



**DeKalb County Department of Planning & Sustainability**

**330 Ponce De Leon Avenue, Suite 300**

**Decatur, GA 30030**

**(404) 371-2155 / [www.dekalbcountyga.gov/planning](http://www.dekalbcountyga.gov/planning)**

Michael Thurmond  
Chief Executive Officer

**Planning Commission Hearing Date: September 01, 2020**

**Board of Commissioners Hearing Date: September 24, 2020**

**STAFF ANALYSIS**

**Case No.:** Z-20-1243958 **Agenda #:** D.3

**Location/Address:** The property is located on the southeast corner of Stephenson Road and Alford Road at 800, 810 and 820 Alford Road and 917 Stephenson Road, Stone Mountain, GA. **Commission District:** 4 **Super District:** 7

**Parcel ID:** 16-128-02-001; 16-128-02-003; 16-128-02-011; 16-129-02-009

**Request:** To rezone property from R-100 (Residential Medium Lot) District to RSM (Small Lot Residential Mix) District to develop 140 single-family detached residences at a density of 3.42 units per acre.

**Property Owner:** Katherine L. Brown; Louis Evans Brown Jr.; Robert Larry Brow; Sarah K. Warbington; Danny H. Warbington

**Applicant/Agent:** Parkland Communities, LLC / co Battle Law, P.C.

**Acreage:** 40.91 Acres

**Existing Land Use:** Primarily Undeveloped with Three Single Family Residences and Accessory Structures

**Surrounding Properties Adjacent Zoning:** Adjacent to the site along the west and south property lines are single-family detached subdivisions zoned RSM. North and east of the site is zoned R-100 and developed with single-family detached residences. The subject site is within walking distance of three public schools: Pine Ridge Elementary, Stephenson Middle and Stephenson High school.

**Comprehensive Plan:** Suburban (SUB)  Consistent  Inconsistent

<b>Proposed Residential Units.:</b> 140	<b>Existing Residential Units:</b> 3
<b>Proposed Lot Coverage:</b> Detached 50% Per Lot	<b>Existing Lot Coverage:</b> <35% Per Lot

## **SUBJECT PROPERTY**

The subject property is located at the southeast corner of Stephenson Road and Alford Road. The 40.91 -acre site consists of three single-family residence with accessory structures. However, the majority of the site is undeveloped with lots of mature green vegetation. Stephenson Road is a heavily traveled two-lane collector with a middle turn lane and Alford Road is classified as a local street. The site is surrounded by a mixture of residential developments and institutional uses. The subject site is within walking distance of three public schools: Pine Ridge Elementary, Stephenson Middle and Stephenson High school. The site is adjacent to an after-school program on Stephenson Road. Carriage Point subdivision is west of the site along Alford Road and Alford Crossing subdivision is south of the site. The site is currently zoned R-100 (Residential Medium Lot) District.

## **ZONING ANALYSIS**

The subject application requests an amendment to the Official Zoning Map pursuant to Chapter 27, Article 7.3 of the DeKalb Code of Ordinances to rezone the entire 40.91-acre site from R-100 (Residential Medium Lot 100) District to the RSM (Small Lot Residential Mix) District to allow for the development of 140 single-family detached residences at a density of 3.42 units per acre. The proposed RSM zoning district is consistent and compatible with RSM zoned properties west of the site along Alford Road and RSM zoned properties adjacent to the site along the south property line pursuant to CZ-86175. The proposed rezoning to RSM (Small Lot Residential Mix) District is appropriate for this site given its consistency with the 2035 Comprehensive Land Use Plan which designates this within the Suburban (SUB) Character Area. The intent of the Suburban (SUB) Character Area is to recognize those areas of the county that have developed in traditional suburban land use patterns while encouraging new development to have increased connectivity and accessibility. The future land use for the surrounding properties to the west, north, south and east are all designated Suburban (SUB) Character Area.

## **PROJECT ANALYSIS**

The revised site plan depicts only 140 single-family detached residences. The site plan shows a designated park area with playground and mail kiosk as well as an interior pocket park. An existing pond on the site will remain and will be accessible to residents by mulch trails proposed for the site. Two stormwater detention ponds are proposed on the site. Access is proposed via one curb cut on Stephenson Road and one curb cut on Alford Road.

## **Impact Analysis**

**Section 27-7.3.4 of the DeKalb County Code states that the following standards and factors shall govern the review of all proposed amendments to the Official Zoning Map.**

**A. Whether the zoning proposal is in conformity with the policy and intent of the comprehensive plan:**

The 2035 Comprehensive Plan designates the subject site within the Suburban (SUB) Character Area. The intent of the Suburban (SUB) Character Area is to recognize those areas of the county that have developed in traditional suburban land use patterns while encouraging new development to have increased connectivity and accessibility. The proposed rezoning and development are compatible with the policy and intent of the 2035 Comprehensive Plan.

**B. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties:**

The proposed rezoning to the RSM (Small Lot Residential Mix) District complies with Chapter 27- Article 5.2.3 Compatibility of new and existing subdivisions by providing a minimum 20-foot wide transitional buffer along the perimeter property lines adjacent to single-family detached residences.

**C. Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned:**

The site as currently zoned R-100 would not provide the greatest economic use for the site. Larger homes on larger lots would produce fewer residences resulting in increased costs for construction and purchase.

**D. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property:**

The rezoning request to the RSM (Small Lot Residential Mix) District should not adversely affect the use or usability of adjacent and/or nearby residential properties in the area along Alford Road.

**E. Whether there are other existing or changing conditions affecting the use and development of the property, which give supporting grounds for either approval or disapproval of the zoning proposal:**

The proposed development offers 140 single-family detached residences on existing undeveloped property. The opportunity for home ownership by DeKalb County residents and compliance to development standards provide supporting grounds for approval of the zoning request.

**F. Whether the zoning proposal will adversely affect historic buildings, sites, districts, or archaeological resources:**

The proposed rezoning will not adversely affect historic buildings, sites, districts or archaeological resources.

**G. Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools:**

The zoning proposal to the RSM District to develop 140 residential units would increase traffic along Stephenson Road and Alford Road. However, given that Stephenson Road is a two-lane collector with a median, the increase in traffic should be mitigated by road improvements along the property frontage. The Department of Public Works Traffic Engineering did not find any traffic concerns that would disrupt traffic flow. The DeKalb County School District stated that the original proposed development for 183 new residences would add 95 students to the following schools: 22 at Pine Ridge Elementary School, 15 at Stephenson Middle School, 26 at Stephenson High School and 30 at other DeKalb County School District schools and two at private schools. The reduction to 140 residences would decrease the number of new students added to the school district. However, all three neighborhood schools have capacity for additional students.

**Since BOC 7/30/20**

The applicant has changed the request from proposing to develop 172 units consisting of single-family detached and single-family attached residences to proposing to develop only 140 single-family detached residences. The applicant requested a traffic impact study for the project area to determine if any recommendations (i.e. site improvements) would alleviate possible future traffic congestion in the area. The attached study prepared by

Kimley Horn and Associates was submitted to Planning and Sustainability after the Planning Commission staff report was finalized and distributed. Planning staff has now reviewed the traffic impact study which states the following conclusion: All study intersections are expected to operate at an overall acceptable level-of-service (LOS) under all future conditions. The roadway segments along Stephenson Road to the east and to the west of the development are currently operating at and projected to operate at LOS D under all existing and future scenarios. The traffic impact study recommends the following site development improvements to alleviate traffic from the proposed development that staff will include in the recommended conditions:

- Stephenson Road at Site Driveway East (Intersection 4)  
Along Stephenson Road, construct one (1) eastbound right turn lane.

Construct a conventional stop-controlled driveway on the site with one (1) ingress lane entering the site and one (1) egress lane exiting the site.

- Alford Road at Site Driveway West (Intersection 5)  
Construct a conventional stop-controlled driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.

**H. Whether the zoning proposal adversely impacts the environment or surrounding natural resources.**

The rezoning proposal to the RSM district will not adversely impact the environment or surrounding natural resources.

**COMPLIANCE WITH DISTRICT STANDARDS**

Per the chart below, the proposed RSM (Residential Small Lot) single-family detached residences can comply with minimum development standards of the RSM (Residential Small Lot) District per Table 2.2 of the DeKalb County Zoning Ordinance.

RSM STANDARD	REQUIREMENT	PROPOSED	COMPLIANCE
MIN. LOT WIDTH	50 feet for Single-Family Detached (SFD)	50 feet	YES
MIN. LOT AREA	5,000 sq. ft. for SFD	5,000 sq. ft.	YES
FRONT SETBACK	Min 20 ft. for SFD	20 feet	YES
INTERIOR LOT - SIDE	3 ft. with minimum 10 ft. building separation for SFD	3 ft. with minimum 10 ft. building separation for SFD	YES
REAR	20 ft. SFD	20 ft. SFD	YES
DWELLING UNITS PER ACRE	4 – 8	3.42 units per acre	YES
MAX. LOT COVERAGE	Maximum 50% SFD Per Lot	68% SFD	NO. Will need to show compliance during building permitting phase.

HEIGHT	3 Stories or 45 Feet	2 Stories	YES
MIN. PARKING Article 6	SFD-2 spaces per residence plus .25 for guest = 215 total required	585 Total Proposed	YES
OPEN SPACE	Minimum 20% if site is > 5 acres. Site is 40.9 acres	20.9%	YES
Linear Feet of Sidewalk	5-foot wide	5-foot wide	YES

**STAFF RECOMMENDATION: APPROVAL WITH CONDITIONS**

The revised request to rezone property from R-100 (Residential Medium Lot-100) District to RSM (Small Lot Residential Mix) District to construct 140 units consisting of single-family detached residences at a proposed density of 3.42 units per acre is compatible and consistent with the surrounding and adjacent residential properties. The proposed development complies primarily with the RSM district standards. The request is compatible with the Suburban (SUB) Character Area in the 2035 Comprehensive Land Use Plan and the following policies: density increases, infill development and residential protection. The traffic impact study submitted by the applicant suggests site development improvements to address the potential impact of increased traffic along Stephenson Road and Alford Road. Staff has incorporated these improvements in the recommended conditions. Therefore, the Planning and Sustainability Department recommends Approval Conditional subject to the following conditions:

1. The development shall have a maximum of 140 units consisting only of single-family detached residences. Conceptual layout of site plan and building design shall be in be in substantial compliance with the revised site plan dated 8/21/2020 and subject to approval of the Director of Planning & Sustainability Department.
2. Provide access on Stephenson Road and Alford Road. Location of vehicular ingress and egress shall be subject to approval by the DeKalb County Department of Public Works, Transportation Division.
3. Construct one (1) eastbound right turn lane along Stephenson Road. Construct a conventional stop-controlled driveway on the site with one (1) ingress lane entering the site and one (1) egress lane exiting the site. Along Alford Road, construct a conventional stop-controlled driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site.
4. Dedicate a minimum 50 feet of right of way from centerline of Stephenson Road and 27.5 feet of right of way from centerline of Alford Road (or all public infrastructure on right of way – including streetlights, whichever greater).
5. Install an enhanced pedestrian feature to include a refuge medianette, rectangular flashing beacons and advanced warning signs to facilitate safe crossing from the development to Stephen Middle School. Location to be approved by the Transportation Division.
6. Streetlights required with payment to Georgia Power and signed petition required prior to final plat approval.
7. Six-foot wide sidewalks required along Stephenson Road frontage. Five-foot wide sidewalks required along Alford Road.

8. A mandatory homeowners' association shall be created and shall be governed by a declaration of covenants, conditions, and restrictions. The homeowner association shall be responsible for the maintenance of required transitional buffer, open space within the property, street lighting, amenity areas and pedestrian paths.
9. Provide open space in compliance to Chapter 27-Article 5 of the DeKalb Code of Ordinances per conceptual site plan.
10. No residential units shall directly face Stephenson Road or Alford Road.
11. All exterior lighting shall be screened from adjacent properties or shielded to minimize glare and keep light inside the development.
12. Provide a minimum six-foot high fence along the southern boundary line of the site.
13. A six-foot high fence and minimum 15-foot wide landscape buffer on the public street frontage shall be provided along Stephenson Road and Alford Road. The landscaped buffer must meet requirements of Section 27-5.4.5(C)(1)-(C)(3) of this code regarding planting height, planting type, and planting functions. Street - facing fences shall have masonry (brick, stone, or hard coat stucco finish) piers separating fence sections with maximum lengths of 24 feet. A pier shall be required at any point where the fence changes direction. Piers must be at least 12 inches wide.
14. The approval of this rezoning application by the Board of Commissioners has no bearing on other approvals by the Zoning Board of Appeals or other authority, whose decision should be based on the merits of the application before said authority.

