Distribution tables for 2025 volumes are provided in Appendix F.

Trip Distribution

The directional distribution of site traffic was developed based upon available traffic volumes, characteristics of the surrounding area, and the proposed site plan.

Exhibit 9 shows the proposed distribution percentages for Phase 1 (2023) Government Office Building traffic.

Exhibit 10 shows the proposed distribution percentages for Phase 1 (2023) Utility traffic.

Exhibit 11 shows the proposed distribution percentages for Build-Out (2025) Elementary School Traffic. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only.*

Site Trips

Exhibit 12 shows the estimated Government Office Building site traffic assigned to the roadway network during the weekday AM peak hour and weekday PM peak hour.

Exhibit 13 shows the estimated Utility site traffic assigned to the roadway network during the weekday AM peak hour and weekday PM peak hour.

Exhibit 14 shows the estimated Elementary School site traffic assigned to the roadway network during the weekday AM peak hour and weekday PM peak hour. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only.*

Note: The estimated number of trips shown in Table 1 may not match the values shown in the Exhibits. Additionally, there could be minor variations in volumes between intersections. These differences are a result of rounding partial trips up to the nearest whole trip within the trip distribution tables in Appendix E and Appendix F.

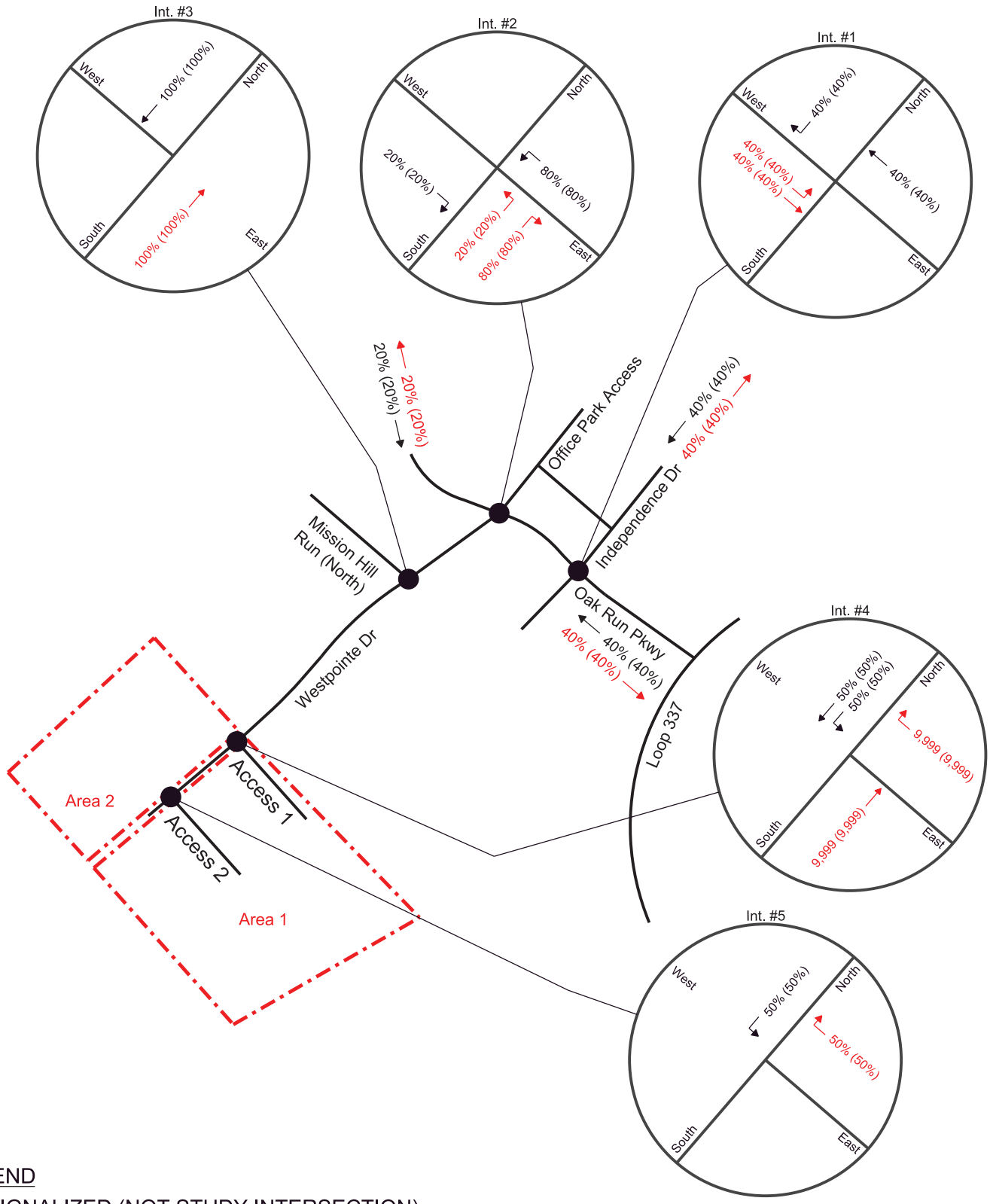
Phase 1 (2023) Total Traffic Condition
The Phase 1 (2023) Site Traffic assigned to the roadway network are provided in Exhibit 15. This is the combined volumes from Exhibit 12 and Exhibit 13.

The Phase 1 (2024) Total Traffic condition volumes are provided in Exhibit 16. These volumes are the estimated Area 1 site traffic assigned to the roadway network (shown in Exhibit 15) added to the Background (2023) traffic volumes (shown in Exhibit 7).

Build-Out (2025) Total Traffic Condition
Build-Out Year (2025) Total Site Traffic assigned to the roadway network are provided in Exhibit 17. These are the combined volumes from Exhibit 12, Exhibit 13, and Exhibit 14.

The Build-Out (2025) Total Traffic condition volumes are provided in Exhibit 18. These volumes are the Build-Out (2025) total site traffic assigned to the roadway network (shown in Exhibit 17) added to the Background (2025) traffic volumes (shown in Exhibit 8).

Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only.



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AM (PM) % ENTER

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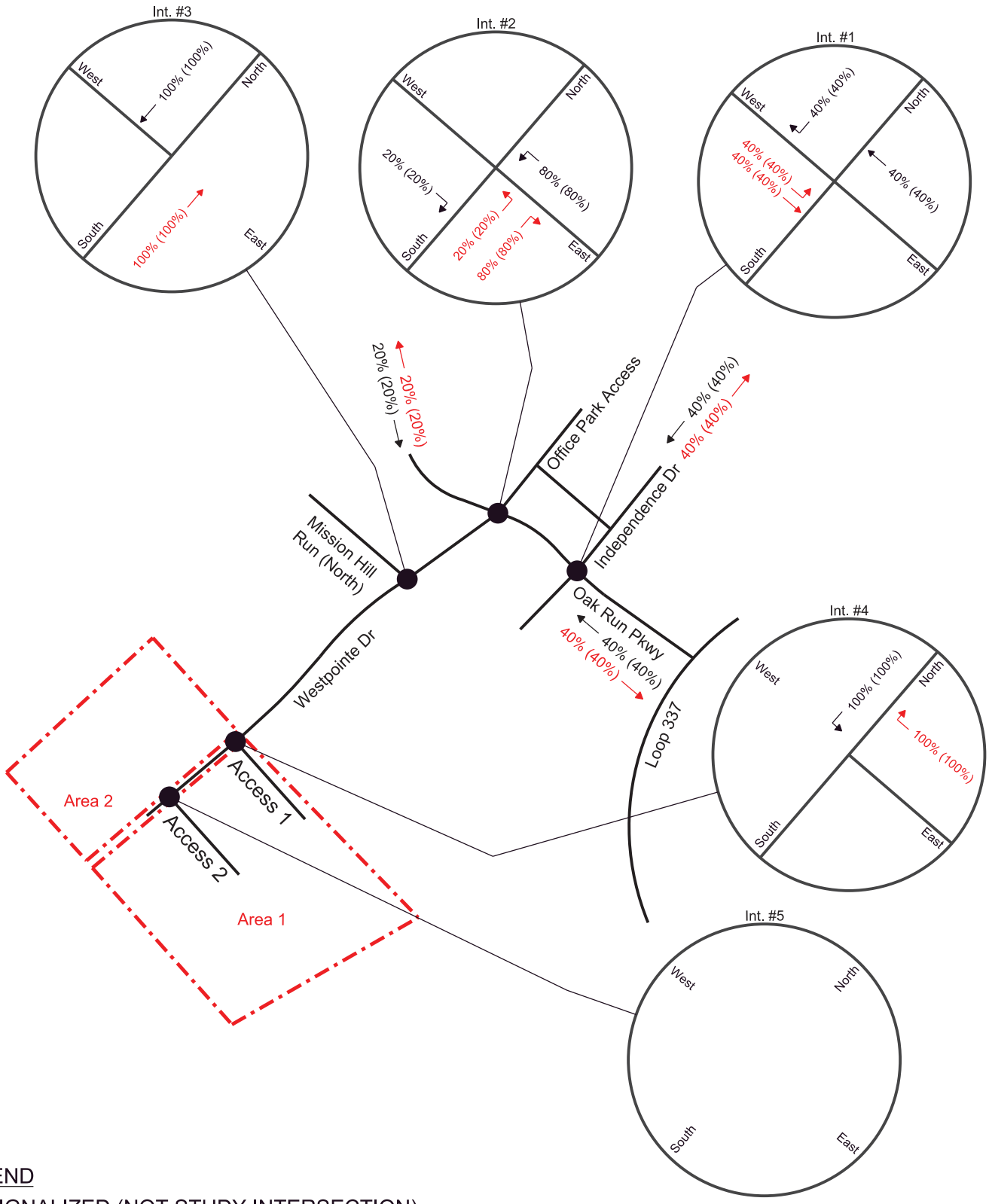
Phase 1 (2023) Site Traffic Distribution
for Area 1 (Government Office Building)

Exhibit 9



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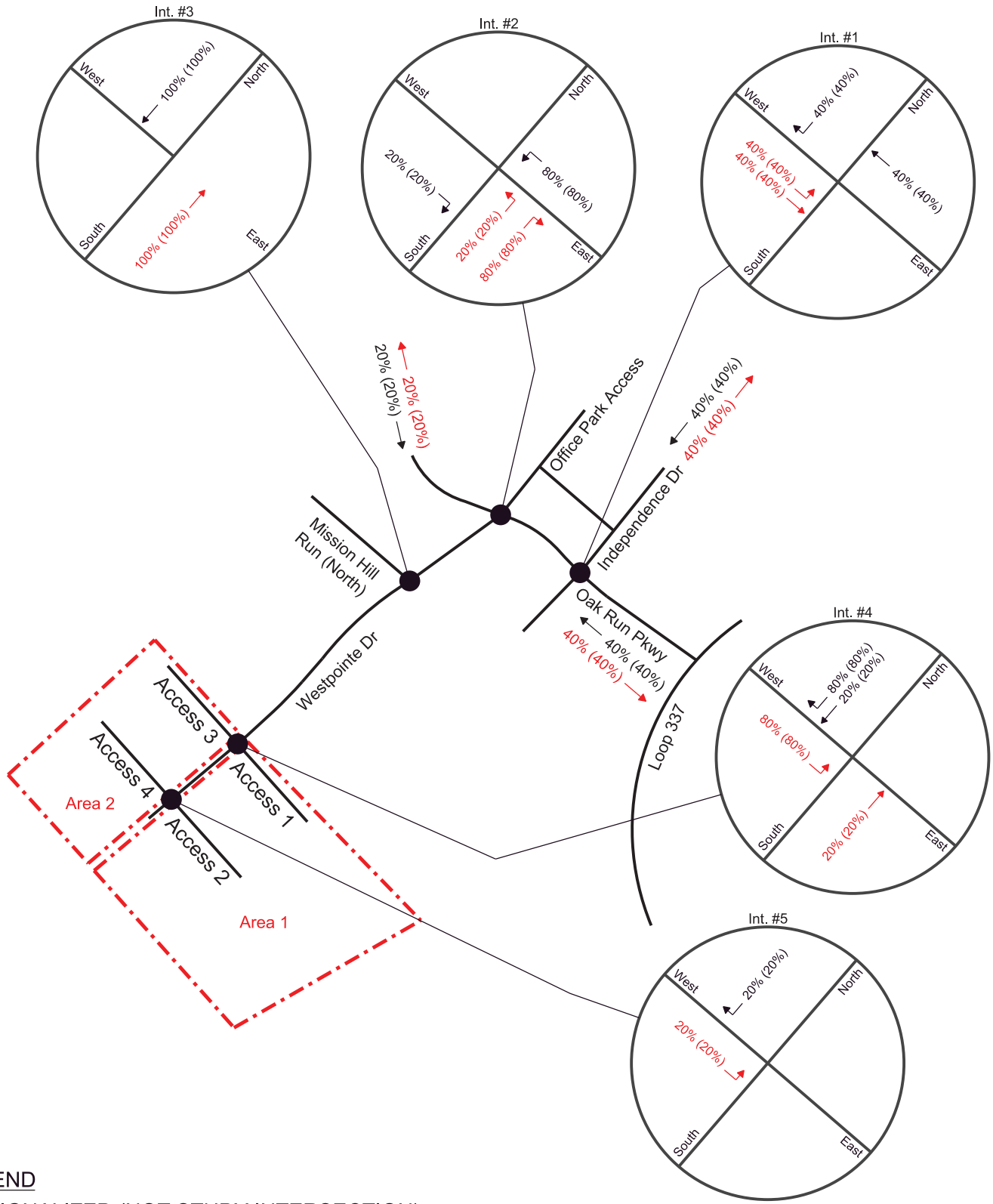
Phase 1 (2023) Site Traffic Distribution for Area 1 (Utility)

Exhibit 10



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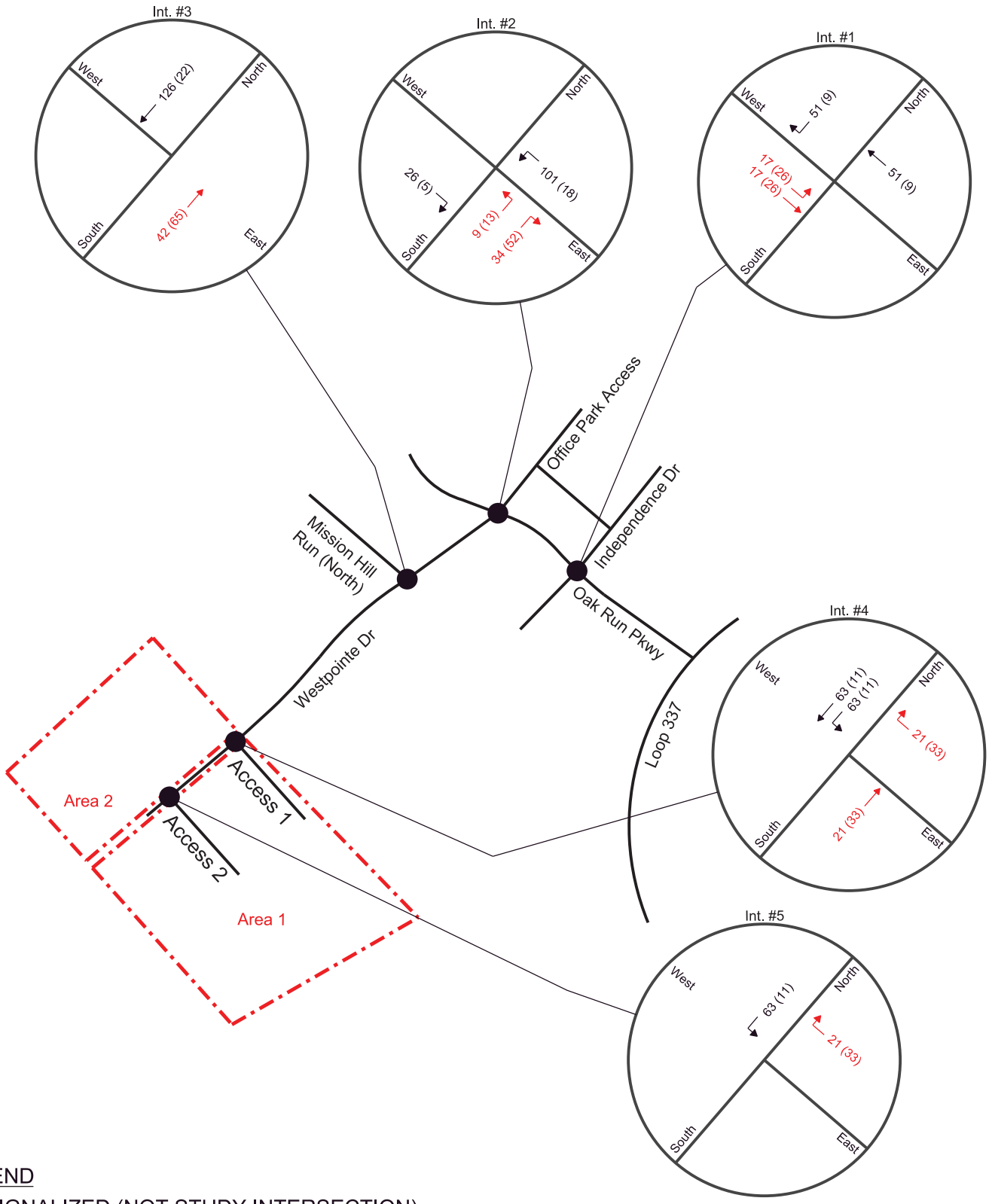
Build-Out (2025) Site Traffic Distribution
for Area 2 (Elementary School)

Exhibit 11



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) ENTERING PK. HR. VOLUMES

AM (PM) EXITING PK. HR. VOLUMES

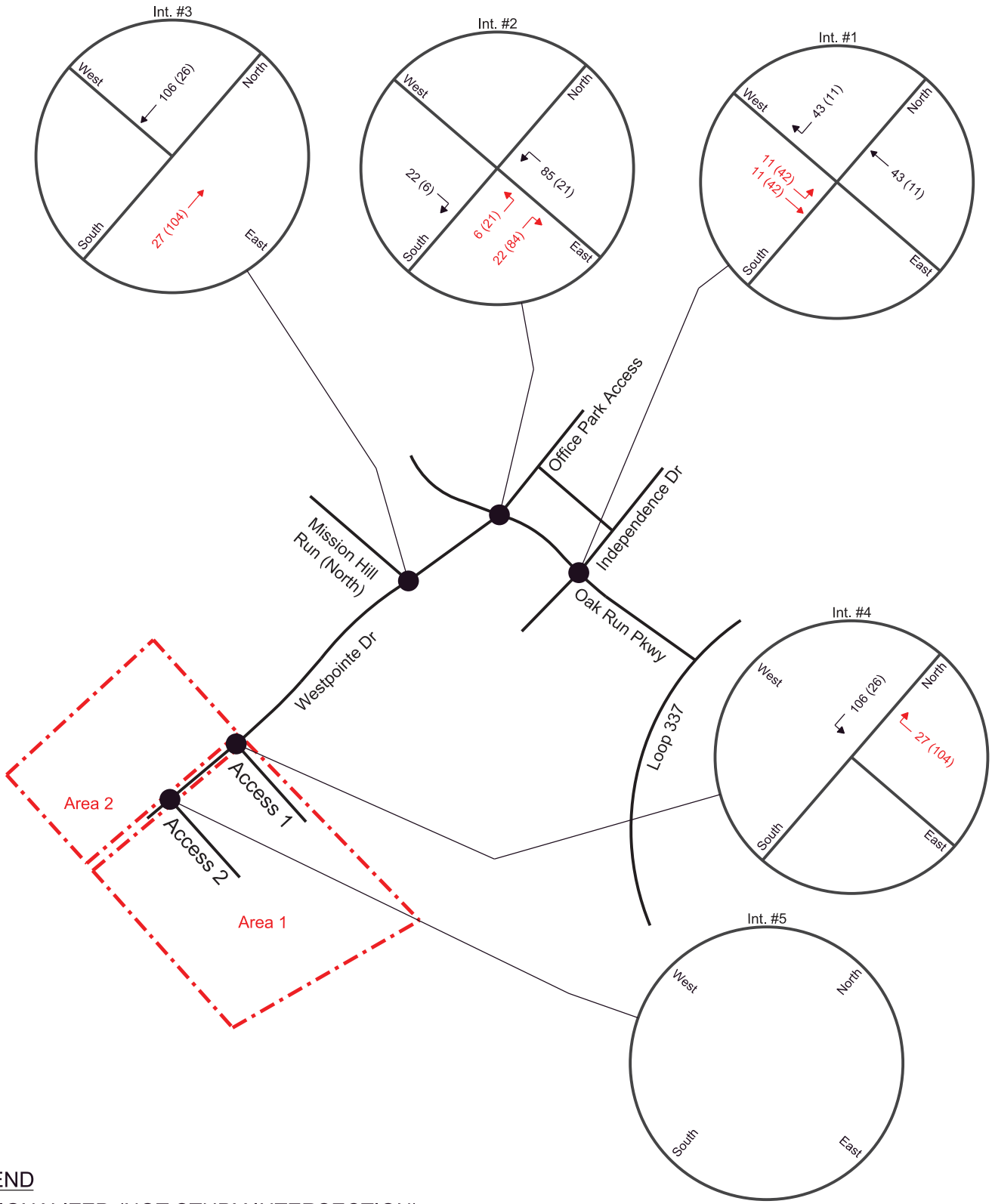
N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Phase 1 (2023) Site Traffic Volumes
for Area 1 (Government Office Building)

Exhibit 12



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) ENTERING PK. HR. VOLUMES

AM (PM) EXITING PK. HR. VOLUMES

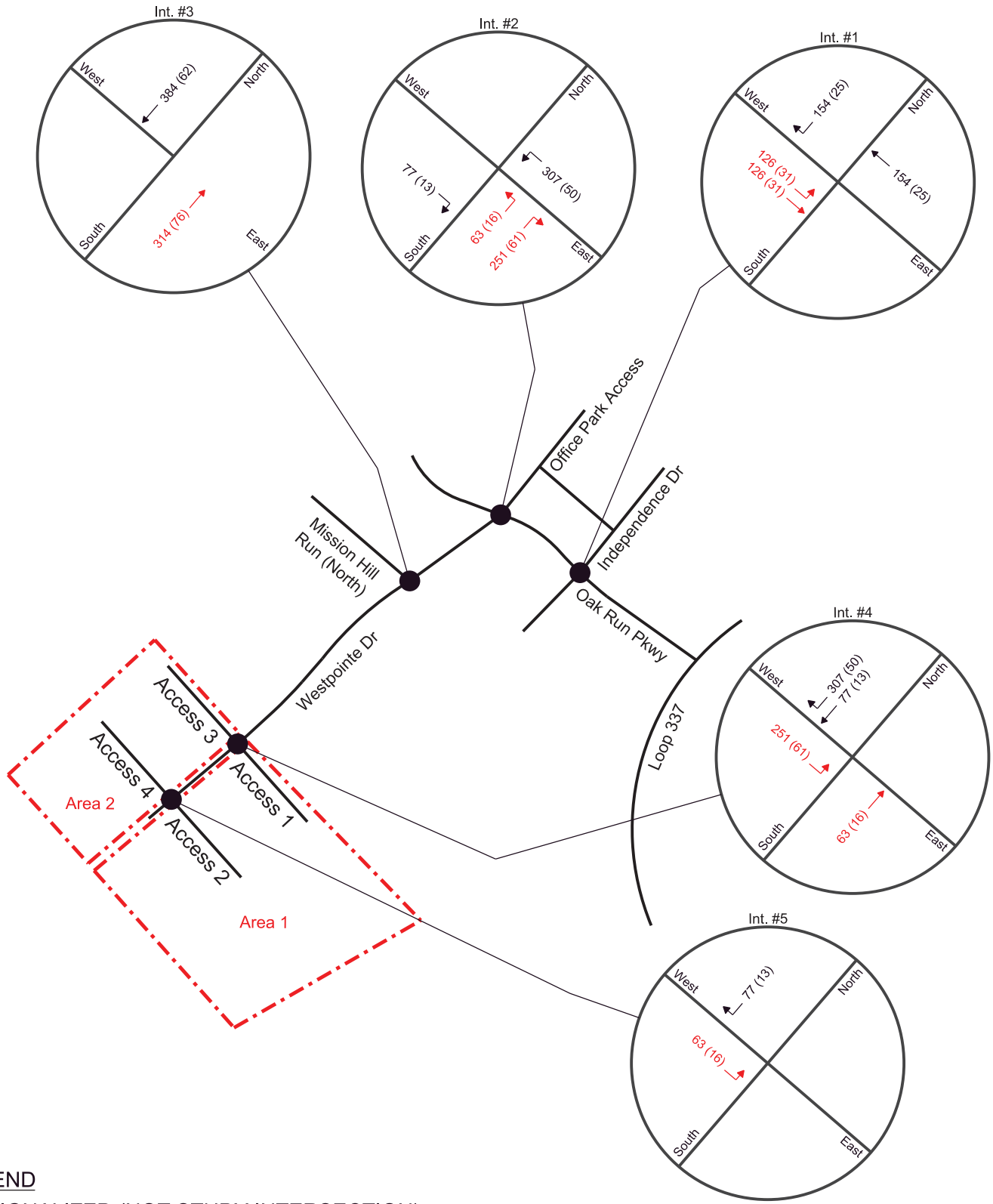
N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Phase 1 (2023) Site Traffic Volumes
for Area 1 (Utility)

Exhibit 13



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) ENTERING PK. HR. VOLUMES

AM (PM) EXITING PK. HR. VOLUMES

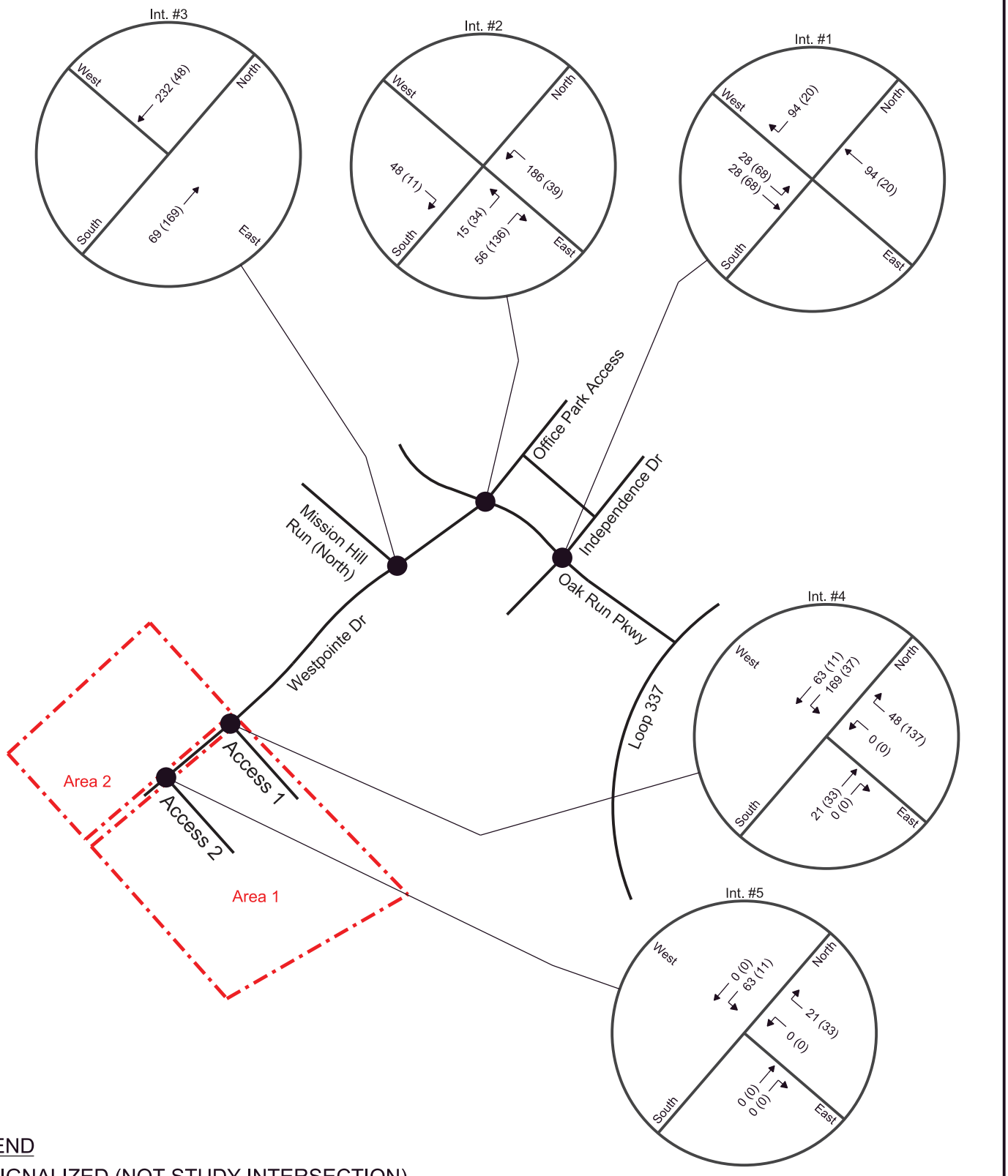
N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Build-Out (2025) Site Traffic Volumes
for Area 2 (Elementary School)

