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2/5/2026

VINTAGE KNOXVILLE WEST
Knox County, Tennessee

TRAFFIC IMPACT STUDY

Prepared for
VINTAGE KNOXVILLE WEST LLC

Prepared by

CDM Smith

December 2025
Revised February 2026

VINTAGE KNOXVILLE WEST

KNOX COUNTY, TENNESSEE

TRAFFIC IMPACT STUDY

Prepared for

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

CDM Smith is pleased to submit this report to address any traffic impact and access of the Vintage Knoxville West residential development located on Everett Road in west Knox County. This is a Level 1 study of the multi-family development formerly included in the Hickory Creek Residential development studied in April 2016. This traffic study required the collection of traffic data, generation of anticipated traffic volumes for the proposed site, and development of projected traffic volumes for normal growth and for buildout of the Everett Woods subdivision. Analyses of the resulting traffic projections were conducted to determine the capacity and levels of service for the site accesses to Everett Road and its adjacent intersection with Yarnell Road. This study will evaluate the development's impact and determine if any mitigation measures are necessary to minimize the traffic impact including improved roadway geometrics and traffic control devices.

Project Description

The Vintage Knoxville West is a multi-family development on approximately 40 acres. The current zoning of Planned Residential (PR) permits up to 5 residential units per acre. The development is for 224 multi-family units accessing Everett Road with two accesses, one opposite Yellow Glen Boulevard and another 250-feet from Yarnell Road. **Figure 1** shows the proposed site plan. Current zoning for the site and its vicinity is illustrated in **Figure 2**.

Site Location

The location of the proposed residential development is south of Everett Road and east of Yarnell Road. This site is north of Interstate 40/75 in west Knox County, Tennessee, near Loudon County. **Figure 3** illustrates the site location relative to local and regional access. The roadway classifications in the site vicinity are illustrated in **Figure 4**.

SITE PLAN

Vintage Knoxville West

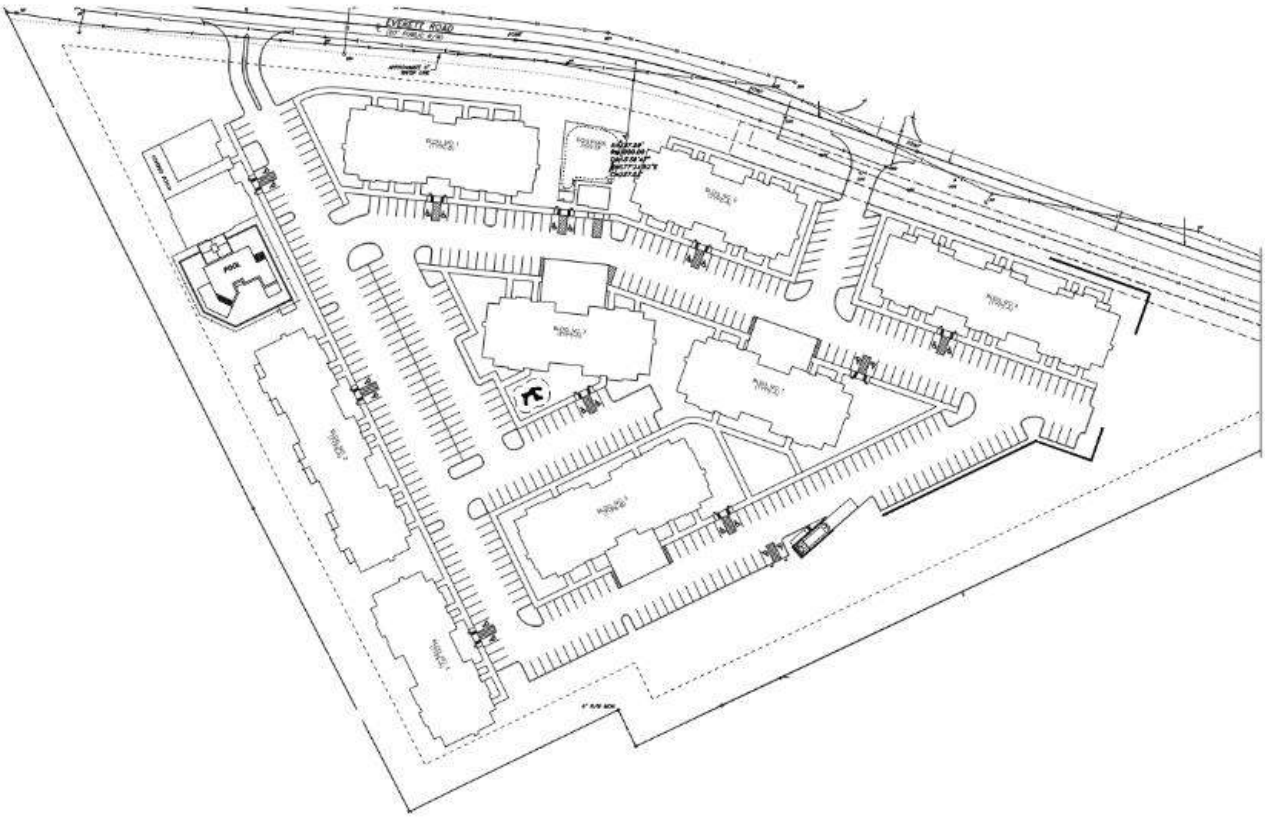

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Figure 1

ZONING
Vintage Knoxville West

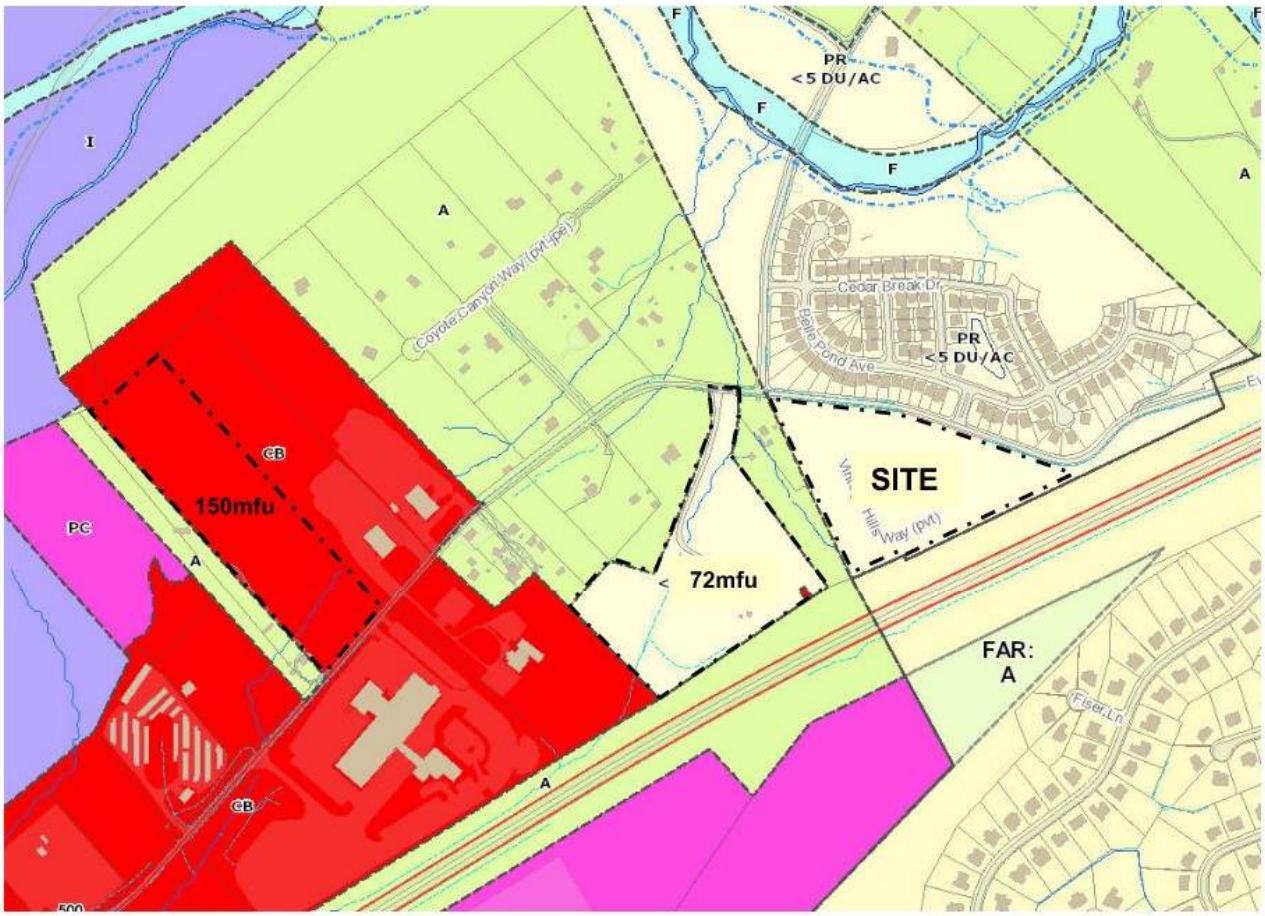


Figure 2

VICINITY MAP

Vintage Knoxville West

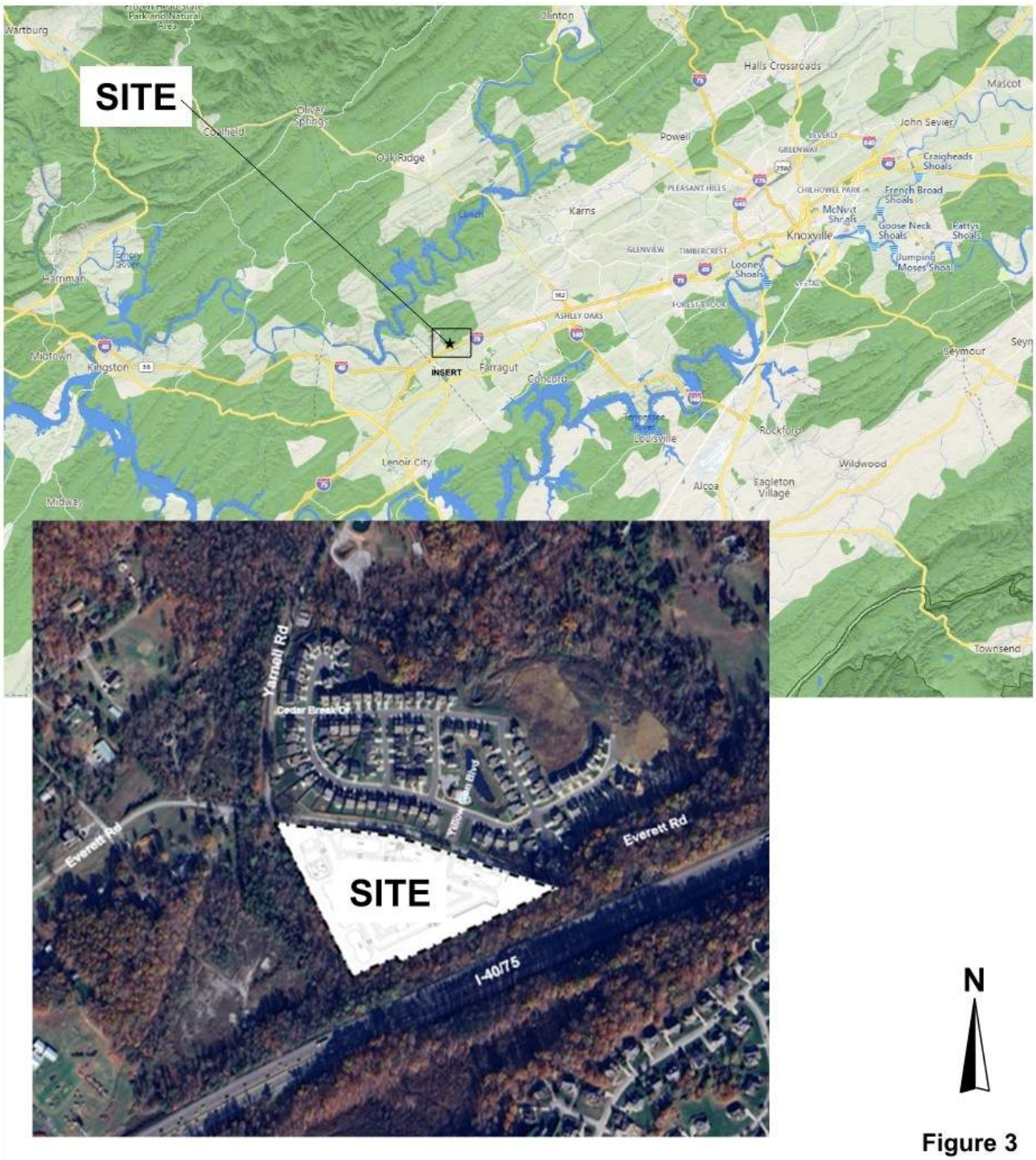


Figure 3

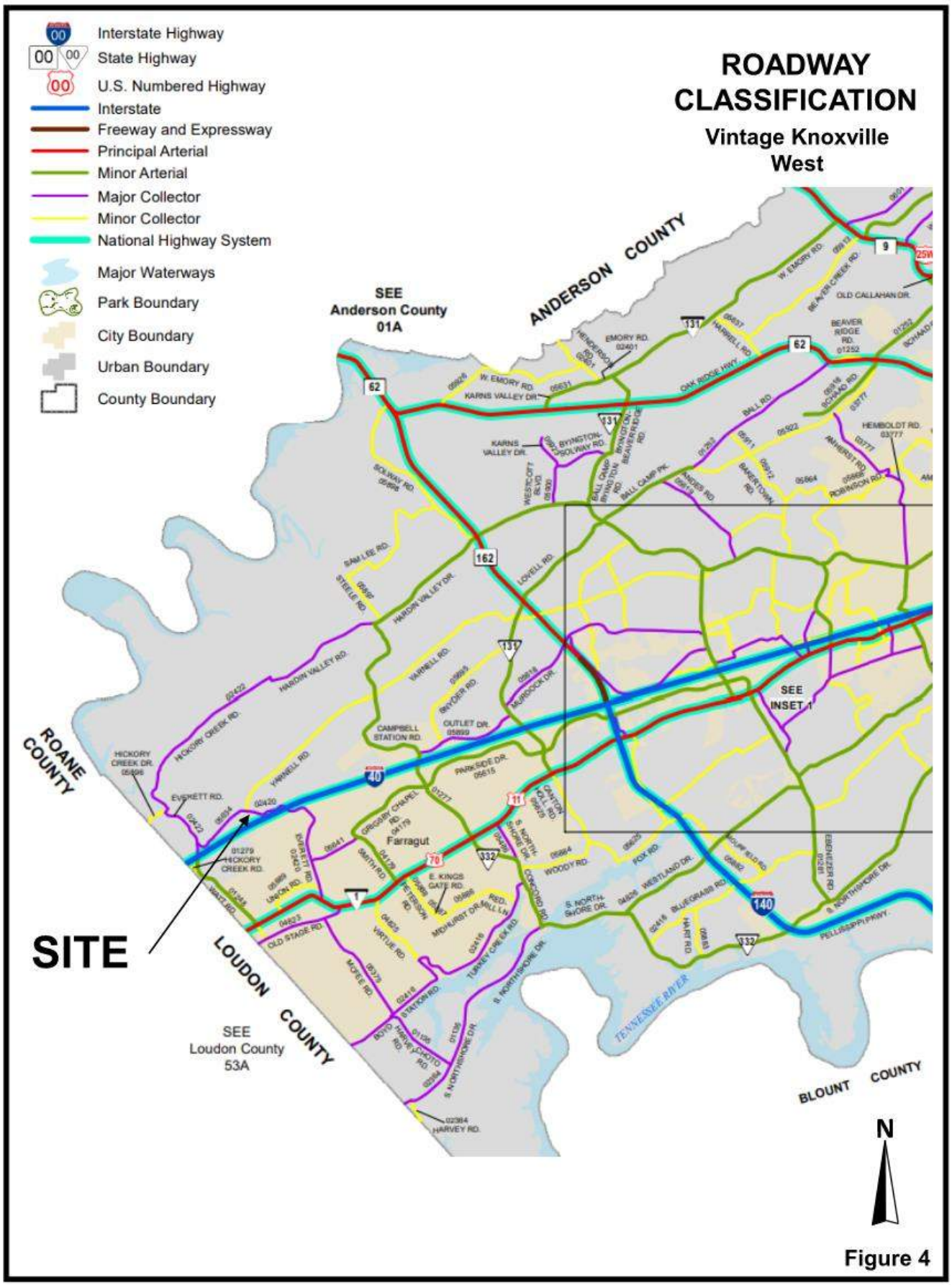

ROADWAY CLASSIFICATION
Vintage Knoxville West
Interstate Highway
State Highway
U.S. Numbered Highway
Interstate
Freeway and Expressway
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
National Highway System
Major Waterways
Park Boundary
City Boundary
Urban Boundary
County Boundary
SEE Anderson County 01A
ANDERSON COUNTY
SEE INSET 1
ROANE COUNTY
SITE
LOUDON COUNTY
SEE Loudon County 53A
BLOUNT COUNTY
Farragut
TENNESSEE RIVER
N

Figure 4

LOCAL AND REGIONAL ACCESS

Local Access

Everett Road is the proposed local access for the site, a classified Major Collector intersecting Yarnell Road to the west of the site. Everett Road extends west to Watt Road, and Yarnell Road extends to the east intersecting Marietta Church Road, Campbell Station Road, and Lovell Road (SR 131), providing access to the north and Hardin Valley. To the south, Everett Road enters the Town of Farragut and intersects Smith Road, Union Road, and Kingston Pike (US 11/70). Everett Road, adjacent to the site, is approximately 18 feet wide. This width of the roadway is not to current standards but is the minimum section considered acceptable to the County. Much of the traffic on Everett Road, west of the site, currently turns to Yarnell Road, thereby reflecting a significant reduction of traffic on Everett Road to the east. Everett Road has a 2024 Tennessee Department of Transportation (TDOT) average daily traffic (ADT) of approximately 2,355 vehicles per day (vpd) east of the site. West of the site on Everett Road, the 2025 TDOT ADT was approximately 2,760vpd.

There are no Knoxville Area Transit (KAT) services, sidewalks, or bike facilities in the site vicinity..

Regional Access

Regional access to this site is from Watt Road, Campbell Station Road, Lovell Road (SR 131), Hardin Valley Road, and Kingston Pike (US 11/70). Watt Road extends north from Kingston Pike intersecting the I-40 interchange and Everett Road. Both Campbell Station Road and Lovell Road (SR 131) are classified Minor Arterials extending north and south providing access to the Hardin Valley area with the Kingston Pike (US 11/70) corridor. Kingston Pike (US 11/70) intersects Everett Road south of the site. Kingston Pike is a five-lane Major Arterial extending through Farragut, between Knoxville to the east and the Knox County line to the west, where US 11 and US 70 split and extend into Lenoir City and Loudon County. The 2025 average annual daily traffic (AADT) on Kingston Pike is 24,350 east of Everett Road and 16,500 to the west of Watt Road.