#### Attachments

1. Department Comments
2. Application
3. Site Plan
4. Zoning Map
5. Land Use Map
6. Site Photos

## NEXT STEPS

***Following an approval of this zoning action, one or several of the following may be required:***

- ✓ **Land Disturbance Permit** *(Required for of new building construction on non-residential properties, or land disturbance/improvement such as storm water detention, paving, digging, or landscaping.)*
- ✓ **Building Permit** *(New construction or renovation of a building (interior or exterior) may require full plan submittal or other documentation. zoning, site development, watershed and health department standards will be checked for compliance.)*
- ✓ **Certificate of Occupancy** *(Required prior to occupation of a commercial space and for use of property for any business type. The issuance follows the review of submitted plans if required based on the type occupancy.)*
- ✓ **Plat Approval** *(Required if any parcel is being subdivided, re-parceled, or combined. Issued “administratively”; no public hearing required.)*
- ✓ **Variance or Special Exception** *(Required seeking relief from any development standards of the Zoning Ordinance. A public hearing and action by the Board of Appeals are required for most variances.)*

**Each of the approvals and permits listed above require submittal of application, fees and supporting documents. Please consult with the appropriate department/division.**

## TRANSPORTATION COMMENTS-JULY 2020 ZONING AGENDA CASES

N1., N2 No comment

N3. No Comment

N4. Stephenson Rd is classified as a collector road. ROW dedication of 35 feet from centerline or to accommodate all public infrastructure, whichever greater. Bike lanes, 6-foot sidewalk, streetlights required. Add sidewalks across frontage of outparcel at 1451 Stephenson Road (16 162 05 001). Interior Streets residential: 55 right of way, 5 foot sidewalks, streetlights required. Contact Herman Fowler at [hefowler@dekalbcountyga.gov](mailto:hefowler@dekalbcountyga.gov) for street lighting.

N5. Stephenson Rd is classified as a collector road. ROW dedication of 35 feet from centerline or to accommodate all public infrastructure, whichever greater. Bike lanes, 6-foot sidewalk, streetlights required. Alford is classified at a local road. ROW dedication of 27.5 feet from centerline or to accommodate all public infrastructure, whichever greater. 5-foot sidewalk, streetlights required. Provide an enhanced pedestrian crossing with a pedestrian refuge median and rectangular rapid flashing beacon for access to school. Add sidewalks across frontage of outparcel at 949 Stephenson Road (16 129 02 008). Contact Herman Fowler at [hefowler@dekalbcountyga.gov](mailto:hefowler@dekalbcountyga.gov) for street lighting.

N6 & N7. Wesley Chapel Road is classified as a major arterial. ROW dedication of 50 feet from centerline or to accommodate all public infrastructure, whichever greater. Bike lanes, 6-foot sidewalk, streetlights required. Contact Herman Fowler at [hefowler@dekalbcountyga.gov](mailto:hefowler@dekalbcountyga.gov) for street lighting.

N8. Parcel has no frontage to right of way. Verify access easements.

N9. Panola Industrial and Acuity Way are both classified as collectors. ROW dedication of 35 feet from centerline or to accommodate all public infrastructure, whichever greater. Bike lanes, 6-foot sidewalk, streetlights required on all public right of way frontages. Contact Herman Fowler at [hefowler@dekalbcountyga.gov](mailto:hefowler@dekalbcountyga.gov) for street lighting. Access to interior road needs to meet at a 90-degree angle to the existing street to meet county code.

N10. Memorial Drive. GDOT review and permits required prior to LDP. The right of way falls within the jurisdiction of the City of Atlanta. Professional courtesy would allow COA a chance to comment. No comments.

N11. Bermuda Road is classified as a collector. ROW dedication of 35 feet from centerline or to accommodate all public infrastructure, whichever greater. Bike lanes, 6-foot sidewalk, streetlights required. Interior roads are shown as private. If public- ROW must be 55 feet, 5-foot sidewalks and streetlights required. Contact Herman Fowler at [hefowler@dekalbcountyga.gov](mailto:hefowler@dekalbcountyga.gov) for street lighting.

N12. Columbia Drive is classified as a minor arterial. ROW dedication of 40 feet from centerline or to accommodate all public infrastructure, whichever greater. Bike lanes, 6-foot sidewalk, streetlights required. Watch required ROW dedication as it may impact offsets and # of lots. Contact Herman Fowler at [hefowler@dekalbcountyga.gov](mailto:hefowler@dekalbcountyga.gov) for street lighting.



**DeKalb County School District  
Development Review Comments**

**Analysis Date:** 6/15/2020

**Submitted to:** DeKalb County

**Case #:** Z-20-1243958

**Parcel #:** 16-128-02-001/-003/-009/-011

**Name of Development:** 800 Alford Road  
**Location:** 800, 810, 820 Alford Road

**Description:** 91 single-family detached and 92 single-family attached residences

**Impact of Development:** When fully constructed, this development would be expected to generate 95 students: 22 at Pine Ridge ES, 15 at Stephenson MS, 26 at Stephenson HS, 30 at other DCSD schools, and 2 at private schools. All three neighborhood schools have capacity for additional students.

<b>Current Condition of Schools</b>	<b>Pine Ridge ES</b>	<b>Stephenson MS</b>	<b>Stephenson HS</b>	<b>Other DCSD Schools</b>	<b>Private Schools</b>	<b>Total</b>
Capacity	883	1,366	2,040			
Portables	0	0	0			
Enrollment (Fcast. Oct. 2020)	542	975	1,338			
Seats Available	341	391	702			
Utilization (%)	61.4%	71.4%	65.6%			
<b>New students from development</b>	22	15	26	30	2	95
New Enrollment	564	990	1,364			
New Seats Available	319	376	676			
New Utilization	63.9%	72.5%	66.9%			

<b>Yield Rates</b>	<b>Attend Home School</b>	<b>Attend other DCSD School</b>	<b>Private School</b>	<b>Total</b>
Elementary	0.120889	0.085393	0.006658	0.212940
Middle	0.080905	0.024602	0.002869	0.108376
High	0.139598	0.048719	0.006992	0.195308
<b>Total</b>	<b>0.3414</b>	<b>0.1587</b>	<b>0.0165</b>	<b>0.5166</b>
<b>Student Calculations</b>				
<b>Proposed Units</b>	183			
<b>Unit Type</b>	Mixed			
<b>Cluster</b>	Stephenson HS			
<b>Units x Yield</b>	<b>Attend Home School</b>	<b>Attend other DCSD School</b>	<b>Private School</b>	<b>Total</b>
Elementary	22.12	15.63	1.22	38.97
Middle	14.81	4.50	0.53	19.84
High	25.55	8.92	1.28	35.75
<b>Total</b>	<b>62.48</b>	<b>29.05</b>	<b>3.03</b>	<b>94.56</b>
<b>Anticipated Students</b>	<b>Attend Home School</b>	<b>Attend other DCSD School</b>	<b>Private School</b>	<b>Total</b>
Pine Ridge ES	22	16	1	39
Stephenson MS	15	5	0	20
Stephenson HS	26	9	1	36
<b>Total</b>	<b>63</b>	<b>30</b>	<b>2</b>	<b>95</b>



## DEKALB COUNTY GOVERNMENT PLANNING DEPARTMENT DISTRIBUTION FORM

The following areas below may warrant comments from the Development Division. Please respond accordingly as the issues relate to the proposed request and the site plan enclosed as it relates to Chapter 14. You may address applicable disciplines.

### DEVELOPMENT ANALYSIS:

- **Transportation/Access/Row**

Consult the Georgia DOT as well as the DeKalb County Transportation Department prior to land development permit. Verify widths from the centerline of the roadways to the property line for possible right-of-way dedication. Improvements within the right-of-way may be required as a condition for land development application review approval. Safe vehicular circulation is required. Paved off-street parking is required.

- **Storm Water Management**

Compliance with the Georgia Stormwater Management Manual, DeKalb County Code of Ordinances 14-40 for Stormwater Management and 14-42 for Storm Water Quality Control, to include Runoff Reduction Volume where applicable is required as a condition of land development permit approval. Use Volume Three of the G.S.M.M. for best maintenance practices. Use the NOAA Atlas 14 Point Precipitation Data set specific to the site.. Recommend Low Impact Development features/ Green Infrastructure be included in the proposed site design to protect as much as practicable the statewaters and special flood hazard areas.

- **Flood Hazard Area/Wetlands**

The presence of FEMA Flood Hazard Area was not indicated in the County G.I.S. mapping records for the site; and should be noted in the plans at the time of any land development permit application. Encroachment of flood hazard areas require compliance with Article IV of Chapter 14 and FEMA floodplain regulations.

- **Landscaping/Tree Preservation**

Landscaping and tree preservation plans for any building, or parking lot must comply with DeKalb County Code of Ordinances 14-39 as well as Chapter 27 Article 5 and are subject to approval from the County Arborist.

- **Tributary Buffer**

State water buffer was reflected in the G.I.S. records for the site. Typical state waters buffer have a 75' undisturbed stream buffer and land development within the undisturbed creek buffer is prohibited without a variance per DeKalb County Code of Ordinances 14-44.1.

- **Fire Safety**

Plans for land development permit must comply with Chapter 12 DeKalb County Code for fire protection and prevention.



# DEKALB COUNTY GOVERNMENT PLANNING DEPARTMENT DISTRIBUTION FORM

**NOTE:** PLEASE RETURN ALL COMMENTS VIA EMAIL OR FAX TO EXPEDITE THE PROCESS TO MICHELLE M ALEXANDER [mmalexander@dekalbcountyga.gov](mailto:mmalexander@dekalbcountyga.gov) OR JOHN REID [JREID@DEKALBCOUNTYGA.GOV](mailto:JREID@DEKALBCOUNTYGA.GOV)

## COMMENTS FORM: PUBLIC WORKS WATER AND SEWER

Case No.: Z-20-1243958

Parcel I.D. #: 16-128-02-001; 16-128-02-003; 16-128-02-011; 16-129-02-009

Address: 800, 810, and 820 Alford Road and 917 Stephenson Road  
Stone Mountain, Georgia

**WATER:**

Size of existing water main: 6" DI, 8" DI, and 12" DI Water Main (adequate/inadequate)  
Distance from property to nearest main: Adjacent to Property 8" or 12" mfo  
Size of line required, if inadequate: N/A

**SEWER:**

Outfall Servicing Project: Lower Crooked Creek Basin

Is sewer adjacent to property: Yes (X) No ( ) If no, distance to nearest line:  
    

Water Treatment Facility: Pole Bridge WTF ( ) adequate ( ) inadequate

Sewage Capacity: \* (MGPD) Current Flow: 6.48 (MGPD)

**COMMENTS:**

<p><small>* Please note that the sewer capacity has not been reviewed or approved for this project. A Sewer Capacity Request (SCR) must be completed and submitted for review. This can be a lengthy process and should be addressed early in the process.</small></p>
<p><b>* MUST UTILIZE 8" OR 12" DI WATER LINE FOR SERVICE TO DEVELOPMENT mfo</b></p>

Signature:



Board of Health

06/15/2020

To: Mr. John Reid, Senior Planner  
From: Ryan Cira, Environmental Health Manager  
Cc: Alan Gaines, Technical Services Manager  
Re: Rezone Application Review

General Comments:

DeKalb County Health Regulations prohibit use of on-site sewage disposal systems for

- multiple dwellings
- food service establishments
- hotels and motels
- commercial laundries
- funeral homes
- schools
- nursing care facilities
- personal care homes with more than six (6) clients
- child or adult day care facilities with more than six (6) clients
- residential facilities containing food service establishments

If proposal will use on-site sewage disposal, please contact the Land Use Section (404) 508-7900.

Any proposal, which will alter wastewater flow to an on-site sewage disposal system, must be reviewed by this office prior to construction.

This office must approve any proposed food service operation or swimming pool prior to starting construction.

Public health recommends the inclusion of sidewalks to continue a preexisting sidewalk network or begin a new sidewalk network. Sidewalks can provide safe and convenient pedestrian access to a community-oriented facility and access to adjacent facilities and neighborhoods.

For a public transportation route, there shall be a 5ft. sidewalk with a buffer between the sidewalk and the road. There shall be enough space next to sidewalk for bus shelter's concrete pad installation. Recommendation: Provide trash can with liner at each bus stop with bench and monitor for proper removal of waste.

Since DeKalb County is classified as a Zone 1 radon county, this office recommends the use of radon resistant construction.