Exhibit 14



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) PEAK HOUR VOLUMES

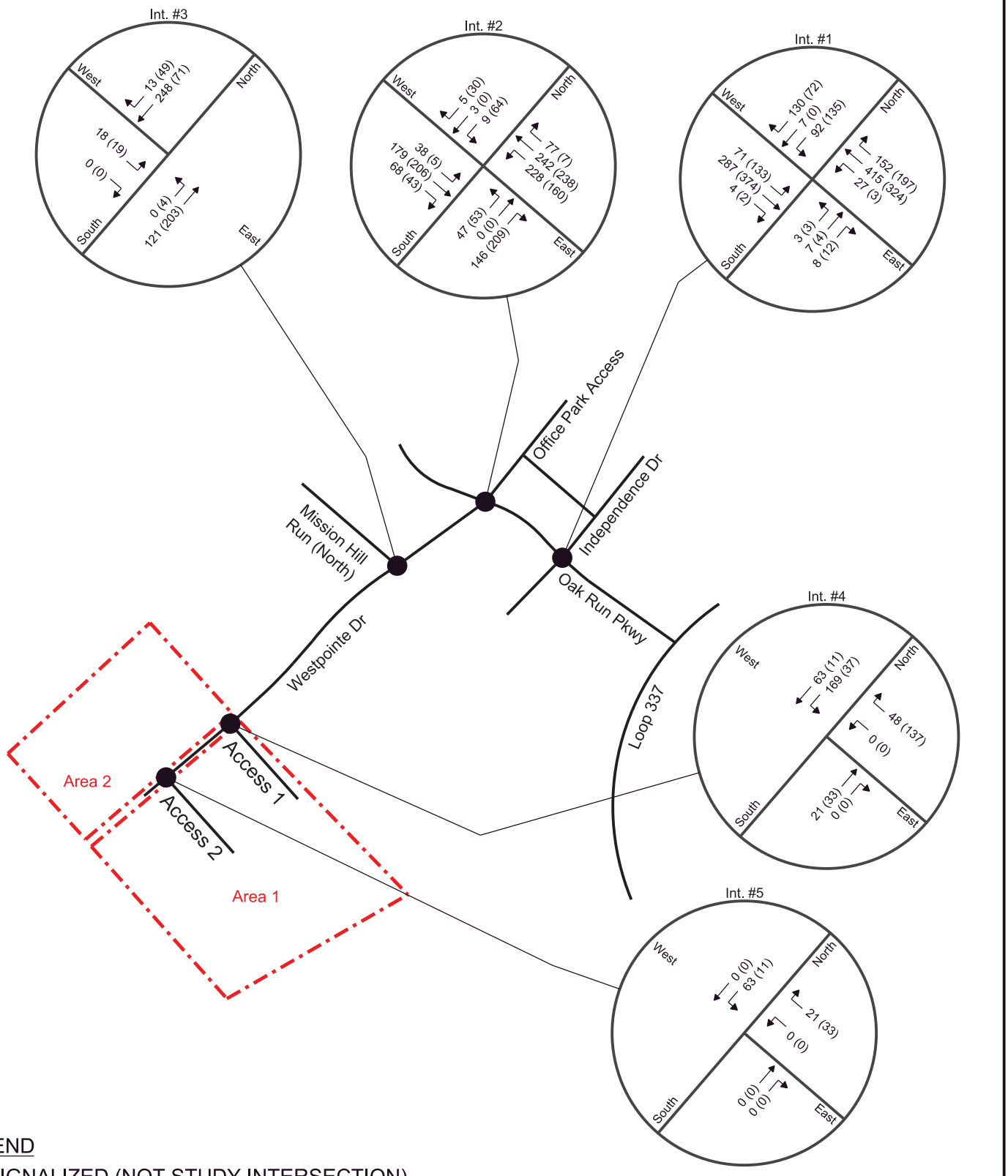
N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Phase 1 (2023) Total Site Traffic

Exhibit 15



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) PEAK HOUR VOLUMES

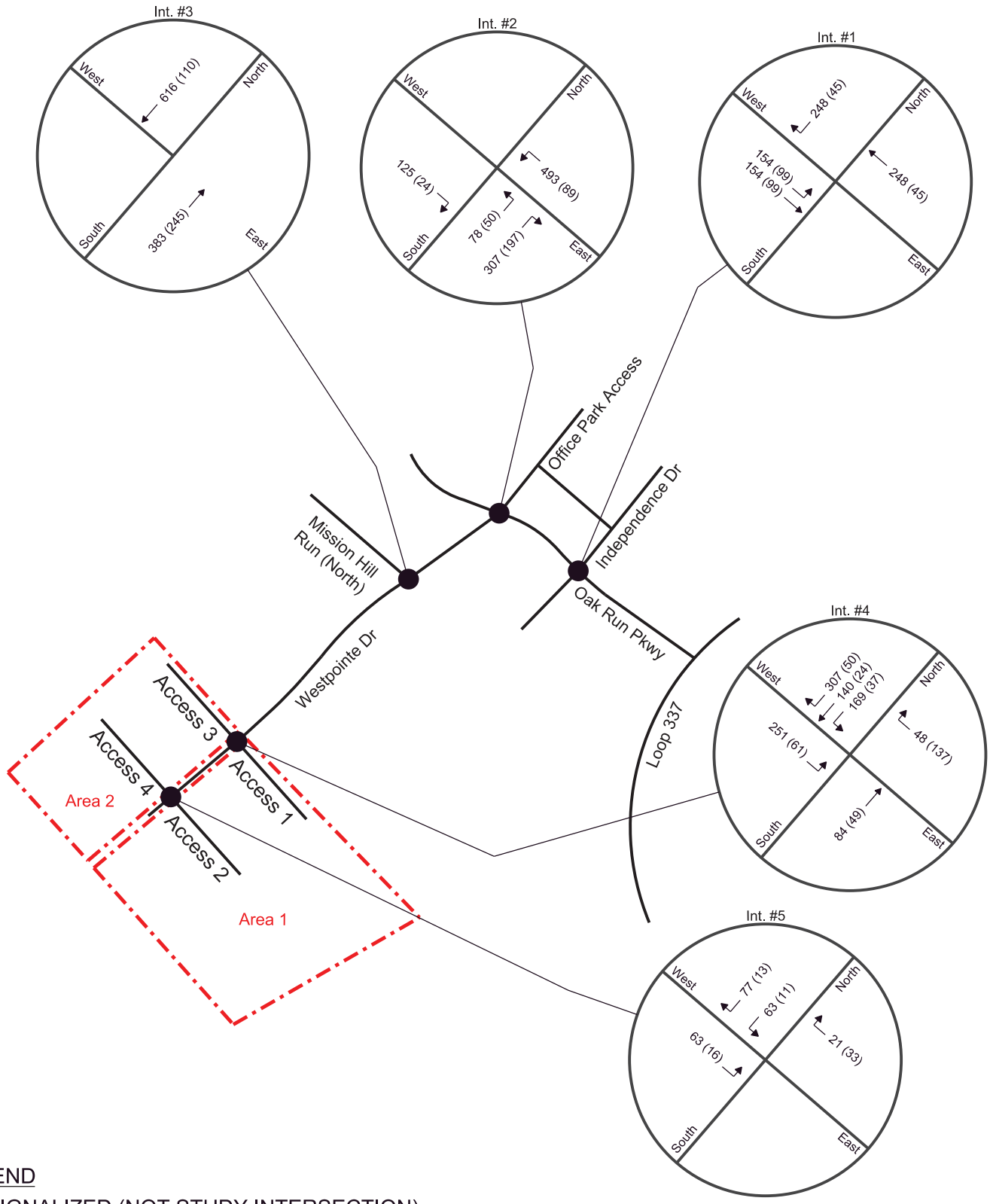
N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Phase 1 (2023) Total Traffic Condition

Exhibit 16



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) PEAK HOUR VOLUMES

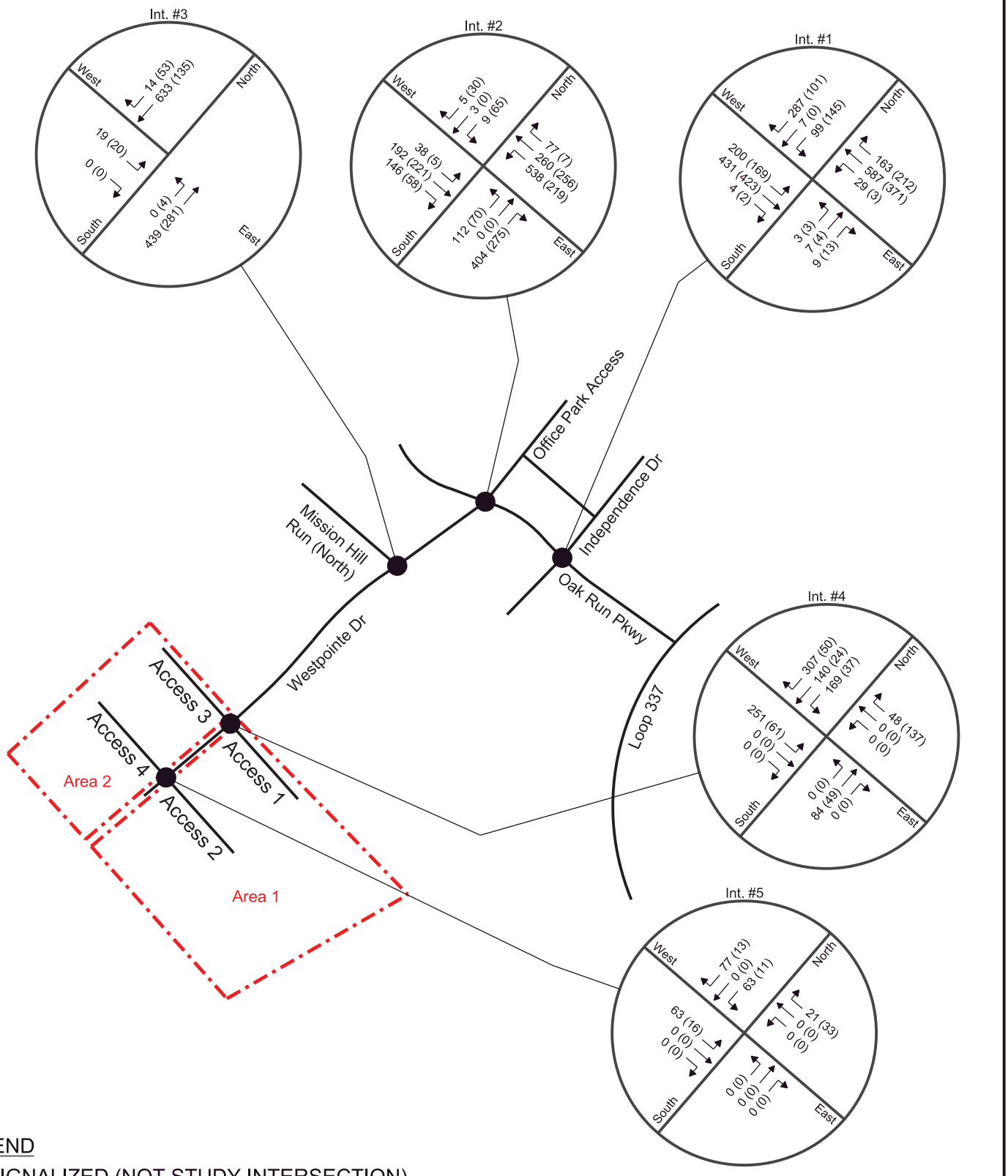
N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Build-Out (2025) Total Site Traffic

Exhibit 17



LEGEND

- ○ SIGNALIZED (NOT STUDY INTERSECTION)
- ⊗ SIGNALIZED (STUDY INTERSECTION)
- ● NOT SIGNALIZED (STUDY INTERSECTION)

AM (PM) PEAK HOUR VOLUMES

N

NOT TO SCALE

8122 DATAPOINT DRIVE
SUITE 1005
SAN ANTONIO, TEXAS 78229
210-561-5411
TBPE FIRM F-450
LEE ENGINEERING

Build-Out (2025) Total Traffic Condition

Exhibit 18

AUXILIARY LANE ANALYSIS

Right-Turn Lane Analysis

As part of this study, a right-turn auxiliary lane analysis was conducted for the following impact area intersection approaches:

- Southwest bound Independence Drive at Oak Run Parkway (Intersection 1).
- Northeast bound Westpointe Drive at Oak Run Parkway (Intersection 2).
- Southeast bound Oak Run Parkway at Westpointe Drive (Intersection 2).
- Southwest bound Westpointe Drive at Access 3 (Intersection 4).
- Southwest bound Westpointe Drive at Access 4 (Intersection 5).

Guidelines for the City of New Braunfels indicate:

- A right turn deceleration lane shall be required when the daily right-turning volume is 500 vehicles or higher or the peak hour right-turning volume is 50 vehicles or higher.

The anticipate right-turn volume for Southwest bound Independence Drive at Oak Run Parkway (Intersection 1) exceeds the threshold for requiring a right-turn deceleration lane in the Background (2023) and Background (2025) traffic conditions. This is anticipated to continue in the Phase 1 (2023) and Build-Out (2025) traffic conditions.

The right-turn volume for northwest bound Oak Run Parkway at Independence Drive (Intersection 1) exceeds the threshold for requiring a right-turn deceleration lane in the Existing (2021) traffic condition. This is anticipated to continue in the Background (2023), Background (2025), Phase 1 (2023), and Build-Out (2025) traffic conditions.

A summary of the evaluation is provided in Table 4.

Table 4: Right-Turn Lane Analysis for Oak Run Parkway at Independence Drive (Intersection 1).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Existing (2021)	SW	30	50	33 (48)	No (No)
Existing (2021)	NW	30	50	140 (182)	**YES (YES)**
Background (2023)	SW	30	50	36 (52)	No **(YES)**
Background (2023)	NW	30	50	152 (197)	**YES (YES)**
Background (2025)	SW	30	50	39 (56)	No **(YES)**
Background (2025)	NW	30	50	163 (212)	**YES (YES)**
Phase 1 (2023)	SW	30	50	130 (72)	**YES (YES)**
Phase 1 (2023)	NW	30	50	152 (197)	**YES (YES)**
Build-Out (2025)	SW	30	50	287 (101)	**YES (YES)**
Build-Out (2025)	NW	30	50	163 (212)	**YES (YES)**

The anticipated right-turn volume for Southeast bound Oak Run Parkway at Westpointe Drive (Intersection 2) exceeds the threshold for requiring a right-turn deceleration lane in the Phase 1 (2023) Traffic Condition. This is anticipated to continue in the Build-Out (2025) Traffic Condition.

The anticipate right-turn volume for northeast bound Westpointe Drive at Oak Run Parkway (Intersection 2) exceeds the threshold for requiring a right-turn deceleration lane in the Existing (2021) traffic condition. This is anticipated to continue in the Background (2023), Background (2025), Phase 1 (2023), and Build-Out (2025) Traffic Conditions.

A summary of the evaluation is provided in Table 5.

Table 5: Right-Turn Lane Analysis for Westpointe Drive at Oak Run Parkway (Intersection 2).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Existing (2021)	SE	30	50	18 (29)	No (No)
Existing (2021)	NE	30	50	83 (67)	**YES (YES)**
Background (2023)	SE	30	50	20 (32)	No (No)
Background (2023)	NE	30	50	90 (73)	**YES (YES)**
Background (2025)	SE	30	50	21 (34)	No (No)
Background (2025)	NE	30	50	97 (78)	**YES (YES)**
Phase 1 (2023)	SE	30	50	68 (43)	**YES** (No)
Phase 1 (2023)	NE	30	50	146 (209)	**YES (YES)**
Build-Out (2025)	SE	30	50	146 (58)	**YES (YES)**
Build-Out (2025)	NE	30	50	404 (275)	**YES (YES)**

The anticipated right-turn volume for Southwest bound Westpointe Drive at Access 3 (Intersection 4) exceeds the threshold for requiring a right-turn deceleration lane in the Build-Out (2025) Traffic Condition.

A summary of the evaluation is provided in Table 6

Table 6: Right-Turn Lane Analysis for Westpointe Drive at Access 3 (Intersection 4).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Build-Out (2025)	SW	30	50	307 (50)	**YES (YES)**

The anticipated right-turn volume for Southwest bound Westpointe Drive at Access 4 (Intersection 5) exceeds the threshold for requiring a right-turn deceleration lane in the Build-Out (2025) Traffic Condition.

A summary of the evaluation is provided in Table 7

Table 7: Right-Turn Lane Analysis for Westpointe Drive at Access 4 (Intersection 5).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Build-Out (2025)	SW	30	50	77 (13)	**YES** (No)

Left-Turn Auxiliary Lane Analysis
As part of this study, a left-turn auxiliary lane analysis was conducted for the following impact area intersection approaches:

- Northeast bound Westpointe Drive at Oak Run Parkway (Intersection 2).
- Southwest bound Westpointe Drive at Access 1 (Intersection 4).
- Southwest bound Westpointe Drive at Access 2 (Intersection 5).

Guidelines for the City of New Braunfels indicate:

- A left turn deceleration lane shall be required when the daily left-turning volume is 500 vehicles or higher or the peak hour left-turning volume is 50 vehicles or higher.

The anticipated northeast bound left-turn volume for Westpointe Drive at Oak Run Parkway (Intersection 2) exceeds the threshold for requiring a left-turn deceleration lane in the Phase 1 (2023) Traffic Condition.

A summary of the evaluation is provided in Table 8.

Table 8: Left-Turn Lane Analysis for Westpointe Drive at Oak Run Parkway (Intersection 2).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Existing (2021)	NE	30	50	29 (17)	No (No)
Background (2023)	NE	30	50	32 (19)	No (No)
Background (2025)	NE	30	50	34 (20)	No (No)
Phase 1 (2023)	NE	30	50	47 (53)	No **(YES)**
Build-Out (2025)	NE	30	50	112 (70)	**YES (YES)**

The anticipated southwest bound left-turn volume for Westpointe Drive at Access 1 (Intersection 4) are anticipated to exceed the threshold for requiring a left-turn declaration lane in the Phase 1 (2023) traffic condition.

A summary of the evaluation is provided in Table 9.

Table 9: Left-Turn Lane Analysis for Westpointe Drive at Access 1 (Intersection 4).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Phase 1 (2023)	SW	30	50	169 (73)	**YES (YES)**
Build-Out (2025)	SW	30	50	169 (73)	**YES (YES)**

The anticipated southwest bound left-turn volume for Westpointe Drive at Access 2 (Intersection 5) are anticipated to exceed the threshold for requiring a left-turn declaration lane in the Phase 1 (2023) traffic condition.

A summary of the evaluation is provided in Table 10.

Table 10: Left-Turn Lane Analysis for Westpointe Drive at Access 2 (Intersection 5).

Analysis Period	Approach	Speed Limit (mph)	Threshold (vph)	Volume (vph) AM (PM)	Exceeds Threshold? AM (PM)
Phase 1 (2023)	SW	30	50	63 (11)	**YES** (No)
Build-Out (2025)	SW	30	50	63 (11)	**YES** (No)

ROADWAY LINK CAPACITY ANALYSIS

Roadway capacity is defined as the volume of traffic that a roadway can accommodate based on the road's width, number of lanes, traffic control, and other factors.

For residential streets, the capacity is primarily based upon resident comfort. If the volume of traffic using a residential street is over 1,000 vehicles per day, then the street may need a residential collector cross-section instead of a residential cross section.

Additionally, City of New Braunfels guidelines indicate residential lots having direct access on a collector or major thoroughfare streets may be platted only if:

a. All lots are greater than one acre in size, have a minimum lot frontage of 100 feet, and provide for permanent vehicular turnaround on the lot to prevent backing onto the street. A note shall be placed on the plat stating a permanent vehicular turnaround shall be provided on each lot to prevent a vehicle from backing onto the street.
b. Access points which would permit vehicular access to lots less than one acre in size may be allowed if a marginal access street or easement to serve two or more lots spaced a minimum of 200 feet apart and 200 feet from an existing driveway or street is constructed. The marginal access street or easement shall be designed to prevent a vehicle from backing onto collector or major thoroughfare streets.
c. The street is classified as a residential collector with a minimum of 36 feet of pavement, has daily traffic volumes of less than 2,000 vehicles per day, and includes traffic calming measures.
d. The street is classified as a residential collector with a minimum of 40 feet of pavement, has daily traffic volumes of less than 4,000 vehicles per day, and includes traffic calming measures.

Generalized annual average daily capacity volumes for urbanized areas are provided in Table 11. These values come from the *2012 FDOT Quality/Level of Service Handbook*. These are used to conduct any roadway link capacity analyses for Collector and Arterial Streets.

Table 11. Generalized Annual Average Daily Volumes for Urbanized Areas from Florida DOT Quality/Level of Service Handbook.

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	16,800	17,700	**
4	Divided	*	37,900	39,800	**
6	Divided	*	58,400	59,900	**
8	Divided	*	78,800	80,100	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	7,300	14,800	15,600
4	Divided	*	14,500	32,400	33,800
6	Divided	*	23,300	50,000	50,900
8	Divided	*	32,000	67,300	68,100

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	2,900	7,600	19,700
50-84%	2,100	6,700	19,700	>19,700
85-100%	9,300	19,700	>19,700	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	2,800	9,500
50-84%	*	1,600	8,700	15,800
85-100%	3,800	10,700	17,400	>19,700

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
4	47,400	64,000	77,900	84,600
6	69,900	95,200	116,600	130,600
8	92,500	126,400	154,300	176,600
10	115,100	159,700	194,500	222,700
12	162,400	216,700	256,600	268,900

Urbanized

Lanes	B	C	D	E
4	45,800	61,500	74,400	79,900
6	68,100	93,000	111,800	123,300
8	91,500	123,500	148,700	166,800
10	114,800	156,000	187,100	210,300

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 20,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	8,600	17,000	24,200	33,300
4	Divided	36,700	51,800	65,600	72,600
6	Divided	55,000	77,700	98,300	108,800

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* **Cannot be achieved using table input value defaults.**

** **Not applicable for that level of service letter grade.** For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

Residential Street Analysis
For a single-family development, dwelling units should be distributed such than no more than 105 units are using a single segment of residential street. The estimated daily trips generated by 105 single-family detached housing lots is 992 vehicles per day. At 106 dwelling units, the estimated daily trips become 1,001 vehicles per day, which is higher than the 1,000 vehicles per day capacity.

Within the proposed development, the dwelling units appear to be distributed such that the residential streets segments will have fewer than 1,000 vehicles per day. Therefore, residential street cross-sections should be appropriate for these roadways.

Collector and Local Street Link Capacity Analysis
Roadway link capacity analysis was performed for:

- Independence Drive.
- Oak Run Parkway.
- Westpointe Drive.

The daily volume for each road was estimated based upon the highest peak hour traffic flow along each segment of the roadway. These values can be found in Appendix E and Appendix F. These values presume the highest peak hour volume represents 10 percent of the daily traffic.

Independence Drive
The roadway link capacity analysis for Independence Drive shows the anticipated traffic volumes fall above the threshold for Level of Service D in the Build-Out (2025) traffic condition. This suggests the potential for level of service issues at intersections along the roadway as a result of insufficient link capacity when compared to traffic demand.

Mitigations for intersection level of service issues are considered within the Capacity Analysis chapter of this report.

A summary of the link capacity analysis is provided in Table 12.

Table 12. Link Capacity Analysis for Independence Drive.

Independence Drive (Major Collector): Northeast of Oak Run Parkway								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	2	Exclusive Left	-5%	6,935	14,060	4,180	C or Better
Background (2023)	30	2	Exclusive Left	-5%	6,935	14,060	4,530	C or Better
Background (2025)	30	2	Exclusive Left	-5%	6,935	14,060	4,870	C or Better
Phase 1 (2023)	30	2	Exclusive Left	-5%	6,935	14,060	5,410	C or Better
Build-Out (2025)	30	2	Exclusive Left	-5%	6,935	14,060	7,630	D
Independence Drive (Local Street): South West of Oak Run Parkway								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	2	Undivided	-30%	5,110	10,360	490	C or Better
Background (2023)	30	2	Undivided	-30%	5,110	10,360	560	C or Better
Background (2025)	30	2	Undivided	-30%	5,110	10,360	590	C or Better
Phase 1 (2023)	30	2	Undivided	-30%	5,110	10,360	560	C or Better
Build-Out (2025)	30	2	Undivided	-30%	5,110	10,360	590	C or Better

Oak Run Parkway

The roadway link capacity analysis for Oak Run Parkway shows the anticipated traffic volumes fall above the threshold for Level of Service D in the Build-Out (2025) traffic condition. This suggests the potential for level of service issues at intersections along the roadway as a result of insufficient link capacity when compared to traffic demand.

Mitigations for intersection level of service issues are considered within the Capacity Analysis chapter of this report.

A summary of the link capacity analysis is provided in Table 13.

Table 13. Link Capacity Analysis for Oak Run Parkway.

Oak Run Parkway (Major Collector): Southeast of Independence Drive								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	4	Divided	-10%	13,050	29,160	8,270	C or Better
Background (2023)	30	4	Divided	-10%	13,050	29,160	9,570	C or Better
Background (2025)	30	4	Divided	-10%	13,050	29,160	10,230	C or Better
Phase 1 (2023)	30	4	Divided	-10%	13,050	29,160	10,450	C or Better
Build-Out (2025)	30	4	Divided	-10%	13,050	29,160	13,180	D
Oak Run Parkway (Major Collector): Independence Drive to Westpointe Drive								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	4	Divided	-10%	13,050	29,160	6,160	C or Better
Background (2023)	30	4	Divided	-10%	13,050	29,160	7,290	C or Better
Background (2025)	30	4	Divided	-10%	13,050	29,160	7,780	C or Better
Phase 1 (2023)	30	4	Divided	-10%	13,050	29,160	9,070	C or Better
Build-Out (2025)	30	4	Divided	-10%	13,050	29,160	15,090	D
Oak Run Parkway (Major Collector): Northwest of Westpointe Drive								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	4	Divided	-10%	13,050	29,160	4,410	C or Better
Background (2023)	30	4	Divided	-10%	13,050	29,160	5,110	C or Better
Background (2025)	30	4	Divided	-10%	13,050	29,160	5,460	C or Better
Phase 1 (2023)	30	4	Divided	-10%	13,050	29,160	5,320	C or Better
Build-Out (2025)	30	4	Divided	-10%	13,050	29,160	6,410	C or Better

Westpointe Drive

The roadway link capacity analysis for Oak Run Parkway shows the anticipated traffic volumes fall above the threshold for Level of Service D in the Build-Out (2025) traffic condition. This suggests the potential for level of service issues at intersections along the roadway as a result of insufficient link capacity when compared to traffic demand.

Mitigations for intersection level of service issues are considered within the Capacity Analysis chapter of this report.

A summary of the link capacity analysis is provided in Table 14.

Table 14. Link Capacity Analysis for Westpointe Drive.

Westpointe Drive (Local Street): Oak Run Parkway to Mission Hill Run (North)								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	2	Undivided	-30%	5,110	10,360	2,250	C or Better
Background (2023)	30	2	Undivided	-30%	5,110	10,360	2,450	C or Better
Background (2025)	30	2	Undivided	-30%	5,110	10,360	2,620	C or Better
Phase 1 (2023)	30	2	Undivided	-30%	5,110	10,360	4,920	C or Better
Build-Out (2025)	30	2	Undivided	-30%	5,110	10,360	12,030	E or F
Westpointe Drive (Local Street): Mission Hill Run (North) to Access 1/Access 3								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Existing 2020	30	2	Undivided	-30%	5,110	10,360	620	C or Better
Background (2023)	30	2	Undivided	-30%	5,110	10,360	680	C or Better
Background (2025)	30	2	Undivided	-30%	5,110	10,360	730	C or Better
Phase 1 (2023)	30	2	Undivided	-30%	5,110	10,360	3,690	C or Better
Build-Out (2025)	30	2	Undivided	-30%	5,110	10,360	10,720	E or F
Westpointe Drive (Local Street): Access 1/Access 3 to Access 2/Access 4								
Scenario	**Speed Limit**	**Thru Lanes**	**Turn Lanes**	**Total Adjustments**	**LOS C Threshold**	**LOS D Threshold**	**ADT**	**LOS**
Phase 1 (2023)	30	2	Undivided	-30%	5,110	10,360	840	C or Better
Build-Out (2025)	30	2	Undivided	-30%	5,110	10,360	2,240	C or Better

INTERSECTION CAPACITY ANALYSIS

Intersection Level of Service (LOS) is a qualitative measure of capacity and operating conditions and is directly related to vehicle delay.

