

City of Bartlett

David Parsons, Mayor

BOARD OF MAYOR AND ALDERMEN MEETING AGENDA

TUESDAY, APRIL 23, 2024 - BARTLETT CITY HALL - 6:00 PM

INVOCATION

Opening Prayer by Ron Harvey, Grace Baptist Church

FUTURE MEETINGS

Bartlett Station Commission, May 1 at 7:30 a.m.

City Beautiful Commission, May 2 at 6:30 p.m.

Industrial Development Board, May 2 at 7 p.m.

Family Assistance Commission, May 6 at 6 p.m.

Beer Board, May 7 at 6 p.m.

Parks and Recreation Advisory Board, May 9 at 6 p.m.

Planning Commission, May 13 at 6:30 p.m.

RECOGNITIONS

Official Business of the Day

MINUTES ACCEPTANCE

Minutes of the March 26, 2024 Board of Mayor and Aldermen Regular Meeting

CONSENT AGENDA

- I Authorization to auction surplus property. (Dick Phebus, Director of Finance)**

One item has been identified as having a potential auction-value of \$500 or more and will be auctioned on GovDeals.com.

2 Purchase a 2024 F-350 4x4 SD Crew Cab. (Paul Wright, Director of Parks and Recreation)

We recommend accepting the quote from Lonnie Cobb Ford as part of the State of Tennessee's state-wide vehicle contract, for a total cost of \$53,420.00. Funds are available in Account 311.48311.785.50724.

3 Purchase Backup Solution for PD/GIS. (Kevin Franz, IT Manager)

Recommend accepting the quote from SHI provided on the Omnia Purchasing contract at a cost of \$27,065.00 per year for a three year term. Funds are available in Account 123.48123.264.

4 Purchase two battery powered hydraulic rescue tool sets. (Tommy Gately, Fire Chief)

Recommend accepting the sole bid from Mid-South Rescue at a total cost of \$59,020.00. Funds are available in Account 131.42200.939.02524 for the amount of \$40,000.00 and Account 135.42200.935 for the amount of \$19,020.00.

5 Site Plan Contract for Ladd's Annex LLC. (John Horne, Director of Engineering)

The developer, Ladd's Annex LLC., will pay \$25,176.79 in City fees. The bond is set at \$121,073.00.

6 Treasurer's Report for March 2024. (Dick Phebus, Director of Finance)

7 Planning Commission Report for April 2024. (Kim Taylor, Director of Planning and Economic Development)

NEW BUSINESS

1 Appoint Greg Easton to Historic Preservation Commission. (David Parsons, Mayor)

2 Appoint Josh McNeil to the Planning Commission. (David Parsons, Mayor)

3 Approval of the YMCA Advisory Board By-Laws. (Paul Wright, Director of Parks and Recreation)

4 Purchase Wastewater Treatment Plant Clarifier Drive Units. (John Horne, Director of Engineering)

Request authorization to purchase two Wastewater Treatment Plant Clarifier Drive units from Kuster's Water Division Inc. at a total cost of \$109,728.00. Kuster's Water Division Inc. is a sole-source provider. Funds are available in Account 510.51400.945.

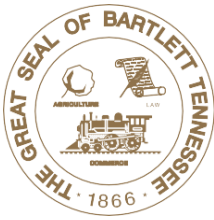
5 Set a Public Hearing for May 28, 2024 for Resolution 12-24, a resolution to approve a Special Use Permit to allow a school to be located in Christian Life Tabernacle at 9375 Davies Plantation Road, within the "R-E" Residential Estate Zoning District. (Kim Taylor, Director of Planning and Economic Development)

6 Resolution 13-24, a resolution to amend the Fiscal Year 2024 Bartlett City Schools General Purpose School Fund and Education Capital Project Fund. (Dick Phebus, Director of Finance)

OPEN DISCUSSION

The public shall be provided an opportunity to address the Board or Commission during an Open Discussion period at the end of each regular and special meeting of the governing body. Prior to the start of the meeting, individuals will be required to complete and present to the Clerk the Open Discussion Citizen form provided at each meeting. The Open Discussion period for regular and special meetings of the Board or Commission shall be limited to twenty (20) minutes. Individuals shall be allowed to speak for up to three (3) minutes each. Open Discussion periods will not be held for any meeting where there are no actionable items on the agenda or meetings where the governing body is conducting a disciplinary hearing for a member of the governing body or a person whose profession or activities fall within the jurisdiction of the governing body.

ADJOURNMENT



City of Bartlett

David Parsons, Mayor

BOARD OF MAYOR AND ALDERMEN MEETING MINUTES

TUESDAY, MARCH 26, 2024 - BARTLETT CITY HALL - 6:00 PM

ATTENDANCE

Mayor David Parsons: Present, Alderman Brad King: Present, Alderman Robert Griffin: Present, Alderman David Reaves: Present, Alderman Monique L. Williams: Present, Vice Mayor Jack Young: Present, Alderman Kevin Quinn: Present.

INVOCATION

Opening Prayer by Pastor Mark Johnson, Fountain of Truth

FUTURE MEETINGS

Family Assistance Commission, April 1 at 6 p.m.

Planning Commission, April 1 at 6:30 p.m.

Beer Board, April 2 at 6 p.m.

Bartlett Station Commission, April 3 at 7:30 a.m.

City Beautiful Commission, April 4 at 6:30 p.m.

RECOGNITIONS

Employee of the Year Recognitions

The 2023 Employees of the Year were recognized.

Fire Department - Larry Stone

I.T. Department - Jeremiah Wooten

Parks and Recreation Department - Alex Bien

Police Department - Officer Nathan DeCrow

Public Works - Sean Lilly

*****Official Business of the Day*****

Minutes Acceptance: Minutes of Mar 26, 2024 6:00 PM (MINUTES ACCEPTANCE)

MINUTES ACCEPTANCE**Minutes of the March 12, 2024 Board of Mayor and Aldermen Regular Meeting**

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	Jack Young, Vice Mayor
SECONDER:	Monique L. Williams, Alderman
AYES:	Brad King, Robert Griffin, David Reaves, Monique L. Williams, Jack Young, Kevin Quinn

CONSENT AGENDA

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Jack Young, Vice Mayor
SECONDER:	Monique L. Williams, Alderman
AYES:	Brad King, Robert Griffin, David Reaves, Monique L. Williams, Jack Young, Kevin Quinn

- 1 Special event permit for the Flashlight Easter Egg Hunt. (Trey Arthur, Director of Code Enforcement)**
The event will be held on Friday, March 29 from 7 p.m. to 9:30 p.m. at Ellendale Baptist Church.

2 Treasurer's Report for February 2024. (Dick Phebus, Director of Finance)

Budgeted Expenditures	\$105,587,418
Year-to-Date Expenditures	\$80,000,728
Budgeted Revenues	\$105,587,418
Year-to-Date Revenues	\$74,450,118

NEW BUSINESS**1 Appoint Ray Schwill to the Beer Board. (David Parsons, Mayor)**

RESULT:	APPROVED [UNANIMOUS]
MOVER:	David Reaves, Alderman
SECONDER:	Jack Young, Vice Mayor
AYES:	Brad King, Robert Griffin, David Reaves, Monique L. Williams, Jack Young, Kevin Quinn

2 Appoint Sylvia Montague to Bartlett City Beautiful Commission. (David Parsons, Mayor)

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Robert Griffin, Alderman
SECONDER:	David Reaves, Alderman
AYES:	Brad King, Robert Griffin, David Reaves, Monique L. Williams, Jack Young, Kevin Quinn

OPEN DISCUSSION

Alderman Kevin Quinn reported that the Wolf River District, Boy Scouts of America, will be honoring former Alderman Emily Elliot as Bartlett's 2024 Good Scout of the Year. Mayor Parsons and the Board of Aldermen have all received invitations for the event on Thursday, April 4 at Bartlett United Methodist Church, 5676 Stage Road. The festivities begin at 6:00 p.m.

Mayor Parsons recognized Alderman Monique Williams' birthday by relaying greetings and leading the chamber in singing "Happy Birthday".

Director of Community Relations Debbie Gelineau gave a report on the upcoming "Total Eclipse in the Park" on Monday, April 8. Information is available on the City's website as well all social media platforms.

ADJOURNMENT

Meeting adjourned at 6:17 PM

Harold Brad King, Register to the Board of
Mayor and Aldermen

David Parson, Mayor

Minutes Acceptance: Minutes of Mar 26, 2024 6:00 PM (MINUTES ACCEPTANCE)



Board of Mayor and Aldermen

6400 Stage Road
Bartlett, TN 38134

SCHEDULED

AGENDA ITEM

Meeting: 04/23/24 06:00 PM
Department: Finance
Category: Presentation
Prepared By: Penny Medlock
Department Head: Dick Phebus

Authorization to auction surplus property.

Department	Year	Make/Model	Color	Vehicle ID#
Parks	1999	Ford F550	White	IFDAF56F7XEB05672

Article V Section 4 of the Charter of the City of Bartlett designates the authority to the Mayor to sell surplus property with Board approval for items valued over \$500. The following item has been identified as surplus with a potential value of over \$500 and are eligible to be sold at public auction.

It is our recommendation that this item be approved to be sold at public auction. If approved, the City of Bartlett will advertise the items to be auctioned on the GovDeals website (www.govdeals.com).

Thank you for your consideration of the above item.

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Parks and Recreation

Category: Purchase

Prepared By: Debbie Christopher

Department Head: Paul Wright

Purchase a 2024 F-350 4x4 SD Crew Cab.

Funds are available in Account 311.48311.785.50724.

Thank you for your consideration.

SWC 209
Lonnie Cobb Ford Contract # 80355

2024 F-350 4x4 SD Crew Cab 8' box 176" WB SRW XL (W3B)

Price Level: 420



Client Proposal

Prepared by:
STEVEN BLACKSTOCK
Office: 731-989-2121
Date: 04/03/2024

Attachment: Lonnie Cobb Ford F-350 4.3.2024 (3526 : Vehicle Purchase 2024 F-350 4x4 SD Crew Cab)



Lonnie Cobb Ford | 1618 Highway 45 North, Henderson, Tennessee, 383404005
Office: 731-989-2121 | Fax: 731-989-3502



Prepared by: STEVEN BLACKSTOCK

04/03/2024

Lonnie Cobb Ford | 1618 Highway 45 North Henderson Tennessee | 383404005

2024 F-350 4x4 SD Crew Cab 8' box 176" WB SRW XL (W3B)

Price Level: 420

As Configured Vehicle

Code	Description	MSRP
W3B	Base Vehicle Price (W3B)	\$52,815.00
610A	Order Code 610A <i>Includes:</i> - Engine: 6.8L 2V DEVCT NA PFI V8 Gas Flex fuel. - Transmission: TorqShift-G 10-Speed Automatic Includes SelectShift and selectable drive modes: normal, eco, slippery roads, tow/haul and off-road. - GVWR: 10,900 lb Payload Package - Wheels: 17" Argent Painted Steel Includes painted hub covers/center ornaments. - HD Vinyl 40/20/40 Split Bench Seat Includes center armrest, cupholder, storage and driver's side manual lumbar. - Radio: AM/FM Stereo w/MP3 Player Includes 4 speakers. - SYNC 4 Includes 8" LCD capacitive touchscreen with swipe capability, wireless phone connection, cloud connected, AppLink with app catalog, 911 Assist, Apple CarPlay and Android Auto compatibility and digital owner's manual.	N/C
99A	Engine: 6.8L 2V DEVCT NA PFI V8 Gas <i>Flex fuel.</i>	Included
44F	Transmission: TorqShift-G 10-Speed Automatic <i>Includes SelectShift and selectable drive modes: normal, eco, slippery roads, tow/haul and off-road.</i>	Included
X3E	Electronic-Locking w/3.73 Axle Ratio	Included
STDGV	GVWR: 10,900 lb Payload Package	Included
TEX	Tires: LT285/70R17 A/T <i>Off-road. Spare may not be the same as road tire.</i>	Included
64A	Wheels: 17" Argent Painted Steel <i>Includes painted hub covers/center ornaments.</i>	Included
A	HD Vinyl 40/20/40 Split Bench Seat <i>Includes center armrest, cupholder, storage and driver's side manual lumbar.</i>	Included
176WB	176" Wheelbase	STD
PAINT	Monotone Paint Application	STD
STDRD	Radio: AM/FM Stereo w/MP3 Player <i>Includes 4 speakers.</i> <i>Includes:</i> - SYNC 4 Includes 8" LCD capacitive touchscreen with swipe capability, wireless phone connection, cloud connected, AppLink with app catalog, 911 Assist, Apple CarPlay and Android Auto compatibility and digital owner's manual.	Included

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.



Prepared by: STEVEN BLACKSTOCK
04/03/2024
Lonnie Cobb Ford | 1618 Highway 45 North Henderson Tennessee | 383404005
2024 F-350 4x4 SD Crew Cab 8' box 176" WB SRW XL (W3B)
Price Level: 420

Warranty

Standard Warranty

<i>Basic Warranty</i>	
Basic warranty	36 months/36,000 miles
<i>Powertrain Warranty</i>	
Powertrain warranty	60 months/60,000 miles
<i>Corrosion Perforation</i>	
Corrosion perforation warranty	60 months/unlimited
<i>Roadside Assistance Warranty</i>	
Roadside warranty	60 months/60,000 miles

Attachment: Lonnie Cobb Ford F-350 4.3.2024 (3526 : Vehicle Purchase 2024 F-350 4x4 SD Crew Cab)

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Prepared by: STEVEN BLACKSTOCK

04/03/2024

Lonnie Cobb Ford | 1618 Highway 45 North Henderson Tennessee | 383404005

2024 F-350 4x4 SD Crew Cab 8' box 176" WB SRW XL (W3B)

Price Level: 420

As Configured Vehicle (cont'd)

Code	Description	MSRP
17Z	XL Off-Road Package <i>Includes transfer case and axle water fording vent tubes and unique front air dams with approach angle improvement.</i> <i>Includes:</i> - Tires: LT285/70R17 A/T - Off-road. Spare may not be the same as road tire. - Electronic-Locking w/3.73 Axle Ratio - Transfer Case & Fuel Tank Skid Plates	\$995.00
471	Camper Package <i>Includes heavy service front springs (1 up upgrade above the spring computer selected as a consequence of options chosen. Not included if maximum springs have been computer selected as standard equipment) and slide-in camper certification. Note 1: Salesperson's source book or Ford RV trailer towing guide should be consulted for specific trailer towing or camper limits and corresponding required equipment, axle ratios and model availability. Note 2: May result in deterioration of ride quality when vehicle is not equipped with camper.</i> <i>Includes:</i> - Rear Stabilizer Bar & Auxiliary Springs	\$160.00
67D	190 Amp Alternator	Included
66S	Upfitter Switches (6) <i>Located in overhead console.</i> <i>Includes:</i> - 190 Amp Alternator	\$165.00
WARANT	Fleet Customer Powertrain Limited Warranty Requires valid FIN code. <i>Ford is increasing the 5-year 60,000-mile limited powertrain warranty to 5-years, 100,000 miles. Only Fleet purchasers with a valid Fleet Identification Number (FIN code) will receive the extended warranty. When the sale is entered into the sales reporting system with a sales type fleet along with a valid FIN code, the warranty extension will automatically be added to the vehicle. The extension will stay with the vehicle even if it is subsequently sold to a non-fleet customer before the expiration. This extension applies to both gas and diesel powertrains. Dealers can check for the warranty extension on eligible fleet vehicles in OASIS. Please refer to the Warranty and Policy Manual section 3.13.00 Gas Engine Commercial Warranty. This change will also be reflected in the printed Warranty Guided distributed with the purchase of every new vehicle.</i>	N/C
425	50-State Emissions System	STD
Z1_01	Oxford White	N/C
AS_03	Medium Dark Slate w/HD Vinyl 40/20/40 Split Bench Seat	N/C
4 leds	Front and rear LED's <i>(2) LED's mounted to front grill LED strip under tailgate</i>	\$825.00

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Prepared by: STEVEN BLACKSTOCK

04/03/2024

Lonnie Cobb Ford | 1618 Highway 45 North Henderson Tennessee | 383404005

2024 F-350 4x4 SD Crew Cab 8' box 176" WB SRW XL (W3B)

Price Level: 420

As Configured Vehicle (cont'd)

Code	Description	MSRP
cab steps 2	F250/f350/f450/f550 cab steps <i>black or chrome tube cab steps</i>	\$650.00
toolbox	toolbox <i>diamond plate cross box toolbox</i>	\$595.00
spray in bedlin	spray in bedliner	\$595.00
mlb	mini led lightbar <i>Mini LED Amber Lightbar</i>	\$895.00
SUBTOTAL		\$57,695.00
Destination Charge		\$1,995.00
TOTAL		\$59,690.00

Attachment: Lonnie Cobb Ford F-350 4.3.2024 (3526 : Vehicle Purchase 2024 F-350 4x4 SD Crew Cab)

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.



Prepared by: STEVEN BLACKSTOCK

04/03/2024

Lonnie Cobb Ford | 1618 Highway 45 North Henderson Tennessee | 383404005

2024 F-350 4x4 SD Crew Cab 8' box 176" WB SRW XL (W3B)

Price Level: 420

Pricing Summary - Single Vehicle

MSRP

Vehicle Pricing

Base Vehicle Price	\$52,815.00
Options	\$1,320.00
Colors	\$0.00
Upfitting	\$3,560.00
Fleet Discount	\$0.00
Fuel Charge	\$0.00
Destination Charge	\$1,995.00
Subtotal	\$59,690.00

Pre-Tax Adjustments

Code	Description	MSRP
fleet discount	fleet discount	-\$6,270.00
Total		\$53,420.00

Customer Signature

Acceptance Date

Prices and content availability as shown are subject to change and should be treated as estimates only. Actual base vehicle, package and option pricing may vary from this estimate because of special local pricing, availability or pricing adjustments not reflected in the dealer's computer system. See salesperson for the most current information.

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Information Technology

Category: Purchase

Prepared By: Kevin Franz

Department Head: Kevin Franz

Purchase Backup Solution for PD/GIS.

Backup solution using Unitrends software and hardware storage for local daily backup of PD files, GIS files and other local server components as needed. This solution will be another layer in our Cybersecurity initiative to secure our City's data.

We recommend accepting the quote from SHI. Pricing is acquired off the Omnia Purchasing contract for \$27,065.00 per year for a three year term with a \$1.00 buyout at the end of year three.

Funds are available in Account 123.48123.264.

Thank you for your consideration.



Pricing Proposal
 Quotation #: 24633514
 Created On: 3/19/2024
 Valid Until: 3/29/2024

TN-City of Bartlett

Kevin Franz

6400 Stage Road
 Bartlett, TN 38135
 United States
 Phone: (901) 385-6464
 Fax:
 Email: kfranz@cityofbartlett.org

Inside Account Executive

Mike Cimilluca

290 Davidson Ave
 Somerset NJ 08873
 Phone: 732-652-0262
 Fax:
 Email: mike_cimilluca@shi.com

All Prices are in US Dollar (USD)

	Product	Qty	Your Price	Total
1	Unitrends Unitrends Includes up to two (2) remotely delivered sessions of up to two (2) hours with a Services Consultant to cover UI walkthrough, reporting Unitrends Software - Part#: CNSUNISURECAREPRO Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02	1	\$1,283.16	\$1,283.16
2	Unitrends Includes Helix agent provisioning for automated backup remediation on up to one (1) appliance Unitrends Software - Part#: CNS-UNIHILIX Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02	1	\$218.98	\$218.98
3	Unitrends Description: Includes up to one (1) remotely delivered session of up thirty (30) min with a Services Consultant to configure UniView Backup Portal Unitrends Software - Part#: CNS-UNI-UBP Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02	1	\$0.00	\$0.00
4	Unitrends Backup Enterprise Plus Edition for VMware and Hyper-V (per socket license with support) - Upfront Subscription Unitrends Software - Part#: BU-ENPBPL-SKT-A Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 1	2	\$0.00	\$0.00
5	Unitrends-Recovery Series Appliance Model Subscription RS-10-80 with 80TB Usable Capacity and 55.6 TB Suggested Capacity. Includes Unitrends Enterprise Plus Unitrends Software - Part#: RS-10-80BPL Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 1	1	\$24,336.81	\$24,336.81
6	Unitrends Helix add-on resilience service for Recovery Series Appliances with 80 TB Useable Capacity - Annual Subscription Unitrends Software - Part#: RS-HELIX-80-UNT-A Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02	1	\$0.00	\$0.00

Attachment: SHI Quote-24633514 Unitrends Backup solution (3533 : Purchase Backup solution for PD/GIS)

Note: Year 1

7	Unitrends UniView - Portal Integration Unitrends Software - Part#: S-CLD-K3-UBP Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 1	1	\$0.00	\$0.00
8	Unitrends Backup Enterprise Plus Edition for VMware and Hyper-V (per socket license with support) - Upfront Subscription Unitrends Software - Part#: BU-ENPBPL-SKT-A Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 2	2	\$0.00	\$0.00
9	Unitrends-Recovery Series Appliance Model Subscription RS-10-80 with 80TB Usable Capacity and 55.6 TB Suggested Capacity. Includes Unitrends Enterprise Plus Unitrends Software - Part#: RS-10-80BPL Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 2	1	\$24,336.81	\$24,336.81
10	Unitrends Helix add-on resilience service for Recovery Series Appliances with 80 TB Useable Capacity - Annual Subscription Unitrends Software - Part#: RS-HELIX-80-UNT-A Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 2	1	\$0.00	\$0.00
11	Unitrends UniView - Portal Integration Unitrends Software - Part#: S-CLD-K3-UBP Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 2	1	\$0.00	\$0.00
12	Unitrends Backup Enterprise Plus Edition for VMware and Hyper-V (per socket license with support) - Upfront Subscription Unitrends Software - Part#: BU-ENPBPL-SKT-A Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 3	2	\$0.00	\$0.00
13	Unitrends-Recovery Series Appliance Model Subscription RS-10-80 with 80TB Usable Capacity and 55.6 TB Suggested Capacity. Includes Unitrends Enterprise Plus Unitrends Software - Part#: RS-10-80BPL Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 3	1	\$24,336.81	\$24,336.81
14	Unitrends Helix add-on resilience service for Recovery Series Appliances with 80 TB Useable Capacity - Annual Subscription Unitrends Software - Part#: RS-HELIX-80-UNT-A Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 3	1	\$0.00	\$0.00
15	Unitrends UniView - Portal Integration Unitrends Software - Part#: S-CLD-K3-UBP Contract Name: Omnia Partners - IT Solutions Contract #: 2018011-02 Note: Year 3	1	\$0.00	\$0.00

Attachment: SHI Quote-24633514 Unitrends Backup solution (3533 : Purchase Backup solution for PD/GIS)

Total	\$74,512.57
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Additional Comments

Please note, if Emergency Connectivity Funds (ECF) will be used to pay for all or part of this quote, please let us know as we will need to ensure compliance with the funding program.

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.



Thank you for partnering with SHI to accomplish your financing needs.

Customer Name	TN-City of Bartlett
Date	April 11, 2024
SHI Quote Number	24633514
Amount Financed	\$74,512.57
Lease Term	3 Years
Purchase Option	\$1 Buyout
Annual Payment	\$27,065.00

- Subject to credit approval and equipment verification
- Proposal pricing subject to change without notice

Lease Purchase Option:

SHI can also help to customize a leasing structure to meet your specific needs.

\$1.00 Purchase Option

This is a capital lease option designed for equipment that you want to own at the end of the lease term.

Benefits of Leasing Technology Equipment:

Avoid Technological Obsolescence	Conserves Working Capital
May Provide Tax Benefits	Flexible End-Of-Lease Options
Fixed Monthly Payment	Pay For The Time In Use

At SHI, we're committed to providing organizations with the best support and IT solutions in the industry – on time and within budget. What's more, SHI's flexible financing options make acquiring the cutting-edge technology and services you need to advance your business easier than ever before.

Contact your SHI Account Executive for more information, or email SHI_Capital@SHI.com.

Financing is available through DLL Public Finance, LLC to qualified customers in the United States and is subject to credit approval, tax-exempt verification, and execution of DLL's documentation. Other charges including fees and shipping charges may apply. Not all customers may qualify for this offer. Other restrictions may apply.

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Fire

Category: Bid

Prepared By: Kristina Headley

Department Head: Tommy Gately

Purchase two battery powered hydraulic rescue tool sets.

On March 15, 2024 an ad was placed in *The Daily News*. On March 25, 2024 the City of Bartlett received one bid, which was opened at City Hall:

Mid-South Rescue for \$59,020.00

We recommend the bid be awarded to Mid-South Rescue for a total price of \$59,020.00.

Funds are available in Account 131.42200.969.02524 for \$40,000.00 and in Account 135.42200.935 for \$19,020.00.

Thank you for your consideration.

Rescue Equipment
 Bartlett Fire Department
 Sealed Bid: FY2024-03-015
 Due Date: April 1, 2024

ORIGINAL

NOTICE TO BIDDERS

Sealed Bids are to be received no later than **2:00 P.M. on Monday, April 1, 2024**. All bid packets, with an original, clearly identified, and two copies, must be labeled **"FY2024-03-015 "FIRST RESPONDERS RESCUE EQUIPMENT"** and addressed as follows:

**MAYOR DAVID PARSONS
 CITY OF BARTLETT
 6400 STAGE ROAD
 BARTLETT, TENNESSEE 38134**

The City reserves the right to reject any and all bids and to waive any informality in the bidding process. The City of Bartlett is an equal opportunity employer. If further information is desired, please contact Blake Boros, Training Chief, at 901-385-6414 or email bboros@cityofbartlett.org

Please quote prices on attached bid sheet.

We propose to furnish the item(s) listed on attached form(s) at prices quoted and guarantee safe delivery FOB Delivery as specified.

These prices are submitted with a declaration that no Bartlett Aldermen or Employee has a financial or beneficial interest in this transaction.

Mid-South Rescue
 NAME OF FIRM

4870 Raleigh Lagrange, Dr.
 Collierville Tn 38017
 ADDRESS


 SIGNATURE OF AUTHORIZED
 REPRESENTATIVE

Midsouthrescue@gmail.com
 EMAIL

901-336-7856
 PHONE

Glen Baurnfind
 PRINT NAME

03-25-2024
 DATE

Attachment: Battery Powered Rescue Tools- Specs 4-4-24 (3501 : Battery Powered Hydraulic Rescue Tools)

Rescue Equipment
 Bartlett Fire Department
 Sealed Bid: FY2024-03-015
 Due Date: April 1, 2024

BID PRICING SHEET

(One original, clearly marked, and two copies, must include the Public Acts 109 form)

Item No.	Product No.	Description Storm Surge or Equivalent	Unit	Qty.	Unit Price	Total Amount
1	ES-100-28	TNT Rescue Electric Storm Surge 28 Inch Spreader Battery Operated extrication tool with Milwaukee 18V 8AMP platform	Ea.	2	11457.00	22914.00
2	ESLC-29	TNT Rescue Storm Surge 7 3/8 Inch Cutter Battery Operated Rescue Tool With 3-Stage Pump and Milwaukee M18V 8AMP Platform	Ea.	2	10625.00	21250.00
3	ER-40	TNT Rescue Storm Surge Ram with Pushing and Pulling Capability and M18V 8AMP Platform	Ea.	2	7253.00	14506.00
4	M18V	Milwaukee M18V Battery – Two (2) for each item 1-3 above	Ea.	12	N/C	N/C
5	Charger	Dual Charger for each item 1-3 above	Ea.	6	N/C	N/C
Total Bid					Below	

Time required for delivery: 90 days

Total Bid in Words:

Shipping cost 350.00

Total 59,020.00

Fifty-Nine Thousand Twenty Dollars and no/100

Mid-South Rescue
 NAME OF FIRM

Midsouthrescue@gmail.com
 Email

Glen Baurndind
 Authorized Representative
 (Typed or Printed)

901-336-7856
 Telephone Number


 Authorized Representative Signature

03-25-2024
 Date

Attachment: Battery Powered Rescue Tools- Specs 4-4-24 (3501 : Battery Powered Hydraulic Rescue Tools)

Rescue Equipment
 Bartlett Fire Department
 Sealed Bid: FY2024-03-015
 Due Date: April 1, 2024

PUBLIC ACTS 109

“By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalties of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to § 12-12-106.”

Full text of Public Chapters can be found on the Tennessee Secretary of State's website: [http://tnsos.org/acts/ PublicActs.109.php](http://tnsos.org/acts/PublicActs.109.php).

Print Name Glen Baurnfind

Signed *Glen Z Baurnfind*

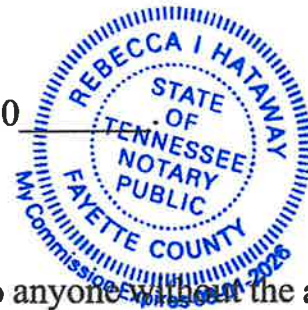
Title Owner - Mid-South Rescue

Subscribed and sworn before me this 25th day of March, 20 24.

Signed *Rebecca I Hataway* Print Name Rebecca I Hataway

Title Customer Service

My commission expires: 08-01-26, 20



NOTE: Bids cannot be considered nor awards made to anyone without the above required statement.

Attachment: Battery Powered Rescue Tools- Specs 4-4-24 (3501 : Battery Powered Hydraulic Rescue Tools)

MADE IN THE USA

RESCUE

USA



HYDRAULIC HOSED TOOLS

Should any TNT Rescue Systems, Inc. manufactured product purchased from TNT Rescue Systems, Inc. or an authorized representative of TNT Rescue Systems, Inc. fail to perform as originally intended due to wear or workmanship, return it to TNT Rescue Systems, Inc. with postage prepaid, and we will either replace or repair it, at our option, for as long as you own it - no if's, and's or but's. TNT Rescue Systems, Inc. recommends annual servicing of tools by a TNT Rescue Systems, Inc. authorized service technician.

This warranty does not apply to:

- 1) ABUSE.
- 2) ANY ALTERATIONS NOT COMPLIANT WITH TNT RESCUE SYSTEMS, INC. FACTORY SPECIFICATIONS AND SERVICE PROVIDED BY UNAUTHORIZED TECHNICIANS.
- 3) ANY COMPONENTS NOT MANUFACTURED BY TNT RESCUE.

This warranty is limited to the cost of repair or replacement at the option of TNT Rescue Systems, Inc. of any defective product and it shall in no event include incidental or consequential commercial damages of any kind.

This warranty is an exclusive warranty and TNT Rescue Systems, Inc. makes no other warranties of any kind or nature whatsoever, expressed, or implied, with respect to the products manufactured and/or sold by it. TNT Rescue Systems, Inc. specifically disclaims any warranties of fitness for a particular purpose or merchantability.

No distributor, agent, employee or representative of TNT Rescue Systems, Inc. may alter this warranty in any way.

TNT Rescue System, Inc.'s Forever Warranty also remains in effect when used with other manufactures equipment!

'Any product not manufactured by TNT Rescue Systems, Inc. carries a 3-year warranty.

TNT RESCUE SYSTEMS INC.
2490 west Oak Street
Ashippun, WI 53003
www.TNTRESCUE.com



STORM SERIES BATTERY TOOLS

Should any TNT Rescue Systems, Inc. manufactured product purchased from TNT Rescue Systems, Inc. or an authorized representative of TNT Rescue Systems, Inc. fail to perform as originally intended due to wear or workmanship, return it to TNT Rescue Systems, Inc. with postage prepaid, and we will either replace or repair it, at our option, for as long as you own it - no if's, and's or but's. The Storm series forever warranty also includes the Lexan body, electrical components, motor, gearbox and wiring harness. TNT Rescue Systems, Inc. recommends annual servicing of tools by a TNT Rescue Systems, Inc. authorized service technician.

This warranty does not apply to:

- 1) ABUSE.
- 2) ANY ALTERATIONS NOT COMPLIANT WITH TNT RESCUE SYSTEMS, INC. FACTORY SPECIFICATIONS AND SERVICE PROVIDED BY UNAUTHORIZED TECHNICIANS.
- 3) BATTERIES AND BATTERY CHARGERS.

This warranty is limited to the cost of repair or replacement at the option of TNT Rescue Systems, Inc. of any defective product and it shall in no event include incidental or consequential commercial damages of any kind.

This warranty is an exclusive warranty and TNT Rescue Systems, Inc. makes no other warranties of any kind or nature whatsoever, expressed, or implied, with respect to the products manufactured and/or sold by it. TNT Rescue Systems, Inc. specifically disclaims any warranties of fitness for a particular purpose or merchantability.

No distributor, agent, employee or representative of TNT Rescue Systems, Inc. may alter this warranty in any way.



ES100-28



STORM SURGE

TECHNICAL SPECS	STANDARD	METRIC
LENGTH	34.80 IN	883.99 MM
HEIGHT	11.15 IN	283.09 MM
WIDTH	13.58 IN	344.93 MM
MAX. SPREAD DISTANCE	28 IN	711.2 MM
MAX. PULL DISTANCE	24.26 IN	616.31 MM
POWER SOURCE	MILWAUKEE M18	
MFG. TO NFPA 1936-2020	YES	
MAX. SPREAD FORCE RANGE	56,128 - 228,126 LBS	249 - 1,014 KN
MAX. PULL FORCE	25,512 LBS	113 KN
IP RATING	54	

TNT RESCUE SYSTEMS INC.
2490 west Oak Street
Ashippun, WI 53003
www.TNTRESCUE.com





ESLC2



STORM SURGE

TECHNICAL SPECS	STANDARD	METRIC
LENGTH	32.99 IN	837.90 MM
HEIGHT	11.69 IN	296.83 MM
WIDTH	10.5 IN	266.7 MM
MAX. BLADE OPENING	8 IN	203 MM
MAX. CUT REACH	5.08 IN	129.15 MM
POWER SOURCE	MILWAUKEE M18	
MFG. TO NFPA 1936-2020	YES	
NFPA CUT TEST	A8, B9, C9, D9, E9, F4	
IP RATING	54	

TNT RESCUE SYSTEMS INC.
2490 west Oak Street
Ashippun, WI 53003
www.TNTRESCUE.com



ER40


**STORM
SURGE**

TECHNICAL SPECS	STANDARD	METRIC
EXTENDED LENGTH	41 IN	1041.4 MM
CLOSED LENGTH	25.50 IN	647.7 MM
HEIGHT	10.75 IN	273 MM
WIDTH	8.10 IN	205.7 MM
WEIGHT		
NO BATTERIES	40.6 LBS	18.4 KG
MAX. PUSH FORCE	32,980 LBS	145 KN
MAX. PULL FORCE	7,800 LBS	34.7 KN
POWER SOURCE	MILWAUKEE M18	
NFPA 1936-2020 ED CERTIFIED	YES	
STROKE	13.97 IN	355 MM
IP RATING	54	

TNT RESCUE SYSTEMS INC.
2490 west Oak Street
Ashippun, WI 53003
www.TNTRESCUE.com



Mid-South Rescue

Glen Baurnfind
4870 Raleigh Lagrange Dr.
Collierville, TN 38017
901-336-7856



Prepared for :

Bartlett Fire Department
2939 Altruria Road
Bartlett TN 38134

Quote No. 613

3/20/2024

Quote Good for 90 days

Description	Qty	Cost	Total
Storm Surge 28 Inch Spreader (ES-100-28) M18	2	11,457.00	22,914.00
Storm Surge 7 3/8 Inch Cutter (ESLC-29) M18	2	10,625.00	21,250.00
Storm Surge 40 Inch Ram (ER-40) M18	2	7,253.00	14,506.00
Shipping		350.00	350.00
All tools are covered by TNT Rescue's FOREVER WARRANTY			
Each tool includes two (2) Milwaukee 18V 8 AMP batteries and one (1) dual charger			
All pricing will be in place for 120 days			
Total			\$59,020.00

Signature :

Midsouthrescue@gmail.com

Attachment: Battery Powered Rescue Tools- Specs 4-4-24 (3501 : Battery Powered Hydraulic Rescue Tools)

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Engineering

Category: Contract

Prepared By: Max Gomez-Pedro

Department Head: John Horne

Site Plan Contract for Ladd's Annex LLC.

SITE PLAN CONTRACT

THIS AGREEMENT, made and executed this _____ day of _____, _____
between the CITY OF BARTLETT, SHELBY COUNTY , TENNESSEE, hereinafter referred to
as the CITY and LADD'S ANNEX LLC, hereinafter referred to as the DEVELOPER.

W I T N E S S E T H :

WHEREAS, the CITY PLANNING COMMISSION has by resolution of
SEPTEMBER 5, 2023, approved the Subdivision and Site Plans for LADD'S ANNEX LLC, and
established certain conditions for approval of this Site Plan Contract by the CITY BOARD OF
MAYOR AND ALDERMEN; and

WHEREAS, the CITY and the DEVELOPER by the terms of this contract desire to
specify those detailed costs, division of responsibilities and maintenance and other conditions in
addition to the Subdivision Regulations and the Site Plan, Grading, Sanitary Sewer and Erosion
Control Plans heretofore approved, according to Law by the CITY PLANNING COMMISSION,
said additional terms not to be considered as a variance from or modification to regulations, plans
or plat, as approved on the date of execution; and

WHEREAS, this Site Plan Contract is entered into by the CITY
at the insistence of the DEVELOPER upon the understanding that the DEVELOPER shall
remain fully responsible for specific compliance with the requirements of the Subdivision
Regulations, the Technical Specifications of the CITY, and the Site Plan, Grading, Sanitary Sewer
and Erosion Control Plan, duly approved by the CITY PLANNING COMMISSION subject to
review and recommendation of the CITY ENGINEER, and

NOW, THEREFORE, in consideration of the promises and mutual covenants of the
parties herein contained, and other considerations herein recited, it is agreed and understood as
follows:

I

GENERAL PROVISIONS

1. That the DEVELOPER shall at its expense provide all improvements and installations to be constructed as set forth herein and on the approved Site Plan, Grading, Sanitary Sewer and Erosion Control Plans, including construction of all off-site improvements and erosion control systems (pertaining to this development).
2. That the DEVELOPER shall pay the expenses of engineering inspection by the CITY ENGINEER, however, that the DEVELOPER shall remain fully responsible for construction to the approved design and quality control, and that the CITY ENGINEER is vested with the right of periodic inspections, final approval and stop work order as a measure of secondary or subsequent enforcement.
3. That the CITY in its proprietary function does not purport to specify the development layout nor the choice of available land uses; nor does the CITY PLANNER design, supervise, nor certify the adequacy, structural integrity, or capacity of improvements or installations within or without the limits of the development; neither is the CITY ENGINEER vested with any authority or responsibility for the design of any improvements or installations within or without the limits of the development; nor is the CITY ENGINEER required to determine the structural integrity, capacity, elevation, location, type or adequacy of any improvements or installations.
4. That in providing technical assistance, planning and review of the proposed grading and erosion control measures the CITY seeks to enforce its minimal governmental standards and does not relieve or accept any of the DEVELOPER'S liability and responsibility for proper design, construction and installation of improvements within or without the limits of the site plan.
5. That subject to the warranty provisions herein, after completion of the improvements, subject to final inspection and written approval of the CITY ENGINEER, the DEVELOPER does thereafter accept responsibility for all the maintenance of all improvements.
6. That the DEVELOPER shall haul all scrap building materials, debris, rubbish, and other

de-gradable materials to a permitted landfill, and not bury any such materials within the limits of said site plan (except if they are permitted to burn by Shelby County Health Department and the Bartlett Fire Department).

7. That if a bond has been executed to secure the value of the improvements to be constructed and installed under this contract and said bond, due to inflation and/or rising costs, is inadequate to secure the cost of said improvements when an extension of the contract period is sought, the DEVELOPER shall provide the additional security to bring the bond amount in line with current cost projections by the CITY ENGINEER and approved by the CITY BOARD OF MAYOR AND ALDERMEN.

8. That the CITY and any of its agencies will not unreasonably withhold approval of time extensions where the DEVELOPER has provided the required notice to the CITY ENGINEER and such additional security as may be deemed necessary.

9. That the DEVELOPER understands that failure to follow this time extension procedure constitutes a breach of contract and places the DEVELOPER in violation of the Subdivision Regulations and subject to a declaration of default.

10. That the DEVELOPER will not transfer the property on which this subdivision is to be located without first providing the CITY ENGINEER with prior notice of when and to whom transfer is to be made. If the transferee intends to develop this site plan in accordance with the approved

Master Plan, the DEVELOPER shall provide the CITY ENGINEER and the CITY ATTORNEY an Assumption Agreement by which the transferee agrees to perform and complete all the requirements of this contract and to provide the surety needed to secure such performance. Said agreement shall be subject to approval of the CITY BOARD OF MAYOR AND ALDERMEN.

11. That the DEVELOPER understands that transfer of said property without providing the notice of transfer and Assumption Agreement as required herein shall be a breach of contract and places the DEVELOPER in violation of the Subdivision Regulations and subject to a declaration of

default.

12. That the DEVELOPER shall comply with all applicable Federal, State, and local laws, and it shall be the DEVELOPER'S responsibility to furnish proof of said compliance upon demand.

13. That should the DEVELOPER default in any part of this contract and it becomes necessary to engage an attorney to file necessary legal action to enforce the provisions of this contract or sue for any sums of money due and owing or liability arising incident to this contract, the DEVELOPER shall pay to the CITY reasonable attorney's fees.

14. That the Developer shall furnish, on demand of the CITY ATTORNEY, satisfactory evidence that the DEVELOPER has the lawful right to enter into this contract for the purpose herein contained.

II

FIXED IMPROVEMENTS

1. The construction of all required improvements by the DEVELOPER including but not limited to the sediment ponds, silt fence, rip-rap check dams, erosion control blankets, storm drain systems, sidewalk, driveway apron, landscape screen, and other related items, shall be in accordance with the subdivision regulations and specifications of the CITY OF BARTLETT, which are incorporated by reference herein and said fixed improvements required approval and acceptance by the CITY OF BARTLETT. Said plans shall bear the signature of approval by the CITY ENGINEER before construction may commence. The DEVELOPER will pay the expenses of engineering inspection by the CITY ENGINEER, the DEVELOPER shall remain primarily responsible for construction to approve design and quality control and the CITY ENGINEER is vested with the right of periodic inspections, final approval and stop work order as a measure of secondary or subsequent enforcement.

III

SEDIMENT AND DEBRIS

1. The DEVELOPER will hold the CITY OF BARTLETT and the CITY ENGINEER harmless and defend all claims, judgments and demands of all persons for damage caused by the deposit of more sediment or debris from drainage flowing from said site plan. Further, the DEVELOPER shall bear the expense of erosion and sediment control and dust abatement before, during and after construction during the warranty period.
2. That the DEVELOPER shall provide necessary erosion control in accordance with the CITY Subdivision Regulations and Technical Specifications and TDEC approval. All freshly excavated and embankment areas, not covered with satisfactory vegetation, shall be fertilized, mulched and seeded and/or sprigged and/or sodded as required by the CITY ENGINEER to prevent erosion. In event it is determined by the CITY ENGINEER that the necessary erosion control is not being provided by the DEVELOPER, the CITY ENGINEER shall officially notify the DEVELOPER of the problem. If the DEVELOPER fails to provide satisfactory erosion control within fifteen (15) days after notice, then the CITY shall make all necessary improvements to eliminate the erosion problem, documenting all expenses incurred performing the work. Prior to releasing any bonds or other securities covering said subdivision, all expenses incurred by the CITY shall be paid in full by the DEVELOPER.
3. That the DEVELOPER shall maintain work sites within and without the subdivision in a manner which will prevent increased sedimentation, debris and pollution from drainage flowing from said site. In the event of a stop work order issued by the CITY ENGINEER, the DEVELOPER shall be permitted a reasonable time to continue work required to comply with this Section. Further, the DEVELOPER shall bear the expense of erosion, sediment, and insect vector control before, during and after construction, and until termination of the warranty period. It is noted that the warranty period shall run for an indefinite period until such time as the punch list is

complete, or warranty period ends; whichever is later.

IV

DRAINAGE DESIGN RESPONSIBILITIES

1. That the DEVELOPER shall construct and install all erosion control measures, including swales, ditches, sedimentation ponds and etc. Said erosion control measures system shall be designed such that the amount and rate of water from all sources leaving the subdivision after full building development shall not be significantly different after than before said development unless approved by the CITY ENGINEER upon certification of a Professional Engineer registered in the State of Tennessee that the Drainage system design and improvements are sufficient to accept surface and ground water reasonably expected to flow onto the subdivision and discharge all waters reasonably expected to flow from the property so as not to damage or flood properties nor to increase the established base flood elevation of the upstream or downstream portion of Flood Way within or without the site. Further, that the adequacy of the drainage shall in all cases be certified by the DEVELOPER'S engineer by his signature and seal affixed upon the Site Plan, Grading, and Erosion Control Plans of said property prior to the final approval by the CITY PLANNING COMMISSION.

2. That in any development which alters or revises the Flood Plain or Flood Way shown on the Flood Hazard Boundary Map issued by the Federal Emergency Management Region Office, the DEVELOPER shall provide to the CITY FLOOD ADMINISTRATOR a Development Permit issued by the Federal Insurance Administration Regional Office accepting said alteration or revision of the Flood Plain or Flood Way. Further, until said Development Permit is provided the DEVELOPER shall not proceed with any work affecting the Flood Plain or Flood Way.

3. It is understood and agreed that the CITY OF BARTLETT in its proprietary function does not purport to specify the development layout nor the choice of available land uses; nor does the CITY OF BARTLETT design, construct, supervise nor certify the adequacy of the drainage

improvements.

4. Neither is the CITY ENGINEER vested with any responsibility for the design of drainage improvements nor is he required to determine drainage capacities, survey elevation, cross check adequacy nor specify the type and locations of drainage improvements; and in providing technical assistance, planning and review the CITY OF BARTLETT does not commit itself to the construction, improvements or modification of the drainage system within or without the development.

5. Rather it is the responsibility of the DEVELOPER to properly anticipate, survey, design and construct all grading and erosion control improvements so that the development will not increase, alter or affect the flow of surface waters or channelized waters from or onto any property so as to damage or flood any property nor contribute to the same.

6. In providing technical assistance, planning and review the CITY OF BARTLETT seeks to enforce its minimal governmental standards and does not relieve or accept any of the Developers liability and responsibility to properly design and construct the site plan, grading, and erosion control measures.

7. The DEVELOPER further agrees to hold harmless the CITY OF BARTLETT and the CITY ENGINEER from any loss or damage from any claim, cause of action or liability resulting in whole or part from the design, construction and/or installation of the grading and erosion control measures including reasonable costs, litigation expenses and attorneys fees for defense of same.

8. As long as the City of Bartlett holds security, be it bond, letter of credit or otherwise, the City of Bartlett reserves the right to use said security for completion or repair of the erosion control measures during the warranty period of the development or for routine maintenance not performed by the DEVELOPER.

WARRANTY PROVISIONS

1. That neither the final certificate of payment nor any provision of this contract or its incorporated documents shall constitute an approval or acceptance of any work not performed in accordance with the contract and its incorporated documents, nor relieve the DEVELOPER of liability with respect to any express warranty or responsibility for faulty materials or workmanship.
2. That the DEVELOPER shall remedy any defects in work and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from the date of final written approval and acceptance. The CITY shall give notice of observed defects with reasonable promptness. Further, this Construction Warranty does not effect but is in addition to the rights and liabilities assessed herein unless a longer period is specified.
3. That throughout the warranty period beginning at final acceptance the DEVELOPER shall provide a bond or other surety securing such warranty for all improvements in a form, amount and with terms acceptable to the CITY BOARD OF MAYOR AND ALDERMEN. The warranty period is to extend to a minimum of one (1) year after the City's final acceptance.
4. That the DEVELOPER shall complete all improvements in this contract within 360 consecutive calendar days from the date hereof; however, if due to unforeseen circumstances, the DEVELOPER is unable to complete said work within the times specified, but desires to complete said contract to the satisfaction of the CITY, the DEVELOPER will submit a written request for extension of the contract period to the CITY ENGINEER at least sixty (60) days prior to the expiration date for such completion, but in no case shall such date exceed one (1) calendar year from the completion date specified in any Performance Bond, provided said bond can be extended

for the additional period.

VI

BONDING REQUIREMENTS

That prior to proceeding with any site preparation, construction or installation of improvements the DEVELOPER shall deposit with the CITY all required fees and assessments for said improvements in a form approved by the CITY BOARD OF MAYOR AND ALDERMEN.

Further, prior to proceeding as stated herein, the DEVELOPER shall deliver to the CITY a Certificate of Deposit, Letter of Credit, or cash bond in the amount identified on Page 12 of said contract and with terms stated in the CITY PLANNING COMMISSION RESOLUTION dated July 8, 1967 and amended to September 5, 1989. Further, prior to proceeding as stated herein, the DEVELOPER shall deliver to the City an approved N.O.I. (Notice of Intent), and SWPPP (Storm Water Pollution Prevention Plan) approved by TDEC (Tennessee Department of Environment and Conservation) as required by the Storm Water Phase 2 requirements.