Interstate 40/75 access is provided from Campbell Station Road and Watt Road, east and west of the proposed development site, respectively. Interstate 40 is an east and west six-lane facility running through Knoxville to the east and Nashville to the west. Interstate 75 extends north to Lexington, Kentucky and to the west, I-75 turns south to Chattanooga, Tennessee. The Interstate 40/75 facility has a 2024 AADT of 114,510 east of Watt Road and south of the site.

EXISTING TRAFFIC CONDITIONS

Existing Traffic Control and Geometry

Everrett Road is the proposed site access north of the I-40/75 overpass. The posted speed limit for Everett Road is 30mph. Yarnell Road has a posted speed of 30mph. Yarnell Road is STOP controlled at Everett Road. **Figure 5** illustrates the intersection geometry and traffic control in the site vicinity.

Existing Traffic Volumes

A peak-hour turning movement count was conducted October 15, 2025 for the Everett Point traffic impact study. The AM and PM peak hours are between 7:30 to 8:30a.m. and 5:00 to 6:00p.m. CDM Smith conducted peak hour counts for the Everett Woods subdivision, provided in the report Appendix. **Figure 6** illustrates the AM and PM peak-hour turning movement counts conducted for the Everett Road intersections in the vicinity of the site.

Existing Capacity and Level of Service

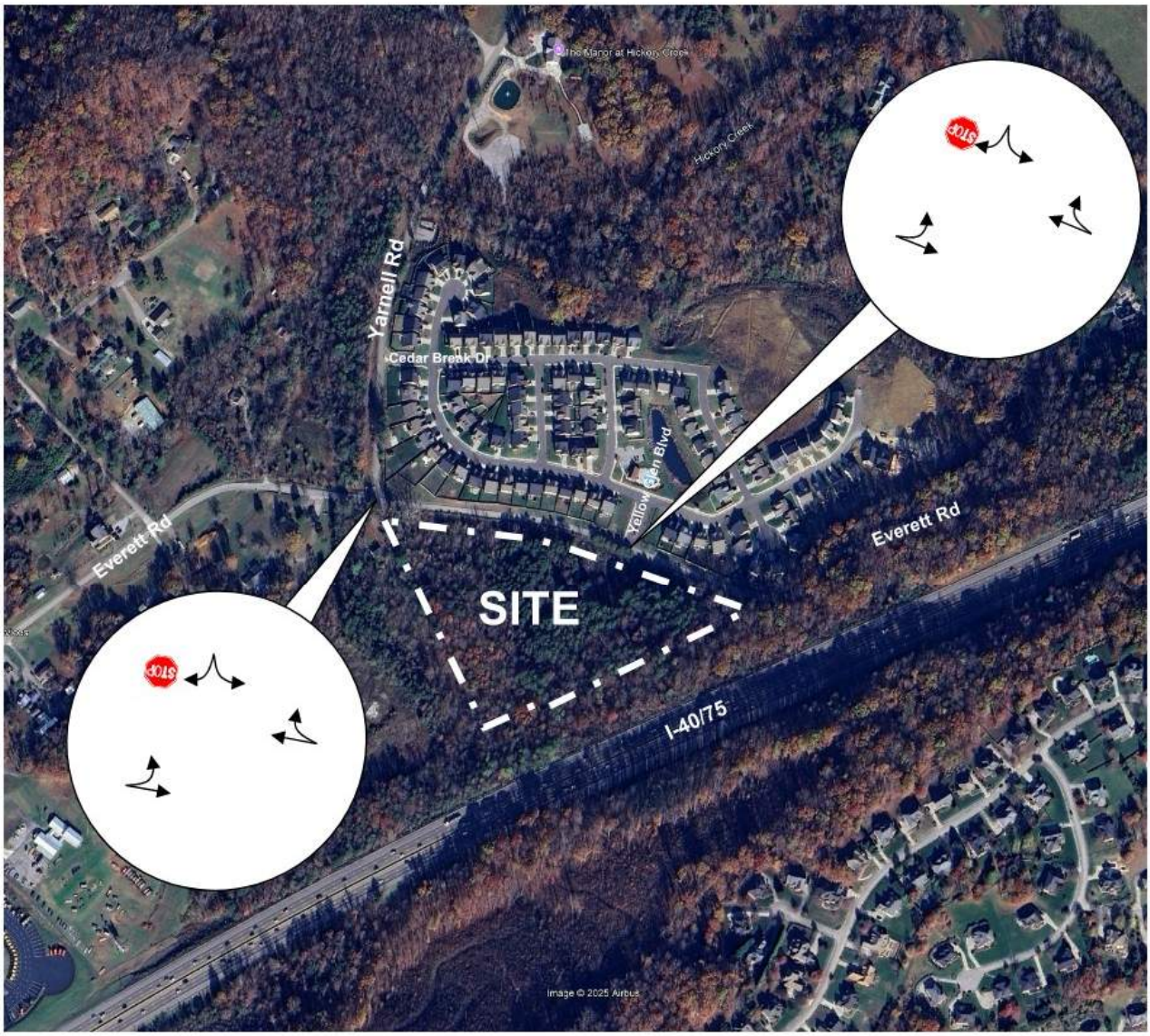
In order to evaluate the current operations of the traffic control devices, capacity and level of service were calculated using the **Highway Capacity Manual,** published by the Transportation Research Board (TRB). Signalized and unsignalized intersections are evaluated based on estimated intersection delays, which are related to level of service (LOS).

Level of service and capacity are measurements of an intersection's ability to accommodate traffic volumes. Levels of service for intersections range from A to F. LOS A is the best, and LOS F is failing. For signalized intersections, LOS A has an average estimated delay of less than 10 seconds per vehicle, and LOS F has an estimated delay of greater than 80 seconds. LOS C and D are typical design values. Within urban areas, LOS D (delay between 35 and 55 seconds) is considered acceptable by the Institute of Transportation Engineers (ITE) for signalized intersections.

Unsignalized intersection levels of service have lower thresholds of delays. LOS F exceeds estimated delays of 50 seconds per vehicle. For urban arterials, minor approaches may frequently experience levels of service E. Full level of service descriptions for unsignalized and signalized intersections are presented in **Table 1**.

2025 GEOMETRY AND TRAFFIC CONTROL

Vintage Knoxville West



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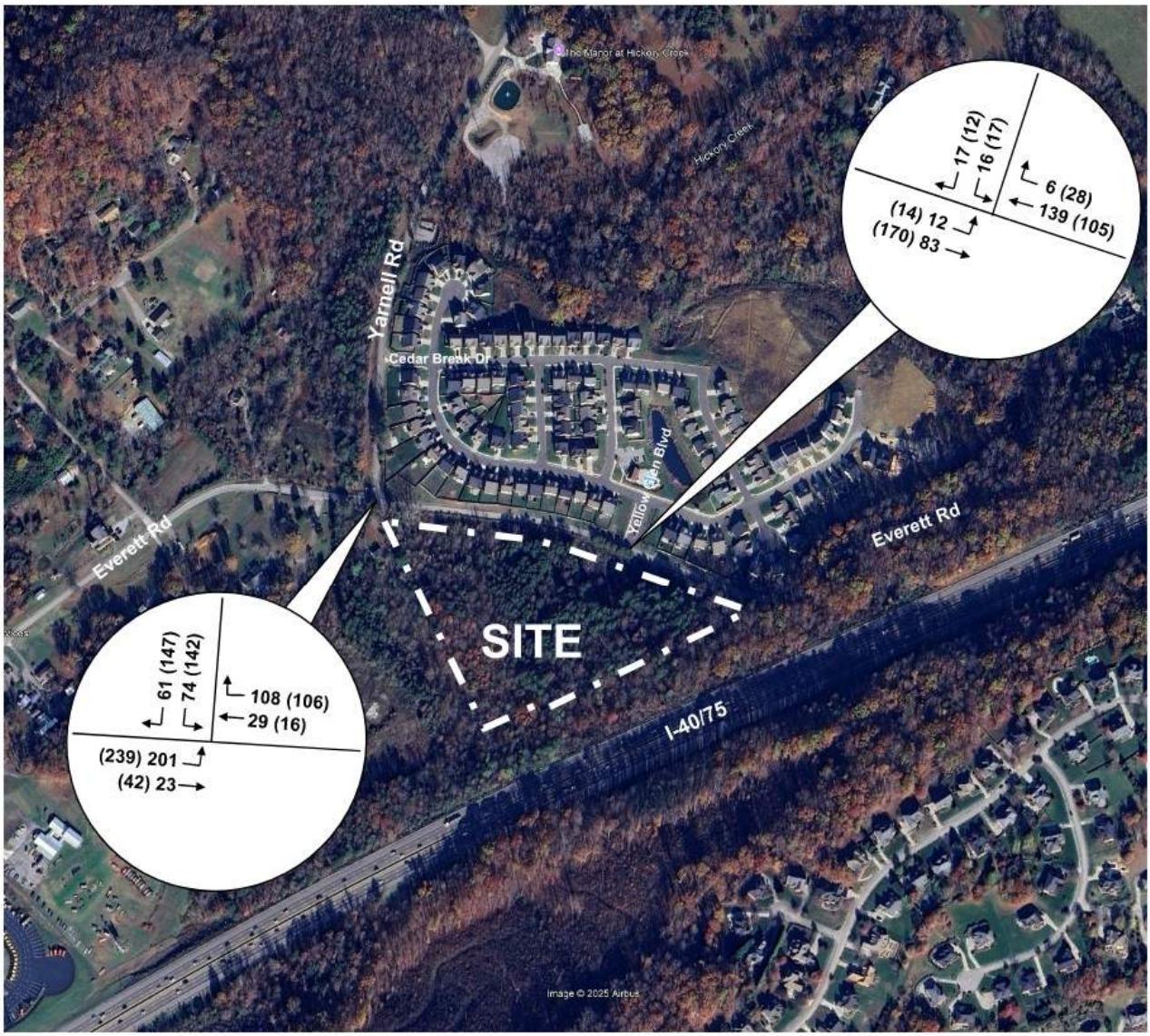
LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 5

2025 TRAFFIC

Vintage Knoxville West



LEGEND
XXX AM PEAK
(XXX) PM PEAK

N

Figure 6

Table 1
SERVICE (LOS) DESCRIPTION
FOR TWO-WAY STOP INTERSECTIONS

Level of Service	Average Control Delay per Vehicle (seconds)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0
F	> 50.0

SOURCE: Highway Capacity Manual, TRB Special Report 209

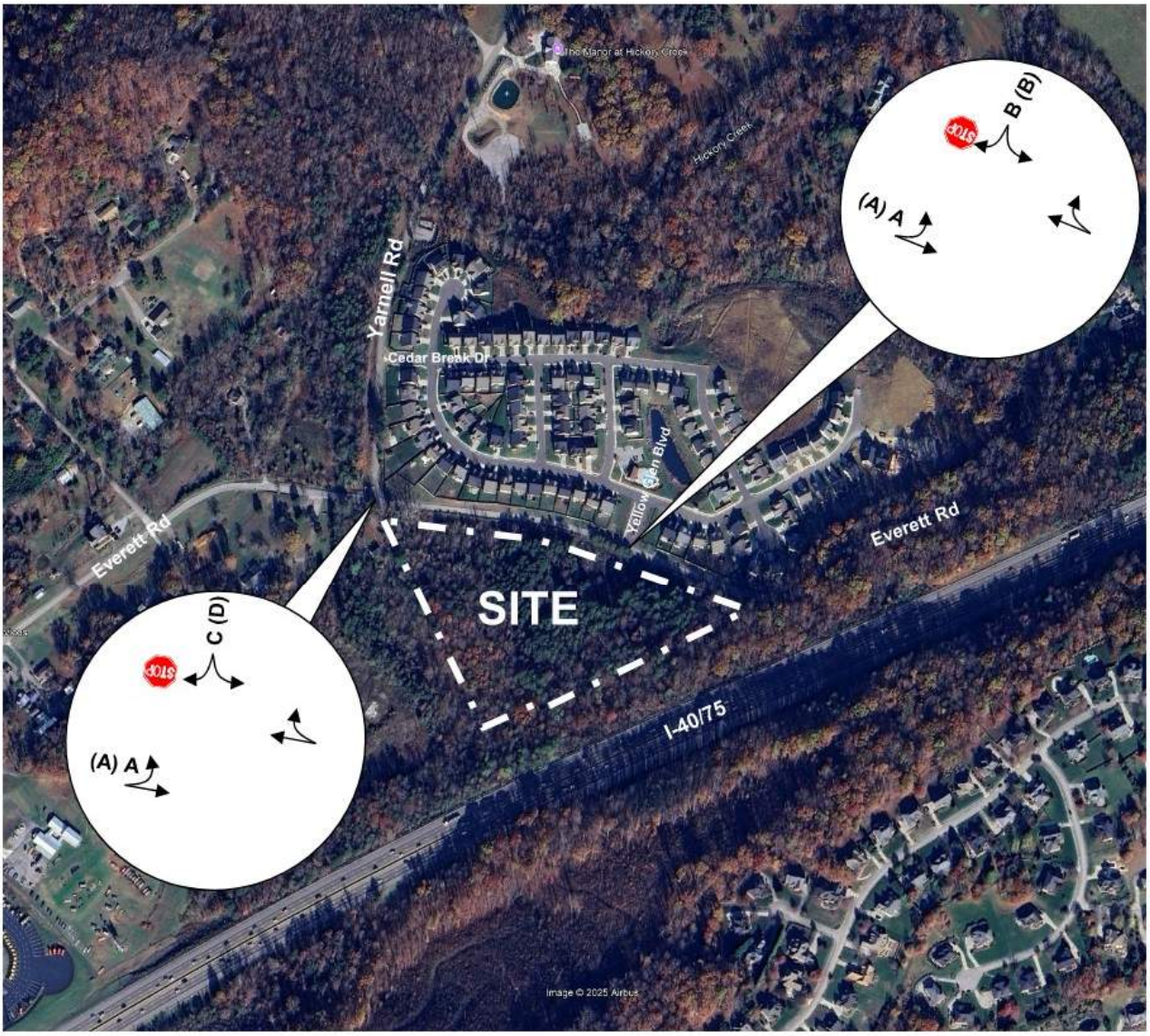
Analyses were conducted using the **Synchro** Software, developed by Trafficware. **Table 2** presents the analyses conducted for the 2025 traffic conditions. Current conditions at all intersections are LOS D or better.

TABLE 2
2025 EXISTING
CAPACITY AND LEVEL OF SERVICE

INTERSECTION	TRAFFIC CONTROL	PEAK PERIOD	V/C	DELAY	LOS
Everett Road &	STOP	AM	0.43	19.6	C
Yarnell Road	SB	PM	0.72	29.6	D
Everett Road &	STOP	AM	0.06	10.2	B
Yellow Glen Blvd/Apt Access	SB	PM	0.05	10.4	B

Note: Average vehicle delay estimated in seconds. STOP control analyses presented by total minor approaches.

2025
LEVEL OF SEVICE
Vintage Knoxville West



LEGEND
XXX AM PEAK
(XXX) PM PEAK

N

Figure 7

BACKGROUND TRAFFIC CONDITIONS

Background traffic is traffic that can be anticipated regardless of the proposed development. Traffic within the study area should continue to grow due to other development. This background traffic is projected for the purpose of establishing a baseline.

Background Traffic Volumes

Historical traffic data was reviewed to determine traffic growth trends in the study area. Using the TDOT count station 136 on Everett Road west of the site, the annual growth from 2013 to 2023 reflects a rate of 2.1-percent. Background traffic for this study, therefore, assumes an annual growth rate of 2.0-percent. Background traffic is projected for the year 2028, thereby reflecting a 6.0-percent growth (2.0-percent for 3 years) for the study intersections. Buildout of the site is planned in the next few years. Actual buildout, however, will largely depend on the housing market. **Figure 8A** illustrates the grown 2028 background traffic reflecting the adjusted traffic volumes increased by a factor of 1.06-percent without the Everett Woods traffic, figure provided in the report appendix.

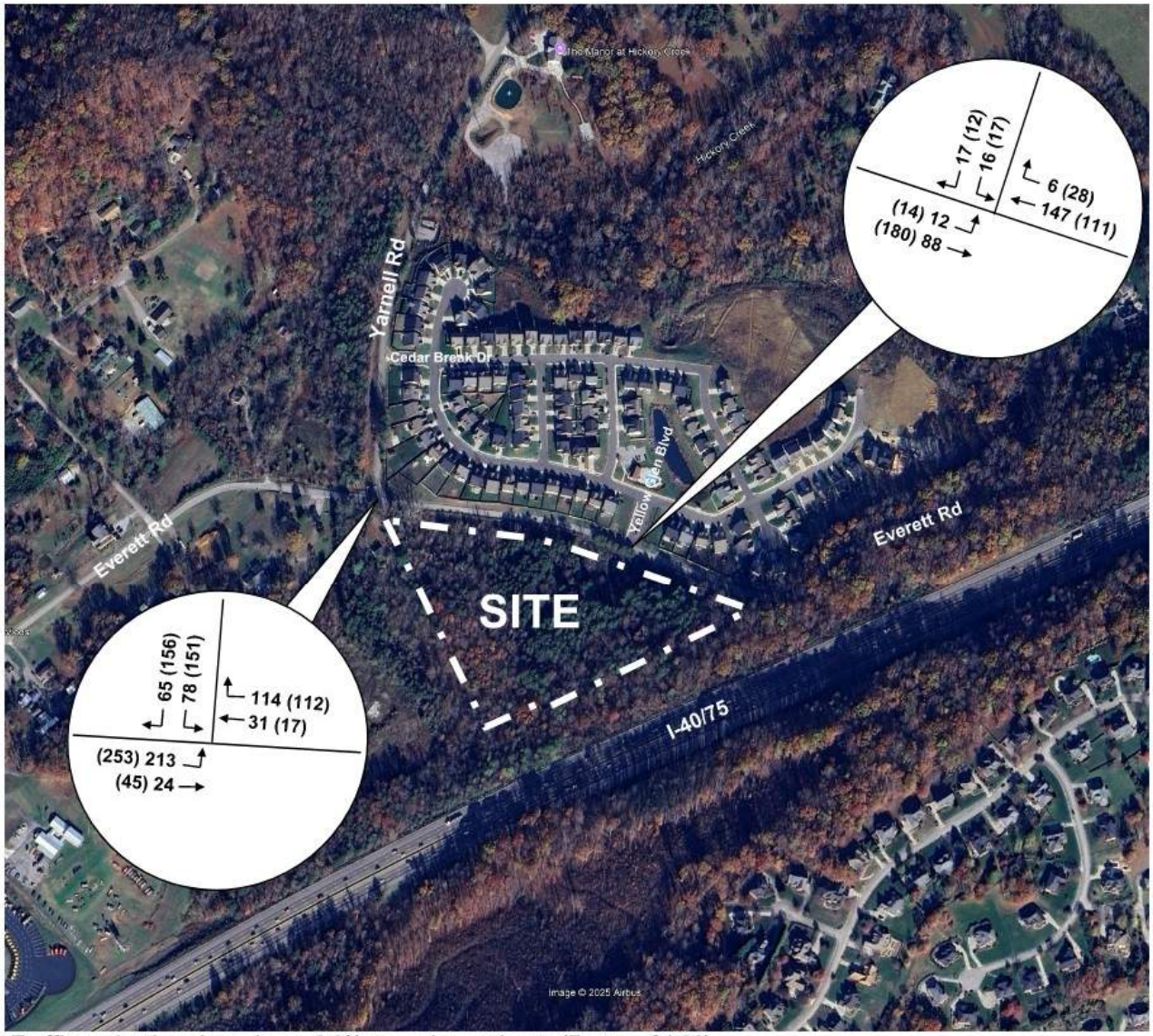
The Everett Woods subdivision, part of the original Hickory Creek development with 169 single-family units, located north of Everett Road, has another final phase to develop. Background traffic conditions have been developed to reflect its buildout. Also to the west, two multi-family developments are currently proposed. The projected Everett Woods buildout trips and the two proposed multi-family developments are presented in **Table 3**.