Board of Health

- N.1 Z-20-1243838 2020-0598 / 15-013-01, 15-013-01-018  
4341 East Conley Road, Conley, GA 30288  
- Please review general comments.
- N.2 Z-20-1243839 2020-0599 / 15-013-02-017  
4388 East Conley Road, Conley, GA 30288  
- Please review general comments.
- N.3 CZ-20-1243935 2020-0600 / 18-261-01-006, 18-261-01-062  
4575 Chamblee Tucker Road, Tucker, GA 30084  
- Please review general comments.
- N.4 Z-20-1243841 2020-0601/ 16-159-01-003, 16-162-05-002, 16-162-05-003  
1503 Stephenson Road, Lithonia, GA 30058  
- Please review general comments.
- N.5 Z-20-1243958 2020-0602 / 16-128-02-001, 16-128-02-003, 16-128-02-011, 16-129-02-009  
800 Alford Road, Stone Mountain, GA 30087  
- Please review general comments.
- N.6 Z-20-1243955 2020-0603 15-131-03-009, 15-131-03-001, 15-131-03-012, 15-131-03-013  
2450 Wesley Chapel Road, Decatur, GA 30035  
- Please review general comments.
- N.7 SLUP-20-1243956 2020-0604 15-131-03-009, 15-131-03-001, 15-131-03-012, 15-131-03-013  
2450 Wesley Chapel Road, Decatur, GA 30035  
- Please review general comments.
- N.8 SLUP-20-1243957 2020-0605 / 15-015-04-013  
3468 Moreland Ave., Conley, GA 30288  
- Please review general comments.
- N.9 CZ-2—1243960 2020-0606 16-009-01-001,18-024-06-001  
2620 Shell Bark Road, Decatur, GA 30035



Board of Health

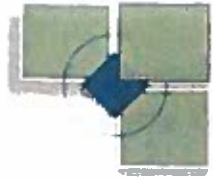
- N.10 Z-20-1243968 2020-0607 / 15-179-11-025  
2017 Memorial Drive, Atlanta, GA 30317
  - Please review general comments.
  
- N.11 Z-20-1243972 2020-0608 /18-083-01-010  
1347 Bermuda Road, Stone Mountain, GA 30087
  - Please review general comments.
  
- N.12 Z-20-1243977 2020-0609 15-154-12-003  
2043 Columbia Drive, Decatur, GA 30032
  - Septic system installed on this property on June 24, 1975
  - Please review general comments.
  
- N.13 TA-20-1244029 2020-0610  
DeKalb County, GA
  - Please review general comments.
  
- N.14 RE: Public Art 2020-0611 / 16-071-09-001  
2387 Wellborn Road, Lithonia, GA 30058
  - Please review general comments.



# DeKalb County Department of Planning & Sustainability

Michael L. Thurmond  
Chief Executive Officer

Andrew A. Baker, AICP  
Director



## APPLICATION TO AMEND OFFICIAL ZONING MAP OF DEKALB COUNTY, GEORGIA

**RECEIVED**  
**APR 30 2020**

Z/CZ No. 2-20-124358

Filing Fee: \_\_\_\_\_

Date Received: \_\_\_\_\_ Application No.: \_\_\_\_\_

Applicant: Parkland Communities, Inc. c/o Battle Law, P.C. E-Mail: mlb@battlelawpc.com

Applicant Mailing Address:  
One West Court Square, Suite 750 Decatur, GA 30030

Applicant Phone: 404.601.7616 Fax: 404.745.0045

Owner(s): See Attached E-Mail: \_\_\_\_\_  
(If more than one owner, attach as Exhibit "A")

Owner's Mailing Address:  
See Attached

Owner(s) Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Address/Location of Subject Property: See Attached

District(s): 16 Land Lot(s): 128 & 129 Block: 02 Parcel(s): 001, 003, 011 & 009

Acreage: 40.91 Commission District(s): 4 & 7

Present Zoning Category: R-100 Proposed Zoning Category: RSM

Present Land Use Category: SUB

### PLEASE READ THE FOLLOWING BEFORE SIGNING

This form must be completed in its entirety before the Planning Department accepts it. It must include the attachments and filing fees identified on the attachments. An application, which lacks any of the required attachments, shall be determined as incomplete and shall not be accepted.

#### Disclosure of Campaign Contributions

In accordance with the Conflict of Interest in Zoning Act, O.C.G.A., Chapter 36-67A, the following questions must be answered:

Have you the applicant made \$250 or more in campaign contributions to a local government official within two years immediately preceding the filing of this application? \_\_\_\_\_ Yes X No

If the answer is yes, you must file a disclosure report with the governing authority of DeKalb County showing:

1. The name and official position of the local government official to whom the campaign contribution was made.
2. The dollar amount and description of each campaign contribution made during the two years immediately preceding the filing of this application and the date of each such contribution.

The disclosure must be filed within 10 days after the application is first filed and must be submitted to the C.E.O. and the Board of Commissioners, DeKalb County, 1300 Commerce Drive, Decatur, Ga. 30030  
Parkland Communities, Inc.

NOTARY

Nov 26, 2022

EXPIRATION DATE / SEAL



SIGNATURE OF APPLICANT / DATE

Check One: Owner \_\_\_\_\_ Agent X

330 West Peachtree Street, Suite 100-500 - Decatur, Georgia - 30030  
[voice] 404.371-2199 [Planning Fax] (404) 371-4556 [Development Fax] (404) 371-3007

Web Address <http://www.dekalbcountyga.gov/planning>  
Email Address: [planninganddevelopment@dekalbcountyga.gov](mailto:planninganddevelopment@dekalbcountyga.gov)



**STATEMENT OF INTENT AND**  
**IMPACT ANALYSIS**

and

Other Material Required by  
DeKalb County Zoning Ordinance  
for the  
Application for Rezoning

of

**Parkland Communities, Inc.**  
**c/o Battle Law, P.C.**

for

40.91± acres of land located at  
**800 Alford Road**  
**810 Alford Road**  
**820 Alford Road**  
**917 Stephenson Road**

Submitted for Applicant by:

Michèle L. Battle, Esq.  
Battle Law, P.C.  
One West Court Square, Suite 750  
Decatur, Georgia 30030  
Phone: (404) 601-7616  
Fax: (404) 745-0045  
Email: [mlb@battlelawpc.com](mailto:mlb@battlelawpc.com)

## **I. STATEMENT OF INTENT**

The Applicant, Parkland Communities, Inc., is seeking to rezone the properties located at 800, 810 and 820 Alford Road, and 917 Stephenson Road, Lithonia, Unincorporated DeKalb County, GA having an aggregate acreage of 40.91 acres (the “Subject Property”) from R-100 to RSM for the development of a 91 single-family detached lot and 92 single-family attached lot subdivision at a density of 4.47 units per acre. The Subject Property has a land use designation of Suburban.

Except for the three (3) single family detached homes located on the Subject Property, the majority of the Subject Property is undeveloped, as it has been for decades. The Subject Property is located within walking distance of Pine Ridge Elementary School, Stephenson Middle School and Stephenson High School, and is surrounded by residential subdivision communities that were built in or prior to 2006. Consequently, many of these communities are not built to the same standards as are currently required under the DeKalb County Zoning Ordinance, which means that they don’t have sidewalks, street trees and lighting on all streets, and along the exterior boundaries of the property abutting public right of ways. They also do no benefit from the Building Form Standards in Article 5, which require multiple facades with differing elements which make communities more marketable in todays real estate market. It is the Applicant’s desire to develop a residential subdivision which is compatible with the surrounding community, but also incorporates the elements in the current DeKalb County Zoning Ordinance which enhance the overall aesthetics of the residential communities, thereby having the potential to raise values in the surrounding area.

This document is submitted both as a Statement of Intent regarding this Application, a preservation of the Applicant’s constitutional rights, and the Impact Analysis of this Application

as required by the DeKalb County Zoning Ordinance. A surveyed plat and conceptual site plan of the Subject Property controlled by the Applicant has been filed contemporaneously with the Application, along with other required materials.

## **II. IMPACT ANALYSIS**

- (a) Suitability of use: The proposed rezoning will allow for the development of residential lots at a density that is suitable for the area considering the existing uses and zoning classifications in the area. The Subject Property is located at the intersection of Alford Road, a local road, and Stephenson Road (a collector road). Additionally, the Subject Property is directly across the street from two schools and within walking distance of a third school. The use of the Subject Property for the development of a residential subdivision is therefore, more than appropriate. The majority of the subdivisions in the area are zoned RSM. The lots which are not apart of a subdivision are, like the Subject Property, zoned R-100. Therefore, rezoning the Subject Property to RSM is suitable for the Subject Property.

The proposed subdivision will contain both single-family detached and attached product. The single-family detached product will be compliant with the minimum 5,000 sq ft. lot size, as well as with the other RSM dimensional requirements. The homes will have a minimum heated floor area of 1,800 sq. ft. and each unit will have a 2-car garage, with two parking pads in the driveway. The homes will be built with a mixture of textures including brick, stone, batten board, hardi-plank and other fiber cement siding.

With respect to the townhome units, they will be a minimum of 1,500 sq. ft. with a 2-car garage. It is the Applicant's position that the townhome units along Stephenson Road

provide for a suitable transition from the non-residential use across the street from the Subject Property, as well as adjacent to the Subject Property. The introduction of townhomes into the area will allow for a diversity of product that is consistent with the surrounding residential uses. It will allow for those looking to downsize, or young couple, or single parents to have an alternative to the traditional single-family style house currently in the area. The location of the townhomes on Stephenson Road is also appropriate as Stephenson Road is a collector street. The townhome unit owners will be members of the mandatory homeowner's association for the entire subdivision, and subject to the mandatory HOA fees and assessments. This will help support the maintenance of the townhomes in a manner which is compatible with the balance of the community.

(b) Effect on adjacent property: The proposed development will have a positive impact on the surrounding community, as it will support the continued recovery of the area from the 2007 economic downturn which devastated South DeKalb. The proposed homes will be sold at a price points which will be in excess of many of the surrounding values. Furthermore, the community will have sidewalks, pedestrian scale lighting, greenspace areas around the perimeter of the subdivision, as well as trees planted throughout the community, walking trails, an amenity area, pocket parks and a mandatory homeowners association, all of which enhance the viability and marketability of both the proposed community and the surrounding community as new prospective homeowners come to the area.

(c) Effect on public facilities: The Subject Property is in an area with public utility availability. The proposed rezoning will not cause excessive use of streets, transportation facilities, or utilities in the area. The Applicant will be installing sidewalks along

Stephenson Road and Alford Road, which will support the continued improvement of the these right of ways. Additionally, all of the schools within walking distance of the Subject Property are significantly below capacity.

- (d) Economic use of current zoning: The Subject Property has minimal use as currently zoned R-100. The development of large lot single family homes is not currently marketable in the area as the sales prices of the homes and lots would be significantly higher than current market rates due to building and infrastructure costs. Additionally, smaller residential lots reduce the impact of continue urban sprawl and allows for homes to be built which support working families.
- (e) Effect on historic building, sites, etc. The approval of this Application will not have any adverse impact on any historic buildings, sites, districts or archaeological resources in the area.
- (f) Compatibility with Comprehensive Land Use Plan. The Subject Property has a land use designation of Suburban which supports the RSM zoning district.

#### **IV. CONCLUSION**

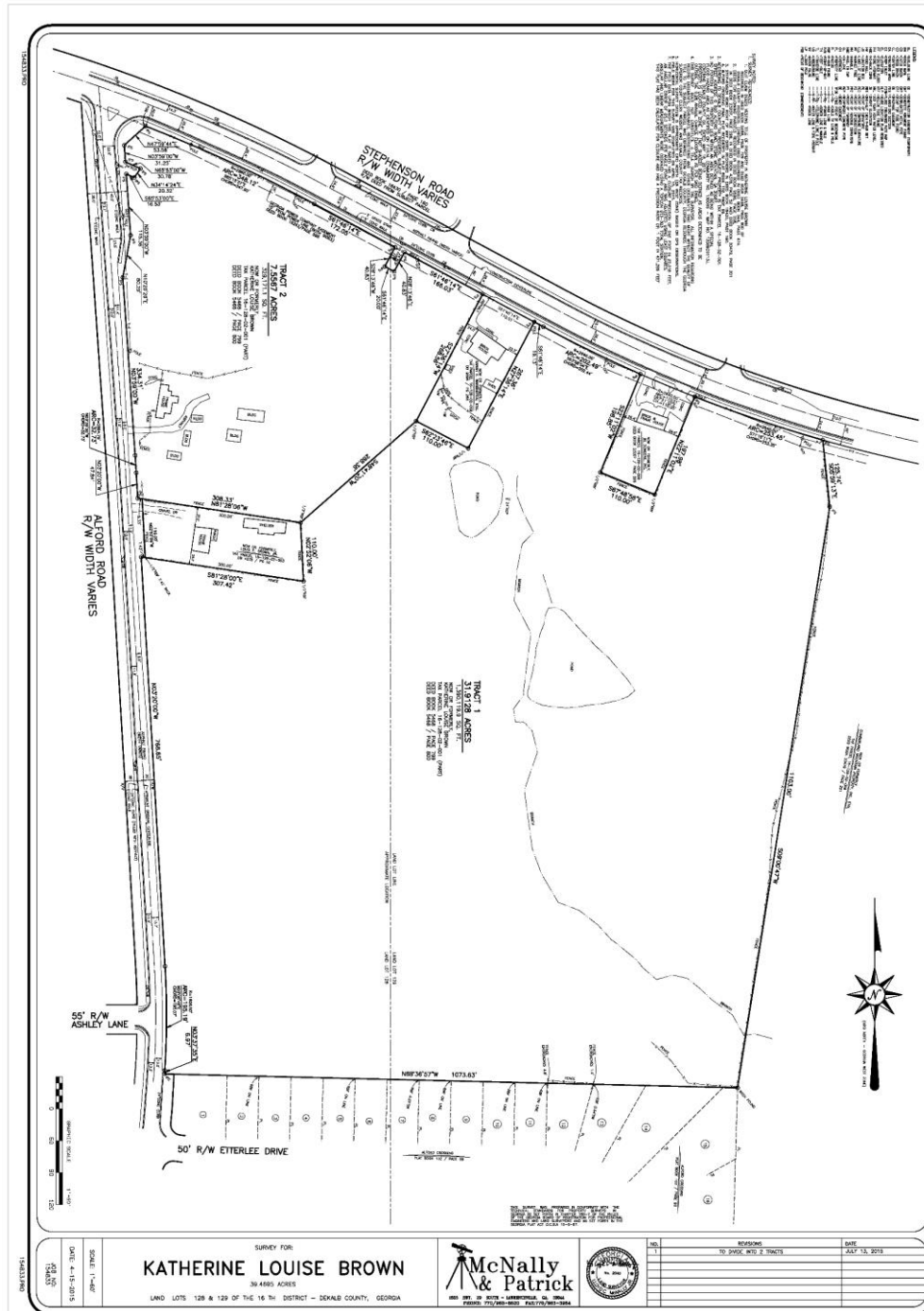
For the foregoing reasons, the Applicant respectfully requests that the Land use Amendment Application at issue be approved. Please note that the Applicant's Notice of Constitutional Allegations and Preservation of Constitutional Rights have been submitted with this Application and are attached hereto and by this reference incorporated herein.