VII

HOLD HARMLESS

That the DEVELOPER shall hold harmless the CITY and the CITY ENGINEER from any claim, cause of action or liability resulting in whole or in part from the design, construction or installation of the improvements within and without the limits of the subdivision, including reasonable costs, litigation expenses and attorney's fees for defense of same.

SPECIAL CONDITION

Attachment: Ladd's Contract 3-25-24 (3524 : Site Plan Contract for Ladd's Annex LLC)

SPECIAL CONDITIONS

1. This subdivision is located within the Fletcher Creek Sewer Basin serviced by the City of Memphis which at the time of this contract execution, has suspended new sewer connections to the system in order to curb capacity flows. However the City of Memphis has allowed connections to resume provided the permitted user provide off-line storage between the hours of 5 AM and 11 PM. The stored sewerage must then be pumped into the system between the hours of 11 PM and 5 AM. This storage must be approved by both the City of Bartlett and the City of Memphis prior to connection to the sewer system.

Attachment: Ladd's Contract 3-25-24 (3524 : Site Plan Contract for Ladd's Annex LLC)

VIII

PAYMENT AND SCHEDULE BARTLETT, TENNESSEE. THE DEVELOPER WILL
PAY TO THE CITY OF BARTLETT THE FOLLOWING AMOUNTS AS
HEREINBEFORE DETAILED FOR: LADD'S ANNEX LLC

I. Due at Execution of Subdivision and Site Plan Contract and before Construction Begins:

1.	Water Plant Expansion @ 15% of Water Main Cost (Water Main Cost = \$11,770.00)		<u>\$1,765.50</u>
2.	a. Water System Engineering and Subdivision Review @) 6% of Water Main Cost \$11,770.00		<u>\$706.20</u>
	b. Subdivision and Site Plan Review Fee @ \$175 per lot or 1.5% of Public Improvement Cost, whichever is greater \$175 x 1 = \$ 175.00 1.5% of \$121,073.00 \$1,816.10		<u>\$1,816.10</u>
3	Sewer Review Fee - \$10 per lot or \$25 per 250 feet of sewer line extension (whichever is greater) Minimum charge of \$25 per contract \$10.00 implies \$10.00 \$25.00 implies \$25.00		<u>\$25.00</u>
4	Water Connection Fee @ \$3,000.00 per service (1) Domestic, (1) Irrigation 2		<u>\$6,000.00</u>
5	City Site Plan Inspection @ A: 3% of Development Cost \$3,632.19 or B: \$300.00 per Lot, \$300.00 Whichever is greater Development Cost = \$121,073.00		<u>\$3,632.19</u>
6	Cost of Water and Sewer Mains to the Subdivision		
SEWER BASIN			
7	Sewer Connection Charge at Greater of either @ \$2333 per acre 4.6 Acres (Total Site) \$ 10,731.80 \$10,731.80 (or) \$33 per Front Foot x 200' \$6,600.00		<u>\$10,731.80</u>

Attachment: Ladd's Contract 3-25-24 (3524 : Site Plan Contract for Ladd's Annex LLC)

DRAINAGE BASIN

- 8 a. Drainage Control Fee for area
not served by a Detention Basin at \$500.00 per half acre or fraction thereof
(in multiples of \$500)

ac

N/A

- b. Drainage Control Fee for area
served by a Detention Basin at \$250 per half acre or fraction thereof
(in multiples of \$250)

.64 Acres Detained

\$500.00

- 9 City portion of Water Improvements

N/A

TOTAL DUE CITY**\$25,176.79**

**II. Due after date of Subdivision Contract and within 30 days
after written request from the City's Department of Public Works.**

1. Asphalt Paving Cost (Estimated
Construction Cost)

\$ -

2. Street Light (Estimated)

\$ -

TOTAL DUE II\$ -

**III. Upon Execution of Subdivision Contract and
Before Construction Begins 100% of Development
Cost (BOND)**

\$121,073.00

Attachment: Ladd's Contract 3-25-24 (3524 : Site Plan Contract for Ladd's Annex LLC)

IN WITNESS WHEREOF, the parties hereto have affixed their hands and seals at

Bartlett, Tennessee, this _____ day of _____, _____.

DAVID PARSONS
MAYOR, CITY OF BARTLETT

DEVELOPER:
LADD'S ANNEX LLC,

By:_____

Printed Name: _____

ATTEST:

CITY CLERK

BONDING COMPANY

LETTER OF CREDIT, APPROVED BY CITY ATTORNEY

BY:_____
CITY ENGINEER

DATE APPROVED BY BOARD OF MAYOR AND ALDERMEN_____

Attachment: Ladd's Contract 3-25-24 (3524 : Site Plan Contract for Ladd's Annex LLC)



**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Finance

Category: Report

Prepared By: Eric Phan

Department Head: Dick Phebus

Treasurer's Report for March 2024.



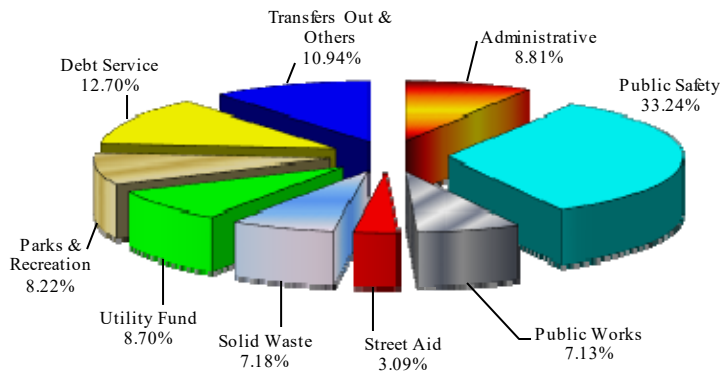
City of Bartlett

FINANCIAL REPORT

March 31, 2024

Total Expenditures, FY 2024 Budget: \$105,587,418

WHERE THE \$ GOES (Does not include School)

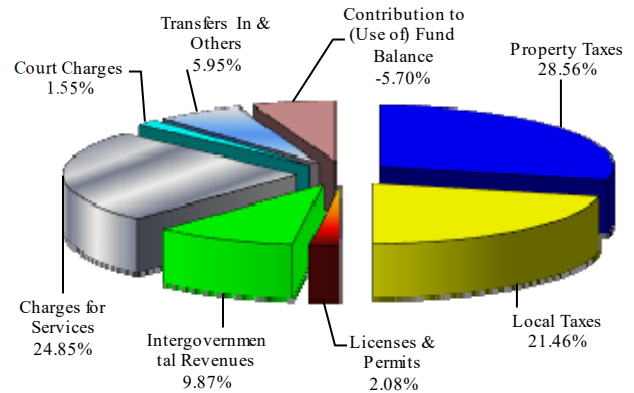


BUDGET HIGHLIGHTS

- Property taxes are below budgeted. Building & Development fees and interest are exceeding budget. Other revenues are within budget.
- Property taxes were due February 28 and delinquent March 1.
- Fiscal Year 2025 budgets are being reviewed by the Mayor and CAO.

Total Revenues, FY 2024 Budget: \$105,587,418

WHERE THE \$ COMES FROM (Does not include School)



FY 2024 YEAR-TO-DATE For The Period Ending March 31, 2024

	Adopted Budget	Year-to-Date Actual
General Fund Expenditures		
Administrative	\$ 8,316,654	\$ 5,458,804
Public Safety	34,679,607	25,969,893
Public Works	7,384,012	5,184,803
Parks and Recreation	7,818,801	5,660,420
Performing Arts	862,540	648,345
Transfers & Other Gen. Fund Items	6,389,019	6,728,665
Subtotal	\$ 65,450,633	\$ 49,650,930
General Fund Revenues		
Property Taxes	\$ 30,153,000	\$ 28,794,244
Local Taxes	17,881,181	10,883,999
Building and Development Fees	2,191,200	1,827,995
Intergovernmental	8,316,500	4,768,603
Charges for Services	4,507,715	3,413,446
Court Charges	1,337,000	1,039,009
Other Revenue	1,064,037	796,570
Subtotal	\$ 65,450,633	\$ 51,523,866
Special Rev. Funds - Expenditures	\$ 12,618,476	\$ 12,827,705
Special Rev. Funds - Revenues	\$ 12,618,476	\$ 11,747,244
Utility Expenses	\$ 15,386,187	\$ 12,485,845
Utility Revenues	\$ 15,386,187	\$ 9,469,346
Debt Service Expenditures	\$ 12,132,122	\$ 11,337,200
Debt Service Revenues	\$ 12,132,122	\$ 7,531,796
Total Expenditures	\$ 105,587,418	\$ 86,301,680
Total Revenues	\$ 105,587,418	\$ 80,272,252

Note: FY 2024 Adopted Budget includes use of fund balance in the General Fund, Special Revenue Funds, Utility Fund and the Debt Service Fund.

Attachment: Mar24FinRpt (3534 : Treasurer's Report for March 2024)



City of Bartlett -- Financial Summary

For The Period Ending For The Period Ending March 31, 2024



	FY 2023 Actual	FY 2024 Adopted Budget	Increase/ Decrease in \$	Year-to-Date Actual FY 2023	Year-to-Date Actual FY 2024	Increase/ Decrease in \$	Percent of FY 2023 Actual	Percent of FY 2024 Budget	Increase/ Decrease in %
General Fund Expenditures									
Administrative	\$ 7,401,480	\$ 8,316,654	\$ 915,174	\$ 5,276,263	\$ 5,458,804	\$ 182,541	71.29%	65.64%	-5.65%
Public Safety	31,909,622	34,679,607	2,769,985	24,566,062	25,969,893	1,403,831	76.99%	74.89%	-2.10%
Public Works	6,801,474	7,384,012	582,537	4,908,752	5,184,803	276,051	72.17%	70.22%	-1.96%
Parks and Recreation	7,075,135	7,818,801	743,666	5,342,996	5,660,420	317,424	75.52%	72.39%	-3.12%
Performing Arts	801,412	862,540	61,128	562,601	648,345	85,744	70.20%	75.17%	4.97%
Transfers & Other Gen. Fund Items	8,018,818	6,389,019	(1,629,799)	6,276,019	6,728,665	452,646	78.27%	105.32%	27.05%
Total General Fund Expenditures	\$ 62,007,941	\$ 65,450,633	\$ 3,442,691	\$ 46,932,694	\$ 49,650,930	\$ 2,718,236	75.69%	75.86%	0.17%
General Fund Revenues									
Property Taxes	\$ 29,768,045	\$ 30,153,000	\$ 384,955	\$ 29,229,763	\$ 28,794,244	\$ (435,519)	98.19%	95.49%	-2.70%
Local Taxes	16,976,562	17,881,181	904,619	10,449,059	10,883,999	434,940	61.55%	60.87%	-0.68%
Building and Development Fees	1,715,368	2,191,200	475,832	1,164,770	1,827,995	663,225	67.90%	83.42%	15.52%
Intergovernmental	8,043,637	8,316,500	272,863	4,615,980	4,768,603	152,623	57.39%	57.34%	-0.05%
Charges for Services	4,663,003	4,507,715	(155,288)	3,345,265	3,413,446	68,180	71.74%	75.72%	3.98%
Court Charges	1,331,287	1,337,000	5,713	997,369	1,039,009	41,640	74.92%	77.71%	2.79%
Other Revenue	1,296,382	1,064,037	(232,346)	508,712	796,570	287,858	39.24%	74.86%	35.62%
Total General Fund Revenues	\$ 63,794,284	\$ 65,450,633	\$ 1,656,349	\$ 50,310,919	\$ 51,523,866	\$ 1,212,947	78.86%	78.72%	-0.14%
Special Revenue Funds									
Street Aid Fund	\$ 1,851,698	\$ 3,260,000	\$ 1,408,302	\$ 967,013	\$ 1,225,641	\$ 258,628	52.22%	37.60%	-14.63%
Solid Waste Fund	6,917,292	7,642,070	724,778	4,704,940	5,636,391	931,452	68.02%	73.75%	5.74%
General Improvement Fund	1,045,060	1,154,800	109,740	519,893	649,205	129,311	49.75%	56.22%	6.47%
Drug Enforcement Fund	192,234	300,000	107,766	113,775	149,905	36,130	59.19%	49.97%	-9.22%
DEA Enforcement Fund	112,744	102,500	(10,244)	88,838	16,335	(72,502)	78.80%	15.94%	-62.86%
Drainage Control Fund	121,509	143,106	21,597	0	100,724	100,724	0.00%	70.38%	70.38%
Park Improvement Fund	135,000	0	(135,000)	667	0	(667)	0.00%	0.00%	0.00%
E-Citation Fund	667	16,000	15,333	3,441	3,099	(342)	0.00%	19.37%	19.37%
Grant Funds	7,533,785	0	(7,533,785)	2,872,529	5,046,405	2,173,876	38.13%	0.00%	-38.13%
Special Revenue Funds - Expenditures	\$ 17,909,991	\$ 12,618,476	\$ (5,291,515)	\$ 9,271,095	\$ 12,827,705	\$ 3,556,610	51.76%	101.66%	49.89%
Special Revenue Funds - Revenues	\$ 19,548,168	\$ 12,618,476	\$ (6,929,692)	\$ 10,877,096	\$ 11,747,244	\$ 870,148	55.64%	93.10%	37.45%
Utility Fund									
Total Utility Operations	\$ 7,904,678	\$ 14,113,841	\$ 6,209,163	\$ 5,410,594	\$ 11,338,917	\$ 5,928,323	68.45%	80.34%	11.89%
Total Utility Debt Expenses	909,365	1,272,346	362,981	866,848	1,146,928	280,080	95.32%	90.14%	-5.18%
Total Utility Expenses	\$ 8,814,043	\$ 15,386,187	\$ 6,572,144	\$ 6,277,441	\$ 12,485,845	\$ 6,208,403	71.22%	81.15%	9.93%
Total Utility Revenues	\$ 10,973,767	\$ 15,386,187	\$ 4,412,421	\$ 7,807,253	\$ 9,469,346	\$ 1,662,093	71.14%	61.54%	-9.60%
Debt Service Fund									
Total Debt Service Expenditures	\$ 9,089,523	\$ 12,132,122	\$ 3,042,599	\$ 8,518,795	\$ 11,337,200	\$ 2,818,405	93.72%	93.45%	-0.27%
Total Debt Service Revenues	\$ 9,315,315	\$ 12,132,122	\$ 2,816,807	\$ 7,399,995	\$ 7,531,796	\$ 131,801	79.44%	62.08%	-17.36%
Total Expenditures	\$ 97,821,498	\$ 105,587,418	\$ 7,765,919	\$ 71,000,025	\$ 86,301,680	\$ 15,301,654	72.58%	81.73%	9.15%
Total Revenues	\$ 103,631,534	\$ 105,587,418	\$ 1,955,884	\$ 76,395,263	\$ 80,272,252	\$ 3,876,989	73.72%	76.02%	2.31%

Attachment: Mar24FinRprt (3534 : Treasurer's Report for March 2024)



Board of Mayor and Aldermen

6400 Stage Road
Bartlett, TN 38134

SCHEDULED

AGENDA ITEM

Meeting: 04/23/24 06:00 PM

Department: Planning and Economic Development

Category: Report

Prepared By: Melissa Hale

Department Head: Kim Taylor

Planning Commission Report for April 2024.

Continued

Special Use Permit

I. Christian Life Tabernacle, School Use, 9375 Davies Plantation Road (Roy Lamica, EFI Global)

INTRODUCTION: Mr. Roy Lamica with EFI Global is requesting Planning Commission approval of a favorable recommendation for a Special Use Permit to allow a private school use with an existing church. The subject property is located at 9375 Davies Plantation Road within the "R-E" Residential Estate Zoning District.

BACKGROUND: On December 4, 2023 the Planning Commission continued the Special Use Permit application review until a traffic study could be obtained.

On August 6, 2012, the Planning Commission approved a Special Use permit to allow a new church at 9375 Davies Plantation. On November 2, 2015, the Planning Commission approved the Site Plan for Christian Life Church with an 18,600 square foot main building and a 1,200 square foot storage building. Surrounding uses include residential single-family homes, museum, and a church.

DISCUSSION: The specific request by the applicant is for Planning Commission's approval of a favorable recommendation to the Board of Mayor and Aldermen for a Special Use Permit (SUP) to allow the church to add a 17,428 square foot school with new playground to the church property. The school was not a part of the original SUP concept plan for Christian Life Church.

The school will start with Pre-K through Third Grade with additional grades to be added in the future. The school plans to open with approximately 30 students expanding as growth occurs. The Church estimates 150 students at its maximum with 20 % of the student body coming from outside Christian Life Church. However, according to the applicant a realistic number of students would be 50-60 students after several years of operation.

Recommendation: Approval with conditions.

Approved with conditions of staff and additional condition that the school has a maximum of 150 students.

NEW BUSINESS

Master Plan

2. Bah Legacy Square Subdivision, 5905 Stage Road (Dave Watkins, The Reaves

Firm, Inc.)

INTRODUCTION: Mr. Dave Watkins with The Reaves Firm is requesting Planning Commission approval of a Master Plan for the Bah Legacy Square Subdivision. The subject property is located at 5905 Stage Road, and it is within the “CG-MS” General Business with a Main Street Overlay Zoning District.

BACKGROUND: The subject property is the current location of the Bah Family Medicine building that was the former location of the Easy Way building. The subject property is not a legal lot of record (created after March 6, 1956) and is less than 4-acres (not exempt from subdivision regulations). In order to make the lot eligible for a building permit, it must be within a Planning Commission approved and legally recorded subdivision.

DISCUSSION: The specific request by the applicant is for the approval of the Master Plan for the Bah Legacy Square Subdivision. The applicant is proposing to subdivide the existing 2.246 acre subject property into two lots. Lot 1 is proposed to be 0.861 acres, and Lot 2 is proposed to be 1.385 acres. Lot 1 is proposed to be the future site of a coffee shop, and Lot 2 will remain as the Bah Family Medicine building. Access to the subdivision will be from existing curb cuts on Stage Road.

Recommendation: Approval with conditions.

Approved with conditions of staff.

Final Plan

3. Resubdivision of Lots 51 & 52 of Ellendale Highway Subdivision, 7205 & 7215 Andrews Road (David Bray, The Bray Firm)

INTRODUCTION: Mr. David Bray with The Bray Firm is requesting Planning Commission approval of a revised Final Plan for the Resubdivision of Lots 51 and 52 of the Ellendale Highway Subdivision. The subject property is located at 7205 and 7215 Andrews Road, and it is within the “RS-18” Single Family Residential Zoning District.

BACKGROUND: The Ellendale Highway Subdivision was recorded in Plat Book 9, Page 90 in April 1919. The subject property currently occupies the lots identified as Lots 51, 52, and 53 on Block A of the recorded plat. 7205 Andrews Road consists of Lot 51 and part of Lot 52, and 7215 Andrews Road consists of Lot 53 and part of Lot 52.

DISCUSSION: The specific request by the applicant is for the approval of the revised Final Plan for the Resubdivision of Lots 51 and 52 of the Ellendale Highway Subdivision. The applicant would like to reconfigure the lot lines of Lots 51, 52, and 53 to generate an additional lot. Lot 51 will be addressed as 7205 Andrews Road, and it is proposed to be 21,853 square feet. Lot 52 will need to obtain a new address, and it is proposed to be 63,221 square feet. Lot 53 will be addressed as 7215 Andrews Road, and it will be the lot size dimensions as

recorded for Lot 53 at 43,560 square feet. Access to the subdivision will be from driveway aprons on Andrews Road.

Recommendation: Approval with conditions.

Approved with conditions of staff and with engineering condition #19 amended to say, “The plat should reflect the stream buffer on Lot 2 with a width to be determined by the City Engineer. This existing building on Lot 2 is an existing non-conforming structure. If this building is torn down, it may not be built back within the stream buffer.”

Site Plan

4. Calhoun Memorial Temple, 8069 Thorne Road (Brenda Walls, M & B Enterprises)

INTRODUCTION: Ms. Brenda Walls with M&B Enterprise, on behalf of Calhoun Memorial Temple is requesting Planning Commission approval of a Site Plan for a new church annex building addition (church help center). The subject property is located at 8069 Thorne Road, and it is within the “RS-15” Single Family Residential Zoning District.

BACKGROUND: The subject property is located within the Dr. W. T. Hortons Subdivision, which was recorded in 1918 utilizing the subdivision rules of that era. Horton Subdivision was annexed by the City of Bartlett in 2004, and the preexisting subdivision lots do not conform to the Bartlett Zoning Ordinance creating the need for variances to remedy the pre-existing conditions of the subdivision. On May 19, 2005, the Board of Zoning Appeals approved 6 variances for Calhoun Memorial Temple main worship center located at 8053 Thorne Road, and the Site Plan was approved by the Planning Commission on September 6, 2005. On October 19, 2023, the Board of Zoning Appeals approved 7 variances for this newly proposed Site Plan. The approved variances included building setbacks, landscape/streetscape widths, and lot size requirements.

DISCUSSION: The specific request by the applicant is for Planning Commission approval of a Site Plan to construct a 3,771 square foot church annex building addition off their existing 728 square foot house that is currently being used as the church annex building (church help center). Currently, the church is utilizing 3 lots at the intersection of Thorne Road and Clarence Road. The lot at the southwest corner houses the sanctuary, the lot at the northwest corner houses the shared parking lot, and the southeast corner will house the proposed church annex building addition (church help center). Access to the site will be from Thorne Road. The site parking lot will have two van accessible handicap spaces. Additional parking can be utilized at the existing shared parking lot for the main worship center. Other features of the development include a streetscape buffer, a commercial/residential landscape buffer, and a stormwater detention basin. The specifics of the Site Plan are as follows:

Site Data

Site Area:	0.39 acres/16,988 square feet
Total Required Parking Spaces: (One space per 4 seats in worship center)	30
Total Proposed Parking Spaces:	30
Handicap Accessible:	2 van accessible
Regular:	28
Existing Building Area:	728 square feet
Proposed Building Area:	3,771 square feet
Total Building Area:	4,499 square feet
Greenspace/Open space:	68%
Building Height:	One story

Recommendation: Approval with conditions.

Approved with conditions of staff.

****Due to the Bartlett High School Graduation Ceremony being on May 6, 2024, the May Planning Commission meeting will take place on Monday, May 13, 2024.****

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Board of Mayor and Aldermen

Category: Appointment

Prepared By: Jeanie Underwood

Department Head: David Parsons

Appoint Greg Easton to Historic Preservation Commission.

Greg Easton will complete Mandy Young's term. His term will expire December 31, 2026.

HISTORIC PRESERVATION COMMISSION

NAME	TERM EXPIRES	NEW/ RE-APPOINT
Easton, Greg	12/31/2026	New Appointment (replacing Mandy Young)

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Board of Mayor and Aldermen

Category: Appointment

Prepared By: Jeanie Underwood

Department Head: David Parsons

Appoint Josh McNeil to the Planning Commission.

Josh McNeil will complete Mandy Young's term. His term will expire on December 31, 2024.

PLANNING COMMISSION

NAME	TERM EXPIRES	NEW/ RE-APPOINT
McNeil, Josh	12/31/2024	New Appointment (replacing Mandy Young)

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Parks and Recreation

Category: Proposal

Prepared By: Debbie Christopher

Department Head: Paul Wright

Approval of the YMCA Advisory Board By-Laws.

**[FINAL DRAFT] BYLAWS FOR BARTLETT YMCA ADVISORY BOARD
CITY OF BARTLETT, TENNESSEE**

April 8, 2024

Section 1. Purpose

The purpose of the Bartlett YMCA Advisory Board is to provide financial oversight and recommendations, advocacy, and conduct fundraising activities for the newly formed recreation center that coincides with the guidelines set by the City, YMCA, and the terms of the lease agreement between the City of Bartlett and the YMCA of Memphis and the Mid-South.

Section 2. Definitions

As used in these bylaws, these terms shall have the following meanings:

- A. "Board" means the Bartlett YMCA Advisory Board; and,
- B. "Bartlett YMCA" and the approximate 7.8 acres of land located at 7700 Flaherty Place, Bartlett, TN 38133 known as Parcel Number B0158XB00026 as shown on Tax Map number 96D in the Shelby County Tax Assessor's Office and being a parcel of land owned by the City of Bartlett by deed recorded in instrument 05029798, Plat Book 217, page 29 in the Shelby County Register of Deeds Office.

Section 3. Creation - Eligibility

- A. The City of Bartlett Mayor will nominate members of the advisory board, subject to the approval by the Board of Aldermen of the City of Bartlett. The City of Bartlett YMCA Advisory Board will consist of nine individuals comprised of the following: one (1) member will be the City of Bartlett YMCA Executive Director or his/her designee, one (1) member will be the CEO of the YMCA or his/her designee, one (1) member will be the City's Director of Parks and Recreation or his/her designee, the remaining six (6) members will be based on the recommendation and approval of the Board of Aldermen, with each City of Bartlett Alderman submitting the name of one (1) City resident, subject to approval of the majority of the members of the Board of Aldermen. Two (2) advisors will also be assigned to the board. One (1) will be the City Attorney or Assistant City Attorney, and one (1) will be the City's Chief Administrative Officer.
- B. No Board member shall receive any compensation for his/her services.

Section 4. Terms of Board Members

Board members shall be appointed to terms running concurrently with the appointing Alderman's term. Members will be eligible to be considered for reappointment to an additional term(s). Members of the Board serve at the will and pleasure of the Mayor and may be removed at any time with or without cause and with or without notice

Section 5. Officers - Meetings - Quorum

- A. Members of the Board shall meet and organize at the beginning of the new fiscal year by electing from the citizen members of the Board a Chair, Vice-Chair and Secretary and such other officers as may be necessary. The Chair and Vice-Chair shall be elected for a one-year term taking office at the July quarterly meeting. All Board members present are eligible to vote. In the event the Chair is unable to complete his/her term, the Vice-Chair will assume

the position of the Chair until the expiration of the one-year term, and a new Vice-Chair shall be elected.

- B. The Chair shall preside at all meetings of the Board and in his/her absence, the Vice-Chair shall preside.
- C. A majority (five) of the Board shall constitute a quorum, and five (5) affirmative votes shall be necessary to carry any proposition.
- D. A meeting of the Board shall be held at least once a quarter on the second Monday of the month, unless otherwise agreed upon by the Board. Special meetings may be called by the Chairman. The time and place shall be posted at City Hall.

Section 6. Powers and Duties

The Board shall:

- A. Develop Bylaws to govern the internal affairs of the Board. The City of Bartlett Board of Mayor and Aldermen must approve all Bylaws.
- B. Review financials and advise and make recommendations to the Board of Mayor and Aldermen regarding the fees and services of the Bartlett YMCA.
- C. Coordinate with the Bartlett YMCA Leadership Team, City of Bartlett Chief Administrative Officer, and Director of the Parks and Recreation Department to assure that the Board's recommendations are feasible and practical.
- D. Carry out other Bartlett YMCA related tasks assigned by the Board of Mayor and Aldermen or by ordinance.
- E. To volunteer and to recruit volunteers for Bartlett YMCA community affairs.

Section 7. City Staff Support

The Parks and Recreation Director or any other designee of the City Mayor shall provide administrative staff support. Said staff support shall be responsible for the agenda packets, written record of the proceedings of the Bartlett YMCA Advisory Board, and such other support as necessary to enable the board to conduct business and carry out its duties and responsibilities.

Section 8. Vacancies

The office of any member shall become vacant upon his/her resignation delivered to the Chair of the Board or the Mayor. Any member who misses two (2) regularly scheduled meetings in a calendar year will immediately and without notice be automatically removed from the Board. The Mayor shall then appoint and the Board of Mayor and Aldermen shall approve a new member to serve the remainder of the removed members term on the commission.

Section 9. Severability

Should any section, paragraph, sentence, clause or phrase of these Bylaws, or their application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of these Bylaws be pre-empted by state or federal law or regulation,

such decision or preemption shall not affect the validity of the remaining portions of these Bylaws or their application to other persons or circumstances.

Section 10. Effective Date

These bylaws shall take effect and be in full force on the date approved by the Board of Mayor and Aldermen.

APPROVED BY THE BOARD OF MAYOR AND ALDERMEN AT A REGULAR MEETING THEREOF ON
THE ____ DAY OF _____ 2024.

Attachment: Bartlett YMCA Advisory Board Bylaws_finaldraft (3535 : YMCA Advisory Board By-Laws)

**Board of Mayor and Aldermen**

6400 Stage Road
Bartlett, TN 38134

SCHEDULED**AGENDA ITEM**

Meeting: 04/23/24 06:00 PM

Department: Engineering

Category: Purchase

Prepared By: John Horne

Department Head: John Horne

Purchase Wastewater Treatment Plant Clarifier Drive Units.

1. Our Wastewater Treatment Plant (WWTP) #1 has two clarifiers on site. A site plan of our WWTP is attached.
2. Also, if you are interested in how these clarifiers work, here is a brief video.
<https://www.youtube.com/watch?v=s4rIT4z-cx8>
3. The drive mechanisms (picture attached) are over 26 years old and are in need of replacing for both clarifiers.
4. The drive units are *specialty products* and are only available by a sole source.
5. Approved sole source purchases do NOT require a bid. This has been confirmed by our Finance Department.
6. The cost for materials only for these two drive units total \$109,728.00. (see attached)
7. Funding is available in FY24 in Account 510.51400.945.
8. Later, we plan to bid the labor for the installation of these units out of the FY25 Budget after July 1, 2024.
9. Please authorize the purchase of these two drive units totaling \$109,728.00 from Account 510.51400.945.



Manufacture.Quality.Solutions.

Kusters Water Division

February 9, 2024

Bartlett WWTP
Bartlett, TN

Subject: Clarifiers Sole Source Letter

To whom it may concern,

This letter is to certify that Kusters Water is the sole authorized distributor for Sales and Service of (2) 65' diameter Pier Supported Spiral Scraper Clarifiers model: HBPS serial number(s): 970592-65A and 970592-65B provided in 1997 on original order 970592 for the Bartlett WWTP in Bartlett, TN.

All inquiries for equipment or replacement parts should be directed to the aftermarket sales department or Environmental Technical Sales Inc., the Kusters Water Representative for your area.

Should you have any questions, please feel free to contact us. Thank you for your business.

Best Regards,

Tonya Robinson
Aftermarket Sales Manager - Kusters Water
Kusters Water Division



Phone: 864-587-5713
Cell: 864-931-0031
Mail tonya.robinson@zimacorp.com

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Zima Corporation
physical address
101 Zima Park Drive
Spartanburg • SC 29301 • USA

mailing address
P.O. Box 6128
Spartanburg • SC 29304 • USA
+1 864 576-0660
www.zimacorp.com/water
www.kusterswater.com



Registered to
ISO 9001

dependable, cost-effective solutions for water and wastewater treatment

Headworks • Biological • Clarification • Thickening • Biosolids

Quotation: SP-09410-24REV1

Customer Number:

Page: 1 of 2

Customer:

WILLIAM KAIN
CITY OF BARTLETT
5258 SHELTER RUN LANE
BARTLETT, TN 38135

USA - UNITED STATES OF AMERICA

Phone: 901-385-6450
wkain@cityofbartlett.org

Fax:

Quotation

Date: 2/21/2024
Expiration: 3/21/2024
Terms: NET 30 DAYS FREIGHT PREPAID &
ADDED TO INVOICE
FOB: EXWORKS
Ship Via: MOTOR FREIGHT
Leadtime: 12 Weeks

Quote Specifications:

REF: HI-TECH SN# 970592
BARTLETT WWTP
BARTLETT, TN
65' DIA. CLARIFIER

Line No	Qty	Part ID# Description	Unit Price	Extended Price
1	1.00	30D-H CLARIFIER DRIVE UNIT CONTINUS RATED TORQUE:12,000 FT-LBS REPLACEMENT FOR EXISTING: DRIVE UNIT ON HI-TECH SN# 970592	53,614.00	\$53,614
2	1.00	30D-H CLARIFIER DRIVE UNIT CONTINUS RATED TORQUE:12,000 FT-LBS REPLACEMENT FOR EXISTING: DRIVE UNIT ON HI-TECH SN# 970592	53,614.00	\$53,614
3	1.00	ESTIMATED FREIGHT TO SITE	2,500.00	\$2,500
Quotation Total (US Dollars):				\$109,728

Attachment: SP-09410-24REV1 (3530 : Wastewater Treatment Plant Clarifier Drive Mechanism Replacements)

Quotation: SP-09410-24REV1

Customer Number:

Page: 2 of 2

Line No	Qty	Part ID# (Cust Part #) Description	Unit Price	Extended Price
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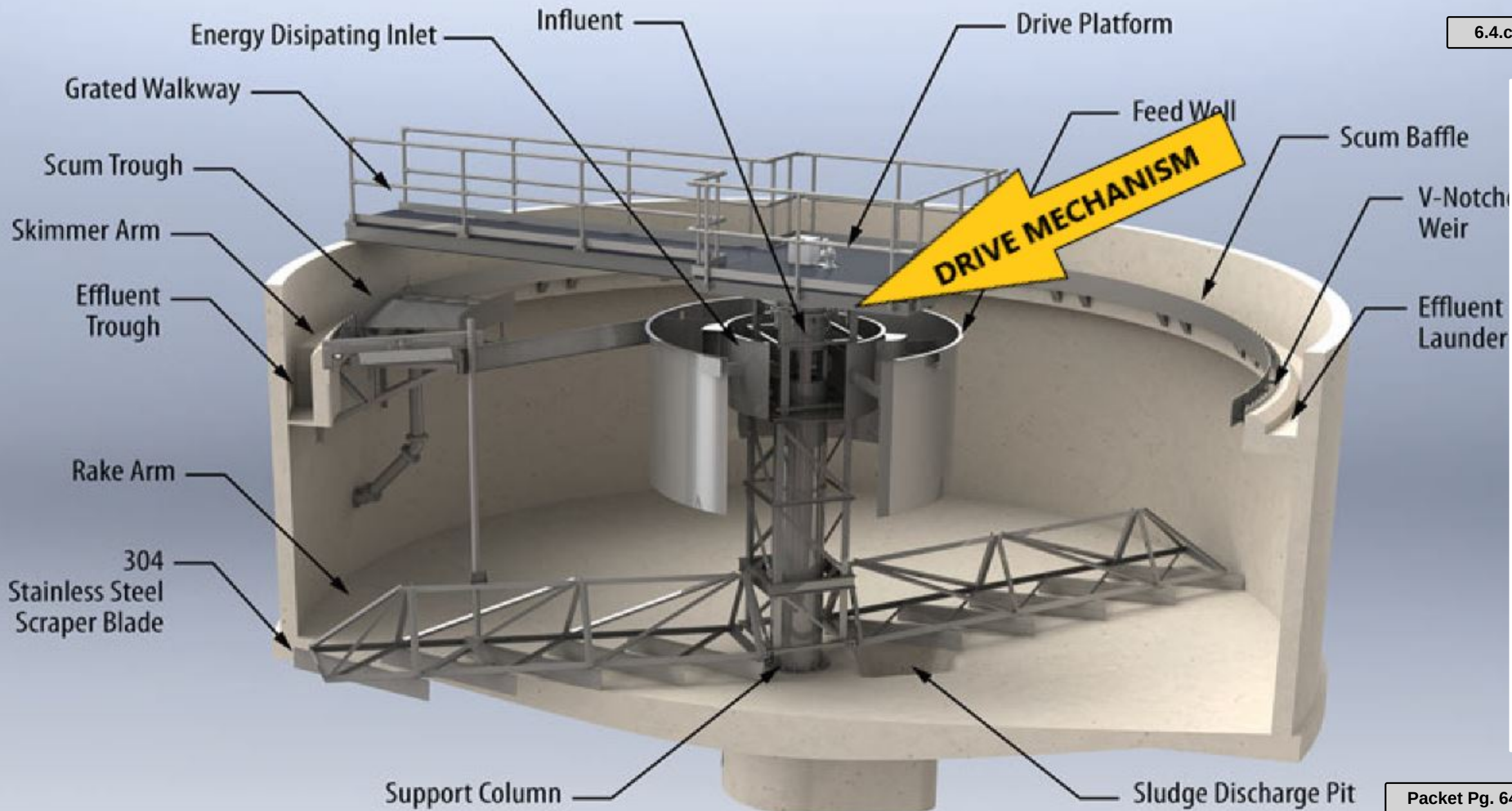
AUTHORIZED SIGNATURES

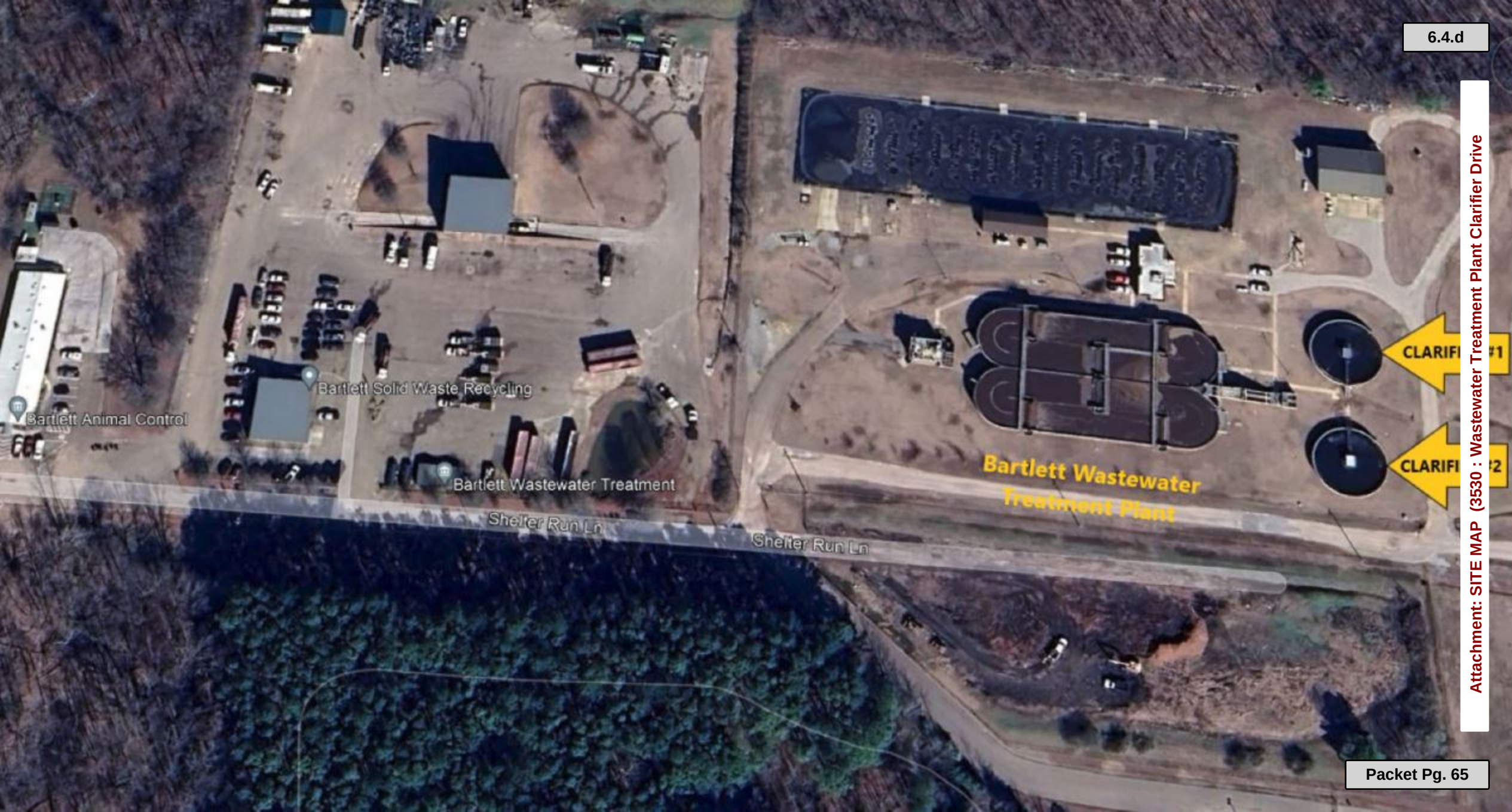
Customer Acceptance

TONYA ROBINSON

1. All prices are stated in US Dollars.
2. Minimum order of \$50 required.
3. Quote is valid for 30 days from the date of the quote.
4. Any applicable Banking fees, Sales, Use, Excise or other Taxes or Duties shall be paid by the buyer directly to the appropriate authority. If Tax Exempt, an Exempt Certificate must be sent with the Purchase Order.
5. A Purchase Order issued to Zima Corp., PO. Box 6128, Spartanburg, SC 29304, is required for Order Entry.
6. An estimated shipping date will be confirmed at the time of order placement based on the current manufacturing load at that time.

Attachment: SP-09410-24REV1 (3530 : Wastewater Treatment Plant Clarifier Drive Mechanism Replacements)





Attachment: SITE MAP (3530 : Wastewater Treatment Plant Clarifier Drive



Board of Mayor and Aldermen

6400 Stage Road
Bartlett, TN 38134

SCHEDULED

RESOLUTION (ID # 3528)

Meeting: 04/23/24 06:00 PM

Department: Planning and Economic Development

Category: Special use permit

Prepared By: Melissa Hale

Initiator: Kim Taylor

Sponsors:

DOC ID: 3528

Set a Public Hearing for May 28, 2024 for Resolution 12-24, a resolution to approve a Special Use Permit to allow a school to be located in Christian Life Tabernacle at 9375 Davies Plantation Road, within the “R-E” Residential Estate Zoning District.

WHEREAS, an application has been made for a Special Use Permit to amend an existing Special Use Permit to allow a School to be located in Christian Life Tabernacle at 9375 Davies Plantation Road within the “R-E” Residential Estate Zoning District.

WHEREAS, according to Article 5, Chart I of the Bartlett Zoning Ordinance, a Special Use Permit is required in the “R-E” Residential Estate zoning district to operate a church.

WHEREAS, the Planning Commission reviewed the proposed Special Use Permit to amend an existing special use permit to allow a school to be located in Christian Life Tabernacle at 9375 Davies Plantation Road on Monday, April 1, 2024, in accordance with their regulations and approved the favorable recommendation of approval of the Special Use Permit; and

WHEREAS, the Board of Mayor and Aldermen held a Public Hearing on the 28th day of May, 2024, and approved the Special Use Permit to allow a school to be located in Christian Life Tabernacle at 9375 Davies Plantation Road, subject to the following conditions:

Engineering Conditions:

General:

1. A Commercial Site Plan contract may be required and will be prepared by Engineering and submitted to the developer/engineer for review to cover the fees to be paid to the City of Bartlett.
2. Applicant/ Engineer shall provide a **digital set of drawing** files showing the sanitary sewer lines, drainage lines, lot lines and all improvements in AutoCAD format to dhubbard@cityofbartlett.org and ecampbell@cityofbartlett.org for use in the preparation of the Water Design Plan. This plan will be coordinated with the site design engineer to resolve any conflicts.
3. A SWPPP and a TDEC permit may be required and shall be submitted to TDEC and also to the City of Bartlett Engineering office.
4. All new utilities shall be underground.

Plans:

5. A fire suppression system will be required, and must get approved by the City of Bartlett fire Marshall.

6. Detention will require an updated analysis to insure detention is adequate for additional building.
7. All proposed drainage shall be noted as private.
8. Applicant's engineer shall submit the stamped and signed detention calculations for the proposed detention basin and show the 'pre' and the 'post' runoff for the 2, 5, 10, 25-year storms.
9. Plan and profile views will be required for Sewer.
10. No sewer connection shown on the plans for the new building.

The Following Comments are based on the traffic impact study prepared by Pickering firm in March 2024

11. A reasonable growth rate was determined using TDOT's nearest 3 count stations. It was used to estimate future volumes for years 2025-2030.
12. The study covers 3 intersections: Hillman/Davies Plantation, Davies Manor/Davies Plantation, E. Davies Plantation/Canada.
13. The two intersections in Bartlett are currently operating at Level-of-Service (LOS) A at all times of day.
14. The addition of 50 students in 2025 still resulted in LOS A at both intersections in Bartlett. The addition of 150 students (total) in 2030 does drop Davies Manor/Davies Plantation to LOS B in the PM peak. LOS B is acceptable.
15. Davies Plantation/Canada currently operates at LOS C for AM and PM peaks. The additional traffic generated by the school is expected to drop the LOS at this signalized intersection to unacceptable levels. It is recommended that Lakeland retimes the signal, and they may need additional capacity in the future.
16. Parents are expected to park and escort children into the school. They will not have a drop off and pick up line.
 - There should be no traffic backing into Davies Plantation
 - Available parking spaces are sufficient for 150 student parents to park at school bell times.
 - If the school ever changes to a drop off/pickup line, the school should be required to revise the traffic study and/or provide an acceptable circulation plan so that traffic does not ever back up onto Davies Plantation Road. The church appears to have sufficient space to have a long queue of vehicles on site, utilizing the existing cove on the west side of the school and parking lot for circulation. If traffic ever backs into Davies Plantation, the school should be required to increase capacity (add lanes) so traffic on Davies Plantation is not stopped by the school queue.
17. No other developments were considered for this traffic study, (beyond the average growth rate mentioned above used to estimate future volumes)
 - The purpose was to determine the impact to the surrounding transportation system, specifically caused by the addition of a school to the existing church property
 - The consultant requested traffic data from Lakeland regarding the development nearby in Lakeland on East Davies Plantation Road. They (Lakeland and that development's

engineer) did not believe the impacts to the Davies Manor/Davies Plantation intersection would be great enough to consider in their traffic study. They could not provide any expected turning movement data (at Davies Manor/Davies Plantation or any other intersection in Bartlett) for CL church's consultant to incorporate into the study.

- Rather than make up numbers for another development's traffic impacts, we asked CL church's engineer to base this study only on the impacts that CL church is creating.
- The development in Lakeland's design year is 2029, which is only one year prior to the full expected impact year (2030) of CL church's expansion, so it isn't known at this time if that development will be completed and if their traffic impacts will be known by the horizon year of this study.

Planning Comments:

- I. The Planning Department received a couple of letters from Davies Plantation residents who read the traffic study and are against the special use permit for a school use. Each stated that the amount of additional traffic a school use would add to the neighborhood would be detrimental to the community.

Planning Conditions:

- I. The applicant shall be present at the corresponding Board of Mayor and Aldermen meetings to make decisions relative to any changes that maybe suggested by the Board of Mayor and Aldermen.

Planning Commission Conditions:

- I. The school will have a maximum of 150 students, being the maximum allowed based on the building square footage.

WHEREAS, the Board of Mayor and Aldermen have determined that this Special Use Permit should be approved;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF BARTLETT, TENNESSEE, that the Special Use Permit to amend an existing Special Use Permit to allow a school to be located in Christian Life Tabernacle at 9375 Davies Plantation Road, incorporating the above listed conditions, is approved.

ADOPTED THIS 28th DAY OF MAY 2024.

Harold Brad King, Register to the
Board of Mayor and Aldermen

David Parsons, Mayor

Penny Medlock, City Clerk

**Bartlett Planning and
Economic Development Department**
6382 Stage Road, P.O. Box 341148
Bartlett, TN 38184-1148
901-385-6417 FAX 901-385-6419
www.cityofbartlett.org

Bartlett Planning Commission
Application for Special Use Permit Approval

Consultation with the staff is encouraged prior to the completion of this application form.

Requested Special Use Private School

Property Address 9375 Davies Plantation Road

Present Zoning R-E

Owner/Developer Contact Pastor Caleb Adams Phone 901-606-3000

Company Name Christian Life Tabernacle Inc. Fax _____

Address 9375 Davies Plantation Road

Email Address pastor@cltmemphis.org

Architect Contact _____ Phone _____

Company Name _____ Fax _____

Address _____

Email Address _____

Engineer Contact Roy Lamica, P.E. Phone 901-355-1347

Company Name EFI Global Fax _____

Address 7975 Stage Hills Blvd, Suite 1

Email Address roy.lamica@efiglobal.com

Submitted by Roy Lamica, P.E. Roy D. Lamica 10/20/23

(printed name) (signature) (date)
Email Address roy.lamica@efiglobal.com Phone 901-355-1347 Fax _____

- RL Acknowledge (by initials in the blank to the left) that the “**Application Instructions: Planning Commission**” were obtained and read prior to submitting this application.
- RL Attach a checked-off “**Special Use Permit Checklist**” and all items required therein.
- RL Provide 18-folded (± 10”x13”) sets of plans with a copy of the signed application attached to each set.
- RL Provide an electronic PDF file of the plans. Note that an updated electronic file is required when plans are revised. The electronic file shall be labeled with the project name and accurately dated.
- RL Include a fee with this application (check payable to the City of Bartlett) of \$500 for five (5) acres or less, plus \$50 per acre (after the first five) to a maximum of \$3,000. **The fee is not refundable.**

I, the property owner(s) hereby authorize the filing of this application.