LOS criteria for signalized intersections are shown in Table 15. LOS is given as a letter designation ranging from A to F, with LOS A representing very short delay (less than 10 seconds of average control delay per vehicle) and LOS F representing very long delay (more than 80 seconds of average control delay per vehicle).

LOS criteria for unsignalized intersections are shown in Table 16.

Within the City of New Braunfels, LOS C is considered the minimum acceptable condition for an intersection before improvements might be necessary in order to mitigate the impacts of site traffic.

Capacity analyses were conducted for the following scenarios:

- Phase 1 (2023) Total Traffic Condition.
- Build-Out (2025) Total Traffic Condition.

Capacity analysis results and mitigation analyses are presented by intersection for:

- Oak Run Parkway at Independence Drive (Intersection 1).
- Oak Run Parkway at Westpointe Drive (Intersection 2).
- Westpointe Drive at Mission Hill (Intersection 3).
- Westpointe Drive at Access 1/Access 3 (Intersection 4).
- Westpointe Drive at Access 2/Access 4 (Intersection 5).

The intersection capacity analyses were conducted using HCM methodologies included within the *Synchro 10* traffic analysis software package. The Synchro Output files are provided in Appendix G.

The Existing (2021) evaluations use the Existing (2021) Impact Area Lane Configuration and Existing (2021) Traffic Volumes.

The Background (2023) and Background (2025) evaluations use the Existing (2021) Impact Area Lane Configuration and Background (2023) or Background (2025) traffic volumes.

The Phase 1 (2023) evaluations use the Phase 1 (2023) Impact Area Lane Configuration and Phase 1 (2023) Total Traffic Condition Volumes.

The Build-Out (2025) evaluations use the Build-Out (2025) Impact Area Lane Configuration and the Build-Out (2025) Total Traffic Condition Volumes.

Table 15. Level of Service Criteria for Signalized Intersections.

Level-of-Service (LOS)	Average Control Delay (seconds/vehicle)	Description
A	≤ 10.0	Very low vehicle delays, free flow, signal progression extremely favorable, most vehicles arrive during given signal phase.
B	10.1 to 20.0	Good signal progression, more vehicles stop and experience higher delays than for LOS A.
C	20.1 to 35.0	Stable flow, fair signal progression, significant number of vehicles stop at signals.
D	35.1 to 55.0	Congestion noticeable, longer delays and unfavorable signal progression, many vehicles stop at signals.
E	55.1 to 80.0	Limit of acceptable delay, unstable flow, poor signal progression, traffic near roadway capacity, frequent cycle failures.
F	> 80.0	Unacceptable delays, extremely unstable flow and congestion, traffic exceeds roadway capacity, stop-and-go conditions.

SOURCE: Highway Capacity Manual, 6th Edition, Transportation Research Board, 2016

Table 16. Level of Service Criteria for Unsignalized Intersections.

Level-of-Service (LOS)	Average Control Delay (seconds/vehicle)	Description
A	≤ 10.0	No delays at intersections with continuous flow of traffic. Uncongested operations: high frequency of long gaps available for all left and right turning traffic. No observable queues.
B	10.1 to 15.0	No delays at intersections with continuous flow of traffic. Uncongested operations: high frequency of long gaps available for all left and right turning traffic. No observable queues.
C	15.1 to 25.0	Moderate delays at intersections with satisfactory to good traffic flow. Light congestion; infrequent backups on critical approaches.
D	25.1 to 35.0	Increased probability of delays along every approach. Significant congestion on critical approaches, but intersection functional. No standing long lines formed.
E	35.1 to 50.0	Heavy traffic flow condition. Heavy delays probable. No available gaps for cross-street traffic or main street turning traffic. Limit of stable flow.
F	> 50.0	Unstable traffic flow. Heavy congestion. Traffic moves in forced flow condition. Average delays greater than one minute highly probable. Total breakdown.

SOURCE: Highway Capacity Manual, 6th Edition, Transportation Research Board, 2016

Oak Run Parkway at Independence Drive (Intersection 1)
The capacity analysis results for Oak Run Parkway at Independence Drive (Intersection 1) indicate the westbound approach of Oak Run Parkway is anticipated to operate at level of service D in the Phase 1 (2023) Traffic Condition. As shown in the right-turn auxiliary lane analysis for Intersection 1 (Table 4), the right-turn volume on the northwest bound approach exceeds the threshold for a right-turn auxiliary lane in the Existing (2021) Traffic Condition. The capacity analysis results indicate that constructing this right-turn lane would result in level of service C in the Phase 1 (2023) Traffic Condition.

The capacity analysis results for Oak Run Parkway at Independence Drive (Intersection 1) indicate that the intersection is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there is a need for increased regional connectivity or traffic signalization prior to the construction of the school scenario considered within this report. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

A summary of the analysis is provided in Table 17.

Table 17. Capacity Analysis Results for Oak Run Parkway at Independence Drive (Intersection 1).

Scenario	Peak Hour	Intersection	EB	WB	NB	SB
Existing (2021) All-Way Stop	AM	11.5 (B)	10.9 (B)	12.2 (B)	9.9 (A)	11.0 (B)
	PM	12.3 (B)	11.0 (B)	13.4 (B)	9.9 (A)	11.8 (B)
Background (2023) All-Way Stop	AM	13.6 (B)	12.0 (B)	15.1 (C)	10.6 (B)	11.9 (B)
	PM	14.0 (B)	12.4 (B)	15.7 (C)	10.6 (B)	12.8 (B)
Background (2025) All-Way Stop	AM	14.8 (B)	12.7 (B)	16.8 (C)	10.9 (B)	12.4 (B)
	PM	15.3 (C)	13.1 (B)	17.8 (C)	10.9 (B)	13.5 (B)
Phase 1 (2023) All-Way Stop	AM	20.0 (C)	14.9 (B)	25.7 (D)	12.1 (B)	13.1 (B)
	PM	17.0 (C)	15.0 (B)	20.4 (C)	11.6 (B)	14.1 (B)
Phase 1 (2023) Mitigation 1 - NW Right-Turn Lane	AM	15.6 (C)	14.8 (B)	16.9 (C)	11.9 (B)	13.9 (B)
	PM	14.1 (B)	14.8 (B)	13.6 (B)	11.4 (B)	13.8 (B)
Build-Out (2025) All-Way Stop	AM	81.6 (F)	33.5 (D)	140.3 (F)	15.8 (C)	46.0 (E)
	PM	22.2 (C)	18.2 (C)	29.4 (D)	12.5 (B)	15.6 (C)

[1] HCM methodologies discourage the use of intersection-wide delay for 1-Way & 2-Way Stop Control Analysis.
[2] Delay in seconds/vehicle (Level of Service)

Oak Run Parkway at Westpointe Drive/Office Park Access (Intersection 2)

The capacity analysis results for Oak Run Parkway at Westpointe Drive (Intersection 2) indicate the intersection and all approaches are anticipated to operate at level of service C or better in the Phase 1 (2023) traffic condition.

The capacity analysis results for Oak Run Parkway at Westpointe Drive (Intersection 2) indicate that the intersection is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there is a need for increased regional connectivity or traffic signalization prior to the construction of the school scenario considered within this report. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

A summary of the analysis is provided in Table 18.

Table 18. Capacity Analysis Results for Oak Run Parkway at Westpointe Drive/Office Park Access (Intersection 2).

Scenario	Peak Hour	Intersection	EB	WB	NB	SB
Existing (2021) All-Way Stop	AM	9.3 (A)	9.4 (A)	9.2 (A)	9.5 (A)	8.8 (A)
	PM	9.2 (A)	9.4 (A)	9.1 (A)	9.0 (A)	9.2 (A)
Background (2023) All-Way Stop	AM	10.2 (B)	10.6 (B)	9.9 (A)	10.4 (B)	9.6 (A)
	PM	10.2 (B)	10.4 (B)	10.0 (A)	9.7 (A)	10.6 (B)
Background (2025) All-Way Stop	AM	10.5 (B)	10.9 (B)	10.1 (B)	10.8 (B)	9.7 (A)
	PM	10.4 (B)	10.7 (B)	10.3 (B)	10.0 (A)	10.8 (B)
Phase 1 (2023) All-Way Stop	AM	13.2 (B)	13.0 (B)	13.0 (B)	13.2 (B)	10.8 (B)
	PM	13.3 (B)	12.7 (B)	12.3 (B)	15.7 (C)	12.2 (B)
Build-Out (2025) All-Way Stop	AM	127.2 (F)	26.3 (D)	148.3 (F)	168.8 (F)	14.2 (B)
	PM	17.8 (C)	14.9 (B)	15.2 (C)	25.0 (C)	13.5 (B)

[1] HCM methodologies discourage the use of intersection-wide delay for 1-Way & 2-Way Stop Control Analysis.
[2] Delay in seconds/vehicle (Level of Service)

Westpointe Drive at Mission Hill (Intersection 3)

The capacity analysis results for Westpointe Drive at Mission Hill (Intersection 3) indicate all approaches are anticipated to operate at level of service C or better in the Phase 1 (2023) traffic condition.

The capacity analysis results for Westpointe Drive at Mission Hill (Intersection 3) indicate that the eastbound approached is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there is a need for increased regional connectivity prior to the construction of the school scenario considered within this report. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

A summary of the analysis is provided in Table 19.

Table 19. Capacity Analysis Results for Westpointe Drive at Mission Hill (Intersection 3).

Scenario	Peak Hour	Intersection	EB	WB	NB	SB
Existing (2021) All-Way Stop	AM	--	9.1 (A)	--	0.0 (A)	0.0 (A)
	PM	--	9.1 (A)	--	0.7 (A)	0.0 (A)
Background (2023) All-Way Stop	AM	--	9.2 (A)	--	0.0 (A)	0.0 (A)
	PM	--	9.2 (A)	--	0.8 (A)	0.0 (A)
Background (2025) All-Way Stop	AM	--	9.2 (A)	--	0.0 (A)	0.0 (A)
	PM	--	9.2 (A)	--	0.7 (A)	0.0 (A)
Phase 1 (2023) All-Way Stop	AM	--	12.4 (B)	--	0.0 (A)	0.0 (A)
	PM	--	11.7 (B)	--	0.2 (A)	0.0 (A)
Build-Out (2025) All-Way Stop	AM	--	36.9 (E)	--	0.0 (A)	0.0 (A)
	PM	--	13.2 (B)	--	0.1 (A)	0.0 (A)

[1] HCM methodologies discourage the use of intersection-wide delay for 1-Way & 2-Way Stop Control Analysis.
[2] Delay in seconds/vehicle (Level of Service)

Westpointe Drive at Access 1/Access 3 (Intersection 4)

The capacity analysis results for Westpointe Drive at Access 1/Access 3 (Intersection 4) indicate all approaches are anticipated to operate at level of service C or better in the Phase 1 (2023) traffic condition.

The capacity analysis results for Westpointe Drive at Access 1/Access 3 (Intersection 4) indicate that the eastbound approached is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there could be a need for additional mitigations at this intersection if the school were to align their parent drop-off lot with the Utilities Campus main access. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

A summary of the analysis is provided in Table 20.

Table 20. Capacity Analysis Results for Westpointe Drive at Access 1/Access 3 (Intersection 4).

Scenario	Peak Hour	Intersection	EB	WB	NB	SB
Phase 1 (2023) All-Way Stop	AM	--	--	9.0 (A)	0.0 (A)	5.9 (A)
	PM	--	--	9.8 (A)	0.0 (A)	6.1 (A)
Build-Out (2025) All-Way Stop	AM	--	56.7 (F)	9.1 (A)	0.0 (A)	2.2 (A)
	PM	--	12.6 (B)	0.6 (A)	0.0 (A)	2.6 (A)

[1] HCM methodologies discourage the use of intersection-wide delay for 1-Way & 2-Way Stop Control Analysis.
[2] Delay in seconds/vehicle (Level of Service)

Westpointe Drive at Access 2/Access 4 (Intersection 5)

The capacity analysis results for Westpointe Drive at Access 2/Access 4 (Intersection 5) indicate all approaches are anticipated to operate at level of service C or better in the Build-Out (2025) traffic condition. From a high-level planning perspective, this suggests it could be okay to align the bus drop-off and teach parking access point with the Utility Campus Employee lot access. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

A summary of the analysis is provided in Table 21.

Table 21. Capacity Analysis Results for Westpointe Drive at Access 2/Access 4 (Intersection 5).

Scenario	Peak Hour	Intersection	EB	WB	NB	SB
Build-Out (2025) All-Way Stop	AM	--	10.2 (B)	8.4 (A)	0.0 (A)	3.3 (A)
	PM	--	9.5 (A)	8.8 (A)	0.0 (A)	3.5 (A)

[1] HCM methodologies discourage the use of intersection-wide delay for 1-Way & 2-Way Stop Control Analysis.
[2] Delay in seconds/vehicle (Level of Service)

NEIGHBORHOOD TRAFFIC PLAN

A neighborhood traffic plan provides means for improving quality of life within a neighborhood through design features and traffic control strategies. For this analysis, the design features and control strategies considered are:

- Pavement Markings.
- Regional Connectivity.

Note: Street names within this Traffic management Plan come from this report or the information provided in Appendix A. These names have the potential to change.

Pavement Markings

The existing Westpointe Drive as a paved width of approximately 33 feet and is marked a two-lane roadway with 1 lane in each direction. The link capacity analysis indicates that this is sufficient in the Phase 1 (2023) Traffic Condition. If desired, the City could add shoulders to reduce the width of the travel lanes. This space could be used for bicycles or on-street parking.

Regional Connectivity

The link capacity analysis and capacity analysis results indicate that the Build-Out (2025) school scenario considered within this report would result in level of service D or worse on many intersection approaches. From a high-level planning perspective, this suggests there is a need for increased regional connectivity prior to the construction of the school scenario considered within this report.

CONCLUSIONS

The proposed Phase 1 (2023) consists of up to 50,000 square feet of Government Office Building (ITE Code 730) and up to 57,000 square feet of Utility (ITE Code 170).

The Build-Out (2025) condition includes the above along with up to 100,000 square feet of Elementary School (ITE Code 520). *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only.*

For Phase 1 (2023), two access points are proposed:

- Access 1: A full access intersection that will connect with an extended Westpointe Drive approximately 2,900 feet southwest of Oak Run Parkway. This is the main access for the Utilities campus and will be used by Utility Vehicles, Employees, and Visitors.
- Access 2: A full access intersection that will connect with an extended Westpointe Drive approximately 3,400 feet southwest of Oak Run Parkway. This access will only be used by Employees.

For Build-Out (2025), two access points are considered.

- Access 3: The fourth leg of a full access intersection that connects with an extended Westpointe Drive approximately 2,900 feet southwest of Oak Run Parkway. This planning level evaluation presumes this would be the parent pick-up and drop-off access.
- Access 4: The fourth leg of a full access intersection that connects with an extended Westpointe Drive approximately 3,400 feet southwest of Oak Run Parkway. This planning level evaluation presumes this would be the teacher and school bus access.

Phase 1 (2023) of the proposed development is anticipated to generate 299 trips in the AM peak hour and 216 trips in the PM peak hour.

The Build-out (2025) scenario considered within this report would generate an additional 614 AM Peak hour trips and 353 PM peak hour trips.

Auxiliary Lane Analysis

- The anticipate right-turn volume for Southwest bound Independence Drive at Oak Run Parkway (Intersection 1) exceeds the threshold for requiring a right-turn deceleration lane in the Background (2023) and Background (2025) traffic conditions.
- The right-turn volume for northwest bound Oak Run Parkway at Independence Drive (Intersection 1) exceeds the threshold for requiring a right-turn deceleration lane in the Existing (2021) traffic condition.
- The anticipated right-turn volume for Southeast bound Oak Run Parkway at Westpointe Drive (Intersection 2) exceeds the threshold for requiring a right-turn deceleration lane in the Phase 1 (2023) Traffic Condition.

- The anticipate right-turn volume for northeast bound Westpointe Drive at Oak Run Parkway (Intersection 2) exceeds the threshold for requiring a right-turn deceleration lane in the Existing (2021) traffic condition.
- The anticipated right-turn volume for Southwest bound Westpointe Drive at Access 3 (Intersection 4) exceeds the threshold for requiring a right-turn deceleration lane in the Build-Out (2025) Traffic Condition.
- The anticipated right-turn volume for Southwest bound Westpointe Drive at Access 4 (Intersection 5) exceeds the threshold for requiring a right-turn deceleration lane in the Build-Out (2025) Traffic Condition.
- The anticipated northeast bound left-turn volume for Westpointe Drive at Oak Run Parkway (Intersection 2) exceeds the threshold for requiring a left-turn deceleration lane in the Phase 1 (2023) Traffic Condition.
- The anticipated southwest bound left-turn volume for Westpointe Drive at Access 1 (Intersection 4) are anticipated to exceed the threshold for requiring a left-turn declaration lane in the Phase 1 (2023) traffic condition.
- The anticipated southwest bound left-turn volume for Westpointe Drive at Access 2 (Intersection 5) are anticipated to exceed the threshold for requiring a left-turn declaration lane in the Phase 1 (2023) traffic condition.
- No other left or right turn volumes exceed the City of New Braunfels threshold guideline for requiring an auxiliary lane.

Link Capacity Analysis

- The roadway link capacity analysis for Independence Drive shows the anticipated traffic volumes fall above the threshold for Level of Service D in the Build-Out (2025) traffic condition. This suggests the potential for level of service issues at intersections along the roadway as a result of insufficient link capacity when compared to traffic demand.
- The roadway link capacity analysis for Oak Run Parkway shows the anticipated traffic volumes fall above the threshold for Level of Service D in the Build-Out (2025) traffic condition. This suggests the potential for level of service issues at intersections along the roadway as a result of insufficient link capacity when compared to traffic demand.
- The roadway link capacity analysis for Oak Run Parkway shows the anticipated traffic volumes fall above the threshold for Level of Service D in the Build-Out (2025) traffic condition. This suggests the potential for level of service issues at intersections along the roadway as a result of insufficient link capacity when compared to traffic demand.

Intersection Capacity Analysis

Phase 1 (2023) Traffic Condition

- The capacity analysis results for Oak Run Parkway at Independence Drive (Intersection 1) indicate the westbound approach of Oak Run Parkway is anticipated to operate at level of service D in the Phase 1 (2023) Traffic Condition. As shown in the right-turn auxiliary lane analysis for Intersection 1 (Table 4), the right-turn volume on the northwest bound approach exceeds the threshold for a right-turn auxiliary lane in the Existing (2021) Traffic Condition. The capacity analysis results indicate that constructing this right-turn lane would result in level of service C in the Phase 1 (2023) Traffic Condition.
- All remaining intersections and approaches are anticipated to operate at Level of Service C or better int eh Phase 1 (2023) Traffic Condition.

Build-Out (2023) Traffic Condition

- The capacity analysis results for Oak Run Parkway at Independence Drive (Intersection 1) indicate that the intersection is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there is a need for increased regional connectivity or traffic signalization prior to the construction of the school scenario considered within this report. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*
- The capacity analysis results for Oak Run Parkway at Westpointe Drive (Intersection 2) indicate that the intersection is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there is a need for increased regional connectivity or traffic signalization prior to the construction of the school scenario considered within this report. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*
- The capacity analysis results for Westpointe Drive at Mission Hill (Intersection 3) indicate that the eastbound approached is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there is a need for increased regional connectivity prior to the construction of the school scenario considered within this report. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

- The capacity analysis results for Westpointe Drive at Access 1/Access 3 (Intersection 4) indicate that the eastbound approached is anticipated to operate at level of service D or worse in the Build-Out (2025) Traffic Condition. From a high-level planning perspective, this suggests there could be a need for additional mitigations at this intersection if the school were to align their parent drop-off lot with the Utilities Campus main access. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*
- The capacity analysis results for Westpointe Drive at Access 2/Access 4 (Intersection 5) indicate all approaches are anticipated to operate at level of service C or better in the Build-Out (2025) traffic condition. From a high-level planning perspective, this suggests it could be okay to align the bus drop-off and teach parking access point with the Utility Campus Employee lot access. *Note: The school district has not decided how they intend to use this property and there is no site plan for a potential school. Therefore, the evaluation provided is for high-level planning purposes only and no further analyses were conducted.*

RECOMMENDATIONS

Note: Street names within this recommendations section come from this report or the information provided in Appendix A. These names have the potential to change.

Based on this study, the following recommendations are made for each traffic condition considered:

Existing (2021) Traffic Condition

1. Consider constructing a right-turn auxiliary lane on the northwest bound approach of Oak Run Parkway at Independence Drive. *Note: This is also the mitigation identified as an option for maintaining level of service C or better in the Phase 1 (2023) Traffic Condition.*
2. Consider constructing a northbound right-turn auxiliary lane on the northeast bound approach of Westpointe Drive at Oak Run Parkway.

Background (2023) Traffic Condition

1. Consider constructing a right-turn auxiliary lane on the southwest bound approach of independence Drive at Oak Run Parkway.

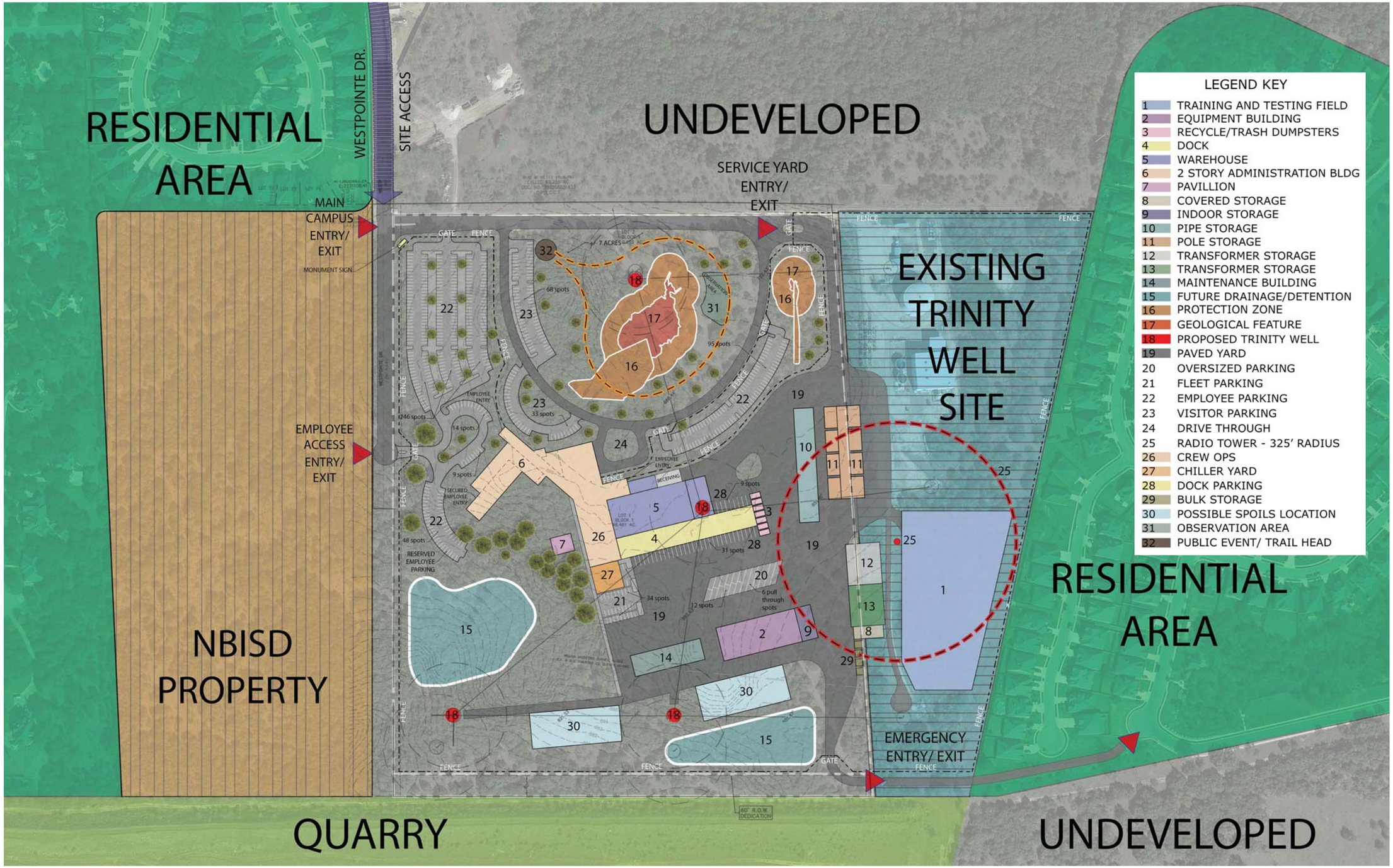
Phase 1 (2023) Utilities Campus

1. Consider constructing a right-turn auxiliary lane on the southeast bound approach of Oak Run Parkway at Westpointe Drive.
2. Consider providing a dedicated northbound left-turn auxiliary lane on the northeast bound approach of Westpointe Drive. *Note: Zero thru movements are anticipated on this approach. Therefore, the dedicated right-turn only lane (identified in the Existing (2021) Traffic Condition) and a shared through left-lane might be sufficient at this location.*
3. Provide a dedicated left-turn lane on the southbound approach of Westpointe Drive at Access 1.
4. Provide a dedicated left-turn lane on the southbound approach of Westpointe Drive at Access 2.

Build-Out (2025) Elementary School Scenario

1. Re-evaluate the impact area when the school district decides how they would like to use the property and a site plan becomes available.
2. If the school district would like to move forward with constructing an Elementary School at this location, there will likely be a need for increased regional connectivity such that a portion of traffic can get to the school without using Oak Run Parkway.

APPENDIX A – SITE PLAN



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NBU Headquarters
FINAL OPTION
01/04/2021

NOT FOR REGULATORY APPROVAL, PERMITTING OR CONSTRUCTION

ARCHITECT REGISTRATION NO. 13800

MarmonMok
ARCHITECTURE

APPENDIX B – SCOPING DOCUMENTATION

CITY OF NEW BRAUNFELS TRAFFIC IMPACT ANALYSIS (TIA) SCOPING MEETING WORKSHEET

This worksheet was developed to facilitate the TIA scoping process and supplement the minimum information required for a TIA by the City of New Braunfels Code of Ordinances. The preparer shall complete Sections 1 and 2 and submit this worksheet and required attachments to engineeringtechs@nbtexas.org one week prior to the scoping meeting.

Section 1: General Information

Project Name: New Braunfels Utilities Campus			
Project Address/Location: Westpointe Drive 0.5 miles south of Oak Run Parkway			
Location? ☒ City of New Braunfels	☐ New Braunfels ETJ	☒ Comal County	☐ Guadalupe County
Owner Name: Dean Watson		Owner Email: dwatson@nbutexas.com	
Owner Address: 355 FM 306, New Braunfels, TX 78130		Owner Phone: (830) 608-8991	
Preparer Company: Lee Engineering, LLC			
Preparer Name: James Robertson, PhD, P.E., PTOE, RSP2IB		Preparer Email: jrobertson@lee-eng.com	
Preparer Address: 8122 Datapoint Drive, Suite 1005, San Antonio, TX 78229		Preparer Phone: (210) 561-5411	
Application Type or Reason for TIA Worksheet/Report			
☒ Master Plan	☐ Preliminary Plat	☐ Final Plat	☐ Commercial Permit ☐ Zoning
Required Attachments			
☒ CoNB TIA Determination Form		☒ Preliminary trip distribution and assignment diagrams	
☒ Site plan with access locations		☒ Basis for background traffic growth rate	

Section 2: TIA Parameters

Parameter	Developer Proposed		City Concurrence Yes	City Concurrence No	If no, identify modifications required
Trip Generation Method	☒ ITE Trip Gen, 10th Ed				
	☐ Other:				
Background Traffic Growth Rate	3.8%				
Proposed Peak Periods	☒ AM				
	☒ PM				
	☐ Other:				
Scenarios and Years for Analysis (e.g. Existing 20XX, Background & Phase # 20XX, Background & Buildout 20XX)	1. Existing	2021			
	2. Background & Phase 1	2023			
	3. Background & Build-Out	2025			
	4.	20			
	5.	20			
	6.	20			
Intersections for Analysis (in addition to all site access)	1. Oak Run Pkwy at Independence Dr				
	2. Oak Run Pkwy at Westpointe Dr				
	3. Westpointe Dr @ Mission Hill Run (Northeast)				
	4.				
	5.				
	6.				