TABLE 3. BACKGROUND TRIPS

Site	Land Use	Land-Use Code	Units	Daily Trips	AM Peak-Hour Trips		PM Peak-Hour Trips	
					Enter	Exit	Enter	Exit
Everett Woods Buildout	Single-Family	210	169	1629	32	87	97	59
Everett Woods Existing		observed	115		28	47	54	39
Remaining Units			54		**4**	**40**	**43**	**20**
Everett Point Apartments	Multi-Family	Knox Co	150	1374	17	61	61	50
Parcel ID 141 04114	Multi-Family	Knox Co	72	710	9	31	32	26
Multi-Family Total			222	**2,084**	**26**	**92**	**93**	**76**
	TOTAL			**5,797**	**87**	**358**	**380**	**270**

Reference: Knoxville/Knox Co. MPC trip rates adopted in July of 2000
Trip Generation, 12th Ed, Institute of Transportation Engineers for Single-Family LUC 210

2028 BACKGROUND GROWTH
Vintage Knoxville West



Traffic projections based on a 2.0% annual growth rate (Factor of 1.06)

LEGEND
XXX AM PEAK
(XXX) PM PEAK

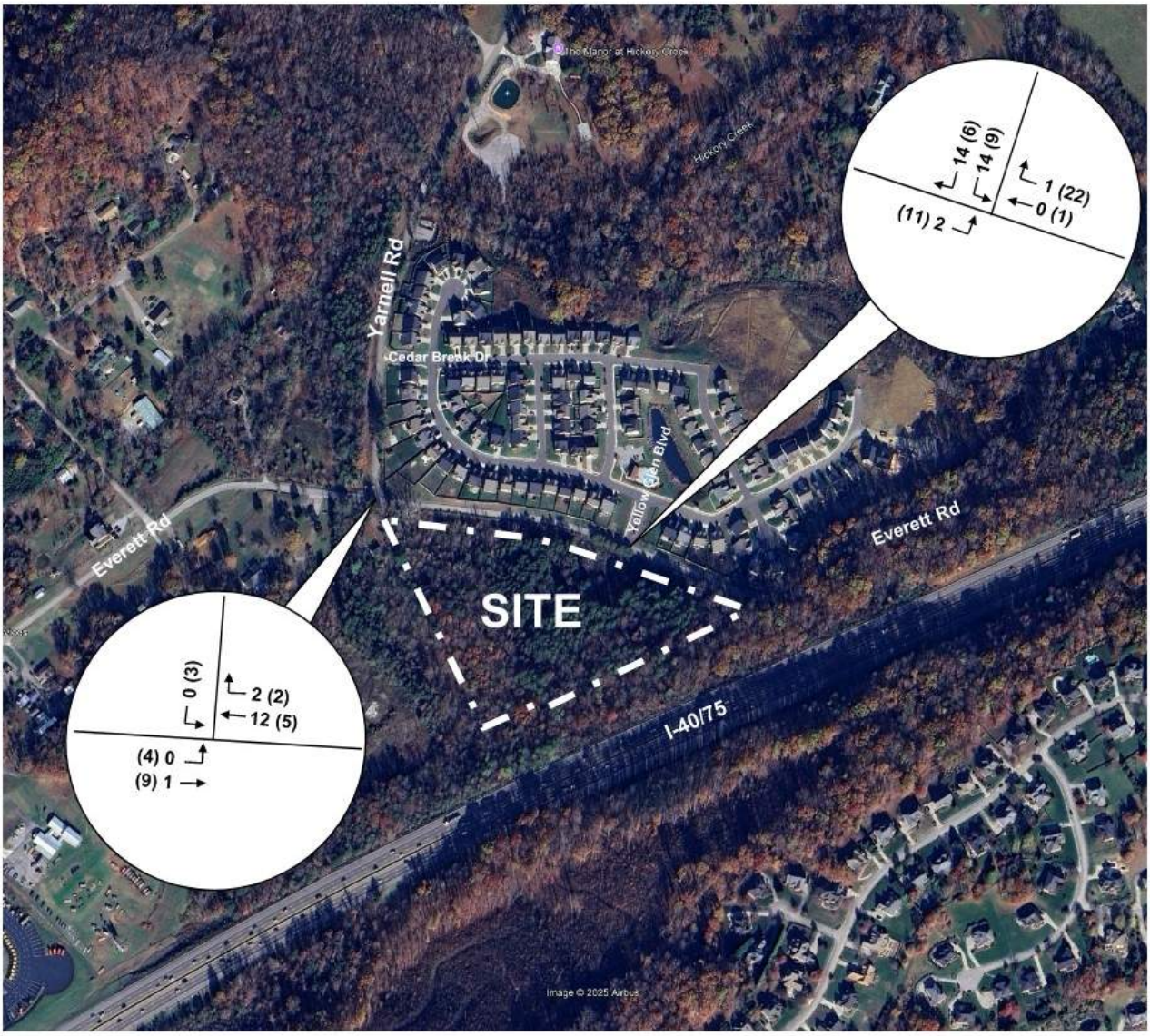
N

Figure 8A

Figure 8B illustrates the buildout assignment of the Everett Woods trips. **Figure 8C** illustrates the assigned trips for the proposed multi-family development to the west of the Vintage Knoxville West site. These assigned trips were added to the background traffic growth to estimate the total background traffic for the study intersections and are illustrated in **Figure 9**.

EVERETT WOODS BUILDOUT TRIPS

Vintage Knoxville West



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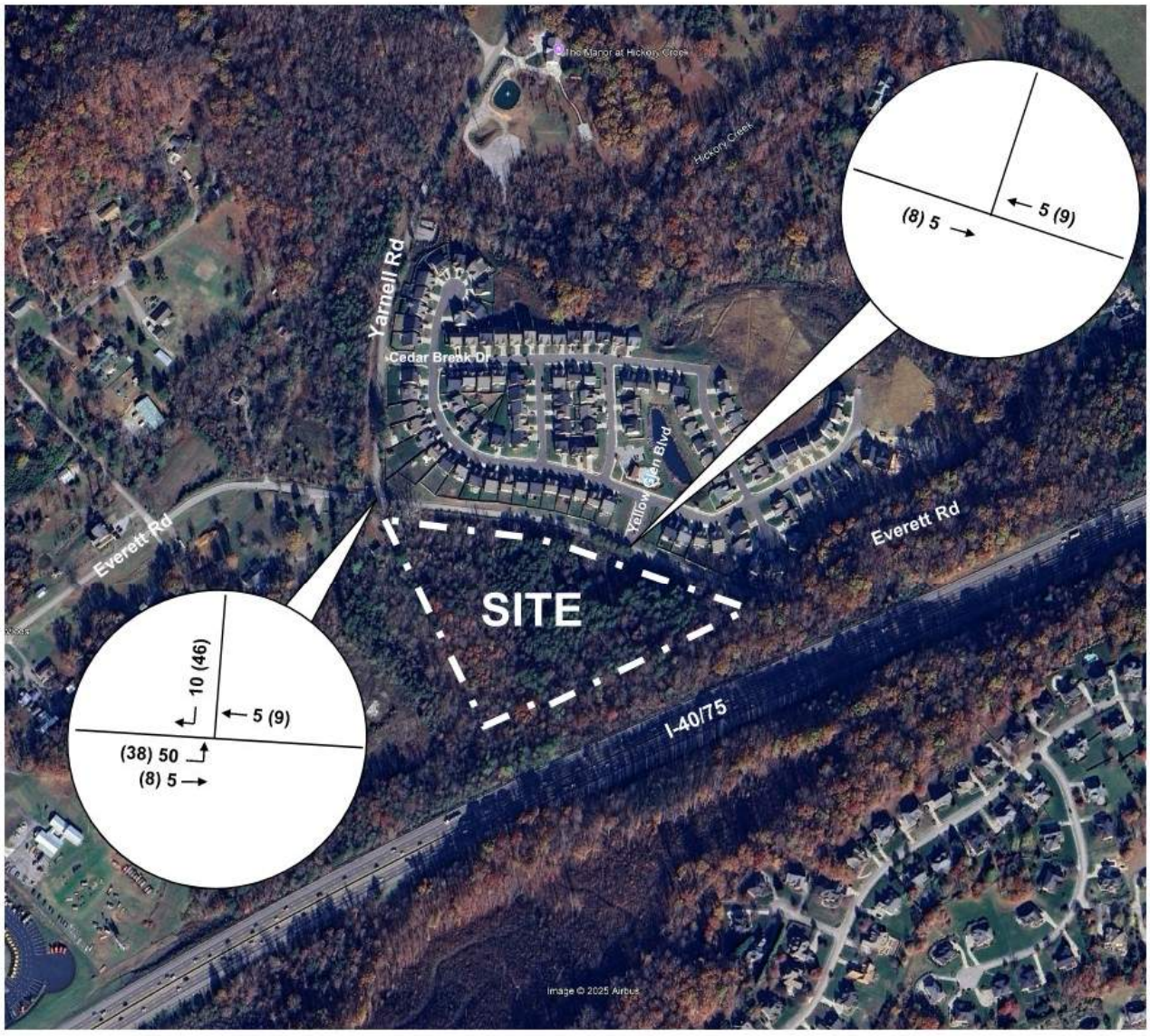
LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 8B

MULTI-FAMILY BACKGROUND TRIPS
Vintage Knoxville West



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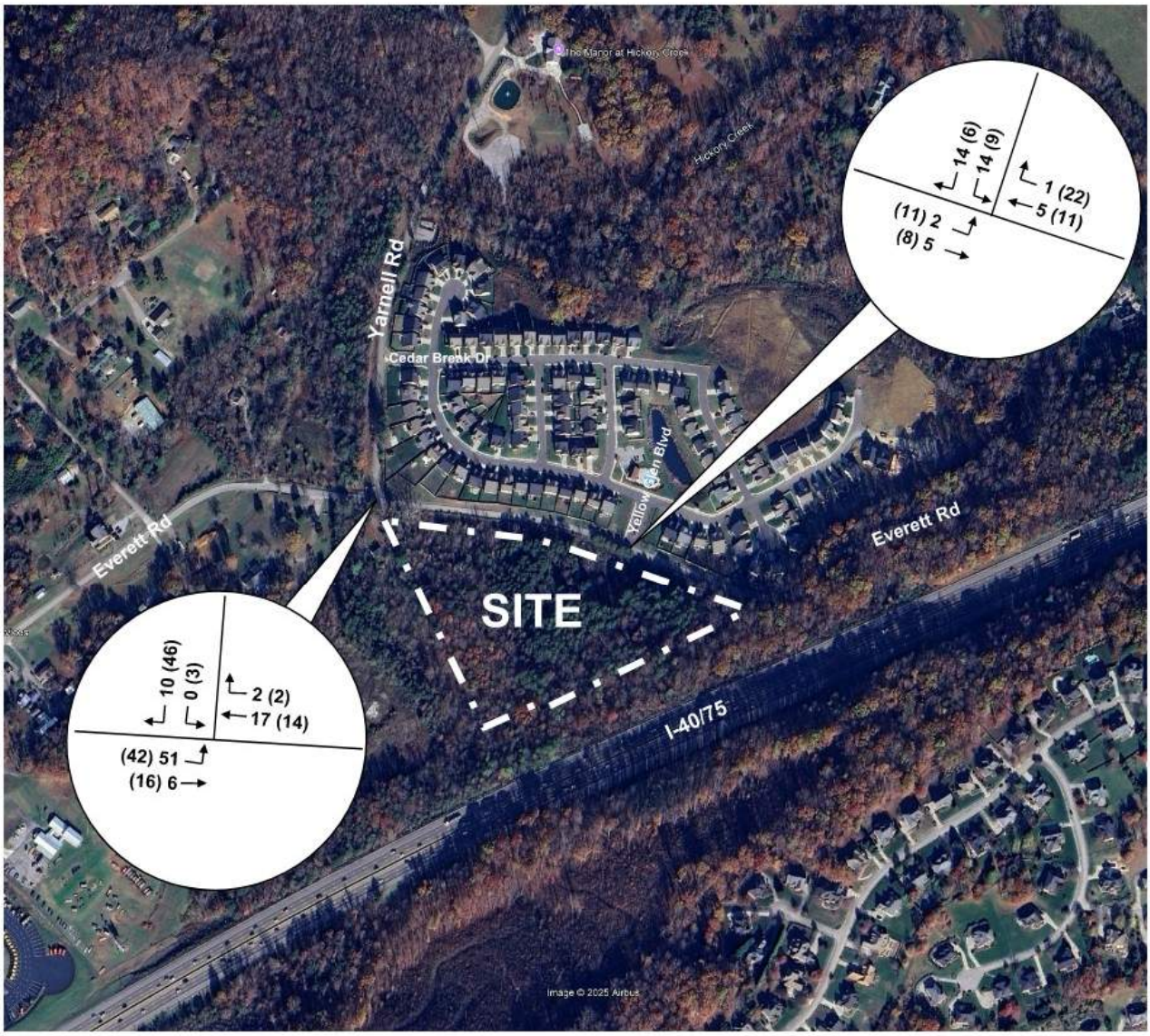
LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 8C

TOTAL BACKGROUND TRIPS

Vintage Knoxville West

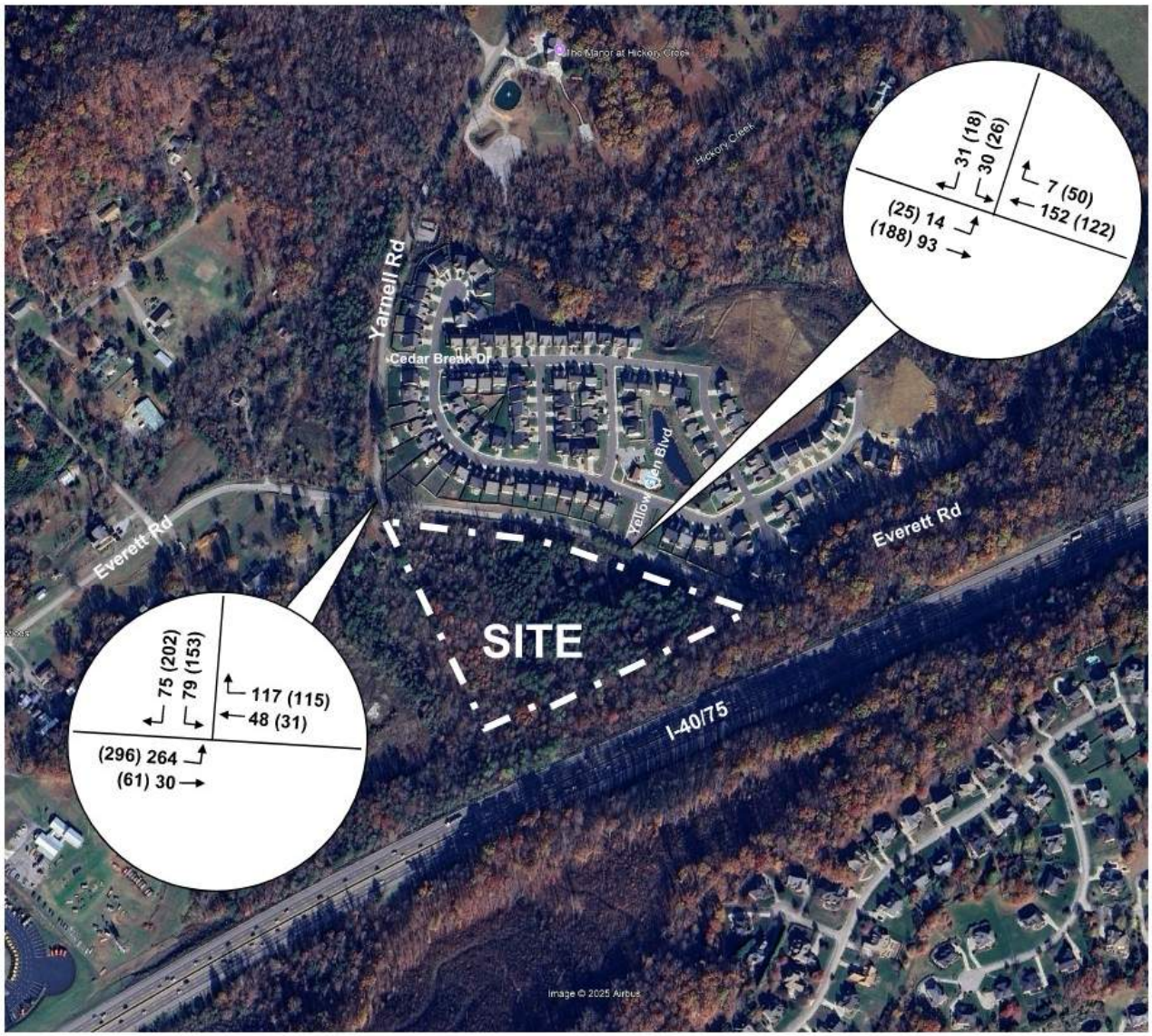


LEGEND
XXX AM PEAK
(XXX) PM PEAK

N

Figure 9

2028 TOTAL BACKGROUND TRAFFIC
Vintage Knoxville West



N

LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 10

Background Capacity and Level of Service

Analyses are performed for the background conditions including the buildout of the Everett Woods subdivision and apartment sites to the west. The results of these analyses are presented in **Table 4**. The levels of service for Year 2028 are impacted with the proposed development in the Vintage Knoxville West site. The LOS for the Yarnell Road approach to Everett Road will operate at unacceptable levels of service without improved traffic control.