(print name) (signature) (date)

**Bartlett Planning and
Economic Development Department**
6382 Stage Road, P.O. Box 341148
Bartlett, TN 38184-1148
901-385-6417 FAX 901-385-6419
www.cityofbartlett.org

Special Use Permit Checklist

Plot Plan and Legal Description (each parcel, if more than one)

- X Plot plan, drawn to scale, showing the following information for each parcel (several parcels may be included on one sheet):
- X Adjoining public street rights-of-way
 - X Area (acres)
 - X Present zoning
 - X Requested special use, including purpose (attach statement, one page maximum)
 - X Area in which buildings are proposed to be located, showing setback dimensions from line.
 - X Drainage
 - X Driveways
 - X Parking area
 - X Buffer planting areas
 - X Type and location of any easements
 - N/A If Site Plan application and approval are necessary, conformance to Tree Ordinance is required.

X Other pertinent information as required through staff consultation.

X Legal description (may be attached to plot plan).

X One (1) PDF file of the plot plan, for display at the Planning Commission meeting.

Vicinity Map

X Vicinity map, drawn to a convenient scale, showing the subject property and all parcels within a 1,000-foot radius. Every parcel shall indicate owner's name and the streets, roads or alleys that each parcel fronts upon.

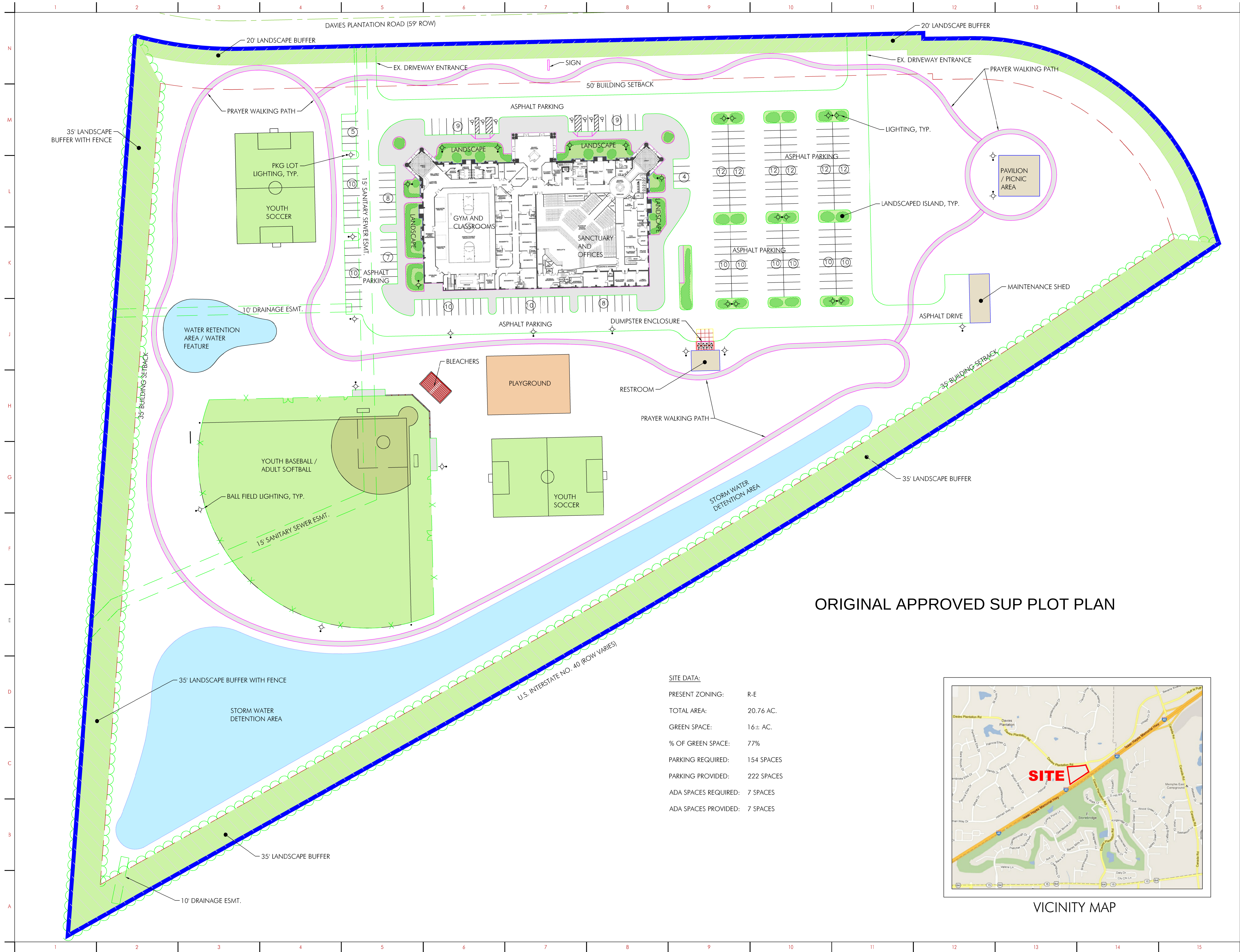
X One (1) PDF file of the vicinity map, for display at the Planning Commission meeting.

Property Owners

X List of all property owners within 1,000 feet or a minimum of fifty (50) property owners, whichever results in the greater number of owners. A xerographic copy of the mailing labels may serve as the list.

X Self-adhesive mailing labels for the list of property owners (two sets).

INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED

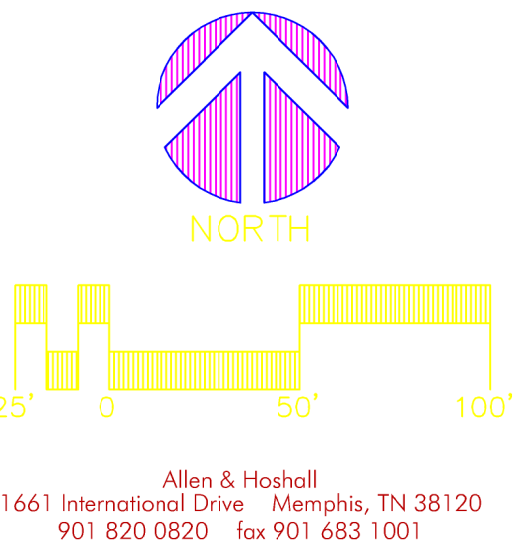


ORIGINAL APPROVED SUP PLOT PLAN

SITE DATA:	
PRESENT ZONING:	R-E
TOTAL AREA:	20.76 AC.
GREEN SPACE:	16± AC.
% OF GREEN SPACE:	77%
PARKING REQUIRED:	154 SPACES
PARKING PROVIDED:	222 SPACES
ADA SPACES REQUIRED:	7 SPACES
ADA SPACES PROVIDED:	7 SPACES



VICINITY MAP



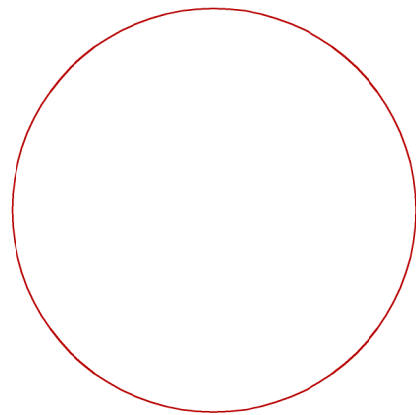
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CHRISTIAN LIFE TABERNACLE

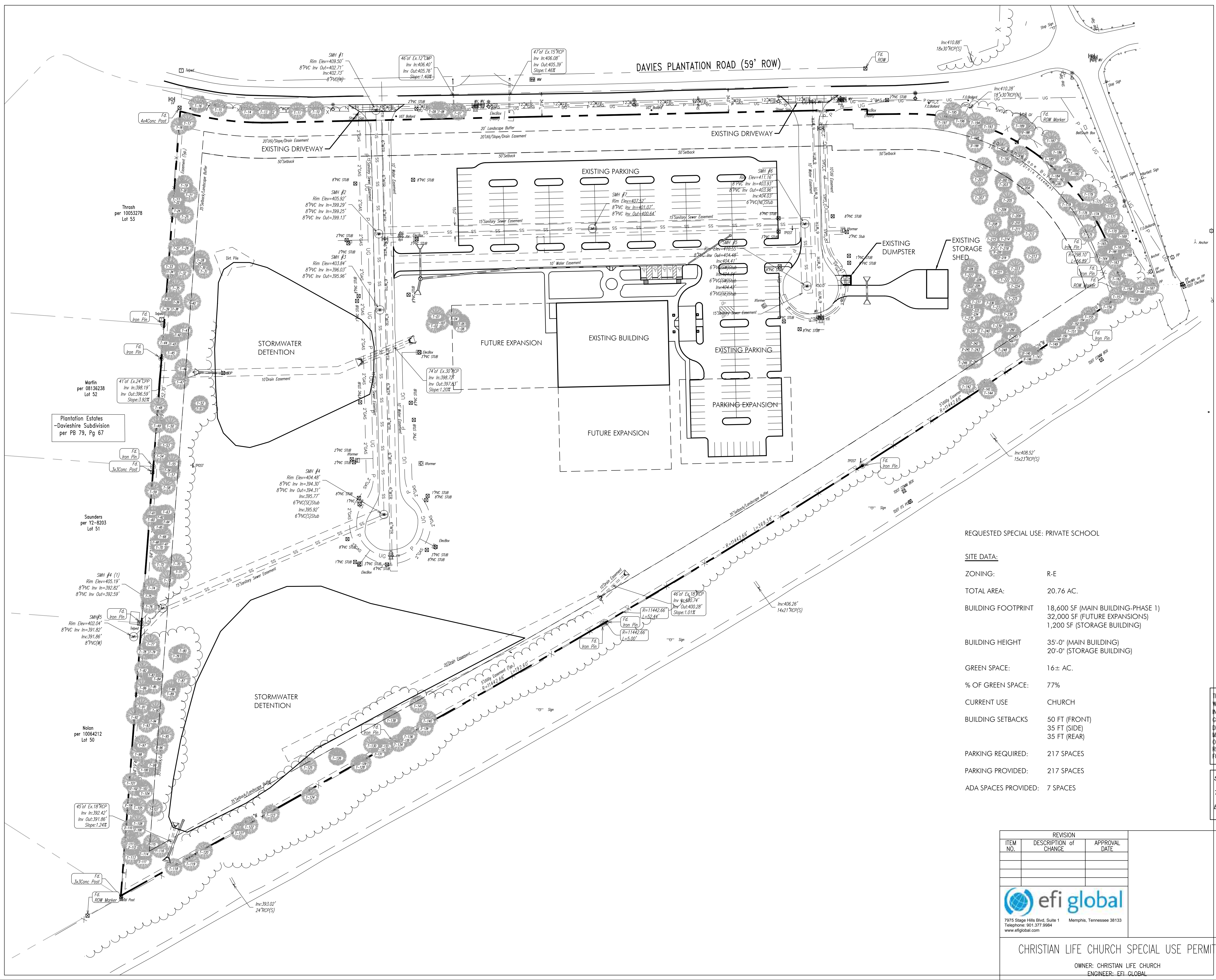
BARTLETT, TN

SPECIAL USE PERMIT
PLOT PLAN

JOB NO:
DATE: 06.22.12
DRAWN:
CHECKED:
CAD FILE:



SUP-1



VICINITY MAP
(N.T.S.)

REQUESTED SPECIAL USE: PRIVATE SCHOOL

SITE DATA:

ZONING:	R-E
TOTAL AREA:	20.76 AC.
BUILDING FOOTPRINT	18,600 SF (MAIN BUILDING-PHASE 1) 32,000 SF (FUTURE EXPANSIONS) 1,200 SF (STORAGE BUILDING)
BUILDING HEIGHT	35'-0" (MAIN BUILDING) 20'-0" (STORAGE BUILDING)
GREEN SPACE:	16± AC.
% OF GREEN SPACE:	77%
CURRENT USE	CHURCH
BUILDING SETBACKS	50 FT (FRONT) 35 FT (SIDE) 35 FT (REAR)
PARKING REQUIRED:	217 SPACES
PARKING PROVIDED:	217 SPACES
ADA SPACES PROVIDED:	7 SPACES



THIS IS TO CERTIFY THAT THIS PROPERTY (THE SUBJECT PROPERTY SURVEYED) IS NOT WITHIN THE LIMITS OF A DESIGNATED "SPECIAL FLOOD HAZARD AREAS SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD". THE SUBJECT PROPERTY, BY GRAPHICAL REPRESENTATION ONLY, LIES WITHIN ZONE X DEFINED AS BEING, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" PER FEMA FIRM MAP NUMBER 47157C0310G & 47157C0330G DATED FEBRUARY 6, 2013 BASED UPON OUR INTERPRETATION OF THE LOCATION OF THE FLOOD HAZARD BOUNDARY LIMITS IN RELATION TO THE PROPERTY LINES. NO SURVEYING OR ENGINEERING WAS PERFORMED FOR THIS SURVEY TO DETERMINE FEMA FLOOD LIMITS.

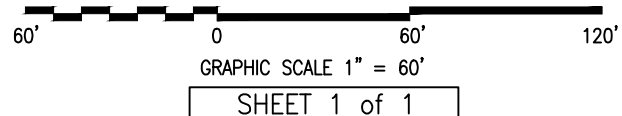
SITE BENCH MARK
TOP OF UPPER MOST NE FLANGE BOLT ON HYDRANT
ELEVATION = 409.16'

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



CHRISTIAN LIFE CHURCH SPECIAL USE PERMIT

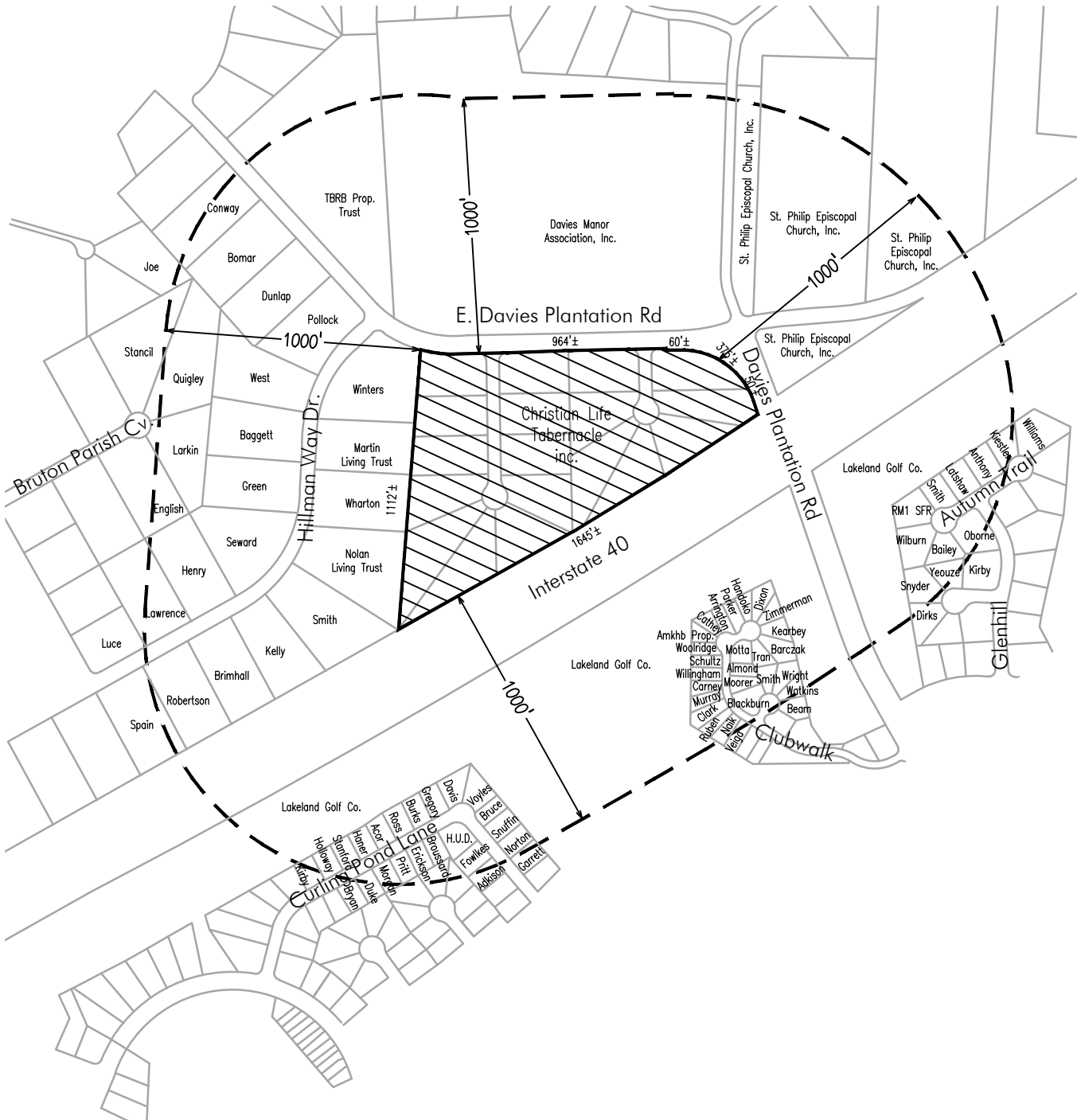
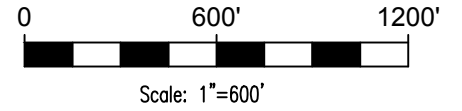
OWNER: CHRISTIAN LIFE CHURCH
ENGINEER: EFL GLOBAL



CITY OF BARTLETT DIVISION OF ENGINEERING
SITE PLAN
LOCATION: 9375 DAVIES PLANTATION ROAD
BARTLETT, TENNESSEE

SURVEY	ALLEN & HOSHAL	DATE	10.27.23	BOOK	AS NOTED
DESIGN BY:	EFL GLOBAL	DATE	10.27.23	SCALE	AS NOTED
REVIEWED					
DEPUTY CITY ENGINEER	DATE	CITY ENGINEER	DATE		

Vicinity Map



Vicinity Map prepared by:



7975 Stage Hills Blvd, Suite 1
Telephone: 901.377.9984
www.efiglobal.com
Memphis, Tennessee 38133

Attachment: SUP Private School 9375 Davies Plantation Rd (3528 : Set a Public Hearing for Res. 12-24,

LEGAL DESCRIPTION

Being all of Lots 1 through 18, inclusive, Davies Cove (closed) and Old Manor Cove (closed) of the Davies Manor Subdivision as shown on Plat of record in Plat Book 222, Page 27 in the Shelby County Register's Office, City of Memphis, Shelby County, State of Tennessee.

BEGINNING at the intersection of the southeast corner of Lot 50 of the Plantation Estates – Davieshire subdivision as recorded in Plat Book 79, Page 67 at the Shelby County Register's office, City of Memphis, Shelby County, State of Tennessee with the northwest right of way line of U.S. Interstate 40, said intersection being the southwest corner of the property herein describe and the TRUE POINT OF BEGINNING; thence with the east line of said Lot 50, Lots 51, 52 and 53, North $04^{\circ}19'46''$ East a distance of 1104.18' to the intersection with the south right of way line of Davies Plantation Road (34' from centerline); thence with said south right of way line in a southeasterly direction along the arc of a non-tangent curve to the left having a radius of 444.00' (Long Chord = $S82^{\circ}56'22''E$, 128.72') an arc length of 129.18' to a point of tangency; thence North $88^{\circ}43'33''$ East a distance of 836.38' to a point; thence South $00^{\circ}44'06''$ East a distance of 7.00' to a point; thence North $89^{\circ}21'54''$ East a distance of 59.60' to a point of curvature; thence in a southeasterly direction along the arc of a curve to the right having a radius of 298.10' (Long Chord = $S54^{\circ}33'27''E$, 350.18') an arc length of 375.06' to a point of tangency; thence South $18^{\circ}30'49''$ East a distance of 50.49' to the intersection with said north right of way line of U.S. Interstate 40; thence with said north right of way line, South $56^{\circ}16'26''$ West a distance of 187.86' to a point of curvature in said line; thence continuing with said north right of way line in a southwesterly direction along the arc of a curve to the right having a radius of 11442.66' (Long Chord = $S58^{\circ}27'25''W$, 871.76') an arc length of 871.97' to a point of tangency; thence continuing with said north right of way line, South $60^{\circ}42'51''$ West a distance of 584.27' to said TRUE POINT OF BEGINNING.

Said described property containing 903,117 square feet or 20.73 acres, more or less.

REDD KEVIN C & JENNIFER L
9531 AUTUMN TRAIL CV #
LAKELAND TN 38002

YEOUZE DAVID A & KRISTINA A
9512 GLENHILL CV #
LAKELAND TN 38002

SMITH WILLIAM & MARIAN
3247 CLUB GROVE CV #
LAKELAND TN 38002

KIESTLER JONATHAN
9530 AUTUMN TRAIL CV #
LAKELAND TN 38002

SNYDER CHARLES & KERI
9508 GLENHALL CV #
LAKELAND TN 38002

BLACKBURN KENNETH E & RUTH
9420 CLUB WALK CT #
LAKELAND TN 38002

ANTHONY CHRISTOPHER & COURTNEY BRICKER-
9524 AUTUMN TRAIL CV #
LAKELAND TN 38002

DIRKS TRENTON C
9509 GLENHILL CV #
LAKELAND TN 38002

MOORER ROBIN T & JEFFREY A
9404 CLUB WALK CT #
LAKELAND TN 38002

LATSHAW SARA G & JASON M
9516 AUTUMN TRAIL CV #
ARLINGTON TN 38002

CHRISTIAN LIFE TABERNACLE INC
9375 DAVIES PLANTATION RD #
BARTLETT TN 38133

ALMOND RICHARD & BARBARA
9392 CLUB WALK CT #
ARLINGTON TN 38002

SMITH KIMBERLY & JAMES S
9508 AUTUMN TRAIL CV #
LAKELAND TN 38002

JOE BEVERLY W
9170 GUNTHER CV #
BARTLETT TN 38133

MOTTA JESSICA
9376 CLUB WALK CT #
LAKELAND TN 38002

RM1 SFR PROPCO B L P
1850 PARKWAY PL #
MARIETTA GA 30067

LAKELAND GOLF CO
6345 TORRINGTON RD #
NASHVILLE TN 37202

NGUYEN TRAN FAMILY REVOCABLE LIVI
10278 SILVER HERON LN #
LAKELAND TN 38002

WILBURN PHILLIP C & MARTHA D
9503 AUTUMN TRAIL CV #
LAKELAND TN 38002

LAKELAND GOLF CO
6345 TORRINGTON RD #
NASHVILLE TN 37202

BARCZAK DAVID & ALISON
9346 CLUB WALK CT #
LAKELAND TN 38002

BAILEY CHAD M
9509 AUTUMN TRAIL CV #
ARLINGTON TN 38002

BEAM JOHN E & BRINDA L
3246 CLUB GROVE CV #
LAKELAND TN 38002

KEARBAY LARRY E
9340 CLUB WALK CT #
LAKELAND TN 38002

OBORNE JOHN L & NANCY K
9515 AUTUMN TRAIL CV #
LAKELAND TN 38002

WATKINS MYRA
3252 CLUB GROVE CV #
LAKELAND TN 38002

ZIMMERMAN PARKER A & ALLYSON
9339 CLUB WALK CT #
LAKELAND TN 38002

KIRBY JERRY D & SANDRA J
9524 GLENHILL CV #
ARLINGTON TN 38002

WRIGHT BELINDA B
3253 CLUB GROVE CV #
LAKELAND TN 38002

DIXON KENNETH A & GRETA G
9345 CLUB WALK CT #
LAKELAND TN 38002

HANDOKO LIEDY
9351 CLUB WALK CT #
ARLINGTON TN 38002

CLARK LAURIE H
9411 CLUB WALK CT #
LAKELAND TN 38002

CONWAY PAUL J III & DONNA
9233 DAVIES PLANTATION RD #
MEMPHIS TN 38133

PARKER RONALD R & SANDRA
9357 CLUB WALK CT #
LAKELAND TN 38002

RUBEN CLEOTRIES SR
9417 CLUB WALK CT #
LAKELAND TN 38002

BOMAR CHARLES K & SHERYL L
9241 DAVIES PLANTATION RD #
MEMPHIS TN 38133

ARRINGTON CHELSEY B
12066 CRANSTON DR #
LAKELAND TN 38002

NAIK DHARMESH & NUTAN
9423 CLUB WALK CT #
ARLINGTON TN 38002

POLLOCK GREGORY D & ASHLEY
9269 DAVIES PLANTATION RD #
BARTLETT TN 38133

CATHEY WALTER E
9369 CLUB WALK CT #
LAKELAND TN 38002

VEIGA JUSSARA B
1118 FRAGILE SAIL CT #
KATY TX 77495

WEST JIMMY R LIVING TRUST
9266 HILLMAN WAY DR #
MEMPHIS TN 38133

AMKHB PROPERTY 1 LLC
1557 W 925 #
SYRACUSE UT 84075

BRIMHALL REBECCA B
9250 DAVIES PLANTATION RD #
BARTLETT TN 38133

BAGGETT PAUL D
9260 HILLMAN WAY DR #
MEMPHIS TN 38133

WOOLDRIDGE RACHEL LIVING TRUST
9381 CLUB WALK CT #
LAKELAND TN 38002

ST PHILIP EPISCOPAL CHURCH DAVIESHIRE
9380 DAVIES PLANTATION RD #
MEMPHIS TN 38133

GREEN MARY A AND STEVEN A GREEN (F
8228 WOODSTOCK CUBA RD #
MILLINGTON TN 38053

SCHULZ OLAF H
9387 CLUB WALK CT #
ARLINGTON TN 38002

DAVIES MANOR ASSOC INC
PO BOX 56 #
BRUNSWICK TN 38014

SEWARD BEN A & MOLLY M
9244 HILLMAN WAY DR #
MEMPHIS TN 38133

WILLINGHAM CHARLES E AND SHARON D MILLER
9393 CLUB WALK CT #
LAKELAND TN 38002

ST PHILIP EPISCOPAL CHURCH
9380 DAVIES PLANTATION RD #
MEMPHIS TN 38133

HENRY FORREST AND PEGGY HENRY LIVI
9224 HILLMAN WAY DR #
MEMPHIS TN 38133

CARNEY BOBBIE G
9399 CLUB WALK CT #
ARLINGTON TN 38002

ST PHILIP EPISCOPAL CHURCH INC
9830 DAVIES PLANTATION RD #
MEMPHIS TN 38133

LAWRENCE JOSEPH K & AUDREY
9206 HILLMAN WAY DR #
MEMPHIS TN 38133

MURRAY LINDA & WILLIAM H
9405 CLUB WALK CT #
LAKELAND TN 38002

ST PHILIP EPISCOPAL CHURCH INC
9830 DAVIES PLANTATION RD #
MEMPHIS TN 38133

LUCE NATHAN & ANGELA
9188 HILLMAN WAY DR #
MEMPHIS TN 38133

ENGLISH REVOCABLE LIVING TRUST
9183 BRUTON PARISH CV #
BARTLETT TN 38133

WHARTON CLIFFORD C & SANDRA K
9253 HILLMAN WAY DR #
MEMPHIS TN 38133

PRITT PAUL T & SANDRA S
9309 CURLING POND LN #
LAKELAND TN 38002

LARKIN ELTON E JR & MARY T
9191 BURTON PARISH CV #
MEMPHIS TN 38133

MARTIN LYDIA K REVOCABLE LIVING TRUST
9259 HILLMAN WAY DR #
MEMPHIS TN 38133

ERICKSON BETHANY M & ZACHARY EMINE
9315 CURLING POND LN #
LAKELAND TN 38002

QUIGLEY KYLE A & BRENNAN A AND
9196 BRUTON PARISH CV #
BARTLETT TN 38133

WINTERS DAVID & DIANA
9289 DAVIES PLANTATION RD #
BARTLETT TN 38133

BROUSSARD KIM & SHEILA NAZE
1040 CEDARVIEW LN #
FRANKLIN TN 37067

STANCIL STEPHEN P & JESSICA D
9190 BRUTON PARISH CV #
BARTLETT TN 38133

DUNLAP REVOCABLE LIVING TRUST
9255 DAVIES PLANTATION RD #
MEMPHIS TN 38133

JN US INVESTMENTS LLC
#

SPAIN ROBIN L & BONNIE S
9187 HILLMAN WAY DR #
BARTLETT TN 38133

WHITE LARRY D & BONNIE L
3176 BIRCHTON GLADE CV #
ARLINGTON TN 38002

FOWLKES KATHY A
3201 GLADE VERDE LN #
LAKELAND TN 38002

ROBERTSON FRANCES L (LE) AND JANICE R
9203 HILLMAN WAY DR #
BARTLETT TN 38133

MOORE DYLAN R
3180 BIRCHTON GLADE CV #
LAKELAND TN 38002

ADKISON DAVID W & KIMBERLY ,
3195 GLADE VERDE LN #
ARLINGTON TN 38002

BRIMHALL NICHOLAS & CATHERINE
9221 HILLMAN WAY DR #
MEMPHIS TN 38133

FKH SFR PROPCO A LP
1850 PARKWAY PL #
MARIETTA GA 30067

GARRETT DERRICK & TAMMY
3190 GLADE VERDE LN #
LAKELAND TN 38002

KELLY CHRISTOPHER J & KIMBERLY A
9237 HILLMAN WAY DR #
MEMPHIS TN 38133

BRYAN JUDY & PHILLIP E
9289 CURLING POND LN #
LAKELAND TN 38002

NORTON JULIA R
3196 GLADE VERDE LN #
LAKELAND TN 38002

SMITH GLENN L & BRENDA C
9245 HILLMAN WAY DR #
MEMPHIS TN 38133

DUKE PAMELA AND RACHEL DUKE (RS)
9295 CURLING POND LN #
LAKELAND TN 38002

SNUFFIN GARY R & MARION L
3202 GLADE VERDE LN #
ARLINGTON TN 38002

NOLAN KATHLEEN L REVOCABLE LIVING TRUST
9249 HILLMAN WAY DR #
BARTLETT TN 38133

MORGAN ROGER D
9301 CURLING POND LN #
LAKELAND TN 38002

BRUCE MARTIN JR & KIMBERLY
3208 GLADE VERDE LN #
LAKELAND TN 38002

VOYLES RUBEN M & CYNTHIA A
3218 GLADE VERDE LN #
LAKELAND TN 38002

DAVIS RICHARD A JR
9332 CURLING POND LN #
LAKELAND TN 38002

GREGORY PAUL R
50 S 100 #
MILLVILLE UT 84326

BURKS CATHERINE L
9320 CURLING POND LN #
ARLINGTON TN 38002

ROSS TOMMY D & CATHERINE M
2100 LATTING HILLS CV #
CORDOVA TN 38016

ACOR JACK O
9308 CURLING POND LN #
LAKELAND TN 38002

HANER CHARLES D & ROBIN G
9300 CURLING POND LN #
LAKELAND TN 38002

STANFORD JUSTIN & LILLIAN ZALDUONDO
9292 CURLING POND LN #
LAKELAND TN 38002

HOLLOWAY COLEMAN & SHANNON
9286 CURLING POND LN #
LAKELAND TN 38002

KIRBY JEANNETTE E
9280 CURLING POND LN #
LAKELAND TN 38002

TRAFFIC IMPACT STUDY

Project Name: Christian Life Tabernacle Private School

Project Location: Christian Life Tabernacle
9375 Davies Plantation Rd.
Bartlett, TN 38133

Applicant: Christian Life Tabernacle, Inc.
9375 Davies Plantation Rd.
Bartlett, TN 38133

Reviewing Agency: City of Bartlett

Study Date: March 2024

Prepared By: **PICKERING FIRM, INC.**
6363 Poplar Avenue, Suite 300
Memphis, TN 38119
(901) 726-0810

Engineer of Record: Patrick W. Neal, PE
Tennessee PE-104504
pneal@pickeringfirm.com





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Executive Summary

This report presents the results of a traffic impact study performed for the proposed Christian Life Tabernacle Private School. The project site is located in Bartlett, Shelby County, Tennessee on the southwest corner of Davies Plantation Road and Davies Manor Drive intersection. The private school is proposed to accommodate up to 50 students on opening day 2025 and a maximum of 150 students by full build out 2030.

Access to the private school will be through the existing west driveway off of Davies Plantation Road to maximize the allowable queuing length along Davies Plantation Road. The private school will require all arriving vehicles to park and escort students into the school so offsite queuing will not be an issue.

Based on the projected traffic generation and discussions with the City's Traffic Engineer, the study area was defined to include the following existing intersections:

- Davies Plantation Road and Hillman Way Drive
- Davies Plantation Road and Davies Manor Drive
- E. Davies Plantation Road/Beverle Rivera Drive and Canada Road

The study examined the volumes of traffic which are projected to be added to the roadway network by the proposed private school and analyzed the effects of that additional traffic on the traffic operations of the existing roadway network.

Study Findings

The capacity analysis results demonstrate that intersections in the study area are operating at acceptable levels-of-service (LOS) under current 2024 conditions for the overall intersections, approaches and individual movements with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E), EB LT (LOS D), and EB RT (LOS F)
 - Beverle Rivera Drive – WB approach (LOS D) and WB LT (LOS D)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB RT (LOS D)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS D) and EB RT (LOS E)

Continued growth in background traffic at projected growth rates result in acceptable LOS under future 2025 conditions Without Project for the overall intersections, approaches and individual movements with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E), EB LT (LOS D), and EB RT (LOS F)
 - Beverle Rivera Drive – WB approach (LOS D) and WB LT (LOS D)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB RT (LOS D)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS D) and EB RT (LOS E)

Continued growth in background traffic at projected growth rates result in acceptable LOS under future 2030 conditions Without Project for the overall intersections, approaches and individual movements with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road/Beverle Rivera Drive and Canada Road Intersection – LOS D
 - E. Davies Plantation Road – EB approach (LOS F), EB LT (LOS D), and EB RT (LOS F)
 - Beverle Rivera Drive – WB approach (LOS D) and WB LT (LOS D)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB RT (LOS D)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E) and EB RT (LOS F)

Future 2025 conditions With Project result in acceptable LOS according to TDOT's LOS Goals as outlined in Chapter 4 of the Traffic Impact Studies manual with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road/Beverle Rivera Drive and Canada Road Intersection – LOS D
 - E. Davies Plantation Road – EB approach (LOS F)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E)

Future 2030 conditions With Project result in acceptable LOS according to TDOT's LOS Goals as outlined in Chapter 4 of the Traffic Impact Studies manual with the exception of the following:

- AM Peak Hour
 - Beverle Rivera Drive – WB approach (LOS E) and WB LT (LOS E)
 - E. Davies Plantation Road – EB approach (LOS F)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB approach (LOS D)

Additionally, future site conditions at the west driveway to the private school for 2025 and 2030 result in a LOS A for all applicable movements with minimal queuing.

Recommendations

Based on the results of the analyses described in the study, there are no roadway or intersection improvements required within the City of Bartlett as a result of the proposed school; however, the signalized intersection at Canada Road located in the City of Lakeland did experience some minor decreases in LOS as a result of the proposed school. The signalized intersection was analyzed using the existing signal timings as provided in the design drawings from 2013. Considering the time that has elapsed since the intersection was originally designed, it is recommended that the City of Lakeland review the timings to determine if adjustments to the timings could alleviate some, if not all, of the increases in delay.

Introduction

This report presents the analysis and recommendations from a Traffic Impact Study for the development described below. The intent of the study is to analyze the potential effects on the transportation system within the defined study area of the increase in traffic which can reasonably be expected as a result of the proposed development. This study is based on requirements published by the Tennessee Department of Transportation (TDOT), dated February 2023, as contained in the *TDOT Traffic Impact Studies Guide*. The specific scope of the study was defined based on discussions with the City of Bartlett's Traffic Engineering division as documented below.

Project Name	Christian Life Tabernacle Private School
Project Location	Davies Manor Subdivision 9375 Davies Plantation Rd. Bartlett, TN 38133 Shelby County
Existing Land Use	Religious
Project Size	School Expansion – 17,428 sq. ft. Adjacent to and west of existing church building – 18,500 sq. ft.
Project Description	K-8 Private School Access points: Existing West Driveway Existing East Driveway will be blocked off to prevent access
Project Phasing	N/A
Projected Completion Year	Based on discussions with the owner, the project is anticipated to begin construction in 2024 and be operational by Fall 2025
Study Scope	Intersections: • Davies Plantation Road and Hillman Way Drive • Davies Plantation Road and Davies Manor Drive • E. Davies Plantation Road/Beverle Rivera Drive and Canada Road Analysis Periods: • Weekday, AM Peak Hour of Adjacent Street (between 7 and 9 am) • Weekday, PM Peak Hour of Generator (End of School Day 3 pm) • Weekday, PM Peak Hour of Adjacent Street (between 4 and 6 pm) Study Horizons: • Opening Day, 2025 – 50 students • Full Build Out, 2030 – 150 students
Study Methodology	The basic study methodology is as follows: Trip generation via ITE Trip Generation Manual, 11th Edition Capacity Analysis by Highway Capacity Manual 7th edition methodology implemented by Synchro
Traffic Data	0.93% growth rate (based on TDOT historical traffic data in surrounding area) 12-hr Turning Movement Counts (TMC) collected at all study intersections



Figure 1 – Site Location Map

Level of Service

Intersection operation is defined by “level of service”. Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS ‘A’, to very poor, represented by LOS ‘F’. For the purpose of this traffic study, LOS A-D was used to define acceptable peak hour operating conditions.

Descriptions of the various levels of service are as follows:

- LOS A is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At signalized intersections, average delays are less than 10 seconds. At unsignalized intersections, average delays are less than 10 seconds.
- LOS B represents stable operation. At signalized intersections, average vehicle delays are 10 to 20 seconds. At unsignalized intersections, average delays are 10 to 15 seconds.

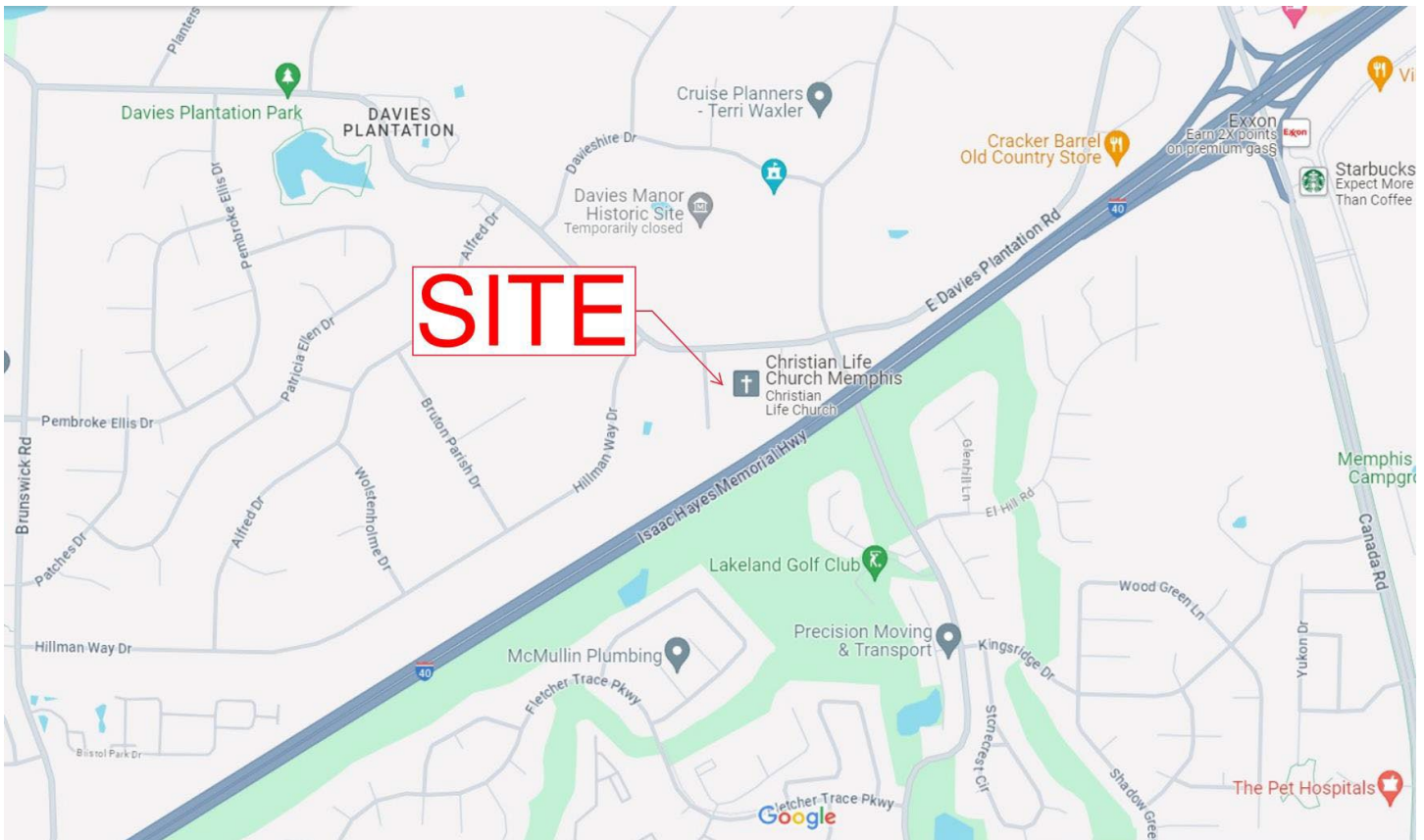


Figure 2 – Vicinity Map

- LOS C still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At signalized intersections, average vehicle delays are 20 to 35 seconds. At unsignalized intersections, average delays are 15 to 25 seconds.
- LOS D represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At signalized intersections, average vehicle delays are 35 to 55 seconds. At unsignalized intersections, average delays are 25 to 35 seconds.
- LOS E represents the capacity of the intersection. At signalized intersections, average vehicle delays are 55 to 80 seconds. At unsignalized intersections, average delays are 35 to 50 seconds.
- LOS F represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At signalized intersections, average vehicle delays exceed 80 seconds. At unsignalized intersections, average delays exceed 50 seconds.

Existing Traffic Conditions

The existing conditions of the roadways within the study area are as follows:

Existing Roadway Geometry	Davies Plantation Road – rural 2-lane undivided Hillman Way Drive – rural 2-lane undivided Davies Manor Drive – rural 2-lane undivided E Davies Plantation Road – rural 2-lane undivided Canada Road – urban multilane undivided Beverle Rivera Drive – urban 2-lane undivided
Auxiliary Lanes	Left turn lane E. Davies Plantation Road (EB) - Beverle Rivera Drive (WB) - Canada Road (NB and SB) Right turn lane - Canada Road (NB)
Functional Classification	Functional Classification System: Davies Plantation Road – major collector Hillman Way Drive – local Davies Manor Drive – local E Davies Plantation Road – major collector Canada Road – minor arterial Beverle Rivera Drive – major collector
Posted Speed Limits	Davies Plantation Road – 35 mph Hillman Way Drive – 30 mph Davies Manor Drive – 30 mph E Davies Plantation Road – 35 mph Canada Road – 35 mph Beverle Rivera Drive – 35 mph
Existing Traffic Volumes	Davies Plantation Road, ID79000560 – 2023 AADT = 3,931 E. Davies Plantation Road, ID79001048 – 2023 AADT = 4,314 Canada Road, ID79000213 – 2023 AADT = 9,401
Pedestrian Facilities	Davies Plantation Road – N/A Hilman Way Drive – N/A Davies Manor Drive – N/A E. Davies Plantation Road, Beverle Rivera Drive, and Canada Road – sidewalks on all approaches
Bicycle Facilities	N/A
Intersections in Study Area	Davies Plantation Road and Hillman Way Drive Davies Plantation Road and Davies Manor Drive E. Davies Plantation Road/Beverle Rivera Drive and Canada Road

Existing Intersection Characteristics

The characteristics of the existing intersections within the study area are as outlined below:

1. Davies Plantation Road and Hillman Way Drive

a. Davies Plantation Road:

- Number of Lanes: 1 @ 11 ft. lane EB (1 Thru/RT turn lane) and 1 @ 11 ft. lane WB (1 LT turn/Thru lane)
- Posted Speed: 35 mph
- Free flow condition

b. Hillman Way Drive:

- Number of Lanes: 1 @ 12 ft. lane NB (1 LT/RT turn lane)
- Posted Speed: 30 mph
- Stop controlled

2. Davies Plantation Road and Davies Manor Drive

a. Davies Plantation Road/E. Davies Plantation Road:

- Number of Lanes: 1 @ 12 ft. lane EB and WB (1 LT turn/Thru/RT turn lane)
- Posted Speed: 35 mph
- Stop controlled

b. Davies Plantation Road/Davies Manor Drive:

- Number of Lanes: 1 @ 11 ft. lanes NB and SB (1 LT turn/Thru/RT turn lane)
- Posted Speed: NB 35 mph, SB 30 mph
- Stop Controlled

3. E. Davies Plantation Road and Canada Road

a. E. Davies Plantation Road/Beverle Rivera Drive:

- Number of Lanes: 2 @ 12 ft. lanes EB and WB (1 LT turn lane and 1 Thru/RT turn lane)
- Posted Speed: 35 mph
- Signalized – EB and WB protected/permitted LT turn

b. Canada Road:

- Number of Lanes: 3 @ 12 ft. lanes NB (1 LT turn lane, 1 Thru lane, and 1 RT turn lane) and 3 @ 12 ft. lanes SB (1 LT turn lane, 1 Thru lane, and 1 Thru/RT turn lane)

- Posted Speed: 35 mph
- Signalized – NB and SB protected/permitted LT turn

Existing Peak Hour Traffic Volumes

Twelve-hour turning movement counts were collected at each intersection to determine peak hourly volumes (see Appendix A). Table 1 identifies the peak periods and the total entering volumes for each period.

Table 1 – Peak Periods

Location	Peak Period	Time of Day	Total Approach Volume
Davies Plantation Road and Hillman Way Drive	A.M. Peak	7:45 – 8:45	212
	Mid-day Peak	14:45 – 15:45	214
	P.M. Peak	16:45 – 17:45	347
Davies Plantation Road and Davies Manor Drive	A.M. Peak	7:30 – 8:30	484
	Mid-day Peak	14:45 – 15:45	437
	P.M. Peak	16:45 – 17:45	638
E. Davies Plantation Road/Beverle Rivera Drive and Canada Road	A.M. Peak	7:15 – 8:15	1,725
	Mid-day Peak	14:45 – 15:45	1,459
	P.M. Peak	16:45 – 17:45	1,883

Existing peak-hour turning movement volumes are shown in Figure 3.

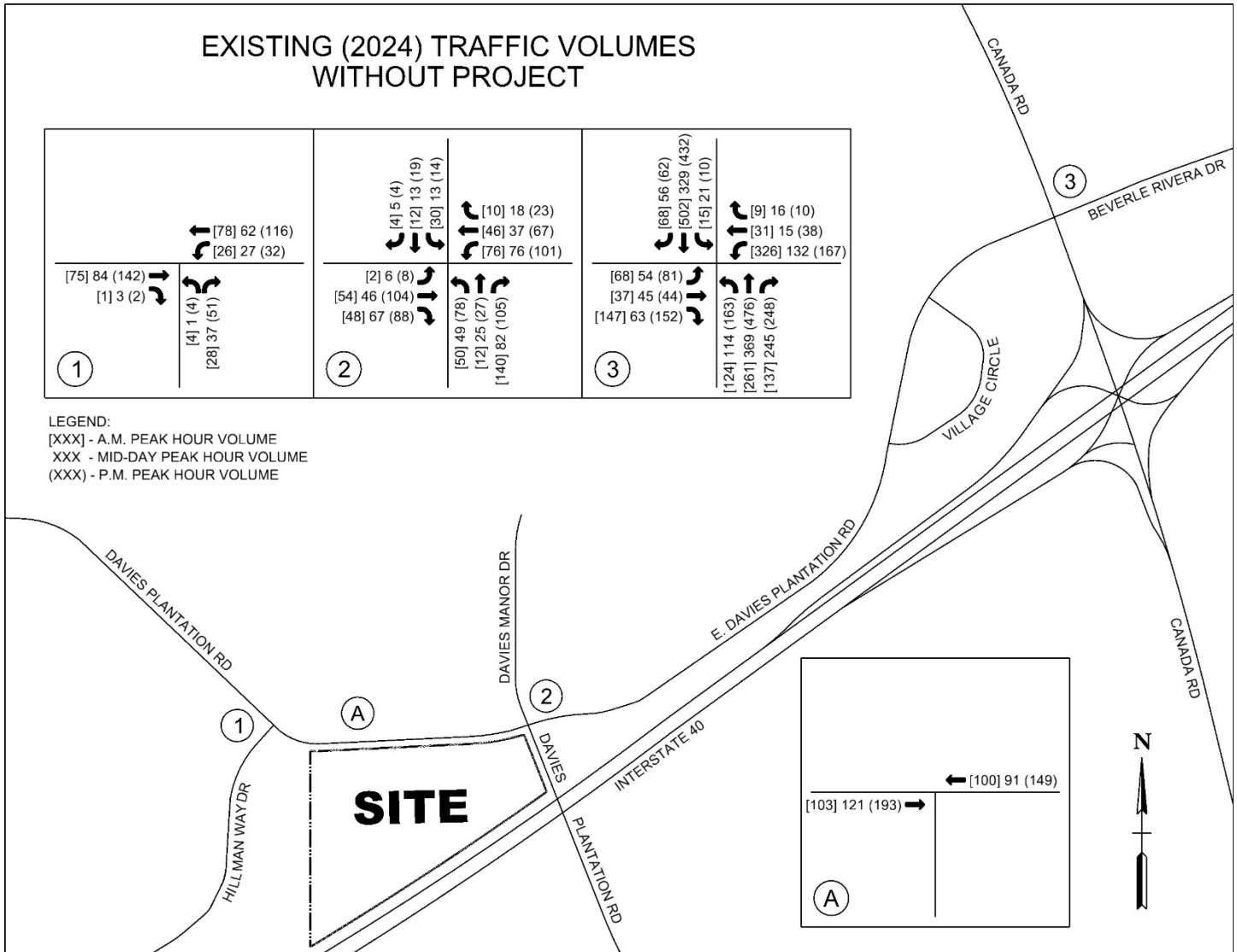


Figure 3 – Existing (2024) Peak Hour Traffic Volumes

Existing Conditions Capacity and Queuing Analysis

Capacity analysis of existing roadway conditions and existing traffic volumes was performed in accordance with Highway Capacity Manual (7th edition) methodology. Summary results for controlled lane groups only are presented in Table 2. Detailed analysis reports are contained in Appendix D.1.