Section 3: Additional Comments/Concerns to be Addressed in the TIA Report (*TxDOT access, sight distance, traffic control warrants, neighborhood traffic control plan, traffic calming, funded capital and developer improvements, parking, truck traffic, etc.*)

Section 4: Agreement on TIA Parameters

TIA Report Level: ☐ Level 1 (101-500 PHT) ☐ Level 2 (501-1,000 PHT) ☐ Level 3 (1,001 or more PHT)

City of New Braunfels Signature

Preparer's Signature

Printed Name of Representative & Date

Printed Name of Representative & Date

ANTICIPATED ANALYSES

It's anticipated that the TIA will include the following Analyses:

- Left-Turn Auxiliary Lane Analysis for the following Intersections:
    1. Westpointe Driveway @ Driveway 1.
    2. Westpointe Driveway @ Driveway 2.
- Right-Turn Auxiliary Lane Analysis for the following Intersections:
    1. Oak Run Pkwy at Westpointe Drive
    2. Oak Run Parkway at Independence Drive.
- Link Capacity Analysis for the following Roadway Segments:
    1. Westpointe Drive from Driveway 2 to Mission Hill Run (southwest).
    2. Westpointe Drive from Mission Hill Run (southwest) to Mission Hill Run (northwest).
    3. Westpointe Drive from Mission Hill (northwest) to Oak Run Parkway.
- Capacity and Level of Service at the following Intersections:
    1. Westpointe Drive @ Mission Hill Run (southwest).
    2. Westpointe Drive @ Mission Hill Run (Northwest).
    3. Oak Run Pkwy at Westpointe Drive
    4. Oak Run Parkway at Independence Drive.
    5. Westpointe Driveway @ Driveway 1.
    6. Westpointe Driveway @ Driveway 2.
- Traffic Management Plan for Westpointe Drive that includes:
    1. Pavement Marking Recommendations.

City of New Braunfels
PUBLIC WORKS

Engineering Division
550 Landa Street
New Braunfels, TX 78130
Tel: (830) 221-4020

TIA DETERMINATION

February 18, 2020
New Braunfels Utilities Campus
TIA20-0007

Owner:	Preparer:
New Braunfels Utilities	Lee Engineering, LLC
Dean Watson	James Robertson, PhD, P.E.
355 FM 306	8122 Datapoint Drive, Suite 1005
New Braunfels, TX 78130	San Antonio, TX 78229

The Engineering Division reviewed the TIA Determination application and associated documents for the referenced development. Based on the information provided in the application, a Level 1 TIA Report is required. Please work with Kathy Bowlby to schedule a TIA scoping meeting. The attached TIA Scoping Meeting Worksheet must be submitted one week prior to the scheduled scoping meeting, per the instructions on the worksheet.

Please contact the Engineering Division at (830) 221-4016 if you have any questions or need any additional information.

Respectfully,

Mary K. Hamann, P.E.
Engineer

CITY OF NEW BRAUNFELS TRAFFIC IMPACT ANALYSIS (TIA) DETERMINATION FORM

Complete this form to determine Traffic Impact Analysis requirements.
A site exhibit must be with this form to be considered a complete submittal.

Section 1: General Information

General Information			
Project Name: New Braunfels Utilities Campus			Date: 02/12/2020
Subdivision Plat Name: New Braunfels Utilities Campus		Project Address/Location: Westpointe Drive 0.5 miles south of Oak Run Parkway	
Location? ☒ City of New Braunfels	☐ New Braunfels ETJ	☒ Comal County	☐ Guadalupe County
Owner Name: Dean Watson		Owner Email: dwatson@nbutexas.com	
Owner Address: 355 FM 306		Owner Phone: (830) 608-8991	
Preparer Company: Lee Engineering, LLC			
Preparer Name: James Robertson, PhD, PE		Preparer Email: jrobertson@lee-eng.com	
Preparer Address: 8122 Datapoint Drive, Suite 1005, San Antonio, TX 78229		Preparer Phone: (210) 561-5411	
Application Type or Reason for TIA Worksheet/Report			
☒ Master Plan	☐ Preliminary Plat	☐ Final Plat	☐ Commercial Permit ☐ Zoning
TIA Submittal Type (A TIA Worksheet is required with all zoning, plan and plat applications)			
☐ TIA Worksheet Only (100 peak hour trips or less)		☒ Level 1 TIA Report (101-500 peak hour trips)	
☐ Level 2 TIA Report (501-1,000 peak hour trips)		☐ Level 3 TIA Report (1,001 or more peak hour trips)	
TxDOT Access Approved?			
☐ Yes	☐ No	☒ Not Applicable	

Section 2: Proposed Land Use and Trip Information for Application

Land Use	ITE Code[1]	ITE Unit[2]	Est. Project Units	AM Peak Hour Rate	PM Peak Hour Rate	WKND Peak Hour Rate	AM Peak Hour Trips	PM Peak Hour Trips	WKND Peak Hour Trips
Government Office Building	730	1000 Sq. Ft GFA	110	3.34	1.71	NA	368	189	2,485
Total from additional tabulation sheet (if necessary):									
						Total:	368	189	2,485

[1] *Institute of Transportation Engineers (ITE) Trip Generation*, 10th Edition or most recent
[2] E.g., Dwelling Units, Acres, Employees, KSF, etc.

Internal Use Only	Reviewed by:		Date:
	☐ TIA Worksheet only.	☐ TIA Report required.	☐ Additional information required to make a determination.

APPENDIX C – TRIP GENERATION WORKBOOK

CITY OF NEW BRAUNFELS TRAFFIC IMPACT ANALYSIS (TIA) WORKSHEET

Complete this worksheet as a requirement for zoning, master plan, plat and permit as specified in City of New Braunfels Code of Ordinances Sections 114-99 and 118-46.
Note: The Code provides the minimum information for a TIA report and it is recommended that a scoping meeting be scheduled with the Engineering Division.

Section 1: General Information

Project Name: New Braunfels Utilities Campus	Date: 03/22/2021
Subdivision Plat Name: New Braunfels Utilities Campus	Project Address/Location: Westpointe Drive 0.5 miles south of Oak Run Parkway
Location? ■ City of New Braunfels ☐ New Braunfels ETJ ■ Comal County ☐ Guadalupe County	
Owner Name: Dean Watson	Owner Email: dwatson@nbutexas.com
Owner Address: 355 FM 306, New Braunfels, TX 78130	Owner Phone: (830) 608-8991
Preparer Company: Lee Engineering, LLC	
Preparer Name: James Robertson, PhD, P.E., PTOE, RSP2IB	Preparer Email: jrobertson@lee-eng.com
Preparer Address: 8122 Datapoint Drive, Suite 1005, San Antonio, TX 78229	Preparer Phone: (210) 625-7418
TIA scoping meeting with City Engineering Division staff? (required for reports) ■ Yes. Date: 02/26/2021 ☐ No.	TIA Worksheet/Report approved with previous zoning, plan, plat or permit? ■ No. Complete Page 1 only. ☐ Yes. Complete Pages 1 and 2.

Application Type or Reason for TIA Worksheet/Report

☐ Zoning/Concept Plan/Detail Plan ■ Master Plan ☐ Preliminary Plat ☐ Final Plat ☐ Permit ☐ Other

TIA Submittal Type (A TIA Worksheet is required with all zoning, plan, plat and permit applications)

☐ TIA Worksheet Only (100 peak hour trips or less)
☐ TIA Worksheet Only – Previous TIA Report Approved
☐ TIA Worksheet Only – Previous TIA Report not required (supporting documentation may be required)
☐ Level 1 TIA Report (101-500 peak hour trips)
■ Level 2 TIA Report (501-1,000 peak hour trips)
☐ Level 3 TIA Report (1,001 or more peak hour trips)

Section 2: Proposed Land Use and Trip Information for Application

Unit	Land Use	ITE Code[1]	ITE Unit[2]	Est. Project Units	Critical Peak Hour	AM Peak Hour Rate	PM Peak Hour Rate	WKND Peak Hour Rate	Daily Trip Rate	AM Peak Hour Trips	PM Peak Hour Trips	WKND Peak Hour Trips	Daily Trips
1	Government Office Building	730	1000 Sq Ft GFA	50	AM	3.34	1.71	NA	22.59	167	86	NA	1,130
1	Utility	170	1000 Sq Ft GFA	57	AM	2.31	2.27	NA	13.24	132	130	NA	755
2	Elementary School	520	1000 Sq Ft GFA	100	AM	6.97	1.37	NA	19.52	697	137	NA	1,952
Total from additional tabulation sheet (if necessary):										NA	NA	NA	NA
Total:										996	353	NA	3,837

[1]*Institute of Transportation Engineers (ITE) Trip Generation*, 10th Edition or most recent; [2]E.g., Dwelling Units, Acres, Employees, KSF, etc.

Internal Use Only	Reviewed by:			Date:
	☐ TIA Worksheet is acceptable.	☐ TIA Worksheet requires corrections.	☐ TIA Report required.	☐ TIA Report not required.

Section 3: Previously Approved TIA Worksheet/Report

Project Name:					
Preparer Company:		Preparer Name:			Date:
Type:	☐ TIA Worksheet Only	☐ Level 1 TIA Report	☐ Level 2 TIA Report		☐ Level 3 TIA Report
Approved with:	☐ Zoning/Concept Plan/Detail Plan	☐ Master Plan	☐ Plat	☐ Permit	☐ Other

Section 4: Update to and Status of Land Use and Trip Information for Total Development with Approved TIA Worksheet/Report (All Subdivision Units)

Unit	Land Use	Status[3]	ITE Code[1]	ITE Unit[2]	Est. Project Units	Critical Peak Hour	AM Peak Hour Rate	PM Peak Hour Rate	WKND Peak Hour Rate	Daily Trip Rate	AM Peak Hour Trips	PM Peak Hour Trips	WKND Peak Hour Trips	Daily Trips
Total from additional tabulation sheet (if necessary):														
Total:														

[1]*Institute of Transportation Engineers (ITE) Trip Generation*, 10th Edition or most recent; [2]E.g., Dwelling Units, Acres, Employees, KSF, etc.;
[3]Specify current ***approved*** status of unit: PLAN – Zoning/Concept Plan/Detail Plan/Master Plan, PP – Preliminary Plat, FP – Final Plat, P – Permit, C – Completed, A – With this Application (current)

Section 5: Approved TIA Worksheet/Report Conformance

Approved TIA Conformance	AM Peak Hour Trips	PM Peak Hour Trips	WKD Peak Hour Trips	Daily Trips
Approved development total:				
Updated development total:				
Difference development total:				

New TIA Report Required?	
Increase in Peak Hour Trips (PHT) over 100?	☐ Yes. New TIA Report required to be approved prior to approval. ☐ No.

Section 6: Required TIA Mitigation Measures

Mitigation Measures	Unit	Total PHT
1.		
2.		
3.		
4.		
5.		
6.		

APPENDIX D – TRAFFIC VOLUME DATA

Oak Run Parkway at Independence Drive - TMC

Thu Feb 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811954, Location: 29.711784, -98.164311, Site Code: 1

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Oak Run Pkwy						Oak Run Pkwy						Independence Dr						Independence Dr						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-02-04 7:00AM	8	45	1	0	**54**	0	3	32	24	0	**59**	-	0	0	0	0	**0**	0	15	1	4	0	**20**	-	**133**
7:15AM	11	56	1	0	**68**	0	8	34	34	0	**76**	-	0	0	0	0	**0**	0	11	2	2	0	**15**	-	**159**
7:30AM	4	67	1	0	**72**	0	8	51	33	0	**92**	-	0	2	1	0	**3**	0	21	0	3	0	**24**	-	**191**
7:45AM	12	70	1	0	**83**	0	9	71	37	0	**117**	-	1	1	2	0	**4**	0	18	4	8	0	**30**	-	**234**
Hourly Total	35	238	4	0	**277**	0	28	188	128	0	**344**	-	1	3	3	0	**7**	0	65	7	17	0	**89**	-	**717**
8:00AM	13	44	0	0	**57**	0	6	54	35	0	**95**	-	1	1	3	0	**5**	0	21	1	8	0	**30**	-	**187**
8:15AM	10	50	1	0	**61**	0	2	54	35	0	**91**	-	0	2	1	0	**3**	1	25	1	14	0	**40**	-	**195**
8:30AM	5	35	0	0	**40**	0	2	40	30	1	**73**	-	2	2	2	0	**6**	0	23	0	5	0	**28**	-	**147**
8:45AM	11	39	1	0	**51**	0	0	37	21	1	**59**	-	0	1	1	0	**2**	1	16	0	11	0	**27**	-	**139**
Hourly Total	39	168	2	0	**209**	0	10	185	121	2	**318**	-	3	6	7	0	**16**	2	85	2	38	0	**125**	-	**668**
4:00PM	12	59	0	0	**71**	0	0	78	26	0	**104**	-	0	2	4	0	**6**	0	27	0	8	0	**35**	-	**216**
4:15PM	16	51	1	0	**68**	0	1	83	37	0	**121**	-	1	0	2	0	**3**	0	30	1	9	0	**40**	-	**232**
4:30PM	7	55	0	0	**62**	0	1	71	45	0	**117**	-	0	1	0	0	**1**	0	18	0	9	0	**27**	-	**207**
4:45PM	18	47	1	0	**66**	0	0	70	50	0	**120**	-	0	3	1	0	**4**	0	20	0	13	0	**33**	-	**223**
Hourly Total	53	212	2	0	**267**	0	2	302	158	0	**462**	-	1	6	7	0	**14**	0	95	1	39	0	**135**	-	**878**
5:00PM	16	65	0	0	**81**	0	0	67	36	0	**103**	-	0	0	4	0	**4**	0	33	0	9	0	**42**	-	**230**
5:15PM	14	65	0	0	**79**	0	2	65	44	0	**111**	-	2	0	5	0	**7**	2	33	0	14	0	**47**	-	**244**
5:30PM	12	54	0	0	**66**	0	0	74	52	0	**126**	-	0	0	1	0	**1**	1	39	0	12	0	**51**	-	**244**
5:45PM	8	43	0	0	**51**	0	0	55	37	1	**93**	-	0	1	0	0	**1**	1	25	1	15	0	**41**	-	**186**
Hourly Total	50	227	0	0	**277**	0	2	261	169	1	**433**	-	2	1	10	0	**13**	4	130	1	50	0	**181**	-	**904**
Total	177	845	8	0	**1030**	0	42	936	576	3	**1557**	-	7	16	27	0	**50**	6	375	11	144	0	**530**	-	**3167**
% Approach	17.2%	82.0%	0.8%	0%	**-**	-	2.7%	60.1%	37.0%	0.2%	**-**	-	14.0%	32.0%	54.0%	0%	**-**	-	70.8%	2.1%	27.2%	0%	**-**	-	-
% Total	5.6%	26.7%	0.3%	0%	**32.5%**	-	1.3%	29.6%	18.2%	0.1%	**49.2%**	-	0.2%	0.5%	0.9%	0%	**1.6%**	-	11.8%	0.3%	4.5%	0%	**16.7%**	-	-
Lights	172	843	8	0	**1023**	-	42	928	567	3	**1540**	-	7	15	27	0	**49**	-	369	11	142	0	**522**	-	3134
% Lights	97.2%	99.8%	100%	0%	**99.3%**	-	100%	99.1%	98.4%	100%	**98.9%**	-	100%	93.8%	100%	0%	**98.0%**	-	98.4%	100%	98.6%	0%	**98.5%**	-	99.0%
Articulated Trucks	0	0	0	0	**0**	-	0	1	3	0	**4**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	6
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.1%	0.5%	0%	**0.3%**	-	0%	0%	0%	0%	**0%**	-	0.5%	0%	0%	0%	**0.4%**	-	0.2%
Buses and Single-Unit Trucks	5	2	0	0	**7**	-	0	7	6	0	**13**	-	0	1	0	0	**1**	-	4	0	2	0	**6**	-	27
% Buses and Single-Unit Trucks	2.8%	0.2%	0%	0%	**0.7%**	-	0%	0.7%	1.0%	0%	**0.8%**	-	0%	6.3%	0%	0%	**2.0%**	-	1.1%	0%	1.4%	0%	**1.1%**	-	0.9%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Oak Run Parkway at Independence Drive - TMC

Thu Feb 4, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811954, Location: 29.711784, -98.164311, Site Code: 1

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Oak Run Pkwy Eastbound						Oak Run Pkwy Westbound						Independence Dr Northbound						Independence Dr Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-02-04 7:30AM	4	67	1	0	**72**	0	8	51	33	0	**92**	-	0	2	1	0	**3**	0	21	0	3	0	**24**	-	**191**
7:45AM	12	70	1	0	**83**	0	9	71	37	0	**117**	-	1	1	2	0	**4**	0	18	4	8	0	**30**	-	**234**
8:00AM	13	44	0	0	**57**	0	6	54	35	0	**95**	-	1	1	3	0	**5**	0	21	1	8	0	**30**	-	**187**
8:15AM	10	50	1	0	**61**	0	2	54	35	0	**91**	-	0	2	1	0	**3**	1	25	1	14	0	**40**	-	**195**
Total	39	231	3	0	**273**	0	25	230	140	0	**395**	-	2	6	7	0	**15**	1	85	6	33	0	**124**	-	**807**
% Approach	14.3%	84.6%	1.1%	0%	**-**	-	6.3%	58.2%	35.4%	0%	**-**	-	13.3%	40.0%	46.7%	0%	**-**	-	68.5%	4.8%	26.6%	0%	**-**	-	**-**
% Total	4.8%	28.6%	0.4%	0%	**33.8%**	-	3.1%	28.5%	17.3%	0%	**48.9%**	-	0.2%	0.7%	0.9%	0%	**1.9%**	-	10.5%	0.7%	4.1%	0%	**15.4%**	-	-
PHF	0.750	0.825	0.750	-	**0.822**	-	0.694	0.810	0.946	-	**0.844**	-	0.500	0.750	0.583	-	**0.750**	-	0.850	0.375	0.589	-	**0.775**	-	0.862
Lights	36	229	3	0	**268**	-	25	225	136	0	**386**	-	2	6	7	0	**15**	-	85	6	32	0	**123**	-	792
% Lights	92.3%	99.1%	100%	0%	**98.2%**	-	100%	97.8%	97.1%	0%	**97.7%**	-	100%	100%	100%	0%	**100%**	-	100%	100%	97.0%	0%	**99.2%**	-	98.1%
Articulated Trucks	0	0	0	0	**0**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0.4%	0.7%	0%	**0.5%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses and Single-Unit Trucks	3	2	0	0	**5**	-	0	4	3	0	**7**	-	0	0	0	0	**0**	-	0	0	1	0	**1**	-	13
% Buses and Single-Unit Trucks	7.7%	0.9%	0%	0%	**1.8%**	-	0%	1.7%	2.1%	0%	**1.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	3.0%	0%	**0.8%**	-	1.6%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Oak Run Parkway at Independence Drive - TMC

Thu Feb 4, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811954, Location: 29.711784, -98.164311, Site Code: 1

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Oak Run Pkwy Eastbound						Oak Run Pkwy Westbound						Independence Dr Northbound						Independence Dr Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-02-04 4:45PM	18	47	1	0	**66**	0	0	70	50	0	**120**	-	0	3	1	0	**4**	0	20	0	13	0	**33**	-	**223**
5:00PM	16	65	0	0	**81**	0	0	67	36	0	**103**	-	0	0	4	0	**4**	0	33	0	9	0	**42**	-	**230**
5:15PM	14	65	0	0	**79**	0	2	65	44	0	**111**	-	2	0	5	0	**7**	2	33	0	14	0	**47**	-	**244**
5:30PM	12	54	0	0	**66**	0	0	74	52	0	**126**	-	0	0	1	0	**1**	1	39	0	12	0	**51**	-	**244**
Total	60	231	1	0	**292**	0	2	276	182	0	**460**	-	2	3	11	0	**16**	3	125	0	48	0	**173**	-	**941**
% Approach	20.5%	79.1%	0.3%	0%	**-**	-	0.4%	60.0%	39.6%	0%	**-**	-	12.5%	18.8%	68.8%	0%	**-**	-	72.3%	0%	27.7%	0%	**-**	-	-
% Total	6.4%	24.5%	0.1%	0%	**31.0%**	-	0.2%	29.3%	19.3%	0%	**48.9%**	-	0.2%	0.3%	1.2%	0%	**1.7%**	-	13.3%	0%	5.1%	0%	**18.4%**	-	-
PHF	0.833	0.888	0.250	-	**0.901**	-	0.250	0.932	0.875	-	**0.913**	-	0.250	0.250	0.550	-	**0.571**	-	0.801	-	0.857	-	**0.848**	-	0.964
Lights	59	231	1	0	**291**	-	2	275	180	0	**457**	-	2	3	11	0	**16**	-	123	0	48	0	**171**	-	935
% Lights	98.3%	100%	100%	0%	**99.7%**	-	100%	99.6%	98.9%	0%	**99.3%**	-	100%	100%	100%	0%	**100%**	-	98.4%	0%	100%	0%	**98.8%**	-	99.4%
Articulated Trucks	0	0	0	0	**0**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0.5%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.1%
Buses and Single-Unit Trucks	1	0	0	0	**1**	-	0	1	1	0	**2**	-	0	0	0	0	**0**	-	2	0	0	0	**2**	-	5
% Buses and Single-Unit Trucks	1.7%	0%	0%	0%	**0.3%**	-	0%	0.4%	0.5%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	1.6%	0%	0%	0%	**1.2%**	-	0.5%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Oak Run Parkway at Westpointe Drive - TMC

Thu Feb 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811951, Location: 29.713061, -98.166236, Site Code: 2

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Oak Run Pkwy Eastbound						Oak Run Pkwy Westbound						Westpointe Dr Northbound						Westpointe Dr Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-02-04 7:00AM	0	26	2	0	**28**	0	3	30	3	0	**36**	0	9	0	15	0	**24**	0	0	0	0	0	**0**	0	**88**
7:15AM	0	40	2	0	**42**	0	7	32	0	0	**39**	0	12	0	19	0	**31**	0	0	0	0	0	**0**	0	**112**
7:30AM	0	50	11	0	**61**	0	7	45	2	0	**54**	2	10	0	18	0	**28**	0	0	0	0	0	**0**	1	**143**
7:45AM	0	50	1	0	**51**	0	10	71	1	0	**82**	0	8	0	23	0	**31**	0	0	2	0	0	**2**	0	**166**
Hourly Total	0	166	16	0	**182**	0	27	178	6	0	**211**	2	39	0	75	0	**114**	0	0	2	0	0	**2**	1	**509**
8:00AM	0	35	1	1	**37**	0	9	51	1	0	**61**	0	7	0	21	0	**28**	0	0	0	0	0	**0**	0	**126**
8:15AM	1	30	5	0	**36**	0	12	57	0	0	**69**	2	4	0	21	0	**25**	0	0	0	0	0	**0**	2	**130**
8:30AM	0	24	1	0	**25**	0	9	38	1	0	**48**	0	4	0	14	0	**18**	0	0	0	0	0	**0**	1	**91**
8:45AM	0	30	1	0	**31**	0	9	37	3	0	**49**	0	2	0	13	0	**15**	0	1	0	1	0	**2**	0	**97**
Hourly Total	1	119	8	1	**129**	0	39	183	5	0	**227**	2	17	0	69	0	**86**	0	1	0	1	0	**2**	3	**444**
4:00PM	0	49	3	1	**53**	0	32	53	0	0	**85**	0	8	0	17	0	**25**	0	0	0	0	0	**0**	1	**163**
4:15PM	1	46	12	0	**59**	0	34	63	0	0	**97**	0	2	0	12	0	**14**	0	1	0	0	0	**1**	0	**171**
4:30PM	0	47	6	0	**53**	0	34	45	0	0	**79**	1	2	0	17	0	**19**	0	1	0	0	0	**1**	1	**152**
4:45PM	0	33	7	0	**40**	0	30	51	1	3	**85**	0	4	0	20	0	**24**	0	1	0	1	0	**2**	0	**151**
Hourly Total	1	175	28	1	**205**	0	130	212	1	3	**346**	1	16	0	66	0	**82**	0	3	0	1	0	**4**	2	**637**
5:00PM	1	58	7	0	**66**	0	28	51	0	0	**79**	0	4	0	16	0	**20**	0	2	0	0	0	**2**	2	**167**
5:15PM	0	56	12	0	**68**	0	25	59	0	0	**84**	0	5	0	12	0	**17**	0	4	0	0	0	**4**	1	**173**
5:30PM	0	43	3	1	**47**	0	29	59	0	0	**88**	4	4	0	19	0	**23**	0	0	0	0	0	**0**	3	**158**
5:45PM	0	31	7	0	**38**	0	33	40	0	1	**74**	0	3	0	13	0	**16**	1	0	0	0	0	**0**	1	**128**
Hourly Total	1	188	29	1	**219**	0	115	209	0	1	**325**	4	16	0	60	0	**76**	1	6	0	0	0	**6**	7	**626**
Total	3	648	81	3	**735**	0	311	782	12	4	**1109**	9	88	0	270	0	**358**	1	10	2	2	0	**14**	13	**2216**
% Approach	0.4%	88.2%	11.0%	0.4%	**-**	-	28.0%	70.5%	1.1%	0.4%	**-**	-	24.6%	0%	75.4%	0%	**-**	-	71.4%	14.3%	14.3%	0%	**-**	-	-
% Total	0.1%	29.2%	3.7%	0.1%	**33.2%**	-	14.0%	35.3%	0.5%	0.2%	**50.0%**	-	4.0%	0%	12.2%	0%	**16.2%**	-	0.5%	0.1%	0.1%	0%	**0.6%**	-	-
Lights	3	646	78	3	**730**	-	309	771	12	4	**1096**	-	88	0	266	0	**354**	-	10	1	2	0	**13**	-	2193
% Lights	100%	99.7%	96.3%	100%	**99.3%**	-	99.4%	98.6%	100%	100%	**98.8%**	-	100%	0%	98.5%	0%	**98.9%**	-	100%	50.0%	100%	0%	**92.9%**	-	99.0%
Articulated Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0.3%	0%	0%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	2	3	0	**5**	-	1	11	0	0	**12**	-	0	0	4	0	**4**	-	0	1	0	0	**1**	-	22
% Buses and Single-Unit Trucks	0%	0.3%	3.7%	0%	**0.7%**	-	0.3%	1.4%	0%	0%	**1.1%**	-	0%	0%	1.5%	0%	**1.1%**	-	0%	50.0%	0%	0%	**7.1%**	-	1.0%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	9	-	-	-	-	-	1	-	-	-	-	-	13	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Oak Run Parkway at Westpointe Drive - TMC

Thu Feb 4, 2021
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811951, Location: 29.713061, -98.166236, Site Code: 2

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Oak Run Pkwy						Oak Run Pkwy						Westpointe Dr						Westpointe Dr						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2021-02-04 7:30AM	0	50	11	0	**61**	0	7	45	2	0	**54**	2	10	0	18	0	**28**	0	0	0	0	0	**0**	1	**143**
7:45AM	0	50	1	0	**51**	0	10	71	1	0	**82**	0	8	0	23	0	**31**	0	0	2	0	0	**2**	0	**166**
8:00AM	0	35	1	1	**37**	0	9	51	1	0	**61**	0	7	0	21	0	**28**	0	0	0	0	0	**0**	0	**126**
8:15AM	1	30	5	0	**36**	0	12	57	0	0	**69**	2	4	0	21	0	**25**	0	0	0	0	0	**0**	2	**130**
Total	1	165	18	1	**185**	0	38	224	4	0	**266**	4	29	0	83	0	**112**	0	0	2	0	0	**2**	3	**565**
% Approach	0.5%	89.2%	9.7%	0.5%	**-**	-	14.3%	84.2%	1.5%	0%	**-**	-	25.9%	0%	74.1%	0%	**-**	-	0%	100%	0%	0%	**-**	-	**-**
% Total	0.2%	29.2%	3.2%	0.2%	**32.7%**	-	6.7%	39.6%	0.7%	0%	**47.1%**	-	5.1%	0%	14.7%	0%	**19.8%**	-	0%	0.4%	0%	0%	**0.4%**	-	-
PHF	0.250	0.825	0.409	0.250	**0.758**	-	0.792	0.789	0.500	-	**0.811**	-	0.725	-	0.902	-	**0.903**	-	-	0.250	-	-	**0.250**	-	0.851
Lights	1	163	17	1	**182**	-	36	219	4	0	**259**	-	29	0	81	0	**110**	-	0	1	0	0	**1**	-	552
% Lights	100%	98.8%	94.4%	100%	**98.4%**	-	94.7%	97.8%	100%	0%	**97.4%**	-	100%	0%	97.6%	0%	**98.2%**	-	0%	50.0%	0%	0%	**50.0%**	-	97.7%
Articulated Trucks	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	2.6%	0%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0.2%
Buses and Single-Unit Trucks	0	2	1	0	**3**	-	1	5	0	0	**6**	-	0	0	2	0	**2**	-	0	1	0	0	**1**	-	12
% Buses and Single-Unit Trucks	0%	1.2%	5.6%	0%	**1.6%**	-	2.6%	2.2%	0%	0%	**2.3%**	-	0%	0%	2.4%	0%	**1.8%**	-	0%	50.0%	0%	0%	**50.0%**	-	2.1%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Oak Run Parkway at Westpointe Drive - TMC