TABLE 4
2028 BACKGROUND
CAPACITY AND LEVEL OF SERVICE

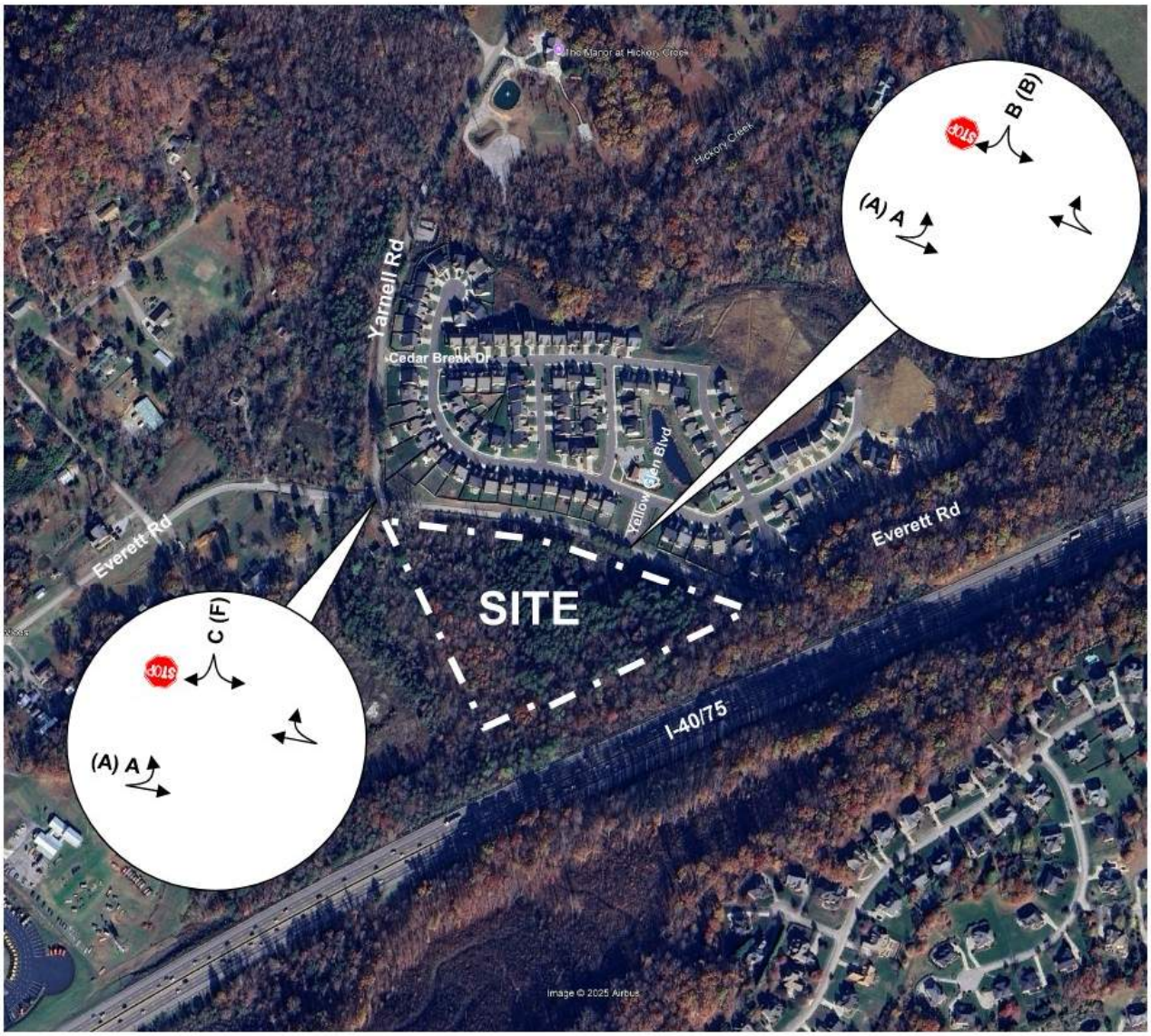
INTERSECTION	TRAFFIC CONTROL	PEAK PERIOD	V/C	DELAY	LOS
Everett Road &	STOP	AM	0.68	37.3	E
Yarnell Road	SB	PM	1.07	96.3	F
	Multi-Way	AM	-	12.5	B
	STOP	PM	-	17.0	C
Everett Road &	STOP	AM	0.12	10.7	B
Yellow Glen Blvd/Apt Access	SB	PM	0.09	11.6	B

Note: Average vehicle delay estimated in seconds. STOP control analyses presented by total minor approaches.

The failing LOS can be mitigated with installation of a multi-way STOP. Warrants for a multi-way STOP are not fully realized but are approached and provide for an acceptable LOS. Warrant analyses are provided in the Appendix.

2028 BACKGROUND LEVEL OF SEVICE

Vintage Knoxville West



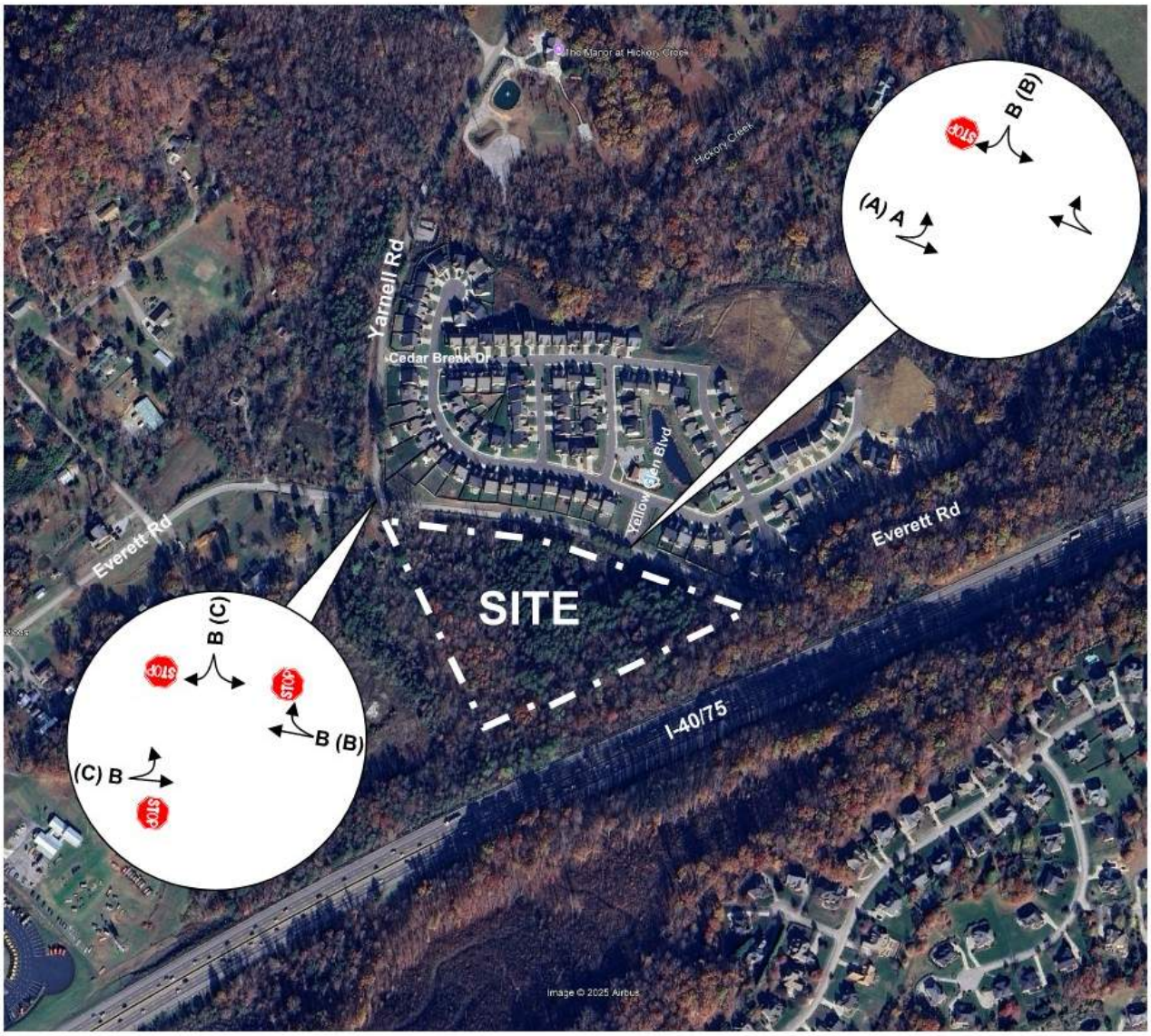
LEGEND
XXX AM PEAK
(XXX) PM PEAK

N

Figure 11A

2028 BACKGROUND MITIGATED LOS

Vintage Knoxville West



LEGEND
XXX AM PEAK
(XXX) PM PEAK

N

Figure 11B

PROJECT IMPACTS

Project conditions are developed by generating traffic based on the proposed land use, distributing the trips to the transportation network, and conducting analyses for capacity and level of service.

Trip Generation

Trips generated for the multi-family development were determined using local trip generation rates adopted by the Knoxville-Knox County Metropolitan Planning Commission in July of 2000 for multi-family developments. Local trip rates were studied in accordance with the publication, **Trip Generation, 6th Edition**. The local trip generation rates are relatively consistent with the rates published by ITE with the exception of exiting trips for the PM peak hour, which is higher with the local rates utilized. Daily trips generated are approximately 1,970. **Table 5** presents the trip generation for this proposed site.

TABLE 5. TRIP GENERATION

Land Use	Land-Use Code	Units	Daily Trips	AM Peak-Hour Trips		PM Peak-Hour Trips	
				Enter	Exit	Enter	Exit
Multi-Family	220	224	1,970	25	88	88	72

Reference: Knoxville/Knox Co. MPC trip rates adopted in July of 2000

Trip Distribution and Assignment

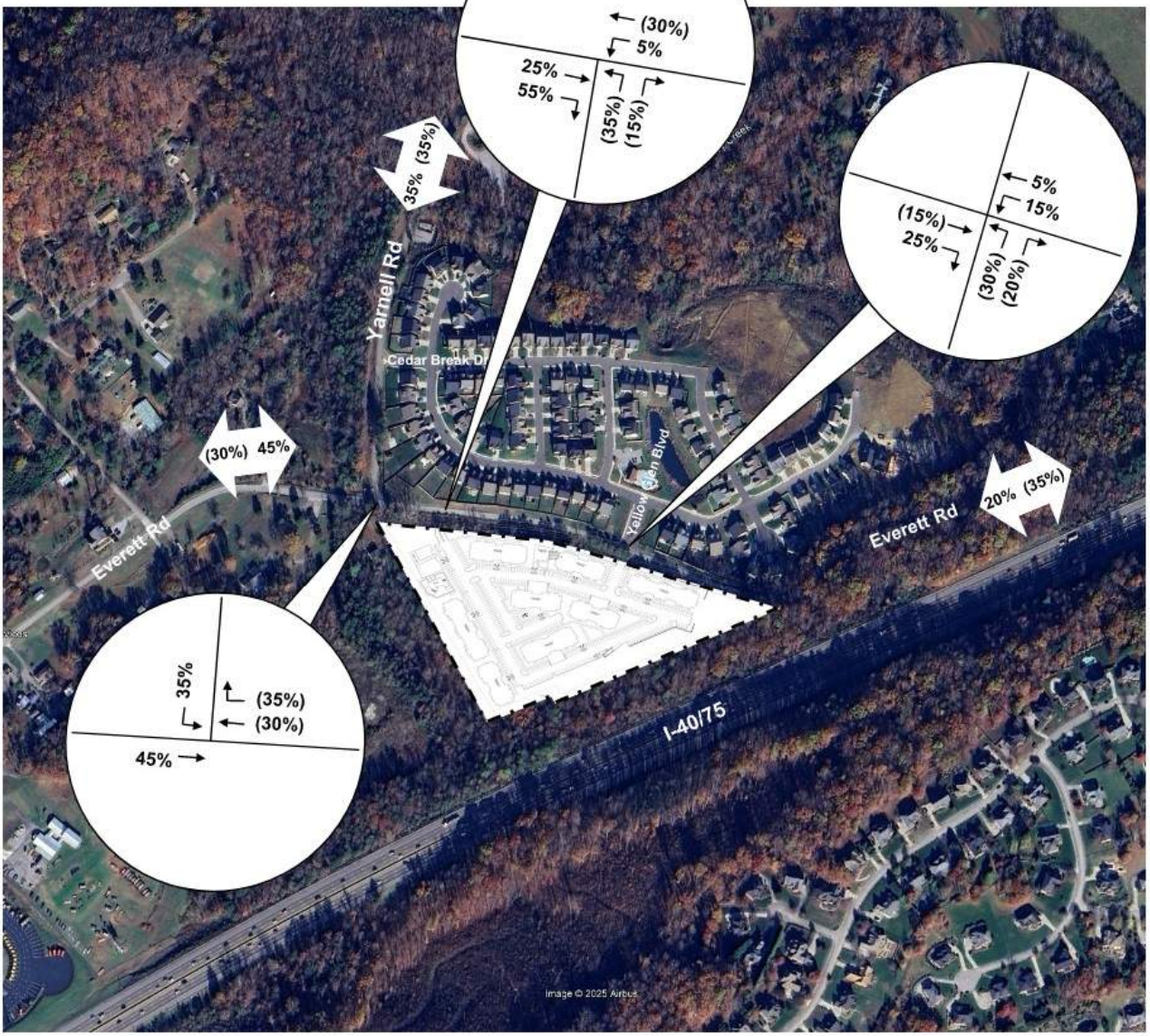
The assumed trip distribution used the Everett Woods subdivision distribution and assignment and the local and regional roadway network. This distribution and assignment varied for the AM and PM peak hours. **Figures 12A and 12B** illustrate this distribution and assignments for the Vintage Knoxville West multi-family residential development for the AM and PM peak hours, respectively.

Project Traffic Volumes

By multiplying the trips generated by the distribution percentages, the project traffic volumes are determined. **Figure 13** illustrates the resulting peak hour assignment of the Vintage Knoxville West trips.

AM PEAK-HOUR TRIP DISTRIBUTION & ASSIGNMENT

Vintage Knoxville West



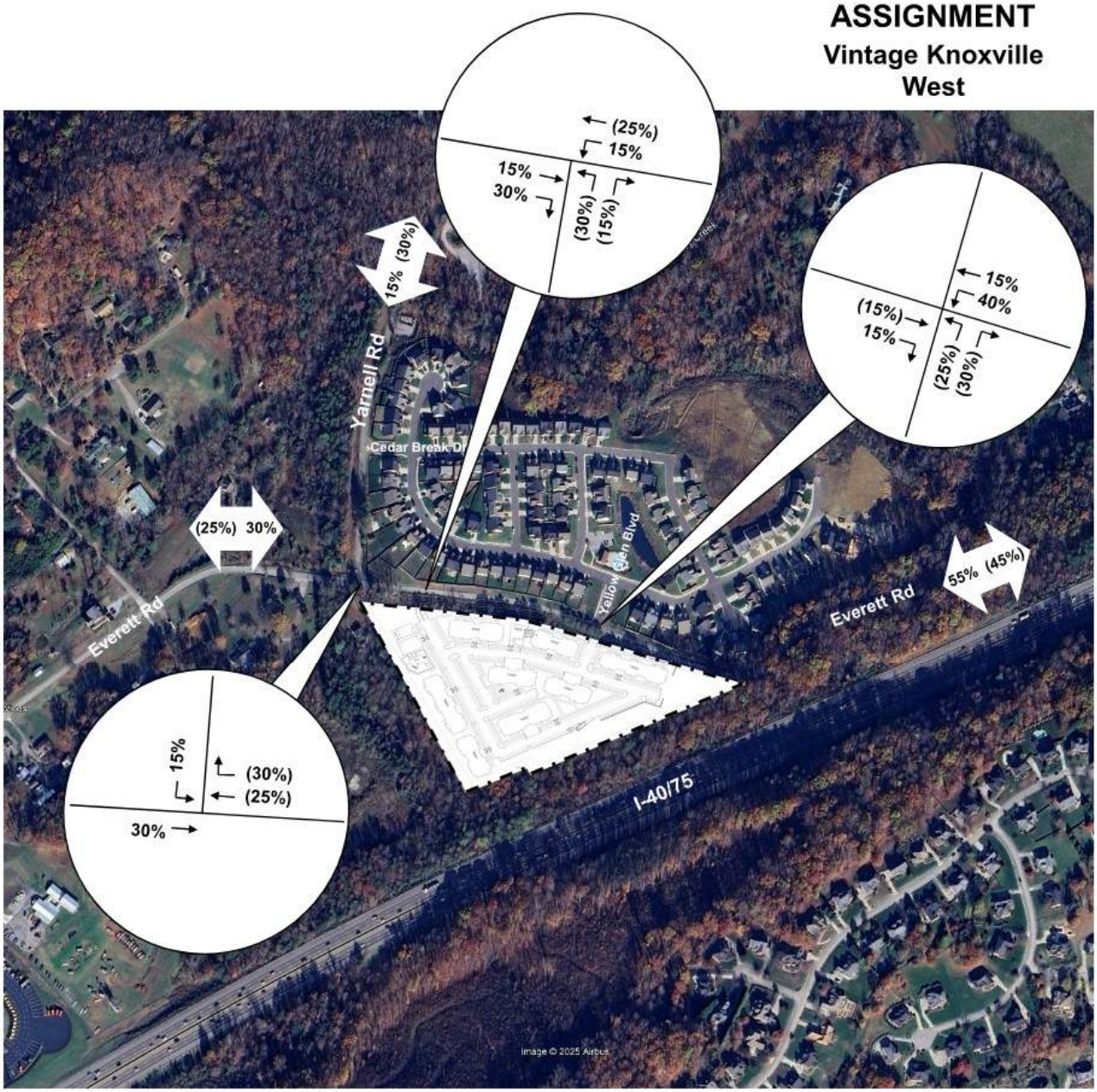
LEGEND
XX% Entering Trips
(XX%) Exiting Trips