Table 2 – Existing Conditions LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95 th tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95 th tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.3)	A (8.97)	NB LT	A	9.0	3
				NB RT	A	7.4	3
	Davies Plantation Road and Davies Manor Drive	A (8.6)	A (8.2)	EB LT/TH/RT	A	8.2	13
			A (8.9)	WB LT/TH/RT	A	8.9	18
			A (8.7)	NB LT/TH/RT	A	8.7	25
			A (8.2)	SB LT/TH/RT	A	8.2	5
	E. Davies Plantation Road and Canada Road	C (33.9)	E (70.1)	EB LT	D	40.4	45
				EB TH	A	0.0	0
				EB RT	F	81.1	190
			D (45.7)	WB LT	D	47.4	243
				WB TH	A	0.0	0
				WB RT	C	31.4	23
			B (15.6)	NB LT	B	19.2	48
				NB TH	B	18.5	118
				NB RT	A	7.0	33
			C (27.2)	SB LT	B	17.0	5
				SB TH	C	28.7	305
				SB RT	B	18.7	30

Table 2 Continued – Existing Conditions LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
Mid-Day Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.5)	A (8.93)	NB LT	A	8.9	3
				NB RT	A	7.4	3
	Davies Plantation Road and Davies Manor Drive	A (8.4)	A (8.0)	EB LT/TH/RT	A	8.0	13
				WB LT/TH/RT	A	8.6	18
				NB LT/TH/RT	A	8.5	20
				SB LT/TH/RT	A	8.0	3
	E. Davies Plantation Road and Canada Road	B (15.5)	C (33.1)	EB LT	C	28.2	23
				EB TH	A	0.0	0
				EB RT	D	35.6	53
			C (25.8)	WB LT	C	25.6	53
				WB TH	A	0.0	0
				WB RT	C	26.9	13
			B (10.5)	NB LT	A	9.4	23
				NB TH	B	12.6	98
				NB RT	A	7.7	45
			B (13.4)	SB LT	B	10.0	5
				SB TH	B	14.1	93
				SB RT	B	10.9	13
P.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (9.47)	NB LT	A	9.5	5
				NB RT	A	7.6	3
	Davies Plantation Road and Davies Manor Drive	A (9.7)	A (9.4)	EB LT/TH/RT	A	9.4	28
				WB LT/TH/RT	A	9.9	30
				NB LT/TH/RT	A	9.9	33
				SB LT/TH/RT	A	8.7	5
	E. Davies Plantation Road and Canada Road	C (23.1)	D (54.0)	EB LT	C	27.7	35
				EB TH	A	0.0	0
				EB RT	E	64.9	150
			C (27.0)	WB LT	C	26.9	73
				WB TH	A	0.0	0
				WB RT	C	27.5	20
			B (14.1)	NB LT	B	13.3	40
				NB TH	B	17.1	168
				NB RT	A	8.7	53
			C (20.2)	SB LT	B	13.8	3
				SB TH	C	21.2	175
				SB RT	B	14.4	20

Background Traffic Development and Growth Calculations

A review of the TDOT Traffic History in the surrounding area identified three (3) counting stations near the project site, 1) station 213 on Canada Road east of the site, 2) station 1048 on Davies Plantation Road east of the site, and 3) station 560 on Davies Plantation Road south of the site. The existing data at each station was used to develop a growth rate for use in the study. The growth rates were 0.35%, 2.34%, and -0.58%, respectively. For purposes of developing an average growth rate across all stations, a growth rate of 0.0% was used for all stations with negative growth rates which resulted in an average growth rate of 0.93% for the study area.

The project is estimated to be constructed and open for use by 2025 so the existing traffic data was extrapolated 1 year at the average growth rate mentioned above for a total of 0.93%. The existing volumes at all three (3) existing study intersections were increased by 0.93% for opening day analysis in 2025 for the initial 50 students. The school anticipates reaching full capacity of 150 students by 2030 so all existing volumes were also increased by 5.71% for full build out analysis 5 years after the private school is opened.

Future Traffic Conditions Without Project

Existing peak-hour traffic volumes were factored to the horizon years for opening day (2025) and opening day plus 5 years (2030) based on the growth factor outlined above. The resulting future peak-hour volumes are presented in Figures 4 and 5.

Future Conditions Capacity and Queuing Analysis

Utilizing the future peak-hour traffic volumes, the capacity analysis was repeated to establish the baseline performance of the transportation system within the study area for the horizon years. Results of the analysis are presented in Tables 3 and 4. Detailed analysis reports are contained in Appendix D.2 and D.3.

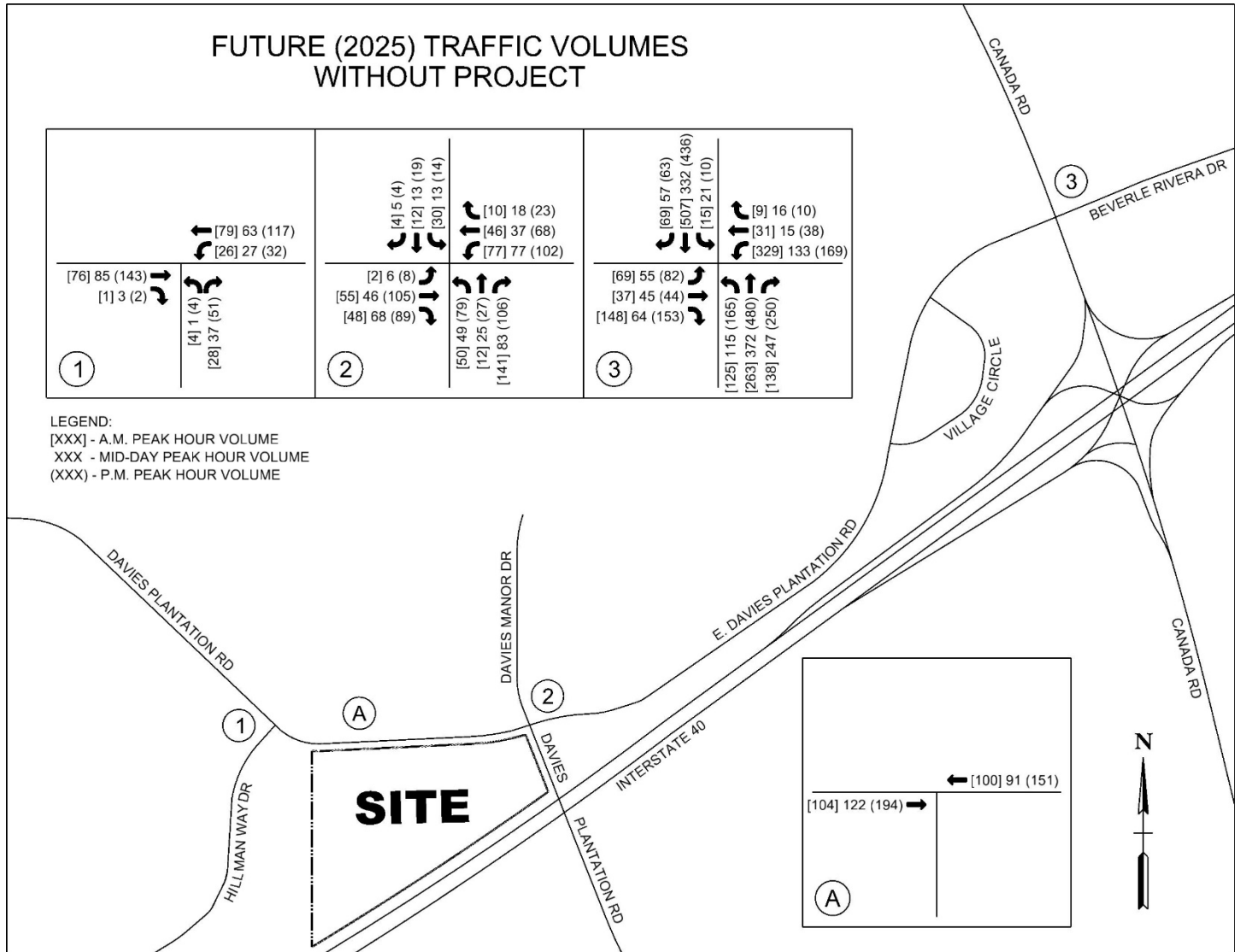


Figure 4 – Future (2025) Peak Hour Traffic Volumes (Without Project)

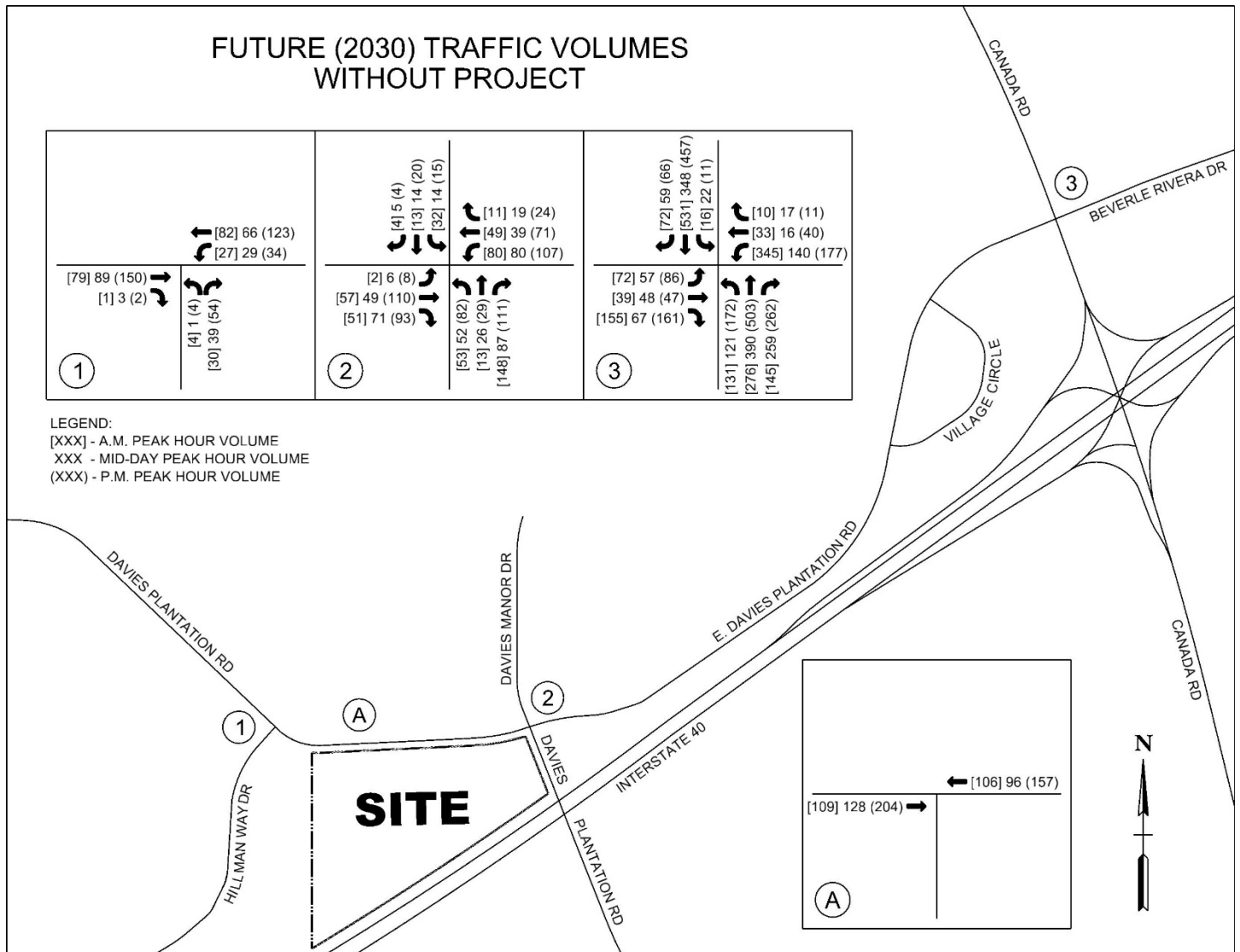


Figure 5 – Future (2030) Peak Hour Traffic Volumes (Without Project)

Table 3 – Future Conditions (2025 Without Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (8.98)	NB LT	A	9.0	3
				NB RT	A	7.4	3
	Davies Plantation Road and Davies Manor Drive	A (8.7)	A (8.2)	EB LT/TH/RT	A	8.2	13
			A (8.9)	WB LT/TH/RT	A	8.9	18
			A (8.8)	NB LT/TH/RT	A	8.8	25
			A (8.3)	SB LT/TH/RT	A	8.3	5
	E. Davies Plantation Road and Canada Road	C (34.3)	E (70.8)	EB LT	D	40.5	45
				EB TH	A	0.0	0
				EB RT	F	82.1	193
			D (46.4)	WB LT	D	48.3	248
				WB TH	A	0.0	0
				WB RT	C	31.4	23
			B (15.8)	NB LT	B	19.5	48
				NB TH	B	18.7	118
				NB RT	A	7.0	33
			C (27.6)	SB LT	B	17.2	5
				SB TH	C	29.1	310
				SB RT	B	18.9	30
Mid-Day Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.5)	A (8.94)	NB LT	A	8.9	3
				NB RT	A	7.5	3
	Davies Plantation Road and Davies Manor Drive	A (8.4)	A (8.0)	EB LT/TH/RT	A	8.0	13
			A (8.6)	WB LT/TH/RT	A	8.6	18
			A (8.5)	NB LT/TH/RT	A	8.5	20
			A (8.0)	SB LT/TH/RT	A	8.0	3
	E. Davies Plantation Road and Canada Road	B (15.6)	C (33.3)	EB LT	C	28.2	23
				EB TH	A	0.0	0
				EB RT	D	35.9	55
			C (25.8)	WB LT	C	25.6	53
				WB TH	A	0.0	0
				WB RT	C	26.9	13
			B (10.5)	NB LT	A	9.4	23
				NB TH	B	12.7	100
				NB RT	A	7.8	45
			B (13.5)	SB LT	B	10.1	5
				SB TH	B	14.2	95
				SB RT	B	11.0	13

Table 3 Continued – Future Conditions (2025 Without Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
P.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (9.48)	NB LT	A	9.5	5
				NB RT	A	7.6	3
	Davies Plantation Road and Davies Manor Drive	A (9.7)	A (9.5)	EB LT/TH/RT	A	9.5	30
			A (9.9)	WB LT/TH/RT	A	9.9	30
			A (9.9)	NB LT/TH/RT	A	9.9	33
			A (8.7)	SB LT/TH/RT	A	8.7	5
	E. Davies Plantation Road and Canada Road	C (23.3)	D (54.9)	EB LT	C	27.7	35
				EB TH	A	0.0	0
				EB RT	E	66.2	153
			C (27.1)	WB LT	C	26.9	73
				WB TH	A	0.0	0
				WB RT	C	27.5	20
			B (14.2)	NB LT	B	13.4	40
				NB TH	B	17.3	170
				NB RT	A	8.7	53
			C (20.4)	SB LT	B	13.9	3
				SB TH	C	21.5	178
				SB LT	B	14.5	20

Table 4 – Future Conditions (2030 Without Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.3)	A (9.0)	NB LT	A	9.0	3
				NB RT	A	7.4	3
	Davies Plantation Road and Davies Manor Drive	A (8.8)	A (8.3)	EB LT/TH/RT	A	8.3	13
			A (9.0)	WB LT/TH/RT	A	9.0	20
			A (8.9)	NB LT/TH/RT	A	8.9	28
			A (8.4)	SB LT/TH/RT	A	8.4	5
	E. Davies Plantation Road and Canada Road	D (37.8)	F (80.5)	EB LT	D	41.1	48
				EB TH	A	0.0	0
				EB RT	F	95.1	220
			D (51.9)	WB LT	D	54.4	278
				WB TH	A	0.0	0
				WB RT	C	31.5	25
			B (16.5)	NB LT	C	20.9	50
				NB TH	B	19.5	128
				NB RT	A	7.0	33
			C (29.6)	SB LT	B	17.7	8
				SB TH	C	31.3	343
				SB LT	B	19.6	33

Table 4 Continued – Future Conditions (2030 Without Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane/Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
Mid-Day Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.5)	A (8.97)	NB LT	A	9.0	3
				NB RT	A	7.5	3
	Davies Plantation Road and Davies Manor Drive	A (8.5)	A (8.1)	EB LT/TH/RT	A	8.1	15
			A (8.7)	WB LT/TH/RT	A	8.7	18
			A (8.6)	NB LT/TH/RT	A	8.6	20
			A (8.1)	SB LT/TH/RT	A	8.1	5
	E. Davies Plantation Road and Canada Road	B (16.0)	C (34.2)	EB LT	C	28.4	25
				EB TH	A	0.0	0
				EB RT	D	37.0	57
			C (26.0)	WB LT	C	25.8	55
				WB TH	A	0.0	0
				WB RT	C	27.0	13
			B (10.8)	NB LT	A	9.7	23
				NB TH	B	13.2	108
				NB RT	A	7.9	48
			B (14.1)	SB LT	B	10.3	5
				SB TH	B	14.8	103
				SB RT	B	11.2	15
P.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (9.55)	NB LT	A	9.5	5
				NB RT	A	7.6	3
	Davies Plantation Road and Davies Manor Drive	A (10.0)	A (9.7)	EB LT/TH/RT	A	9.7	30
			B (10.2)	WB LT/TH/RT	B	10.2	33
			B (10.2)	NB LT/TH/RT	B	10.2	35
			A (8.8)	SB LT/TH/RT	A	8.8	5
	E. Davies Plantation Road and Canada Road	C (25.4)	E (64.9)	EB LT	C	28.0	38
				EB TH	A	0.0	0
				EB RT	F	80.1	183
			C (27.6)	WB LT	C	27.5	78
				WB TH	A	0.0	0
				WB RT	C	27.8	23
			B (14.8)	NB LT	B	14.1	43
				NB TH	B	18.1	185
				NB RT	A	8.8	58
			C (21.5)	SB LT	B	14.3	3
				SB TH	C	22.6	193
				SB RT	B	14.8	20

Site Traffic Conditions

Site traffic conditions are based on information provided by the owner, developer, and/or the design engineer including preliminary site plans, anticipated land uses, and other characteristics of the proposed development. An informational document describing details of the proposed development for use in this study is contained in Appendix B.

Proposed Development

The existing site is zoned Religious and contains an existing 18,600 sq. ft. church facility with 171 parking spaces, 7 handicap spaces, and two 28 ft. wide driveway connections to Davies Plantation Road on the north side of the site. The proposed development is classified as a 17,428 sq. ft. private school facility (K-8). The proposed development includes 7 class rooms, restrooms, kitchen, combination gym and cafeteria, playground, other administrative rooms, and 39 proposed parking spaces.

Trip Generation

The effects that the proposed development could potentially have on the transportation system in the study area are primarily affected by the amount of traffic that the development can be expected to add to the public streets. Trip generation for the proposed private school development was estimated according to the guidelines established in the previously mentioned *Trip Generation Manual*. In determining trip generation for the private school development, ITE Code 534 for Private School (K-8) was used with students as the independent variable. Trip generation numbers were estimated for opening day of the school in 2025 with up to 50 students (see Table 5) as well as for full build out or maximum capacity in 2030 with a maximum of 150 students (see Table 6). Documentation of the trip generation calculations is contained in Appendix C.

Table 5 – Trip Generation Opening Day 2025

Land Use	Land Use Category	Independent Variable	24 Hour Two-Way Volume	AM Peak Hour			Mid-Day Peak Hour			PM Peak Hour		
				Trips			Trips			Trips		
				Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Private School (K-8)	534	50 Students	206	36	29	65	14	16	30	6	7	13
Total			206	36	29	65	14	16	30	6	7	13

Source: *Trip Generation Manual* (11th Edition; ITE, 2021)

Table 6 – Trip Generation Full Build Out 2030

Land Use	Land Use Category	Independent Variable	24 Hour Two-Way Volume	AM Peak Hour			Mid-Day Peak Hour			PM Peak Hour		
				Trips			Trips			Trips		
				Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Private School (K-8)	534	150 Students	616	82	67	149	44	49	93	18	21	39
Total			616	82	67	149	44	49	93	18	21	39

Source: *Trip Generation Manual* (11th Edition; ITE, 2021)

Development Phasing

The proposed site will be developed at one time so there is no phasing required. The owner has indicated that the site should begin construction in 2024 and be operational by Fall 2025 for the initial estimate of up to 50 students. Full build out or maximum capacity of up to 150 students for the private school is anticipated to be reached in the first 5 years or by 2030. For purposes of this study, the traffic impact analysis was based on a development horizon of 2025 for Opening Day and 2030 for Full Build Out.

Proposed Site Access

Proposed site access to the existing public roadway network is summarized in Table 7.

Table 7 – Proposed Site Access Points

Access Point	Roadway Accessed	Control Condition	Comments
West Driveway	Davies Plantation Road	Driveway – Stop Controlled	Existing to remain. Primary access to school.
East Driveway	Davies Plantation Road	Driveway – Stop Controlled	Existing to remain. Access to be blocked off during school hours.

Trip Distribution

Trip distribution describes the predicted patterns of entering and exiting traffic generated by the proposed development as they access the development from the transportation network. These patterns are typically based on judgment, considering factors such as directional splits of background traffic, the nature of the development, and the characteristics of the transportation network both within and beyond the study area. The directional distributions anticipated for the proposed development are presented in Figure 6.

Trip Assignment

Application of the distribution patterns from Figure 6 to the projected new traffic generated by the development (from Tables 5 and 6) produces the directional volumes of generated trips entering and exiting the site. The projected new trip assignments for the proposed development are shown in Figures 7 and 8.

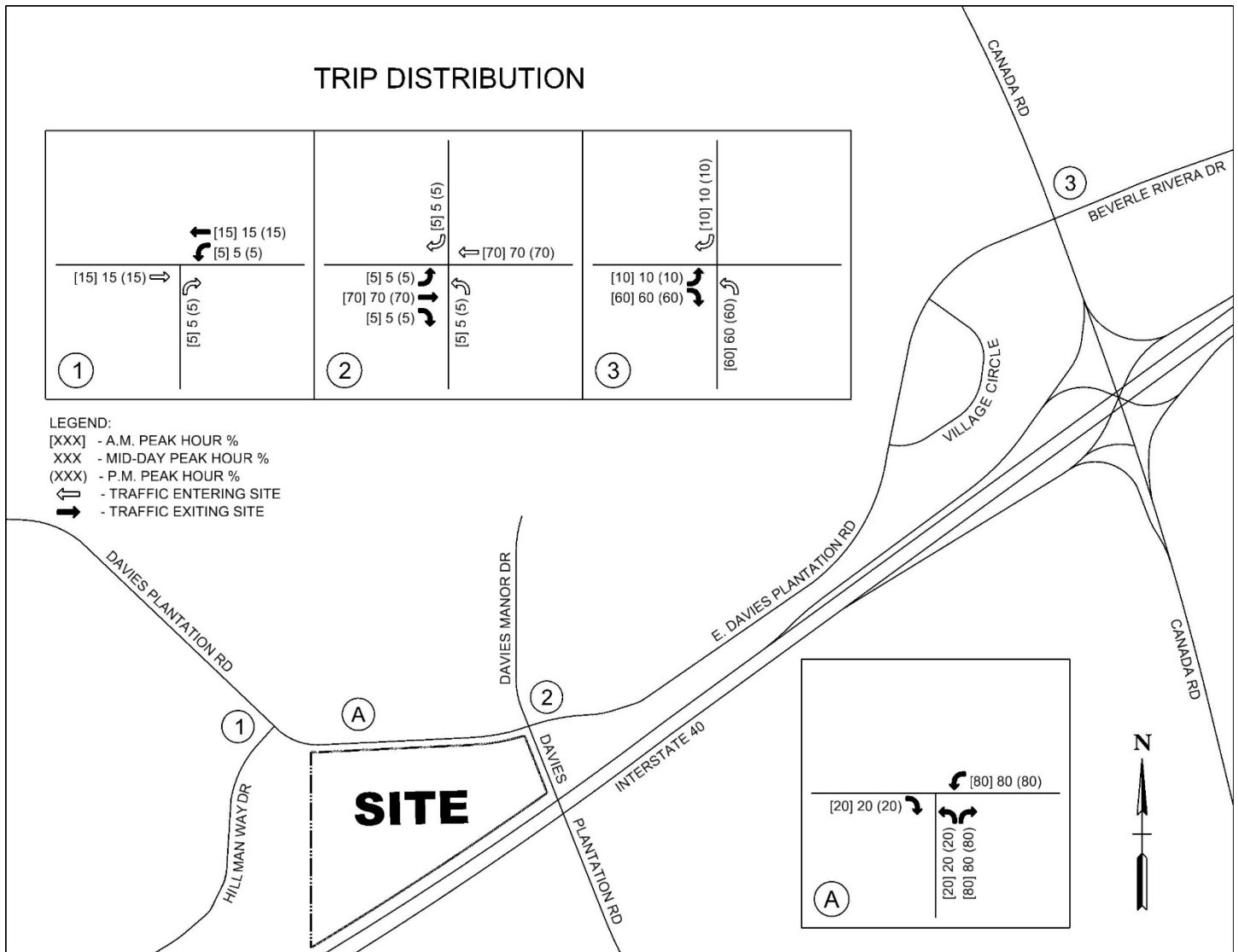
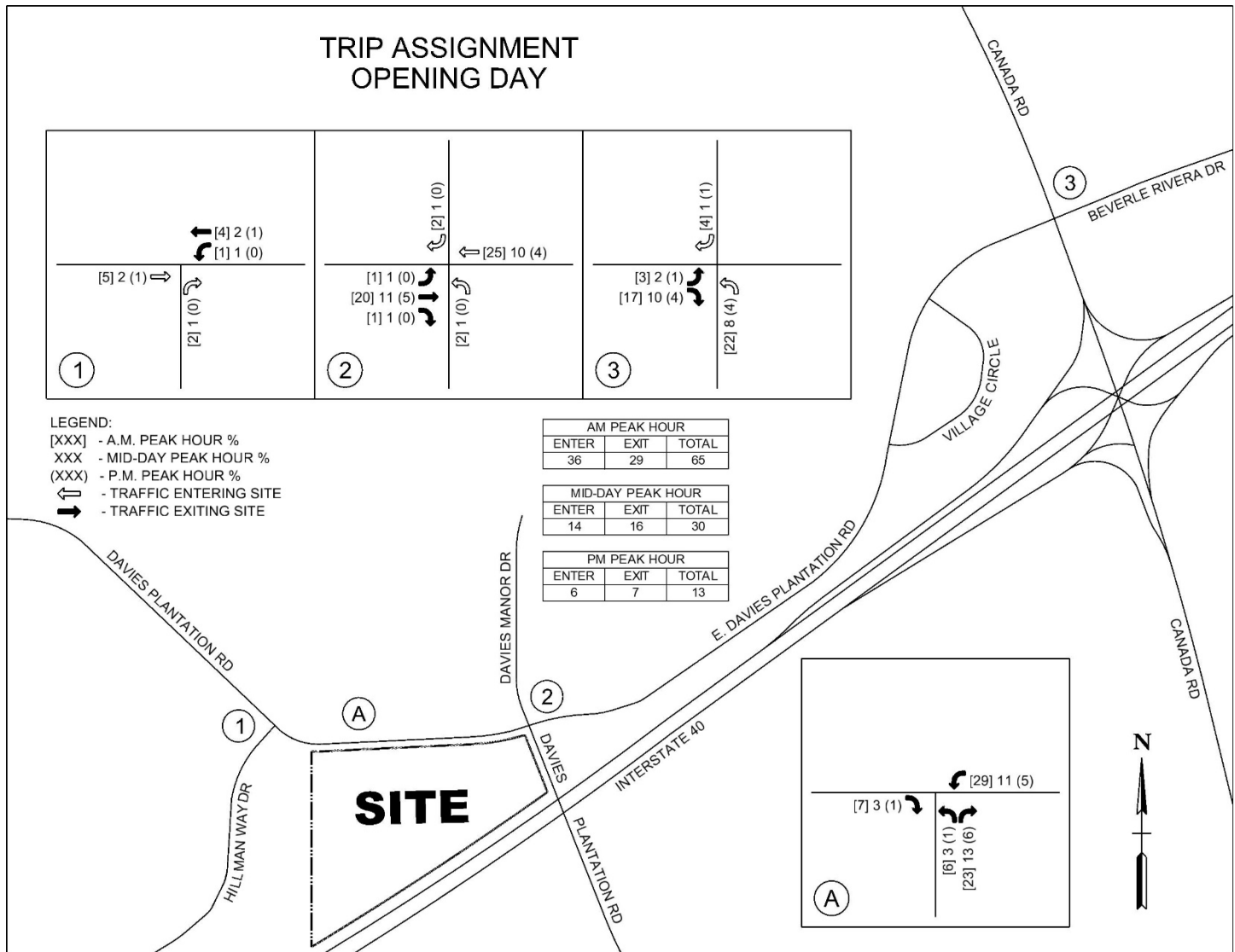


Figure 6 – Trip Distribution



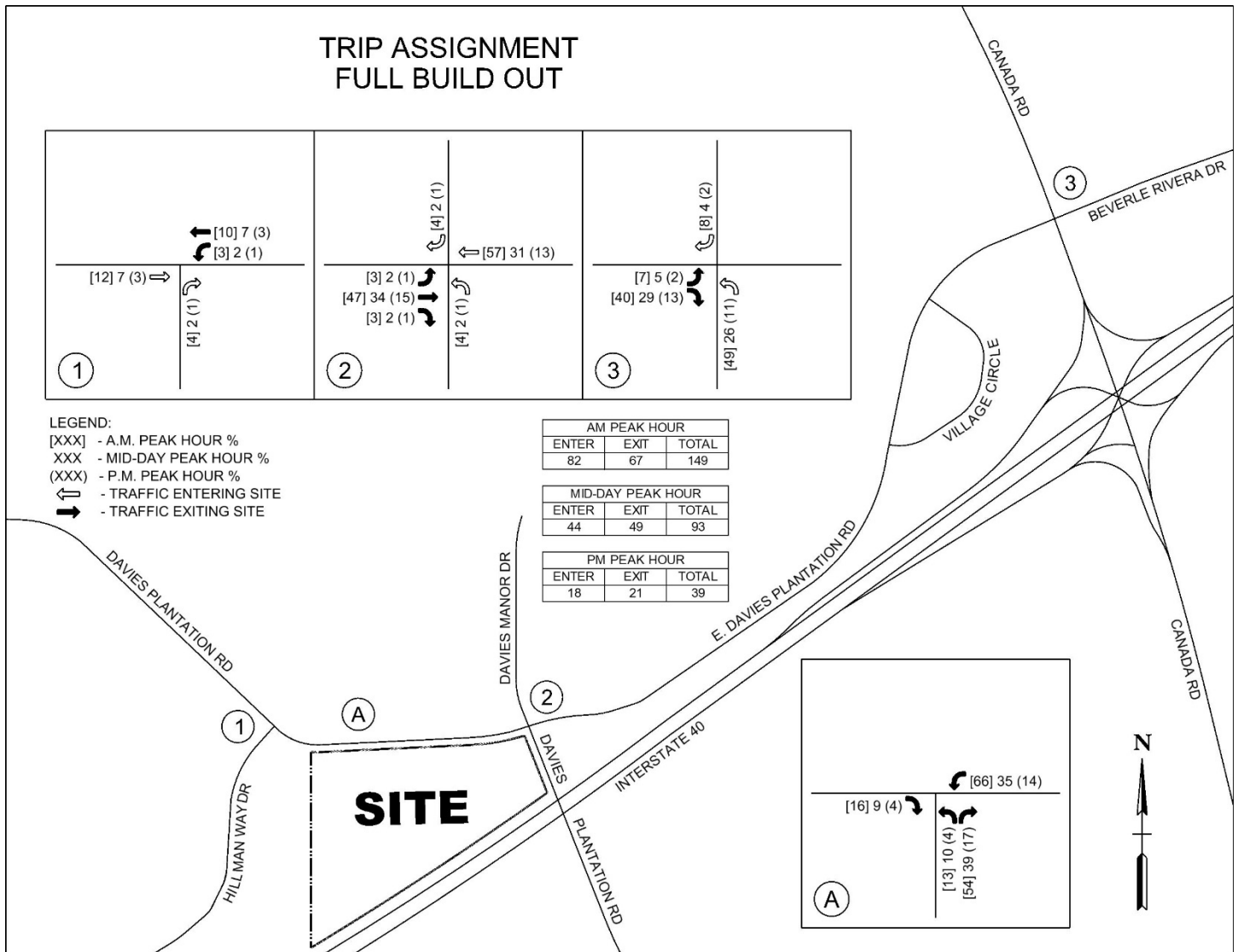


Figure 8 – Trip Assignment Full Build Out 2030

Future Traffic Conditions with Project

This section presents results of the analysis of the transportation network within the study area with the addition of project-generated traffic volumes.

Future Traffic Volumes with Project

To quantify anticipated future traffic volumes in the horizon years with new traffic resulting from the proposed development, the traffic volumes generated by the proposed development as shown in Figures 7 and 8 are combined with the future peak-hour traffic volumes in the horizon years as shown in Figures 4 and 5. The resulting total peak-hour volumes (With Project) are presented in Figures 9 and 10.

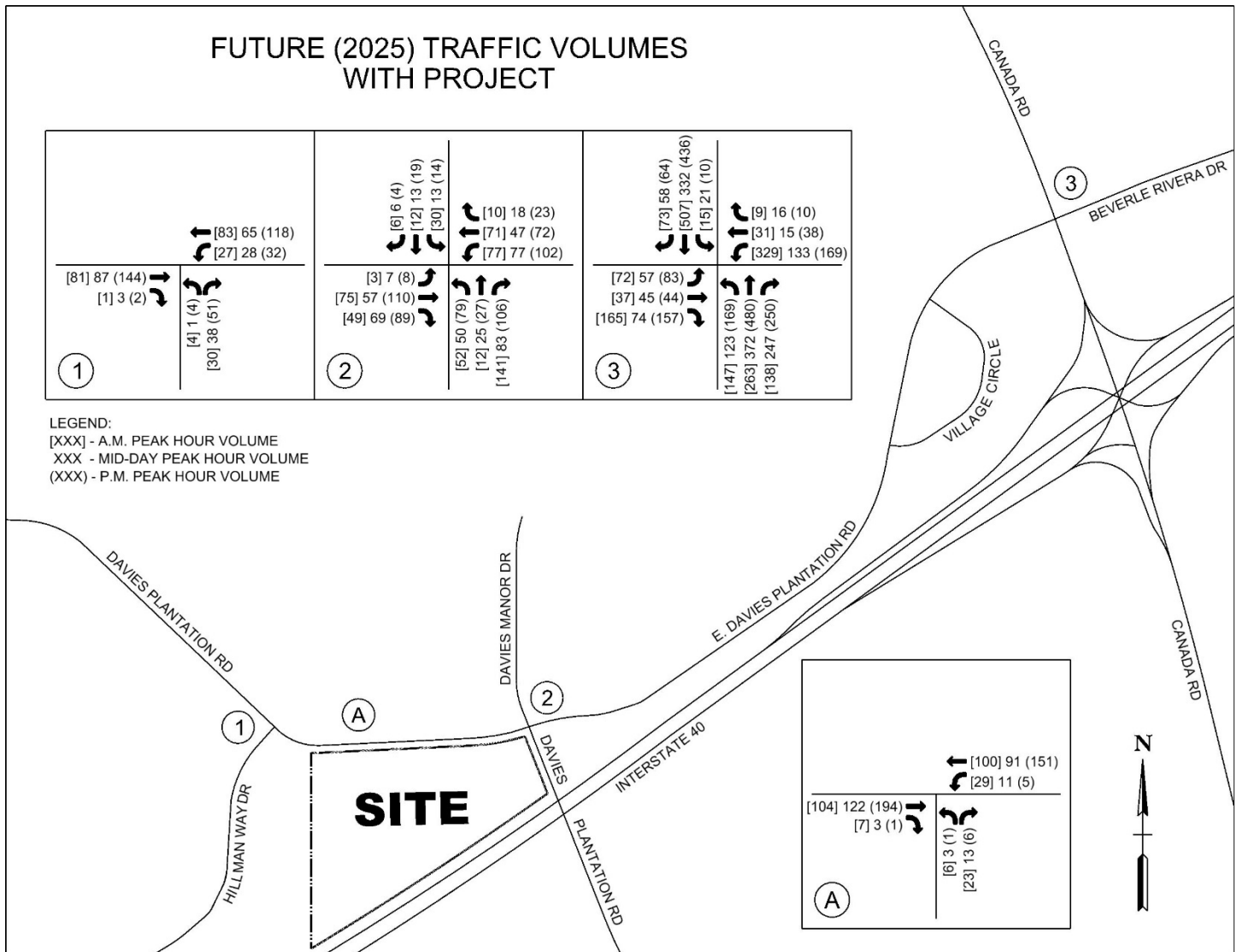


Figure 9 – Future (2025) Peak Hour Traffic Volumes (With Project)

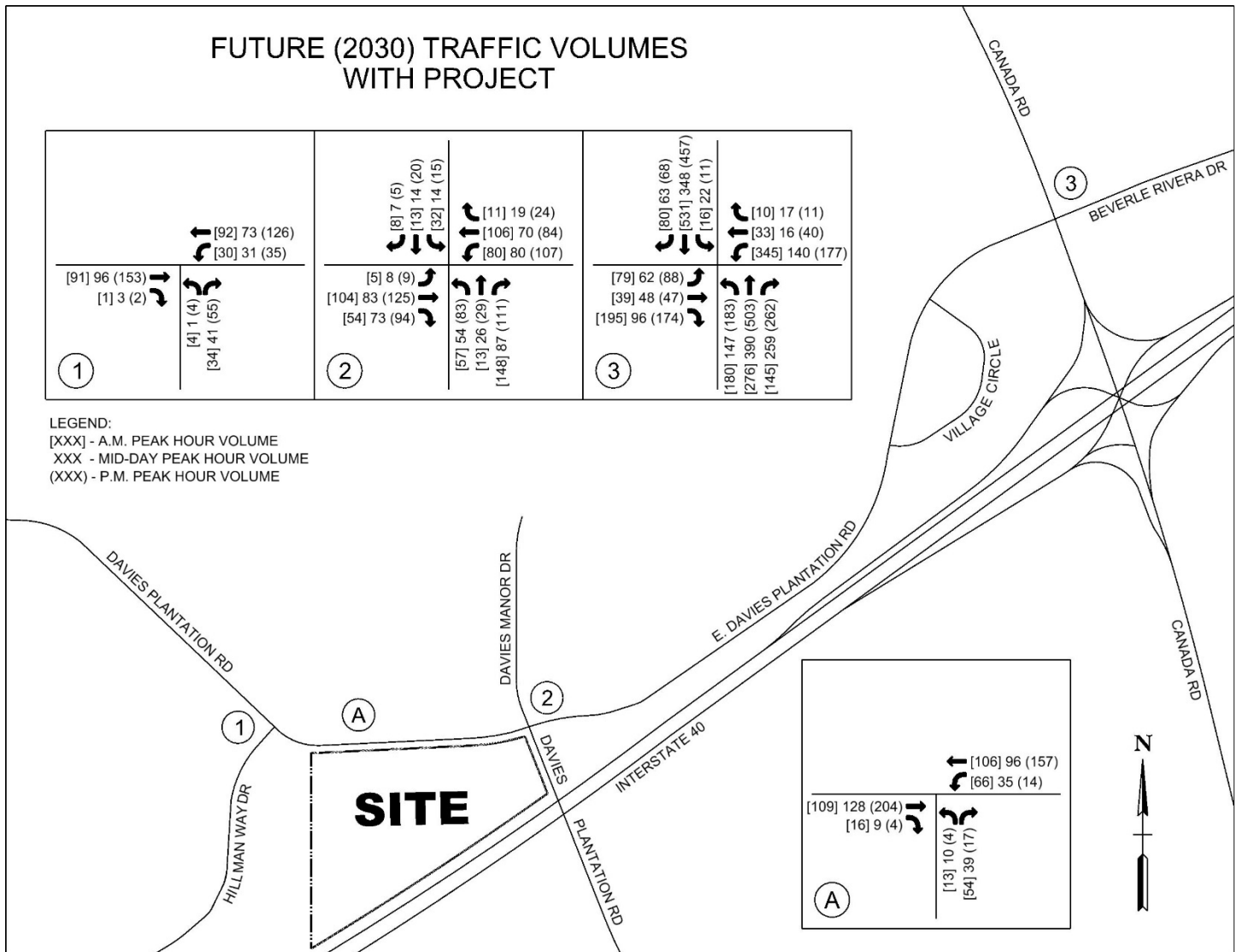


Figure 10 – Future (2030) Peak Hour Traffic Volumes (With Project)

Future Capacity and Queuing Analysis with Project

Utilizing the future peak-hour traffic volumes (with project) from Figures 8 and 9, the capacity analysis was repeated to assess performance of the transportation system within the study area for the horizon years with inclusion of predicted traffic generation resulting from the proposed project. Results of the analysis are presented in Tables 8 and 9. Detailed analysis reports are contained in Appendices D.4 and D.5.

Additionally, the west driveway to the site was analyzed for the horizon years with inclusion of predicted traffic generation resulting from the proposed project. Results of the analysis are presented in Tables 10 and 11. Detailed analysis reports are contained in Appendices D.6 and D.7.

Table 8 – Future Conditions (2025 With Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane/Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (9.01)	NB LT	A	9.0	3
				NB RT	A	7.4	3
	Davies Plantation Road and Davies Manor Drive	A (8.9)	A (8.6)	EB LT/TH/RT	A	8.6	15
			A (9.2)	WB LT/TH/RT	A	9.2	23
			A (9.0)	NB LT/TH/RT	A	9.0	28
			A (8.4)	SB LT/TH/RT	A	8.4	5
	E. Davies Plantation Road and Canada Road	D (38.9)	F (89.1)	EB LT	D	40.9	48
				EB TH	A	0.0	0
				EB RT	F	106.3	245
			D (52.4)	WB LT	D	54.9	265
				WB TH	A	0.0	0
				WB RT	C	31.9	23
			B (16.1)	NB LT	C	20.1	58
				NB TH	B	18.6	120
				NB RT	A	6.9	33
			C (28.3)	SB LT	B	17.6	5
				SB TH	C	29.9	318
				SB RT	B	19.4	33



Indicates level of service within TDOT's standard level of service requirements with the addition of project generated traffic



Indicates level of service outside of TDOT's standard level of service requirements with the addition of project generated traffic

Table 8 (Continued) – Future Conditions (2025 With Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
Mid-Day Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.5)	A (8.95)	NB LT	A	9.0	3
				NB RT	A	7.5	3
	Davies Plantation Road and Davies Manor Drive	A (8.5)	A (8.2)	EB LT/TH/RT	A	8.2	15
			A (8.8)	WB LT/TH/RT	A	8.8	18
			A (8.6)	NB LT/TH/RT	A	8.6	20
			A (8.1)	SB LT/TH/RT	A	8.1	3
	E. Davies Plantation Road and Canada Road	B (15.9)	C (34.5)	EB LT	C	28.3	25
				EB TH	A	0.0	0
				EB RT	D	37.5	60
			C (26.1)	WB LT	C	25.9	53
				WB TH	A	0.0	0
				WB RT	C	27.1	13
			B (10.5)	NB LT	A	9.4	23
				NB TH	B	12.7	100
				NB RT	A	7.8	45
			B (13.7)	SB LT	B	10.2	5
				SB TH	B	14.4	98
				SB RT	B	11.1	15
P.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (9.49)	NB LT	A	9.5	5
				NB RT	A	7.6	3
	Davies Plantation Road and Davies Manor Drive	A (9.8)	A (9.6)	EB LT/TH/RT	A	9.6	30
			A (10.0)	WB LT/TH/RT	A	10.0	30
			A (10.0)	NB LT/TH/RT	A	10.0	33
			A (8.7)	SB LT/TH/RT	A	8.7	5
	E. Davies Plantation Road and Canada Road	C (24.0)	E (58.7)	EB LT	C	27.8	38
				EB TH	A	0.0	0
				EB RT	E	71.4	165
			C (27.3)	WB LT	C	27.2	73
				WB TH	A	0.0	0
				WB RT	C	27.6	20
			B (14.2)	NB LT	B	13.5	43
				NB TH	B	17.3	170
				NB RT	A	8.7	55
			C (20.5)	SB LT	B	14.0	3
				SB TH	C	21.6	178
				SB RT	B	14.6	20



Indicates level of service within TDOT's standard level of service requirements with the addition of project generated traffic



Indicates level of service outside of TDOT's standard level of service requirements with the addition of project generated traffic

Table 9 – Future Conditions (2030 With Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.3)	A (9.09)	NB LT	A	9.1	3
				NB RT	A	7.5	3
	Davies Plantation Road and Davies Manor Drive	A (9.6)	A (9.2)	EB LT/TH/RT	A	9.2	23
			A (10.0)	WB LT/TH/RT	A	10.0	30
			A (9.6)	NB LT/TH/RT	A	9.6	33
			A (8.8)	SB LT/TH/RT	A	8.8	8
	E. Davies Plantation Road and Canada Road	D (48.3)	F (132.1)	EB LT	D	41.5	55
				EB TH	A	0.0	0
				EB RT	F	162.8	330
			E (56.9)	WB LT	E	60.0	293
				WB TH	A	0.0	0
				WB RT	C	32.4	25
			B (17.8)	NB LT	C	24.2	78
				NB TH	B	19.4	130
				NB RT	A	6.9	35
			C (30.5)	SB LT	B	18.2	8
				SB TH	C	32.3	353
				SB RT	C	20.3	38
Mid-Day Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.5)	A (9.02)	NB LT	A	9.0	5
				NB RT	A	7.5	3
	Davies Plantation Road and Davies Manor Drive	A (8.9)	A (8.7)	EB LT/TH/RT	A	8.7	20
			A (9.2)	WB LT/TH/RT	A	9.2	23
			A (9.0)	NB LT/TH/RT	A	9.0	23
			A (8.3)	SB LT/TH/RT	A	8.3	5
	E. Davies Plantation Road and Canada Road	B (17.5)	D (39.2)	EB LT	C	28.2	25
				EB TH	A	0.0	0
				EB RT	D	43.9	83
			C (26.4)	WB LT	C	26.2	58
				WB TH	A	0.0	0
				WB RT	C	27.2	13
			B (11.3)	NB LT	B	10.2	30
				NB TH	B	13.8	113
				NB RT	A	8.3	53
			B (15.2)	SB LT	B	11.1	5
				SB TH	B	16.0	110
				SB RT	B	12.2	18

 Indicates level of service within TDOT's standard level of service requirements with the addition of project generated traffic

 Indicates level of service outside of TDOT's standard level of service requirements with the addition of project generated traffic

Table 9 (Continued) – Future Conditions (2030 With Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
P.M. Peak Hour	Davies Plantation Road and Hillman Way Drive	A (2.2)	A (9.58)	NB LT	A	9.6	5
				NB RT	A	7.6	3
	Davies Plantation Road and Davies Manor Drive	B (10.2)	B (10.1)	EB LT/TH/RT	B	10.1	35
			B (10.5)	WB LT/TH/RT	B	10.5	35
			B (10.4)	NB LT/TH/RT	B	10.4	35
			A (8.9)	SB LT/TH/RT	A	8.9	5
	E. Davies Plantation Road and Canada Road	C (27.9)	E (78.5)	EB LT	C	28.1	40
				EB TH	A	0.0	0
				EB RT	F	98.7	218
			C (28.1)	WB LT	C	28.0	78
				WB TH	A	0.0	0
				WB RT	C	28.1	23
			B (14.8)	NB LT	B	14.3	45
				NB TH	B	18.0	185
				NB RT	A	8.7	58
			C (21.8)	SB LT	B	14.4	3
				SB TH	C	22.9	195
				SB RT	B	15.0	23

Indicates level of service within TDOT's standard level of service requirements with the addition of project generated traffic

Indicates level of service outside of TDOT's standard level of service requirements with the addition of project generated traffic

Table 10 – Future Site Conditions (2025 With Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and West Driveway	A (1.8)	A (9.29)	NB LT/RT	A	9.3	3
				WB LT	A	7.5	3
Mid-Day Peak Hour	Davies Plantation Road and West Driveway	A (0.9)	A (9.21)	NB LT/RT	A	9.2	3
				WB LT	A	7.5	0
P.M. Peak Hour	Davies Plantation Road and West Driveway	A (0.3)	A (9.61)	NB LT/RT	A	9.6	0
				WB LT	A	7.7	0

Table 11 – Future Site Conditions (2030 With Project) LOS and Queue Analysis

Analysis Period	Intersection	Overall Level of Service & Delay (s/veh)	Approach Level of Service & Delay (s/veh)	Lane/Movement Level of Service and 95%tile Queue			
				Lane /Movement	Level of Service	Delay (sec/veh)	95%tile Queue Length (ft)
A.M. Peak Hour	Davies Plantation Road and West Driveway	A (1.8)	A (9.29)	NB LT/RT	A	9.3	3
				WB LT	A	7.5	3
Mid-Day Peak Hour	Davies Plantation Road and West Driveway	A (0.9)	A (9.21)	NB LT/RT	A	9.2	3
				WB LT	A	7.5	0
P.M. Peak Hour	Davies Plantation Road and West Driveway	A (0.3)	A (9.61)	NB LT/RT	A	9.6	0
				WB LT	A	7.7	0

Summary of Findings

The following section presents a summary comparison of traffic conditions with and without the proposed project, along with discussion and analysis of any proposed mitigation measures.