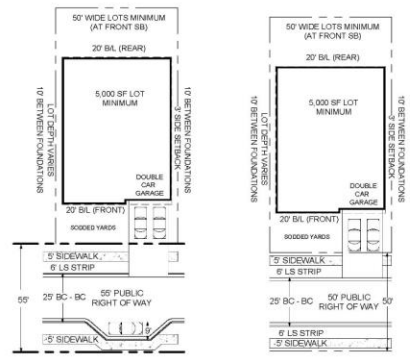
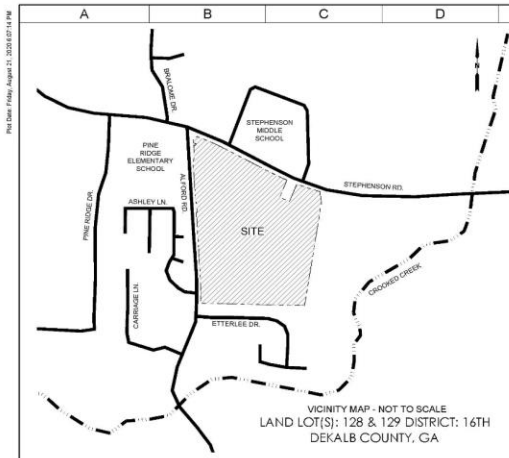
This 29<sup>th</sup> day of April, 2020.

Respectfully submitted,



\_\_\_\_\_  
Michèle L. Battle, Esq.  
Attorney For Applicant





GROSS ACRES:	40.91 AC (1,782,039 SQ. FT)
EXISTING ZONING:	R100
PROPOSED ZONING:	RSM / DEKALB COUNTY
TOTAL UNITS:	140 UNITS
TOTAL DENSITY:	3.42 U/A
SINGLE FAMILY LOT WIDTH:	50' TYPICAL
MIN. UNIT HEATED AREA:	1,800 SF (SINGLE FAMILY)
BUILDING SETBACKS:	SINGLE FAMILY DETACHED
FRONT:	20' (20' MIN DRIVEWAYS)
REAR:	20'
SIDE:	3'
BETWEEN FOUNDATIONS (SINGLE FAMILY):	10' BETWEEN FOUNDATIONS
TRANSITIONAL BUFFER:	20' (GRADED AND REPLANTED)
LANDSCAPE STRIP:	20' (ALFORD RD AND STEPHENSON RD)
BUILDING HT. REQUIRED:	35' MAX. (SINGLE FAM)
PARKING REQUIRED:	2.0 / UNIT FOR EACH DWELLING; 0.25 / UNIT FOR GUESTS
OPEN SPACE REQUIRED:	20% OR 8.18 ACRES
OPEN SPACE PROVIDED:	20.9% OR 8.55 ACRES
ENHANCED PROVIDED:	10% OR 4.09 ACRES
MULCH TRAIL PROVIDED:	41,150 SQ. LF
LOT COVERAGE ALLOWED:	80% (MAXIMUM PER LOT OR TOTAL PARCEL ACREAGE)

PARKING ANALYSIS		TOTAL PER HOUSE	TOTAL LOT SPACES
LOT TYPE	GARAGE/DRIVEWAY	2	4
FRONT ENTRY		2	2
OFF STREET PARALLEL GUEST/AMENITY PARKING			34
TOTAL PARKING SPACES PROPOSED FOR RESIDENTIAL			594

DEVELOPED BY:

**REQUESTED VARIANCES:**  
1. GRADED AND REPLANTED BUFFERS AS SHOWN  
2. GRADING CAN BE ALLOWED WITHIN THE 75' IMPERVIOUS STREAM SETBACK, BUT NOT THE 50' UNDISTURBED BUFFER.

**PROPERTY OWNERS:**  
PID: 16 128 02 001 - KATHERINE LOUISE BROWN  
PID: 16 128 02 003 - LOUIS E. BROWN, JR.  
PID: 16 129 02 009 - SARA K. WARBINGTON, ETAL

**SEWER NOTE:**  
SEWER WILL BE A GRAVITY LINE AND TIE INTO THE EXISTING SEWER MANHOLE ALONG ALFORD ROAD & ASHLEY LANE.

**WATER NOTE:**  
EXISTING WATER LINE LOCATED ON STEPHENSON ROAD AND PROVIDED BY DEKALB COUNTY.

**STREET LIGHT NOTE:**  
FIXTURES AND ILLUMINATION SHALL COMPLY WITH COUNTY STANDARDS.

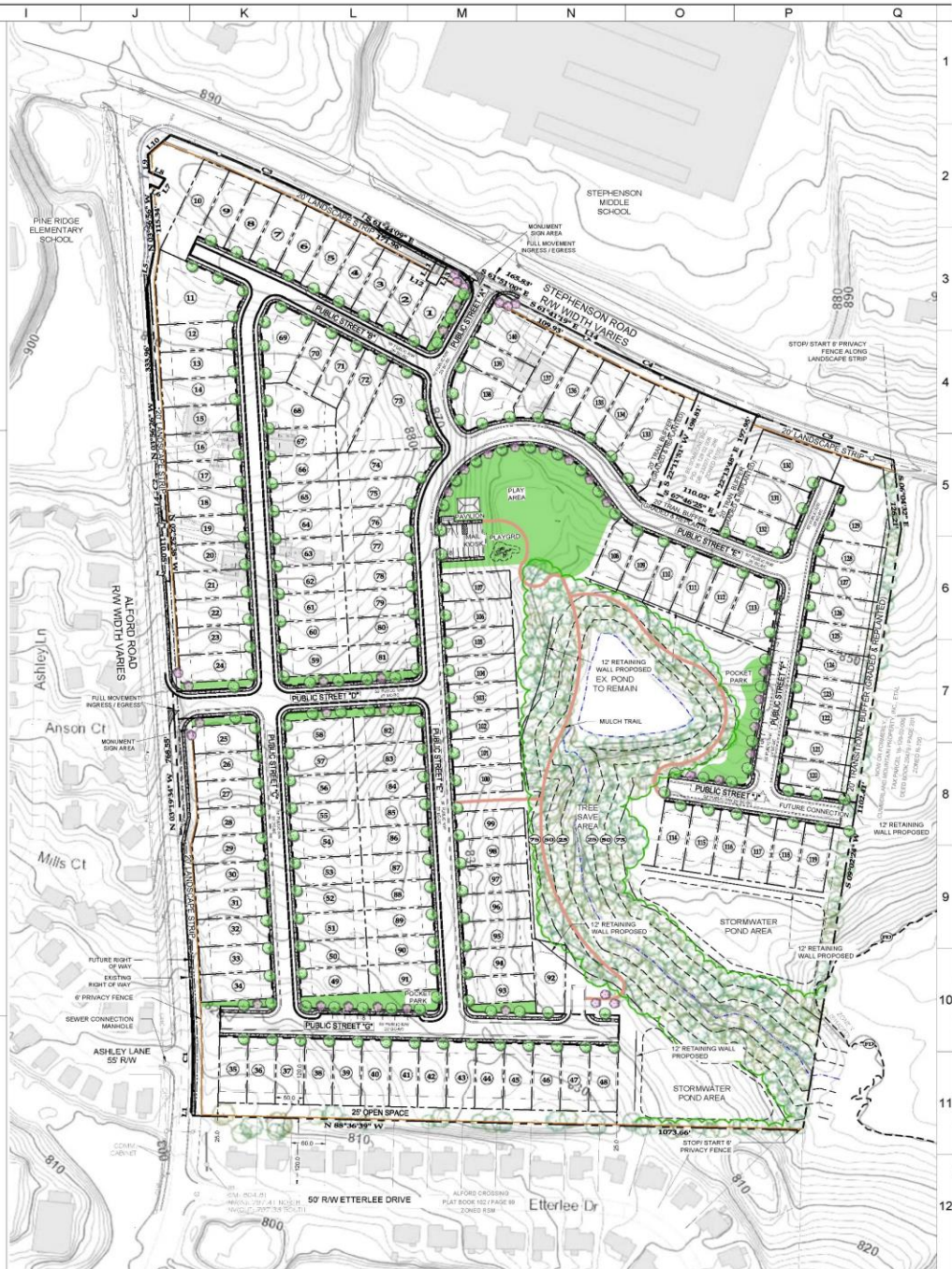
**FEMA NOTE:**  
A SMALL PORTION OF THIS PROPERTY IS LOCATED IN A FEMA FLOOD PLAIN AS PER FEMA MAP NO. 130890113J, DATED MAY 16, 2013

**TREE PRESERVATION NOTE:**  
EITHER 120 INCHES (DBH) PER ACRE OR 25% OF EXISTING SIGNIFICANT TREES, WHICHEVER IS LESS, SHALL BE PRESERVED ON THE SITE.

**BOUNDARY SURVEY BY:**  
McNALLY & PATRICK  
1505 HWY. 29 SOUTH, LAWRENCEVILLE, GEORGIA 30044  
PHONE: 770.963.8520

LINE	BEARING	DISTANCE
L1	N 09°37'45" E	6.90'
L2	S 81°27'46" E	7.46'
L3	N 81°22'54" W	63.33'
L4	N 09°18'59" W	68.14'
L5	N 10°26'58" E	60.20'
L6	S 65°52'46" E	16.52'
L7	N 53°52'36" E	20.37'
L8	S 65°56'17" W	30.71'
L9	N 04°00'29" W	31.54'
L10	N 48°04'38" E	53.60'
L11	S 28°05'54" E	40.53'
L12	S 60°30'18" E	20.00'
L13	S 28°36'27" E	40.80'
L14	S 61°47'51" E	19.34'
L15	S 27°33'48" W	267.19'
L16	S 62°22'50" W	109.94'
L17	N 27°36'04" E	268.91'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	1467.61	149.28'	196.16'	N 01°08'58" E	6°57'35"
C2	2843.20	32.71'	32.71'	N 03°39'25" W	0°39'00"
C3	2848.51	347.93'	347.72'	S 65°13'22" E	6°38'26"
C4	2641.21	302.93'	202.54'	S 63°59'41" E	4°23'41"
C5	2638.06	253.26'	253.16'	S 71°17'08" E	5°30'02"



**ALLIANCE ENGINEERING & PLANNING**  
LANDSCAPE ARCHITECTURE  
SURVEYING

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DEVELOPER:  
**PARKLAND COMMUNITIES**  
JIM@PARKLANDCO.COM  
JIM@PARKLANDCO.COM

Site Concept Plan for  
**STEPHENSON ROAD TRACT**  
800 ALFORD ROAD  
LL 128 & 129 - DISTRICT 16TH  
PARCEL # 16-128-02-001