Thu Feb 4, 2021
PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811951, Location: 29.713061, -98.166236, Site Code: 2

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg Direction	Oak Run Pkwy Eastbound						Oak Run Pkwy Westbound						Westpointe Dr Northbound						Westpointe Dr Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2021-02-04 4:45PM	0	33	7	0	**40**	0	30	51	1	3	**85**	0	4	0	20	0	**24**	0	1	0	1	0	**2**	0	**151**
5:00PM	1	58	7	0	**66**	0	28	51	0	0	**79**	0	4	0	16	0	**20**	0	2	0	0	0	**2**	2	**167**
5:15PM	0	56	12	0	**68**	0	25	59	0	0	**84**	0	5	0	12	0	**17**	0	4	0	0	0	**4**	1	**173**
5:30PM	0	43	3	1	**47**	0	29	59	0	0	**88**	4	4	0	19	0	**23**	0	0	0	0	0	**0**	3	**158**
Total	1	190	29	1	**221**	0	112	220	1	3	**336**	4	17	0	67	0	**84**	0	7	0	1	0	**8**	6	**649**
% Approach	0.5%	86.0%	13.1%	0.5%	**-**	-	33.3%	65.5%	0.3%	0.9%	**-**	-	20.2%	0%	79.8%	0%	**-**	-	87.5%	0%	12.5%	0%	**-**	-	**-**
% Total	0.2%	29.3%	4.5%	0.2%	**34.1%**	-	17.3%	33.9%	0.2%	0.5%	**51.8%**	-	2.6%	0%	10.3%	0%	**12.9%**	-	1.1%	0%	0.2%	0%	**1.2%**	-	**-**
PHF	0.250	0.819	0.604	0.250	**0.813**	-	0.933	0.932	0.250	0.250	**0.955**	-	0.850	-	0.838	-	**0.875**	-	0.438	-	0.250	-	**0.500**	-	0.938
Lights	1	190	28	1	**220**	-	112	219	1	3	**335**	-	17	0	66	0	**83**	-	7	0	1	0	**8**	-	646
% Lights	100%	100%	96.6%	100%	**99.5%**	-	100%	99.5%	100%	100%	**99.7%**	-	100%	0%	98.5%	0%	**98.8%**	-	100%	0%	100%	0%	**100%**	-	99.5%
Articulated Trucks	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	0	0	1	0	**1**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	0	0	0	0	**0**	-	3
% Buses and Single-Unit Trucks	0%	0%	3.4%	0%	**0.5%**	-	0%	0.5%	0%	0%	**0.3%**	-	0%	0%	1.5%	0%	**1.2%**	-	0%	0%	0%	0%	**0%**	-	0.5%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpointe Drive at Mission Hill Run - TMC

Thu Feb 4, 2021
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811953, Location: 29.711667, -98.168528, Site Code: 3

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Mission Hill Run					Westpointe Dr					Westpointe Dr					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2021-02-04 7:00AM	0	0	0	**0**	0	0	11	0	**11**	0	1	0	0	**1**	0	**12**
7:15AM	2	0	0	**2**	0	0	14	0	**14**	0	2	2	0	**4**	0	**20**
7:30AM	4	0	0	**4**	0	0	6	0	**6**	0	2	7	0	**9**	0	**19**
7:45AM	5	0	0	**5**	0	0	16	0	**16**	0	6	3	0	**9**	0	**30**
Hourly Total	11	0	0	**11**	0	0	47	0	**47**	0	11	12	0	**23**	0	**81**
8:00AM	5	0	0	**5**	0	0	12	0	**12**	0	4	0	0	**4**	0	**21**
8:15AM	7	0	0	**7**	0	0	3	0	**3**	0	4	2	0	**6**	0	**16**
8:30AM	1	0	0	**1**	2	0	5	0	**5**	0	1	4	0	**5**	2	**11**
8:45AM	2	0	0	**2**	2	0	4	0	**4**	0	5	3	0	**8**	0	**14**
Hourly Total	15	0	0	**15**	4	0	24	0	**24**	0	14	9	0	**23**	2	**62**
4:00PM	6	0	0	**6**	0	0	11	0	**11**	0	4	10	0	**14**	0	**31**
4:15PM	4	0	1	**5**	1	3	2	0	**5**	0	8	9	0	**17**	0	**27**
4:30PM	3	0	0	**3**	0	0	10	0	**10**	0	6	16	0	**22**	0	**35**
4:45PM	4	0	0	**4**	1	0	8	0	**8**	0	3	10	0	**13**	0	**25**
Hourly Total	17	0	1	**18**	2	3	31	0	**34**	0	21	45	0	**66**	0	**118**
5:00PM	3	0	0	**3**	0	1	5	0	**6**	0	5	5	0	**10**	0	**19**
5:15PM	1	1	0	**2**	0	0	8	0	**8**	0	8	10	0	**18**	0	**28**
5:30PM	3	0	0	**3**	5	0	12	0	**12**	0	6	12	0	**18**	0	**33**
5:45PM	2	0	0	**2**	3	0	4	0	**4**	0	6	12	0	**18**	0	**24**
Hourly Total	9	1	0	**10**	8	1	29	0	**30**	0	25	39	0	**64**	0	**104**
Total	52	1	1	**54**	14	4	131	0	**135**	0	71	105	0	**176**	2	**365**
% Approach	96.3%	1.9%	1.9%	**-**	-	3.0%	97.0%	0%	**-**	-	40.3%	59.7%	0%	**-**	-	**-**
% Total	14.2%	0.3%	0.3%	**14.8%**	-	1.1%	35.9%	0%	**37.0%**	-	19.5%	28.8%	0%	**48.2%**	-	**-**
Lights	48	1	1	**50**	-	4	130	0	**134**	-	69	101	0	**170**	-	354
% Lights	92.3%	100%	100%	**92.6%**	-	100%	99.2%	0%	**99.3%**	-	97.2%	96.2%	0%	**96.6%**	-	97.0%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	1.4%	0%	0%	**0.6%**	-	0.3%
Buses and Single-Unit Trucks	4	0	0	**4**	-	0	1	0	**1**	-	1	4	0	**5**	-	10
% Buses and Single-Unit Trucks	7.7%	0%	0%	**7.4%**	-	0%	0.8%	0%	**0.7%**	-	1.4%	3.8%	0%	**2.8%**	-	2.7%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	14	-	-	-	-	0	-	-	-	-	2	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpointe Drive at Mission Hill Run - TMC

Thu Feb 4, 2021
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811953, Location: 29.711667, -98.168528, Site Code: 3

CJ Hensch & Associates, Inc.
Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg	Mission Hill Run					Westpointe Dr					Westpointe Dr					
Direction	Eastbound					Northbound					Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2021-02-04 7:15AM	2	0	0	**2**	0	0	14	0	**14**	0	2	2	0	**4**	0	**20**
7:30AM	4	0	0	**4**	0	0	6	0	**6**	0	2	7	0	**9**	0	**19**
7:45AM	5	0	0	**5**	0	0	16	0	**16**	0	6	3	0	**9**	0	**30**
8:00AM	5	0	0	**5**	0	0	12	0	**12**	0	4	0	0	**4**	0	**21**
Total	16	0	0	**16**	0	0	48	0	**48**	0	14	12	0	**26**	0	**90**
% Approach	100%	0%	0%	**-**	-	0%	100%	0%	**-**	-	53.8%	46.2%	0%	**-**	-	**-**
% Total	17.8%	0%	0%	**17.8%**	-	0%	53.3%	0%	**53.3%**	-	15.6%	13.3%	0%	**28.9%**	-	**-**
PHF	0.800	-	-	**0.800**	-	-	0.750	-	**0.750**	-	0.583	0.429	-	**0.722**	-	0.750
Lights	14	0	0	**14**	-	0	47	0	**47**	-	12	10	0	**22**	-	83
% Lights	87.5%	0%	0%	**87.5%**	-	0%	97.9%	0%	**97.9%**	-	85.7%	83.3%	0%	**84.6%**	-	92.2%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	1	0	0	**1**	-	1
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	7.1%	0%	0%	**3.8%**	-	1.1%
Buses and Single-Unit Trucks	2	0	0	**2**	-	0	1	0	**1**	-	1	2	0	**3**	-	6
% Buses and Single-Unit Trucks	12.5%	0%	0%	**12.5%**	-	0%	2.1%	0%	**2.1%**	-	7.1%	16.7%	0%	**11.5%**	-	6.7%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Westpointe Drive at Mission Hill Run - TMC

Thu Feb 4, 2021
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 811953, Location: 29.711667, -98.168528, Site Code: 3

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave.,
Pasadena, TX, 77503, US

Leg / Direction	Mission Hill Run Eastbound					Westpointe Dr Northbound					Westpointe Dr Southbound					
Time	L	R	U	**App**	Ped*	L	T	U	**App**	Ped*	T	R	U	**App**	Ped*	**Int**
2021-02-04 4:00PM	6	0	0	**6**	0	0	11	0	**11**	0	4	10	0	**14**	0	**31**
4:15PM	4	0	1	**5**	1	3	2	0	**5**	0	8	9	0	**17**	0	**27**
4:30PM	3	0	0	**3**	0	0	10	0	**10**	0	6	16	0	**22**	0	**35**
4:45PM	4	0	0	**4**	1	0	8	0	**8**	0	3	10	0	**13**	0	**25**
Total	17	0	1	**18**	2	3	31	0	**34**	0	21	45	0	**66**	0	**118**
% Approach	94.4%	0%	5.6%	**-**	-	8.8%	91.2%	0%	**-**	-	31.8%	68.2%	0%	**-**	-	-
% Total	14.4%	0%	0.8%	**15.3%**	-	2.5%	26.3%	0%	**28.8%**	-	17.8%	38.1%	0%	**55.9%**	-	-
PHF	0.708	-	0.250	**0.750**	-	0.250	0.705	-	**0.773**	-	0.656	0.703	-	**0.750**	-	0.843
Lights	15	0	1	**16**	-	3	31	0	**34**	-	21	43	0	**64**	-	114
% Lights	88.2%	0%	100%	**88.9%**	-	100%	100%	0%	**100%**	-	100%	95.6%	0%	**97.0%**	-	96.6%
Articulated Trucks	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Articulated Trucks	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Buses and Single-Unit Trucks	2	0	0	**2**	-	0	0	0	**0**	-	0	2	0	**2**	-	4
% Buses and Single-Unit Trucks	11.8%	0%	0%	**11.1%**	-	0%	0%	0%	**0%**	-	0%	4.4%	0%	**3.0%**	-	3.4%
Bicycles on Road	0	0	0	**0**	-	0	0	0	**0**	-	0	0	0	**0**	-	0
% Bicycles on Road	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%	0%	0%	**0%**	-	0%
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

APPENDIX E – PHASE 1 (2023) TRIP DISTRIBUTION TABLES

Intersection #:	1	Oak Run Parkway at Independence Drive														
		Existing Traffic														
		Oak Run Parkway						Independence Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	39	231	3	25	230	140	2	6	7	85	6	33	7:30 AM	0.86	2.0%
	PM:	*60*	*231*	*1*	*2*	*276*	*182*	*2*	*3*	*11*	*125*	*0*	*48*	*4:45 PM*	*0.96*	2.0%
AM Approach Vol:		273			395			15			124					
PM Approach Vol:		*292*			*460*			*16*			*173*					
AM Departure Vol:		263			323			34			185					
PM Departure Vol:		*324*			*367*			*3*			*245*					
AM Link Total:		536			718			49			309					
PM Link Total:		*616*			*827*			*19*			*418*					
Estimated Link ADT:		6,160			8,270			490			4,180					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:	2021	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:	2023	
	AM:	43	250	4	27	249	152	3	7	8	92	7	36	Growth Rate:	3.8%	
	PM:	*65*	*250*	*2*	*3*	*299*	*197*	*3*	*4*	*12*	*135*	*0*	*52*	Factor:	1.08	
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:						**40%**								**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:						***40%***								***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:			**40%**											**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:			***40%***											***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	0	9	0	0	72	0	0	0	0	0	0	0	AM Rate:	1.44	
	PM:	*0*	*56*	*0*	*0*	*5*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Oak Run Parkway at Independence Drive														
		Total Background Traffic														
		Oak Run Parkway						Independence Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	43	259	4	27	321	152	3	7	8	92	7	36	7:30 AM	0.86	2.0%
	PM:	*65*	*306*	*2*	*3*	*304*	*197*	*3*	*4*	*12*	*135*	*0*	*52*	*4:45 PM*	*0.96*	*2.0%*
AM Approach Vol:		306			500			18			135					
PM Approach Vol:		*373*			*504*			*19*			*187*					
AM Departure Vol:		357			359			38			202					
PM Departure Vol:		*356*			*453*			*5*			*266*					
AM Link Total:		663			859			56			337					
PM Link Total:		*729*			*957*			*24*			*453*					
Estimated Link ADT:		7,290			9,570			560			4,530					

Intersection #: 1	Oak Run Parkway at Independence Drive											
Continued	**Total Background Traffic**											
	Oak Run Parkway						**Independence Drive**					
	EB			**WB**			**NB**			**SB**		
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱
AM:	43	259	4	27	321	152	3	7	8	92	7	36
PM:	*65*	*306*	*2*	*3*	*304*	*197*	*3*	*4*	*12*	*135*	*0*	*52*
AM Approach Vol:	306			500			18			135		
PM Approach Vol:	*373*			*504*			*19*			*187*		
AM Departure Vol:	357			359			38			202		
PM Departure Vol:	*356*			*453*			*5*			*266*		
AM Link Total:	663			859			56			337		
PM Link Total:	*729*			*957*			*24*			*453*		
Estimated Link ADT:	7,290			9,570			560			4,530		

Area 1 - Government Office Building (2023)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:					40%							40%	**AM Trips:**	**167**	**AM Enter %:**	**75%**
PM Enter Dist:					*40%*							*40%*	***PM Trips:***	***86***	***PM Enter %:***	**25%**
AM Exit Dist:	40%	40%											**AM Trips:**	**167**	**AM Exit %:**	**25%**
PM Exit Dist:	*40%*	*40%*											***PM Trips:***	***86***	***PM Exit %:***	***75%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA	
AM:	17	17	0	0	51	0	0	0	0	0	0	51	AM Rate:	3.34		
PM:	26	26	0	0	9	0	0	0	0	0	0	9	PM Rate:	1.71		

Area 1 - Utility (2023)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:					40%							40%	**AM Trips:**	**132**	**AM Enter %:**	**80%**
PM Enter Dist:					*40%*							*40%*	***PM Trips:***	***130***	***PM Enter %:***	**20%**
AM Exit Dist:	40%	40%											**AM Trips:**	**132**	**AM Exit %:**	**20%**
PM Exit Dist:	*40%*	*40%*											***PM Trips:***	***130***	***PM Exit %:***	***80%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA	
AM:	11	11	0	0	43	0	0	0	0	0	0	43	AM Rate:	2.31		
PM:	*42*	*42*	*0*	*0*	*11*	*0*	*0*	*0*	*0*	*0*	*0*	*11*	*PM Rate:*	2.27		

Area 2 - Elementary School (2025)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:					40%							40%	**AM Trips:**	**0**	**AM Enter %:**	**55%**
PM Enter Dist:					*40%*							*40%*	***PM Trips:***	***0***	***PM Enter %:***	**45%**
AM Exit Dist:	40%	40%											**AM Trips:**	**0**	**AM Exit %:**	**45%**
PM Exit Dist:	*40%*	*40%*											***PM Trips:***	***0***	***PM Exit %:***	***55%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	0	1000 Sq. Ft. GFA	
AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	6.97		
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	1.37		

Total Site Traffic

	Oak Run Parkway						Independence Drive					
	EB			WB			NB			SB		
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱
AM:	28	28	0	0	94	0	0	0	0	0	0	94
PM:	*68*	*68*	*0*	*0*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*20*
AM Approach Vol:	56			94			0			94		
PM Approach Vol:	*136*			*20*			*0*			*20*		
AM Departure Vol:	188			28			0			28		
PM Departure Vol:	*40*			*68*			*0*			*68*		
AM Link Total:	244			122			0			122		
PM Link Total:	*176*			*88*			*0*			*88*		
Estimated Link ADT:	2,440			1,220			0			1,220		

Build-Out - Total Traffic Condition

	Oak Run Parkway						Independence Drive								
	EB			WB			NB			SB					
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**
AM:	71	287	4	27	415	152	3	7	8	92	7	130	7:30 AM	0.86	10%
PM:	*133*	*374*	*2*	*3*	*324*	*197*	*3*	*4*	*12*	*135*	*0*	*72*	*4:45 PM*	*0.96*	10%
AM Approach Vol:	362			594			18			229					
PM Approach Vol:	*509*			*524*			*19*			*207*					
AM Departure Vol:	545			387			38			230					
PM Departure Vol:	*396*			*521*			*5*			*334*					
AM Link Total:	907			981			56			459					
PM Link Total:	*905*			*1,045*			*24*			*541*					
Estimated Link ADT:	9,070			10,450			560			5,410					

Intersection #:	2	Oak Run Parkway at Westpointe Drive														
		Existing Traffic														
		Oak Run Parkway						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	1	165	18	38	224	4	29	0	83	0	2	0	7:30 AM	0.85	2.3%
	PM:	*1*	*190*	*29*	*112*	*220*	*1*	*17*	*0*	*67*	*7*	*0*	*1*	*4:45 AM*	*0.94*	2.0%
AM Approach Vol:		184			266			112			2					
PM Approach Vol:		*220*			*333*			*84*			*8*					
AM Departure Vol:		224			248			58			5					
PM Departure Vol:		*221*			*264*			*141*			*2*					
AM Link Total:		408			514			170			7					
PM Link Total:		*441*			*597*			*225*			*10*					
Estimated Link ADT:		4,410			5,970			2,250			100					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2023
	AM:	2	179	20	42	242	5	32	0	90	0	3	0	Growth Rate:		3.8%
	PM:	*2*	*206*	*32*	*121*	*238*	*2*	*19*	*0*	*73*	*8*	*0*	*2*	Factor:		1.08
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:		**20%**					**40%**							**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:		***20%***					***40%***							***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:											**40%**		**20%**	**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:											***40%***		***20%***	***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	36	0	0	0	0	72	0	0	0	9	0	5	AM Rate:	1.44	
	PM:	*3*	*0*	*0*	*0*	*0*	*5*	*0*	*0*	*0*	*56*	*0*	*28*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Oak Run Parkway at Westpointe Drive														
		Total Background Traffic														
		Oak Run Parkway						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	38	179	20	42	242	77	32	0	90	9	3	5	7:30 AM	0.85	2.3%
	PM:	*5*	*206*	*32*	*121*	*238*	*7*	*19*	*0*	*73*	*64*	*0*	*30*	*4:45 AM*	*0.94*	*2.0%*
AM Approach Vol:		237			361			122			17					
PM Approach Vol:		*243*			*366*			*92*			*94*					
AM Departure Vol:		247			278			65			115					
PM Departure Vol:		*268*			*343*			*153*			*12*					
AM Link Total:		484			639			187			132					
PM Link Total:		*511*			*709*			*245*			*106*					
Estimated Link ADT:		5,110			7,090			2,450			1,320					

Intersection #: 2	Oak Run Parkway at Westpointe Drive															
Continued	**Total Background Traffic**															
	Oak Run Parkway						**Westpointe Drive**									
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM:	38	179	20	42	242	77	32	0	90	9	3	5				
PM:	*5*	*206*	*32*	*121*	*238*	*7*	*19*	*0*	*73*	*64*	*0*	*30*				
AM Approach Vol:	237			361			122			17						
PM Approach Vol:	*243*			*366*			*92*			*94*						
AM Departure Vol:	247			278			65			115						
PM Departure Vol:	*268*			*343*			*153*			*12*						
AM Link Total:	484			639			187			132						
PM Link Total:	*511*			*709*			*245*			*106*						
Estimated Link ADT:	5,110			7,090			2,450			1,320						

Area 1 - Government Office Building (2023)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:			20%	80%									**AM Trips:**	167	**AM Enter %:**	75%
PM Enter Dist:			*20%*	*80%*									***PM Trips:***	*86*	***PM Enter %:***	25%
AM Exit Dist:							20%		80%				**AM Trips:**	167	**AM Exit %:**	25%
PM Exit Dist:							*20%*		*80%*				***PM Trips:***	*86*	***PM Exit %:***	*75%*
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA	
AM:	0	0	26	101	0	0	9	0	34	0	0	0	AM Rate:	3.34		
PM:	0	0	5	18	0	0	13	0	52	0	0	0	PM Rate:	1.71		

Area 1 - Utility (2023)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:			20%	80%									**AM Trips:**	132	**AM Enter %:**	80%
PM Enter Dist:			*20%*	*80%*									***PM Trips:***	*130*	***PM Enter %:***	20%
AM Exit Dist:							20%		80%				**AM Trips:**	132	**AM Exit %:**	20%
PM Exit Dist:							*20%*		*80%*				***PM Trips:***	*130*	***PM Exit %:***	*80%*
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA	
AM:	0	0	22	85	0	0	6	0	22	0	0	0	AM Rate:	2.31		
PM:	*0*	*0*	*6*	*21*	*0*	*0*	*21*	*0*	*84*	*0*	*0*	*0*	*PM Rate:*	2.27		

Area 2 - Elementary School (2025)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:			20%	80%									**AM Trips:**	0	**AM Enter %:**	55%
PM Enter Dist:			*20%*	*80%*									***PM Trips:***	*0*	***PM Enter %:***	45%
AM Exit Dist:							20%		80%				**AM Trips:**	0	**AM Exit %:**	45%
PM Exit Dist:							*20%*		*80%*				***PM Trips:***	*0*	***PM Exit %:***	*55%*
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	0	1000 Sq. Ft. GFA	
AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	6.97		
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	1.37		

Total Site Traffic

	Oak Run Parkway						Westpointe Drive					
	EB			WB			NB			SB		
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱
AM:	0	0	48	186	0	0	15	0	56	0	0	0
PM:	*0*	*0*	*11*	*39*	*0*	*0*	*34*	*0*	*136*	*0*	*0*	*0*
AM Approach Vol:	48			186			71			0		
PM Approach Vol:	*11*			*39*			*170*			*0*		
AM Departure Vol:	0			56			234			0		
PM Departure Vol:	*0*			*136*			*50*			*0*		
AM Link Total:	48			242			305			0		
PM Link Total:	*11*			*175*			*220*			*0*		
Estimated Link ADT:	480			2,420			3,050			0		

Build-Out - Total Traffic Condition

	Oak Run Parkway						Westpointe Drive								
	EB			WB			NB			SB					
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**
AM:	38	179	68	228	242	77	47	0	146	9	3	5	7:30 AM	0.85	14%
PM:	*5*	*206*	*43*	*160*	*238*	*7*	*53*	*0*	*209*	*64*	*0*	*30*	*4:45 AM*	*0.94*	14%
AM Approach Vol:	285			547			193			17					
PM Approach Vol:	*254*			*405*			*262*			*94*					
AM Departure Vol:	247			334			299			115					
PM Departure Vol:	*268*			*479*			*203*			*12*					
AM Link Total:	532			881			492			132					
PM Link Total:	*522*			*884*			*465*			*106*					
Estimated Link ADT:	5,320			8,840			4,920			1,320					

Intersection #:	3	Westpointe Drive at Mission Hill Run (North)														
		Existing Traffic														
		Mission Hill Run (North)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	16		0				0	48			14	12	7:15 AM	0.75	7.8%
	PM:	*17*		*0*				*3*	*31*			*21*	*45*	*4:00 PM*	*0.84*	3.4%
AM Approach Vol:		16			0			48			26					
PM Approach Vol:		*17*			*0*			*34*			*66*					
AM Departure Vol:		12			0			14			64					
PM Departure Vol:		*45*			*0*			*21*			*48*					
AM Link Total:		28			0			62			90					
PM Link Total:		*62*			*0*			*55*			*114*					
Estimated Link ADT:		620			0			620			1,140					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2023
	AM:	18	0	0	0	0	0	0	52	0	0	16	13	Growth Rate:		3.8%
	PM:	*19*	*0*	*0*	*0*	*0*	*0*	*4*	*34*	*0*	*0*	*23*	*49*	Factor:		1.08
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:														***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:														**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:														***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	1.44	
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Westpointe Drive at Mission Hill Run (North)														
		Total Background Traffic														
		Mission Hill Run (North)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	18	0	0	0	0	0	0	52	0	0	16	13	7:15 AM	0.75	7.8%
	PM:	*19*	*0*	*0*	*0*	*0*	*0*	*4*	*34*	*0*	*0*	*23*	*49*	*4:00 PM*	*0.84*	*3.4%*
AM Approach Vol:		18			0			52			29					
PM Approach Vol:		*19*			*0*			*38*			*72*					
AM Departure Vol:		13			0			16			70					
PM Departure Vol:		*49*			*0*			*23*			*53*					
AM Link Total:		31			0			68			99					
PM Link Total:		*68*			*0*			*61*			*125*					
Estimated Link ADT:		680			0			680			1,250					

Intersection #: 3	Westpointe Drive at Mission Hill Run (North)																
Continued	**Total Background Traffic**																
	Mission Hill Run (North)						**Westpointe Drive**										
	EB			**WB**			**NB**			**SB**							
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
AM:	18	0	0	0	0	0	0	52	0	0	16	13					
PM:	*19*	*0*	*0*	*0*	*0*	*0*	*4*	*34*	*0*	*0*	*23*	*49*					
AM Approach Vol:	18			0			52			29							
PM Approach Vol:	*19*			*0*			*38*			*72*							
AM Departure Vol:	13			0			16			70							
PM Departure Vol:	*49*			*0*			*23*			*53*							
AM Link Total:	31			0			68			99							
PM Link Total:	*68*			*0*			*61*			*125*							
Estimated Link ADT:	680			0			680			1,250							
	Area 1 - Government Office Building (2023)																
	EB			**WB**			**NB**			**SB**							
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**				
AM Enter Dist:											100%		**AM Trips:**	167	**AM Enter %:**	75%	
PM Enter Dist:											*100%*		***PM Trips:***	*86*	***PM Enter %:***	25%	
AM Exit Dist:								100%					**AM Trips:**	167	**AM Exit %:**	25%	
PM Exit Dist:								*100%*					***PM Trips:***	*86*	***PM Exit %:***	*75%*	
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA		
AM:	0	0	0	0	0	0	0	42	0	0	126	0	AM Rate:	3.34			
PM:	0	0	0	0	0	0	0	65	0	0	22	0	PM Rate:	1.71			
	Area 1 - Utility (2023)																
	EB			**WB**			**NB**			**SB**							
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**				
AM Enter Dist:											100%		**AM Trips:**	132	**AM Enter %:**	80%	
PM Enter Dist:											*100%*		***PM Trips:***	*130*	***PM Enter %:***	20%	
AM Exit Dist:								100%					**AM Trips:**	132	**AM Exit %:**	20%	
PM Exit Dist:								*100%*					***PM Trips:***	*130*	***PM Exit %:***	*80%*	
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA		
AM:	0	0	0	0	0	0	0	27	0	0	106	0	AM Rate:	2.31			
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*104*	*0*	*0*	*26*	*0*	*PM Rate:*	2.27			
	Area 2 - Elementary School (2025)																
	EB			**WB**			**NB**			**SB**							
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**				
AM Enter Dist:											100%		**AM Trips:**	0	**AM Enter %:**	55%	
PM Enter Dist:											*100%*		***PM Trips:***	*0*	***PM Enter %:***	45%	
AM Exit Dist:								100%					**AM Trips:**	0	**AM Exit %:**	45%	
PM Exit Dist:								*100%*					***PM Trips:***	*0*	***PM Exit %:***	*55%*	
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	0	1000 Sq. Ft. GFA		
AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	6.97			
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	1.37			
	Total Site Traffic																
	Mission Hill Run (North)						**Westpointe Drive**										
	EB			**WB**			**NB**			**SB**							
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
AM:	0	0	0	0	0	0	0	69	0	0	232	0					
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*169*	*0*	*0*	*48*	*0*					
AM Approach Vol:	0			0			69			232							
PM Approach Vol:	*0*			*0*			*169*			*48*							
AM Departure Vol:	0			0			232			69							
PM Departure Vol:	*0*			*0*			*48*			*169*							
AM Link Total:	0			0			301			301							
PM Link Total:	*0*			*0*			*217*			*217*							
Estimated Link ADT:	0			0			3,010			3,010							
	Build-Out - Total Traffic Condition																
	Mission Hill Run (North)						**Westpointe Drive**										
	EB			**WB**			**NB**			**SB**							
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**		
AM:	18	0	0	0	0	0	0	121	0	0	248	13	7:15 AM	0.75	35%		
PM:	*19*	*0*	*0*	*0*	*0*	*0*	*4*	*203*	*0*	*0*	*71*	*49*	*4:00 PM*	*0.84*	39%		
AM Approach Vol:	18			0			121			261							
PM Approach Vol:	*19*			*0*			*207*			*120*							
AM Departure Vol:	13			0			248			139							
PM Departure Vol:	*49*			*0*			*71*			*222*							
AM Link Total:	31			0			369			400							
PM Link Total:	*68*			*0*			*278*			*342*							
Estimated Link ADT:	680			0			3,690			4,000							