Operational Analysis Summary

Results of the Level-of-Service analyses for the various scenarios are provided in Table 12.

Table 12 – Analysis Summary

INT #	YEAR	PERIOD	LEVEL OF SERVICE																
			INT	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND			
				AP	LT	TH	RT	AP	LT	TH	RT	AP	LT	TH	RT	AP	LT	TH	RT
1	2024	AM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		MID-DAY	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		PM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
	2025 W/O PROJECT	AM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		MID-DAY	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		PM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
	2025 WITH PROJECT	AM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		MID-DAY	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		PM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
	2030 W/O PROJECT	AM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		MID-DAY	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		PM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
	2030 WITH PROJECT	AM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		MID-DAY	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-
		PM	A	-	-	-	-	-	-	-	-	A	A	-	A	-	-	-	-

 Indicates level of service within TDOT's standard level of service requirements with the addition of project generated traffic

 Indicates level of service outside of TDOT's standard level of service requirements with the addition of project generated traffic

Table 12 (Continued) – Analysis Summary

INT #	YEAR	PERIOD	LEVEL OF SERVICE																
			INT	EASTBOUND				WESTBOUND				NORTHBOUND				SOUTHBOUND			
				AP	LT	TH	RT	AP	LT	TH	RT	AP	LT	TH	RT	AP	LT	TH	RT
2	2024	AM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		MID-DAY	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		PM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
	2025 WITHOUT PROJECT	AM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		MID-DAY	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		PM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
	2025 WITH PROJECT	AM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		MID-DAY	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		PM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
	2030 WITHOUT PROJECT	AM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		MID-DAY	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-
		PM	A	A	-	A	-	B	-	B	-	B	-	B	-	A	-	A	-
2030 WITH PROJECT	AM	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-	
	MID-DAY	A	A	-	A	-	A	-	A	-	A	-	A	-	A	-	A	-	
	PM	B	B	-	B	-	B	-	B	-	B	-	B	-	A	-	A	-	
3	2024	AM	C	E	D	A	F	D	D	A	C	B	B	B	A	C	B	C	B
		MID-DAY	B	C	C	A	D	C	C	A	C	B	A	B	A	B	B	B	B
		PM	C	D	C	A	E	C	C	A	C	B	B	B	A	C	B	C	B
	2025 WITHOUT PROJECT	AM	C	E	D	A	F	D	D	A	C	B	B	B	A	C	B	C	B
		MID-DAY	B	C	C	A	D	C	C	A	C	B	A	B	A	B	B	B	B
		PM	C	D	C	A	E	C	C	A	C	B	B	B	A	C	B	C	B
	2025 WITH PROJECT	AM	D	F	D	A	F	D	D	A	C	B	C	B	A	C	B	C	B
		MID-DAY	B	C	C	A	D	C	C	A	C	B	A	B	A	B	B	B	B
		PM	C	E	C	A	E	C	C	A	C	B	B	B	A	C	B	C	B
	2030 WITHOUT PROJECT	AM	D	F	D	A	F	D	D	A	C	B	C	B	A	C	B	C	B
		MID-DAY	B	C	C	A	D	C	C	A	C	B	A	B	A	B	B	B	B
		PM	C	E	C	A	F	C	C	A	C	B	B	B	A	C	B	C	B
	2030 WITH PROJECT	AM	D	F	D	A	F	E	E	A	C	B	C	B	A	C	B	C	C
		MID-DAY	B	D	C	A	D	C	C	A	C	B	B	B	A	B	B	B	B
		PM	C	E	C	A	F	C	C	A	C	B	B	B	A	C	B	C	B

Indicates level of service within TDOT's standard level of service requirements with the addition of project generated traffic

Indicates level of service outside of TDOT's standard level of service requirements with the addition of project generated traffic

The capacity analysis results demonstrate that intersections in the study area are operating at acceptable levels-of-service (LOS) under current 2024 conditions for the overall intersections, approaches and individual movements with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E), EB LT (LOS D), and EB RT (LOS F)
 - Beverle Rivera Drive – WB approach (LOS D) and WB LT (LOS D)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB RT (LOS D)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS D) and EB RT (LOS E)

Continued growth in background traffic at projected growth rates result in acceptable LOS under future 2025 conditions Without Project for the overall intersections, approaches and individual movements with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E), EB LT (LOS D), and EB RT (LOS F)
 - Beverle Rivera Drive – WB approach (LOS D) and WB LT (LOS D)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB RT (LOS D)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS D) and EB RT (LOS E)

Continued growth in background traffic at projected growth rates result in acceptable LOS under future 2030 conditions Without Project for the overall intersections, approaches and individual movements with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road/Beverle Rivera Drive and Canada Road Intersection – LOS D
 - E. Davies Plantation Road – EB approach (LOS F), EB LT (LOS D), and EB RT (LOS F)
 - Beverle Rivera Drive – WB approach (LOS D) and WB LT (LOS D)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB RT (LOS D)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E) and EB RT (LOS F)

Future 2025 conditions With Project result in acceptable LOS according to TDOT's LOS Goals as outlined in Chapter 4 of the *Traffic Impact Studies* manual with the exception of the following:

- AM Peak Hour
 - E. Davies Plantation Road/Beverle Rivera Drive and Canada Road Intersection – LOS D
 - E. Davies Plantation Road – EB approach (LOS F)
- PM Peak Hour
 - E. Davies Plantation Road – EB approach (LOS E)

Future 2030 conditions With Project result in acceptable LOS according to TDOT's LOS Goals as outlined in Chapter 4 of the *Traffic Impact Studies* manual with the exception of the following:

- AM Peak Hour
 - Beverle Rivera Drive – WB approach (LOS E) and WB LT (LOS E)
 - E. Davies Plantation Road – EB approach (LOS F)
- Mid-Day Peak Hour
 - E. Davies Plantation Road – EB approach (LOS D)

Additionally, future site conditions at the west driveway to the private school for 2025 and 2030 result in a LOS A for all applicable movements with minimal queuing.

Recommendations

Based on the results of the analyses described in the study, there are no roadway or intersection improvements required within the City of Bartlett as a result of the proposed school; however, the signalized intersection at Canada Road located in the City of Lakeland did experience some minor decreases in LOS as a result of the proposed school. The signalized intersection was analyzed using the existing signal timings as provided in the design drawings from 2013. Considering the time that has elapsed since the intersection was originally designed, it is recommended that the City of Lakeland review the timings to determine if adjustments to the timings could alleviate some, if not all, of the increases in delay.

APPENDIX A
Existing Traffic Counts

Intersection Turning Movement Count

Davies Plantation Rd @ Hillman Way Dr
Bartlett, TN

File Name : 24010-2
Site Code : 24010-2
Start Date : 1/31/2024
Page No : 1

Groups Printed- Automobiles - Trucks - Buses

Start Time	Davies Plantation Rd Westbound				Hillman Way Dr Northbound				Davies Plantation Rd Eastbound				Int. Total
	Left	Thru	Uturns	App. Total	Left	Right	Uturns	App. Total	Thru	Right	Uturns	App. Total	
06:30	1	4	0	5	0	3	0	3	11	0	0	11	19
06:45	6	8	0	14	0	5	0	5	5	0	0	5	24
Total	7	12	0	19	0	8	0	8	16	0	0	16	43
07:00	3	16	0	19	0	9	0	9	17	0	0	17	45
07:15	4	13	0	17	2	9	0	11	14	0	0	14	42
07:30	1	16	0	17	0	8	0	8	17	0	0	17	42
07:45	7	36	0	43	0	4	0	4	26	1	0	27	74
Total	15	81	0	96	2	30	0	32	74	1	0	75	203
08:00	8	16	0	24	0	6	0	6	15	0	0	15	45
08:15	4	11	0	15	3	9	0	12	19	0	0	19	46
08:30	7	15	0	22	1	9	0	10	15	0	0	15	47
08:45	3	14	0	17	0	4	0	4	11	1	0	12	33
Total	22	56	0	78	4	28	0	32	60	1	0	61	171
09:00	2	12	0	14	0	5	0	5	12	0	0	12	31
09:15	5	14	0	19	1	5	0	6	13	1	0	14	39
09:30	2	13	0	15	0	5	0	5	8	0	0	8	28
09:45	4	8	0	12	2	4	0	6	6	0	0	6	24
Total	13	47	0	60	3	19	0	22	39	1	0	40	122
10:00	5	9	0	14	0	4	0	4	12	2	0	14	32
10:15	3	8	0	11	0	7	0	7	13	1	0	14	32
10:30	4	7	0	11	0	2	0	2	6	1	0	7	20
10:45	1	10	0	11	0	3	0	3	18	0	0	18	32
Total	13	34	0	47	0	16	0	16	49	4	0	53	116
11:00	3	9	0	12	0	9	0	9	14	0	0	14	35
11:15	7	11	0	18	1	6	0	7	12	0	0	12	37
11:30	3	19	0	22	1	6	0	7	12	0	0	12	41
11:45	0	17	0	17	0	7	0	7	19	1	0	20	44
Total	13	56	0	69	2	28	0	30	57	1	0	58	157
12:00	8	21	0	29	1	7	0	8	17	0	0	17	54
12:15	5	10	0	15	0	5	0	5	12	0	0	12	32
12:30	2	15	0	17	0	6	0	6	14	1	0	15	38
12:45	3	18	0	21	0	3	0	3	11	1	0	12	36
Total	18	64	0	82	1	21	0	22	54	2	0	56	160
13:00	4	7	0	11	0	7	0	7	16	1	0	17	35
13:15	6	15	0	21	0	4	0	4	13	0	0	13	38
13:30	3	16	0	19	0	4	0	4	12	2	0	14	37
13:45	5	17	0	22	0	9	0	9	16	0	0	16	47
Total	18	55	0	73	0	24	0	24	57	3	0	60	157
14:00	3	15	0	18	0	5	0	5	12	0	0	12	35
14:15	4	11	0	15	0	4	0	4	13	1	0	14	33
14:30	3	13	0	16	1	10	0	11	21	0	0	21	48
14:45	0	19	0	19	0	8	0	8	21	1	0	22	49
Total	10	58	0	68	1	27	0	28	67	2	0	69	165

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

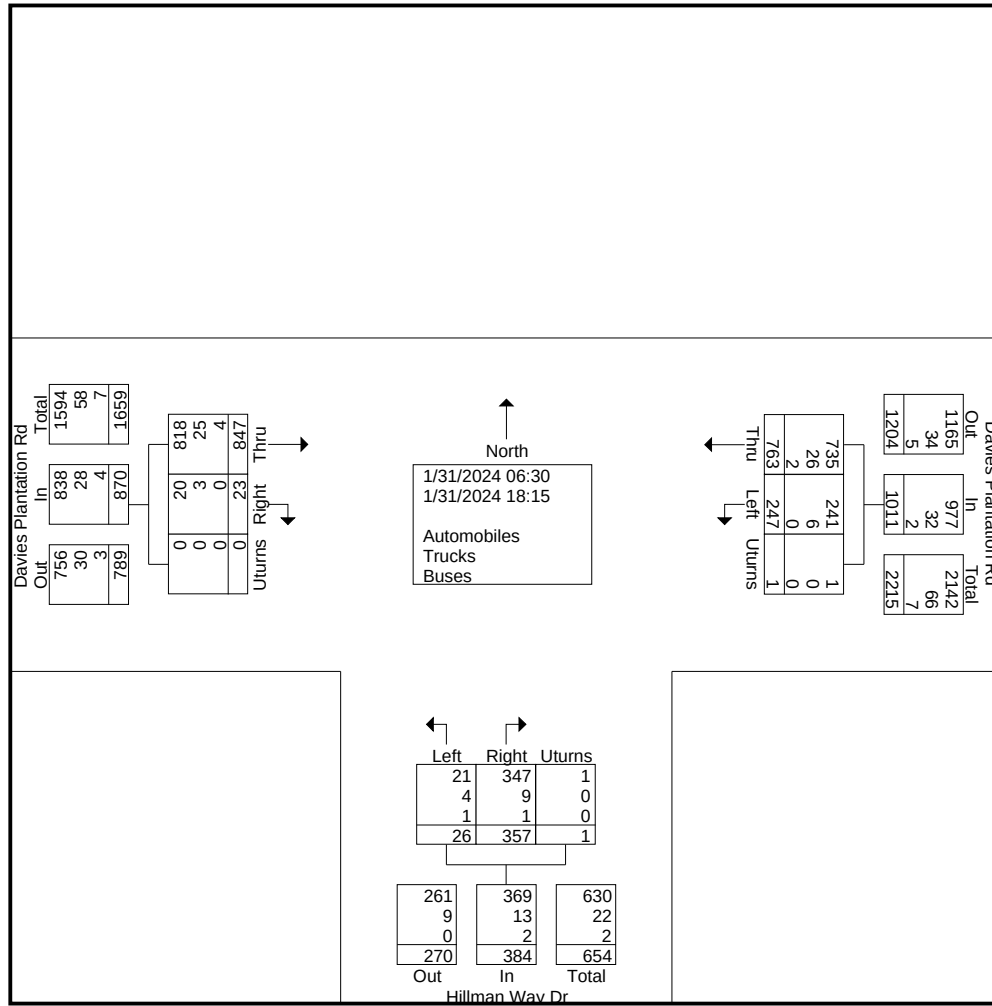
File Name : 24010-2
 Site Code : 24010-2
 Start Date : 1/31/2024
 Page No : 2

Groups Printed- Automobiles - Trucks - Buses

	Davies Plantation Rd Westbound				Hillman Way Dr Northbound				Davies Plantation Rd Eastbound				
Start Time	Left	Thru	UtURNS	App. Total	Left	Right	UtURNS	App. Total	Thru	Right	UtURNS	App. Total	Int. Total
15:00	8	16	0	24	0	12	0	12	23	1	0	24	60
15:15	11	11	0	22	0	9	0	9	16	1	0	17	48
15:30	8	16	0	24	1	8	0	9	24	0	0	24	57
15:45	11	19	0	30	1	11	1	13	27	0	0	27	70
Total	38	62	0	100	2	40	1	43	90	2	0	92	235
16:00	7	14	0	21	0	8	0	8	27	2	0	29	58
16:15	10	24	0	34	2	13	0	15	20	0	0	20	69
16:30	10	22	0	32	2	17	0	19	28	1	0	29	80
16:45	9	34	0	43	1	13	0	14	40	0	0	40	97
Total	36	94	0	130	5	51	0	56	115	3	0	118	304
17:00	7	26	1	34	1	14	0	15	30	1	0	31	80
17:15	12	24	0	36	2	9	0	11	40	1	0	41	88
17:30	4	32	0	36	0	15	0	15	32	0	0	32	83
17:45	11	22	0	33	1	8	0	9	27	0	0	27	69
Total	34	104	1	139	4	46	0	50	129	2	0	131	320
18:00	6	21	0	27	0	10	0	10	22	0	0	22	59
18:15	4	19	0	23	2	9	0	11	18	1	0	19	53
Grand Total	247	763	1	1011	26	357	1	384	847	23	0	870	2265
Apprch %	24.4	75.5	0.1		6.8	93	0.3		97.4	2.6	0		
Total %	10.9	33.7	0	44.6	1.1	15.8	0	17	37.4	1	0	38.4	
Automobiles	241	735	1	977	21	347	1	369	818	20	0	838	2184
% Automobiles	97.6	96.3	100	96.6	80.8	97.2	100	96.1	96.6	87	0	96.3	96.4
Trucks	6	26	0	32	4	9	0	13	25	3	0	28	73
% Trucks	2.4	3.4	0	3.2	15.4	2.5	0	3.4	3	13	0	3.2	3.2
Buses	0	2	0	2	1	1	0	2	4	0	0	4	8
% Buses	0	0.3	0	0.2	3.8	0.3	0	0.5	0.5	0	0	0.5	0.4

Intersection Turning Movement Count

File Name : 24010-2
 Site Code : 24010-2
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

File Name : 24010-2
 Site Code : 24010-2
 Start Date : 1/31/2024
 Page No : 4

	Davies Plantation Rd Westbound				Hillman Way Dr Northbound				Davies Plantation Rd Eastbound				
Start Time	Left	Thru	UtURNS	App. Total	Left	Right	UtURNS	App. Total	Thru	Right	UtURNS	App. Total	Int. Total
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45													
07:45	7	36	0	43	0	4	0	4	26	1	0	27	74
08:00	8	16	0	24	0	6	0	6	15	0	0	15	45
08:15	4	11	0	15	3	9	0	12	19	0	0	19	46
08:30	7	15	0	22	1	9	0	10	15	0	0	15	47
Total Volume	26	78	0	104	4	28	0	32	75	1	0	76	212
% App. Total	25	75	0		12.5	87.5	0		98.7	1.3	0		
PHF	.813	.542	.000	.605	.333	.778	.000	.667	.721	.250	.000	.704	.716
Automobiles	25	77	0	102	2	28	0	30	71	1	0	72	204
% Automobiles	96.2	98.7	0	98.1	50.0	100	0	93.8	94.7	100	0	94.7	96.2
Trucks	1	1	0	2	2	0	0	2	3	0	0	3	7
% Trucks	3.8	1.3	0	1.9	50.0	0	0	6.3	4.0	0	0	3.9	3.3
Buses	0	0	0	0	0	0	0	0	1	0	0	1	1
% Buses	0	0	0	0	0	0	0	0	1.3	0	0	1.3	0.5

Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:45				06:45				07:30			
+0 mins.	7	36	0	43	0	5	0	5	17	0	0	17
+15 mins.	8	16	0	24	0	9	0	9	26	1	0	27
+30 mins.	4	11	0	15	2	9	0	11	15	0	0	15
+45 mins.	7	15	0	22	0	8	0	8	19	0	0	19
Total Volume	26	78	0	104	2	31	0	33	77	1	0	78
% App. Total	25	75	0		6.1	93.9	0		98.7	1.3	0	
PHF	.813	.542	.000	.605	.250	.861	.000	.750	.740	.250	.000	.722
Automobiles	25	77	0	102	1	31	0	32	73	1	0	74
% Automobiles	96.2	98.7	0	98.1	50	100	0	97	94.8	100	0	94.9
Trucks	1	1	0	2	0	0	0	0	4	0	0	4
% Trucks	3.8	1.3	0	1.9	0	0	0	0	5.2	0	0	5.1
Buses	0	0	0	0	1	0	0	1	0	0	0	0
% Buses	0	0	0	0	50	0	0	3	0	0	0	0

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 11:15

11:15	7	11	0	18	1	6	0	7	12	0	0	12	37
11:30	3	19	0	22	1	6	0	7	12	0	0	12	41
11:45	0	17	0	17	0	7	0	7	19	1	0	20	44
12:00	8	21	0	29	1	7	0	8	17	0	0	17	54
Total Volume	18	68	0	86	3	26	0	29	60	1	0	61	176
% App. Total	20.9	79.1	0		10.3	89.7	0		98.4	1.6	0		
PHF	.563	.810	.000	.741	.750	.929	.000	.906	.789	.250	.000	.763	.815
Automobiles	18	65	0	83	3	25	0	28	56	1	0	57	168
% Automobiles	100	95.6	0	96.5	100	96.2	0	96.6	93.3	100	0	93.4	95.5
Trucks	0	3	0	3	0	1	0	1	3	0	0	3	7
% Trucks	0	4.4	0	3.5	0	3.8	0	3.4	5.0	0	0	4.9	4.0
Buses	0	0	0	0	0	0	0	0	1	0	0	1	1
% Buses	0	0	0	0	0	0	0	0	1.7	0	0	1.6	0.6

Intersection Turning Movement Count

File Name : 24010-2
 Site Code : 24010-2
 Start Date : 1/31/2024
 Page No : 5

	Davies Plantation Rd Westbound				Hillman Way Dr Northbound				Davies Plantation Rd Eastbound				
Start Time	Left	Thru	UtURNS	App. Total	Left	Right	UtURNS	App. Total	Thru	Right	UtURNS	App. Total	Int. Total

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:15				11:00				11:45			
+0 mins.	7	11	0	18	0	9	0	9	19	1	0	20
+15 mins.	3	19	0	22	1	6	0	7	17	0	0	17
+30 mins.	0	17	0	17	1	6	0	7	12	0	0	12
+45 mins.	8	21	0	29	0	7	0	7	14	1	0	15
Total Volume	18	68	0	86	2	28	0	30	62	2	0	64
% App. Total	20.9	79.1	0		6.7	93.3	0		96.9	3.1	0	
PHF	.563	.810	.000	.741	.500	.778	.000	.833	.816	.500	.000	.800
Automobiles	18	65	0	83	2	27	0	29	59	2	0	61
% Automobiles	100	95.6	0	96.5	100	96.4	0	96.7	95.2	100	0	95.3
Trucks	0	3	0	3	0	1	0	1	3	0	0	3
% Trucks	0	4.4	0	3.5	0	3.6	0	3.3	4.8	0	0	4.7
Buses	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45

	16:45				16:15				16:45				
16:45	9	34	0	43	1	13	0	14	40	0	0	40	97
17:00	7	26	1	34	1	14	0	15	30	1	0	31	80
17:15	12	24	0	36	2	9	0	11	40	1	0	41	88
17:30	4	32	0	36	0	15	0	15	32	0	0	32	83
Total Volume	32	116	1	149	4	51	0	55	142	2	0	144	348
% App. Total	21.5	77.9	0.7		7.3	92.7	0		98.6	1.4	0		
PHF	.667	.853	.250	.866	.500	.850	.000	.917	.888	.500	.000	.878	.897
Automobiles	32	112	1	145	3	50	0	53	140	2	0	142	340
% Automobiles	100	96.6	100	97.3	75.0	98.0	0	96.4	98.6	100	0	98.6	97.7
Trucks	0	3	0	3	1	1	0	2	2	0	0	2	7
% Trucks	0	2.6	0	2.0	25.0	2.0	0	3.6	1.4	0	0	1.4	2.0
Buses	0	1	0	1	0	0	0	0	0	0	0	0	1
% Buses	0	0.9	0	0.7	0	0	0	0	0	0	0	0	0.3

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:45				16:15				16:45			
+0 mins.	9	34	0	43	2	13	0	15	40	0	0	40
+15 mins.	7	26	1	34	2	17	0	19	30	1	0	31
+30 mins.	12	24	0	36	1	13	0	14	40	1	0	41
+45 mins.	4	32	0	36	1	14	0	15	32	0	0	32
Total Volume	32	116	1	149	6	57	0	63	142	2	0	144
% App. Total	21.5	77.9	0.7		9.5	90.5	0		98.6	1.4	0	
PHF	.667	.853	.250	.866	.750	.838	.000	.829	.888	.500	.000	.878
Automobiles	32	112	1	145	5	56	0	61	140	2	0	142
% Automobiles	100	96.6	100	97.3	83.3	98.2	0	96.8	98.6	100	0	98.6
Trucks	0	3	0	3	1	1	0	2	2	0	0	2
% Trucks	0	2.6	0	2	16.7	1.8	0	3.2	1.4	0	0	1.4
Buses	0	1	0	1	0	0	0	0	0	0	0	0
% Buses	0	0.9	0	0.7	0	0	0	0	0	0	0	0

Intersection Turning Movement Count

Davies Plantation Rd @ Hillman Way Dr
Bartlett, TN

File Name : 24010-2
Site Code : 24010-2
Start Date : 1/31/2024
Page No : 1

Groups Printed- Trucks - Buses

Start Time	Davies Plantation Rd Westbound				Hillman Way Dr Northbound				Davies Plantation Rd Eastbound				Int. Total
	Left	Thru	Uturns	App. Total	Left	Right	Uturns	App. Total	Thru	Right	Uturns	App. Total	
06:30	0	0	0	0	0	0	0	0	2	0	0	2	2
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	2	0	0	2	2
07:00	0	0	0	0	0	0	0	0	3	0	0	3	3
07:15	0	0	0	0	1	0	0	1	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	2	0	0	2	2
07:45	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	1	0	0	1	7	0	0	7	8
08:00	1	0	0	1	0	0	0	0	0	0	0	0	1
08:15	0	1	0	1	2	0	0	2	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	2	0	0	2	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	2	0	0	2	2	0	0	2	6
09:00	0	1	0	1	0	1	0	1	1	0	0	1	3
09:15	1	1	0	2	0	0	0	0	0	1	0	1	3
09:30	0	1	0	1	0	0	0	0	1	0	0	1	2
09:45	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	1	3	0	4	1	1	0	2	2	1	0	3	9
10:00	0	1	0	1	0	0	0	0	0	1	0	1	2
10:15	0	0	0	0	0	1	0	1	3	0	0	3	4
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	1	0	1	0	1	4	1	0	5	7
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	1	0	1	0	1	0	1	2	0	0	2	4
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	1	0	1	0	1	3	0	0	3	5
12:00	0	2	0	2	0	0	0	0	1	0	0	1	3
12:15	0	0	0	0	0	1	0	1	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0	1	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	1	0	1	2	0	0	2	5
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	1	0	1	0	0	0	0	0	0	0	0	1
13:45	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	1	0	0	0	0	1	0	0	1	2
14:00	0	5	0	5	0	0	0	0	0	0	0	0	5
14:15	0	2	0	2	0	1	0	1	0	0	0	0	3
14:30	0	0	0	0	0	0	0	0	1	0	0	1	1
14:45	0	3	0	3	0	0	0	0	0	0	0	0	3
Total	0	10	0	10	0	1	0	1	1	0	0	1	12

Intersection Turning Movement Count

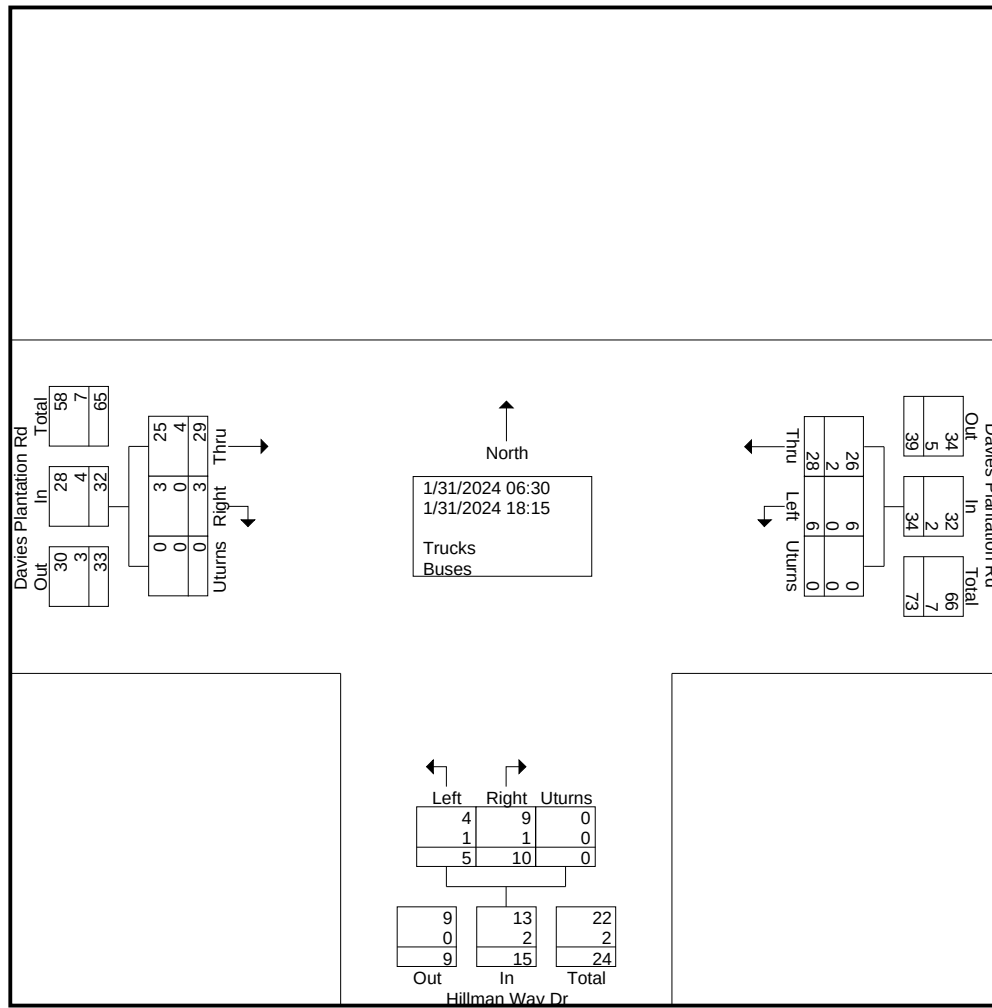
File Name : 24010-2
 Site Code : 24010-2
 Start Date : 1/31/2024
 Page No : 2

Groups Printed- Trucks - Buses

	Davies Plantation Rd Westbound				Hillman Way Dr Northbound				Davies Plantation Rd Eastbound				
Start Time	Left	Thru	UtURNS	App. Total	Left	Right	UtURNS	App. Total	Thru	Right	UtURNS	App. Total	Int. Total
15:00	0	1	0	1	0	0	0	0	1	0	0	1	2
15:15	0	0	0	0	0	1	0	1	0	0	0	0	1
15:30	1	0	0	1	0	0	0	0	0	0	0	0	1
15:45	1	1	0	2	0	2	0	2	1	0	0	1	5
Total	2	2	0	4	0	3	0	3	2	0	0	2	9
16:00	1	1	0	2	0	1	0	1	0	0	0	0	3
16:15	0	0	0	0	0	0	0	0	1	0	0	1	1
16:30	1	2	0	3	0	0	0	0	0	1	0	1	4
16:45	0	4	0	4	1	1	0	2	1	0	0	1	7
Total	2	7	0	9	1	2	0	3	2	1	0	3	15
17:00	0	0	0	0	0	0	0	0	1	0	0	1	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	6	28	0	34	5	10	0	15	29	3	0	32	81
Apprch %	17.6	82.4	0		33.3	66.7	0		90.6	9.4	0		
Total %	7.4	34.6	0	42	6.2	12.3	0	18.5	35.8	3.7	0	39.5	
Trucks	6	26	0	32	4	9	0	13	25	3	0	28	73
% Trucks	100	92.9	0	94.1	80	90	0	86.7	86.2	100	0	87.5	90.1
Buses	0	2	0	2	1	1	0	2	4	0	0	4	8
% Buses	0	7.1	0	5.9	20	10	0	13.3	13.8	0	0	12.5	9.9

Intersection Turning Movement Count

File Name : 24010-2
 Site Code : 24010-2
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

Davies Plantation Rd @ Hillman Way Rd
Bartlett, TN

File Name : 24010-2P
Site Code : 24010-2P
Start Date : 1/31/2024
Page No : 1

Groups Printed- Pedestrians - Bicycles

	Davies Plantation Rd Westbound	Hillman Way Dr Northbound	Davies Plantation Rd Eastbound	
Start Time	Peds	Peds	Peds	Int. Total
06:30	0	0	0	0
06:45	0	0	0	0
Total	0	0	0	0
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
Total	0	0	0	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	0	0	0	0
08:45	0	0	0	0
Total	0	0	0	0
09:00	0	0	0	0
09:15	0	0	0	0
09:30	0	0	0	0
09:45	0	0	0	0
Total	0	0	0	0
10:00	0	0	0	0
10:15	0	0	0	0
10:30	0	0	0	0
10:45	0	0	0	0
Total	0	0	0	0
11:00	0	0	0	0
11:15	0	0	0	0
11:30	0	0	0	0
11:45	0	0	0	0
Total	0	0	0	0
12:00	0	0	0	0
12:15	0	0	0	0
12:30	0	0	0	0
12:45	0	0	0	0
Total	0	0	0	0
13:00	0	0	0	0
13:15	0	0	0	0
13:30	0	0	0	0
13:45	0	0	0	0
Total	0	0	0	0
14:00	0	0	0	0
14:15	0	0	0	0
14:30	0	0	0	0
14:45	0	0	0	0
Total	0	0	0	0

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

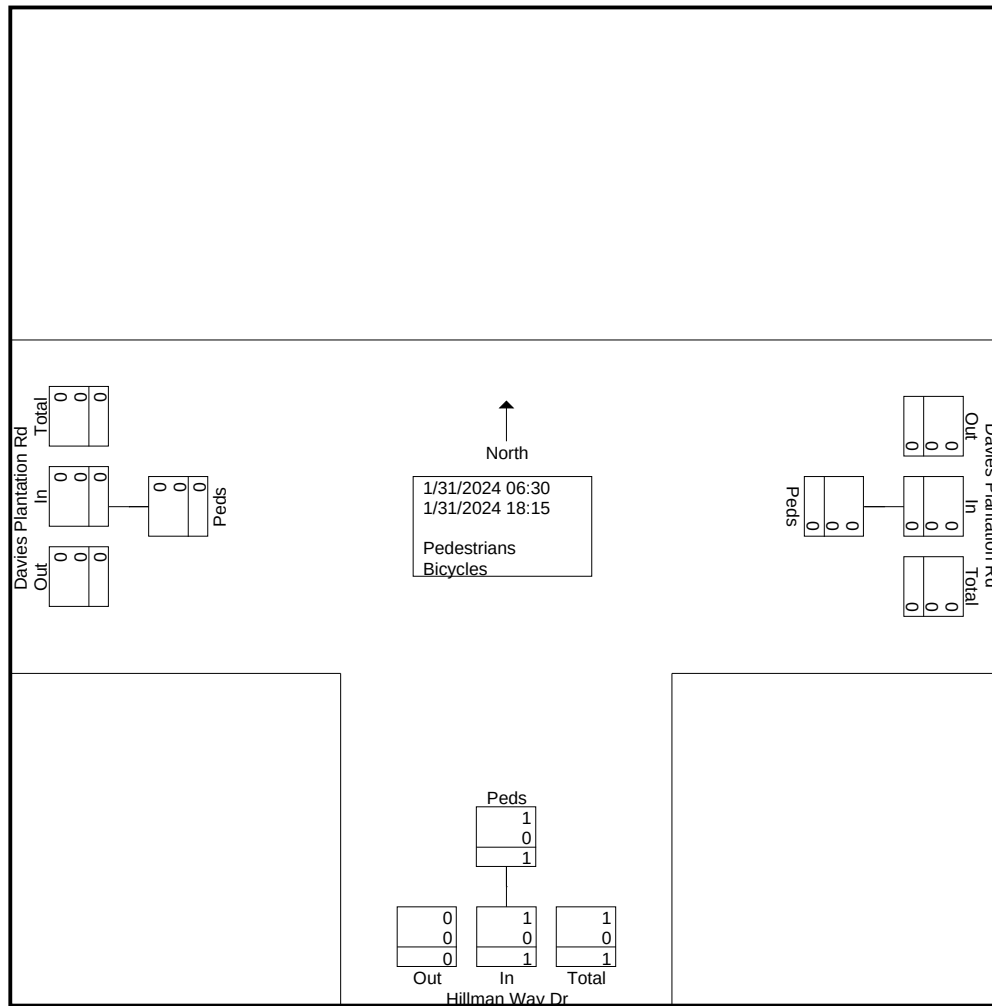
File Name : 24010-2P
 Site Code : 24010-2P
 Start Date : 1/31/2024
 Page No : 2

Groups Printed- Pedestrians - Bicycles

	Davies Plantation Rd Westbound	Hillman Way Dr Northbound	Davies Plantation Rd Eastbound	
Start Time	Peds	Peds	Peds	Int. Total
15:00	0	0	0	0
15:15	0	0	0	0
15:30	0	0	0	0
15:45	0	1	0	1
Total	0	1	0	1
16:00	0	0	0	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
Total	0	0	0	0
17:00	0	0	0	0
17:15	0	0	0	0
17:30	0	0	0	0
17:45	0	0	0	0
Total	0	0	0	0
18:00	0	0	0	0
18:15	0	0	0	0
Grand Total	0	1	0	1
Apprch %	0	100	0	
Total %	0	100	0	
Pedestrians	0	1	0	1
% Pedestrians	0	100	0	100
Bicycles	0	0	0	0
% Bicycles	0	0	0	0

Intersection Turning Movement Count

File Name : 24010-2P
 Site Code : 24010-2P
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

Davies Plantation Rd @ Davies Manor Dr
Bartlett, TN

File Name : 24010-
Site Code : 24010-
Start Date : 1/31/20
Page No : 1

Groups Printed- Automobiles - Trucks - Buses

	Davies Manor Dr Southbound					E Davies Plantation Rd Westbound					Davies Plantation Rd Northbound					Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. T
06:30	1	1	0	0	2	6	4	0	0	10	1	1	6	0	8	0	12	1	0	13	
06:45	4	2	1	0	7	3	4	0	0	7	9	2	19	0	30	1	9	4	0	14	
Total	5	3	1	0	9	9	8	0	0	17	10	3	25	0	38	1	21	5	0	27	
07:00	12	2	0	0	14	10	10	0	0	20	10	2	25	0	37	0	14	12	0	26	
07:15	9	6	1	0	16	10	8	1	0	19	7	3	27	1	38	0	15	7	0	22	
07:30	11	1	1	0	13	7	9	2	0	18	10	3	45	0	58	0	12	11	0	23	1
07:45	6	2	2	0	10	22	18	3	0	43	20	3	37	0	60	0	13	17	0	30	1
Total	38	11	4	0	53	49	45	6	0	100	47	11	134	1	193	0	54	47	0	101	4
08:00	10	6	0	0	16	22	8	3	0	33	14	2	26	0	42	2	12	9	0	23	1
08:15	3	3	1	0	7	25	11	2	0	38	6	4	32	0	42	0	17	11	0	28	1
08:30	9	4	3	0	16	16	12	3	0	31	8	2	25	0	35	1	13	12	0	26	1
08:45	10	1	0	0	11	27	9	2	0	38	6	2	21	0	29	0	5	10	0	15	
Total	32	14	4	0	50	90	40	10	0	140	34	10	104	0	148	3	47	42	0	92	4
09:00	6	3	0	0	9	26	12	0	0	38	2	3	10	0	15	0	10	6	0	16	
09:15	4	2	1	0	7	8	10	1	0	19	8	7	11	0	26	1	7	9	0	17	
09:30	9	3	0	0	12	6	3	3	0	12	12	0	7	0	19	0	6	9	0	15	
09:45	4	3	0	0	7	10	5	0	0	15	7	2	12	0	21	0	3	7	0	10	
Total	23	11	1	0	35	50	30	4	0	84	29	12	40	0	81	1	26	31	0	58	2
10:00	3	6	1	0	10	9	6	1	0	16	8	3	4	0	15	1	4	10	0	15	
10:15	5	6	1	0	12	3	8	3	0	14	2	2	2	0	6	2	14	4	0	20	
10:30	2	5	0	0	7	9	5	3	0	17	6	5	10	0	21	1	6	3	0	10	
10:45	5	2	1	0	8	6	8	2	0	16	4	6	7	0	17	0	10	10	0	20	
Total	15	19	3	0	37	27	27	9	0	63	20	16	23	0	59	4	34	27	0	65	2
11:00	3	1	1	0	5	2	6	3	0	11	5	5	11	0	21	2	8	11	0	21	
11:15	0	1	1	0	2	6	10	1	0	17	7	1	4	1	13	0	15	5	0	20	
11:30	7	3	0	0	10	12	14	0	0	26	8	2	6	0	16	1	9	10	0	20	
11:45	4	5	1	0	10	6	9	1	0	16	8	6	5	0	19	1	14	9	0	24	
Total	14	10	3	0	27	26	39	5	0	70	28	14	26	1	69	4	46	35	0	85	2
12:00	3	2	2	0	7	4	13	2	0	19	12	2	11	0	25	1	14	10	0	25	
12:15	2	4	2	0	8	10	7	1	0	18	6	2	12	0	20	0	10	9	0	19	
12:30	3	3	0	0	6	8	7	4	0	19	12	8	13	0	33	0	11	8	0	19	
12:45	1	3	0	0	4	9	8	2	0	19	15	6	19	1	41	0	7	9	0	16	
Total	9	12	4	0	25	31	35	9	0	75	45	18	55	1	119	1	42	36	0	79	2
13:00	5	2	3	0	10	11	6	4	0	21	5	3	2	0	10	1	11	12	0	24	
13:15	1	2	1	0	4	13	4	3	0	20	13	6	6	0	25	2	6	10	0	18	
13:30	4	6	0	0	10	9	8	4	0	21	9	7	11	0	27	0	5	7	0	12	
13:45	2	5	0	0	7	6	15	3	0	24	8	2	8	0	18	2	10	14	0	26	
Total	12	15	4	0	31	39	33	14	0	86	35	18	27	0	80	5	32	43	0	80	2
14:00	0	4	0	0	4	8	9	2	0	19	10	5	11	0	26	1	6	10	0	17	
14:15	5	7	1	0	13	16	9	2	0	27	5	5	12	0	22	0	5	12	0	17	
14:30	2	6	1	0	9	20	7	6	0	33	8	7	12	0	27	2	15	14	0	31	1
14:45	2	6	0	0	8	8	6	4	0	18	12	7	21	0	40	2	9	16	0	27	
Total	9	23	2	0	34	52	31	14	0	97	35	24	56	0	115	5	35	52	0	92	3

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

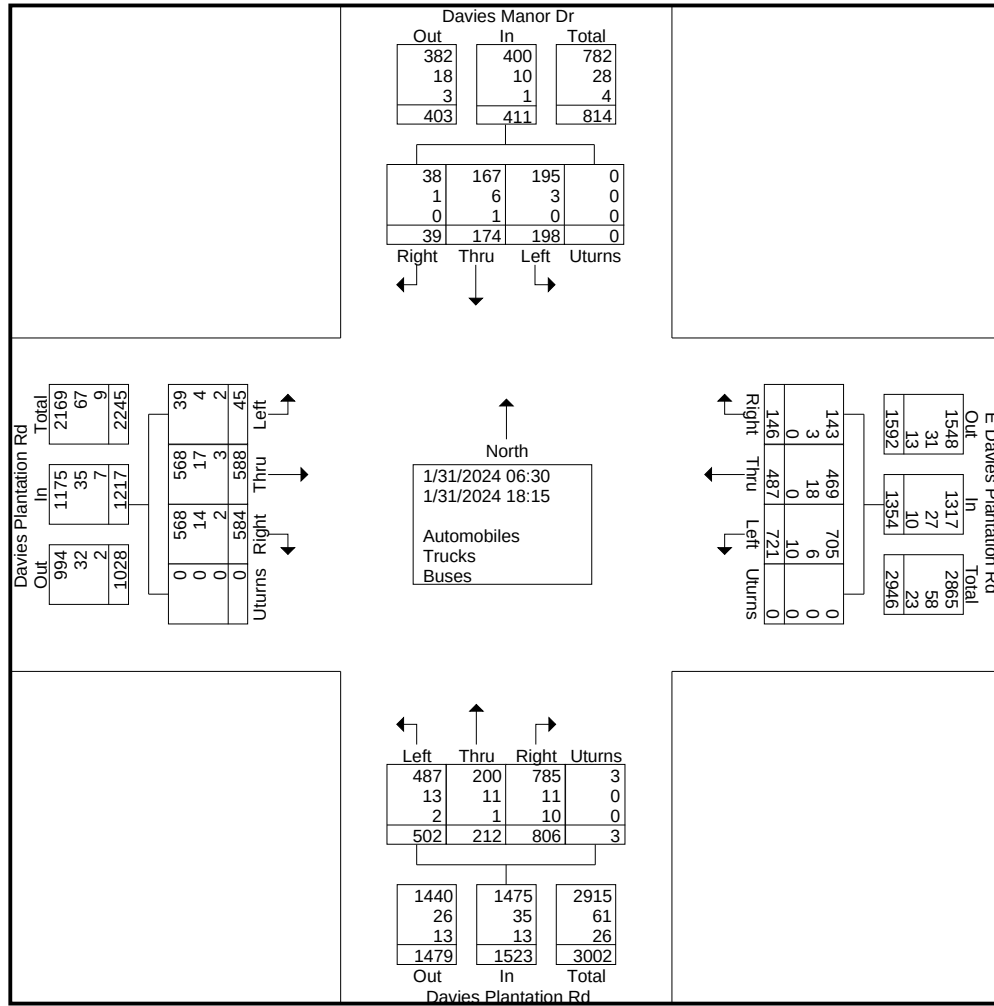
File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/20
 Page No : 2

Groups Printed- Automobiles - Trucks - Buses

	Davies Manor Dr Southbound					E Davies Plantation Rd Westbound					Davies Plantation Rd Northbound					Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc
15:00	5	4	1	0	10	12	10	4	0	26	13	4	18	0	35	3	11	19	0	33	10
15:15	3	1	1	0	5	25	10	4	0	39	13	7	17	0	37	1	9	18	0	28	10
15:30	3	2	3	0	8	31	11	6	0	48	11	7	26	0	44	0	17	14	0	31	10
15:45	2	5	1	0	8	29	15	2	0	46	11	7	18	0	36	4	20	13	0	37	10
Total	13	12	6	0	31	97	46	16	0	159	48	25	79	0	152	8	57	64	0	129	40
16:00	1	2	1	0	4	42	7	6	0	55	14	4	27	0	45	2	16	21	0	39	10
16:15	4	4	2	0	10	24	14	6	0	44	17	4	24	0	45	1	9	18	0	28	10
16:30	5	10	0	0	15	19	9	6	0	34	21	8	24	0	53	0	23	27	0	50	10
16:45	5	6	1	0	12	22	26	4	0	52	18	12	22	0	52	0	35	18	0	53	10
Total	15	22	4	0	41	107	56	22	0	185	70	28	97	0	195	3	83	84	0	170	50
17:00	7	7	1	0	15	24	8	3	0	35	24	6	29	0	59	2	22	26	0	50	10
17:15	0	3	2	0	5	24	18	8	0	50	15	7	27	0	49	4	22	21	0	47	10
17:30	2	3	0	0	5	31	15	8	0	54	21	2	27	0	50	2	25	23	0	50	10
17:45	2	2	0	0	4	16	20	5	0	41	15	8	22	0	45	2	22	11	0	35	10
Total	11	15	3	0	29	95	61	24	0	180	75	23	105	0	203	10	91	81	0	182	50
18:00	1	4	0	0	5	15	22	5	0	42	12	3	14	0	29	0	10	20	0	30	10
18:15	1	3	0	0	4	34	14	8	0	56	14	7	21	0	42	0	10	17	0	27	10
Grand Total	198	174	39	0	411	721	487	146	0	1354	502	212	806	3	1523	45	588	584	0	1217	450
Apprch %	48.2	42.3	9.5	0		53.2	36	10.8	0		33	13.9	52.9	0.2		3.7	48.3	48	0		
Total %	4.4	3.9	0.9	0	9.1	16	10.8	3.2	0	30.1	11.1	4.7	17.9	0.1	33.8	1	13.1	13	0	27	
Automobiles	195	167	38	0	400	705	469	143	0	1317	487	200	785	3	1475	39	568	568	0	1175	430
% Automobiles	98.5	96	97.4	0	97.3	97.8	96.3	97.9	0	97.3	97	94.3	97.4	100	96.8	86.7	96.6	97.3	0	96.5	96
Trucks	3	6	1	0	10	6	18	3	0	27	13	11	11	0	35	4	17	14	0	35	10
% Trucks	1.5	3.4	2.6	0	2.4	0.8	3.7	2.1	0	2	2.6	5.2	1.4	0	2.3	8.9	2.9	2.4	0	2.9	2
Buses	0	1	0	0	1	10	0	0	0	10	2	1	10	0	13	2	3	2	0	7	0
% Buses	0	0.6	0	0	0.2	1.4	0	0	0	0.7	0.4	0.5	1.2	0	0.9	4.4	0.5	0.3	0	0.6	0