N

Figure 12A

PM PEAK-HOUR TRIP DISTRIBUTION & ASSIGNMENT

Vintage Knoxville West



N

LEGEND
XX% Entering Trips
(XX%) Exiting Trips

Figure 12B

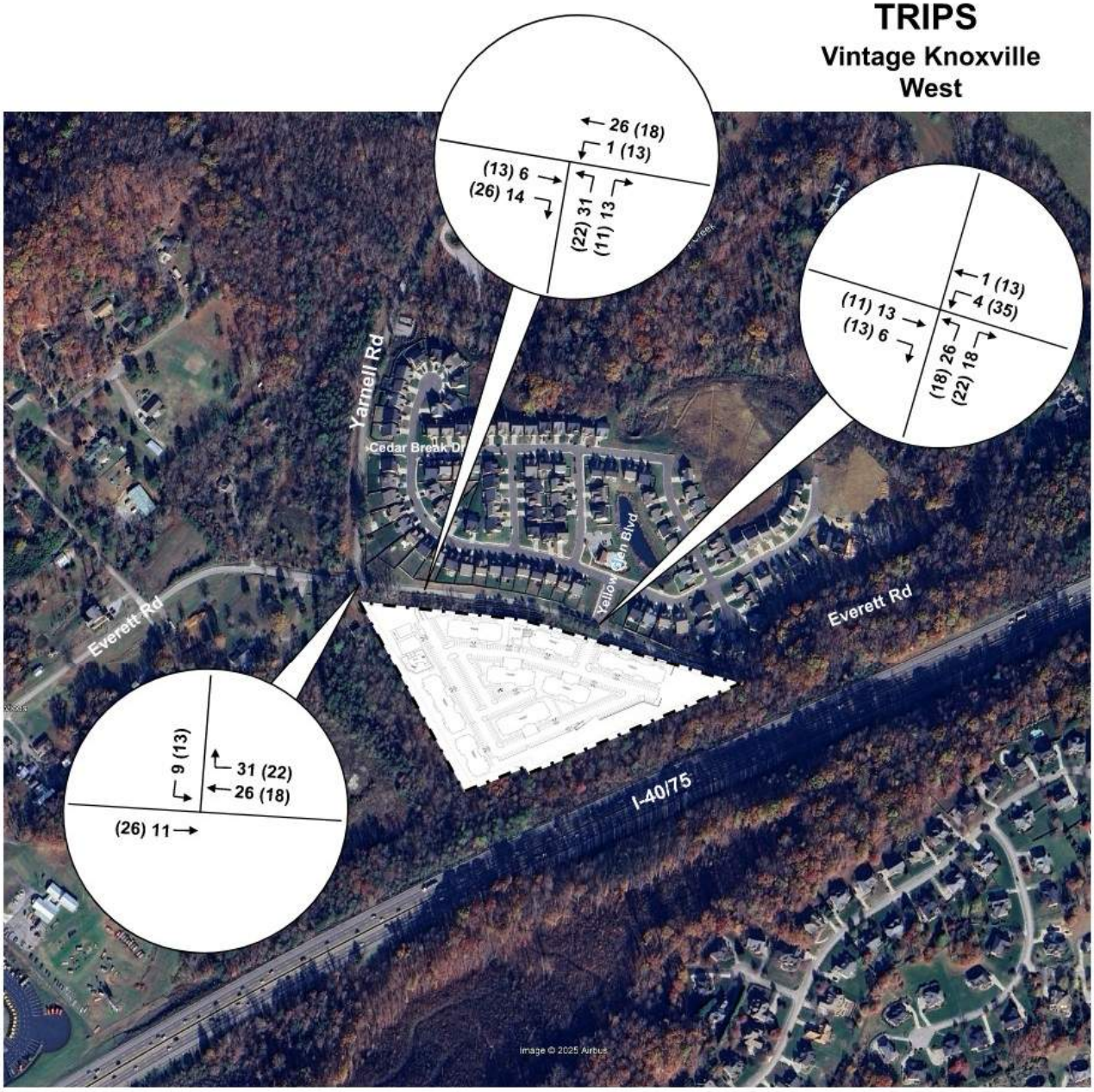

SITE
TRIPS
Vintage Knoxville
West
26 (18)
1 (13)
(13) 6
(26) 14
(22) 31
(11) 13
1 (13)
4 (35)
(11) 13
(13) 6
(18) 26
(22) 18
9 (13)
31 (22)
26 (18)
(26) 11
Yarnell Rd
Cedar Break Dr
Yellow Creek Blvd
Everett Rd
Everett Rd
I-40/75
Image © 2025 Airbus
N
LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 13

Total Projected Traffic Volumes

The Vintage Knoxville West trips were added to the 2028 background traffic for post-development traffic volumes for the year 2028. **Figure 14** illustrates the 2028 traffic projections. Using Knox County's Access Control and Driveway Design Policy, the review and evaluation of the projected traffic volumes did not determine any requirement of left- or right-turn lanes for the proposed site accesses.

Projected Capacity and Level of Service

Analyses were again conducted finding that the study intersections are expected to operate at unacceptable levels of service with the existing traffic control and intersection geometrics. **Table 6** presents the capacity and levels of service for the study intersections. A summary of the capacity and LOS analyses is presented in **Table 7**. Level of service for the Everett Road and Yarnell Road intersection may fail during the peak hours without the previously identified mitigation of a multi-way STOP. Installation of a multi-way STOP results in a minimum intersection LOS C. The site accesses operate at acceptable levels of service.

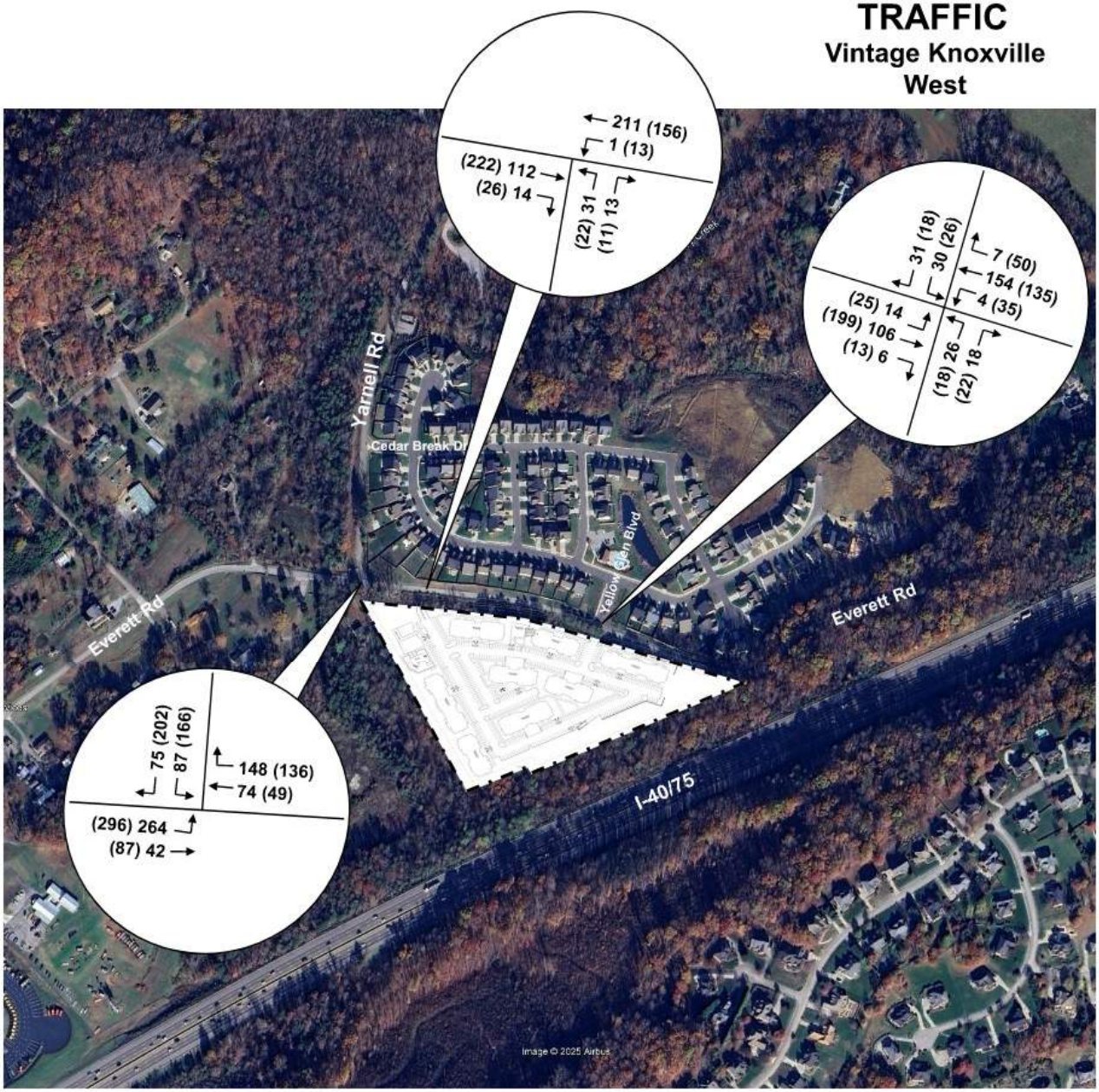
Warrants for the multi-way STOP are provided in the Appendix. A peak-hour signal warrant is satisfied, providing for further justification of a multi-way STOP.

Sight Distance

The proposed accesses to Everett Road with the 30mph posted speed limit requires 300 feet of corner sight-distance by Knox County. The AASHTO minimum stopping sight distance is 200 feet. The sight distances for the proposed western access exceeds 500-feet east and west, thereby providing for acceptable lines of sight. The eastern access, opposite Yellow Glen Boulevard, has the minimum line of sight to the east but is currently limited to the west with a line of sight of 275-feet restricted by the vegetation adjacent to Everett Road. This vegetation would be removed in clearing the property. The current lines of sight are provided in the Appendix of this report.

2028 PROJECTED TRAFFIC

Vintage Knoxville West



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LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 14

Table 6
2028 PROJECTED
CAPACITY AND LEVEL OF SERVICE

INTERSECTION	TRAFFIC CONTROL	PEAK PERIOD	V/C	DELAY	LOS
Everett Road &	STOP	AM	0.85	63.6	F
Yarnell Road	SB	PM	1.25	163.7	F
	Multi-Way	AM	-	14.3	B
	STOP	PM	-	20.1	C
Everett Road &	STOP	AM	0.08 / 0.14	11.2 / 11.3	B / B
Yellow Glen Blvd/Apt Access	NB/SB	PM	0.11 / 0.10	13.6 / 12.9	B / B
Everett Road &	STOP	AM	0.07	10.5	B
Apt Access W	NB	PM	0.06	11.2	B

Note: Average vehicle delay estimated in seconds. STOP control analyses presented by total minor approaches.

TABLE 7
CAPACITY AND LEVEL OF SERVICE SUMMARY

INTERSECTION	TRAFFIC CONTROL	PEAK PERIOD	2025 EXISTING V/C	2025 EXISTING DELAY	2025 EXISTING LOS	2028 BACKGROUND V/C	2028 BACKGROUND DELAY	2028 BACKGROUND LOS	2028 PROJECTED V/C	2028 PROJECTED DELAY	2028 PROJECTED LOS
Everett Road &	STOP	AM	0.43	19.6	C	0.68	37.3	E	0.85	63.6	F
Yarnell Road	SB	PM	0.72	29.6	D	1.07	96.3	F	1.25	163.7	F
	Multi-Way	AM	-	-	-	-	12.5	B	-	14.3	B
	STOP	PM	-	-	-	-	17.0	C	-	20.1	C
Everett Road &	STOP	AM	- / 0.06	- / 10.2	- / B	- / 0.12	- / 10.7	- / B	0.08 / 0.14	11.2 / 11.3	B / B
Yellow Glen Blvd/Apt Access	NB/SB	PM	- / 0.05	- / 10.4	- / B	- / 0.09	- / 11.6	- / B	0.11 / 0.10	13.6 / 12.9	B / B
Everett Road &	STOP	AM	-	-	-	-	-	-	0.07	10.5	B
Apt Access W	NB	PM	-	-	-	-	-	-	0.06	11.2	B

Note: Average vehicle delay estimated in seconds. STOP control analyses presented by total minor approaches.

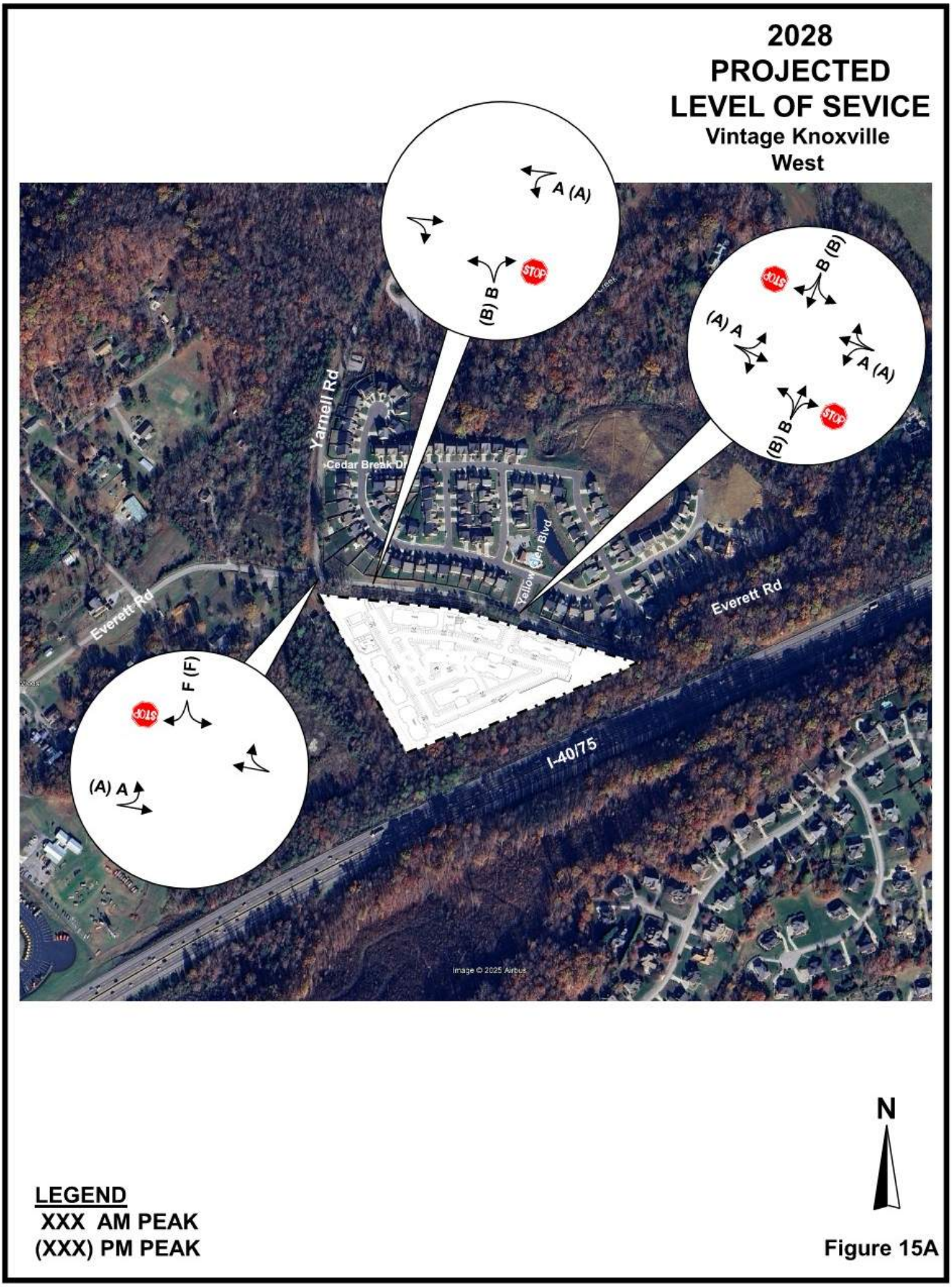
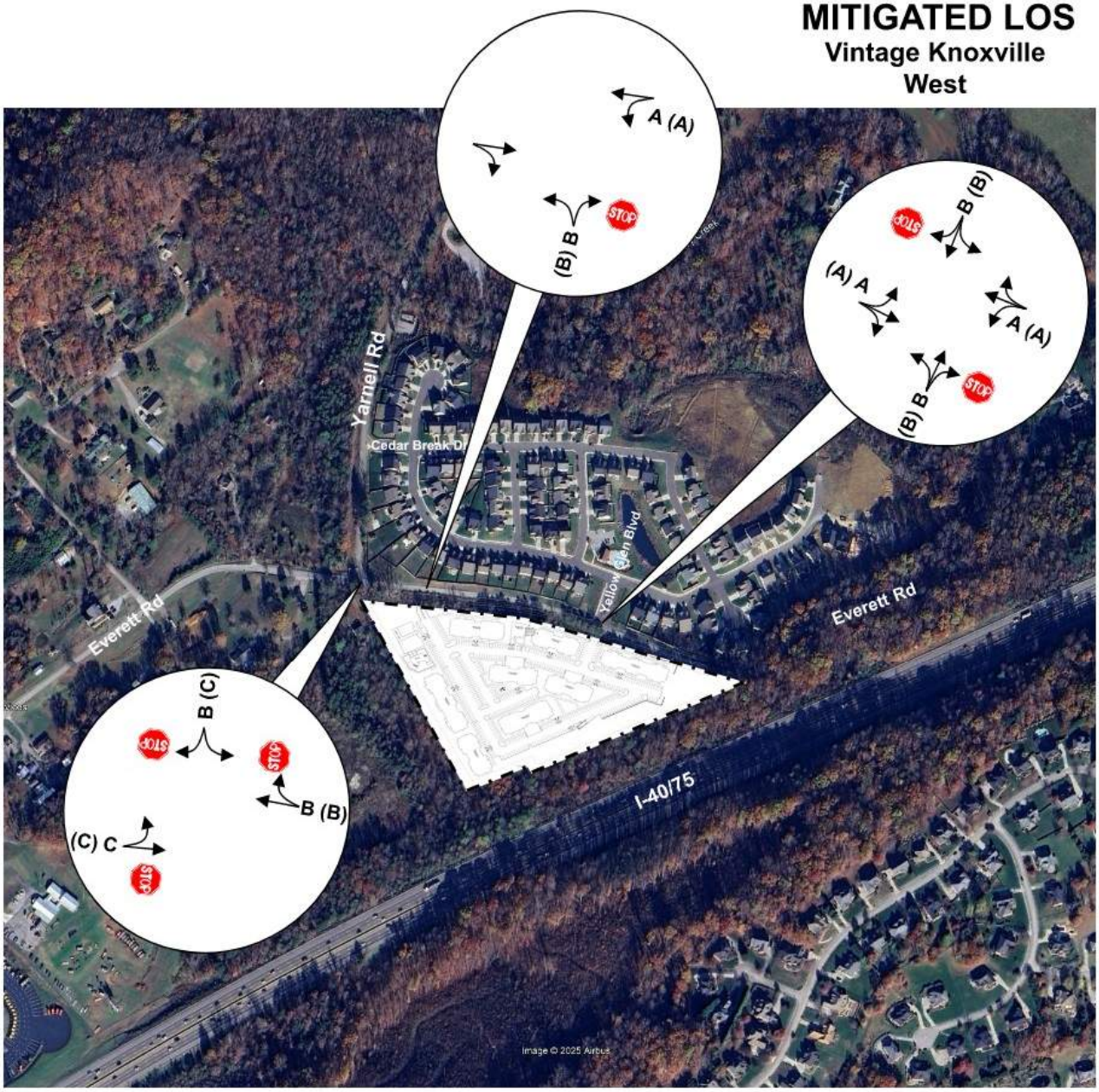

2028
PROJECTED
LEVEL OF SEVICE
Vintage Knoxville
West
A (A)
(B) B
STOP
B (B)
(A) A
A (A)
(B) B
STOP
Yarnell Rd
Cedar Break Dr
Yellow Finch Blvd
Everett Rd
Everett Rd
F (F)
STOP
(A) A
I-40/75
Image © 2025 Airbus
N
LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 15A

2028 PROJECTED MITIGATED LOS

Vintage Knoxville West



N

LEGEND
XXX AM PEAK
(XXX) PM PEAK

Figure 15B

RECOMMENDATIONS

The analyses conducted and the review of the traffic volumes identified the following recommendations:

- Install signing for a multi-way STOP for the intersection of Everett Road and Yarnell Road with advance STOP AHEAD signs posted for Everett Road approaches.
- Minimize landscaping, using low growing vegetation, and signing at the Hickory Creek Residential Development access to Everett Road to ensure that safe sight distance is maintained.
- Develop the site accesses with a minimum 300-foot corner sight-distance as required for the Knox County standard.
- Post STOP signs (R1-1) for the proposed site access approaches to Everett Road.