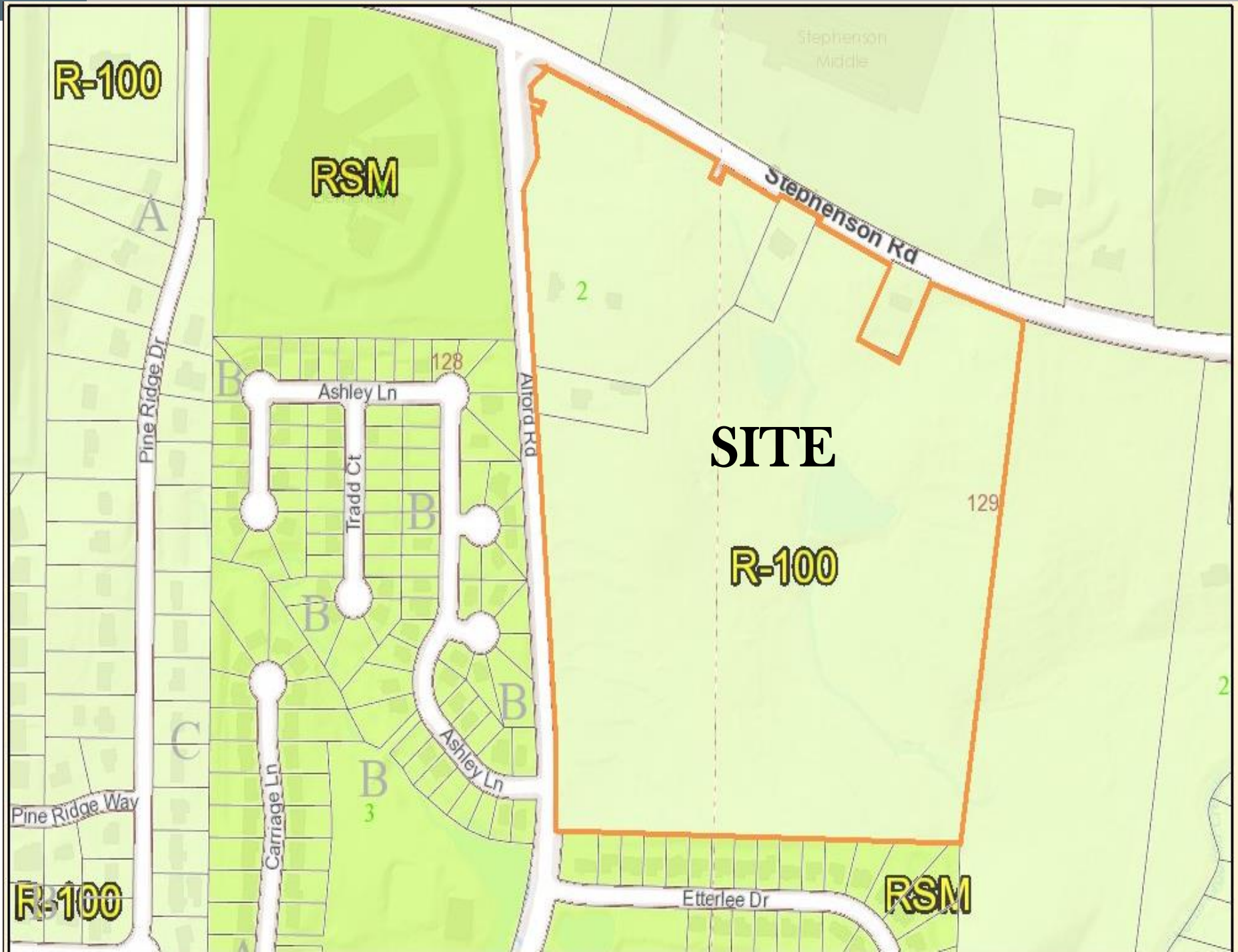
Orig. Issue: BW  
Designed by: JJ  
Checked by: JJ  
Project #: 15073

**NORTH**

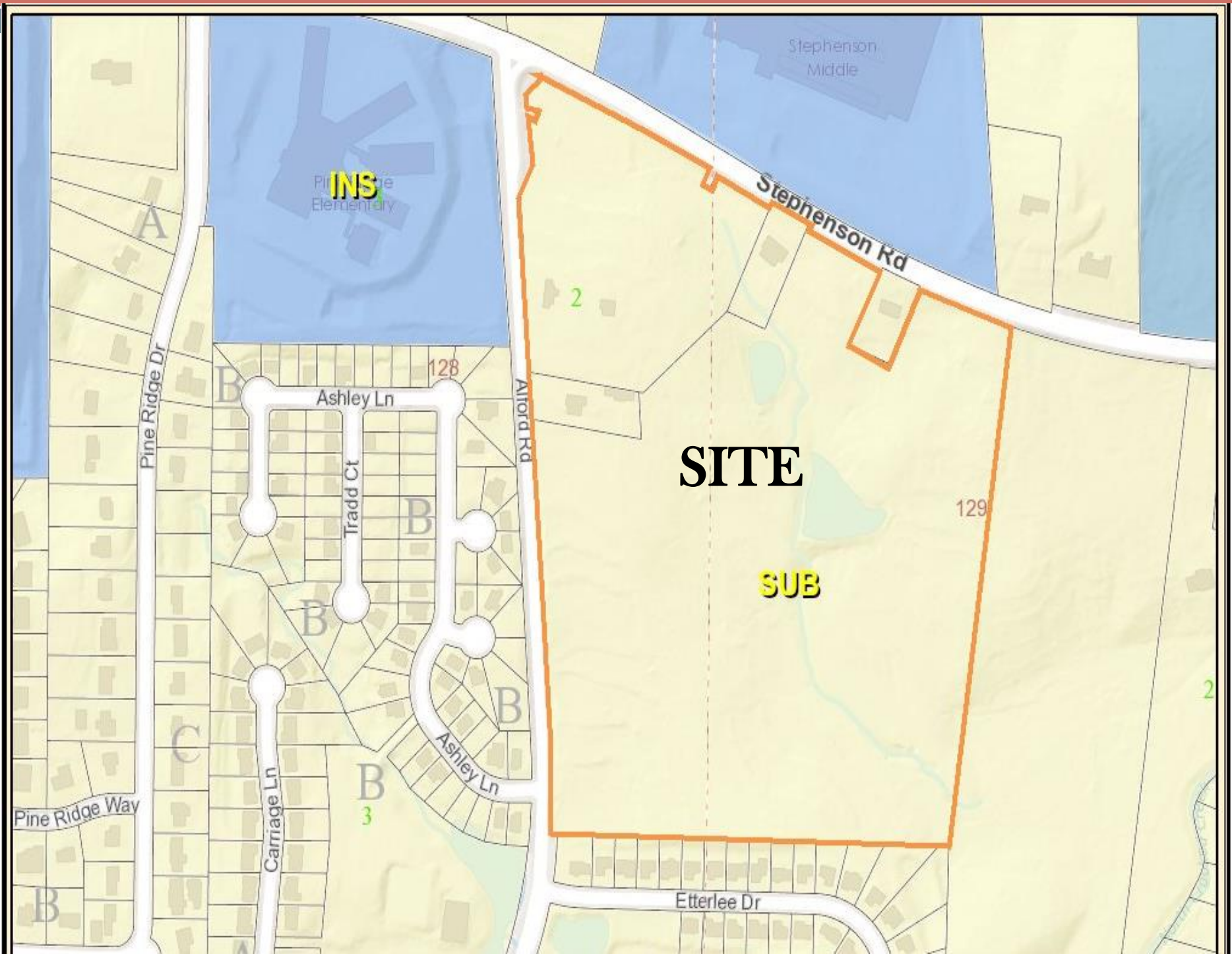
SCALE: 1"=100'  
0 100

**Rezoning Plan**

8-21-2020











*Traffic Impact Study*

# Summertree-Alford Road Tract

Dekalb County, Georgia

*Report Prepared:*

August 2020

*Prepared for:*

Parkland Communities, Inc.

*Prepared by:*

**Kimley»»Horn**

Kimley-Horn and Associates, Inc.  
11720 Amber Park Drive, Suite 600  
Alpharetta, Georgia 30009  
KHA Project #019380011

*Traffic Impact Study*

# Summertree-Alford Road Tract

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*Report Prepared:*

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*Prepared by:*

**Kimley»»Horn**

Kimley-Horn and Associates, Inc.  
11720 Amber Park Drive, Suite 600  
Alpharetta, Georgia 30009  
KHA Project #019380011



8/20/2020

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Appendix B: Traffic Count Data

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Appendix D: Intersection Volume Worksheets

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## 1.0 INTRODUCTION

This report presents the analysis of the anticipated traffic impacts associated with the *Summertree-Alford Road Tract* development, which is expected to be completed in 2026 (referred to herein as “build-out year”). This study evaluates the impact of constructing 140 single-family housing units. The approximately 40.9-acre site is located east of Alford Road and south of Stephenson Road in DeKalb County, Georgia.

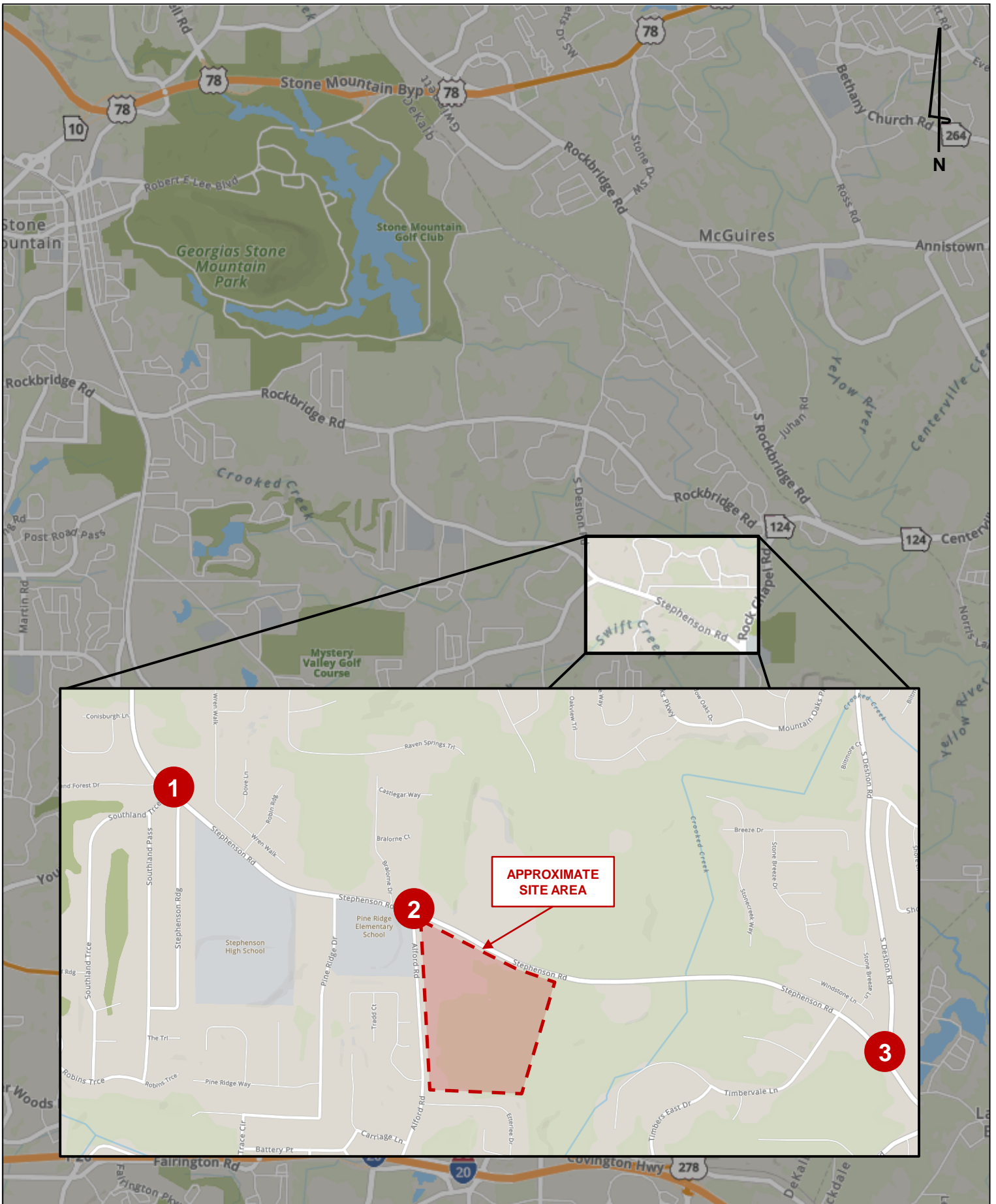
**Figure 1** provides a location map of the project site. **Figure 2** provides an aerial image that captures the project site and the study roadway network. A site plan is also included in **Appendix A**.

## 2.0 STUDY AREA DETERMINATION

The study area consists of the following existing intersections:

1. Stephenson Road at Southland Trace (Unsignalized)
2. Stephenson Road at Alford Road/Private Driveway (Unsignalized)
3. Stephenson Road at S Deshon Road W (Signalized)

For purposes of the traffic impact study, Stephenson Road is considered to have an east-west orientation. Southland Trace, S Deshon Road W, and all proposed site driveways are considered to have a north-south orientation.