Intersection Turning Movement Count

File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/20
 Page No : 4

	Davies Manor Dr Southbound					E Davies Plantation Rd Westbound					Davies Plantation Rd Northbound					Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	11	1	1	0	13	7	9	2	0	18	10	3	45	0	58	0	12	11	0	23	14
07:45	6	2	2	0	10	22	18	3	0	43	20	3	37	0	60	0	13	17	0	30	14
08:00	10	6	0	0	16	22	8	3	0	33	14	2	26	0	42	2	12	9	0	23	14
08:15	3	3	1	0	7	25	11	2	0	38	6	4	32	0	42	0	17	11	0	28	14
Total Volume	30	12	4	0	46	76	46	10	0	132	50	12	140	0	202	2	54	48	0	104	44
% App. Total	65.2	26.1	8.7	0		57.6	34.8	7.6	0		24.8	5.9	69.3	0		1.9	51.9	46.2	0		
PHF	.682	.500	.500	.000	.719	.760	.639	.833	.000	.767	.625	.750	.778	.000	.842	.250	.794	.706	.000	.867	.842
Automobiles	28	11	4	0	43	72	44	10	0	126	50	12	136	0	198	1	51	46	0	98	44
% Automobiles	93.3	91.7	100	0	93.5	94.7	95.7	100	0	95.5	100	100	97.1	0	98.0	50.0	94.4	95.8	0	94.2	96.2
Trucks	2	1	0	0	3	1	2	0	0	3	0	0	1	0	1	1	3	2	0	6	1
% Trucks	6.7	8.3	0	0	6.5	1.3	4.3	0	0	2.3	0	0	0.7	0	0.5	50.0	5.6	4.2	0	5.8	2.3
Buses	0	0	0	0	0	3	0	0	0	3	0	0	3	0	3	0	0	0	0	0	1
% Buses	0	0	0	0	0	3.9	0	0	0	2.3	0	0	2.1	0	1.5	0	0	0	0	0	

Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15					07:45					07:30					07:45				
+0 mins.	9	6	1	0	16	22	18	3	0	43	10	3	45	0	58	0	13	17	0	30
+15 mins.	11	1	1	0	13	22	8	3	0	33	20	3	37	0	60	2	12	9	0	23
+30 mins.	6	2	2	0	10	25	11	2	0	38	14	2	26	0	42	0	17	11	0	28
+45 mins.	10	6	0	0	16	16	12	3	0	31	6	4	32	0	42	1	13	12	0	26
Total Volume	36	15	4	0	55	85	49	11	0	145	50	12	140	0	202	3	55	49	0	107
% App. Total	65.5	27.3	7.3	0		58.6	33.8	7.6	0		24.8	5.9	69.3	0		2.8	51.4	45.8	0	
PHF	.818	.625	.500	.000	.859	.850	.681	.917	.000	.843	.625	.750	.778	.000	.842	.375	.809	.721	.000	.892
Automobiles	35	14	4	0	53	81	47	10	0	138	50	12	136	0	198	1	52	48	0	101
% Automobiles	97.2	93.3	100	0	96.4	95.3	95.9	90.9	0	95.2	100	100	97.1	0	98	33.3	94.5	98	0	94.4
Trucks	1	1	0	0	2	1	2	1	0	4	0	0	1	0	1	1	3	1	0	5
% Trucks	2.8	6.7	0	0	3.6	1.2	4.1	9.1	0	2.8	0	0	0.7	0	0.5	33.3	5.5	2	0	4.7
Buses	0	0	0	0	0	3	0	0	0	3	0	0	3	0	3	1	0	0	0	1
% Buses	0	0	0	0	0	3.5	0	0	0	2.1	0	0	2.1	0	1.5	33.3	0	0	0	0.9

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:00

	12:00					12:15					12:30					12:45				
12:00	3	2	2	0	7	4	13	2	0	19	12	2	11	0	25	1	14	10	0	25
12:15	2	4	2	0	8	10	7	1	0	18	6	2	12	0	20	0	10	9	0	19
12:30	3	3	0	0	6	8	7	4	0	19	12	8	13	0	33	0	11	8	0	19
12:45	1	3	0	0	4	9	8	2	0	19	15	6	19	1	41	0	7	9	0	16
Total Volume	9	12	4	0	25	31	35	9	0	75	45	18	55	1	119	1	42	36	0	79
% App. Total	36	48	16	0		41.3	46.7	12	0		37.8	15.1	46.2	0.8		1.3	53.2	45.6	0	
PHF	.750	.750	.500	.000	.781	.775	.673	.563	.000	.987	.750	.563	.724	.250	.726	.250	.750	.900	.000	.790
Automobiles	9	12	4	0	25	28	33	9	0	70	45	16	51	1	113	1	42	33	0	76
% Automobiles	100	100	100	0	100	90.3	94.3	100	0	93.3	100	88.9	92.7	100	95.0	100	100	91.7	0	96.2
Trucks	0	0	0	0	0	3	2	0	0	5	0	2	4	0	6	0	0	3	0	3
% Trucks	0	0	0	0	0	9.7	5.7	0	0	6.7	0	11.1	7.3	0	5.0	0	0	8.3	0	3.8
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Turning Movement Count

File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/20
 Page No : 5

	Davies Manor Dr Southbound					E Davies Plantation Rd Westbound					Davies Plantation Rd Northbound					Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:00					13:00					12:00					11:15				
+0 mins.	3	6	1	0	10	11	6	4	0	21	12	2	11	0	25	0	15	5	0	20
+15 mins.	5	6	1	0	12	13	4	3	0	20	6	2	12	0	20	1	9	10	0	20
+30 mins.	2	5	0	0	7	9	8	4	0	21	12	8	13	0	33	1	14	9	0	24
+45 mins.	5	2	1	0	8	6	15	3	0	24	15	6	19	1	41	1	14	10	0	25
Total Volume	15	19	3	0	37	39	33	14	0	86	45	18	55	1	119	3	52	34	0	89
% App. Total	40.5	51.4	8.1	0		45.3	38.4	16.3	0		37.8	15.1	46.2	0.8		3.4	58.4	38.2	0	
PHF	.750	.792	.750	.000	.771	.750	.550	.875	.000	.896	.750	.563	.724	.250	.726	.750	.867	.850	.000	.890
Automobiles	14	18	3	0	35	39	32	14	0	85	45	16	51	1	113	3	49	32	0	84
% Automobiles	93.3	94.7	100	0	94.6	100	97	100	0	98.8	100	88.9	92.7	100	95	100	94.2	94.1	0	94.4
Trucks	1	1	0	0	2	0	1	0	0	1	0	2	4	0	6	0	2	2	0	4
% Trucks	6.7	5.3	0	0	5.4	0	3	0	0	1.2	0	11.1	7.3	0	5	0	3.8	5.9	0	4.5
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0	0	1.1

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45

	16:45					17:00					17:15					17:30				
16:45	5	6	1	0	12	22	26	4	0	52	18	12	22	0	52	0	35	18	0	53
17:00	7	7	1	0	15	24	8	3	0	35	24	6	29	0	59	2	22	26	0	50
17:15	0	3	2	0	5	24	18	8	0	50	15	7	27	0	49	4	22	21	0	47
17:30	2	3	0	0	5	31	15	8	0	54	21	2	27	0	50	2	25	23	0	50
Total Volume	14	19	4	0	37	101	67	23	0	191	78	27	105	0	210	8	104	88	0	200
% App. Total	37.8	51.4	10.8	0		52.9	35.1	12	0		37.1	12.9	50	0		4	52	44	0	
PHF	.500	.679	.500	.000	.617	.815	.644	.719	.000	.884	.813	.563	.905	.000	.890	.500	.743	.846	.000	.943
Automobiles	14	18	4	0	36	100	66	22	0	188	75	26	105	0	206	6	102	87	0	195
% Automobiles	100	94.7	100	0	97.3	99.0	98.5	95.7	0	98.4	96.2	96.3	100	0	98.1	75.0	98.1	98.9	0	97.5
Trucks	0	1	0	0	1	0	1	1	0	2	2	1	0	0	3	1	2	0	0	3
% Trucks	0	5.3	0	0	2.7	0	1.5	4.3	0	1.0	2.6	3.7	0	0	1.4	12.5	1.9	0	0	1.5
Buses	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	1	0	1	0	2
% Buses	0	0	0	0	0	1.0	0	0	0	0.5	1.3	0	0	0	0.5	12.5	0	1.1	0	1.0

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:15					15:30					16:30					16:30				
+0 mins.	4	4	2	0	10	31	11	6	0	48	21	8	24	0	53	0	23	27	0	50
+15 mins.	5	10	0	0	15	29	15	2	0	46	18	12	22	0	52	0	35	18	0	53
+30 mins.	5	6	1	0	12	42	7	6	0	55	24	6	29	0	59	2	22	26	0	50
+45 mins.	7	7	1	0	15	24	14	6	0	44	15	7	27	0	49	4	22	21	0	47
Total Volume	21	27	4	0	52	126	47	20	0	193	78	33	102	0	213	6	102	92	0	200
% App. Total	40.4	51.9	7.7	0		65.3	24.4	10.4	0		36.6	15.5	47.9	0		3	51	46	0	
PHF	.750	.675	.500	.000	.867	.750	.783	.833	.000	.877	.813	.688	.879	.000	.903	.375	.729	.852	.000	.943
Automobiles	21	26	4	0	51	122	46	20	0	188	74	32	102	0	208	4	100	90	0	194
% Automobiles	100	96.3	100	0	98.1	96.8	97.9	100	0	97.4	94.9	97	100	0	97.7	66.7	98	97.8	0	97
Trucks	0	1	0	0	1	0	1	0	0	1	2	1	0	0	3	1	2	0	0	3
% Trucks	0	3.7	0	0	1.9	0	2.1	0	0	0.5	2.6	3	0	0	1.4	16.7	2	0	0	1.5
Buses	0	0	0	0	0	4	0	0	0	4	2	0	0	0	2	1	0	2	0	3
% Buses	0	0	0	0	0	3.2	0	0	0	2.1	2.6	0	0	0	0.9	16.7	0	2.2	0	1.5

Intersection Turning Movement Count

Davies Plantation Rd @ Davies Manor Dr
Bartlett, TN

File Name : 24010-
Site Code : 24010-
Start Date : 1/31/20
Page No : 1

Groups Printed- Trucks - Buses

	Davies Manor Dr Southbound					E Davies Plantation Rd Westbound					Davies Plantation Rd Northbound					Davies Plantation Rd Eastbound						
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc	
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
07:00	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	2	0	0	3	
07:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	
07:45	1	1	0	0	2	0	0	0	0	0	0	0	2	0	2	0	1	1	0	0	2	
Total	1	2	0	0	3	0	0	0	0	0	0	2	2	0	4	0	3	4	0	0	7	
08:00	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	1	1	0	0	0	2	
08:15	1	0	0	0	1	2	2	0	0	4	0	0	2	0	2	0	0	0	0	0	0	
08:30	0	0	0	0	0	0	0	1	0	1	0	0	3	0	3	1	1	0	0	0	2	
08:45	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	
Total	1	0	0	0	1	5	2	1	0	8	0	0	6	0	6	2	2	0	0	0	4	
09:00	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	2	0	0	0	2	
09:15	0	0	1	0	1	0	1	0	0	1	0	1	1	0	2	0	0	0	0	0	0	
09:30	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	1	0	0	0	1	
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	1	0	1	1	2	1	0	4	1	1	1	0	3	0	3	0	0	0	3	
10:00	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
10:15	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	1	1	0	0	3	
10:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	
10:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	
Total	1	1	0	0	2	0	0	0	0	0	1	2	1	0	4	1	2	1	0	0	4	
11:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
11:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	0	3	
11:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
Total	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	3	1	0	0	4	
12:00	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	0	1	0	0	1	
12:15	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	1	
12:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	1	0	0	1	
12:45	0	0	0	0	0	1	0	0	0	1	0	1	2	0	3	0	0	0	0	0	0	
Total	0	0	0	0	0	3	2	0	0	5	0	2	4	0	6	0	0	3	0	0	3	
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	1	
13:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	
13:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	
Total	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	0	0	2	0	0	2	
14:00	0	0	0	0	0	0	2	0	0	2	3	0	0	0	3	0	0	0	0	0	0	
14:15	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	0	0	1	0	0	1	
14:30	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	
14:45	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	
Total	0	1	0	0	1	1	6	0	0	7	4	1	1	0	6	0	0	2	0	0	2	

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/20
 Page No : 2

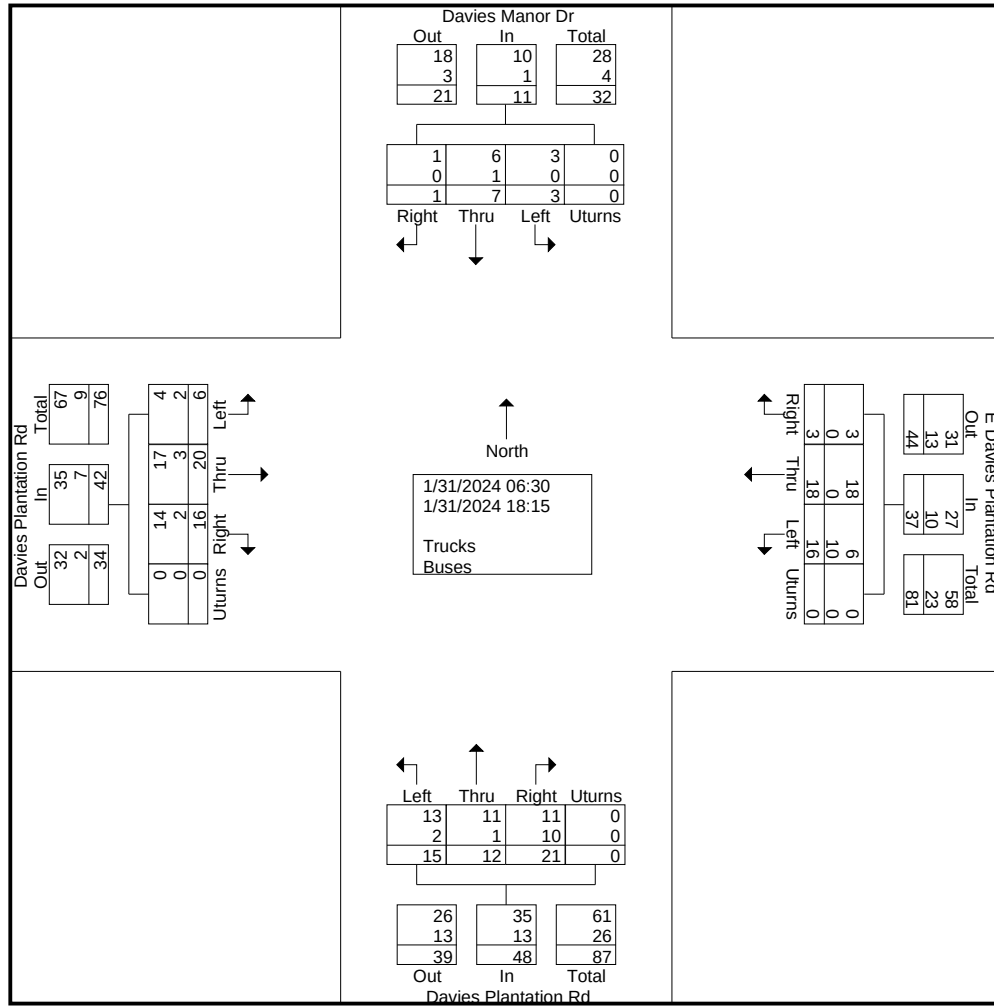
Groups Printed- Trucks - Buses

	Davies Manor Dr Southbound					E Davies Plantation Rd Westbound					Davies Plantation Rd Northbound					Davies Plantation Rd Eastbound						
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc	
15:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	1	:
15:15	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
15:30	0	0	0	0	0	0	0	0	0	0	1	1	2	0	4	0	1	0	0	0	1	
15:45	0	1	0	0	1	1	1	0	0	2	0	0	3	0	3	1	1	0	0	0	2	
Total	0	1	0	0	1	2	1	0	0	3	2	1	5	0	8	1	2	1	0	0	4	:
16:00	0	0	0	0	0	1	0	0	0	1	2	0	0	0	2	0	1	0	0	0	1	:
16:15	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
16:30	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	0	1	0	0	1	
16:45	0	1	0	0	1	1	1	0	0	2	3	1	0	0	4	0	2	1	0	0	3	
Total	0	1	0	0	1	4	3	0	0	7	6	1	0	0	7	0	3	2	0	0	5	:
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	:
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	0	0	0	2	:
18:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1:
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Grand Total	3	7	1	0	11	16	18	3	0	37	15	12	21	0	48	6	20	16	0	42		
Apprch %	27.3	63.6	9.1	0		43.2	48.6	8.1	0		31.2	25	43.8	0		14.3	47.6	38.1	0			
Total %	2.2	5.1	0.7	0	8	11.6	13	2.2	0	26.8	10.9	8.7	15.2	0	34.8	4.3	14.5	11.6	0	30.4		
Trucks	3	6	1	0	10	6	18	3	0	27	13	11	11	0	35	4	17	14	0	35	11	
% Trucks	100	85.7	100	0	90.9	37.5	100	100	0	73	86.7	91.7	52.4	0	72.9	66.7	85	87.5	0	83.3	77	
Buses	0	1	0	0	1	10	0	0	0	10	2	1	10	0	13	2	3	2	0	7	:	
% Buses	0	14.3	0	0	9.1	62.5	0	0	0	27	13.3	8.3	47.6	0	27.1	33.3	15	12.5	0	16.7	22	

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

Davies Plantation Rd @ Davies Manor Dr
Bartlett, TN

File Name : 24010-1P
Site Code : 24010-1P
Start Date : 1/31/2024
Page No : 1

Groups Printed- Pedestrians - Bicycles

	Davies Manor Dr Southbound	E Davies Plantation Rd Westbound	Davies Plantation Rd Northbound	Davies Plantation Rd Eastbound	
Start Time	Peds	Peds	Peds	Peds	Int. Total
06:30	0	0	0	0	0
06:45	0	0	0	0	0
Total	0	0	0	0	0
07:00	0	0	0	0	0
07:15	0	0	0	0	0
07:30	0	0	0	0	0
07:45	0	0	0	0	0
Total	0	0	0	0	0
08:00	0	0	0	0	0
08:15	0	0	0	0	0
08:30	0	0	0	0	0
08:45	0	0	0	0	0
Total	0	0	0	0	0
09:00	0	0	0	0	0
09:15	0	0	0	0	0
09:30	0	0	0	0	0
09:45	0	0	0	0	0
Total	0	0	0	0	0
10:00	0	0	0	0	0
10:15	0	0	0	0	0
10:30	0	0	0	0	0
10:45	0	0	0	0	0
Total	0	0	0	0	0
11:00	0	0	0	0	0
11:15	0	0	0	0	0
11:30	0	0	0	0	0
11:45	0	0	0	0	0
Total	0	0	0	0	0
12:00	0	0	0	0	0
12:15	0	0	0	0	0
12:30	0	0	0	0	0
12:45	0	0	0	0	0
Total	0	0	0	0	0
13:00	0	0	0	0	0
13:15	0	0	0	0	0
13:30	0	0	0	0	0
13:45	0	0	0	0	0
Total	0	0	0	0	0
14:00	0	0	0	0	0
14:15	0	0	0	0	0
14:30	0	0	0	0	0
14:45	0	0	0	0	0
Total	0	0	0	0	0

Intersection Turning Movement Count

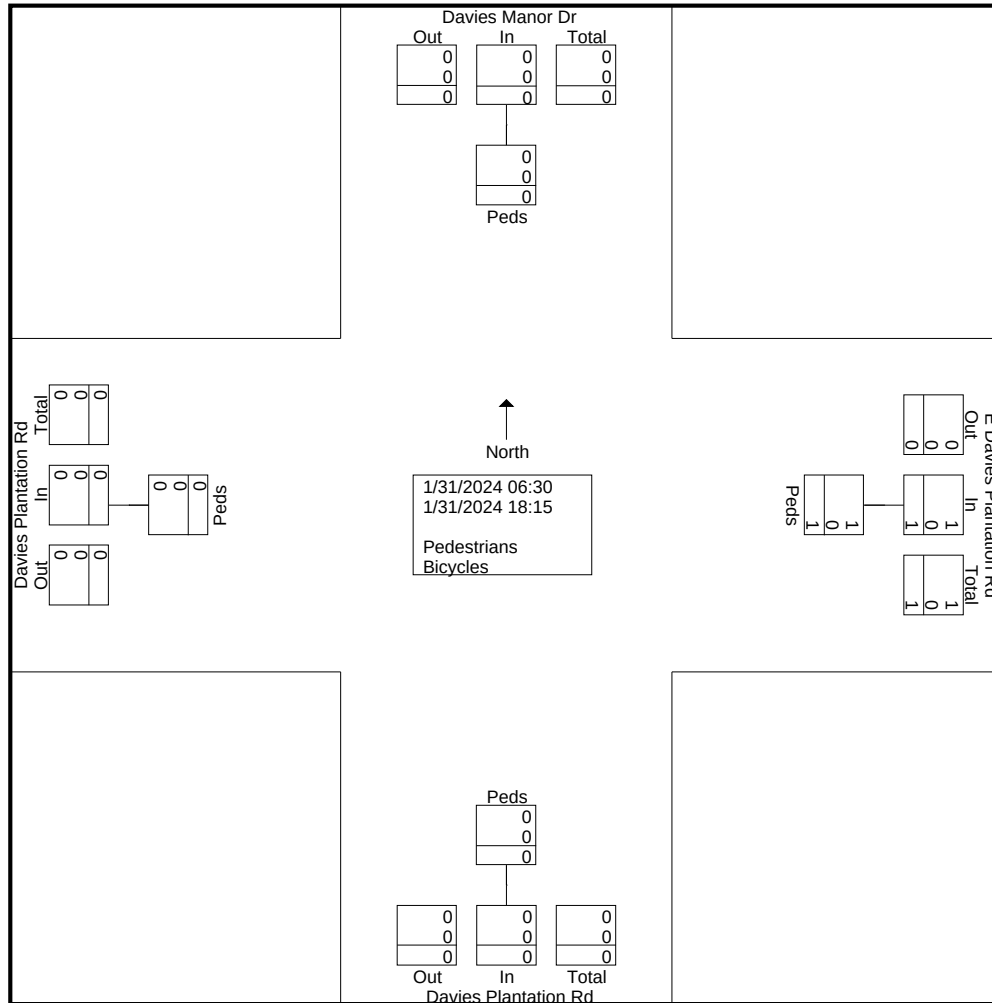
File Name : 24010-1P
 Site Code : 24010-1P
 Start Date : 1/31/2024
 Page No : 2

Groups Printed- Pedestrians - Bicycles

	Davies Manor Dr Southbound	E Davies Plantation Rd Westbound	Davies Plantation Rd Northbound	Davies Plantation Rd Eastbound	
Start Time	Peds	Peds	Peds	Peds	Int. Total
15:00	0	0	0	0	0
15:15	0	0	0	0	0
15:30	0	0	0	0	0
15:45	0	0	0	0	0
Total	0	0	0	0	0
16:00	0	0	0	0	0
16:15	0	0	0	0	0
16:30	0	1	0	0	1
16:45	0	0	0	0	0
Total	0	1	0	0	1
17:00	0	0	0	0	0
17:15	0	0	0	0	0
17:30	0	0	0	0	0
17:45	0	0	0	0	0
Total	0	0	0	0	0
18:00	0	0	0	0	0
18:15	0	0	0	0	0
Grand Total	0	1	0	0	1
Apprch %	0	100	0	0	
Total %	0	100	0	0	
Pedestrians	0	1	0	0	1
% Pedestrians	0	100	0	0	100
Bicycles	0	0	0	0	0
% Bicycles	0	0	0	0	0

Intersection Turning Movement Count

File Name : 24010-1P
 Site Code : 24010-1P
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

Davies Plantation Rd @ Canada Rd
Lakeland, TN

File Name : 24010-
Site Code : 24010-
Start Date : 1/31/20
Page No : 1

Groups Printed- Automobiles - Trucks - Buses

	Canada Rd Southbound						Beverle Rivera Dr Westbound						Canada Rd Northbound						E Davies Plantation Rd Eastbound						
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc				
06:30	2	90	5	0	97	31	0	0	0	31	12	43	9	0	64	2	3	16	0	21	2'				
06:45	2	95	8	0	105	56	0	2	0	58	15	36	19	1	71	4	3	21	0	28	2'				
Total	4	185	13	0	202	87	0	2	0	89	27	79	28	1	135	6	6	37	0	49	4'				
07:00	3	123	4	0	130	84	7	3	0	94	24	47	16	4	91	8	5	33	0	46	3'				
07:15	1	137	5	0	143	96	12	3	0	111	26	57	15	5	103	6	7	53	0	66	4'				
07:30	3	142	7	0	152	88	7	2	0	97	26	63	32	1	122	24	7	38	0	69	4'				
07:45	4	113	24	0	141	67	4	3	0	74	39	83	38	1	161	29	10	27	0	66	4'				
Total	11	515	40	0	566	335	30	11	0	376	115	250	101	11	477	67	29	151	0	247	16'				
08:00	7	110	32	0	149	75	8	1	0	84	33	58	52	1	144	9	13	29	0	51	4'				
08:15	4	115	25	0	144	64	3	2	0	69	27	45	50	2	124	15	21	29	0	65	4'				
08:30	19	112	15	0	146	92	20	6	0	118	23	38	55	2	118	10	26	23	0	59	4'				
08:45	7	83	13	0	103	112	20	7	0	139	22	28	53	1	104	4	11	22	0	37	3'				
Total	37	420	85	0	542	343	51	16	0	410	105	169	210	6	490	38	71	103	0	212	16'				
09:00	3	81	9	0	93	77	24	7	0	108	27	39	30	2	98	12	4	17	0	33	3'				
09:15	3	86	7	0	96	50	3	5	0	58	17	56	30	2	105	8	5	18	0	31	2'				
09:30	1	79	7	0	87	49	7	3	0	59	13	44	25	2	84	4	6	19	0	29	2'				
09:45	3	72	3	0	78	47	4	1	0	52	13	36	27	1	77	8	6	19	0	33	2'				
Total	10	318	26	0	354	223	38	16	0	277	70	175	112	7	364	32	21	73	0	126	11'				
10:00	2	63	8	0	73	28	6	7	0	41	12	32	24	1	69	2	5	19	0	26	2'				
10:15	2	59	4	0	65	33	3	1	0	37	19	47	30	5	101	6	9	19	0	34	2'				
10:30	3	60	4	0	67	53	1	4	0	58	18	48	42	2	110	9	2	13	0	24	2'				
10:45	4	74	11	0	89	34	3	5	0	42	23	50	42	2	117	10	2	14	0	26	2'				
Total	11	256	27	0	294	148	13	17	0	178	72	177	138	10	397	27	18	65	0	110	9'				
11:00	2	64	4	0	70	48	5	3	0	56	10	55	27	3	95	6	7	15	0	28	2'				
11:15	3	63	10	0	76	35	7	4	0	46	23	43	23	5	94	10	7	23	0	40	2'				
11:30	2	68	8	0	78	36	3	1	0	40	20	55	31	1	107	7	5	21	0	33	2'				
11:45	4	60	10	0	74	35	3	5	0	43	15	52	33	2	102	11	3	15	0	29	2'				
Total	11	255	32	0	298	154	18	13	0	185	68	205	114	11	398	34	22	74	0	130	10'				
12:00	2	57	7	0	66	41	3	2	0	46	15	52	36	1	104	6	8	27	0	41	2'				
12:15	2	61	5	0	68	38	7	1	0	46	19	59	46	2	126	7	6	22	0	35	2'				
12:30	1	73	3	0	77	32	2	3	0	37	25	65	39	1	130	8	9	15	0	32	2'				
12:45	1	56	7	0	64	31	7	3	0	41	18	51	26	1	96	14	9	17	0	40	2'				
Total	6	247	22	0	275	142	19	9	0	170	77	227	147	5	456	35	32	81	0	148	10'				
13:00	0	74	9	0	83	40	6	4	0	50	19	67	46	1	133	6	4	26	0	36	3'				
13:15	2	75	3	0	80	36	6	2	0	44	21	65	27	2	115	3	4	22	0	29	2'				
13:30	2	57	10	0	69	35	4	3	0	42	25	59	32	6	122	9	7	19	0	35	2'				
13:45	2	44	7	0	53	30	3	1	0	34	20	62	36	4	122	5	6	15	0	26	2'				
Total	6	250	29	0	285	141	19	10	0	170	85	253	141	13	492	23	21	82	0	126	10'				
14:00	0	65	8	0	73	33	3	2	0	38	17	72	28	3	120	4	5	15	0	24	2'				
14:15	3	64	16	0	83	34	7	2	0	43	18	63	36	6	123	6	3	25	0	34	2'				
14:30	2	72	12	0	86	47	4	4	0	55	26	62	46	5	139	15	2	15	0	32	3'				
14:45	4	71	8	0	83	34	1	1	0	36	23	87	47	1	158	18	9	10	0	37	3'				
Total	9	272	44	0	325	148	15	9	0	172	84	284	157	15	540	43	19	65	0	127	11'				

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

File Name : 24010-

Site Code : 24010-

Start Date : 1/31/20

Page No : 2

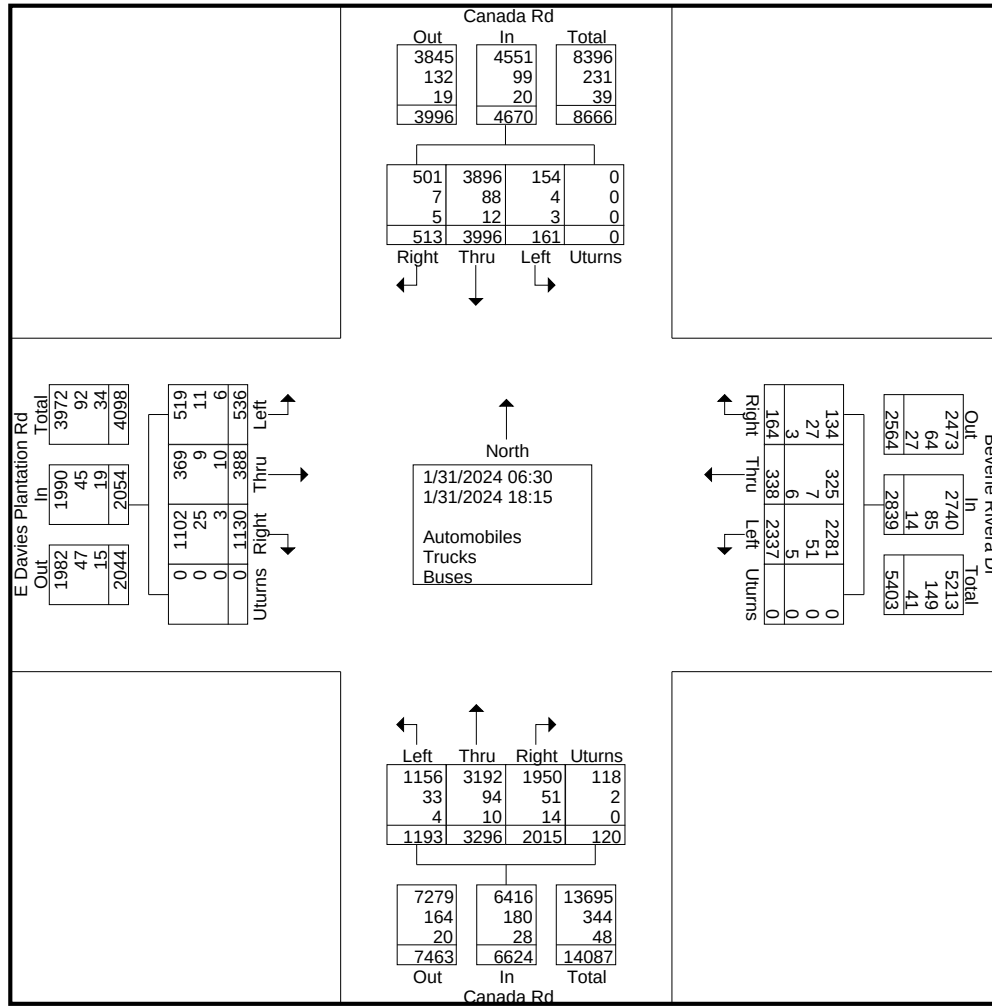
Groups Printed- Automobiles - Trucks - Buses

	Canada Rd Southbound					Beverle Rivera Dr Westbound					Canada Rd Northbound					E Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. To
15:00	3	74	6	0	83	37	3	7	0	47	24	84	51	4	163	17	6	17	0	40	3:00
15:15	5	90	23	0	118	32	6	3	0	41	30	90	75	0	195	9	11	14	0	34	3:15
15:30	9	94	19	0	122	29	5	5	0	39	37	108	72	3	220	10	19	22	0	51	4:00
15:45	3	68	15	0	86	47	12	4	0	63	34	89	78	5	206	17	18	26	0	61	4:15
Total	20	326	63	0	409	145	26	19	0	190	125	371	276	12	784	53	54	79	0	186	15:00
16:00	4	85	9	0	98	61	25	13	0	99	33	110	46	2	191	20	14	22	0	56	4:30
16:15	5	72	6	0	83	78	17	8	0	103	35	111	50	0	196	17	8	25	0	50	4:45
16:30	3	78	13	0	94	47	9	2	0	58	33	100	61	4	198	18	11	30	0	59	4:00
16:45	5	80	12	0	97	43	12	2	0	57	41	120	62	1	224	20	9	39	0	68	4:15
Total	17	315	40	0	372	229	63	25	0	317	142	441	219	7	809	75	42	116	0	233	17:00
17:00	1	109	9	0	119	46	5	5	0	56	32	132	63	4	231	21	11	44	0	76	4:30
17:15	2	144	27	0	173	35	9	1	0	45	46	110	53	3	212	22	10	33	0	65	4:45
17:30	2	99	14	0	115	43	12	2	0	57	44	114	70	6	234	18	14	36	0	68	4:00
17:45	7	88	11	0	106	35	7	4	0	46	35	102	60	2	199	17	10	40	0	67	4:15
Total	12	440	61	0	513	159	33	12	0	204	157	458	246	15	876	78	45	153	0	276	18:00
18:00	2	103	13	0	118	47	3	2	0	52	40	115	59	3	217	11	4	29	0	44	4:30
18:15	5	94	18	0	117	36	10	3	0	49	26	92	67	4	189	14	4	22	0	40	3:00
Grand Total	161	3996	513	0	4670	2337	338	164	0	2839	1193	3296	2015	120	6624	536	388	1130	0	2054	1618
Apprch %	3.4	85.6	11	0		82.3	11.9	5.8	0		18	49.8	30.4	1.8		26.1	18.9	55	0		
Total %	1	24.7	3.2	0	28.9	14.4	2.1	1	0	17.5	7.4	20.4	12.4	0.7	40.9	3.3	2.4	7	0	12.7	
Automobiles	154	3896	501	0	4551	2281	325	134	0	2740	1156	3192	1950	118	6416	519	369	1102	0	1990	1569
% Automobiles	95.7	97.5	97.7	0	97.5	97.6	96.2	81.7	0	96.5	96.9	96.8	96.8	98.3	96.9	96.8	95.1	97.5	0	96.9	95.7
Trucks	4	88	7	0	99	51	7	27	0	85	33	94	51	2	180	11	9	25	0	45	40
% Trucks	2.5	2.2	1.4	0	2.1	2.2	2.1	16.5	0	3	2.8	2.9	2.5	1.7	2.7	2.1	2.3	2.2	0	2.2	2.8
Buses	3	12	5	0	20	5	6	3	0	14	4	10	14	0	28	6	10	3	0	19	19
% Buses	1.9	0.3	1	0	0.4	0.2	1.8	1.8	0	0.5	0.3	0.3	0.7	0	0.4	1.1	2.6	0.3	0	0.9	0.3

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

File Name : 24010-
 Site Code : 24010-
 Start Date : 1/31/20
 Page No : 3



Intersection Turning Movement Count

File Name : 24010-

Site Code : 24010-

Start Date : 1/31/20

Page No : 4

	Canada Rd Southbound					Beverle Rivera Dr Westbound					Canada Rd Northbound					E Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. T.C.
Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	1	137	5	0	143	96	12	3	0	111	26	57	15	5	103	6	7	53	0	66	44
07:30	3	142	7	0	152	88	7	2	0	97	26	63	32	1	122	24	7	38	0	69	44
07:45	4	113	24	0	141	67	4	3	0	74	39	83	38	1	161	29	10	27	0	66	44
08:00	7	110	32	0	149	75	8	1	0	84	33	58	52	1	144	9	13	29	0	51	44
Total Volume	15	502	68	0	585	326	31	9	0	366	124	261	137	8	530	68	37	147	0	252	176
% App. Total	2.6	85.8	11.6	0		89.1	8.5	2.5	0		23.4	49.2	25.8	1.5		27	14.7	58.3	0		
PHF	.536	.884	.531	.000	.962	.849	.646	.750	.000	.824	.795	.786	.659	.400	.823	.586	.712	.693	.000	.913	.913
Automobiles	14	492	65	0	571	322	31	8	0	361	121	248	132	8	509	65	36	143	0	244	168
% Automobiles	93.3	98.0	95.6	0	97.6	98.8	100	88.9	0	98.6	97.6	95.0	96.4	100	96.0	95.6	97.3	97.3	0	96.8	97.6
Trucks	0	6	2	0	8	4	0	0	0	4	2	9	4	0	15	1	1	4	0	6	6
% Trucks	0	1.2	2.9	0	1.4	1.2	0	0	0	1.1	1.6	3.4	2.9	0	2.8	1.5	2.7	2.7	0	2.4	1.1
Buses	1	4	1	0	6	0	0	1	0	1	1	4	1	0	6	2	0	0	0	2	6
% Buses	6.7	0.8	1.5	0	1.0	0	0	11.1	0	0.3	0.8	1.5	0.7	0	1.1	2.9	0	0	0	0.8	0.3

Peak Hour Analysis From 06:30 to 09:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30					08:15					07:30					07:15				
+0 mins.	3	142	7	0	152	64	3	2	0	69	26	63	32	1	122	6	7	53	0	66
+15 mins.	4	113	24	0	141	92	20	6	0	118	39	83	38	1	161	24	7	38	0	69
+30 mins.	7	110	32	0	149	112	20	7	0	139	33	58	52	1	144	29	10	27	0	66
+45 mins.	4	115	25	0	144	77	24	7	0	108	27	45	50	2	124	9	13	29	0	51
Total Volume	18	480	88	0	586	345	67	22	0	434	125	249	172	5	551	68	37	147	0	252
% App. Total	3.1	81.9	15	0		79.5	15.4	5.1	0		22.7	45.2	31.2	0.9		27	14.7	58.3	0	
PHF	.643	.845	.688	.000	.964	.770	.698	.786	.000	.781	.801	.750	.827	.625	.856	.586	.712	.693	.000	.913
Automobiles	17	471	83	0	571	337	66	20	0	423	119	239	166	5	529	65	36	143	0	244
% Automobiles	94.4	98.1	94.3	0	97.4	97.7	98.5	90.9	0	97.5	95.2	96	96.5	100	96	95.6	97.3	97.3	0	96.8
Trucks	0	5	2	0	7	7	0	1	0	8	5	6	5	0	16	1	1	4	0	6
% Trucks	0	1	2.3	0	1.2	2	0	4.5	0	1.8	4	2.4	2.9	0	2.9	1.5	2.7	2.7	0	2.4
Buses	1	4	3	0	8	1	1	1	0	3	1	4	1	0	6	2	0	0	0	2
% Buses	5.6	0.8	3.4	0	1.4	0.3	1.5	4.5	0	0.7	0.8	1.6	0.6	0	1.1	2.9	0	0	0	0.8

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 12:15

12:15	2	61	5	0	68	38	7	1	0	46	19	59	46	2	126	7	6	22	0	35	27
12:30	1	73	3	0	77	32	2	3	0	37	25	65	39	1	130	8	9	15	0	32	27
12:45	1	56	7	0	64	31	7	3	0	41	18	51	26	1	96	14	9	17	0	40	27
13:00	0	74	9	0	83	40	6	4	0	50	19	67	46	1	133	6	4	26	0	36	30
Total Volume	4	264	24	0	292	141	22	11	0	174	81	242	157	5	485	35	28	80	0	143	106
% App. Total	1.4	90.4	8.2	0		81	12.6	6.3	0		16.7	49.9	32.4	1		24.5	19.6	55.9	0		
PHF	.500	.892	.667	.000	.880	.881	.786	.688	.000	.870	.810	.903	.853	.625	.912	.625	.778	.769	.000	.894	.913
Automobiles	4	254	24	0	282	135	20	8	0	163	81	227	152	5	465	33	26	79	0	138	106
% Automobiles	100	96.2	100	0	96.6	95.7	90.9	72.7	0	93.7	100	93.8	96.8	100	95.9	94.3	92.9	98.8	0	96.5	95.7
Trucks	0	10	0	0	10	5	2	3	0	10	0	15	5	0	20	2	2	1	0	5	6
% Trucks	0	3.8	0	0	3.4	3.5	9.1	27.3	0	5.7	0	6.2	3.2	0	4.1	5.7	7.1	1.3	0	3.5	4.1
Buses	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0.7	0	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0

Intersection Turning Movement Count

File Name : 24010-

Site Code : 24010-

Start Date : 1/31/20

Page No : 5

	Canada Rd Southbound					Beverle Rivera Dr Westbound					Canada Rd Northbound					E Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Tc

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:45					10:30					13:00					12:00				
+0 mins.	4	74	11	0	89	53	1	4	0	58	19	67	46	1	133	6	8	27	0	41
+15 mins.	2	64	4	0	70	34	3	5	0	42	21	65	27	2	115	7	6	22	0	35
+30 mins.	3	63	10	0	76	48	5	3	0	56	25	59	32	6	122	8	9	15	0	32
+45 mins.	2	68	8	0	78	35	7	4	0	46	20	62	36	4	122	14	9	17	0	40
Total Volume	11	269	33	0	313	170	16	16	0	202	85	253	141	13	492	35	32	81	0	148
% App. Total	3.5	85.9	10.5	0		84.2	7.9	7.9	0		17.3	51.4	28.7	2.6		23.6	21.6	54.7	0	
PHF	.688	.909	.750	.000	.879	.802	.571	.800	.000	.871	.850	.944	.766	.542	.925	.625	.889	.750	.000	.902
Automobiles	8	256	32	0	296	159	16	11	0	186	81	243	138	12	474	34	30	79	0	143
% Automobiles	72.7	95.2	97	0	94.6	93.5	100	68.8	0	92.1	95.3	96	97.9	92.3	96.3	97.1	93.8	97.5	0	96.6
Trucks	3	13	1	0	17	11	0	5	0	16	4	10	3	1	18	1	2	2	0	5
% Trucks	27.3	4.8	3	0	5.4	6.5	0	31.2	0	7.9	4.7	4	2.1	7.7	3.7	2.9	6.2	2.5	0	3.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45

	16:45					17:00					17:15					17:30					
+0 mins.	5	80	12	0	97	43	12	2	0	57	41	120	62	1	224	20	9	39	0	68	4
+15 mins.	1	109	9	0	119	46	5	5	0	56	32	132	63	4	231	21	11	44	0	76	4
+30 mins.	2	144	27	0	173	35	9	1	0	45	46	110	53	3	212	22	10	33	0	65	4
+45 mins.	2	99	14	0	115	43	12	2	0	57	44	114	70	6	234	18	14	36	0	68	4
Total Volume	10	432	62	0	504	167	38	10	0	215	163	476	248	14	901	81	44	152	0	277	18
% App. Total	2	85.7	12.3	0		77.7	17.7	4.7	0		18.1	52.8	27.5	1.6		29.2	15.9	54.9	0		
PHF	.500	.750	.574	.000	.728	.908	.792	.500	.000	.943	.886	.902	.886	.583	.963	.920	.786	.864	.000	.911	.9
Automobiles	10	429	60	0	499	167	38	8	0	213	160	467	248	14	889	80	44	150	0	274	18
% Automobiles	100	99.3	96.8	0	99.0	100	100	80.0	0	99.1	98.2	98.1	100	100	98.7	98.8	100	98.7	0	98.9	98
Trucks	0	3	0	0	3	0	0	2	0	2	2	8	0	0	10	0	0	2	0	2	
% Trucks	0	0.7	0	0	0.6	0	0	20.0	0	0.9	1.2	1.7	0	0	1.1	0	0	1.3	0	0.7	0
Buses	0	0	2	0	2	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	0
% Buses	0	0	3.2	0	0.4	0	0	0	0	0	0.6	0.2	0	0	0.2	1.2	0	0	0	0.4	0

Peak Hour Analysis From 14:00 to 18:15 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	17:00					15:45					16:45					16:45				
+0 mins.	1	109	9	0	119	47	12	4	0	63	41	120	62	1	224	20	9	39	0	68
+15 mins.	2	144	27	0	173	61	25	13	0	99	32	132	63	4	231	21	11	44	0	76
+30 mins.	2	99	14	0	115	78	17	8	0	103	46	110	53	3	212	22	10	33	0	65
+45 mins.	7	88	11	0	106	47	9	2	0	58	44	114	70	6	234	18	14	36	0	68
Total Volume	12	440	61	0	513	233	63	27	0	323	163	476	248	14	901	81	44	152	0	277
% App. Total	2.3	85.8	11.9	0		72.1	19.5	8.4	0		18.1	52.8	27.5	1.6		29.2	15.9	54.9	0	
PHF	.429	.764	.565	.000	.741	.747	.630	.519	.000	.784	.886	.902	.886	.583	.963	.920	.786	.864	.000	.911
Automobiles	12	437	61	0	510	228	58	24	0	310	160	467	248	14	889	80	44	150	0	274
% Automobiles	100	99.3	100	0	99.4	97.9	92.1	88.9	0	96	98.2	98.1	100	100	98.7	98.8	100	98.7	0	98.9
Trucks	0	3	0	0	3	2	0	3	0	5	2	8	0	0	10	0	0	2	0	2
% Trucks	0	0.7	0	0	0.6	0.9	0	11.1	0	1.5	1.2	1.7	0	0	1.1	0	0	1.3	0	0.7
Buses	0	0	0	0	0	3	5	0	0	8	1	1	0	0	2	1	0	0	0	1
% Buses	0	0	0	0	0	1.3	7.9	0	0	2.5	0.6	0.2	0	0	0.2	1.2	0	0	0	0.4