Intersection design should conform to the recommended standards and practices of the American Association of State Highway and Transportation Officials, the Institute of Transportation Engineers, and the Knox County Engineering and Public Works Department.

CONCLUSION

The study of this proposed residential development evaluated the projected traffic conditions. Background traffic was determined using a 2.0-percent annual growth rate until the horizon year 2028 and includes the buildout of Everett Woods and two proposed mult-family developments to the west of Vintage Knoxville West. Traffic associated with the Vintage Knoxville West development was then generated and distributed to the proposed site accesses. Using the identified turning movements for the projected traffic conditions, unsignalized capacity and level of service analyses were conducted using the **Highway Capacity Manual**. Capacity and levels of service are found to be acceptable for the projected traffic conditions with the installation of a multi-way STOP for the intersection of Everett Road and Yarnell Road.

With the recommendations of this report, the efficient and safe flow of traffic should be maintained with the development of the Vintage Knoxville West development.

APPENDIX

Trip Generation

Turn Lane Warrants

Traffic Control Warrants

Access Lines of Sight

Synchro HCM Analyses Reports

Traffic Data

TRIP GENERATION

TRIP GENERATION

10-Dec-25

AVERAGE

LAND USE	L.U.C	SIZE	DAILY TRAFFIC	AM PEAK ENTER	AM PEAK EXIT	AM PEAK TOTAL	PM PEAK ENTER	PM PEAK EXIT	PM PEAK TOTAL
KNOX CO MULTI-FAMILY	225	224	2,023	27	96	123	89	73	161
KNOX CO MULTI-FAMILY	225	150	1,355	18	64	83	59	49	108
KNOX CO MULTI-FAMILY	225	72	650	9	31	40	29	23	52
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
INGLE FAMILY (Detachec	210	169	1,536	32	86	118	97	60	157
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			5,564	86	278	364	274	204	478

REGRESSION

LAND USE	L.U.C	SIZE	DAILY TRAFFIC	AM PEAK ENTER	AM PEAK EXIT	AM PEAK TOTAL	PM PEAK ENTER	PM PEAK EXIT	PM PEAK TOTAL
KNOX CO MULTI-FAMILY	225	224	1,970	25	88	113	88	72	160
KNOX CO MULTI-FAMILY	225	150	1,374	17	61	78	61	50	110
KNOX CO MULTI-FAMILY	225	72	710	9	31	39	32	26	58
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
INGLE FAMILY (Detachec	210	169	1,629	32	87	119	97	59	156
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			5,684	83	266	348	277	207	485

LAND USE	L.U.C	SIZE	SATURDAY DAILY TRAFFIC	SATURDAY PEAK ENTER	SATURDAY PEAK EXIT	SATURDAY PEAK TOTAL	SUNDAY DAILY TRAFFIC	SUNDAY PEAK ENTER	SUNDAY PEAK EXIT	SUNDAY PEAK TOTAL
KNOX CO MULTI-FAMILY	225	224	1,431	57	59	116	131	59	55	114
KNOX CO MULTI-FAMILY	225	150	959	38	40	78	88	40	37	77
KNOX CO MULTI-FAMILY	225	72	460	18	19	37	42	19	18	37
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
INGLE FAMILY (Detachec	210	169	1,518	86	77	163	1,424	81	71	152
			0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
			4,368	200	195	395	1,685	199	181	380

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 12th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

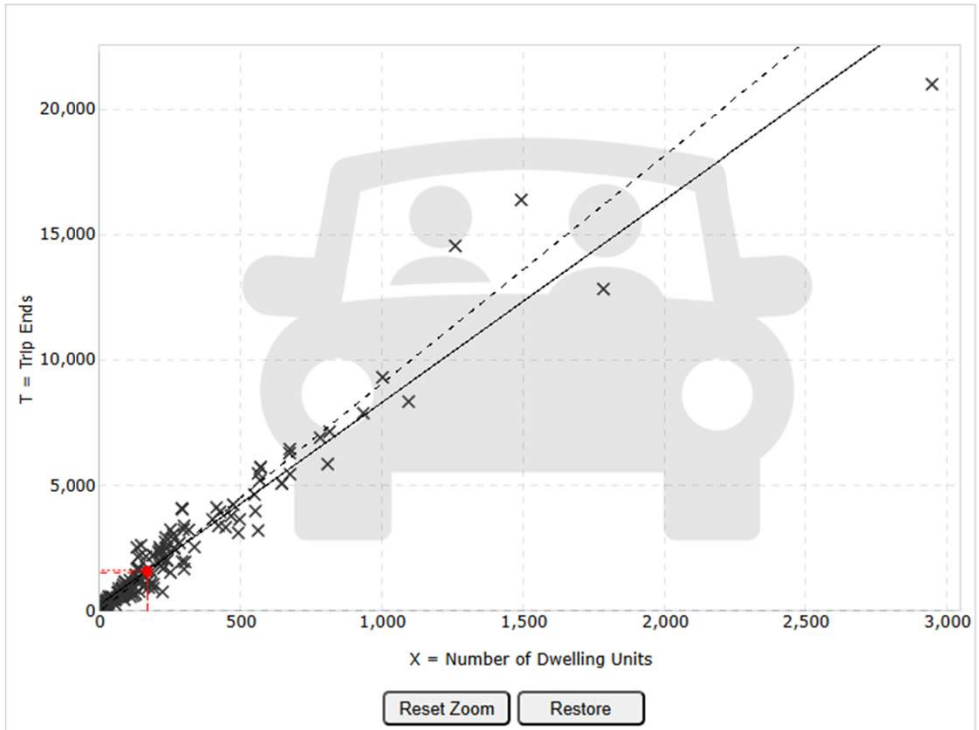
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
169 Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
155

Avg. Num. of Dwelling Units:
261

Average Rate:
9.09

Range of Rates:
3.47 - 23.80

Standard Deviation:
2.29

Fitted Curve Equation:
T = 8.07(X) + 265.45

R^2:
0.94

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 1536 (Total), 768 (Entry), 768 (Exit)
Fitted Curve: 1629 (Total), 815 (Entry), 814 (Exit)

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 12th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

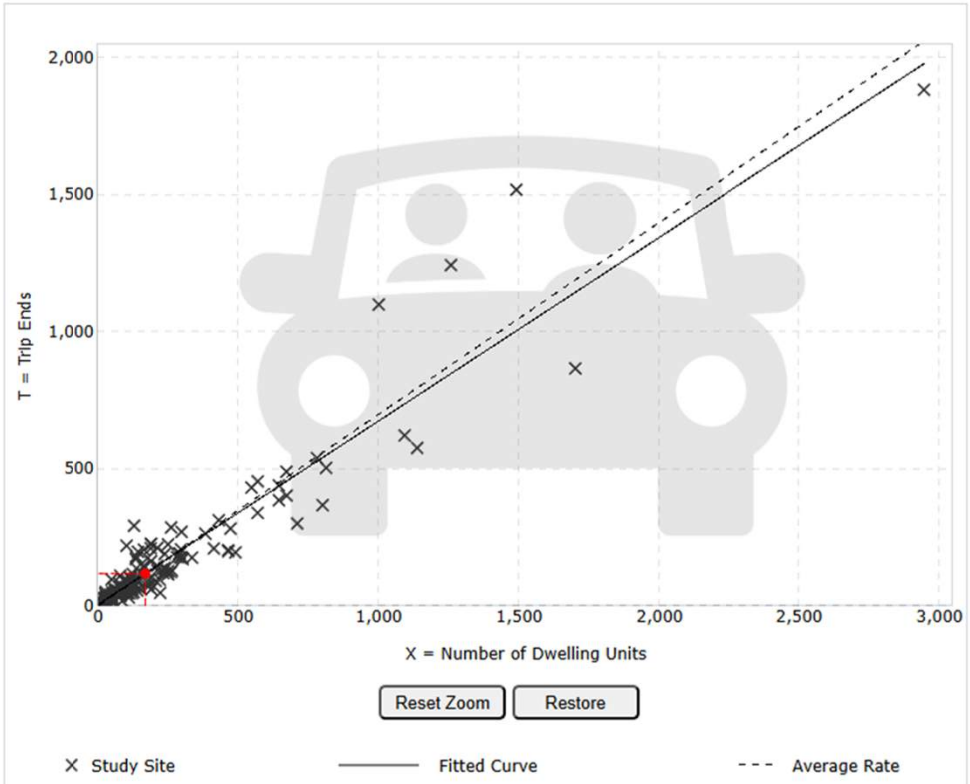
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Stre

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
169 Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
153

Avg. Num. of Dwelling Units:
239

Average Rate:
0.70

Range of Rates:
0.22 - 2.27

Standard Deviation:
0.26

Fitted Curve Equation:
T = 0.67(X) + 5.59

R^2:
0.89

Directional Distribution:
27% entering, 73% exiting

Calculated Trip Ends:
Average Rate: 118 (Total), 32 (Entry), 86 (Exit)
Fitted Curve: 119 (Total), 32 (Entry), 87 (Exit)

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 12th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

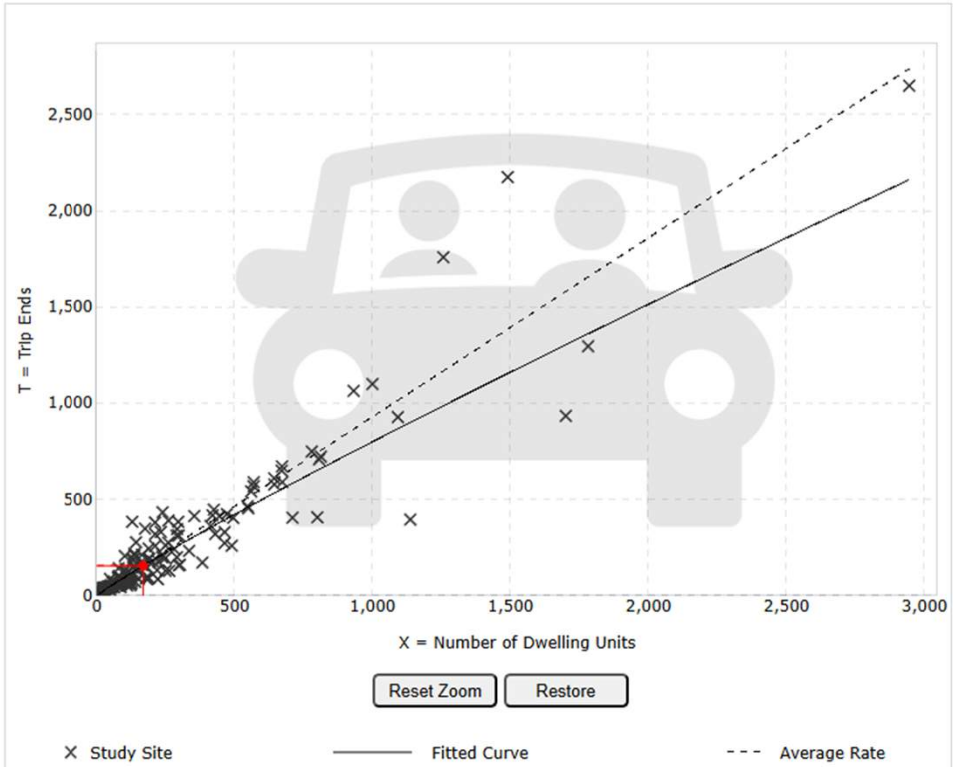
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Stre

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
169 Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
166

Avg. Num. of Dwelling Units:
266

Average Rate:
0.93

Range of Rates:
0.35 - 2.98

Standard Deviation:
0.33

Fitted Curve Equation:
Ln(T) = 0.92 Ln(X) + 0.33

R^2:
0.90

Directional Distribution:
62% entering, 38% exiting

Calculated Trip Ends:
Average Rate: 157 (Total), 97 (Entry), 60 (Exit)
Fitted Curve: 156 (Total), 97 (Entry), 59 (Exit)

TURN LANE WARRANTS

EVERETT ROAD
LEFT-TURN LANE
FOR THE WESTBOUND APPROACH TO
PROPOSED APPARTMENT ACCESSES

TABLE 4A

LEFT-TURN LANE VOLUME THRESHOLDS
FOR TWO-LANE ROADWAYS WITH A PREVAILING SPEED OF 35 MPH OR LESS

(If the left-turn volume exceeds the table value a left -turn lane is needed)

OPPOSING VOLUME	THROUGH VOLUME PLUS RIGHT-TURN VOLUME *					
	100 - 149	150 - 199	200 - 249	250 - 299	300 - 349	350 - 399
100 - 149 150 - 199	300 245	235 200	185 160	145 130	120 110	100 90
200 - 249 250 - 299	205 175	170 150	140 125	115 105	100 90	80 70
300 - 349 350 - 399	155 135	135 120	110 100	95 85	80 70	65 60
400 - 449 450 - 499	120 105	105 90	90 80	75 70	65 60	55 50
500 - 549 550 - 599	95 85	80 70	70 65	65 60	55 50	50 45
600 - 649 650 - 699	75 70	65 60	60 55	55 50	45 40	40 35
700 - 749 750 or More	65 60	55 50	50 45	45 40	35 35	30 30

OPPOSING VOLUME	THROUGH VOLUME PLUS RIGHT-TURN VOLUME *					
	350 - 399	400 - 449	450 - 499	500 - 549	550 - 599	= / > 600
100 - 149 150 - 199	100 90	80 75	70 65	60 55	55 50	50 45
200 - 249 250 - 299	80 70	72 65	460 55	55 50	50 45	45 40
300 - 349 350 - 399	65 60	60 55	50 50	50 45	45 40	40 40
400 - 449 450 - 499	55 50	50 45	45 45	45 40	40 35	35 35
500 - 549 550 - 599	50 45	45 40	40 40	40 35	35 35	35 35
600 - 649 650 - 699	40 35	35 35	35 35	35 30	35 30	30 30
700 - 749 750 or More	30 30	30 30	30 30	30 30	30 30	30 30

* Or through volume only if a right-turn lane exists.

EVERETT ROAD
RIGHT-TURN LANE
FOR THE EASTBOUND APPROACH TO
PROPOSED APPARTMENT ACCESSES

TABLE 4B

RIGHT-TURN LANE VOLUME THRESHOLDS

FOR TWO-LANE ROADWAYS WITH A PREVAILING SPEED OF 35 MPH OR LESS

RIGHT-TURN VOLUME	THROUGH VOLUME PLUS LEFT-TURN VOLUME *					
	< 100	168 167 100 - 199	200 - 249	250 - 299	300 - 349	350 - 399
13 Fewer Than 25		NO				
26 25 - 49		NO				
50 - 99						
100 - 149						
150 - 199						
200 - 249						
250 - 299						Yes
300 - 349					Yes	Yes
350 - 399				Yes	Yes	Yes
400 - 449			Yes	Yes	Yes	Yes
450 - 499			Yes	Yes	Yes	Yes
500 - 549		Yes	Yes	Yes	Yes	Yes
550 - 599		Yes	Yes	Yes	Yes	Yes
600 or More	Yes	Yes	Yes	Yes	Yes	Yes

RIGHT-TURN VOLUME	THROUGH VOLUME PLUS LEFT-TURN VOLUME *					
	350 - 399	400 - 449	450 - 499	500 - 549	550 - 600	+ / > 600
Fewer Than 25						Yes
25 - 49						Yes
50 - 99					Yes	Yes
100 - 149				Yes	Yes	Yes
150 - 199			Yes	Yes	Yes	Yes
200 - 249		Yes	Yes	Yes	Yes	Yes
250 - 299	Yes	Yes	Yes	Yes	Yes	Yes
300 - 349	Yes	Yes	Yes	Yes	Yes	Yes
350 - 399	Yes	Yes	Yes	Yes	Yes	Yes
400 - 449	Yes	Yes	Yes	Yes	Yes	Yes
450 - 499	Yes	Yes	Yes	Yes	Yes	Yes
500 - 549	Yes	Yes	Yes	Yes	Yes	Yes
550 - 599	Yes	Yes	Yes	Yes	Yes	Yes
600 or More	Yes	Yes	Yes	Yes	Yes	Yes

* Or through volume only if a left-turn lane exists.