Intersection #:	4	Westpointe Drive at Access 1 (NBU Campus) / Access 3 (School)														
		Existing Traffic														
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:														0.92	2.0%
	PM:														*0.92*	2.0%
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2023
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	Growth Rate:		3.8%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	Factor:		1.08
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:														***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:														**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:														***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	1.44	
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Westpointe Drive at Access 1 (NBU Campus) / Access 3 (School)														
		Total Background Traffic														
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	12:00 AM	0.92	2.0%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12:00 AM*	*0.92*	*2.0%*
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					

Intersection #:	4	Westpointe Drive at Access 1 (NBU Campus) / Access 3 (School)																
Continued		Total Background Traffic																
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
	AM:	0	0	0	0	0	0	0	0	0	0	0	0					
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					
AM Approach Vol:		0			0			0			0							
PM Approach Vol:		*0*			*0*			*0*			*0*							
AM Departure Vol:		0			0			0			0							
PM Departure Vol:		*0*			*0*			*0*			*0*							
AM Link Total:		0			0			0			0							
PM Link Total:		*0*			*0*			*0*			*0*							
Estimated Link ADT:		0			0			0			0							
		Area 1 - Government Office Building (2023)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data				
AM Enter Dist:											50%	50%		**AM Trips:**	167	**AM Enter %:**	75%	
PM Enter Dist:											*50%*	*50%*		***PM Trips:***	*86*	***PM Enter %:***	25%	
AM Exit Dist:						50%		50%						**AM Trips:**	167	**AM Exit %:**	25%	
PM Exit Dist:						*50%*		*50%*						***PM Trips:***	*86*	***PM Exit %:***	*75%*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA		
	AM:	0	0	0	0	0	21	0	21	0	63	63	0	AM Rate:	3.34			
	PM:	0	0	0	0	0	33	0	33	0	11	11	0	PM Rate:	1.71			
		Area 1 - Utility (2023)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data				
AM Enter Dist:											100%			**AM Trips:**	132	**AM Enter %:**	80%	
PM Enter Dist:											*100%*			***PM Trips:***	*130*	***PM Enter %:***	20%	
AM Exit Dist:						100%								**AM Trips:**	132	**AM Exit %:**	20%	
PM Exit Dist:						*100%*								***PM Trips:***	*130*	***PM Exit %:***	*80%*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA		
	AM:	0	0	0	0	0	27	0	0	0	106	0	0	AM Rate:	2.31			
	PM:	*0*	*0*	*0*	*0*	*0*	*104*	*0*	*0*	*0*	*26*	*0*	*0*	*PM Rate:*	2.27			
		Area 2 - Elementary School (2025)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data				
AM Enter Dist:												20%	80%	**AM Trips:**	0	**AM Enter %:**	55%	
PM Enter Dist:												*20%*	*80%*	***PM Trips:***	*0*	***PM Enter %:***	45%	
AM Exit Dist:	80%							20%						**AM Trips:**	0	**AM Exit %:**	45%	
PM Exit Dist:	*80%*							*20%*						***PM Trips:***	*0*	***PM Exit %:***	*55%*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	0	1000 Sq. Ft. GFA		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	6.97			
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	1.37			
		Total Site Traffic																
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
	AM:	0	0	0	0	0	48	0	21	0	169	63	0					
	PM:	*0*	*0*	*0*	*0*	*0*	*137*	*0*	*33*	*0*	*37*	*11*	*0*					
AM Approach Vol:		0			48			21			232							
PM Approach Vol:		*0*			*137*			*33*			*48*							
AM Departure Vol:		0			169			63			69							
PM Departure Vol:		*0*			*37*			*11*			*170*							
AM Link Total:		0			217			84			301							
PM Link Total:		*0*			*174*			*44*			*218*							
Estimated Link ADT:		0			2,170			840			3,010							
		Build-Out - Total Traffic Condition																
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks		
	AM:	0	0	0	0	0	48	0	21	0	169	63	0	12:00 AM	0.92	44%		
	PM:	*0*	*0*	*0*	*0*	*0*	*137*	*0*	*33*	*0*	*37*	*11*	*0*	*12:00 AM*	*0.92*	60%		
AM Approach Vol:		0			48			21			232							
PM Approach Vol:		*0*			*137*			*33*			*48*							
AM Departure Vol:		0			169			63			69							
PM Departure Vol:		*0*			*37*			*11*			*170*							
AM Link Total:		0			217			84			301							
PM Link Total:		*0*			*174*			*44*			*218*							
Estimated Link ADT:		0			2,170			840			3,010							

Intersection #:	5	Westpointe Drive at Access 2 (NBU Campus) / Access 4 (School)														
		Existing Traffic														
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:														0.92	2.0%
	PM:														*0.92*	2.0%
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2023
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	Growth Rate:		3.8%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	Factor:		1.08
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:														***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:														**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:														***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	1.44	
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Westpointe Drive at Access 2 (NBU Campus) / Access 4 (School)														
		Total Background Traffic														
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	12:00 AM	0.92	2.0%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12:00 AM*	*0.92*	*2.0%*
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					

Intersection #:	5	Westpointe Drive at Access 2 (NBU Campus) / Access 4 (School)															
Continued		Total Background Traffic															
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
	AM:	0	0	0	0	0	0	0	0	0	0	0	0				
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*				
AM Approach Vol:		0			0			0			0						
PM Approach Vol:		*0*			*0*			*0*			*0*						
AM Departure Vol:		0			0			0			0						
PM Departure Vol:		*0*			*0*			*0*			*0*						
AM Link Total:		0			0			0			0						
PM Link Total:		*0*			*0*			*0*			*0*						
Estimated Link ADT:		0			0			0			0						
		Area 1 - Government Office Building (2023)															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:											50%			**AM Trips:**	167	**AM Enter %:**	75%
PM Enter Dist:											*50%*			***PM Trips:***	*86*	***PM Enter %:***	25%
AM Exit Dist:						50%								**AM Trips:**	167	**AM Exit %:**	25%
PM Exit Dist:						*50%*								***PM Trips:***	*86*	***PM Exit %:***	*75%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA	
	AM:	0	0	0	0	0	21	0	0	0	63	0	0	AM Rate:	3.34		
	PM:	0	0	0	0	0	33	0	0	0	11	0	0	PM Rate:	1.71		
		Area 1 - Utility (2023)															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:														**AM Trips:**	132	**AM Enter %:**	80%
PM Enter Dist:														***PM Trips:***	*130*	***PM Enter %:***	20%
AM Exit Dist:														**AM Trips:**	132	**AM Exit %:**	20%
PM Exit Dist:														***PM Trips:***	*130*	***PM Exit %:***	*80%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA	
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	2.31		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	2.27		
		Area 2 - Elementary School (2025)															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:													20%	**AM Trips:**	0	**AM Enter %:**	55%
PM Enter Dist:													*20%*	***PM Trips:***	*0*	***PM Enter %:***	45%
AM Exit Dist:	20%													**AM Trips:**	0	**AM Exit %:**	45%
PM Exit Dist:	*20%*													***PM Trips:***	*0*	***PM Exit %:***	*55%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	0	1000 Sq. Ft. GFA	
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	6.97		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	1.37		
		Total Site Traffic															
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
	AM:	0	0	0	0	0	21	0	0	0	63	0	0				
	PM:	*0*	*0*	*0*	*0*	*0*	*33*	*0*	*0*	*0*	*11*	*0*	*0*				
AM Approach Vol:		0			21			0			63						
PM Approach Vol:		*0*			*33*			*0*			*11*						
AM Departure Vol:		0			63			0			21						
PM Departure Vol:		*0*			*11*			*0*			*33*						
AM Link Total:		0			84			0			84						
PM Link Total:		*0*			*44*			*0*			*44*						
Estimated Link ADT:		0			840			0			840						
		Build-Out - Total Traffic Condition															
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks	
	AM:	0	0	0	0	0	21	0	0	0	63	0	0	12:00 AM	0.92	2%	
	PM:	*0*	*0*	*0*	*0*	*0*	*33*	*0*	*0*	*0*	*11*	*0*	*0*	*12:00 AM*	*0.92*	2%	
AM Approach Vol:		0			21			0			63						
PM Approach Vol:		*0*			*33*			*0*			*11*						
AM Departure Vol:		0			63			0			21						
PM Departure Vol:		*0*			*11*			*0*			*33*						
AM Link Total:		0			84			0			84						
PM Link Total:		*0*			*44*			*0*			*44*						
Estimated Link ADT:		0			840			0			840						

APPENDIX F – BUILD-OUT (2025) TRIP DISTRIBUTION TABLES

Intersection #:	1	Oak Run Parkway at Independence Drive															
		Existing Traffic															
		Oak Run Parkway						Independence Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks	
	AM:	39	231	3	25	230	140	2	6	7	85	6	33	7:30 AM	0.86	2.0%	
	PM:	*60*	*231*	*1*	*2*	*276*	*182*	*2*	*3*	*11*	*125*	*0*	*48*	*4:45 PM*	*0.96*	2.0%	
AM Approach Vol:		273			395			15			124						
PM Approach Vol:		*292*			*460*			*16*			*173*						
AM Departure Vol:		263			323			34			185						
PM Departure Vol:		*324*			*367*			*3*			*245*						
AM Link Total:		536			718			49			309						
PM Link Total:		*616*			*827*			*19*			*418*						
Estimated Link ADT:		6,160			8,270			490			4,180						
		Growth of Existing Traffic to Background Volumes															
		EB			WB			NB			SB			Traffic Count Year:	2021		
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:	2025		
	AM:	46	268	4	29	267	163	3	7	9	99	7	39	Growth Rate:	3.8%		
	PM:	*70*	*268*	*2*	*3*	*321*	*212*	*3*	*4*	*13*	*145*	*0*	*56*	Factor:	1.16		
		Office Park (750) - Background Traffic															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:						40%								AM Trips:	201	AM Enter %:	89%
PM Enter Dist:						*40%*								*PM Trips:*	*149*	*PM Enter %:*	*7%*
AM Exit Dist:			40%											AM Trips:	201	AM Exit %:	11%
PM Exit Dist:			*40%*											*PM Trips:*	*149*	*PM Exit %:*	*93%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA	
	AM:	0	9	0	0	72	0	0	0	0	0	0	0	AM Rate:	1.44		
	PM:	*0*	*56*	*0*	*0*	*5*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*		
		Land Use 2 - Background Traffic															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:														AM Trips:	0	AM Enter %:	
PM Enter Dist:														*PM Trips:*	*0*	*PM Enter %:*	
AM Exit Dist:														AM Trips:	0	AM Exit %:	
PM Exit Dist:														*PM Trips:*	*0*	*PM Exit %:*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:			
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:			
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:			
		Land Use 3 - Background Traffic															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:														AM Trips:	0	AM Enter %:	
PM Enter Dist:														*PM Trips:*	*0*	*PM Enter %:*	
AM Exit Dist:														AM Trips:	0	AM Exit %:	
PM Exit Dist:														*PM Trips:*	*0*	*PM Exit %:*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:			
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:			
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*			
		Oak Run Parkway at Independence Drive															
		Total Background Traffic															
		Oak Run Parkway						Independence Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks	
	AM:	46	277	4	29	339	163	3	7	9	99	7	39	7:30 AM	0.86	2.0%	
	PM:	*70*	*324*	*2*	*3*	*326*	*212*	*3*	*4*	*13*	*145*	*0*	*56*	*4:45 PM*	*0.96*	*2.0%*	
AM Approach Vol:		327			531			19			145						
PM Approach Vol:		*396*			*541*			*20*			*201*						
AM Departure Vol:		378			385			40			216						
PM Departure Vol:		*382*			*482*			*5*			*286*						
AM Link Total:		705			916			59			361						
PM Link Total:		*778*			*1,023*			*25*			*487*						
Estimated Link ADT:		7,780			10,230			590			4,870						

Intersection #:	1	Oak Run Parkway at Independence Drive																
Continued		Total Background Traffic																
		Oak Run Parkway						Independence Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
	AM:	46	277	4	29	339	163	3	7	9	99	7	39					
	PM:	*70*	*324*	*2*	*3*	*326*	*212*	*3*	*4*	*13*	*145*	*0*	*56*					
AM Approach Vol:		327			531			19			145							
PM Approach Vol:		*396*			*541*			*20*			*201*							
AM Departure Vol:		378			385			40			216							
PM Departure Vol:		*382*			*482*			*5*			*286*							
AM Link Total:		705			916			59			361							
PM Link Total:		*778*			*1,023*			*25*			*487*							
Estimated Link ADT:		7,780			10,230			590			4,870							
		Area 1 - Government Office Building (2023)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**				
AM Enter Dist:						40%							40%	**AM Trips:**	**167**	**AM Enter %:**	**75%**	
PM Enter Dist:						*40%*							*40%*	***PM Trips:***	***86***	***PM Enter %:***	**25%**	
AM Exit Dist:	40%	40%												**AM Trips:**	**167**	**AM Exit %:**	**25%**	
PM Exit Dist:	*40%*	*40%*												***PM Trips:***	***86***	***PM Exit %:***	***75%***	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA		
	AM:	17	17	0	0	51	0	0	0	0	0	0	51	AM Rate:	3.34			
	PM:	26	26	0	0	9	0	0	0	0	0	0	9	PM Rate:	1.71			
		Area 1 - Utility (2023)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**				
AM Enter Dist:						40%							40%	**AM Trips:**	**132**	**AM Enter %:**	**80%**	
PM Enter Dist:						*40%*							*40%*	***PM Trips:***	***130***	***PM Enter %:***	**20%**	
AM Exit Dist:	40%	40%												**AM Trips:**	**132**	**AM Exit %:**	**20%**	
PM Exit Dist:	*40%*	*40%*												***PM Trips:***	***130***	***PM Exit %:***	***80%***	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA		
	AM:	11	11	0	0	43	0	0	0	0	0	0	43	AM Rate:	2.31			
	PM:	*42*	*42*	*0*	*0*	*11*	*0*	*0*	*0*	*0*	*0*	*0*	*11*	*PM Rate:*	2.27			
		Area 2 - Elementary School (2025)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**				
AM Enter Dist:						40%							40%	**AM Trips:**	**697**	**AM Enter %:**	**55%**	
PM Enter Dist:						*40%*							*40%*	***PM Trips:***	***137***	***PM Enter %:***	**45%**	
AM Exit Dist:	40%	40%												**AM Trips:**	**697**	**AM Exit %:**	**45%**	
PM Exit Dist:	*40%*	*40%*												***PM Trips:***	***137***	***PM Exit %:***	***55%***	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	100	1000 Sq. Ft. GFA		
	AM:	126	126	0	0	154	0	0	0	0	0	0	154	AM Rate:	6.97			
	PM:	*31*	*31*	*0*	*0*	*25*	*0*	*0*	*0*	*0*	*0*	*0*	*25*	*PM Rate:*	1.37			
		Total Site Traffic																
		Oak Run Parkway						Independence Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
	AM:	154	154	0	0	248	0	0	0	0	0	0	248					
	PM:	*99*	*99*	*0*	*0*	*45*	*0*	*0*	*0*	*0*	*0*	*0*	*45*					
AM Approach Vol:		308			248			0			248							
PM Approach Vol:		*198*			*45*			*0*			*45*							
AM Departure Vol:		496			154			0			154							
PM Departure Vol:		*90*			*99*			*0*			*99*							
AM Link Total:		804			402			0			402							
PM Link Total:		*288*			*144*			*0*			*144*							
Estimated Link ADT:		8,040			4,020			0			4,020							
		Build-Out - Total Traffic Condition																
		Oak Run Parkway						Independence Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**		
	AM:	200	431	4	29	587	163	3	7	9	99	7	287	7:30 AM	0.86	7%		
	PM:	*169*	*423*	*2*	*3*	*371*	*212*	*3*	*4*	*13*	*145*	*0*	*101*	*4:45 PM*	*0.96*	9%		
AM Approach Vol:		635			779			19			393							
PM Approach Vol:		*594*			*586*			*20*			*246*							
AM Departure Vol:		874			539			40			370							
PM Departure Vol:		*472*			*581*			*5*			*385*							
AM Link Total:		1,509			1,318			59			763							
PM Link Total:		*1,066*			*1,167*			*25*			*631*							
Estimated Link ADT:		15,090			13,180			590			7,630							

Intersection #:	2	Oak Run Parkway at Westpointe Drive														
		Existing Traffic														
		Oak Run Parkway						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	1	165	18	38	224	4	29	0	83	0	2	0	7:30 AM	0.85	2.3%
	PM:	*1*	*190*	*29*	*112*	*220*	*1*	*17*	*0*	*67*	*7*	*0*	*1*	*4:45 AM*	*0.94*	2.0%
AM Approach Vol:		184			266			112			2					
PM Approach Vol:		*220*			*333*			*84*			*8*					
AM Departure Vol:		224			248			58			5					
PM Departure Vol:		*221*			*264*			*141*			*2*					
AM Link Total:		408			514			170			7					
PM Link Total:		*441*			*597*			*225*			*10*					
Estimated Link ADT:		4,410			5,970			2,250			100					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2025
	AM:	2	192	21	45	260	5	34	0	97	0	3	0	Growth Rate:		3.8%
	PM:	*2*	*221*	*34*	*130*	*256*	*2*	*20*	*0*	*78*	*9*	*0*	*2*	Factor:		1.16
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:		**20%**					**40%**							**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:		***20%***					***40%***							***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:											**40%**		**20%**	**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:											***40%***		***20%***	***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	36	0	0	0	0	72	0	0	0	9	0	5	AM Rate:	1.44	
	PM:	*3*	*0*	*0*	*0*	*0*	*5*	*0*	*0*	*0*	*56*	*0*	*28*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Oak Run Parkway at Westpointe Drive														
		Total Background Traffic														
		Oak Run Parkway						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	38	192	21	45	260	77	34	0	97	9	3	5	7:30 AM	0.85	2.3%
	PM:	*5*	*221*	*34*	*130*	*256*	*7*	*20*	*0*	*78*	*65*	*0*	*30*	*4:45 AM*	*0.94*	*2.0%*
AM Approach Vol:		251			382			131			17					
PM Approach Vol:		*260*			*393*			*98*			*95*					
AM Departure Vol:		265			298			69			115					
PM Departure Vol:		*286*			*364*			*164*			*12*					
AM Link Total:		516			680			200			132					
PM Link Total:		*546*			*757*			*262*			*107*					
Estimated Link ADT:		5,460			7,570			2,620			1,320					

Intersection #: 2	Oak Run Parkway at Westpointe Drive															
Continued	**Total Background Traffic**															
	Oak Run Parkway						**Westpointe Drive**									
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM:	38	192	21	45	260	77	34	0	97	9	3	5				
PM:	*5*	*221*	*34*	*130*	*256*	*7*	*20*	*0*	*78*	*65*	*0*	*30*				
AM Approach Vol:	251			382			131			17						
PM Approach Vol:	*260*			*393*			*98*			*95*						
AM Departure Vol:	265			298			69			115						
PM Departure Vol:	*286*			*364*			*164*			*12*						
AM Link Total:	516			680			200			132						
PM Link Total:	*546*			*757*			*262*			*107*						
Estimated Link ADT:	5,460			7,570			2,620			1,320						
	Area 1 - Government Office Building (2023)															
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**			
AM Enter Dist:			**20%**	**80%**									**AM Trips:**	**167**	**AM Enter %:**	**75%**
PM Enter Dist:			***20%***	***80%***									***PM Trips:***	***86***	***PM Enter %:***	**25%**
AM Exit Dist:							**20%**		**80%**				**AM Trips:**	**167**	**AM Exit %:**	**25%**
PM Exit Dist:							***20%***		***80%***				***PM Trips:***	***86***	***PM Exit %:***	***75%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA	
AM:	0	0	26	101	0	0	9	0	34	0	0	0	AM Rate:	3.34		
PM:	0	0	5	18	0	0	13	0	52	0	0	0	PM Rate:	1.71		
	Area 1 - Utility (2023)															
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**			
AM Enter Dist:			**20%**	**80%**									**AM Trips:**	**132**	**AM Enter %:**	**80%**
PM Enter Dist:			***20%***	***80%***									***PM Trips:***	***130***	***PM Enter %:***	**20%**
AM Exit Dist:							**20%**		**80%**				**AM Trips:**	**132**	**AM Exit %:**	**20%**
PM Exit Dist:							***20%***		***80%***				***PM Trips:***	***130***	***PM Exit %:***	***80%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA	
AM:	0	0	22	85	0	0	6	0	22	0	0	0	AM Rate:	2.31		
PM:	*0*	*0*	*6*	*21*	*0*	*0*	*21*	*0*	*84*	*0*	*0*	*0*	*PM Rate:*	2.27		
	Area 2 - Elementary School (2025)															
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Trip Generation Data**			
AM Enter Dist:			**20%**	**80%**									**AM Trips:**	**697**	**AM Enter %:**	**55%**
PM Enter Dist:			***20%***	***80%***									***PM Trips:***	***137***	***PM Enter %:***	**45%**
AM Exit Dist:							**20%**		**80%**				**AM Trips:**	**697**	**AM Exit %:**	**45%**
PM Exit Dist:							***20%***		***80%***				***PM Trips:***	***137***	***PM Exit %:***	***55%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	100	1000 Sq. Ft. GFA	
AM:	0	0	77	307	0	0	63	0	251	0	0	0	AM Rate:	6.97		
PM:	*0*	*0*	*13*	*50*	*0*	*0*	*16*	*0*	*61*	*0*	*0*	*0*	*PM Rate:*	1.37		
	Total Site Traffic															
	Oak Run Parkway						**Westpointe Drive**									
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM:	0	0	125	493	0	0	78	0	307	0	0	0				
PM:	*0*	*0*	*24*	*89*	*0*	*0*	*50*	*0*	*197*	*0*	*0*	*0*				
AM Approach Vol:	125			493			385			0						
PM Approach Vol:	*24*			*89*			*247*			*0*						
AM Departure Vol:	0			307			618			0						
PM Departure Vol:	*0*			*197*			*113*			*0*						
AM Link Total:	125			800			1,003			0						
PM Link Total:	*24*			*286*			*360*			*0*						
Estimated Link ADT:	1,250			8,000			10,030			0						
	Build-Out - Total Traffic Condition															
	Oak Run Parkway						**Westpointe Drive**									
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**	
AM:	38	192	146	538	260	77	112	0	404	9	3	5	7:30 AM	0.85	8%	
PM:	*5*	*221*	*58*	*219*	*256*	*7*	*70*	*0*	*275*	*65*	*0*	*30*	*4:45 AM*	*0.94*	12%	
AM Approach Vol:	376			875			516			17						
PM Approach Vol:	*284*			*482*			*345*			*95*						
AM Departure Vol:	265			605			687			115						
PM Departure Vol:	*286*			*561*			*277*			*12*						
AM Link Total:	641			1,480			1,203			132						
PM Link Total:	*570*			*1,043*			*622*			*107*						
Estimated Link ADT:	6,410			14,800			12,030			1,320						

Intersection #:	3	Westpointe Drive at Mission Hill Run (North)														
		Existing Traffic														
		Mission Hill Run (North)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	16		0				0	48			14	12	7:15 AM	0.75	7.8%
	PM:	*17*		*0*				*3*	*31*			*21*	*45*	*4:00 PM*	*0.84*	3.4%
AM Approach Vol:		16			0			48			26					
PM Approach Vol:		*17*			*0*			*34*			*66*					
AM Departure Vol:		12			0			14			64					
PM Departure Vol:		*45*			*0*			*21*			*48*					
AM Link Total:		28			0			62			90					
PM Link Total:		*62*			*0*			*55*			*114*					
Estimated Link ADT:		620			0			620			1,140					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2025
	AM:	19	0	0	0	0	0	0	56	0	0	17	14	Growth Rate:		3.8%
	PM:	*20*	*0*	*0*	*0*	*0*	*0*	*4*	*36*	*0*	*0*	*25*	*53*	Factor:		1.16
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**201**	**AM Enter %:**	**89%**
PM Enter Dist:														***PM Trips:***	***149***	***PM Enter %:***	***7%***
AM Exit Dist:														**AM Trips:**	**201**	**AM Exit %:**	**11%**
PM Exit Dist:														***PM Trips:***	***149***	***PM Exit %:***	***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA	
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	1.44		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*		
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**	
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***	
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**	
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:			
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:			
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:			
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**	
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***	
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**	
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:			
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:			
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*			
		Westpointe Drive at Mission Hill Run (North)														
		Total Background Traffic														
		Mission Hill Run (North)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	19	0	0	0	0	0	0	56	0	0	17	14	7:15 AM	0.75	7.8%
	PM:	*20*	*0*	*0*	*0*	*0*	*0*	*4*	*36*	*0*	*0*	*25*	*53*	*4:00 PM*	*0.84*	*3.4%*
AM Approach Vol:		19			0			56			31					
PM Approach Vol:		*20*			*0*			*40*			*78*					
AM Departure Vol:		14			0			17			75					
PM Departure Vol:		*53*			*0*			*25*			*56*					
AM Link Total:		33			0			73			106					
PM Link Total:		*73*			*0*			*65*			*134*					
Estimated Link ADT:		730			0			730			1,340					

Intersection #: 3	Westpointe Drive at Mission Hill Run (North)															
Continued	**Total Background Traffic**															
	Mission Hill Run (North)						**Westpointe Drive**									
	EB			**WB**			**NB**			**SB**						
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM:	19	0	0	0	0	0	0	56	0	0	17	14				
PM:	*20*	*0*	*0*	*0*	*0*	*0*	*4*	*36*	*0*	*0*	*25*	*53*				
AM Approach Vol:	19			0			56			31						
PM Approach Vol:	*20*			*0*			*40*			*78*						
AM Departure Vol:	14			0			17			75						
PM Departure Vol:	*53*			*0*			*25*			*56*						
AM Link Total:	33			0			73			106						
PM Link Total:	*73*			*0*			*65*			*134*						
Estimated Link ADT:	730			0			730			1,340						

Area 1 - Government Office Building (2023)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:											100%		**AM Trips:**	**167**	**AM Enter %:**	**75%**
PM Enter Dist:											***100%***		***PM Trips:***	***86***	***PM Enter %:***	**25%**
AM Exit Dist:								100%					**AM Trips:**	**167**	**AM Exit %:**	**25%**
PM Exit Dist:								***100%***					***PM Trips:***	***86***	***PM Exit %:***	***75%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA	
AM:	0	0	0	0	0	0	0	42	0	0	126	0	AM Rate:	3.34		
PM:	0	0	0	0	0	0	0	65	0	0	22	0	PM Rate:	1.71		

Area 1 - Utility (2023)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:											100%		**AM Trips:**	**132**	**AM Enter %:**	**80%**
PM Enter Dist:											***100%***		***PM Trips:***	***130***	***PM Enter %:***	**20%**
AM Exit Dist:								100%					**AM Trips:**	**132**	**AM Exit %:**	**20%**
PM Exit Dist:								***100%***					***PM Trips:***	***130***	***PM Exit %:***	***80%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA	
AM:	0	0	0	0	0	0	0	27	0	0	106	0	AM Rate:	2.31		
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*104*	*0*	*0*	*26*	*0*	*PM Rate:*	2.27		

Area 2 - Elementary School (2025)

	EB			WB			NB			SB			Trip Generation Data			
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
AM Enter Dist:											100%		**AM Trips:**	**697**	**AM Enter %:**	**55%**
PM Enter Dist:											***100%***		***PM Trips:***	***137***	***PM Enter %:***	**45%**
AM Exit Dist:								100%					**AM Trips:**	**697**	**AM Exit %:**	**45%**
PM Exit Dist:								***100%***					***PM Trips:***	***137***	***PM Exit %:***	***55%***
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	100	1000 Sq. Ft. GFA	
AM:	0	0	0	0	0	0	0	314	0	0	384	0	AM Rate:	6.97		
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*76*	*0*	*0*	*62*	*0*	*PM Rate:*	1.37		