### 3.0 EXISTING TRAFFIC CONDITIONS

#### 3.1 ROADWAY CONDITIONS

The roadways within the study network have the following characteristics:

Stephenson Road is a two-lane, major collector roadway with a posted speed limit of 45 MPH in the vicinity of the study network. A center two-way left-turn lane (TWLTL) is present along the majority of the roadway segment. GDOT counts taken along Stephenson Road west of Alford Road indicate an annual average daily traffic (AADT) of approximately 7,660 vehicles per day in 2019. Kimley-Horn collected counts from August 2020 (no school traffic and COVID-19 impacts) indicate an average daily traffic (ADT) of 6,350 vehicles per day.

S Deshon Road W is a two-lane, major collector roadway with a posted speed limit of 45 MPH in the vicinity of the study network.

Alford Road and Southland Trace are two-lane, local roadways with posted speed limits of 25 MPH in the vicinity of the study network.

#### 3.2 VEHICULAR VOLUMES

Vehicle peak hour turning movement counts were performed at all three (3) existing study intersections. 24-hour, bi-directional tube counts were collected along Stephenson Road west of Alford Road.

The peak hour turning movement counts and daily traffic counts were performed on Thursday, August 6, 2020. The AM and PM peak hours for each intersection are listed below in **Table 1**. The peak hour traffic counts were used to perform the analysis presented in this report.

Table 1: Intersection Peak Hours		
Intersection	AM Peak Hour	PM Peak Hour
1. Stephenson Road at Southland Trace (Unsignalized)	7:45 AM – 8:45 AM	5:00 PM – 6:00 PM
2. Stephenson Road at Alford Road (Unsignalized)	7:00 AM – 8:00 AM	5:00 PM – 6:00 PM
3. Stephenson Road at S Deshon Road W (Signalized)	8:00 AM – 9:00 AM	5:00 PM – 6:00 PM

The complete traffic count data is provided in **Appendix B**.

### 3.3 EXISTING VOLUME ADJUSTMENT

Due to COVID-19 and traffic counts being collected when schools were not in session, the existing turning movement counts were adjusted based on historical data and engineering judgement.

Average Daily Traffic (ADT) volumes and Annual Average Daily Traffic (AADT) volumes from GDOT's Traffic Analysis & Data Application (TADA) were used to compare typical traffic volumes in the vicinity of the project site to the ADT volumes collected by Kimley-Horn. After comparing the data, growth factors were determined for the AM and PM peak hours and applied to the existing turning movement counts to use in the analysis. The volume comparison is shown in tabular format in **Table 2** and graphically in **Figure 3**, **Figure 4**, and **Figure 5**.

Table 2: Traffic Count Comparison and Adjustment Calculations										
Count Station	Location	GDOT					Collected			
		2019 AADT	ADT Date	ADT	AM Peak	PM Peak	2020 ADT	AM Peak	PM Peak	
089-0458	Stephenson Road (w/o Alford Road)	7660	Feb 2012	8249	835	768	6350	260	504	
089-0461	Stephenson Road (w/o SR 124)	7470	Jan 2017	7668	662	626	7573	329	630	
089-0161	SR 124 (n/o Asbury Road)	36800	Jan 2020	36385	2785	3273	30003	1510	2631	
Difference Calculations		ADT			AM Peak			PM Peak		
		Vol	Percent	Factor	Vol	Percent	Factor	Vol	Percent	Factor
089-0458	Stephenson Road (w/o Alford Road)	-1,899	-23%	1.3	-575	-69%	3.2	-264	-34%	1.5
089-0461	Stephenson Road (w/o SR 124)	-95	-1%	1.0	-333	-50%	2.0	4	1%	1.0
089-0161	SR 124 (n/o Asbury Road)	-6,382	-18%	1.2	-1,275	-46%	1.8	-642	-20%	1.2

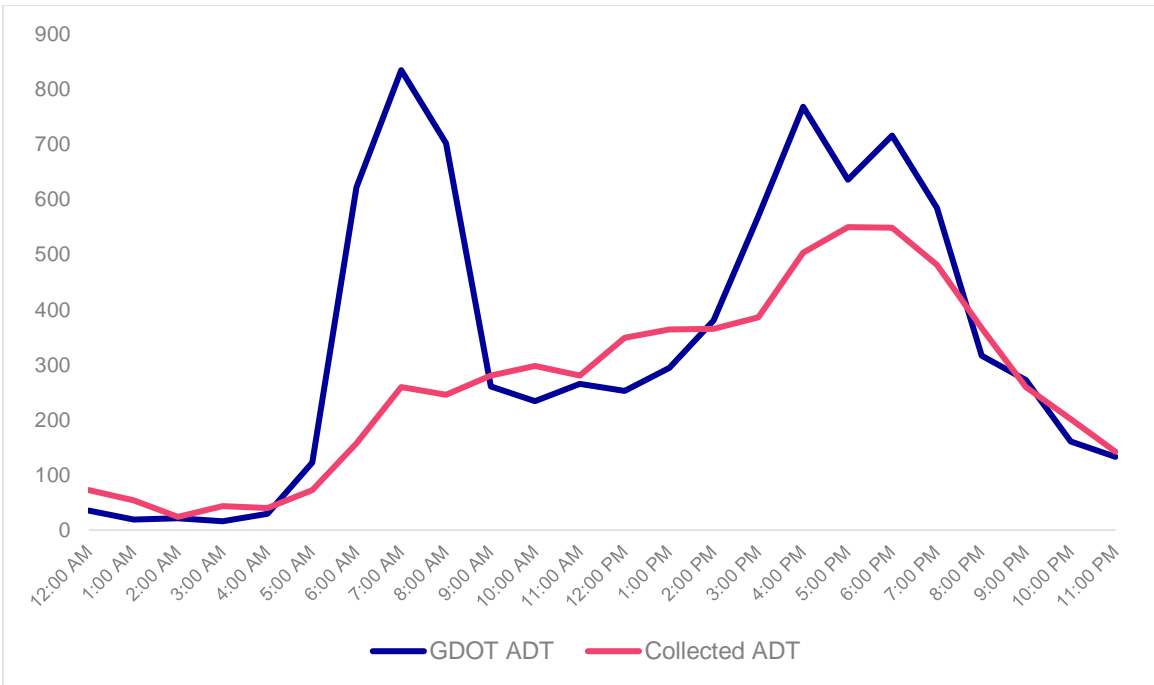


Figure 3: ADT along Stephenson Road west of Alford Road

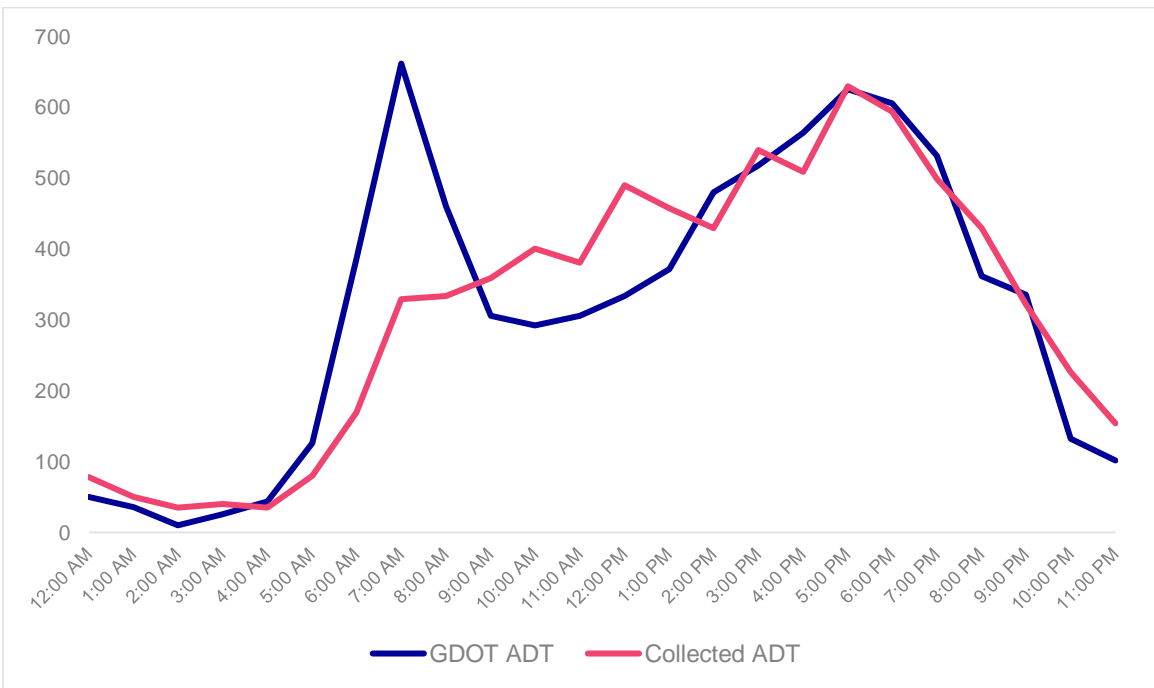
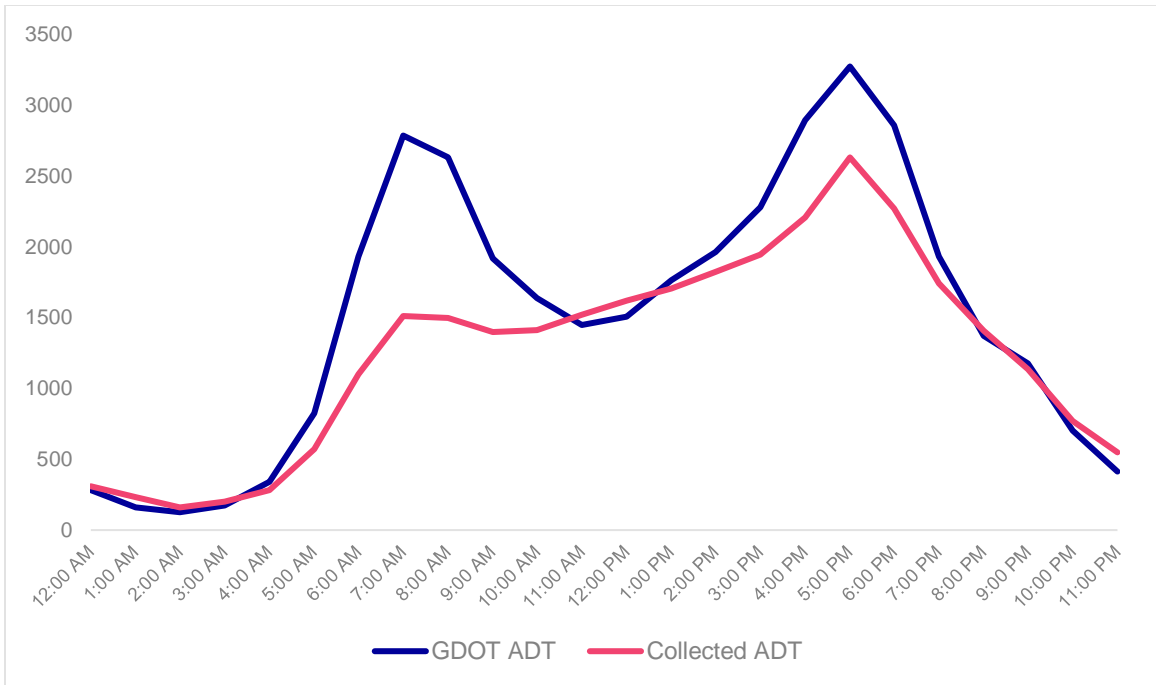