TRAFFIC CONTROL WARRANTS

INTERSECTION:	Everett Road & Yarnell Road 2028 Background Conditions
JOB NUMBER:	0
DATE:	12/09/2025

85% SPEED:	30	SIGNALS WARRANTED? (YES/NO	NO
POPULATION:	350,000	NUMBER OF ACCIDENTS (YEAR)	0

HOUR	TOTAL INTER. VOLUME	MAJOR STREET TRAFFIC	MINOR STREET VOLUME	MAJOR STREET PERCENT	MINOR STREET PERCENT	TOTAL TRAFFIC 500	MINOR TRAFFIC 200	VOLUME WARRANT	TRAFFIC SPLIT
24-1	0	0	0	0%	0%	0%	0%	NO	NO
1-2	0	0	0	0%	0%	0%	0%	NO	NO
2-3	0	0	0	0%	0%	0%	0%	NO	NO
3-4	0	0	0	0%	0%	0%	0%	NO	NO
4-5	0	0	0	0%	0%	0%	0%	NO	NO
5-6	0	0	0	0%	0%	0%	0%	NO	NO
6-7	0	0	0	0%	0%	0%	0%	NO	NO
7-8	494	354	141	72%	28%	99%	70%	NO	NO
8-9	484	347	137	72%	28%	97%	69%	NO	NO
9-10	370	257	113	69%	31%	74%	57%	NO	NO
10-11	411	282	129	69%	31%	82%	64%	NO	NO
11-12	457	311	146	68%	32%	91%	73%	NO	NO
12-13	503	341	162	68%	32%	101%	81%	NO	NO
13-14	503	341	162	68%	32%	101%	81%	NO	NO
14-15	530	357	173	67%	33%	106%	86%	NO	NO
15-16	537	356	181	66%	34%	107%	90%	YES/NO	NO
16-17	670	450	219	67%	33%	134%	110%	YES	NO
17-18	874	506	368	58%	42%	175%	184%	YES	YES
18-19	0	0	0	0%	0%	0%	0%	NO	NO
19-20	0	0	0	0%	0%	0%	0%	NO	NO
20-21	0	0	0	0%	0%	0%	0%	NO	NO
21-22	0	0	0	0%	0%	0%	0%	NO	NO
22-23	0	0	0	0%	0%	0%	0%	NO	NO
23-24	0	0	0	0%	0%	0%	0%	NO	NO

SUMMARY

	GUIDELINES	OBTAINED	HOURS	POSSIBLE ADDITIONAL HOURS
I.	SIGNALS WARRANTEI	NO	N/A	N/A
II.	ACCIDENT EXPERIEN(	NO	N/A	N/A
III.	MINIMUM VOLUME:	NO	2	1
	TRAFFIC SPLIT:	NO	1	0

INTERSECTION:	Everett Road & Yarnell Road 2028 Projected Conditions
JOB NUMBER:	0
DATE:	12/09/2025

85% SPEED:	30	SIGNALS WARRANTED? (YES/NO	YES
POPULATION:	350,000	NUMBER OF ACCIDENTS (YEAR)	0

HOUR	TOTAL INTER. VOLUME	MAJOR STREET TRAFFIC	MINOR STREET VOLUME	MAJOR STREET PERCENT	MINOR STREET PERCENT	TOTAL TRAFFIC 500	MINOR TRAFFIC 200	VOLUME WARRANT	TRAFFIC SPLIT
24-1	0	0	0	0%	0%	0%	0%	NO	NO
1-2	0	0	0	0%	0%	0%	0%	NO	NO
2-3	0	0	0	0%	0%	0%	0%	NO	NO
3-4	0	0	0	0%	0%	0%	0%	NO	NO
4-5	0	0	0	0%	0%	0%	0%	NO	NO
5-6	0	0	0	0%	0%	0%	0%	NO	NO
6-7	0	0	0	0%	0%	0%	0%	NO	NO
7-8	592	441	151	75%	25%	118%	75%	NO	NO
8-9	558	412	146	74%	26%	112%	73%	NO	NO
9-10	428	305	124	71%	29%	86%	62%	NO	NO
10-11	447	314	133	70%	30%	89%	67%	NO	NO
11-12	497	345	152	69%	31%	99%	76%	NO	NO
12-13	548	379	169	69%	31%	110%	84%	NO	NO
13-14	548	379	169	69%	31%	110%	84%	NO	NO
14-15	573	394	179	69%	31%	115%	90%	YES/NO	NO
15-16	585	396	189	68%	32%	117%	94%	YES/NO	NO
16-17	728	498	230	68%	32%	146%	115%	YES	NO
17-18	959	575	384	60%	40%	192%	192%	YES	YES
18-19	0	0	0	0%	0%	0%	0%	NO	NO
19-20	0	0	0	0%	0%	0%	0%	NO	NO
20-21	0	0	0	0%	0%	0%	0%	NO	NO
21-22	0	0	0	0%	0%	0%	0%	NO	NO
22-23	0	0	0	0%	0%	0%	0%	NO	NO
23-24	0	0	0	0%	0%	0%	0%	NO	NO

SUMMARY

	GUIDELINES	OBTAINED'	HOURS	POSSIBLE ADDITIONAL HOURS
I.	SIGNALS WARRANTEI	YES	N/A	N/A
II.	ACCIDENT EXPERIEN(	NO	N/A	N/A
III.	MINIMUM VOLUME:	NO	2	2
	TRAFFIC SPLIT:	NO	1	0

INTERSECTION: **Everett Road & Yarnell Road 2028 Projected Conditions**
JOB NUMBER: **0**
DATE: 12/09/2025

85TH PERCENTILE SPEED: 30
POPULATION: 350,000

NUMBER OF APPROACHES: 3
LANES ON MAIN STREET: 1
MINOR STREET APPROACH LANES: 1

	MAIN STREET			MINOR STREET									
HOUR	MAIN STREET VOLUME	PERCENT OF WARRANT 1A 500	PERCENT OF WARRANT 1B 750	MINOR STREET VOLUME	MINIMUM VOLUME WARRANT 1A 150		INTERRUPTION WARRANT 1B 75		COMBINATION WARRANT A&B 1A	1B	4-HOUR WARRANT 2		PEAK HOUR WARRANT 3B	
24-1	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
1-2	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
2-3	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
3-4	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
4-5	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
5-6	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
6-7	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
7-8	441	88%	59%	151	101%	NO	201%	NO	YES	NO	52%	NO	33%	NO
8-9	412	82%	55%	146	98%	NO	195%	NO	YES	NO	48%	NO	31%	NO
9-10	305	61%	41%	124	83%	NO	165%	NO	NO	NO	35%	NO	23%	NO
10-11	314	63%	42%	133	89%	NO	178%	NO	NO	NO	38%	NO	25%	NO
11-12	345	69%	46%	152	101%	NO	203%	NO	NO	NO	45%	NO	30%	NO
12-13	379	76%	51%	169	112%	NO	225%	NO	NO	NO	53%	NO	34%	NO
13-14	379	76%	51%	169	112%	NO	225%	NO	NO	NO	53%	NO	34%	NO
14-15	394	79%	53%	179	119%	NO	239%	NO	NO	NO	58%	NO	37%	NO
15-16	396	79%	53%	189	126%	NO	252%	NO	NO	NO	61%	NO	39%	NO
16-17	498	100%	66%	230	153%	YES	306%	NO	YES	NO	87%	NO	54%	NO
17-18	575	115%	77%	384	256%	YES	512%	NO	YES	NO	167%	YES	100%	YES
18-19	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
19-20	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
20-21	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
21-22	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
22-23	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO
23-24	0	0%	0%	0	0%	NO	0%	NO	NO	NO	0%	NO	0%	NO

SUMMARY

WARRANT	WARRANT DESCRIPTION	WARRANT OBTAINED?	HOURS 100%	HOURS >90%	PRIORITY POINTS
1 A	MINIMUM VOLUME:	NO	2	0	22
B	INTERUPTION:	NO	0	0	0
A & B	COMBINATION:	NO	0	N/A	0
2	FOUR-HOUR:	NO	1	0	16
3 A	PEAK HOUR DELAY:	N/A	N/A	N/A	0
B	PEAK HOUR VOLUME:	YES	1	0	56
4 No data collected	MINIMUM PED. VOLUMES:	N/A	N/A	N/A	N/A
5	SCHOOL CROSSING:	NO	N/A	N/A	0
6	CORD. SIGNAL SYSTEM:	NO	N/A	N/A	0
7	ACCIDENT EXPERIENCE:	NO	4	N/A	0
8	ROADWAY NETWORK:	NO	0	N/A	0
9	INTERSECTION NEAR A GRADE CROSS	N/A	0	0	0
			PRIORITY		94

ACCESS LINES OF SIGHT

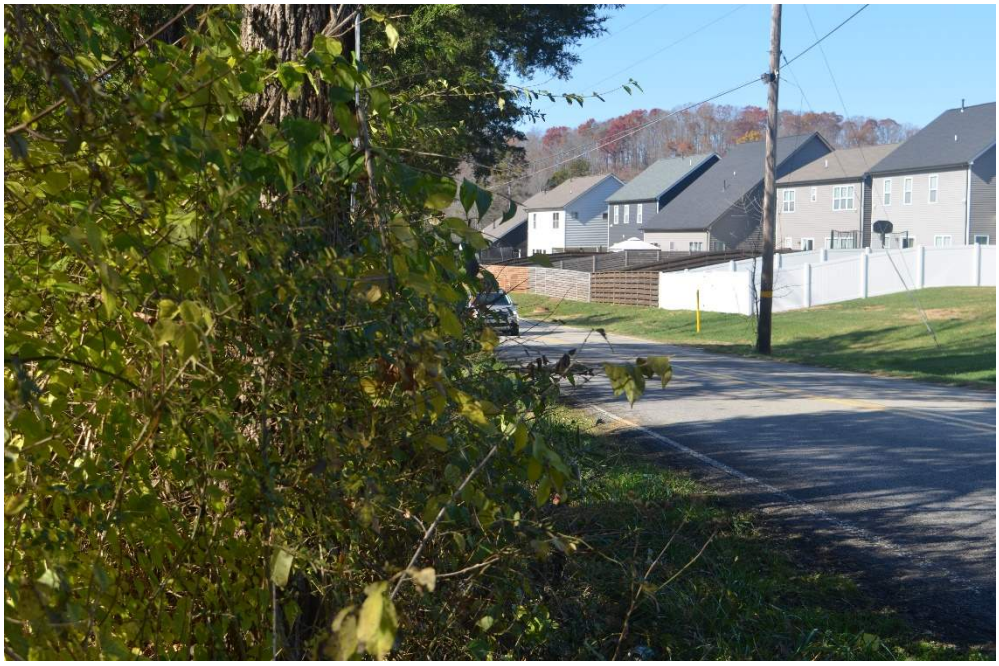
SIGHT DISTANCE
Western Access
Vintage Knoxville West

Line of Sight
Looking to the East
>500-ft

Line of Sight
Looking to the West
>500-ft

SIGHT DISTANCE
Eastern Access
Vintage Knoxville West

Line of Sight
Looking to the East
Approx. 550-ft



Line of Sight
Looking to the West
Approx. 275-ft

Clear Vegetation

SYNCHRO HCM ANALYSIS REPORTS

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	201	23	29	108	74	61
Future Vol, veh/h	201	23	29	108	74	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	62	62	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	287	33	47	174	103	85

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	221	0	-	0	741	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	607	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1348	-	-	-	384	915
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	544	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1348	-	-	-	301	915
Mov Cap-2 Maneuver	-	-	-	-	301	-
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	544	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	7.5	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1348	-	-	-	432
HCM Lane V/C Ratio	0.213	-	-	-	0.434
HCM Ctrl Dly (s/v)	8.4	0	-	-	19.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q (veh)	0.8	-	-	-	2.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	83	139	6	16	17
Future Vol, veh/h	12	83	139	6	16	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	74	74	69	69
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	105	188	8	23	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	196	0	-	0	327	192
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1377	-	-	-	667	850
Stage 1	-	-	-	-	841	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1377	-	-	-	659	850
Mov Cap-2 Maneuver	-	-	-	-	659	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1377	-	-	-	745
HCM Lane V/C Ratio	0.011	-	-	-	0.064
HCM Ctrl Dly (s/v)	7.6	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	15.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	239	42	16	106	142	147
Future Vol, veh/h	239	42	16	106	142	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	291	51	18	122	171	177

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	140	0	-	0	712	79
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	633	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1443	-	-	-	399	981
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	529	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1443	-	-	-	316	981
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	529	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	6.9	0	29.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1443	-	-	-	482
HCM Lane V/C Ratio	0.202	-	-	-	0.722
HCM Ctrl Dly (s/v)	8.1	0	-	-	29.6
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q (veh)	0.8	-	-	-	5.8

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	118	105	28	17	12
Future Vol, veh/h	14	118	105	28	17	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	68	68	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	153	154	41	21	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	195	0	-	0	364	175
Stage 1	-	-	-	-	175	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1378	-	-	-	635	868
Stage 1	-	-	-	-	855	-
Stage 2	-	-	-	-	843	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1378	-	-	-	626	868
Mov Cap-2 Maneuver	-	-	-	-	626	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	843	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.8	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1378	-	-	-	708
HCM Lane V/C Ratio	0.013	-	-	-	0.051
HCM Ctrl Dly (s/v)	7.6	0	-	-	10.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	12.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	264	30	48	117	79	75
Future Vol, veh/h	264	30	48	117	79	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	62	62	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	377	43	77	189	110	104

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	266	0	-	0	969	172
Stage 1	-	-	-	-	172	-
Stage 2	-	-	-	-	797	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1298	-	-	-	281	872
Stage 1	-	-	-	-	858	-
Stage 2	-	-	-	-	444	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1298	-	-	-	197	872
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	444	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	8	0	37.3
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1298	-	-	-	316
HCM Lane V/C Ratio	0.291	-	-	-	0.677
HCM Ctrl Dly (s/v)	8.9	0	-	-	37.3
HCM Lane LOS	A	A	-	-	E
HCM 95th %tile Q (veh)	1.2	-	-	-	4.6

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	93	152	7	30	31
Future Vol, veh/h	14	93	152	7	30	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	79	79	74	74	69	69
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	118	205	9	43	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	214	0	-	0	364	210
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	154	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1356	-	-	-	635	830
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	874	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1356	-	-	-	626	830
Mov Cap-2 Maneuver	-	-	-	-	626	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	874	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	1	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1356	-	-	-	715
HCM Lane V/C Ratio	0.013	-	-	-	0.124
HCM Ctrl Dly (s/v)	7.7	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0	-	-	-	0.4

Intersection	
Int Delay, s/veh	42.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	296	61	31	115	153	202
Future Vol, veh/h	296	61	31	115	153	202
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	361	74	36	132	184	243

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	168	0	-	0	898	102
Stage 1	-	-	-	-	102	-
Stage 2	-	-	-	-	796	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1410	-	-	-	310	953
Stage 1	-	-	-	-	922	-
Stage 2	-	-	-	-	444	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1410	-	-	-	227	953
Mov Cap-2 Maneuver	-	-	-	-	227	-
Stage 1	-	-	-	-	676	-
Stage 2	-	-	-	-	444	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	7	0	96.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1410	-	-	-	401
HCM Lane V/C Ratio	0.256	-	-	-	1.067
HCM Ctrl Dly (s/v)	8.4	0	-	-	96.3
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q (veh)	1	-	-	-	14.4

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	188	122	50	26	18
Future Vol, veh/h	25	188	122	50	26	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	68	68	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	244	179	74	32	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	253	0	-	0	524	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	308	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1312	-	-	-	514	824
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	745	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1312	-	-	-	500	824
Mov Cap-2 Maneuver	-	-	-	-	500	-
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	745	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0.9	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1312	-	-	-	596
HCM Lane V/C Ratio	0.025	-	-	-	0.091
HCM Ctrl Dly (s/v)	7.8	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q (veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	264	30	48	117	79	75
Future Vol, veh/h	264	30	48	117	79	75
Peak Hour Factor	0.70	0.70	0.62	0.62	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	377	43	77	189	110	104
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	14.9	10.1	10.9
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	90%	0%	51%
Vol Thru, %	10%	29%	0%
Vol Right, %	0%	71%	49%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	294	165	154
LT Vol	264	0	79
Through Vol	30	48	0
RT Vol	0	117	75
Lane Flow Rate	420	266	214
Geometry Grp	1	1	1
Degree of Util (X)	0.582	0.34	0.321
Departure Headway (Hd)	4.986	4.601	5.408
Convergence, Y/N	Yes	Yes	Yes
Cap	714	769	669
Service Time	3.078	2.701	3.408
HCM Lane V/C Ratio	0.588	0.346	0.32
HCM Control Delay, s/veh	14.9	10.1	10.9
HCM Lane LOS	B	B	B
HCM 95th-tile Q	3.8	1.5	1.4

Intersection	
Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	296	61	31	115	153	202
Future Vol, veh/h	296	61	31	115	153	202
Peak Hour Factor	0.82	0.82	0.87	0.87	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	361	74	36	132	184	243
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	19.5	10.3	17.1
HCM LOS	C	B	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	83%	0%	43%
Vol Thru, %	17%	21%	0%
Vol Right, %	0%	79%	57%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	357	146	355
LT Vol	296	0	153
Through Vol	61	31	0
RT Vol	0	115	202
Lane Flow Rate	435	168	428
Geometry Grp	1	1	1
Degree of Util (X)	0.675	0.251	0.632
Departure Headway (Hd)	5.583	5.386	5.321
Convergence, Y/N	Yes	Yes	Yes
Cap	644	665	676
Service Time	3.626	3.443	3.368
HCM Lane V/C Ratio	0.675	0.253	0.633
HCM Control Delay, s/veh	19.5	10.3	17.1
HCM Lane LOS	C	B	C
HCM 95th-tile Q	5.2	1	4.5

Intersection	
Int Delay, s/veh	17.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	264	42	74	148	87	75
Future Vol, veh/h	264	42	74	148	87	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	62	62	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	377	60	119	239	121	104

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	358	0	-	0	1053	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	814	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1201	-	-	-	251	800
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	435	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1201	-	-	-	169	800
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	541	-
Stage 2	-	-	-	-	435	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	8.08	0	63.28
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1161	-	-	-	266
HCM Lane V/C Ratio	0.314	-	-	-	0.845
HCM Ctrl Dly (s/v)	9.4	0	-	-	63.3
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	1.4	-	-	-	7

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	106	6	4	154	7	26	1	18	30	1	31
Future Vol, veh/h	14	106	6	4	154	7	26	1	18	30	1	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	92	92	74	74	92	92	92	69	92	69
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	134	7	4	208	9	28	1	20	43	1	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	218	0	0	141	0	0	390	399	137	392	398	213
Stage 1	-	-	-	-	-	-	173	173	-	222	222	-
Stage 2	-	-	-	-	-	-	217	226	-	170	176	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1352	-	-	1442	-	-	569	539	911	568	540	827
Stage 1	-	-	-	-	-	-	829	756	-	781	720	-
Stage 2	-	-	-	-	-	-	785	717	-	832	753	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1352	-	-	1442	-	-	527	529	911	545	530	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	527	529	-	545	530	-
Stage 1	-	-	-	-	-	-	817	745	-	778	718	-
Stage 2	-	-	-	-	-	-	739	714	-	801	743	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.86	0.15	11.15	11.34
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	634	200	-	-	35	-	-	657
HCM Lane V/C Ratio	0.077	0.013	-	-	0.003	-	-	0.136
HCM Ctrl Dly (s/v)	11.1	7.7	0	-	7.5	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	112	14	1	211	31	13
Future Vol, veh/h	112	14	1	211	31	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	122	15	1	229	34	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	137	0	361	129
Stage 1	-	-	-	-	129	-
Stage 2	-	-	-	-	232	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1447	-	638	920
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1447	-	637	920
Mov Cap-2 Maneuver	-	-	-	-	637	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	806	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.04	10.51
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	701	-	-	8	-
HCM Lane V/C Ratio	0.068	-	-	0.001	-
HCM Ctrl Dly (s/v)	10.5	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	67.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	296	87	49	136	166	202
Future Vol, veh/h	296	87	49	136	166	202
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	87	87	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	361	106	56	156	200	243

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	213	0	-	0	963	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	828	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1358	-	-	-	284	914
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	429	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1358	-	-	-	204	914
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	640	-
Stage 2	-	-	-	-	429	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	6.65	0	165.04
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1278	-	-	-	355
HCM Lane V/C Ratio	0.266	-	-	-	1.249
HCM Ctrl Dly (s/v)	8.6	0	-	-	165
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	1.1	-	-	-	19.5

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	199	13	35	135	50	26	1	18	18	1	22
Future Vol, veh/h	25	199	13	35	135	50	26	1	18	18	1	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	92	92	68	68	92	92	92	81	92	81
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	258	14	38	199	74	28	1	20	22	1	27

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	272	0	0	273	0	0	606	679	266	635	649	235
Stage 1	-	-	-	-	-	-	330	330	-	311	311	-
Stage 2	-	-	-	-	-	-	275	348	-	324	338	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1291	-	-	1291	-	-	409	374	773	391	389	804
Stage 1	-	-	-	-	-	-	683	645	-	699	658	-
Stage 2	-	-	-	-	-	-	731	634	-	688	641	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1291	-	-	1291	-	-	369	350	773	356	364	804
Mov Cap-2 Maneuver	-	-	-	-	-	-	369	350	-	356	364	-
Stage 1	-	-	-	-	-	-	663	626	-	675	635	-
Stage 2	-	-	-	-	-	-	680	612	-	650	622	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.84	0.97	13.63	12.86
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	466	190	-	-	210	-	-	509
HCM Lane V/C Ratio	0.105	0.025	-	-	0.029	-	-	0.099
HCM Ctrl Dly (s/v)	13.6	7.9	0	-	7.9	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.1	-	-	0.3