Total Site Traffic

	Mission Hill Run (North)						Westpointe Drive					
	EB			WB			NB			SB		
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱
AM:	0	0	0	0	0	0	0	383	0	0	616	0
PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*245*	*0*	*0*	*110*	*0*
AM Approach Vol:	0			0			383			616		
PM Approach Vol:	*0*			*0*			*245*			*110*		
AM Departure Vol:	0			0			616			383		
PM Departure Vol:	*0*			*0*			*110*			*245*		
AM Link Total:	0			0			999			999		
PM Link Total:	*0*			*0*			*355*			*355*		
Estimated Link ADT:	0			0			9,990			9,990		

Build-Out - Total Traffic Condition

	Mission Hill Run (North)						Westpointe Drive								
	EB			WB			NB			SB					
	↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**
AM:	19	0	0	0	0	0	0	439	0	0	633	14	7:15 AM	0.75	13%
PM:	*20*	*0*	*0*	*0*	*0*	*0*	*4*	*281*	*0*	*0*	*135*	*53*	*4:00 PM*	*0.84*	27%
AM Approach Vol:	19			0			439			647					
PM Approach Vol:	*20*			*0*			*285*			*188*					
AM Departure Vol:	14			0			633			458					
PM Departure Vol:	*53*			*0*			*135*			*301*					
AM Link Total:	33			0			1,072			1,105					
PM Link Total:	*73*			*0*			*420*			*489*					
Estimated Link ADT:	730			0			10,720			11,050					

Intersection #:	4	Westpointe Drive at Access 1 (NBU Campus) / Access 3 (School)														
		Existing Traffic														
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:														0.92	2.0%
	PM:														*0.92*	2.0%
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2025
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	Growth Rate:		3.8%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	Factor:		1.16
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:														***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:														**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:														***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	1.44	
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Westpointe Drive at Access 1 (NBU Campus) / Access 3 (School)														
		Total Background Traffic														
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	12:00 AM	0.92	2.0%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12:00 AM*	*0.92*	*2.0%*
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					

Intersection #:	4	Westpointe Drive at Access 1 (NBU Campus) / Access 3 (School)																
Continued		Total Background Traffic																
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
	AM:	0	0	0	0	0	0	0	0	0	0	0	0					
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*					
AM Approach Vol:		0			0			0			0							
PM Approach Vol:		*0*			*0*			*0*			*0*							
AM Departure Vol:		0			0			0			0							
PM Departure Vol:		*0*			*0*			*0*			*0*							
AM Link Total:		0			0			0			0							
PM Link Total:		*0*			*0*			*0*			*0*							
Estimated Link ADT:		0			0			0			0							
		Area 1 - Government Office Building (2023)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data				
AM Enter Dist:											50%	50%		**AM Trips:**	167	**AM Enter %:**	75%	
PM Enter Dist:											*50%*	*50%*		***PM Trips:***	*86*	***PM Enter %:***	25%	
AM Exit Dist:						50%		50%						**AM Trips:**	167	**AM Exit %:**	25%	
PM Exit Dist:						*50%*		*50%*						***PM Trips:***	*86*	***PM Exit %:***	*75%*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA		
	AM:	0	0	0	0	0	21	0	21	0	63	63	0	AM Rate:	3.34			
	PM:	0	0	0	0	0	33	0	33	0	11	11	0	PM Rate:	1.71			
		Area 1 - Utility (2023)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data				
AM Enter Dist:											100%			**AM Trips:**	132	**AM Enter %:**	80%	
PM Enter Dist:											*100%*			***PM Trips:***	*130*	***PM Enter %:***	20%	
AM Exit Dist:						100%								**AM Trips:**	132	**AM Exit %:**	20%	
PM Exit Dist:						*100%*								***PM Trips:***	*130*	***PM Exit %:***	*80%*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA		
	AM:	0	0	0	0	0	27	0	0	0	106	0	0	AM Rate:	2.31			
	PM:	*0*	*0*	*0*	*0*	*0*	*104*	*0*	*0*	*0*	*26*	*0*	*0*	*PM Rate:*	2.27			
		Area 2 - Elementary School (2025)																
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data				
AM Enter Dist:												20%	80%	**AM Trips:**	697	**AM Enter %:**	55%	
PM Enter Dist:												*20%*	*80%*	***PM Trips:***	*137*	***PM Enter %:***	45%	
AM Exit Dist:	80%							20%						**AM Trips:**	697	**AM Exit %:**	45%	
PM Exit Dist:	*80%*							*20%*						***PM Trips:***	*137*	***PM Exit %:***	*55%*	
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	100	1000 Sq. Ft. GFA		
	AM:	251	0	0	0	0	0	0	63	0	0	77	307	AM Rate:	6.97			
	PM:	*61*	*0*	*0*	*0*	*0*	*0*	*0*	*16*	*0*	*0*	*13*	*50*	*PM Rate:*	1.37			
		Total Site Traffic																
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱					
	AM:	251	0	0	0	0	48	0	84	0	169	140	307					
	PM:	*61*	*0*	*0*	*0*	*0*	*137*	*0*	*49*	*0*	*37*	*24*	*50*					
AM Approach Vol:		251			48			84			616							
PM Approach Vol:		*61*			*137*			*49*			*111*							
AM Departure Vol:		307			169			140			383							
PM Departure Vol:		*50*			*37*			*24*			*247*							
AM Link Total:		558			217			224			999							
PM Link Total:		*111*			*174*			*73*			*358*							
Estimated Link ADT:		5,580			2,170			2,240			9,990							
		Build-Out - Total Traffic Condition																
		Access 1 (NBU Campus) / Access 3 (School)						Westpointe Drive										
		EB			WB			NB			SB							
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	**Time**	**PHF**	**% Trucks**		
	AM:	251	0	0	0	0	48	0	84	0	169	140	307	12:00 AM	0.92	13%		
	PM:	*61*	*0*	*0*	*0*	*0*	*137*	*0*	*49*	*0*	*37*	*24*	*50*	*12:00 AM*	*0.92*	36%		
AM Approach Vol:		251			48			84			616							
PM Approach Vol:		*61*			*137*			*49*			*111*							
AM Departure Vol:		307			169			140			383							
PM Departure Vol:		*50*			*37*			*24*			*247*							
AM Link Total:		558			217			224			999							
PM Link Total:		*111*			*174*			*73*			*358*							
Estimated Link ADT:		5,580			2,170			2,240			9,990							

Intersection #:	5	Westpointe Drive at Access 2 (NBU Campus) / Access 4 (School)														
		Existing Traffic														
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:														0.92	2.0%
	PM:														*0.92*	2.0%
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					
		Growth of Existing Traffic to Background Volumes														
		EB			WB			NB			SB			Traffic Count Year:		2021
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Build-Out Yr:		2025
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	Growth Rate:		3.8%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	Factor:		1.16
		Office Park (750) - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**201**	**AM Enter %:** **89%**
PM Enter Dist:														***PM Trips:***	***149***	***PM Enter %:*** ***7%***
AM Exit Dist:														**AM Trips:**	**201**	**AM Exit %:** **11%**
PM Exit Dist:														***PM Trips:***	***149***	***PM Exit %:*** ***93%***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	139	1000 Sq. Ft. GLA
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	1.44	
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	*1.07*	
		Land Use 2 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	PM Rate:		
		Land Use 3 - Background Traffic														
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data		
AM Enter Dist:														**AM Trips:**	**0**	**AM Enter %:**
PM Enter Dist:														***PM Trips:***	***0***	***PM Enter %:***
AM Exit Dist:														**AM Trips:**	**0**	**AM Exit %:**
PM Exit Dist:														***PM Trips:***	***0***	***PM Exit %:***
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:		
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*		
		Westpointe Drive at Access 2 (NBU Campus) / Access 4 (School)														
		Total Background Traffic														
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive								
		EB			WB			NB			SB					
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	12:00 AM	0.92	2.0%
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*12:00 AM*	*0.92*	*2.0%*
AM Approach Vol:		0			0			0			0					
PM Approach Vol:		*0*			*0*			*0*			*0*					
AM Departure Vol:		0			0			0			0					
PM Departure Vol:		*0*			*0*			*0*			*0*					
AM Link Total:		0			0			0			0					
PM Link Total:		*0*			*0*			*0*			*0*					
Estimated Link ADT:		0			0			0			0					

Intersection #:	5	Westpointe Drive at Access 2 (NBU Campus) / Access 4 (School)															
Continued		Total Background Traffic															
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
	AM:	0	0	0	0	0	0	0	0	0	0	0	0				
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*				
AM Approach Vol:		0			0			0			0						
PM Approach Vol:		*0*			*0*			*0*			*0*						
AM Departure Vol:		0			0			0			0						
PM Departure Vol:		*0*			*0*			*0*			*0*						
AM Link Total:		0			0			0			0						
PM Link Total:		*0*			*0*			*0*			*0*						
Estimated Link ADT:		0			0			0			0						
		Area 1 - Government Office Building (2023)															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:											50%			**AM Trips:**	167	**AM Enter %:**	75%
PM Enter Dist:											*50%*			***PM Trips:***	*86*	***PM Enter %:***	25%
AM Exit Dist:						50%								**AM Trips:**	167	**AM Exit %:**	25%
PM Exit Dist:						*50%*								***PM Trips:***	*86*	***PM Exit %:***	*75%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	50	1000 Sq. Ft. GFA	
	AM:	0	0	0	0	0	21	0	0	0	63	0	0	AM Rate:	3.34		
	PM:	0	0	0	0	0	33	0	0	0	11	0	0	PM Rate:	1.71		
		Area 1 - Utility (2023)															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:														**AM Trips:**	132	**AM Enter %:**	80%
PM Enter Dist:														***PM Trips:***	*130*	***PM Enter %:***	20%
AM Exit Dist:														**AM Trips:**	132	**AM Exit %:**	20%
PM Exit Dist:														***PM Trips:***	*130*	***PM Exit %:***	*80%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	57	1000 Sq. Ft. GFA	
	AM:	0	0	0	0	0	0	0	0	0	0	0	0	AM Rate:	2.31		
	PM:	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*PM Rate:*	2.27		
		Area 2 - Elementary School (2025)															
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Trip Generation Data			
AM Enter Dist:													20%	**AM Trips:**	697	**AM Enter %:**	55%
PM Enter Dist:													*20%*	***PM Trips:***	*137*	***PM Enter %:***	45%
AM Exit Dist:	20%													**AM Trips:**	697	**AM Exit %:**	45%
PM Exit Dist:	*20%*													***PM Trips:***	*137*	***PM Exit %:***	*55%*
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Quantity:	100	1000 Sq. Ft. GFA	
	AM:	63	0	0	0	0	0	0	0	0	0	0	77	AM Rate:	6.97		
	PM:	*16*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*13*	*PM Rate:*	1.37		
		Total Site Traffic															
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱				
	AM:	63	0	0	0	0	21	0	0	0	63	0	77				
	PM:	*16*	*0*	*0*	*0*	*0*	*33*	*0*	*0*	*0*	*11*	*0*	*13*				
AM Approach Vol:		63			21			0			140						
PM Approach Vol:		*16*			*33*			*0*			*24*						
AM Departure Vol:		77			63			0			84						
PM Departure Vol:		*13*			*11*			*0*			*49*						
AM Link Total:		140			84			0			224						
PM Link Total:		*29*			*44*			*0*			*73*						
Estimated Link ADT:		1,400			840			0			2,240						
		Build-Out - Total Traffic Condition															
		Access 2 (NBU Campus) / Access 4 (School)						Westpointe Drive									
		EB			WB			NB			SB						
		↰	↑	↱	↰	↑	↱	↰	↑	↱	↰	↑	↱	Time	PHF	% Trucks	
	AM:	63	0	0	0	0	21	0	0	0	63	0	77	12:00 AM	0.92	2%	
	PM:	*16*	*0*	*0*	*0*	*0*	*33*	*0*	*0*	*0*	*11*	*0*	*13*	*12:00 AM*	*0.92*	2%	
AM Approach Vol:		63			21			0			140						
PM Approach Vol:		*16*			*33*			*0*			*24*						
AM Departure Vol:		77			63			0			84						
PM Departure Vol:		*13*			*11*			*0*			*49*						
AM Link Total:		140			84			0			224						
PM Link Total:		*29*			*44*			*0*			*73*						
Estimated Link ADT:		1,400			840			0			2,240						

APPENDIX G – SYNCHRO OUTPUTS

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	231	3	25	230	140	2	6	7	85	6	33
Future Vol, veh/h	39	231	3	25	230	140	2	6	7	85	6	33
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	269	3	29	267	163	2	7	8	99	7	38
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	10.9	12.2	9.9	11
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	13%	100%	0%	0%	18%	0%	100%	0%
Vol Thru, %	40%	0%	100%	96%	82%	45%	0%	15%
Vol Right, %	47%	0%	0%	4%	0%	55%	0%	85%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	39	154	80	140	255	85	39
LT Vol	2	39	0	0	25	0	85	0
Through Vol	6	0	154	77	115	115	0	6
RT Vol	7	0	0	3	0	140	0	33
Lane Flow Rate	17	45	179	93	163	297	99	45
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.033	0.084	0.306	0.159	0.272	0.455	0.199	0.078
Departure Headway (Hd)	6.888	6.665	6.16	6.134	6.006	5.529	7.263	6.162
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	519	537	584	584	597	652	494	580
Service Time	4.647	4.405	3.9	3.873	3.743	3.265	5.011	3.909
HCM Lane V/C Ratio	0.033	0.084	0.307	0.159	0.273	0.456	0.2	0.078
HCM Control Delay	9.9	10	11.6	10	11	12.8	11.8	9.4
HCM Lane LOS	A	A	B	A	B	B	B	A
HCM 95th-tile Q	0.1	0.3	1.3	0.6	1.1	2.4	0.7	0.3

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	165	18	38	224	4	29	0	83	0	2	0
Future Vol, veh/h	1	165	18	38	224	4	29	0	83	0	2	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	194	21	45	264	5	34	0	98	0	2	0
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	9.4	9.2	9.5	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	26%	1%	0%	100%	0%	0%	0%
Vol Thru, %	0%	99%	82%	0%	100%	95%	100%
Vol Right, %	74%	0%	18%	0%	0%	5%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	84	101	38	149	79	2
LT Vol	29	1	0	38	0	0	0
Through Vol	0	83	83	0	149	75	2
RT Vol	83	0	18	0	0	4	0
Lane Flow Rate	132	98	118	45	176	93	2
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.197	0.152	0.179	0.07	0.25	0.131	0.004
Departure Headway (Hd)	5.388	5.581	5.449	5.636	5.133	5.098	5.966
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	663	640	655	634	697	701	595
Service Time	3.147	3.34	3.208	3.385	2.882	2.846	3.746
HCM Lane V/C Ratio	0.199	0.153	0.18	0.071	0.253	0.133	0.003
HCM Control Delay	9.5	9.3	9.4	8.8	9.6	8.6	8.8
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.7	0.5	0.6	0.2	1	0.4	0

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	0	0	48	14	12
Future Vol, veh/h	16	0	0	48	14	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	75	75	75	75	75	75
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	21	0	0	64	19	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	91	27	35	0	-	0
Stage 1	27	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.48	6.28	4.18	-	-	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	2.272	-	-	-
Pot Cap-1 Maneuver	895	1031	1538	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	944	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	895	1031	1538	-	-	-
Mov Cap-2 Maneuver	895	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	944	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	895	-	-
HCM Lane V/C Ratio	-	-	0.024	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	231	1	2	276	182	2	3	11	125	0	48
Future Vol, veh/h	60	231	1	2	276	182	2	3	11	125	0	48
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	241	1	2	288	190	2	3	11	130	0	50
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	11	13.4	9.9	11.8
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	100%	0%	0%	1%	0%	100%	0%
Vol Thru, %	19%	0%	100%	99%	99%	43%	0%	0%
Vol Right, %	69%	0%	0%	1%	0%	57%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	16	60	154	78	140	320	125	48
LT Vol	2	60	0	0	2	0	125	0
Through Vol	3	0	154	77	138	138	0	0
RT Vol	11	0	0	1	0	182	0	48
Lane Flow Rate	17	62	160	81	146	333	130	50
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.032	0.119	0.283	0.143	0.245	0.523	0.265	0.085
Departure Headway (Hd)	6.897	6.863	6.356	6.347	6.057	5.648	7.317	6.107
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	517	522	565	564	592	637	491	585
Service Time	4.669	4.612	4.106	4.097	3.8	3.391	5.07	3.86
HCM Lane V/C Ratio	0.033	0.119	0.283	0.144	0.247	0.523	0.265	0.085
HCM Control Delay	9.9	10.5	11.6	10.2	10.8	14.5	12.7	9.4
HCM Lane LOS	A	B	B	B	B	B	B	A
HCM 95th-tile Q	0.1	0.4	1.2	0.5	1	3	1.1	0.3

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	190	29	112	220	1	17	0	67	7	0	1
Future Vol, veh/h	1	190	29	112	220	1	17	0	67	7	0	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	202	31	119	234	1	18	0	71	7	0	1
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	9.4	9.1	9	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	20%	1%	0%	100%	0%	0%	88%
Vol Thru, %	0%	99%	77%	0%	100%	99%	0%
Vol Right, %	80%	0%	23%	0%	0%	1%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	84	96	124	112	147	74	8
LT Vol	17	1	0	112	0	0	7
Through Vol	0	95	95	0	147	73	0
RT Vol	67	0	29	0	0	1	1
Lane Flow Rate	89	102	132	119	156	79	9
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.135	0.157	0.196	0.183	0.218	0.11	0.015
Departure Headway (Hd)	5.426	5.527	5.357	5.527	5.024	5.015	6.355
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	658	646	667	648	713	712	560
Service Time	3.183	3.279	3.109	3.271	2.768	2.759	4.128
HCM Lane V/C Ratio	0.135	0.158	0.198	0.184	0.219	0.111	0.016
HCM Control Delay	9	9.3	9.4	9.5	9.2	8.4	9.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.5	0.6	0.7	0.7	0.8	0.4	0

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	0	3	31	21	45
Future Vol, veh/h	17	0	3	31	21	45
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	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	20	0	4	37	25	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	97	52	79	0	-	0
Stage 1	52	-	-	-	-	-
Stage 2	45	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	900	1013	1513	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	897	1013	1513	-	-	-
Mov Cap-2 Maneuver	897	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	975	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1513	-	897	-	-
HCM Lane V/C Ratio	0.002	-	0.023	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	259	4	27	321	152	3	7	8	92	7	36
Future Vol, veh/h	43	259	4	27	321	152	3	7	8	92	7	36
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	50	301	5	31	373	177	3	8	9	107	8	42
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	12	15.1	10.6	11.9
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	100%	0%	0%	14%	0%	100%	0%
Vol Thru, %	39%	0%	100%	96%	86%	51%	0%	16%
Vol Right, %	44%	0%	0%	4%	0%	49%	0%	84%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	43	173	90	188	313	92	43
LT Vol	3	43	0	0	27	0	92	0
Through Vol	7	0	173	86	161	161	0	7
RT Vol	8	0	0	4	0	152	0	36
Lane Flow Rate	21	50	201	105	218	363	107	50
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.043	0.098	0.365	0.19	0.377	0.586	0.23	0.092
Departure Headway (Hd)	7.451	7.044	6.537	6.506	6.219	5.802	7.731	6.633
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	478	508	548	549	578	621	463	538
Service Time	5.243	4.804	4.298	4.267	3.97	3.553	5.504	4.405
HCM Lane V/C Ratio	0.044	0.098	0.367	0.191	0.377	0.585	0.231	0.093
HCM Control Delay	10.6	10.6	13	10.8	12.7	16.5	12.8	10.1
HCM Lane LOS	B	B	B	B	B	C	B	B
HCM 95th-tile Q	0.1	0.3	1.7	0.7	1.7	3.8	0.9	0.3

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	179	20	42	242	77	32	0	90	9	3	5
Future Vol, veh/h	38	179	20	42	242	77	32	0	90	9	3	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	45	211	24	49	285	91	38	0	106	11	4	6
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	10.6	9.9	10.4	9.6
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	26%	30%	0%	100%	0%	0%	53%
Vol Thru, %	0%	70%	82%	0%	100%	51%	18%
Vol Right, %	74%	0%	18%	0%	0%	49%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	122	128	110	42	161	158	17
LT Vol	32	38	0	42	0	0	9
Through Vol	0	90	90	0	161	81	3
RT Vol	90	0	20	0	0	77	5
Lane Flow Rate	144	150	129	49	190	185	20
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.235	0.256	0.21	0.082	0.287	0.262	0.037
Departure Headway (Hd)	5.888	6.143	5.863	5.941	5.437	5.092	6.575
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	610	585	613	607	664	710	545
Service Time	3.616	3.87	3.591	3.641	3.137	2.792	4.31
HCM Lane V/C Ratio	0.236	0.256	0.21	0.081	0.286	0.261	0.037
HCM Control Delay	10.4	11	10.2	9.2	10.3	9.6	9.6
HCM Lane LOS	B	B	B	A	B	A	A
HCM 95th-tile Q	0.9	1	0.8	0.3	1.2	1	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	0	0	52	16	13
Future Vol, veh/h	18	0	0	52	16	13
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	75	75	75	75	75	75
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	24	0	0	69	21	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	99	30	38	0	-	0
Stage 1	30	-	-	-	-	-
Stage 2	69	-	-	-	-	-
Critical Hdwy	6.48	6.28	4.18	-	-	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	2.272	-	-	-
Pot Cap-1 Maneuver	885	1027	1534	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	885	1027	1534	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1534	-	885	-	-
HCM Lane V/C Ratio	-	-	0.027	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	14
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	306	2	3	304	197	3	4	12	135	0	52
Future Vol, veh/h	65	306	2	3	304	197	3	4	12	135	0	52
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	319	2	3	317	205	3	4	13	141	0	54
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	12.4	15.7	10.6	12.8
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	16%	100%	0%	0%	2%	0%	100%	0%
Vol Thru, %	21%	0%	100%	98%	98%	44%	0%	0%
Vol Right, %	63%	0%	0%	2%	0%	56%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	65	204	104	155	349	135	52
LT Vol	3	65	0	0	3	0	135	0
Through Vol	4	0	204	102	152	152	0	0
RT Vol	12	0	0	2	0	197	0	52
Lane Flow Rate	20	68	212	108	161	364	141	54
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.042	0.134	0.39	0.198	0.286	0.603	0.302	0.098
Departure Headway (Hd)	7.55	7.111	6.604	6.59	6.379	5.969	7.73	6.516
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	502	542	542	560	603	463	547
Service Time	5.25	4.884	4.377	4.363	4.147	3.737	5.514	4.299
HCM Lane V/C Ratio	0.042	0.135	0.391	0.199	0.287	0.604	0.305	0.099
HCM Control Delay	10.6	11	13.6	11	11.7	17.5	13.9	10
HCM Lane LOS	B	B	B	B	B	C	B	A
HCM 95th-tile Q	0.1	0.5	1.8	0.7	1.2	4	1.3	0.3

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	206	32	121	238	7	19	0	73	64	0	30
Future Vol, veh/h	5	206	32	121	238	7	19	0	73	64	0	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	219	34	129	253	7	20	0	78	68	0	32
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	10.4	10	9.7	10.6
HCM LOS	B	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	21%	5%	0%	100%	0%	0%	68%
Vol Thru, %	0%	95%	76%	0%	100%	92%	0%
Vol Right, %	79%	0%	24%	0%	0%	8%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	108	135	121	159	86	94
LT Vol	19	5	0	121	0	0	64
Through Vol	0	103	103	0	159	79	0
RT Vol	73	0	32	0	0	7	30
Lane Flow Rate	98	115	144	129	169	92	100
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.16	0.195	0.236	0.215	0.258	0.139	0.179
Departure Headway (Hd)	5.891	6.113	5.921	6.013	5.508	5.45	6.444
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	609	588	607	599	653	659	557
Service Time	3.624	3.842	3.65	3.735	3.23	3.173	4.175
HCM Lane V/C Ratio	0.161	0.196	0.237	0.215	0.259	0.14	0.18
HCM Control Delay	9.7	10.3	10.5	10.4	10.1	9.1	10.6
HCM Lane LOS	A	B	B	B	B	A	B
HCM 95th-tile Q	0.6	0.7	0.9	0.8	1	0.5	0.6

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	0	4	34	23	49
Future Vol, veh/h	19	0	4	34	23	49
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	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	23	0	5	40	27	58

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	106	56	85	0	-	0
Stage 1	56	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	889	1008	1505	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	1008	1505	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	970	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1505	-	886	-	-
HCM Lane V/C Ratio	0.003	-	0.026	-	-
HCM Control Delay (s)	7.4	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	14.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	277	4	29	339	163	3	7	9	99	7	39
Future Vol, veh/h	46	277	4	29	339	163	3	7	9	99	7	39
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	322	5	34	394	190	3	8	10	115	8	45
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	12.7	16.8	10.9	12.4
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	16%	100%	0%	0%	15%	0%	100%	0%
Vol Thru, %	37%	0%	100%	96%	85%	51%	0%	15%
Vol Right, %	47%	0%	0%	4%	0%	49%	0%	85%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	46	185	96	199	333	99	46
LT Vol	3	46	0	0	29	0	99	0
Through Vol	7	0	185	92	170	170	0	7
RT Vol	9	0	0	4	0	163	0	39
Lane Flow Rate	22	53	215	112	231	387	115	53
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.048	0.107	0.399	0.207	0.408	0.638	0.253	0.101
Departure Headway (Hd)	7.769	7.202	6.695	6.666	6.357	5.936	7.918	6.811
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	464	496	535	535	563	607	451	523
Service Time	5.469	4.976	4.468	4.439	4.12	3.699	5.705	4.596
HCM Lane V/C Ratio	0.047	0.107	0.402	0.209	0.41	0.638	0.255	0.101
HCM Control Delay	10.9	10.8	13.9	11.2	13.5	18.7	13.4	10.4
HCM Lane LOS	B	B	B	B	B	C	B	B
HCM 95th-tile Q	0.2	0.4	1.9	0.8	2	4.5	1	0.3

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	192	21	45	260	77	34	0	97	9	3	5
Future Vol, veh/h	38	192	21	45	260	77	34	0	97	9	3	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	45	226	25	53	306	91	40	0	114	11	4	6
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	10.9	10.1	10.8	9.7
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	26%	28%	0%	100%	0%	0%	53%
Vol Thru, %	0%	72%	82%	0%	100%	53%	18%
Vol Right, %	74%	0%	18%	0%	0%	47%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	131	134	117	45	173	164	17
LT Vol	34	38	0	45	0	0	9
Through Vol	0	96	96	0	173	87	3
RT Vol	97	0	21	0	0	77	5
Lane Flow Rate	154	158	138	53	204	193	20
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.256	0.273	0.228	0.088	0.312	0.277	0.037
Departure Headway (Hd)	5.987	6.238	5.968	6.016	5.511	5.178	6.711
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	601	577	603	599	657	699	534
Service Time	3.716	3.967	3.697	3.716	3.211	2.878	4.448
HCM Lane V/C Ratio	0.256	0.274	0.229	0.088	0.311	0.276	0.037
HCM Control Delay	10.8	11.3	10.5	9.3	10.7	9.8	9.7
HCM Lane LOS	B	B	B	A	B	A	A
HCM 95th-tile Q	1	1.1	0.9	0.3	1.3	1.1	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	0	0	56	17	14
Future Vol, veh/h	19	0	0	56	17	14
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	75	75	75	75	75	75
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	25	0	0	75	23	19

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	108	33	42	0	-	0
Stage 1	33	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.48	6.28	4.18	-	-	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.372	2.272	-	-	-
Pot Cap-1 Maneuver	875	1024	1529	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	875	1024	1529	-	-	-
Mov Cap-2 Maneuver	875	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	933	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1529	-	875	-	-
HCM Lane V/C Ratio	-	-	0.029	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	324	2	3	326	212	3	4	13	145	0	56
Future Vol, veh/h	70	324	2	3	326	212	3	4	13	145	0	56
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	338	2	3	340	221	3	4	14	151	0	58
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	13.1	17.8	10.9	13.5
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	15%	100%	0%	0%	2%	0%	100%	0%
Vol Thru, %	20%	0%	100%	98%	98%	43%	0%	0%
Vol Right, %	65%	0%	0%	2%	0%	57%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	70	216	110	166	375	145	56
LT Vol	3	70	0	0	3	0	145	0
Through Vol	4	0	216	108	163	163	0	0
RT Vol	13	0	0	2	0	212	0	56
Lane Flow Rate	21	73	225	115	173	391	151	58
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.045	0.148	0.424	0.216	0.314	0.664	0.333	0.109
Departure Headway (Hd)	7.824	7.292	6.785	6.772	6.533	6.123	7.93	6.714
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	460	489	527	526	546	586	450	529
Service Time	5.524	5.082	4.574	4.561	4.315	3.905	5.73	4.513
HCM Lane V/C Ratio	0.046	0.149	0.427	0.219	0.317	0.667	0.336	0.11
HCM Control Delay	10.9	11.4	14.5	11.4	12.3	20.3	14.7	10.3
HCM Lane LOS	B	B	B	B	B	C	B	B
HCM 95th-tile Q	0.1	0.5	2.1	0.8	1.3	4.9	1.4	0.4