Figure 4: ADT along Stephenson Road west of SR 124

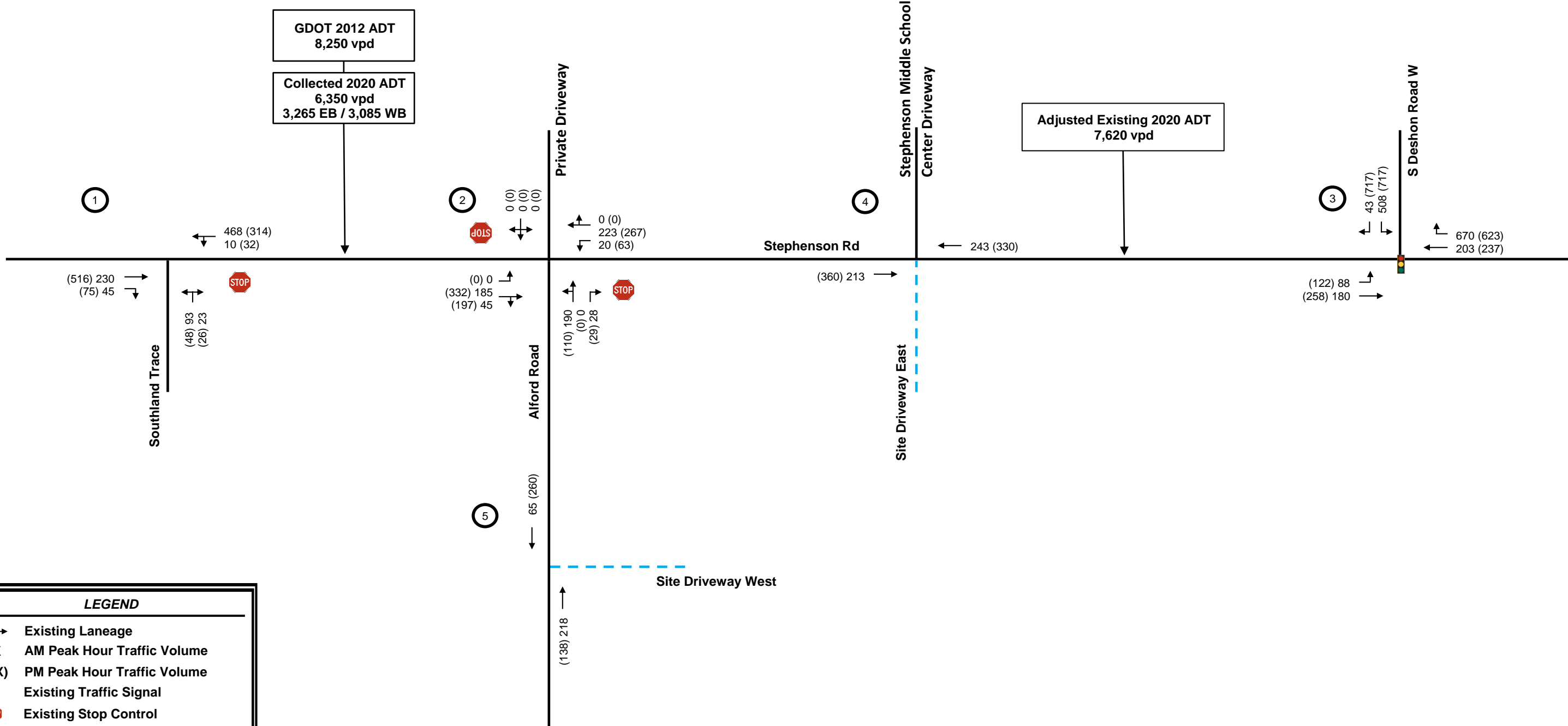


**Figure 5: ADT along SR 124 north of Asbury Road**

The figures above indicate that the collected AM peak volumes are currently much lower than historical volumes during the AM time period. However, the collected mid-day peak volumes are generally the same if not higher when compared to historical volumes during the mid-day time period. The collected PM peak volumes have the most variability when compared to the historical volumes during the PM time period. PM volumes along Stephenson Road are lower than historical volumes at the count station west of Alford Road and the same or higher at the count station west of SR 124. The collected PM peak volumes along SR 124 are lower than historical volumes during the PM time period.

Based on comparisons to historical data, a growth factor of 2.5 and 1.5 were used to adjust the existing AM and PM peak hour turning movement counts, respectively. The growth factors take into account schools not being in session and the potential impacts of COVID-19 to typical traffic patterns.

**Figure 6** illustrates the Existing 2020 adjusted peak hour traffic volumes at the study intersections as well as the existing roadway geometry (intersection layout).



LEGEND	
→	Existing Laneage
XX	AM Peak Hour Traffic Volume
(XX)	PM Peak Hour Traffic Volume
	Existing Traffic Signal
	Existing Stop Control
XXX	Average Daily Traffic Volumes
(X)	Intersection Reference Number

Note: School volumes are not know due to COVID. However, traffic volumes have been adjusted as described in Section 3.3.

## 4.0 PROJECTED BACKGROUND (NON-PROJECT) TRAFFIC

Projected background (non-project) traffic is defined as the expected traffic on the roadway network in the future year(s) absent the *Summertree-Alford Road Tract* development. The adjusted Existing 2020 peak hour traffic volumes were increased by 1.0% per year for six (6) years to account for the expected background growth in traffic through year 2026 build-out of the project. **Figure 4** illustrates the Projected 2026 No-Build traffic volumes for the AM and PM peak hours.

### 4.1 FUTURE ROADWAY / INTERSECTION PROJECTS

ARC's Atlanta Region's Plan, GDOT Statewide TIP (STIP), and DeKalb County transportation projects were researched to identify any currently programmed transportation projects within the vicinity of the proposed development that may impact the study network during the analysis period. No programmed projects were identified.

## 5.0 PROJECT TRAFFIC

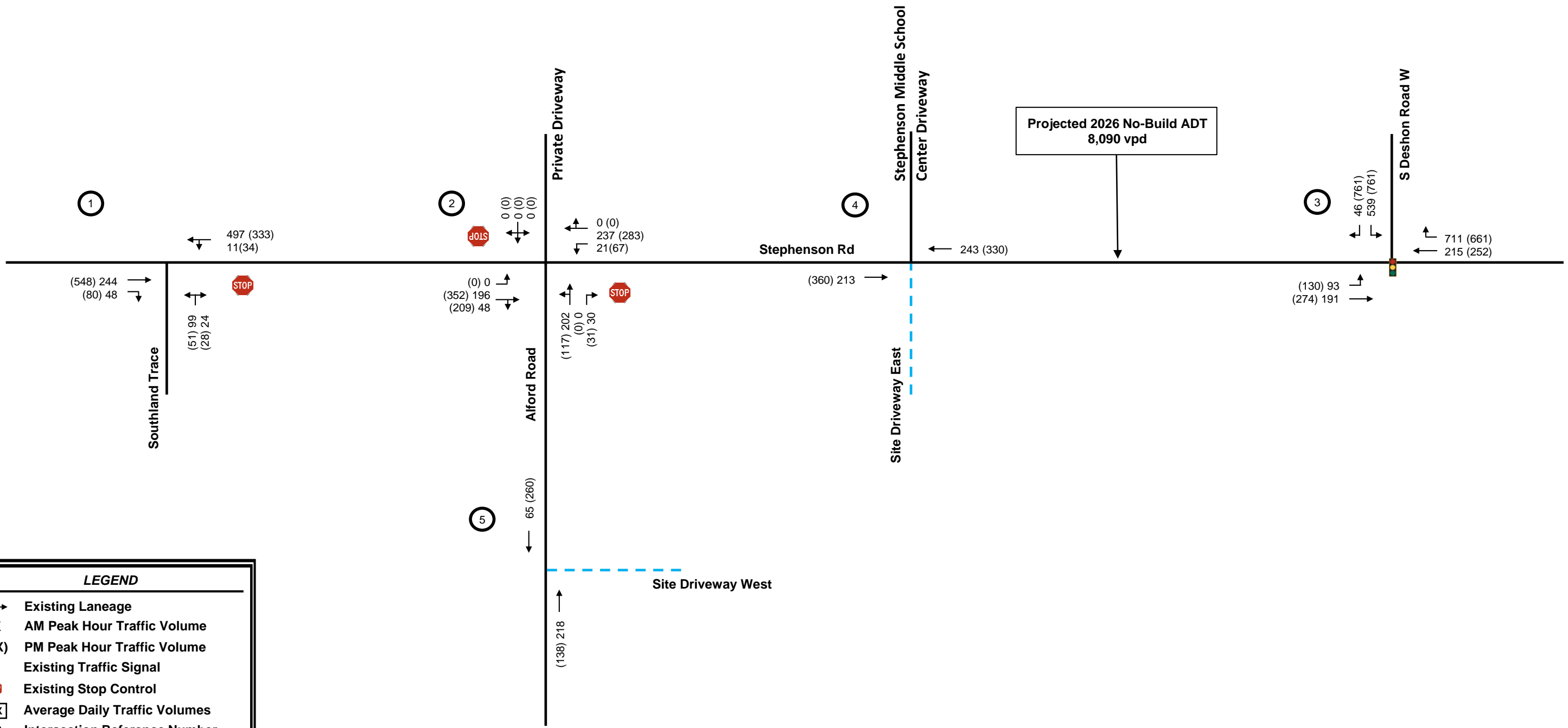
Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the proposed development and the distribution and assignment of that traffic through the study roadway network. This traffic impact study evaluated the impacts of adding the new trips generated by the proposed *Summertree-Alford Road Tract* development.

### 5.1 PROJECT SITE ACCESS

Access to the site will be provided via two (2) site driveways, which are shown on the proposed site plan in **Appendix A**. A brief description of the site driveways are as follows:

- Site Driveway East– a proposed full-movement, side-street stop-controlled driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site. The driveway is proposed to align with the center driveway for Stephenson Middle School along Stephenson Road.
- Site Driveway West– a proposed full-movement, side-street stop-controlled driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site. The driveway is located along Alford Road approximately 500 feet south of the Stephenson Road.

The site driveways provide vehicular access to the entire development. Internal, public roadways throughout the site provide access to all residential units. Refer to the site plan in **Appendix A** for a visual representation of vehicular access and circulation throughout the proposed development.



**LEGEND**

- Existing Laneage
- XX AM Peak Hour Traffic Volume
- (XX) PM Peak Hour Traffic Volume
- Existing Traffic Signal
- Existing Stop Control
- XXX Average Daily Traffic Volumes
- (X) Intersection Reference Number



## 5.2 TRIP GENERATION

Gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10<sup>th</sup> Edition, 2017*, using equations where available. Trip generation for the proposed development was calculated based upon the following land uses:

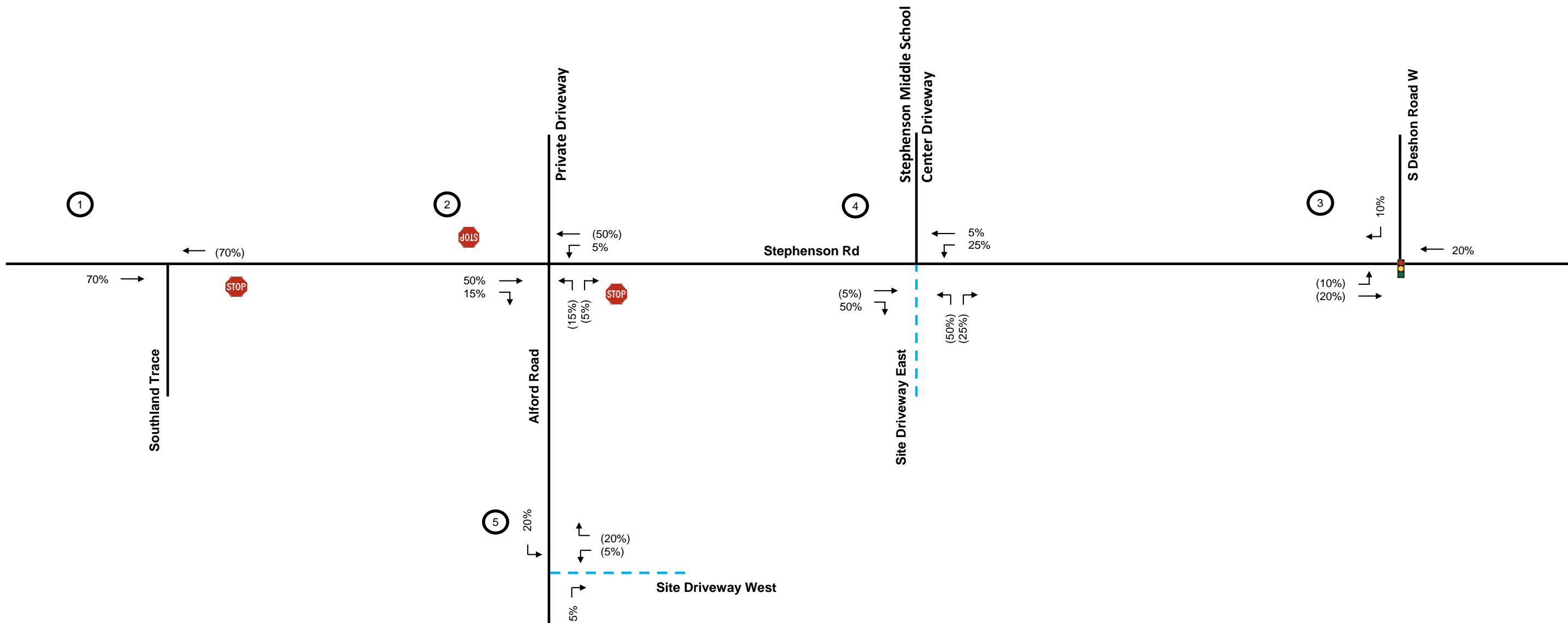
- Land Use 210: Single-Family Detached Housing

**Table 3** summarizes the anticipated net trip generation for the proposed development upon full build-out (2026). **Appendix C** provides the detailed trip generation worksheet for the proposed development.