Intersection Turning Movement Count

Davies Plantation Rd @ Canada Rd
Lakeland, TN

File Name : 24010-3
Site Code : 24010-3
Start Date : 1/31/2024
Page No : 1

Groups Printed- Trucks - Buses

	Canada Rd Southbound					Beverle Rivera Dr Westbound					Canada Rd Northbound					E Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	Utuns	App. Total	Left	Thru	Right	Utuns	App. Total	Left	Thru	Right	Utuns	App. Total	Left	Thru	Right	Utuns	App. Total	Int. Total
06:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	0	3	4
06:45	0	5	0	0	5	0	0	0	0	0	0	1	4	0	5	0	0	0	0	0	10
Total	0	5	0	0	5	0	0	0	0	0	0	2	4	0	6	0	0	3	0	3	14
07:00	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	4
07:15	0	1	0	0	1	1	0	1	0	2	1	4	1	0	6	0	0	1	0	1	10
07:30	0	5	1	0	6	1	0	0	0	1	1	3	1	0	5	1	1	1	0	3	15
07:45	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	2	0	2	0	4	9
Total	0	8	1	0	9	2	0	1	0	3	2	12	4	0	18	3	1	4	0	8	38
08:00	1	4	2	0	7	2	0	0	0	2	1	2	2	0	5	0	0	0	0	0	14
08:15	0	0	2	0	2	0	0	1	0	1	4	1	2	0	7	1	1	1	0	3	13
08:30	0	0	0	0	0	2	0	1	0	3	1	3	5	0	9	1	4	1	0	6	18
08:45	0	3	0	0	3	4	0	0	0	4	0	2	3	0	5	0	1	1	0	2	14
Total	1	7	4	0	12	8	0	2	0	10	6	8	12	0	26	2	6	3	0	11	59
09:00	0	0	0	0	0	2	1	0	0	3	1	0	0	0	1	0	0	3	0	3	7
09:15	0	2	0	0	2	1	0	2	0	3	2	5	1	0	8	0	1	0	0	1	14
09:30	0	2	0	0	2	2	1	0	0	3	1	2	0	0	3	1	0	1	0	2	10
09:45	0	2	0	0	2	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	4
Total	0	6	0	0	6	5	3	2	0	10	4	7	2	0	13	1	1	4	0	6	35
10:00	0	1	0	0	1	0	0	2	0	2	0	1	2	0	3	0	0	1	0	1	7
10:15	0	4	0	0	4	0	0	0	0	0	1	3	2	0	6	1	1	0	0	2	12
10:30	0	1	0	0	1	3	0	1	0	4	0	1	5	0	6	1	0	0	0	1	12
10:45	3	7	0	0	10	0	0	1	0	1	0	3	2	0	5	0	0	1	0	1	17
Total	3	13	0	0	16	3	0	4	0	7	1	8	11	0	20	2	1	2	0	5	48
11:00	0	3	0	0	3	7	0	1	0	8	0	3	0	0	3	0	0	0	0	0	14
11:15	0	2	0	0	2	1	0	2	0	3	1	1	1	1	4	2	0	1	0	3	12
11:30	0	1	1	0	2	0	0	0	0	0	0	5	2	0	7	0	1	1	0	2	11
11:45	0	0	0	0	0	2	0	2	0	4	1	0	1	0	2	1	0	0	0	1	7
Total	0	6	1	0	7	10	0	5	0	15	2	9	4	1	16	3	1	2	0	6	44
12:00	0	2	1	0	3	3	1	0	0	4	0	0	1	0	1	0	0	1	0	1	9
12:15	0	2	0	0	2	3	1	0	0	4	0	4	1	0	5	0	0	0	0	0	11
12:30	0	3	0	0	3	2	0	0	0	2	0	4	1	0	5	0	1	0	0	1	11
12:45	0	3	0	0	3	0	1	2	0	3	0	3	2	0	5	1	1	1	0	3	14
Total	0	10	1	0	11	8	3	2	0	13	0	11	5	0	16	1	2	2	0	5	45
13:00	0	2	0	0	2	1	0	1	0	2	0	4	1	0	5	1	0	0	0	1	10
13:15	0	4	0	0	4	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	8
13:30	0	2	0	0	2	0	0	0	0	0	2	0	0	0	2	0	0	1	0	1	5
13:45	0	0	0	0	0	2	0	1	0	3	1	4	2	1	8	0	0	0	0	0	11
Total	0	8	0	0	8	4	0	2	0	6	4	10	3	1	18	1	0	1	0	2	34
14:00	0	3	0	0	3	0	0	1	0	1	2	2	2	0	6	0	0	0	0	0	10
14:15	0	2	1	0	3	2	1	1	0	4	1	1	1	0	3	0	0	0	0	0	10
14:30	0	7	0	0	7	1	0	0	0	1	0	3	2	0	5	2	0	0	0	2	15
14:45	0	4	0	0	4	4	0	1	0	5	3	6	2	0	11	0	0	0	0	0	20
Total	0	16	1	0	17	7	1	3	0	11	6	12	7	0	25	2	0	0	0	2	55

Intersection Turning Movement Count

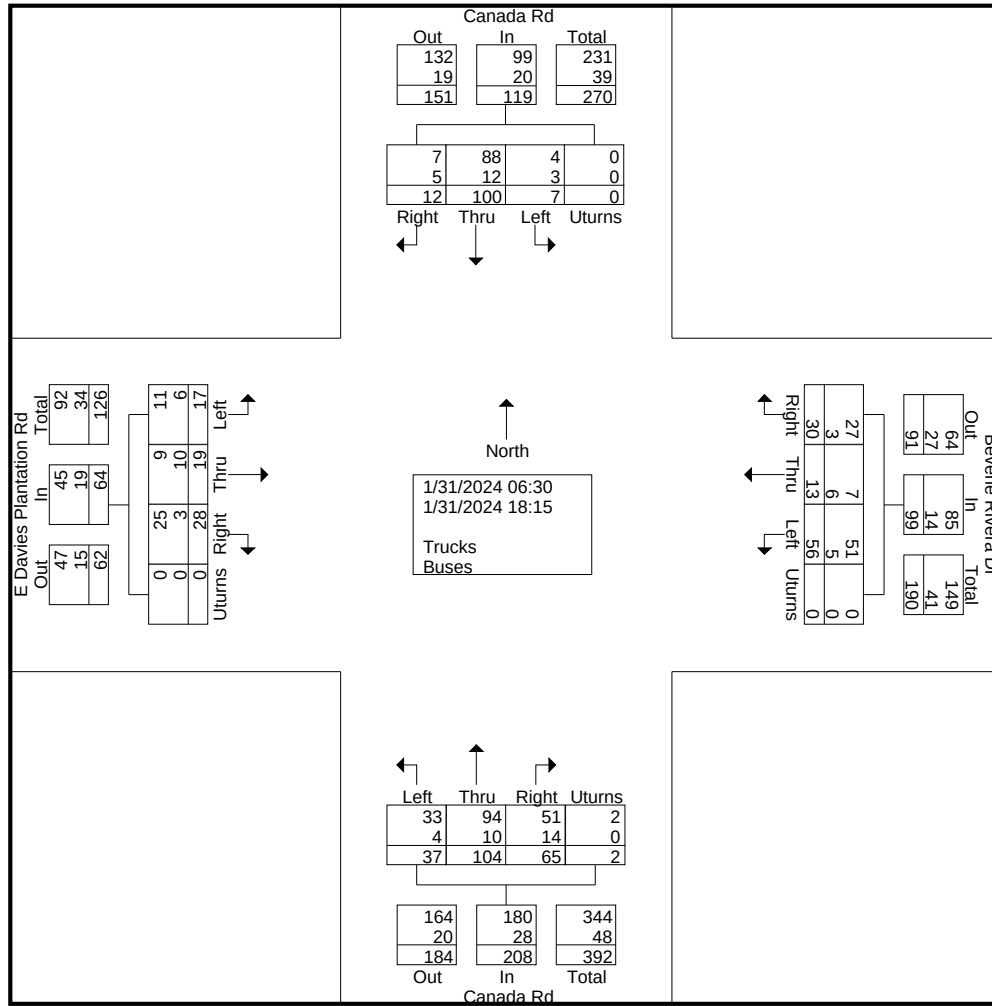
File Name : 24010-3
 Site Code : 24010-3
 Start Date : 1/31/2024
 Page No : 2

Groups Printed- Trucks - Buses

	Canada Rd Southbound					Beverle Rivera Dr Westbound					Canada Rd Northbound					E Davies Plantation Rd Eastbound					
Start Time	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Left	Thru	Right	UtURNS	App. Total	Int. Total
15:00	1	0	0	0	1	3	0	1	0	4	0	3	2	0	5	0	0	0	0	0	10
15:15	0	6	1	0	7	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	12
15:30	1	2	0	0	3	0	1	2	0	3	2	3	5	0	10	1	2	1	0	4	20
15:45	1	2	0	0	3	3	2	0	0	5	2	3	2	0	7	0	3	2	0	5	20
Total	3	10	1	0	14	7	3	4	0	14	5	11	9	0	25	1	5	3	0	9	62
16:00	0	3	0	0	3	1	1	2	0	4	1	0	2	0	3	0	2	2	0	4	14
16:15	0	2	1	0	3	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	7
16:30	0	0	0	0	0	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	4
16:45	0	1	2	0	3	0	0	0	0	0	1	2	0	0	3	1	0	1	0	2	8
Total	0	6	3	0	9	2	3	3	0	8	3	5	2	0	10	1	2	3	0	6	33
17:00	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	5
17:15	0	1	0	0	1	0	0	1	0	1	2	0	0	0	2	0	0	1	0	1	5
17:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
17:45	0	1	0	0	1	0	0	0	0	0	2	2	1	0	5	0	0	0	0	0	6
Total	0	3	0	0	3	0	0	2	0	2	4	9	1	0	14	0	0	1	0	1	20
18:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Grand Total	7	100	12	0	119	56	13	30	0	99	37	104	65	2	208	17	19	28	0	64	490
Apprch %	5.9	84	10.1	0		56.6	13.1	30.3	0		17.8	50	31.2	1		26.6	29.7	43.8	0		
Total %	1.4	20.4	2.4	0	24.3	11.4	2.7	6.1	0	20.2	7.6	21.2	13.3	0.4	42.4	3.5	3.9	5.7	0	13.1	
Trucks	4	88	7	0	99	51	7	27	0	85	33	94	51	2	180	11	9	25	0	45	409
% Trucks	57.1	88	58.3	0	83.2	91.1	53.8	90	0	85.9	89.2	90.4	78.5	100	86.5	64.7	47.4	89.3	0	70.3	83.5
Buses	3	12	5	0	20	5	6	3	0	14	4	10	14	0	28	6	10	3	0	19	81
% Buses	42.9	12	41.7	0	16.8	8.9	46.2	10	0	14.1	10.8	9.6	21.5	0	13.5	35.3	52.6	10.7	0	29.7	16.5

Intersection Turning Movement Count

File Name : 24010-3
 Site Code : 24010-3
 Start Date : 1/31/2024
 Page No : 3



Intersection Turning Movement Count

Davies Plantation Rd @ Canada Rd
Lakeland, TN

File Name : 24010-3P
Site Code : 24010-3P
Start Date : 1/31/2024
Page No : 1

Groups Printed- Pedestrians - Bicycles

	Canada Rd Southbound	Beverle Rivera Dr Westbound	Canada Rd Northbound	E Davies Plantation Rd Eastbound	
Start Time	Peds	Peds	Peds	Peds	Int. Total
06:30	0	0	0	0	0
06:45	0	0	0	0	0
Total	0	0	0	0	0
07:00	0	0	0	0	0
07:15	0	0	0	0	0
07:30	0	0	0	0	0
07:45	0	0	0	0	0
Total	0	0	0	0	0
08:00	0	0	0	0	0
08:15	0	0	0	0	0
08:30	0	0	0	0	0
08:45	0	0	0	0	0
Total	0	0	0	0	0
09:00	0	0	0	0	0
09:15	0	0	0	0	0
09:30	0	0	0	0	0
09:45	0	0	0	0	0
Total	0	0	0	0	0
10:00	0	0	0	0	0
10:15	0	0	0	0	0
10:30	0	0	0	0	0
10:45	0	0	0	0	0
Total	0	0	0	0	0
11:00	0	0	0	0	0
11:15	0	0	0	0	0
11:30	0	0	0	0	0
11:45	0	0	0	0	0
Total	0	0	0	0	0
12:00	0	0	0	0	0
12:15	0	0	0	0	0
12:30	0	0	0	0	0
12:45	0	0	0	0	0
Total	0	0	0	0	0
13:00	0	0	0	0	0
13:15	0	0	0	0	0
13:30	0	0	0	0	0
13:45	0	0	0	0	0
Total	0	0	0	0	0
14:00	0	0	0	0	0
14:15	0	0	0	0	0
14:30	0	0	0	0	0
14:45	0	0	0	0	0
Total	0	0	0	0	0

Attachment: Christian Life Tabernacle Private School TIS 2024.03.01 (3528 : Set a Public Hearing for Res. 12-24, Christian Life Church School

Intersection Turning Movement Count

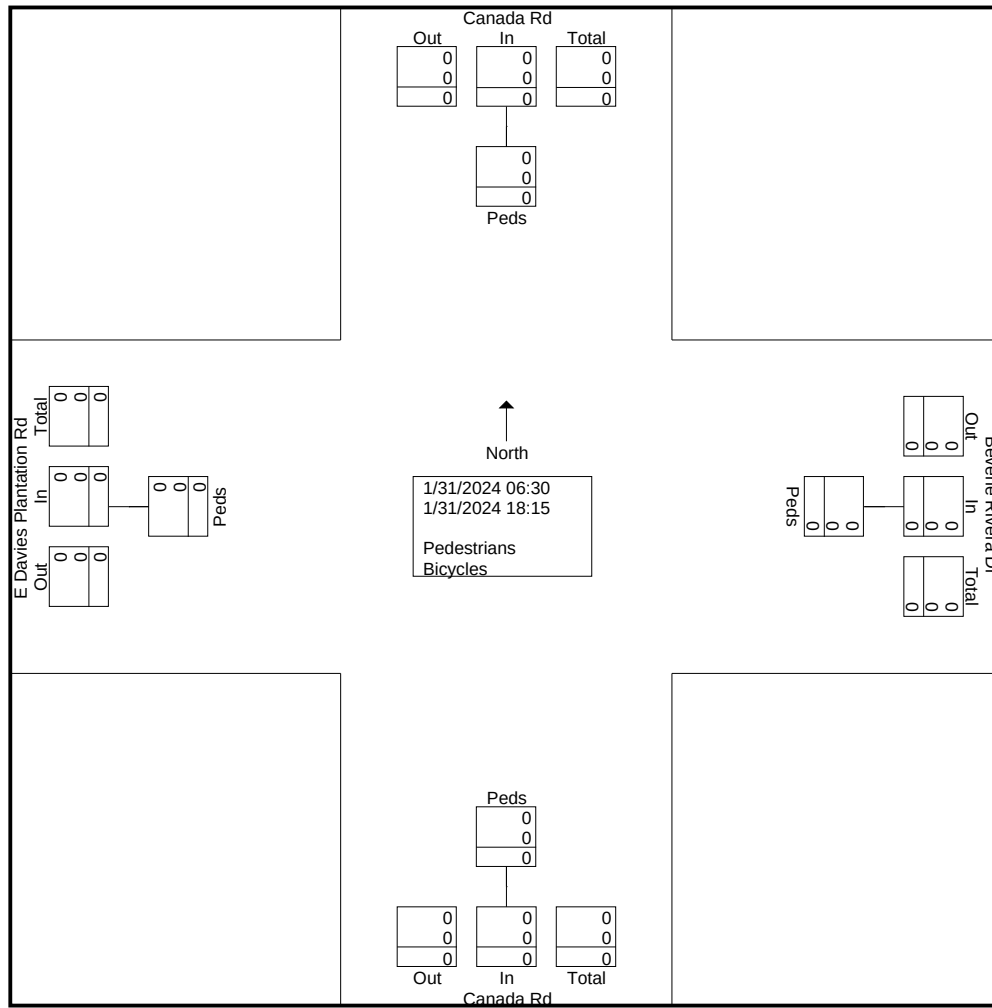
File Name : 24010-3P
 Site Code : 24010-3P
 Start Date : 1/31/2024
 Page No : 2

Groups Printed- Pedestrians - Bicycles

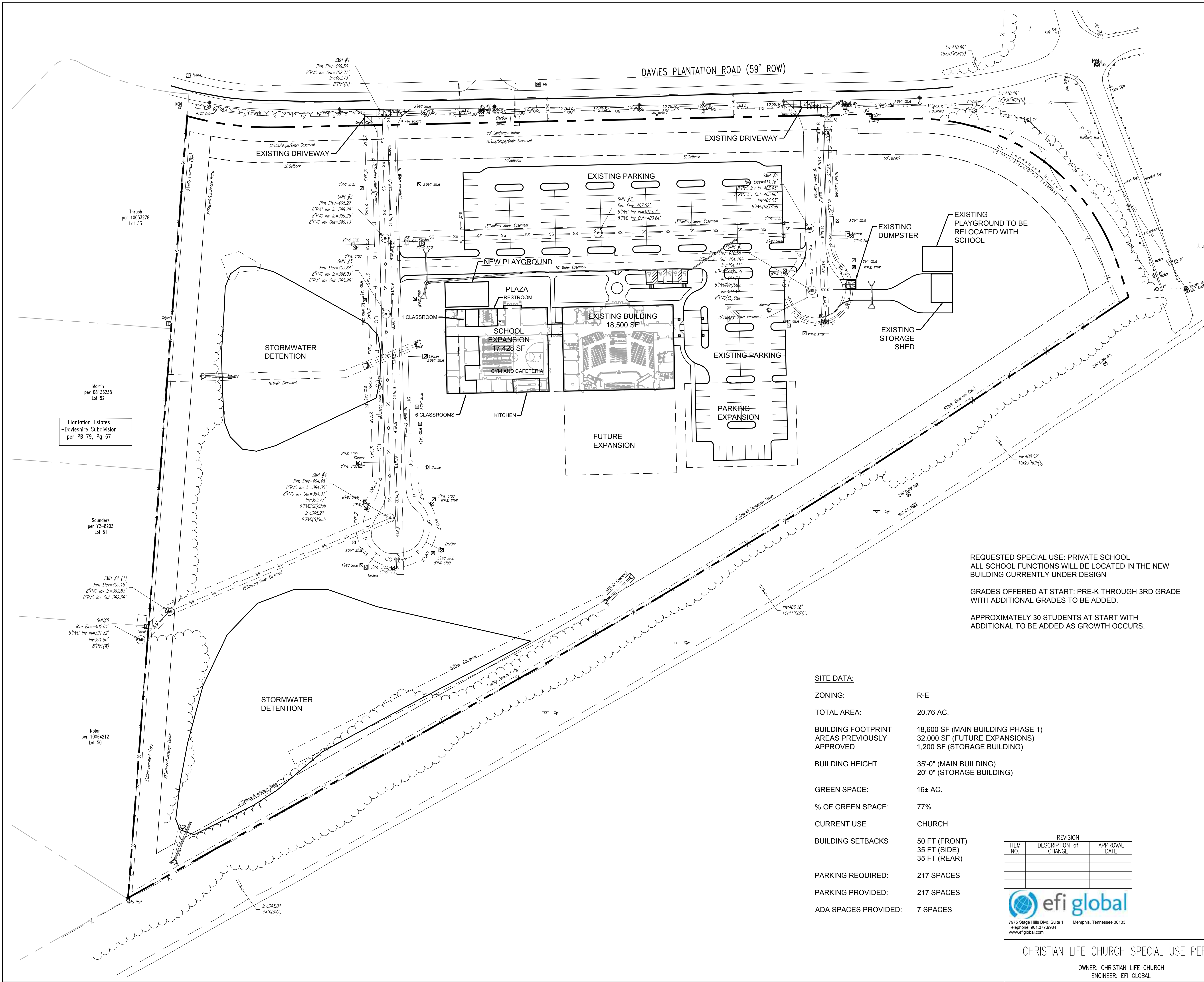
	Canada Rd Southbound	Beverle Rivera Dr Westbound	Canada Rd Northbound	E Davies Plantation Rd Eastbound	
Start Time	Peds	Peds	Peds	Peds	Int. Total
15:00	0	0	0	0	0
15:15	0	0	0	0	0
15:30	0	0	0	0	0
15:45	0	0	0	0	0
Total	0	0	0	0	0
16:00	0	0	0	0	0
16:15	0	0	0	0	0
16:30	0	0	0	0	0
16:45	0	0	0	0	0
Total	0	0	0	0	0
17:00	0	0	0	0	0
17:15	0	0	0	0	0
17:30	0	0	0	0	0
17:45	0	0	0	0	0
Total	0	0	0	0	0
18:00	0	0	0	0	0
18:15	0	0	0	0	0
Grand Total	0	0	0	0	0
Apprch %	0	0	0	0	
Total %					
Pedestrians					0
% Pedestrians	0	0	0	0	0
Bicycles					0
% Bicycles	0	0	0	0	0

Intersection Turning Movement Count

File Name : 24010-3P
 Site Code : 24010-3P
 Start Date : 1/31/2024
 Page No : 3



APPENDIX B
Proposed Development Site Plan

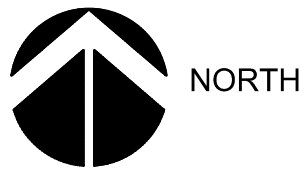


VICINITY MAP
(N.T.S.)

REQUESTED SPECIAL USE: PRIVATE SCHOOL
ALL SCHOOL FUNCTIONS WILL BE LOCATED IN THE NEW BUILDING CURRENTLY UNDER DESIGN

GRADES OFFERED AT START: PRE-K THROUGH 3RD GRADE WITH ADDITIONAL GRADES TO BE ADDED.

APPROXIMATELY 30 STUDENTS AT START WITH ADDITIONAL TO BE ADDED AS GROWTH OCCURS.



SITE DATA:		
ZONING:	R-E	
TOTAL AREA:	20.76 AC.	
BUILDING FOOTPRINT AREAS PREVIOUSLY APPROVED	18,600 SF (MAIN BUILDING-PHASE 1) 32,000 SF (FUTURE EXPANSIONS) 1,200 SF (STORAGE BUILDING)	
BUILDING HEIGHT	35'-0" (MAIN BUILDING) 20'-0" (STORAGE BUILDING)	
GREEN SPACE:	16± AC.	
% OF GREEN SPACE:	77%	
CURRENT USE	CHURCH	
BUILDING SETBACKS	50 FT (FRONT) 35 FT (SIDE) 35 FT (REAR)	
PARKING REQUIRED:	217 SPACES	
PARKING PROVIDED:	217 SPACES	
ADA SPACES PROVIDED:	7 SPACES	

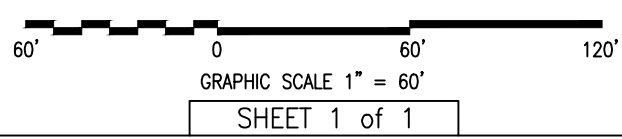
THIS IS TO CERTIFY THAT THIS PROPERTY (THE SUBJECT PROPERTY SURVEYED) IS NOT WITHIN THE LIMITS OF A DESIGNATED "SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD". THE SUBJECT PROPERTY, BY GRAPHICAL REPRESENTATION ONLY, LIES WITHIN ZONE X DEFINED AS BEING, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN" PER FEMA FIRM MAP NUMBER 47157C0310G & 47157C0330G DATED FEBRUARY 6, 2013 BASED UPON OUR INTERPRETATION OF THE LOCATION OF THE FLOOD HAZARD BOUNDARY LIMITS IN RELATION TO THE PROPERTY LINES. NO SURVEYING OR ENGINEERING WAS PERFORMED FOR THIS SURVEY TO DETERMINE FEMA FLOOD LIMITS.

SITE BENCH MARK
TOP OF UPPER MOST N.E. FLANGE BOLT ON HYDRANT
ELEVATION = 409.16'

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
7975 Stage Hills Blvd, Suite 1 Memphis, Tennessee 38133		
Telephone: 901.377.9984		
www.efiglobal.com		

CHRISTIAN LIFE CHURCH SPECIAL USE PERMIT

OWNER: CHRISTIAN LIFE CHURCH
ENGINEER: EFI GLOBAL



CITY OF BARTLETT DIVISION OF ENGINEERING
SITE PLAN
LOCATION: 9375 DAVIES PLANTATION ROAD
BARTLETT, TENNESSEE

SURVEY	ALLEN & HOSHAL	DATE		BOOK	
DESIGN BY:	EFI GLOBAL	DATE	10.27.23	SCALE	AS NOTED
REVIEWED					
DEPUTY CITY ENGINEER		DATE		CITY ENGINEER	

APPENDIX C
Trip Generation Calculations

PROJECT DETAILS

Project Name:	Christian Life Tabernacle Private School	Type of Project:	Private School Expansion
Project No:	26847.00	City:	Bartlett
Country:	United States	Built-up Area(Sq.ft):	17428
Analyst Name:	Patrick W. Neal, PE	Clients Name:	Christian Life Tabernacle, Inc.
Date:	1/23/2024	ZIP/Postal Code:	38133
State/Province:	Tennessee	No. of Scenarios:	8
Analysis Region:	Southeast		

SCENARIO SUMMARY

Scenarios	Name	No. of Land Uses	Phases of Development	No. of Years to Project Traffic	User Group	Estimated New Vehicle Trips		
						Entry	Exit	Total
Scenario - 1	01 - Weekday 2025	1	1	0		103	103	206
Scenario - 2	02 - AM Peak Adjacent Street 2025	1	1	0		36	29	65
Scenario - 3	03 - Mid-Day Peak School Exit 2025	1	1	0		14	16	30
Scenario - 4	04 - PM Peak Adjacent Street 2025	1	1	0		6	7	13
Scenario - 5	05 - Weekday 2030	1	1	0		308	308	616
Scenario - 6	06 - AM Peak Adjacent Street 2030	1	1	0		82	67	149
Scenario - 7	07 - Mid-Day Peak School Exit 2030	1	1	0		44	49	93
Scenario - 8	08 - PM Peak Adjacent Street 2030	1	1	0		18	21	39

Scenario - 1

Scenario Name: 01 - Weekday 2025

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	50	Weekday	Average	103	103	206
Data Source: Trip Generation Manual, 11th Ed					4.11	50%	50%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	50	50

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	103	103	0	0	103	103
	206		0		206	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	103	103	206

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	103	103	206
External Vehicle Trips	103	103	206
New Vehicle Trips	103	103	206

Scenario - 2

Scenario Name: 02 - AM Peak Adjacent Street 2025

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	50	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and	Best Fit (LIN)	36	29	65
Data Source: Trip Generation Manual, 11th Ed					T = 0.85(X) + 22.17	55%	45%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	55	45

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	36	29	0	0	36	29
	65		0		65	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	36	29	65

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	36	29	65
External Vehicle Trips	36	29	65
New Vehicle Trips	36	29	65

Scenario - 3

Scenario Name: 03 - Mid-Day Peak School Exit 2025

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	50	Weekday, PM Peak Hour of Generator	Best Fit (LIN)	14	16	30
Data Source: Trip Generation Manual, 11th Ed					T = 0.63(X) - 1.93	47%	53%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	47	53

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	14	16	0	0	14	16
	30		0		30	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	14	16	30

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	14	16	30
External Vehicle Trips	14	16	30
New Vehicle Trips	14	16	30

Scenario - 4

Scenario Name: 04 - PM Peak Adjacent Street 2025

User Group:
No. of Years to Project 0
Traffic :

Dev. phase: 1

Analyst Note:

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	50	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and	Average	6	7	13
Data Source: Trip Generation Manual, 11th Ed					0.26	46%	54%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	46	54

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	6	7	0	0	6	7
	13		0		13	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	6	7	13

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	6	7	13
External Vehicle Trips	6	7	13
New Vehicle Trips	6	7	13

Scenario - 5

Scenario Name: 05 - Weekday 2030

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	150	Weekday	Average	308	308	616
Data Source: Trip Generation Manual, 11th Ed					4.11	50%	50%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	50	50

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	308	308	0	0	308	308
	616		0		616	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	308	308	616

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	308	308	616
External Vehicle Trips	308	308	616
New Vehicle Trips	308	308	616

Scenario - 6

Scenario Name: 06 - AM Peak Adjacent Street 2030

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	150	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and	Best Fit (LIN)	82	67	149
Data Source: Trip Generation Manual, 11th Ed					T = 0.85(X) + 22.17	55%	45%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	55	45

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	82	67	0	0	82	67
	149		0		149	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	82	67	149

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	82	67	149
External Vehicle Trips	82	67	149
New Vehicle Trips	82	67	149

Scenario - 7

Scenario Name: 07 - Mid-Day Peak School Exit 2030

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	150	Weekday, PM Peak Hour of Generator	Best Fit (LIN)	44	49	93
Data Source: Trip Generation Manual, 11th Ed					T = 0.63(X) - 1.93	47%	53%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	47	53

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	44	49	0	0	44	49
	93		0		93	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	44	49	93

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	44	49	93
External Vehicle Trips	44	49	93
New Vehicle Trips	44	49	93

Scenario - 8

Scenario Name: 08 - PM Peak Adjacent Street 2030

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
534 - Private School (K-8)	General Urban/Suburban	Students	150	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and	Average	18	21	39
Data Source: Trip Generation Manual, 11th Ed					0.26	46%	54%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
534 - Private School (K-8)	100	100	1	1	46	54

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Person Trips by Vehicle		Person Trips by Other Modes		Total Baseline Site Person Trips	
	Entry	Exit	Entry	Exit	Entry	Exit
534 - Private School (K-8)	18	21	0	0	18	21
	39		0		39	

NEW VEHICLE TRIPS

Land Use	New Vehicle Trips		
	Entry	Exit	Total
534 - Private School (K-8)	18	21	39

RESULTS

Site Totals	Entry	Exit	Total
Vehicle Trips Before Reduction	18	21	39
External Vehicle Trips	18	21	39
New Vehicle Trips	18	21	39

APPENDIX D

Analysis Results

D.1***Existing Conditions Analysis***

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/26/2024

Intersection						
Int Delay, s/veh	2.3					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	75	1	26	78	4	28
Future Vol, veh/h	75	1	26	78	4	28
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	82	1	28	85	4	30
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	83	0	223	82
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	141	-
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	-	-	1515	-	765	978
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1515	-	750	978
Mov Cap-2 Maneuver	-	-	-	-	750	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	868	-
Approach	SE	NW		NE		
HCM Control Delay, s/v	0	1.86		8.97		
HCM LOS	A					
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	942	450	-	-	-	
HCM Lane V/C Ratio	0.037	0.019	-	-	-	
HCM Control Delay (s/veh)	9	7.4	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/26/2024

Intersection												
Intersection Delay, s/veh	8.6											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	2	54	48	76	46	10	50	12	140	30	12	4
Future Vol, veh/h	2	54	48	76	46	10	50	12	140	30	12	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	59	52	83	50	11	54	13	152	33	13	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.2	8.9	8.7	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	2%	58%	65%
Vol Thru, %	6%	52%	35%	26%
Vol Right, %	69%	46%	8%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	202	104	132	46
LT Vol	50	2	76	30
Through Vol	12	54	46	12
RT Vol	140	48	10	4
Lane Flow Rate	220	113	143	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.258	0.139	0.189	0.067
Departure Headway (Hd)	4.23	4.437	4.734	4.859
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	850	807	758	736
Service Time	2.257	2.471	2.767	2.896
HCM Lane V/C Ratio	0.259	0.14	0.189	0.068
HCM Control Delay, s/veh	8.7	8.2	8.9	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.5	0.7	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/26/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	37	147	326	31	9	124	261	137	15	502	68
Future Volume (veh/h)	68	37	147	326	31	9	124	261	137	15	502	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	40	160	354	34	10	135	284	149	16	546	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	45	180	411	380	112	341	919	1071	470	840	712
Arrive On Green	0.05	0.14	0.14	0.18	0.27	0.27	0.06	0.49	0.49	0.01	0.45	0.45
Sat Flow, veh/h	1781	327	1308	1781	1388	408	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	74	0	200	354	0	44	135	284	149	16	546	74
Grp Sat Flow(s),veh/h/ln	1781	0	1635	1781	0	1797	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.1	0.0	13.9	19.0	0.0	2.1	4.5	10.5	3.9	0.6	26.3	3.1
Cycle Q Clear(g_c), s	4.1	0.0	13.9	19.0	0.0	2.1	4.5	10.5	3.9	0.6	26.3	3.1
Prop In Lane	1.00		0.80	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	0	225	411	0	492	341	919	1071	470	840	712
V/C Ratio(X)	0.22	0.00	0.89	0.86	0.00	0.09	0.40	0.31	0.14	0.03	0.65	0.10
Avail Cap(c_a), veh/h	373	0	226	452	0	497	364	919	1071	568	840	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	49.0	32.9	0.0	31.3	18.4	17.6	6.7	17.0	24.8	18.4
Incr Delay (d2), s/veh	0.3	0.0	32.0	14.6	0.0	0.1	0.7	0.9	0.3	0.0	3.9	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	7.6	9.7	0.0	0.9	1.9	4.7	1.3	0.2	12.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.4	0.0	81.1	47.4	0.0	31.4	19.2	18.5	7.0	17.0	28.7	18.7
LnGrp LOS	D		F	D		C	B	B	A	B	C	B
Approach Vol, veh/h	274			398			568			636		
Approach Delay, s/veh	70.1			45.7			15.6			27.2		
Approach LOS	E			D			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.3	21.9	5.6	62.9	9.5	37.7	10.5	58.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	24.0	16.0	8.0	52.0	8.0	32.0	8.0	52.0				
Max Q Clear Time (g_c+I1), s	21.0	15.9	2.6	12.5	6.1	4.1	6.5	28.3				
Green Ext Time (p_c), s	0.3	0.0	0.0	2.2	0.0	0.2	0.0	3.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	33.9											
HCM 7th LOS	C											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/26/2024

Intersection

Int Delay, s/veh 2.5

Movement	SET	SER	NWL	NWT	NEL	NER
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Lane Configurations						
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Traffic Vol, veh/h	84	3	27	62	1	37
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Future Vol, veh/h	84	3	27	62	1	37
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Free	Free	Free	Free	Stop	Stop
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	-	-	-	0	-
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Veh in Median Storage, #	0	-	-	0	0	-
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Grade, %	0	-	-	0	0	-
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Peak Hour Factor	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2
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Mvmt Flow	91	3	29	67	1	40
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Major/Minor	Major1	Major2	Minor1
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Conflicting Flow All	0	0	95
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Stage 1	-	-	-
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Stage 2	-	-	-
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Critical Hdwy	-	-	4.12
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Critical Hdwy Stg 1	-	-	-
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Critical Hdwy Stg 2	-	-	-
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Follow-up Hdwy	-	-	2.218
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Pot Cap-1 Maneuver	-	-	1499
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Stage 1	-	-	-
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Stage 2	-	-	-
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Platoon blocked, %	-	-	-
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Mov Cap-1 Maneuver	-	-	1499
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Mov Cap-2 Maneuver	-	-	-
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Stage 1	-	-	-
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Stage 2	-	-	-
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Approach	SE	NW	NE
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HCM Control Delay, s/v	0	2.26	8.93
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HCM LOS			A
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Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
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Capacity (veh/h)	957	546	-	-	-
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HCM Lane V/C Ratio	0.043	0.02	-	-	-
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HCM Control Delay (s/veh)	8.9	7.4	0	-	-
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HCM Lane LOS	A	A	A	-	-
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HCM 95th %tile Q(veh)	0.1	0.1	-	-	-
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HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/26/2024

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	6	46	67	76	37	18	49	25	82	13	13	5
Future Vol, veh/h	6	46	67	76	37	18	49	25	82	13	13	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	50	73	83	40	20	53	27	89	14	14	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB	WB		NB		SB						
Opposing Approach	WB	EB		SB		NB						
Opposing Lanes	1	1		1		1						
Conflicting Approach Left	SB	NB		EB		WB						
Conflicting Lanes Left	1	1		1		1						
Conflicting Approach Right	NB	SB		WB		EB						
Conflicting Lanes Right	1	1		1		1						
HCM Control Delay, s/veh	8	8.6		8.5		8						
HCM LOS	A	A		A		A						

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	31%	5%	58%	42%
Vol Thru, %	16%	39%	28%	42%
Vol Right, %	53%	56%	14%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	156	119	131	31
LT Vol	49	6	76	13
Through Vol	25	46	37	13
RT Vol	82	67	18	5
Lane Flow Rate	170	129	142	34
Geometry Grp	1	1	1	1
Degree of Util (X)	0.204	0.152	0.181	0.044
Departure Headway (Hd)	4.334	4.233	4.569	4.729
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	829	847	786	757
Service Time	2.358	2.256	2.592	2.76
HCM Lane V/C Ratio	0.205	0.152	0.181	0.045
HCM Control Delay, s/veh	8.5	8	8.6	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.5	0.7	0.1

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/26/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	45	63	132	15	16	114	369	245	21	329	56
Future Volume (veh/h)	54	45	63	132	15	16	114	369	245	21	329	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	49	68	143	16	17	124	401	266	23	358	61
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	76	105	313	132	140	537	955	955	423	885	750
Arrive On Green	0.04	0.11	0.11	0.09	0.16	0.16	0.06	0.51	0.51	0.02	0.47	0.47
Sat Flow, veh/h	1781	709	984	1781	830	882	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	59	0	117	143	0	33	124	401	266	23	358	61
Grp Sat Flow(s),veh/h/ln	1781	0	1693	1781	0	1712	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.2	0.0	4.9	5.0	0.0	1.2	2.5	9.9	5.9	0.5	9.2	1.6
Cycle Q Clear(g_c), s	2.2	0.0	4.9	5.0	0.0	1.2	2.5	9.9	5.9	0.5	9.2	1.6
Prop In Lane	1.00		0.58	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	0	181	313	0	272	537	955	955	423	885	750
V/C Ratio(X)	0.19	0.00	0.65	0.46	0.00	0.12	0.23	0.42	0.28	0.05	0.40	0.08
Avail Cap(c_a), veh/h	437	0	275	510	0	440	627	955	955	580	885	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	31.7	24.5	0.0	26.7	9.2	11.3	7.0	10.0	12.7	10.7
Incr Delay (d2), s/veh	0.3	0.0	3.9	1.0	0.0	0.2	0.2	1.4	0.7	0.1	1.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.1	2.1	0.0	0.5	0.9	3.9	1.8	0.2	3.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	0.0	35.6	25.6	0.0	26.9	9.4	12.6	7.7	10.0	14.1	10.9
LnGrp LOS	C		D	C		C	A	B	A	B	B	B
Approach Vol, veh/h	176					176		791		442		
Approach Delay, s/veh	33.1					25.8		10.5		13.4		
Approach LOS	C					C		B		B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	13.9	5.5	43.8	6.9	17.8	8.3	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	7.0	6.9	2.5	11.9	4.2	3.2	4.5	11.2				
Green Ext Time (p_c), s	0.2	0.2	0.0	3.4	0.0	0.1	0.1	2.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	15.5											
HCM 7th LOS	B											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/26/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	142	2	32	116	4	51
Future Vol, veh/h	142	2	32	116	4	51
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	154	2	35	126	4	55
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	157	0	351	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	196	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1423	-	646	890
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	837	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1423	-	629	890
Mov Cap-2 Maneuver	-	-	-	-	629	-
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	815	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		1.64		9.47	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	864	389	-	-	-	
HCM Lane V/C Ratio	0.069	0.024	-	-	-	
HCM Control Delay (s/veh)	9.5	7.6	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.2	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/26/2024

Intersection												
Intersection Delay, s/veh	9.7											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	8	104	88	101	67	23	78	27	105	14	19	4
Future Vol, veh/h	8	104	88	101	67	23	78	27	105	14	19	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	113	96	110	73	25	85	29	114	15	21	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.4	9.9	9.9	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	4%	53%	38%
Vol Thru, %	13%	52%	35%	51%
Vol Right, %	50%	44%	12%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	200	191	37
LT Vol	78	8	101	14
Through Vol	27	104	67	19
RT Vol	105	88	23	4
Lane Flow Rate	228	217	208	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.301	0.277	0.281	0.059
Departure Headway (Hd)	4.752	4.591	4.878	5.25
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	751	776	733	676
Service Time	2.814	2.652	2.94	3.332
HCM Lane V/C Ratio	0.304	0.28	0.284	0.059
HCM Control Delay, s/veh	9.9	9.4	9.9	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	1.1	1.2	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/26/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	44	152	167	38	10	163	476	248	10	432	62
Future Volume (veh/h)	81	44	152	167	38	10	163	476	248	10	432	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	48	165	182	41	11	177	517	270	11	470	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	54	186	302	279	75	426	920	950	312	797	676
Arrive On Green	0.06	0.15	0.15	0.11	0.20	0.20	0.08	0.49	0.49	0.01	0.43	0.43
Sat Flow, veh/h	1781	370	1272	1781	1421	381	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	88	0	213	182	0	52	177	517	270	11	470	67
Grp Sat Flow(s),veh/h/ln	1781	0	1641	1781	0	1802	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.4	0.0	10.5	6.7	0.0	2.0	4.3	15.9	6.8	0.3	15.8	2.1
Cycle Q Clear(g_c), s	3.4	0.0	10.5	6.7	0.0	2.0	4.3	15.9	6.8	0.3	15.8	2.1
Prop In Lane	1.00		0.77	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	388	0	240	302	0	354	426	920	950	312	797	676
V/C Ratio(X)	0.23	0.00	0.89	0.60	0.00	0.15	0.42	0.56	0.28	0.04	0.59	0.10
Avail Cap(c_a), veh/h	459	0	240	435	0	417	464	920	950	466	797	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	34.4	24.9	0.0	27.3	12.6	14.7	7.9	13.8	18.0	14.1
Incr Delay (d2), s/veh	0.3	0.0	30.5	1.9	0.0	0.2	0.6	2.5	0.8	0.0	3.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	6.0	2.9	0.0	0.8	1.6	6.7	2.1	0.1	7.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.7	0.0	64.9	26.9	0.0	27.5	13.3	17.1	8.7	13.8	21.2	14.4
LnGrp LOS	C		E	C		C	B	B	A	B	C	B
Approach Vol, veh/h	301			234			964			548		
Approach Delay, s/veh	54.0			27.0			14.1			20.2		
Approach LOS	D			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	18.0	4.9	46.4	8.7	22.1	10.3	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	8.7	12.5	2.3	17.9	5.4	4.0	6.3	17.8				
Green Ext Time (p_c), s	0.2	0.0	0.0	3.9	0.0	0.1	0.1	2.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	23.1											
HCM 7th LOS	C											

D.2

*Future Conditions Analysis (Without Project)
Horizon Year 2025*

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/27/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	76	1	26	79	4	28
Future Vol, veh/h	76	1	26	79	4	28
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	83	1	28	86	4	30
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	84	0	226	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	142	-
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	-	-	1513	-	763	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	885	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1513	-	748	976
Mov Cap-2 Maneuver	-	-	-	-	748	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	867	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		1.84		8.98	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	940	446	-	-	-	
HCM Lane V/C Ratio	0.037	0.019	-	-	-	
HCM Control Delay (s/veh)	9	7.4	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/27/2024

Intersection												
Intersection Delay, s/veh	8.7											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	2	55	48	77	46	10	50	12	141	30	12	4
Future Vol, veh/h	2	55	48	77	46	10	50	12	141	30	12	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	60	52	84	50	11	54	13	153	33	13	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.2	8.9	8.8	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	2%	58%	65%
Vol Thru, %	6%	52%	35%	26%
Vol Right, %	69%	46%	8%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	203	105	133	46
LT Vol	50	2	77	30
Through Vol	12	55	46	12
RT Vol	141	48	10	4
Lane Flow Rate	221	114	145	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.26	0.141	0.19	0.068
Departure Headway (Hd)	4.234	4.442	4.739	4.866
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	847	805	756	735
Service Time	2.263	2.481	2.776	2.904
HCM Lane V/C Ratio	0.261	0.142	0.192	0.068
HCM Control Delay, s/veh	8.8	8.2	8.9	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.5	0.7	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/27/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	37	148	329	31	9	125	263	138	15	507	69
Future Volume (veh/h)	69	37	148	329	31	9	125	263	138	15	507	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	40	161	358	34	10	136	286	150	16	551	75
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	45	180	413	382	112	336	917	1072	466	837	710
Arrive On Green	0.05	0.14	0.14	0.19	0.28	0.28	0.06	0.49	0.49	0.01	0.45	0.45
Sat Flow, veh/h	1781	325	1309	1781	1388	408	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	75	0	201	358	0	44	136	286	150	16	551	75
Grp Sat Flow(s),veh/h/ln	1781	0	1635	1781	0	1797	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.2	0.0	14.0	19.3	0.0	2.1	4.6	10.7	3.9	0.6	26.8	3.2
Cycle Q Clear(g_c), s	4.2	0.0	14.0	19.3	0.0	2.1	4.6	10.7	3.9	0.6	26.8	3.2
Prop In Lane	1.00		0.80	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	336	0	225	413	0	494	336	917	1072	466	837	710
V/C Ratio(X)	0.22	0.00	0.89	0.87	0.00	0.09	0.40	0.31	0.14	0.03	0.66	0.11
Avail Cap(c_a), veh/h	372	0	225	450	0	495	358	917	1072	564	837	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	49.2	32.9	0.0	31.3	18.7	17.8	6.7	17.1	25.1	18.6
Incr Delay (d2), s/veh	0.3	0.0	32.9	15.4	0.0	0.1	0.8	0.9	0.3	0.0	4.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	7.7	9.9	0.0	0.9	1.9	4.7	1.3	0.2	12.4	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.5	0.0	82.1	48.3	0.0	31.4	19.5	18.7	7.0	17.2	29.1	18.9
LnGrp LOS	D		F	D		C	B	B	A	B	C	B
Approach Vol, veh/h	276				402				572			
Approach Delay, s/veh	70.8				46.4				15.8		27.6	
Approach LOS	E				D				B		C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.6	22.0	5.6	62.9	9.6	38.0	10.6	58.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	24.0	16.0	8.0	52.0	8.0	32.0	8.0	52.0				
Max Q Clear Time (g_c+I1), s	21.3	16.0	2.6	12.7	6.2	4.1	6.6	28.8				
Green Ext Time (p_c), s	0.3	0.0	0.0	2.3	0.0	0.2	0.0	3.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	34.3											
HCM 7th LOS	C											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/27/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	85	3	27	63	1	37
Future Vol, veh/h	85	3	27	63	1	37
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	92	3	29	68	1	40
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	96	0	221	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	127	-
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	-	-	1498	-	767	963
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	899	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1498	-	751	963
Mov Cap-2 Maneuver	-	-	-	-	751	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	880	-
Approach	SE	NW		NE		
HCM Control Delay, s/v	0	2.24		8.94		
HCM LOS	A					
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	956	540	-	-	-	
HCM Lane V/C Ratio	0.043	0.02	-	-	-	
HCM Control Delay (s/veh)	8.9	7.5	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/27/2024

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	6	46	68	77	37	18	49	25	83	13	13	5
Future Vol, veh/h	6	46	68	77	37	18	49	25	83	13	13	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	50	74	84	40	20	53	27	90	14	14	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB	WB		NB		SB						
Opposing Approach	WB	EB		SB		NB						
Opposing Lanes	1	1		1		1						
Conflicting Approach Left	SB	NB		EB		WB						
Conflicting Lanes Left	1	1		1		1						
Conflicting Approach Right	NB	SB		WB		EB						
Conflicting Lanes Right	1	1		1		1						
HCM Control Delay, s/veh	8	8.6		8.5		8						
HCM LOS	A	A		A		A						

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	31%	5%	58%	42%
Vol Thru, %	16%	38%	28%	42%
Vol Right, %	53%	57%	14%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	157	120	132	31
LT Vol	49	6	77	13
Through Vol	25	46	37	13
RT Vol	83	68	18	5
Lane Flow Rate	171	130	143	34
Geometry Grp	1	1	1	1
Degree of Util (X)	0.206	0.153	0.182	0.044
Departure Headway (Hd)	4.339	4.234	4.574	4.738
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	828	848	785	756
Service Time	2.359	2.259	2.598	2.766
HCM Lane V/C Ratio	0.207	0.153	0.182	0.045
HCM Control Delay, s/veh	8.5	8	8.6	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.5	0.7	0.1

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/27/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	45	64	133	15	16	115	372	247	21	332	57
Future Volume (veh/h)	55	45	64	133	15	16	115	372	247	21	332	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	49	70	145	16	17	125	404	268	23	361	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	316	74	106	313	132	141	534	954	956	420	883	748
Arrive On Green	0.04	0.11	0.11	0.09	0.16	0.16	0.06	0.51	0.51	0.02	0.47	0.47
Sat Flow, veh/h	1781	696	995	1781	830	882	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	60	0	119	145	0	33	125	404	268	23	361	62
Grp Sat Flow(s),veh/h/ln	1781	0	1691	1781	0	1712	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.2	0.0	5.0	5.1	0.0	1.2	2.6	10.0	6.0	0.5	9.4	1.6
Cycle Q Clear(g_c), s	2.2	0.0	5.0	5.1	0.0	1.2	2.6	10.0	6.0	0.5	9.4	1.6
Prop In Lane	1.00		0.59	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	0	180	313	0	273	534	954	956	420	883	748
V/C Ratio(X)	0.19	0.00	0.66	0.46	0.00	0.12	0.23	0.42	0.28	0.05	0.41	0.08
Avail Cap(c_a), veh/h	436	0	274	507	0	439	623	954	956	576	883	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	31.8	24.5	0.0	26.7	9.2	11.4	7.0	10.0	12.8	10.7
Incr Delay (d2), s/veh	0.3	0.0	4.1	1.1	0.0	0.2	0.2	1.4	0.7	0.1	1.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.2	2.1	0.0	0.5	0.9	4.0	1.8	0.2	3.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	0.0	35.9	25.6	0.0	26.9	9.4	12.7	7.8	10.1	14.2	11.0
LnGrp LOS	C		D	C		C	A	B	A	B	B	B
Approach Vol, veh/h	179			178			797			446		
Approach Delay, s/veh	33.3			25.8			10.5			13.5		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.9	13.9	5.5	43.8	7.0	17.8	8.3	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+l1), s	7.1	7.0	2.5	12.0	4.2	3.2	4.6	11.4				
Green Ext Time (p_c), s	0.2	0.2	0.0	3.4	0.0	0.1	0.1	2.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	15.6											
HCM 7th LOS	B											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/27/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	143	2	32	117	4	51
Future Vol, veh/h	143	2	32	117	4	51
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	155	2	35	127	4	55
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	158	0	353	157
Stage 1	-	-	-	-	157	-
Stage 2	-	-	-	-	197	-
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	-	-	1422	-	644	889
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	836	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1422	-	628	889
Mov Cap-2 Maneuver	-	-	-	-	628	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	814	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		1.63		9.48	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	863	387	-	-	-	
HCM Lane V/C Ratio	0.069	0.024	-	-	-	
HCM Control Delay (s/veh)	9.5	7.6	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.2	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/27/2024