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	221	34	130	256	7	20	0	78	65	0	30
Future Vol, veh/h	5	221	34	130	256	7	20	0	78	65	0	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	235	36	138	272	7	21	0	83	69	0	32
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	10.7	10.3	10	10.8
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	20%	4%	0%	100%	0%	0%	68%
Vol Thru, %	0%	96%	76%	0%	100%	92%	0%
Vol Right, %	80%	0%	24%	0%	0%	8%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	116	145	130	171	92	95
LT Vol	20	5	0	130	0	0	65
Through Vol	0	111	111	0	171	85	0
RT Vol	78	0	34	0	0	7	30
Lane Flow Rate	104	123	154	138	182	98	101
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.174	0.212	0.257	0.234	0.281	0.151	0.185
Departure Headway (Hd)	6.014	6.216	6.028	6.083	5.577	5.524	6.582
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	596	578	596	592	645	650	546
Service Time	3.753	3.951	3.762	3.809	3.303	3.25	4.321
HCM Lane V/C Ratio	0.174	0.213	0.258	0.233	0.282	0.151	0.185
HCM Control Delay	10	10.6	10.8	10.7	10.5	9.2	10.8
HCM Lane LOS	A	B	B	B	B	A	B
HCM 95th-tile Q	0.6	0.8	1	0.9	1.1	0.5	0.7

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	4	36	25	53
Future Vol, veh/h	20	0	4	36	25	53
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	84	84	84	84	84	84
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	24	0	5	43	30	63

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	115	62	93	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	879	1000	1495	-	-	-
Stage 1	958	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	876	1000	1495	-	-	-
Mov Cap-2 Maneuver	876	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	967	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1495	-	876	-	-
HCM Lane V/C Ratio	0.003	-	0.027	-	-
HCM Control Delay (s)	7.4	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	20
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	71	287	4	27	415	152	3	7	8	92	7	130
Future Vol, veh/h	71	287	4	27	415	152	3	7	8	92	7	130
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	83	334	5	31	483	177	3	8	9	107	8	151
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	14.9	25.7	12.1	14.1
HCM LOS	B	D	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	100%	0%	0%	12%	0%	100%	0%
Vol Thru, %	39%	0%	100%	96%	88%	58%	0%	5%
Vol Right, %	44%	0%	0%	4%	0%	42%	0%	95%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	71	191	100	235	360	92	137
LT Vol	3	71	0	0	27	0	92	0
Through Vol	7	0	191	96	208	208	0	7
RT Vol	8	0	0	4	0	152	0	130
Lane Flow Rate	21	83	222	116	273	418	107	159
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.052	0.186	0.47	0.244	0.543	0.79	0.258	0.332
Departure Headway (Hd)	8.864	8.113	7.602	7.574	7.163	6.803	8.681	7.496
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	404	443	474	474	504	531	414	479
Service Time	6.627	5.857	5.347	5.318	4.903	4.542	6.429	5.244
HCM Lane V/C Ratio	0.052	0.187	0.468	0.245	0.542	0.787	0.258	0.332
HCM Control Delay	12.1	12.7	16.9	12.8	18.1	30.6	14.4	13.9
HCM Lane LOS	B	B	C	B	C	D	B	B
HCM 95th-tile Q	0.2	0.7	2.5	0.9	3.2	7.4	1	1.4

Intersection	
Intersection Delay, s/veh	15.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	71	287	4	27	415	152	3	7	8	92	7	130
Future Vol, veh/h	71	287	4	27	415	152	3	7	8	92	7	130
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	83	334	5	31	483	177	3	8	9	107	8	151
Number of Lanes	1	2	0	0	2	1	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	3	3
HCM Control Delay	14.8	16.9	11.9	13.9
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	17%	100%	0%	0%	16%	0%	0%	100%	0%
Vol Thru, %	39%	0%	100%	96%	84%	100%	0%	0%	5%
Vol Right, %	44%	0%	0%	4%	0%	0%	100%	0%	95%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	71	191	100	165	277	152	92	137
LT Vol	3	71	0	0	27	0	0	92	0
Through Vol	7	0	191	96	138	277	0	0	7
RT Vol	8	0	0	4	0	0	152	0	130
Lane Flow Rate	21	83	222	116	192	322	177	107	159
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.05	0.185	0.466	0.242	0.382	0.632	0.312	0.254	0.326
Departure Headway (Hd)	8.647	8.048	7.538	7.51	7.16	7.077	6.364	8.541	7.368
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	414	447	478	479	504	512	566	421	487
Service Time	6.405	5.788	5.278	5.25	4.897	4.814	4.101	6.283	5.11
HCM Lane V/C Ratio	0.051	0.186	0.464	0.242	0.381	0.629	0.313	0.254	0.326
HCM Control Delay	11.9	12.6	16.7	12.6	14.3	21.2	12	14.2	13.7
HCM Lane LOS	B	B	C	B	B	C	B	B	B
HCM 95th-tile Q	0.2	0.7	2.4	0.9	1.8	4.3	1.3	1	1.4

Intersection	
Intersection Delay, s/veh	13.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	179	68	228	242	77	47	0	146	9	3	5
Future Vol, veh/h	38	179	68	228	242	77	47	0	146	9	3	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	8	8	8	8	8	8	8	8	8	8	8	8
Mvmt Flow	45	211	80	268	285	91	55	0	172	11	4	6
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	13	13	14.2	10.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	24%	30%	0%	100%	0%	0%	53%
Vol Thru, %	0%	70%	57%	0%	100%	51%	18%
Vol Right, %	76%	0%	43%	0%	0%	49%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	193	128	158	228	161	158	17
LT Vol	47	38	0	228	0	0	9
Through Vol	0	90	90	0	161	81	3
RT Vol	146	0	68	0	0	77	5
Lane Flow Rate	227	150	185	268	190	185	20
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.419	0.298	0.344	0.488	0.319	0.293	0.043
Departure Headway (Hd)	6.649	7.15	6.691	6.55	6.043	5.696	7.655
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	540	501	536	550	594	629	466
Service Time	4.41	4.918	4.458	4.3	3.793	3.446	5.437
HCM Lane V/C Ratio	0.42	0.299	0.345	0.487	0.32	0.294	0.043
HCM Control Delay	14.2	13	13	15.4	11.6	10.8	10.8
HCM Lane LOS	B	B	B	C	B	B	B
HCM 95th-tile Q	2.1	1.2	1.5	2.7	1.4	1.2	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	0	0	121	248	13
Future Vol, veh/h	18	0	0	121	248	13
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	75	75	75	75	75	75
Heavy Vehicles, %	13	13	13	13	13	13
Mvmt Flow	24	0	0	161	331	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	501	340	348	0	-	0
Stage 1	340	-	-	-	-	-
Stage 2	161	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.23	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.317	-	-	-
Pot Cap-1 Maneuver	511	678	1152	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	511	678	1152	-	-	-
Mov Cap-2 Maneuver	511	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	842	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1152	-	511	-	-
HCM Lane V/C Ratio	-	-	0.047	-	-
HCM Control Delay (s)	0	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	48	21	0	169	63
Future Vol, veh/h	0	48	21	0	169	63
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	44	44	44	44	44	44
Mvmt Flow	0	52	23	0	184	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	459	23	0	0	23	0
Stage 1	23	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Critical Hdwy	6.84	6.64	-	-	4.54	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.896	3.696	-	-	2.596	-
Pot Cap-1 Maneuver	490	945	-	-	1358	-
Stage 1	901	-	-	-	-	-
Stage 2	571	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	424	945	-	-	1358	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	5.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	945	1358	-
HCM Lane V/C Ratio	-	-	0.055	0.135	-
HCM Control Delay (s)	-	-	9	8.1	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.5	-

Intersection	
Int Delay, s/veh	0

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	0	0	63	0	0	21
Future Vol, veh/h	0	0	63	0	0	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	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	13	13	13	13	13	13
Mvmt Flow	0	0	68	0	0	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	0	0	136	0
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	-	-	4.23	-	6.53	6.33
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	-	-	2.317	-	3.617	3.417
Pot Cap-1 Maneuver	-	-	-	-	832	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	832	-
Mov Cap-2 Maneuver	-	-	-	-	832	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	864	-

Approach	NB	SB	NW
HCM Control Delay, s	0		
HCM LOS			-

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	133	374	2	3	324	197	3	4	12	135	0	72
Future Vol, veh/h	133	374	2	3	324	197	3	4	12	135	0	72
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	139	390	2	3	338	205	3	4	13	141	0	75
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	15	20.4	11.6	14.1
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	16%	100%	0%	0%	2%	0%	100%	0%
Vol Thru, %	21%	0%	100%	98%	98%	45%	0%	0%
Vol Right, %	63%	0%	0%	2%	0%	55%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	133	249	127	165	359	135	72
LT Vol	3	133	0	0	3	0	135	0
Through Vol	4	0	249	125	162	162	0	0
RT Vol	12	0	0	2	0	197	0	72
Lane Flow Rate	20	139	260	132	172	374	141	75
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.046	0.294	0.515	0.261	0.34	0.699	0.334	0.153
Departure Headway (Hd)	8.442	7.649	7.141	7.129	7.13	6.73	8.554	7.333
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	424	471	506	505	507	538	420	489
Service Time	6.2	5.37	4.861	4.85	4.847	4.447	6.296	5.075
HCM Lane V/C Ratio	0.047	0.295	0.514	0.261	0.339	0.695	0.336	0.153
HCM Control Delay	11.6	13.5	17.2	12.4	13.5	23.6	15.5	11.4
HCM Lane LOS	B	B	C	B	B	C	C	B
HCM 95th-tile Q	0.1	1.2	2.9	1	1.5	5.5	1.4	0.5

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	133	374	2	3	324	197	3	4	12	135	0	72
Future Vol, veh/h	133	374	2	3	324	197	3	4	12	135	0	72
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	139	390	2	3	338	205	3	4	13	141	0	75
Number of Lanes	1	2	0	0	2	1	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	3	3
HCM Control Delay	14.8	13.6	11.4	13.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	16%	100%	0%	0%	3%	0%	0%	100%	0%
Vol Thru, %	21%	0%	100%	98%	97%	100%	0%	0%	0%
Vol Right, %	63%	0%	0%	2%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	133	249	127	111	216	197	135	72
LT Vol	3	133	0	0	3	0	0	135	0
Through Vol	4	0	249	125	108	216	0	0	0
RT Vol	12	0	0	2	0	0	197	0	72
Lane Flow Rate	20	139	260	132	116	225	205	141	75
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.045	0.291	0.509	0.258	0.228	0.443	0.363	0.328	0.15
Departure Headway (Hd)	8.211	7.566	7.058	7.046	7.102	7.088	6.376	8.388	7.18
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	436	477	512	512	508	511	566	429	500
Service Time	5.965	5.283	4.775	4.764	4.819	4.805	4.094	6.13	4.921
HCM Lane V/C Ratio	0.046	0.291	0.508	0.258	0.228	0.44	0.362	0.329	0.15
HCM Control Delay	11.4	13.4	16.9	12.2	11.9	15.3	12.7	15.2	11.2
HCM Lane LOS	B	B	C	B	B	C	B	C	B
HCM 95th-tile Q	0.1	1.2	2.8	1	0.9	2.2	1.6	1.4	0.5

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	206	43	160	238	7	53	0	209	64	0	30
Future Vol, veh/h	5	206	43	160	238	7	53	0	209	64	0	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	14	14	14	14	14	14	14	14	14	14	14	14
Mvmt Flow	5	219	46	170	253	7	56	0	222	68	0	32
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	12.7	12.3	15.7	12.2
HCM LOS	B	B	C	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	20%	5%	0%	100%	0%	0%	68%
Vol Thru, %	0%	95%	71%	0%	100%	92%	0%
Vol Right, %	80%	0%	29%	0%	0%	8%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	262	108	146	160	159	86	94
LT Vol	53	5	0	160	0	0	64
Through Vol	0	103	103	0	159	79	0
RT Vol	209	0	43	0	0	7	30
Lane Flow Rate	279	115	155	170	169	92	100
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.501	0.233	0.305	0.333	0.307	0.165	0.207
Departure Headway (Hd)	6.475	7.304	7.07	7.05	6.541	6.483	7.434
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	555	488	505	507	547	550	479
Service Time	4.253	5.1	4.865	4.829	4.319	4.261	5.232
HCM Lane V/C Ratio	0.503	0.236	0.307	0.335	0.309	0.167	0.209
HCM Control Delay	15.7	12.3	13	13.3	12.2	10.6	12.2
HCM Lane LOS	C	B	B	B	B	B	B
HCM 95th-tile Q	2.8	0.9	1.3	1.4	1.3	0.6	0.8

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	0	4	203	71	49
Future Vol, veh/h	19	0	4	203	71	49
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	84	84	84	84	84	84
Heavy Vehicles, %	39	39	39	39	39	39
Mvmt Flow	23	0	5	242	85	58

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	366	114	143	0	-	0
Stage 1	114	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Critical Hdwy	6.79	6.59	4.49	-	-	-
Critical Hdwy Stg 1	5.79	-	-	-	-	-
Critical Hdwy Stg 2	5.79	-	-	-	-	-
Follow-up Hdwy	3.851	3.651	2.551	-	-	-
Pot Cap-1 Maneuver	566	847	1242	-	-	-
Stage 1	827	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	563	847	1242	-	-	-
Mov Cap-2 Maneuver	563	-	-	-	-	-
Stage 1	823	-	-	-	-	-
Stage 2	711	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1242	-	563	-	-
HCM Lane V/C Ratio	0.004	-	0.04	-	-
HCM Control Delay (s)	7.9	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	7.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	137	33	0	37	11
Future Vol, veh/h	0	137	33	0	37	11
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	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	60	60	60	60	60	60
Mvmt Flow	0	149	36	0	40	12

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	128	36	0	0	36	0
Stage 1	36	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	7	6.8	-	-	4.7	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	4.04	3.84	-	-	2.74	-
Pot Cap-1 Maneuver	746	893	-	-	1271	-
Stage 1	856	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	723	893	-	-	1271	-
Mov Cap-2 Maneuver	723	-	-	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	6.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	893	1271	-
HCM Lane V/C Ratio	-	-	0.167	0.032	-
HCM Control Delay (s)	-	-	9.8	7.9	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	0	0	11	0	0	33
Future Vol, veh/h	0	0	11	0	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	60	60	60	60	60	60
Mvmt Flow	0	0	12	0	0	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	0	0	24	0
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	4.7	-	7	6.8
Critical Hdwy Stg 1	-	-	-	-	6	-
Critical Hdwy Stg 2	-	-	-	-	6	-
Follow-up Hdwy	-	-	2.74	-	4.04	3.84
Pot Cap-1 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	862	-
Mov Cap-2 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	868	-

Approach	NB	SB	NW
HCM Control Delay, s	0		
HCM LOS			-

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	SBL	SBT
Capacity (veh/h)	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th %tile Q(veh)	-	-	-	-	-

Intersection	
Intersection Delay, s/veh	81.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	200	431	4	29	587	163	3	7	9	99	7	287
Future Vol, veh/h	200	431	4	29	587	163	3	7	9	99	7	287
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	7	7	7	7	7	7	7	7	7	7	7	7
Mvmt Flow	233	501	5	34	683	190	3	8	10	115	8	334
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	33.5	140.3	15.8	46
HCM LOS	D	F	C	E

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	16%	100%	0%	0%	9%	0%	100%	0%
Vol Thru, %	37%	0%	100%	97%	91%	64%	0%	2%
Vol Right, %	47%	0%	0%	3%	0%	36%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	200	287	148	323	457	99	294
LT Vol	3	200	0	0	29	0	99	0
Through Vol	7	0	287	144	294	294	0	7
RT Vol	9	0	0	4	0	163	0	287
Lane Flow Rate	22	233	334	172	375	531	115	342
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.071	0.613	0.834	0.428	0.971	1.329	0.337	0.888
Departure Headway (Hd)	12.131	10.001	9.484	9.464	9.322	9.016	11.083	9.866
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	297	363	384	383	390	403	327	369
Service Time	9.831	7.701	7.184	7.164	7.05	6.744	8.783	7.566
HCM Lane V/C Ratio	0.074	0.642	0.87	0.449	0.962	1.318	0.352	0.927
HCM Control Delay	15.8	27.3	45.2	19.1	69.8	190.1	19.3	55
HCM Lane LOS	C	D	E	C	F	F	C	F
HCM 95th-tile Q	0.2	3.9	7.6	2.1	11.2	24.5	1.4	8.8

Intersection	
Intersection Delay, s/veh	127.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	192	146	538	260	77	112	0	404	9	3	5
Future Vol, veh/h	38	192	146	538	260	77	112	0	404	9	3	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	8	8	8	8	8	8	8	8	8	8	8	8
Mvmt Flow	45	226	172	633	306	91	132	0	475	11	4	6
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	26.3	148.3	168.8	14.2
HCM LOS	D	F	F	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	22%	28%	0%	100%	0%	0%	53%
Vol Thru, %	0%	72%	40%	0%	100%	53%	18%
Vol Right, %	78%	0%	60%	0%	0%	47%	29%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	516	134	242	538	173	164	17
LT Vol	112	38	0	538	0	0	9
Through Vol	0	96	96	0	173	87	3
RT Vol	404	0	146	0	0	77	5
Lane Flow Rate	607	158	285	633	204	193	20
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	1.285	0.394	0.668	1.428	0.432	0.39	0.054
Departure Headway (Hd)	8.113	10.365	9.765	8.99	8.469	8.126	10.856
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	455	350	373	411	428	447	332
Service Time	5.813	8.065	7.465	6.69	6.169	5.826	8.556
HCM Lane V/C Ratio	1.334	0.451	0.764	1.54	0.477	0.432	0.06
HCM Control Delay	168.8	19.6	30	230.7	17.5	15.9	14.2
HCM Lane LOS	F	C	D	F	C	C	B
HCM 95th-tile Q	24.5	1.8	4.6	28.9	2.1	1.8	0.2

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	0	0	439	633	14
Future Vol, veh/h	19	0	0	439	633	14
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	75	75	75	75	75	75
Heavy Vehicles, %	13	13	13	13	13	13
Mvmt Flow	25	0	0	585	844	19

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1439	854	863	0	-	0
Stage 1	854	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Critical Hdwy	6.53	6.33	4.23	-	-	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.417	2.317	-	-	-
Pot Cap-1 Maneuver	138	343	735	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	138	343	735	-	-	-
Mov Cap-2 Maneuver	138	-	-	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	536	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.9	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	735	-	138	-	-
HCM Lane V/C Ratio	-	-	0.184	-	-
HCM Control Delay (s)	0	-	36.9	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Intersection	
Int Delay, s/veh	16

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	251	0	0	0	0	48	0	84	0	169	140	307
Future Vol, veh/h	251	0	0	0	0	48	0	84	0	169	140	307
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	200
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, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	273	0	0	0	0	52	0	91	0	184	152	334

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	637	611	152	778	945	91	486	0	0	91	0	0
Stage 1	520	520	-	91	91	-	-	-	-	-	-	-
Stage 2	117	91	-	687	854	-	-	-	-	-	-	-
Critical Hdwy	7.23	6.63	6.33	7.23	6.63	6.33	4.23	-	-	4.23	-	-
Critical Hdwy Stg 1	6.23	5.63	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.23	5.63	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.617	4.117	3.417	3.617	4.117	3.417	2.317	-	-	2.317	-	-
Pot Cap-1 Maneuver	375	394	866	301	251	937	1022	-	-	1437	-	-
Stage 1	520	514	-	890	799	-	-	-	-	-	-	-
Stage 2	862	799	-	420	360	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	320	344	866	272	219	937	1022	-	-	1437	-	-
Mov Cap-2 Maneuver	320	344	-	272	219	-	-	-	-	-	-	-
Stage 1	520	448	-	890	799	-	-	-	-	-	-	-
Stage 2	814	799	-	366	314	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	56.7	9.1	0	2.2
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1022	-	-	320	937	1437	-	-
HCM Lane V/C Ratio	-	-	-	0.853	0.056	0.128	-	-
HCM Control Delay (s)	0	-	-	56.7	9.1	7.9	-	-
HCM Lane LOS	A	-	-	F	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	7.6	0.2	0.4	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	63	0	0	0	0	21	0	0	0	63	0	77
Future Volume (Veh/h)	63	0	0	0	0	21	0	0	0	63	0	77
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	68	0	0	0	0	23	0	0	0	68	0	84
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	159	136	0	136	220	0	84			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	159	136	0	136	220	0	84			0		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	91	100	100	100	100	98	100			96		
cM capacity (veh/h)	764	723	1085	808	650	1085	1513			1623		

Direction, Lane #	SE 1	NW 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	68	23	0	0	68	0	84
Volume Left	68	0	0	0	68	0	0
Volume Right	0	23	0	0	0	0	84
cSH	764	1085	1700	1700	1623	1700	1700
Volume to Capacity	0.09	0.02	0.00	0.00	0.04	0.00	0.05
Queue Length 95th (ft)	7	2	0	0	3	0	0
Control Delay (s)	10.2	8.4	0.0	0.0	7.3	0.0	0.0
Lane LOS	B	A			A		
Approach Delay (s)	10.2	8.4	0.0		3.3		
Approach LOS	B	A					

Intersection Summary				
Average Delay	5.7			
Intersection Capacity Utilization	20.3%	ICU Level of Service		A
Analysis Period (min)	15			

Intersection	
Intersection Delay, s/veh	22.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	169	423	2	3	371	212	3	4	13	145	0	101
Future Vol, veh/h	169	423	2	3	371	212	3	4	13	145	0	101
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	9	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	176	441	2	3	386	221	3	4	14	151	0	105
Number of Lanes	1	2	0	0	2	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	3
HCM Control Delay	18.2	29.4	12.5	15.6
HCM LOS	C	D	B	C

Lane	NBLn1	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	15%	100%	0%	0%	2%	0%	100%	0%
Vol Thru, %	20%	0%	100%	99%	98%	47%	0%	0%
Vol Right, %	65%	0%	0%	1%	0%	53%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	169	282	143	189	398	145	101
LT Vol	3	169	0	0	3	0	145	0
Through Vol	4	0	282	141	186	186	0	0
RT Vol	13	0	0	2	0	212	0	101
Lane Flow Rate	21	176	294	149	196	414	151	105
Geometry Grp	8	8	8	8	8	8	8	8
Degree of Util (X)	0.053	0.394	0.616	0.312	0.414	0.827	0.381	0.23
Departure Headway (Hd)	9.171	8.063	7.553	7.543	7.584	7.194	9.085	7.859
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	389	447	479	477	475	505	396	457
Service Time	6.952	5.813	5.303	5.293	5.332	4.943	6.845	5.619
HCM Lane V/C Ratio	0.054	0.394	0.614	0.312	0.413	0.82	0.381	0.23
HCM Control Delay	12.5	16	21.7	13.7	15.6	35.9	17.4	13
HCM Lane LOS	B	C	C	B	C	E	C	B
HCM 95th-tile Q	0.2	1.8	4.1	1.3	2	8.2	1.7	0.9

Intersection	
Intersection Delay, s/veh	17.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	221	58	219	256	7	70	0	275	65	0	30
Future Vol, veh/h	5	221	58	219	256	7	70	0	275	65	0	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	5	235	62	233	272	7	74	0	293	69	0	32
Number of Lanes	0	2	0	1	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	3	2
HCM Control Delay	14.9	15.2	25	13.5
HCM LOS	B	C	C	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	20%	4%	0%	100%	0%	0%	68%
Vol Thru, %	0%	96%	66%	0%	100%	92%	0%
Vol Right, %	80%	0%	34%	0%	0%	8%	32%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	345	116	169	219	171	92	95
LT Vol	70	5	0	219	0	0	65
Through Vol	0	111	111	0	171	85	0
RT Vol	275	0	58	0	0	7	30
Lane Flow Rate	367	123	179	233	182	98	101
Geometry Grp	7	8	8	7	7	7	7
Degree of Util (X)	0.709	0.277	0.39	0.497	0.361	0.194	0.231
Departure Headway (Hd)	6.955	8.111	7.84	7.674	7.161	7.106	8.238
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	521	442	459	471	503	505	436
Service Time	4.698	5.869	5.598	5.422	4.908	4.854	5.999
HCM Lane V/C Ratio	0.704	0.278	0.39	0.495	0.362	0.194	0.232
HCM Control Delay	25	14	15.6	17.8	13.9	11.6	13.5
HCM Lane LOS	C	B	C	C	B	B	B
HCM 95th-tile Q	5.6	1.1	1.8	2.7	1.6	0.7	0.9

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	4	281	135	53
Future Vol, veh/h	20	0	4	281	135	53
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	84	84	84	84	84	84
Heavy Vehicles, %	27	27	27	27	27	27
Mvmt Flow	24	0	5	335	161	63

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	538	193	224	0	-	0
Stage 1	193	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.67	6.47	4.37	-	-	-
Critical Hdwy Stg 1	5.67	-	-	-	-	-
Critical Hdwy Stg 2	5.67	-	-	-	-	-
Follow-up Hdwy	3.743	3.543	2.443	-	-	-
Pot Cap-1 Maneuver	463	789	1210	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	461	789	1210	-	-	-
Mov Cap-2 Maneuver	461	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1210	-	461	-	-
HCM Lane V/C Ratio	0.004	-	0.052	-	-
HCM Control Delay (s)	8	0	13.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	0	0	0	0	137	0	49	0	37	24	50
Future Vol, veh/h	61	0	0	0	0	137	0	49	0	37	24	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	200
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, %	36	36	36	36	36	36	36	36	36	36	36	36
Mvmt Flow	66	0	0	0	0	149	0	53	0	40	26	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	234	159	26	186	213	53	80	0	0	53	0	0
Stage 1	106	106	-	53	53	-	-	-	-	-	-	-
Stage 2	128	53	-	133	160	-	-	-	-	-	-	-
Critical Hdwy	7.46	6.86	6.56	7.46	6.86	6.56	4.46	-	-	4.46	-	-
Critical Hdwy Stg 1	6.46	5.86	-	6.46	5.86	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.46	5.86	-	6.46	5.86	-	-	-	-	-	-	-
Follow-up Hdwy	3.824	4.324	3.624	3.824	4.324	3.624	2.524	-	-	2.524	-	-
Pot Cap-1 Maneuver	655	676	960	706	629	926	1328	-	-	1361	-	-
Stage 1	823	746	-	880	788	-	-	-	-	-	-	-
Stage 2	800	788	-	795	705	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	537	656	960	690	611	926	1328	-	-	1361	-	-
Mov Cap-2 Maneuver	537	656	-	690	611	-	-	-	-	-	-	-
Stage 1	823	724	-	880	788	-	-	-	-	-	-	-
Stage 2	671	788	-	772	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	9.6	0	2.6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1328	-	-	537	926	1361	-	-
HCM Lane V/C Ratio	-	-	-	0.123	0.161	0.03	-	-
HCM Control Delay (s)	0	-	-	12.6	9.6	7.7	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.6	0.1	-	-

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	11	0	13	16	0	0	0	0	33
Future Volume (Veh/h)	0	0	0	11	0	13	16	0	0	0	0	33
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	0	0	12	0	14	17	0	0	0	0	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	14			0			60	24	0	24	38	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	14			0			60	24	0	24	38	0
tC, single (s)	4.5			4.5			7.5	6.9	6.6	7.5	6.9	6.6
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	100			99			98	100	100	100	100	96
cM capacity (veh/h)	1409			1426			822	800	993	901	786	993

Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3	SE 1	NW 1
Volume Total	0	0	12	0	14	17	36
Volume Left	0	0	12	0	0	17	0
Volume Right	0	0	0	0	14	0	36
cSH	1700	1700	1426	1700	1700	822	993
Volume to Capacity	0.00	0.00	0.01	0.00	0.01	0.02	0.04
Queue Length 95th (ft)	0	0	1	0	0	2	3
Control Delay (s)	0.0	0.0	7.5	0.0	0.0	9.5	8.8
Lane LOS			A			A	A
Approach Delay (s)	0.0		3.5			9.5	8.8
Approach LOS						A	A

Intersection Summary				
Average Delay	7.2			
Intersection Capacity Utilization	17.6%	ICU Level of Service		A
Analysis Period (min)	15			