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	222	26	13	156	22	11
Future Vol, veh/h	222	26	13	156	22	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	241	28	14	170	24	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	270	0	453	255
Stage 1	-	-	-	-	255	-
Stage 2	-	-	-	-	198	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1294	-	564	783
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	836	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1294	-	558	783
Mov Cap-2 Maneuver	-	-	-	-	558	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.6	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	617	-	-	138	-
HCM Lane V/C Ratio	0.058	-	-	0.011	-
HCM Ctrl Dly (s/v)	11.2	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	264	42	74	148	87	75
Future Vol, veh/h	264	42	74	148	87	75
Peak Hour Factor	0.70	0.70	0.62	0.62	0.72	0.72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	377	60	119	239	121	104
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	17.1	12.3	11.9
HCM LOS	C	B	B

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	86%	0%	54%
Vol Thru, %	14%	33%	0%
Vol Right, %	0%	67%	46%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	306	222	162
LT Vol	264	0	87
Through Vol	42	74	0
RT Vol	0	148	75
Lane Flow Rate	437	358	225
Geometry Grp	1	1	1
Degree of Util (X)	0.638	0.48	0.356
Departure Headway (Hd)	5.255	4.829	5.698
Convergence, Y/N	Yes	Yes	Yes
Cap	686	745	630
Service Time	3.284	2.859	3.735
HCM Lane V/C Ratio	0.637	0.481	0.357
HCM Control Delay, s/veh	17.1	12.3	11.9
HCM Lane LOS	C	B	B
HCM 95th-tile Q	4.6	2.6	1.6

Intersection	
Intersection Delay, s/veh	20.1
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	296	87	49	136	166	202
Future Vol, veh/h	296	87	49	136	166	202
Peak Hour Factor	0.82	0.82	0.87	0.87	0.83	0.83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	361	106	56	156	200	243
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay, s/veh	24	11.5	20
HCM LOS	C	B	C

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	77%	0%	45%
Vol Thru, %	23%	26%	0%
Vol Right, %	0%	74%	55%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	383	185	368
LT Vol	296	0	166
Through Vol	87	49	0
RT Vol	0	136	202
Lane Flow Rate	467	213	443
Geometry Grp	1	1	1
Degree of Util (X)	0.747	0.331	0.685
Departure Headway (Hd)	5.755	5.599	5.564
Convergence, Y/N	Yes	Yes	Yes
Cap	626	638	647
Service Time	3.815	3.675	3.628
HCM Lane V/C Ratio	0.746	0.334	0.685
HCM Control Delay, s/veh	24	11.5	20
HCM Lane LOS	C	B	C
HCM 95th-tile Q	6.6	1.4	5.4

TRAFFIC DATA

TRAFFIC COUNT DATA

Major Street: Everett Road (WB & EB)
Minor Street: Yarnell Road (SB)
Traffic Control: Stop Sign on Minor Street

10/15/2025 (Wednesday)
Mostly Sunny and Mild
Conducted by: Ajax Engineering

	Yarnell Road		Everett Road		Everett Road			
TIME	SOUTHBOUND		WESTBOUND		EASTBOUND		VEHICLE	PEAK
BEGIN	LT	RT	THRU	RT	LT	THRU	TOTAL	HOUR
7:00 AM	6	8	3	11	12	1	41	
7:15 AM	7	14	7	12	17	3	60	
7:30 AM	26	12	4	22	39	4	107	**7:30 AM - 8:30 AM**
7:45 AM	22	25	15	40	70	10	182	
8:00 AM	18	18	7	35	51	5	134	
8:15 AM	8	6	3	11	41	4	73	
8:30 AM	18	13	10	14	30	5	90	
8:45 AM	24	13	7	14	16	6	80	
TOTAL	129	109	56	159	276	38	767	
2:00 PM	11	14	7	12	15	2	61	
2:15 PM	14	16	3	19	20	5	77	
2:30 PM	7	13	6	17	22	3	68	
2:45 PM	21	13	4	14	37	6	95	
3:00 PM	16	22	5	10	39	6	98	
3:15 PM	19	11	4	14	35	5	88	
3:30 PM	19	22	7	20	43	6	117	
3:45 PM	19	15	4	26	62	3	129	
4:00 PM	22	11	3	21	56	10	123	
4:15 PM	21	25	8	12	52	5	123	
4:30 PM	31	14	2	28	70	15	160	
4:45 PM	27	19	7	22	49	12	136	
5:00 PM	28	34	4	31	69	17	183	**5:00 PM - 6:00 PM**
5:15 PM	42	31	6	24	65	4	172	
5:30 PM	34	33	4	28	63	10	172	
5:45 PM	38	49	2	23	42	11	165	
TOTAL	369	342	76	321	739	120	1967	

2025 AM Peak Hour **7:30 AM - 8:30 AM**

	Yarnell Road		Everett Road		Everett Road	
TIME	SOUTHBOUND		WESTBOUND		EASTBOUND	
BEGIN	LT	RT	THRU	RT	LT	THRU
7:30 AM	26	12	4	22	39	4
7:45 AM	22	25	15	40	70	10
8:00 AM	18	18	7	35	51	5
8:15 AM	8	6	3	11	41	4
TOTAL	**74**	**61**	**29**	**108**	**201**	**23**
TRUCK %	**2.7%**	**16.4%**	**0.0%**	**0.9%**	**5.5%**	**13.0%**
PHF $_{mvmt}$	**0.71**	**0.61**	**0.48**	**0.68**	**0.72**	**0.58**
PHF $_{app}$	**0.72**		**0.62**		**0.70**	
PHF $_{int}$	**0.68**					

2025 PM Peak Hour **5:00 PM - 6:00 PM**

	Yarnell Road		Everett Road		Everett Road	
TIME	SOUTHBOUND		WESTBOUND		EASTBOUND	
BEGIN	LT	RT	THRU	RT	LT	THRU
5:00 PM	28	34	4	31	69	17
5:15 PM	42	31	6	24	65	4
5:30 PM	34	33	4	28	63	10
5:45 PM	38	49	2	23	42	11
TOTAL	**142**	**147**	**16**	**106**	**239**	**42**
TRUCK %	**0.0%**	**2.7%**	**6.3%**	**0.9%**	**0.8%**	**0.0%**
PHF $_{mvmt}$	**0.85**	**0.75**	**0.67**	**0.85**	**0.87**	**0.62**
PHF $_{app}$	**0.83**		**0.87**		**0.82**	
PHF $_{int}$	**0.95**					

Everett Road & Yellow Glen Boulevard

18-Nov-25

AM Peak	SOUTHBOUND				WESTBOUND				NORTHBOUND				EASTBOUND			
	PED	R	T	L	PED	R	T	L	PED	R	T	L	PED	R	T	L
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7:30-7:45	0	6	0	6	0	0	36	0	0	0	0	0	0	0	27	3
7:45-8:00	0	4	0	1	0	3	40	0	0	0	0	0	0	0	18	4
8:00-8:15	0	5	0	4	0	2	47	0	0	0	0	0	0	0	16	3
8:15-8:30	0	2	0	5	0	1	16	0	0	0	0	0	0	0	22	2
Total	**0**	**17**	**0**	**16**	**0**	**6**	**139**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**83**	**12**
PHF				**0.69**				**0.74**								**0.79**

PM Peak	SOUTHBOUND				WESTBOUND				NORTHBOUND				EASTBOUND			
	PED	R	T	L	PED	R	T	L	PED	R	T	L	PED	R	T	L
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5:00-5:15	0	4	0	4	0	5	29	0	0	0	0	0	0	0	30	6
5:15-5:30	0	1	0	5	0	11	38	0	0	0	0	0	0	0	38	5
5:30-5:45	0	1	0	5	0	6	20	0	0	0	0	0	0	0	25	3
5:45-6:00	0	6	0	3	0	6	18	0	0	0	0	0	0	0	25	0
Total	**0**	**12**	**0**	**17**	**0**	**28**	**105**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**118**	**14**
PHF				**0.81**				**0.68**								**0.77**

Checked by: Julie Niedling

Yarnell Road & Cedar Break Drive

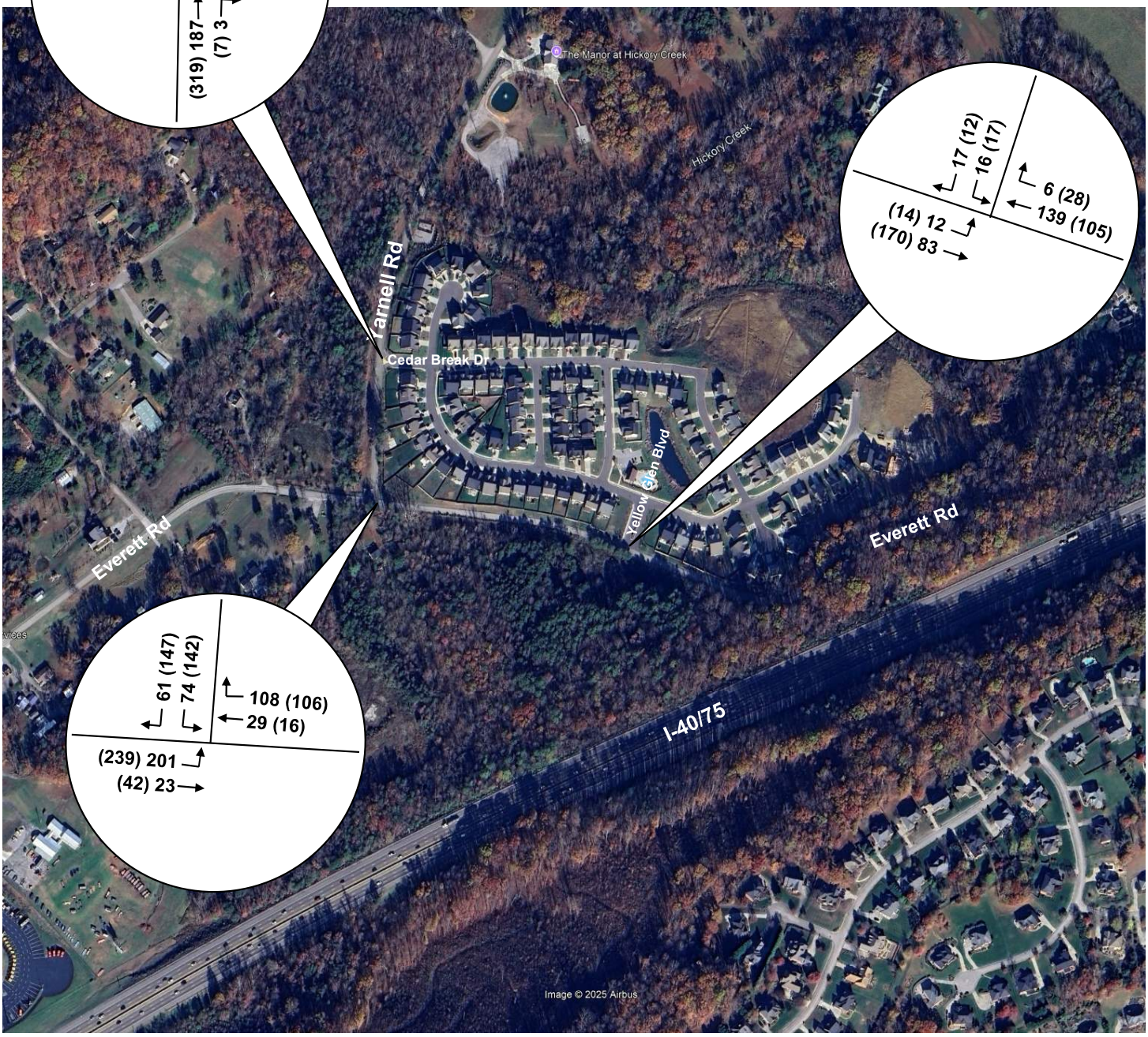
25-Nov-25

AM Peak	SOUTHBOUND				WESTBOUND				NORTHBOUND				EASTBOUND			
	PED	R	T	L	PED	R	T	L	PED	R	T	L	PED	R	T	L
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
7:30-7:45	0	0	39	1	0	3	0	0	0	2	32	0	0	0	0	0
7:45-8:00	0	0	23	3	0	6	0	0	0	0	45	0	0	0	0	0
8:00-8:15	0	0	30	0	0	5	0	0	0	0	60	0	0	0	0	0
8:15-8:30	0	0	35	3	0	0	0	0	0	1	50	0	0	0	0	0
Total	**0**	**0**	**127**	**7**	**0**	**14**	**0**	**0**	**0**	**3**	**187**	**0**	**0**	**0**	**0**	**0**

PM Peak	SOUTHBOUND				WESTBOUND				NORTHBOUND				EASTBOUND			
	PED	R	T	L	PED	R	T	L	PED	R	T	L	PED	R	T	L
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
5:00-5:15	0	0	85	0	0	2	0	0	0	1	98	0	0	0	0	0
5:15-5:30	0	0	78	2	0	2	0	0	0	3	74	0	0	0	0	0
5:30-5:45	0	0	88	1	0	3	0	0	0	1	88	0	0	0	0	0
5:45-6:00	0	0	53	2	0	3	0	0	0	2	59	0	0	0	0	0
Total	**0**	**0**	**304**	**5**	**0**	**10**	**0**	**0**	**0**	**7**	**319**	**0**	**0**	**0**	**0**	**0**

2025 TRAFFIC

Vintage Knoxville West



N

LEGEND

XXX AM PEAK

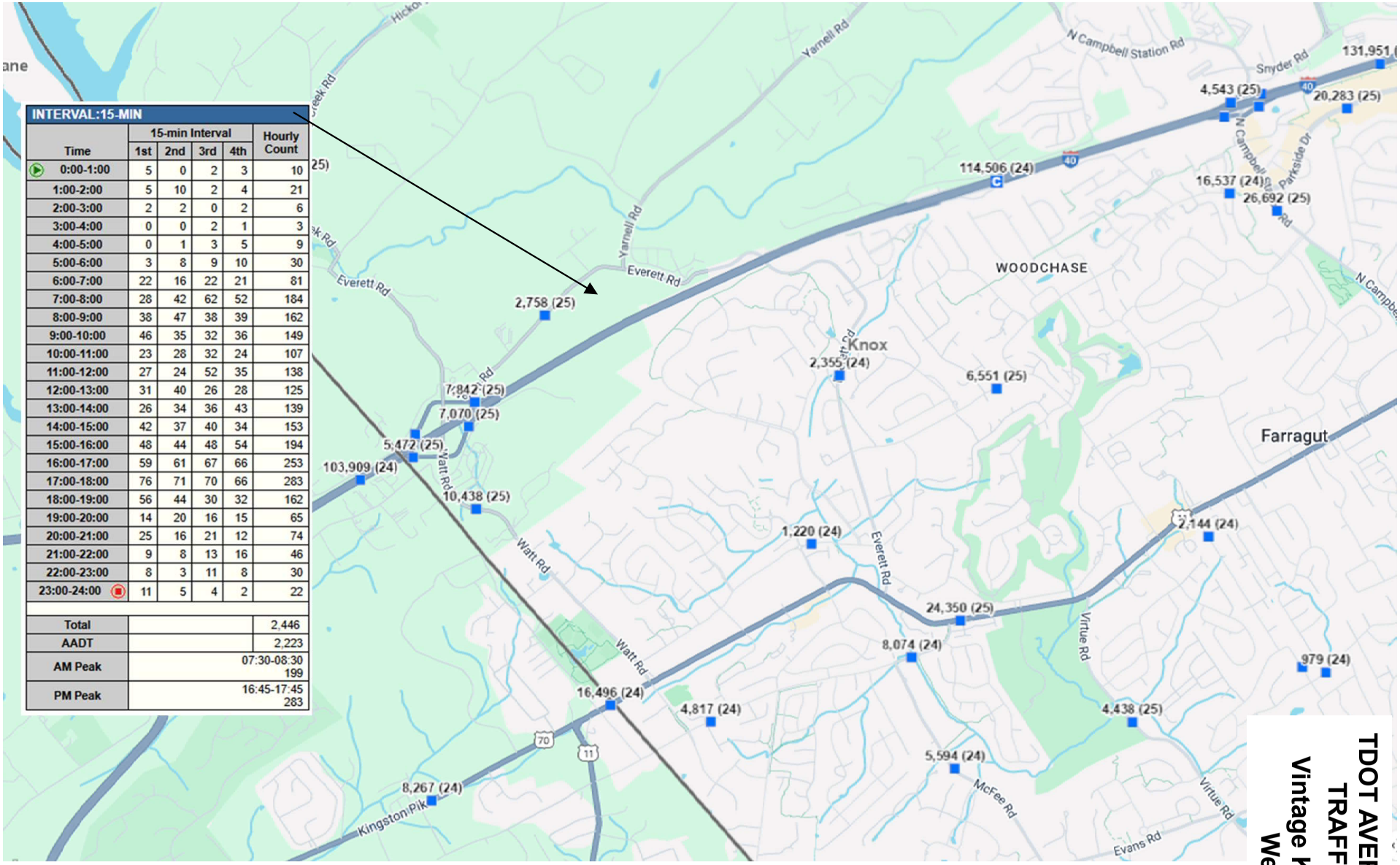
(XXX) PM PEAK

KNOX CO AVERAGE DAILY TRAFFIC DATA

Vintage Knoxville West

TDOT AVERAGE DAILY TRAFFIC DATA

Vintage Knoxville West



INTERVAL:15-MIN					
Time	15-min Interval 1st	2nd	3rd	4th	Hourly Count
0:00-1:00	5	0	2	3	10
1:00-2:00	5	10	2	4	21
2:00-3:00	2	2	0	2	6
3:00-4:00	0	0	2	1	3
4:00-5:00	0	1	3	5	9
5:00-6:00	3	8	9	10	30
6:00-7:00	22	16	22	21	81
7:00-8:00	28	42	62	52	184
8:00-9:00	38	47	38	39	162
9:00-10:00	46	35	32	36	149
10:00-11:00	23	28	32	24	107
11:00-12:00	27	24	52	35	138
12:00-13:00	31	40	26	28	125
13:00-14:00	26	34	36	43	139
14:00-15:00	42	37	40	34	153
15:00-16:00	48	44	48	54	194
16:00-17:00	59	61	67	66	253
17:00-18:00	76	71	70	66	283
18:00-19:00	56	44	30	32	162
19:00-20:00	14	20	16	15	65
20:00-21:00	25	16	21	12	74
21:00-22:00	9	8	13	16	46
22:00-23:00	8	3	11	8	30
23:00-24:00	11	5	4	2	22
Total					2,446
AADT					2,223
AM Peak					07:30-08:30 199
PM Peak					16:45-17:45 283


CDM
Smith