Intersection												
Intersection Delay, s/veh	9.7											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	8	105	89	102	68	23	79	27	106	14	19	4
Future Vol, veh/h	8	105	89	102	68	23	79	27	106	14	19	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	114	97	111	74	25	86	29	115	15	21	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.5	9.9	9.9	8.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	4%	53%	38%
Vol Thru, %	13%	52%	35%	51%
Vol Right, %	50%	44%	12%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	212	202	193	37
LT Vol	79	8	102	14
Through Vol	27	105	68	19
RT Vol	106	89	23	4
Lane Flow Rate	230	220	210	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.305	0.281	0.285	0.059
Departure Headway (Hd)	4.763	4.601	4.888	5.263
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	749	775	730	673
Service Time	2.829	2.664	2.953	3.352
HCM Lane V/C Ratio	0.307	0.284	0.288	0.059
HCM Control Delay, s/veh	9.9	9.5	9.9	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	1.2	1.2	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/27/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	44	153	169	38	10	165	480	250	10	436	63
Future Volume (veh/h)	82	44	153	169	38	10	165	480	250	10	436	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	48	166	184	41	11	179	522	272	11	474	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	54	186	302	279	75	423	919	951	308	796	674
Arrive On Green	0.06	0.15	0.15	0.11	0.20	0.20	0.08	0.49	0.49	0.01	0.43	0.43
Sat Flow, veh/h	1781	368	1273	1781	1421	381	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	89	0	214	184	0	52	179	522	272	11	474	68
Grp Sat Flow(s),veh/h/ln	1781	0	1641	1781	0	1802	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.4	0.0	10.5	6.8	0.0	2.0	4.4	16.2	6.8	0.3	16.0	2.1
Cycle Q Clear(g_c), s	3.4	0.0	10.5	6.8	0.0	2.0	4.4	16.2	6.8	0.3	16.0	2.1
Prop In Lane	1.00		0.78	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	388	0	239	302	0	354	423	919	951	308	796	674
V/C Ratio(X)	0.23	0.00	0.89	0.61	0.00	0.15	0.42	0.57	0.29	0.04	0.60	0.10
Avail Cap(c_a), veh/h	458	0	239	433	0	416	460	919	951	462	796	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	34.5	25.0	0.0	27.3	12.7	14.8	7.9	13.9	18.2	14.2
Incr Delay (d2), s/veh	0.3	0.0	31.7	2.0	0.0	0.2	0.7	2.5	0.8	0.0	3.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	6.1	2.9	0.0	0.8	1.6	6.8	2.2	0.1	7.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.7	0.0	66.2	26.9	0.0	27.5	13.4	17.3	8.7	13.9	21.5	14.5
LnGrp LOS	C		E	C		C	B	B	A	B	C	B
Approach Vol, veh/h	303			236			973			553		
Approach Delay, s/veh	54.9			27.1			14.2			20.4		
Approach LOS	D			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	18.0	4.9	46.4	8.8	22.2	10.3	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	8.8	12.5	2.3	18.2	5.4	4.0	6.4	18.0				
Green Ext Time (p_c), s	0.2	0.0	0.0	3.9	0.0	0.1	0.1	2.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	23.3											
HCM 7th LOS	C											

D.3

Future Conditions Analysis (Without Project)
Horizon Year 2030

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/27/2024

Intersection						
Int Delay, s/veh	2.3					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	79	1	27	82	4	30
Future Vol, veh/h	79	1	27	82	4	30
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	86	1	29	89	4	33
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	87	0	234	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	148	-
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	-	-	1509	-	754	972
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1509	-	739	972
Mov Cap-2 Maneuver	-	-	-	-	739	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	862	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		1.84		9	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	937	446	-	-	-	
HCM Lane V/C Ratio	0.039	0.019	-	-	-	
HCM Control Delay (s/veh)	9	7.4	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/27/2024

Intersection												
Intersection Delay, s/veh	8.8											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	2	57	51	80	49	11	53	13	148	32	13	4
Future Vol, veh/h	2	57	51	80	49	11	53	13	148	32	13	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	62	55	87	53	12	58	14	161	35	14	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay, s/veh	8.3			9			8.9			8.4		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	2%	57%	65%
Vol Thru, %	6%	52%	35%	27%
Vol Right, %	69%	46%	8%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	214	110	140	49
LT Vol	53	2	80	32
Through Vol	13	57	49	13
RT Vol	148	51	11	4
Lane Flow Rate	233	120	152	53
Geometry Grp	1	1	1	1
Degree of Util (X)	0.276	0.149	0.202	0.073
Departure Headway (Hd)	4.275	4.489	4.781	4.921
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	840	796	749	726
Service Time	2.308	2.53	2.822	2.964
HCM Lane V/C Ratio	0.277	0.151	0.203	0.073
HCM Control Delay, s/veh	8.9	8.3	9	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.1	0.5	0.8	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/27/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	39	155	345	33	10	131	276	145	16	531	72
Future Volume (veh/h)	72	39	155	345	33	10	131	276	145	16	531	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	42	168	375	36	11	142	300	158	17	577	78
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	44	178	415	384	117	316	909	1077	449	827	701
Arrive On Green	0.05	0.14	0.14	0.19	0.28	0.28	0.06	0.49	0.49	0.01	0.44	0.44
Sat Flow, veh/h	1781	327	1308	1781	1375	420	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	78	0	210	375	0	47	142	300	158	17	577	78
Grp Sat Flow(s),veh/h/ln	1781	0	1635	1781	0	1795	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.4	0.0	15.0	20.5	0.0	2.3	4.9	11.5	4.2	0.6	29.3	3.4
Cycle Q Clear(g_c), s	4.4	0.0	15.0	20.5	0.0	2.3	4.9	11.5	4.2	0.6	29.3	3.4
Prop In Lane	1.00		0.80	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	0	222	415	0	501	316	909	1077	449	827	701
V/C Ratio(X)	0.23	0.00	0.94	0.90	0.00	0.09	0.45	0.33	0.15	0.04	0.70	0.11
Avail Cap(c_a), veh/h	367	0	222	435	0	501	333	909	1077	545	827	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	50.3	33.2	0.0	31.4	19.9	18.5	6.7	17.7	26.5	19.2
Incr Delay (d2), s/veh	0.4	0.0	44.8	21.2	0.0	0.1	1.0	1.0	0.3	0.0	4.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	8.8	11.1	0.0	1.0	2.0	5.1	1.4	0.3	13.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.1	0.0	95.1	54.4	0.0	31.5	20.9	19.5	7.0	17.7	31.3	19.6
LnGrp LOS	D		F	D		C	C	B	A	B	C	B
Approach Vol, veh/h	288			422			600			672		
Approach Delay, s/veh	80.5			51.9			16.5			29.6		
Approach LOS	F			D			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.7	22.0	5.7	63.2	9.9	38.8	10.9	58.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	24.0	16.0	8.0	52.0	8.0	32.0	8.0	52.0				
Max Q Clear Time (g_c+l1), s	22.5	17.0	2.6	13.5	6.4	4.3	6.9	31.3				
Green Ext Time (p_c), s	0.2	0.0	0.0	2.4	0.0	0.2	0.0	3.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	37.8											
HCM 7th LOS	D											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/27/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	89	3	29	66	1	39
Future Vol, veh/h	89	3	29	66	1	39
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	97	3	32	72	1	42
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	100	0	233	98
Stage 1	-	-	-	-	98	-
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	-	-	1493	-	755	958
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	892	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1493	-	738	958
Mov Cap-2 Maneuver	-	-	-	-	738	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	872	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		2.28		8.97	
HCM LOS	A					
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	950	549	-	-	-	
HCM Lane V/C Ratio	0.046	0.021	-	-	-	
HCM Control Delay (s/veh)	9	7.5	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/27/2024

Intersection												
Intersection Delay, s/veh	8.5											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	6	49	71	80	39	19	52	26	87	14	14	5
Future Vol, veh/h	6	49	71	80	39	19	52	26	87	14	14	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	53	77	87	42	21	57	28	95	15	15	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay, s/veh	8.1			8.7			8.6			8.1		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	5%	58%	42%
Vol Thru, %	16%	39%	28%	42%
Vol Right, %	53%	56%	14%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	165	126	138	33
LT Vol	52	6	80	14
Through Vol	26	49	39	14
RT Vol	87	71	19	5
Lane Flow Rate	179	137	150	36
Geometry Grp	1	1	1	1
Degree of Util (X)	0.218	0.163	0.192	0.048
Departure Headway (Hd)	4.374	4.273	4.61	4.787
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	820	840	779	747
Service Time	2.402	2.302	2.638	2.824
HCM Lane V/C Ratio	0.218	0.163	0.193	0.048
HCM Control Delay, s/veh	8.6	8.1	8.7	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.7	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/27/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	48	67	140	16	17	121	390	259	22	348	59
Future Volume (veh/h)	57	48	67	140	16	17	121	390	259	22	348	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	52	73	152	17	18	132	424	282	24	378	64
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	75	105	313	134	142	521	950	959	404	876	743
Arrive On Green	0.04	0.11	0.11	0.10	0.16	0.16	0.06	0.51	0.51	0.02	0.47	0.47
Sat Flow, veh/h	1781	704	988	1781	831	880	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	62	0	125	152	0	35	132	424	282	24	378	64
Grp Sat Flow(s),veh/h/ln	1781	0	1692	1781	0	1712	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.3	0.0	5.3	5.4	0.0	1.3	2.7	10.8	6.4	0.5	10.1	1.7
Cycle Q Clear(g_c), s	2.3	0.0	5.3	5.4	0.0	1.3	2.7	10.8	6.4	0.5	10.1	1.7
Prop In Lane	1.00		0.58	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	0	179	313	0	276	521	950	959	404	876	743
V/C Ratio(X)	0.20	0.00	0.70	0.48	0.00	0.13	0.25	0.45	0.29	0.06	0.43	0.09
Avail Cap(c_a), veh/h	433	0	272	498	0	435	604	950	959	557	876	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	0.0	32.2	24.6	0.0	26.8	9.4	11.7	7.1	10.3	13.2	11.0
Incr Delay (d2), s/veh	0.3	0.0	4.8	1.2	0.0	0.2	0.3	1.5	0.8	0.1	1.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.3	2.2	0.0	0.5	0.9	4.3	1.9	0.2	4.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.4	0.0	37.0	25.8	0.0	27.0	9.7	13.2	7.9	10.3	14.8	11.2
LnGrp LOS	C		D	C		C	A	B	A	B	B	B
Approach Vol, veh/h	187				187				838			
Approach Delay, s/veh	34.2				26.0				10.8			
Approach LOS	C				C				B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	13.9	5.6	43.9	7.1	18.0	8.5	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+l1), s	7.4	7.3	2.5	12.8	4.3	3.3	4.7	12.1				
Green Ext Time (p_c), s	0.2	0.2	0.0	3.6	0.0	0.1	0.1	2.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	16.0											
HCM 7th LOS	B											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/27/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	150	2	34	123	4	54
Future Vol, veh/h	150	2	34	123	4	54
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	163	2	37	134	4	59

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	165	0	372	164
Stage 1	-	-	-	-	164	-
Stage 2	-	-	-	-	208	-
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	-	-	1413	-	629	880
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	827	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1413	-	611	880
Mov Cap-2 Maneuver	-	-	-	-	611	-
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	804	-

Approach	SE	NW	NE
HCM Control Delay, s/v	0	1.65	9.55
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	854	390	-	-	-
HCM Lane V/C Ratio	0.074	0.026	-	-	-
HCM Control Delay (s/veh)	9.5	7.6	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-	-

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/27/2024

Intersection												
Intersection Delay, s/veh	10											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	8	110	93	107	71	24	82	29	111	15	20	4
Future Vol, veh/h	8	110	93	107	71	24	82	29	111	15	20	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	120	101	116	77	26	89	32	121	16	22	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.7	10.2	10.2	8.8
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	4%	53%	38%
Vol Thru, %	13%	52%	35%	51%
Vol Right, %	50%	44%	12%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	222	211	202	39
LT Vol	82	8	107	15
Through Vol	29	110	71	20
RT Vol	111	93	24	4
Lane Flow Rate	241	229	220	42
Geometry Grp	1	1	1	1
Degree of Util (X)	0.323	0.296	0.301	0.063
Departure Headway (Hd)	4.818	4.654	4.942	5.343
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	741	766	722	663
Service Time	2.889	2.725	3.014	3.439
HCM Lane V/C Ratio	0.325	0.299	0.305	0.063
HCM Control Delay, s/veh	10.2	9.7	10.2	8.8
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	1.4	1.2	1.3	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/27/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	47	161	177	40	11	172	503	262	11	457	66
Future Volume (veh/h)	86	47	161	177	40	11	172	503	262	11	457	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	51	175	192	43	12	187	547	285	12	497	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	54	184	297	277	77	408	916	955	292	789	669
Arrive On Green	0.06	0.14	0.14	0.11	0.20	0.20	0.08	0.49	0.49	0.01	0.42	0.42
Sat Flow, veh/h	1781	370	1271	1781	1407	393	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	93	0	226	192	0	55	187	547	285	12	497	72
Grp Sat Flow(s),veh/h/ln	1781	0	1642	1781	0	1800	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.6	0.0	11.3	7.2	0.0	2.1	4.6	17.5	7.2	0.3	17.3	2.3
Cycle Q Clear(g_c), s	3.6	0.0	11.3	7.2	0.0	2.1	4.6	17.5	7.2	0.3	17.3	2.3
Prop In Lane	1.00		0.77	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	390	0	238	297	0	354	408	916	955	292	789	669
V/C Ratio(X)	0.24	0.00	0.95	0.65	0.00	0.16	0.46	0.60	0.30	0.04	0.63	0.11
Avail Cap(c_a), veh/h	454	0	238	418	0	412	438	916	955	443	789	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	35.2	25.2	0.0	27.6	13.3	15.2	8.0	14.2	18.9	14.5
Incr Delay (d2), s/veh	0.3	0.0	44.9	2.4	0.0	0.2	0.8	2.9	0.8	0.1	3.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	7.3	3.1	0.0	0.9	1.7	7.4	2.3	0.1	7.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.0	0.0	80.1	27.5	0.0	27.8	14.1	18.1	8.8	14.3	22.6	14.8
LnGrp LOS	C		F	C		C	B	B	A	B	C	B
Approach Vol, veh/h	319			247			1019			581		
Approach Delay, s/veh	64.9			27.6			14.8			21.5		
Approach LOS	E			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	18.0	5.0	46.6	9.0	22.3	10.6	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	9.2	13.3	2.3	19.5	5.6	4.1	6.6	19.3				
Green Ext Time (p_c), s	0.2	0.0	0.0	4.0	0.0	0.1	0.1	3.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	25.4											
HCM 7th LOS	C											

D.4*Future Conditions Analysis (With Project)
Horizon Year 2025*

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/28/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	81	1	27	83	4	30
Future Vol, veh/h	81	1	27	83	4	30
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	88	1	29	90	4	33
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	89	0	238	89
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	149	-
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	-	-	1506	-	751	970
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1506	-	735	970
Mov Cap-2 Maneuver	-	-	-	-	735	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	861	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		1.83		9.01	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	935	442	-	-	-	
HCM Lane V/C Ratio	0.04	0.019	-	-	-	
HCM Control Delay (s/veh)	9	7.4	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/28/2024

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	3	75	49	77	71	10	52	12	141	30	12	6
Future Vol, veh/h	3	75	49	77	71	10	52	12	141	30	12	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	82	53	84	77	11	57	13	153	33	13	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.6	9.2	9	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	2%	49%	63%
Vol Thru, %	6%	59%	45%	25%
Vol Right, %	69%	39%	6%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	127	158	48
LT Vol	52	3	77	30
Through Vol	12	75	71	12
RT Vol	141	49	10	6
Lane Flow Rate	223	138	172	52
Geometry Grp	1	1	1	1
Degree of Util (X)	0.27	0.174	0.228	0.072
Departure Headway (Hd)	4.37	4.546	4.782	4.979
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	820	787	749	717
Service Time	2.405	2.591	2.825	3.028
HCM Lane V/C Ratio	0.272	0.175	0.23	0.073
HCM Control Delay, s/veh	9	8.6	9.2	8.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.1	0.6	0.9	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/28/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	37	165	329	31	9	147	263	138	15	507	73
Future Volume (veh/h)	72	37	165	329	31	9	147	263	138	15	507	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	40	179	358	34	10	160	286	150	16	551	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	41	182	395	378	111	343	923	1077	469	829	703
Arrive On Green	0.05	0.14	0.14	0.19	0.27	0.27	0.06	0.49	0.49	0.01	0.44	0.44
Sat Flow, veh/h	1781	298	1333	1781	1388	408	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	78	0	219	358	0	44	160	286	150	16	551	79
Grp Sat Flow(s),veh/h/ln	1781	0	1630	1781	0	1797	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.4	0.0	15.7	19.5	0.0	2.1	5.5	10.7	3.9	0.6	27.3	3.4
Cycle Q Clear(g_c), s	4.4	0.0	15.7	19.5	0.0	2.1	5.5	10.7	3.9	0.6	27.3	3.4
Prop In Lane	1.00		0.82	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	337	0	222	395	0	489	343	923	1077	469	829	703
V/C Ratio(X)	0.23	0.00	0.98	0.91	0.00	0.09	0.47	0.31	0.14	0.03	0.66	0.11
Avail Cap(c_a), veh/h	369	0	222	429	0	490	351	923	1077	566	829	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	0.0	50.5	33.4	0.0	31.9	19.1	17.8	6.7	17.5	25.8	19.1
Incr Delay (d2), s/veh	0.3	0.0	55.8	21.5	0.0	0.1	1.0	0.9	0.3	0.0	4.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	9.8	10.6	0.0	0.9	2.3	4.8	1.3	0.2	12.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.9	0.0	106.3	54.9	0.0	31.9	20.1	18.6	6.9	17.6	29.9	19.4
LnGrp LOS	D		F	D		C	C	B	A	B	C	B
Approach Vol, veh/h	297			402			596			646		
Approach Delay, s/veh	89.1			52.4			16.1			28.3		
Approach LOS	F			D			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.8	22.0	5.6	63.9	9.9	37.9	11.5	58.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	24.0	16.0	8.0	52.0	8.0	32.0	8.0	52.0				
Max Q Clear Time (g_c+I1), s	21.5	17.7	2.6	12.7	6.4	4.1	7.5	29.3				
Green Ext Time (p_c), s	0.3	0.0	0.0	2.3	0.0	0.2	0.0	3.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	38.9											
HCM 7th LOS	D											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/28/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	87	3	28	65	1	38
Future Vol, veh/h	87	3	28	65	1	38
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	95	3	30	71	1	41
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	98	0	228	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	132	-
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	-	-	1495	-	760	960
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	895	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1495	-	744	960
Mov Cap-2 Maneuver	-	-	-	-	744	-
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	876	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		2.25		8.95	
HCM LOS	A					
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	953	542	-	-	-	
HCM Lane V/C Ratio	0.044	0.02	-	-	-	
HCM Control Delay (s/veh)	9	7.5	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/28/2024

Intersection												
Intersection Delay, s/veh	8.5											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	7	57	69	77	47	18	50	25	83	13	13	6
Future Vol, veh/h	7	57	69	77	47	18	50	25	83	13	13	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	62	75	84	51	20	54	27	90	14	14	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.2	8.8	8.6	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	5%	54%	41%
Vol Thru, %	16%	43%	33%	41%
Vol Right, %	53%	52%	13%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	158	133	142	32
LT Vol	50	7	77	13
Through Vol	25	57	47	13
RT Vol	83	69	18	6
Lane Flow Rate	172	145	154	35
Geometry Grp	1	1	1	1
Degree of Util (X)	0.21	0.172	0.197	0.046
Departure Headway (Hd)	4.4	4.286	4.597	4.781
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	816	837	781	748
Service Time	2.428	2.314	2.626	2.818
HCM Lane V/C Ratio	0.211	0.173	0.197	0.047
HCM Control Delay, s/veh	8.6	8.2	8.8	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.7	0.1

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/28/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	45	74	133	15	16	123	372	247	21	332	58
Future Volume (veh/h)	57	45	74	133	15	16	123	372	247	21	332	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	49	80	145	16	17	134	404	268	23	361	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	68	111	304	131	139	536	956	958	421	880	746
Arrive On Green	0.04	0.11	0.11	0.09	0.16	0.16	0.06	0.51	0.51	0.02	0.47	0.47
Sat Flow, veh/h	1781	639	1043	1781	830	882	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	62	0	129	145	0	33	134	404	268	23	361	63
Grp Sat Flow(s),veh/h/ln	1781	0	1683	1781	0	1712	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.3	0.0	5.5	5.1	0.0	1.2	2.8	10.0	6.0	0.5	9.4	1.6
Cycle Q Clear(g_c), s	2.3	0.0	5.5	5.1	0.0	1.2	2.8	10.0	6.0	0.5	9.4	1.6
Prop In Lane	1.00		0.62	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	0	179	304	0	270	536	956	958	421	880	746
V/C Ratio(X)	0.20	0.00	0.72	0.48	0.00	0.12	0.25	0.42	0.28	0.05	0.41	0.08
Avail Cap(c_a), veh/h	435	0	271	497	0	437	619	956	958	576	880	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	32.2	24.8	0.0	26.9	9.2	11.3	7.0	10.1	12.9	10.9
Incr Delay (d2), s/veh	0.3	0.0	5.4	1.2	0.0	0.2	0.2	1.4	0.7	0.1	1.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.4	2.1	0.0	0.5	0.9	4.0	1.8	0.2	3.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	0.0	37.5	25.9	0.0	27.1	9.4	12.7	7.7	10.2	14.4	11.1
LnGrp LOS	C		D	C		C	A	B	A	B	B	B
Approach Vol, veh/h	191			178			806			447		
Approach Delay, s/veh	34.5			26.1			10.5			13.7		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	13.9	5.5	44.0	7.1	17.8	8.5	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	7.1	7.5	2.5	12.0	4.3	3.2	4.8	11.4				
Green Ext Time (p_c), s	0.2	0.2	0.0	3.4	0.0	0.1	0.1	2.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	15.9											
HCM 7th LOS	B											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/28/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	144	2	32	118	4	51
Future Vol, veh/h	144	2	32	118	4	51
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	157	2	35	128	4	55
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	159	0	355	158
Stage 1	-	-	-	-	158	-
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	-	-	1421	-	643	888
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	836	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1421	-	626	888
Mov Cap-2 Maneuver	-	-	-	-	626	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	814	-
Approach	SE	NW		NE		
HCM Control Delay, s/v	0	1.62		9.49		
HCM LOS	A					
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	862	384	-	-	-	
HCM Lane V/C Ratio	0.069	0.024	-	-	-	
HCM Control Delay (s/veh)	9.5	7.6	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.2	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/28/2024

Intersection												
Intersection Delay, s/veh	9.8											
Intersection LOS	A											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	110	89	102	72	23	79	27	106	14	19	4
Future Vol, veh/h	8	110	89	102	72	23	79	27	106	14	19	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	120	97	111	78	25	86	29	115	15	21	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay, s/veh	9.6			10			10			8.7		
HCM LOS	A			A			A			A		
Lane	NBLn1	EBLn1	WBLn1	SBLn1								
Vol Left, %	37%	4%	52%	38%								
Vol Thru, %	13%	53%	37%	51%								
Vol Right, %	50%	43%	12%	11%								
Sign Control	Stop	Stop	Stop	Stop								
Traffic Vol by Lane	212	207	197	37								
LT Vol	79	8	102	14								
Through Vol	27	110	72	19								
RT Vol	106	89	23	4								
Lane Flow Rate	230	225	214	40								
Geometry Grp	1	1	1	1								
Degree of Util (X)	0.306	0.288	0.291	0.059								
Departure Headway (Hd)	4.788	4.615	4.898	5.292								
Convergence, Y/N	Yes	Yes	Yes	Yes								
Cap	744	774	728	670								
Service Time	2.852	2.678	2.962	3.379								
HCM Lane V/C Ratio	0.309	0.291	0.294	0.06								
HCM Control Delay, s/veh	10	9.6	10	8.7								
HCM Lane LOS	A	A	A	A								
HCM 95th-tile Q	1.3	1.2	1.2	0.2								

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/28/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	44	157	169	38	10	169	480	250	10	436	64
Future Volume (veh/h)	83	44	157	169	38	10	169	480	250	10	436	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	90	48	171	184	41	11	184	522	272	11	474	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	389	52	186	297	278	75	425	921	953	309	794	673
Arrive On Green	0.06	0.15	0.15	0.11	0.20	0.20	0.08	0.49	0.49	0.01	0.42	0.42
Sat Flow, veh/h	1781	359	1280	1781	1421	381	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	90	0	219	184	0	52	184	522	272	11	474	70
Grp Sat Flow(s),veh/h/ln	1781	0	1640	1781	0	1802	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.5	0.0	10.9	6.8	0.0	2.0	4.5	16.2	6.8	0.3	16.1	2.2
Cycle Q Clear(g_c), s	3.5	0.0	10.9	6.8	0.0	2.0	4.5	16.2	6.8	0.3	16.1	2.2
Prop In Lane	1.00		0.78	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	389	0	239	297	0	353	425	921	953	309	794	673
V/C Ratio(X)	0.23	0.00	0.92	0.62	0.00	0.15	0.43	0.57	0.29	0.04	0.60	0.10
Avail Cap(c_a), veh/h	457	0	239	428	0	415	458	921	953	462	794	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	34.7	25.1	0.0	27.4	12.8	14.7	7.9	13.9	18.3	14.3
Incr Delay (d2), s/veh	0.3	0.0	36.6	2.1	0.0	0.2	0.7	2.5	0.8	0.0	3.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	6.6	2.9	0.0	0.8	1.7	6.8	2.2	0.1	7.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.8	0.0	71.4	27.2	0.0	27.6	13.5	17.3	8.7	14.0	21.6	14.6
LnGrp LOS	C		E	C		C	B	B	A	B	C	B
Approach Vol, veh/h	309			236			978			555		
Approach Delay, s/veh	58.7			27.3			14.2			20.5		
Approach LOS	E			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	18.0	4.9	46.6	8.8	22.1	10.5	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	8.8	12.9	2.3	18.2	5.5	4.0	6.5	18.1				
Green Ext Time (p_c), s	0.2	0.0	0.0	3.9	0.0	0.1	0.1	2.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	24.0											
HCM 7th LOS	C											

D.5*Future Conditions Analysis (With Project)
Horizon Year 2030*

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/28/2024

Intersection						
Int Delay, s/veh	2.3					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	91	1	30	92	4	34
Future Vol, veh/h	91	1	30	92	4	34
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	99	1	33	100	4	37
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	100	0	265	99
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	165	-
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	-	-	1493	-	724	956
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1493	-	708	956
Mov Cap-2 Maneuver	-	-	-	-	708	-
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	844	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		1.84		9.09	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	922	443	-	-	-	
HCM Lane V/C Ratio	0.045	0.022	-	-	-	
HCM Control Delay (s/veh)	9.1	7.5	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.1	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/28/2024

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	104	54	80	106	11	57	13	148	32	13	8
Future Vol, veh/h	5	104	54	80	106	11	57	13	148	32	13	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	113	59	87	115	12	62	14	161	35	14	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	9.2	10	9.6	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	26%	3%	41%	60%
Vol Thru, %	6%	64%	54%	25%
Vol Right, %	68%	33%	6%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	218	163	197	53
LT Vol	57	5	80	32
Through Vol	13	104	106	13
RT Vol	148	54	11	8
Lane Flow Rate	237	177	214	58
Geometry Grp	1	1	1	1
Degree of Util (X)	0.302	0.232	0.291	0.083
Departure Headway (Hd)	4.588	4.707	4.891	5.204
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	777	757	730	682
Service Time	2.648	2.775	2.957	3.283
HCM Lane V/C Ratio	0.305	0.234	0.293	0.085
HCM Control Delay, s/veh	9.6	9.2	10	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.3	0.9	1.2	0.3

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/28/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	39	195	345	33	10	180	276	145	16	531	80
Future Volume (veh/h)	79	39	195	345	33	10	180	276	145	16	531	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	42	212	375	36	11	196	300	158	17	577	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	36	183	404	375	115	324	916	1082	453	818	693
Arrive On Green	0.05	0.13	0.13	0.19	0.27	0.27	0.07	0.49	0.49	0.01	0.44	0.44
Sat Flow, veh/h	1781	269	1357	1781	1375	420	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	86	0	254	375	0	47	196	300	158	17	577	87
Grp Sat Flow(s),veh/h/ln	1781	0	1626	1781	0	1795	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.9	0.0	16.0	20.8	0.0	2.3	7.0	11.6	4.2	0.6	29.9	3.9
Cycle Q Clear(g_c), s	4.9	0.0	16.0	20.8	0.0	2.3	7.0	11.6	4.2	0.6	29.9	3.9
Prop In Lane	1.00		0.83	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	0	219	404	0	490	324	916	1082	453	818	693
V/C Ratio(X)	0.25	0.00	1.16	0.93	0.00	0.10	0.61	0.33	0.15	0.04	0.71	0.13
Avail Cap(c_a), veh/h	363	0	219	420	0	490	324	916	1082	547	818	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	0.0	51.5	33.8	0.0	32.3	21.0	18.4	6.6	18.2	27.3	19.9
Incr Delay (d2), s/veh	0.4	0.0	111.3	26.2	0.0	0.1	3.2	1.0	0.3	0.0	5.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	13.2	11.7	0.0	1.0	3.1	5.2	1.4	0.3	14.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.5	0.0	162.8	60.0	0.0	32.4	24.2	19.4	6.9	18.2	32.3	20.3
LnGrp LOS	D		F	E		C	C	B	A	B	C	C
Approach Vol, veh/h	340			422			654			681		
Approach Delay, s/veh	132.1			56.9			17.8			30.5		
Approach LOS	F			E			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.0	22.0	5.7	64.3	10.5	38.5	12.0	58.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	24.0	16.0	8.0	52.0	8.0	32.0	8.0	52.0				
Max Q Clear Time (g_c+l1), s	22.8	18.0	2.6	13.6	6.9	4.3	9.0	31.9				
Green Ext Time (p_c), s	0.2	0.0	0.0	2.4	0.0	0.2	0.0	3.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	48.3											
HCM 7th LOS	D											

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/28/2024

Intersection						
Int Delay, s/veh	2.5					
Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	96	3	31	73	1	41
Future Vol, veh/h	96	3	31	73	1	41
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	104	3	34	79	1	45
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	108	0	253	106
Stage 1	-	-	-	-	106	-
Stage 2	-	-	-	-	147	-
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	-	-	1483	-	736	948
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1483	-	718	948
Mov Cap-2 Maneuver	-	-	-	-	718	-
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	860	-
Approach	SE		NW		NE	
HCM Control Delay, s/v	0		2.23		9.02	
HCM LOS					A	
Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER	
Capacity (veh/h)	941	537	-	-	-	
HCM Lane V/C Ratio	0.049	0.023	-	-	-	
HCM Control Delay (s/veh)	9	7.5	0	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.2	0.1	-	-	-	

HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/28/2024

Intersection												
Intersection Delay, s/veh	8.9											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	8	83	73	80	70	19	54	26	87	14	14	7
Future Vol, veh/h	8	83	73	80	70	19	54	26	87	14	14	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	90	79	87	76	21	59	28	95	15	15	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	8.7	9.2	9	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	5%	47%	40%
Vol Thru, %	16%	51%	41%	40%
Vol Right, %	52%	45%	11%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	167	164	169	35
LT Vol	54	8	80	14
Through Vol	26	83	70	14
RT Vol	87	73	19	7
Lane Flow Rate	182	178	184	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.23	0.218	0.239	0.052
Departure Headway (Hd)	4.56	4.411	4.677	4.951
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	786	811	766	720
Service Time	2.6	2.451	2.717	3.003
HCM Lane V/C Ratio	0.232	0.219	0.24	0.053
HCM Control Delay, s/veh	9	8.7	9.2	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.8	0.9	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/28/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	48	96	140	16	17	147	390	259	22	348	63
Future Volume (veh/h)	62	48	96	140	16	17	147	390	259	22	348	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	67	52	104	152	17	18	160	424	282	24	378	68
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	66	132	299	141	149	517	943	951	397	852	722
Arrive On Green	0.04	0.12	0.12	0.10	0.17	0.17	0.07	0.50	0.50	0.02	0.46	0.46
Sat Flow, veh/h	1781	557	1113	1781	831	880	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	67	0	156	152	0	35	160	424	282	24	378	68
Grp Sat Flow(s),veh/h/ln	1781	0	1670	1781	0	1712	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.5	0.0	7.0	5.5	0.0	1.3	3.4	11.2	6.7	0.5	10.6	1.9
Cycle Q Clear(g_c), s	2.5	0.0	7.0	5.5	0.0	1.3	3.4	11.2	6.7	0.5	10.6	1.9
Prop In Lane	1.00		0.67	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	337	0	199	299	0	291	517	943	951	397	852	722
V/C Ratio(X)	0.20	0.00	0.79	0.51	0.00	0.12	0.31	0.45	0.30	0.06	0.44	0.09
Avail Cap(c_a), veh/h	442	0	261	476	0	423	579	943	951	545	852	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	32.9	24.9	0.0	27.0	9.8	12.2	7.5	11.1	14.3	11.9
Incr Delay (d2), s/veh	0.3	0.0	11.0	1.3	0.0	0.2	0.3	1.6	0.8	0.1	1.7	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.3	2.3	0.0	0.5	1.2	4.5	2.1	0.2	4.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	0.0	43.9	26.2	0.0	27.2	10.2	13.8	8.3	11.1	16.0	12.2
LnGrp LOS	C		D	C		C	B	B	A	B	B	B
Approach Vol, veh/h	223			187			866			470		
Approach Delay, s/veh	39.2			26.4			11.3			15.2		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	15.1	5.6	44.7	7.5	19.0	9.3	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	7.5	9.0	2.5	13.2	4.5	3.3	5.4	12.6				
Green Ext Time (p_c), s	0.2	0.2	0.0	3.5	0.0	0.1	0.1	2.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			17.5									
HCM 7th LOS			B									

HCM 7th TWSC

1: Hillman Way Drive & Davies Plantation Road

02/28/2024

Intersection

Int Delay, s/veh 2.2

Movement	SET	SER	NWL	NWT	NEL	NER
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Lane Configurations						
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Traffic Vol, veh/h	153	2	35	126	4	55
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Future Vol, veh/h	153	2	35	126	4	55
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Conflicting Peds, #/hr	0	0	0	0	0	0
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Sign Control	Free	Free	Free	Free	Stop	Stop
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RT Channelized	-	None	-	None	-	None
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Storage Length	-	-	-	-	0	-
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Veh in Median Storage, #	0	-	-	0	0	-
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Grade, %	0	-	-	0	0	-
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Peak Hour Factor	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2
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Mvmt Flow	166	2	38	137	4	60
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Major/Minor	Major1	Major2	Minor1
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Conflicting Flow All	0	0	168
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Stage 1	-	-	-
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Stage 2	-	-	-
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Critical Hdwy	-	-	4.12
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Critical Hdwy Stg 1	-	-	-
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Critical Hdwy Stg 2	-	-	-
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Follow-up Hdwy	-	-	2.218
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Pot Cap-1 Maneuver	-	-	1409
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Stage 1	-	-	-
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Stage 2	-	-	-
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Platoon blocked, %	-	-	-
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Mov Cap-1 Maneuver	-	-	1409
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Mov Cap-2 Maneuver	-	-	-
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Stage 1	-	-	-
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Stage 2	-	-	-
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Approach	SE	NW	NE
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HCM Control Delay, s/v	0	1.66	9.58
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HCM LOS			A
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Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
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Capacity (veh/h)	851	391	-	-	-
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HCM Lane V/C Ratio	0.075	0.027	-	-	-
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HCM Control Delay (s/veh)	9.6	7.6	0	-	-
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HCM Lane LOS	A	A	A	-	-
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HCM 95th %tile Q(veh)	0.2	0.1	-	-	-
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HCM 7th AWSC

2: Davies Plantation Road & E. Davies Plantation Road & Davies Manor Drive

02/28/2024

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	9	125	94	107	84	24	83	29	111	15	20	5
Future Vol, veh/h	9	125	94	107	84	24	83	29	111	15	20	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	136	102	116	91	26	90	32	121	16	22	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay, s/veh	10.1	10.5	10.4	8.9
HCM LOS	B	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	4%	50%	38%
Vol Thru, %	13%	55%	39%	50%
Vol Right, %	50%	41%	11%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	223	228	215	40
LT Vol	83	9	107	15
Through Vol	29	125	84	20
RT Vol	111	94	24	5
Lane Flow Rate	242	248	234	43
Geometry Grp	1	1	1	1
Degree of Util (X)	0.33	0.324	0.323	0.067
Departure Headway (Hd)	4.901	4.705	4.979	5.531
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	725	756	715	652
Service Time	2.985	2.787	3.063	3.531
HCM Lane V/C Ratio	0.334	0.328	0.327	0.066
HCM Control Delay, s/veh	10.4	10.1	10.5	8.9
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.4	1.4	1.4	0.2

HCM 7th Signalized Intersection Summary

3: Canada Road & E. Davies Plantation Road/Beverle Rivera Drive

02/28/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	47	174	177	40	11	183	503	262	11	457	68
Future Volume (veh/h)	88	47	174	177	40	11	183	503	262	11	457	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	51	189	192	43	12	199	547	285	12	497	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	50	186	287	274	76	412	920	958	293	786	666
Arrive On Green	0.06	0.14	0.14	0.11	0.19	0.19	0.08	0.49	0.49	0.01	0.42	0.42
Sat Flow, veh/h	1781	348	1290	1781	1407	393	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	96	0	240	192	0	55	199	547	285	12	497	74
Grp Sat Flow(s),veh/h/ln	1781	0	1638	1781	0	1800	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.8	0.0	12.0	7.2	0.0	2.1	5.0	17.5	7.2	0.3	17.5	2.4
Cycle Q Clear(g_c), s	3.8	0.0	12.0	7.2	0.0	2.1	5.0	17.5	7.2	0.3	17.5	2.4
Prop In Lane	1.00		0.79	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	0	236	287	0	350	412	920	958	293	786	666
V/C Ratio(X)	0.25	0.00	1.02	0.67	0.00	0.16	0.48	0.59	0.30	0.04	0.63	0.11
Avail Cap(c_a), veh/h	452	0	236	407	0	410	434	920	958	443	786	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	35.7	25.3	0.0	27.9	13.5	15.2	8.0	14.4	19.1	14.7
Incr Delay (d2), s/veh	0.3	0.0	63.1	2.7	0.0	0.2	0.9	2.8	0.8	0.1	3.9	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	8.7	3.1	0.0	0.9	1.8	7.4	2.3	0.1	7.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.1	0.0	98.7	28.0	0.0	28.1	14.3	18.0	8.7	14.4	22.9	15.0
LnGrp LOS	C		F	C		C	B	B	A	B	C	B
Approach Vol, veh/h	336			247			1031			583		
Approach Delay, s/veh	78.5			28.1			14.8			21.8		
Approach LOS	E			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	18.0	5.0	47.0	9.2	22.2	10.9	41.0				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0				
Max Green Setting (Gmax), s	15.0	12.0	8.0	35.0	8.0	19.0	8.0	35.0				
Max Q Clear Time (g_c+I1), s	9.2	14.0	2.3	19.5	5.8	4.1	7.0	19.5				
Green Ext Time (p_c), s	0.2	0.0	0.0	4.0	0.0	0.1	0.1	3.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	27.9											
HCM 7th LOS	C											

D.6

*Future Site Conditions Analysis (With Project)
Horizon Year 2025*

HCM 7th TWSC

4: West Driveway & Davies Plantation Rd

02/29/2024

Intersection						
Int Delay, s/veh	1.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	104	7	29	100	6	23
Future Vol, veh/h	104	7	29	100	6	23
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	113	8	32	109	7	25
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	121	0	289	117
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	172	-
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	-	-	1467	-	702	935
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	858	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1467	-	686	935
Mov Cap-2 Maneuver	-	-	-	-	686	-
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	839	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		1.69		9.29	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	870	-	-	405	-	
HCM Lane V/C Ratio	0.036	-	-	0.021	-	
HCM Control Delay (s/veh)	9.3	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-	

HCM 7th TWSC

4: West Driveway & Davies Plantation Rd

02/29/2024

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	122	3	11	91	3	13
Future Vol, veh/h	122	3	11	91	3	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	133	3	12	99	3	14
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	136	0	257	134
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	123	-
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	-	-	1448	-	732	915
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1448	-	725	915
Mov Cap-2 Maneuver	-	-	-	-	725	-
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	895	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.81		9.21	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	872	-	-	194	-	
HCM Lane V/C Ratio	0.02	-	-	0.008	-	
HCM Control Delay (s/veh)	9.2	-	-	7.5	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

HCM 7th TWSC

4: West Driveway & Davies Plantation Rd

02/29/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	194	1	5	151	1	6
Future Vol, veh/h	194	1	5	151	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	211	1	5	164	1	7
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	212	0	386	211
Stage 1	-	-	-	-	211	-
Stage 2	-	-	-	-	175	-
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	-	617	829
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1358	-	614	829
Mov Cap-2 Maneuver	-	-	-	-	614	-
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	852	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0.25		9.61	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	789	-	-	58	-	
HCM Lane V/C Ratio	0.01	-	-	0.004	-	
HCM Control Delay (s/veh)	9.6	-	-	7.7	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0	-	

D.7

*Future Site Conditions Analysis (With Project)
Horizon Year 2030*

HCM 7th TWSC

4: West Driveway & Davies Plantation Rd

02/29/2024

Intersection						
Int Delay, s/veh	3.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	109	16	66	106	13	54
Future Vol, veh/h	109	16	66	106	13	54
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	118	17	72	115	14	59
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	136	0	386	127
Stage 1	-	-	-	-	127	-
Stage 2	-	-	-	-	259	-
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	-	-	1448	-	617	923
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1448	-	585	923
Mov Cap-2 Maneuver	-	-	-	-	585	-
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	743	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		2.92		9.76	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	830	-	-	691	-	
HCM Lane V/C Ratio	0.088	-	-	0.05	-	
HCM Control Delay (s/veh)	9.8	-	-	7.6	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.3	-	-	0.2	-	

HCM 7th TWSC

4: West Driveway & Davies Plantation Rd

02/29/2024

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	9	35	96	10	39
Future Vol, veh/h	128	9	35	96	10	39
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	139	10	38	104	11	42
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	149	0	324	144
Stage 1	-	-	-	-	144	-
Stage 2	-	-	-	-	180	-
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	-	-	1433	-	669	903
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	851	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1433	-	651	903
Mov Cap-2 Maneuver	-	-	-	-	651	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	827	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		2.03		9.59	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	837	-	-	481	-	
HCM Lane V/C Ratio	0.064	-	-	0.027	-	
HCM Control Delay (s/veh)	9.6	-	-	7.6	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	

HCM 7th TWSC

4: West Driveway & Davies Plantation Rd

02/29/2024

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	204	4	14	157	4	17
Future Vol, veh/h	204	4	14	157	4	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	222	4	15	171	4	18
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	226	0	425	224
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	201	-
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	-	-	1342	-	586	816
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	833	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1342	-	579	816
Mov Cap-2 Maneuver	-	-	-	-	579	-
Stage 1	-	-	-	-	813	-
Stage 2	-	-	-	-	822	-
Approach	EB	WB		NB		
HCM Control Delay, s/v	0	0.63		9.91		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	757	-	-	147	-	
HCM Lane V/C Ratio	0.03	-	-	0.011	-	
HCM Control Delay (s/veh)	9.9	-	-	7.7	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	



Board of Mayor and Aldermen

6400 Stage Road
Bartlett, TN 38134

SCHEDULED

RESOLUTION (ID # 3527)

Meeting: 04/23/24 06:00 PM

Department: Finance

Category: Presentation

Prepared By: Dick Phebus

Initiator: Dick Phebus

Sponsors:

DOC ID: 3527

Resolution 13-24, a resolution to amend the Fiscal Year 2024 Bartlett City Schools General Purpose School Fund and Education Capital Project Fund.

WHEREAS, the Bartlett City Board of Mayor and Aldermen is required to approve the Bartlett City Board of Education (BOE) General Purpose School Fund budget, as amended; and

WHEREAS, the Bartlett City BOE, using Resolution 11-7, approved a budget amendment on March 28, 2024, which provides for a use of FY2024 General Purpose School Fund Balance of \$355,000 to fund Education Capital Projects of \$335,000 for Bartlett High School roofing repairs to Building E and Building M; and

WHEREAS, resolution 11-7 of the Bartlett City BOE is hereby attached and made a part of this resolution by reference;

NOW THEREFORE BE IT RESOLVED By the Board of Mayor and Aldermen that the amendment itemized in resolution 11-7 to the FY2024 General Purpose School Fund and Education Capital Project Fund of the Bartlett City BOE is approved.

Adopted this day of April 23, 2024

Harold Brad King, Register to the

Board of Mayor and Aldermen

David Parsons, Mayor

Attest: _____
Penny Medlock, City Clerk



RESOLUTION 11-7

A RESOLUTION TO APPROVE THE PLANNED USE OF GENERAL FUND BALANCE AND TO AMEND THE 2023-2024 FISCAL YEAR EDUCATIONAL CAPITAL PROJECT FUND BUDGETS OF THE BARTLETT CITY SCHOOLS.

WHEREAS, Tennessee Code Annotated §49-2-203(a)(10)(A)(i) requires the Bartlett City Board of Education to direct the Superintendent and the Chair to prepare a budget on forms furnished by the Commissioner, and when the budget has been approved by the Board, to then submit that budget to the Bartlett Board of Mayor and Aldermen for their approval; and

WHEREAS, these amendments change the total amount of the budget.

NOW, THEREFORE, BE IT RESOLVED BY THE BARTLETT CITY BOARD OF EDUCATION:

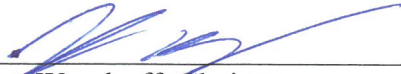
Section 1. That the General Purpose Fund and Educational Capital Project Fund Budgets for the 2023-2024 school year for the Bartlett City Schools as presented in official budget documents are hereby amended by reference in the following amounts as referenced below:

Fund 177 - Education Capital Projects								
Fund	Function	Object	Project	Description	Budget	Add	Subtract	Amended Budget
177	91300	70700	5630	BHS E Building Re-roof	\$0.00	\$165,000.00		\$165,000.00
177	91300	70700	5640	BHS M Building Re-roof	\$0.00	\$170,000.00		\$170,000.00
Totals					\$0.00	\$335,000.00	\$0.00	\$335,000.00
FY24 Amended General Fund Balance					Beginning Bal	Add	Subtract	Amended Fund Bal
					\$42,822,828.27		\$335,000.00	\$42,487,828.27

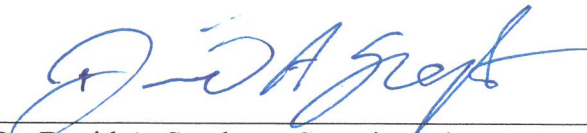
Section 2. That the budget documents required by law will be amended and submitted as required for approval to the Bartlett Board of Mayor and Aldermen, and, upon approval, shall be submitted as required to the State of Tennessee.

Section 3. That this resolution shall become effective March 28, 2024 from and after its adoption by the Bartlett City Board of Education.

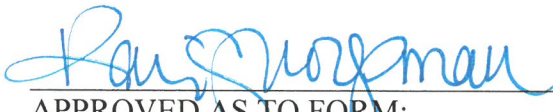
Adopted this 28 day of March, 2024.



D. Bryan Woodruff, Chairman
Bartlett City Board of Education



Dr. David A. Stephens, Superintendent
Bartlett City Board of Education



APPROVED AS TO FORM:
Kari Shoopman, General Counsel