Table 3: Project Trip Generation Summary								
ITE Code	Land Use	Density	Daily Traffic		AM Peak Hour		PM Peak Hour	
			Enter	Exit	Enter	Exit	Enter	Exit
210	Single-Family Housing	140 units	709	709	26	78	88	52
<b>Total New Trips</b>			<b>709</b>	<b>709</b>	<b>26</b>	<b>78</b>	<b>88</b>	<b>52</b>

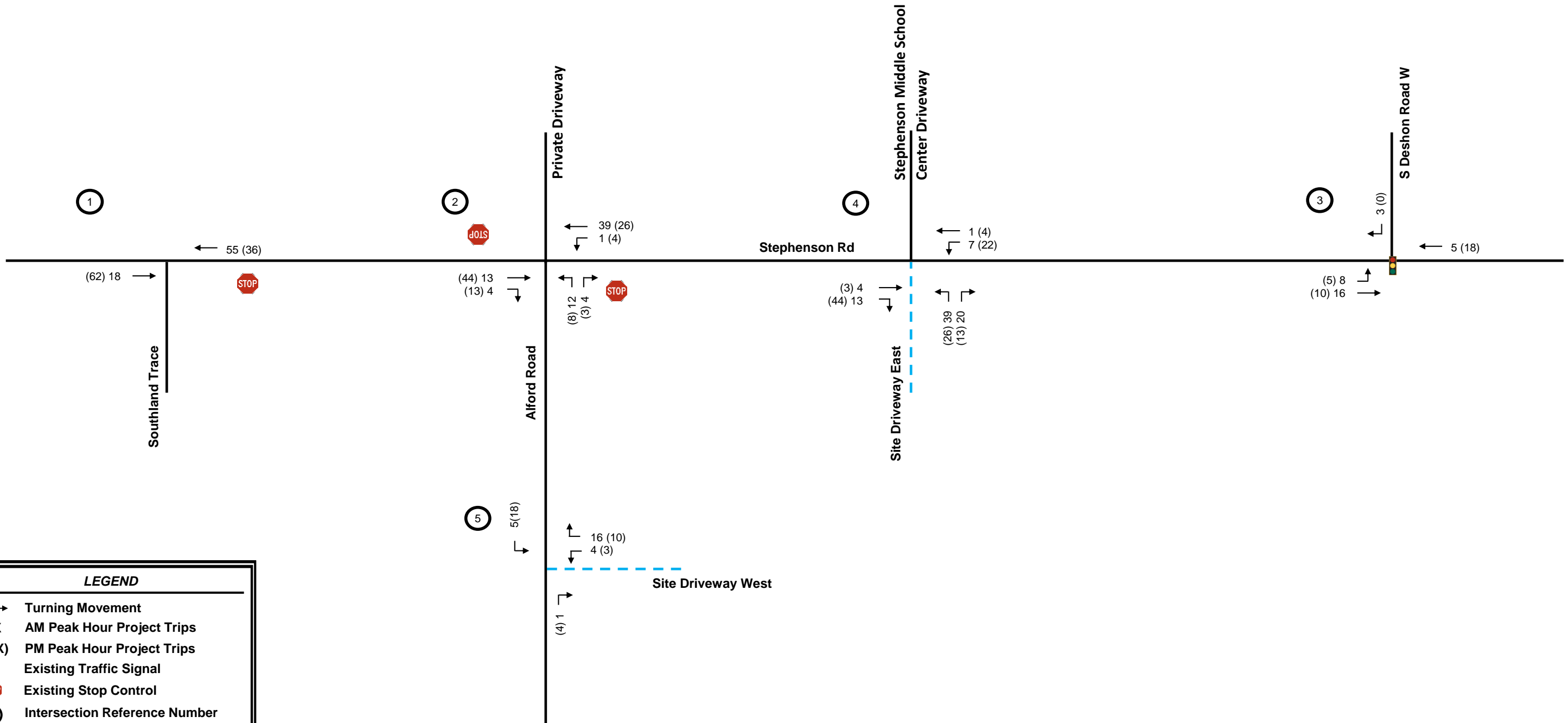
## 5.3 TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution and assignment of adding new trips (project trips) related to the proposed development was based on a review of land uses and population densities in the area, existing travel patterns in the area, and engineering judgement. A detailed trip distribution and assignment is shown in **Figure 5**. Based on trip generation from **Table 3** and the anticipated trip distribution, new project trips were assigned to the study roadway network. **Figure 6** illustrates the new project trips distributed throughout the study network. **Figure 7** illustrates the Projected 2026 Build traffic volumes for the AM and PM peak hours. **Appendix D** provides intersection volume worksheets for all study intersections.



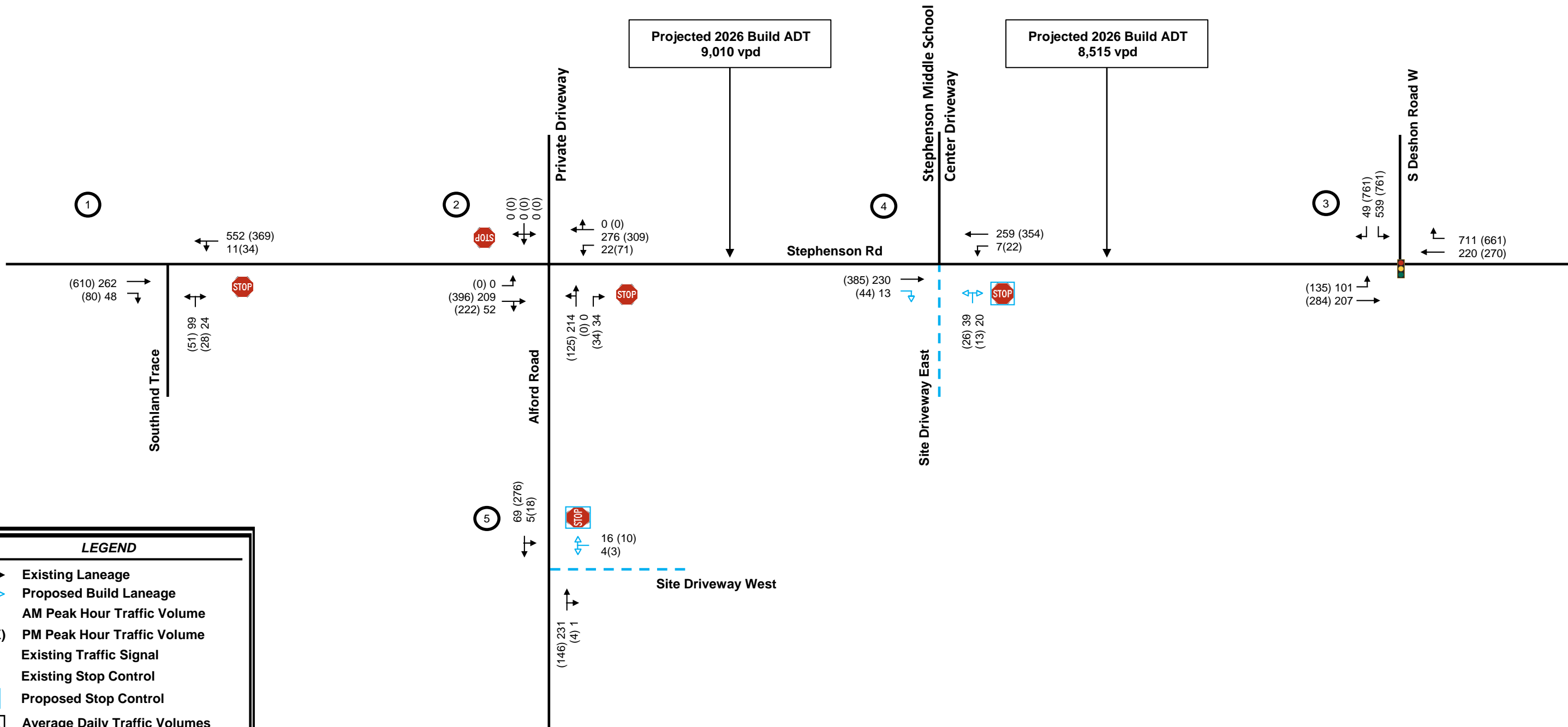
**LEGEND**

- Turning Movement
- XX % Entering Traffic
- (XX) % Exiting Traffic
- Existing Traffic Signal
- STOP Existing Stop Control
- (X) Intersection Reference Number



**LEGEND**

- Turning Movement
- XX AM Peak Hour Project Trips
- (XX) PM Peak Hour Project Trips
- Existing Traffic Signal
- STOP Existing Stop Control
- (X) Intersection Reference Number



## 6.0 LEVEL-OF-SERVICE ANALYSIS

Level-of-service (LOS) determinations were made for the weekday AM and PM peak hours for the study network intersections using *Synchro, Version 10*. The program uses methodologies contained in the *6<sup>th</sup> Edition Highway Capacity Manual* to determine the operating characteristics of an intersection. Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a specified period under prevailing roadway, traffic, and control conditions.

LOS is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions of a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A being the best and F the worst.

LOS for signalized intersections are reported for this intersection as a whole. One or more movements at an intersection may experience a low LOS while the intersection as a whole may operate acceptably.

LOS for unsignalized intersections, with stop control on the minor streets only, are reported for the side-street approaches and major street left-turns. Low levels-of-service for side street approaches are not uncommon, as vehicles may experience delay turning onto a major roadway.

LOS analyses were performed for the AM and PM peak hours under adjusted Existing 2020 conditions, Projected 2026 No-Build conditions, and Projected 2026 Build conditions. The results of each analysis are summarized in **Table 4**. *Synchro* analysis reports are included in **Appendix E**.

Table 4: Level-of-Service Summary							
LOS (Delay in Seconds)							
Intersection	Approach/ Movement	Adjusted Existing 2020		Projected 2026 No-Build		Projected 2026 Build	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1. Stephenson Road at Southland Trace (TWSC)	NB	C (19.3)	D (25.7)	C (21.3)	D (29.9)	C (24.4)	E (38.2)
	WBL	A (7.9)	A (9.4)	A (8.0)	A (9.6)	A (8.0)	A (9.9)
2. Stephenson Road at Alford Road (TWSC)	NB	B (14.3)	C (18.6)	C (15.0)	C (20.2)	C (16.3)	C (23.4)
	WBL	A (7.9)	A (9.0)	A (8.0)	A (9.2)	A (7.9)	A (9.4)
3. Stephenson Road at S Deshon Road W (Signalized)	Overall	C (21.3)	C (34.9)	C (22.8)	D (42.5)	C (23.4)	D (46.0)
4. Stephenson Road at Site Driveway East (TWSC)	NB					B (11.1)	B (13.3)
	WBL					A (7.8)	A (8.4)
5. Alford Road at Site Driveway West (TWSC)	WB					A (9.8)	A (9.8)
	SBL					A (7.7)	A (7.6)

As shown in **Table 4**, the analyses indicate that all study intersections are projected to operate at an acceptable overall LOS during the AM and PM peak hours under adjusted Existing 2020 conditions, Projected 2026 No-Build conditions, and Projected 2026 Build conditions.

It should be noted that low levels-of-service for side street approaches are not uncommon, as vehicles may experience delay turning onto a major roadway.

**7.0 ROADWAY SEGMENT CAPACITY ANALYSIS**

Roadway segments can be rated for operational effectiveness in terms of LOS based on ADT. The LOS for a roadway segment follows the same pattern as intersection LOS with A being the best and F being the worst. The LOS of a roadway can vary depending on the prevailing roadway and traffic control conditions. GRTA’s Generalized Annual Average Daily Volumes table was referenced to determine LOS based on ADT. The table can be found in **Appendix F**. For the purposes of this traffic impact study, Stephenson Road is assumed to be a non-state other signalized roadway with two lanes and left-turn lanes. **Table 5** summarizes the ADT volumes and LOS for the roadway segments.

<b>Table 5: Roadway Segment Capacity Summary</b>			
<b>Roadway Segment</b>	<b>Volume, vehicles per day (LOS)</b>		
	<b>Adjusted Existing 2020 ADT</b>	<b>Projected 2026 No-Build ADT</b>	<b>Projected 2026 Build ADT</b>
Stephenson Road between Southland Trace and Site Location	7,620 (LOS D)	8,090 (LOS D)	9,010 (LOS D)
Stephenson Road between Site Location and S Deshon Road W	7,620 (LOS D)	8,090 (LOS D)	8,515 (LOS D)

Currently, both segments along Stephenson Road operate at LOS D. Under Projected 2026 No-Build conditions, both roadway segments are projected to continue to operate at LOS D. Under Projected 2026 Build conditions, the daily project trips are anticipated to follow the same trip distribution as the peak hour trips as shown in **Figure 8**. With the addition of the daily project trips, the Projected 2026 Build ADT for both the Stephenson Road between Southland Trace and the site location roadway segment and the Stephenson Road between the site location and S Deshon Road W segment is projected to continue to operate at LOS D.

## 8.0 CONCLUSION

This traffic study evaluated the traffic impacts associated with the *Summertree-Alford Road Tract* development located east of Alford Road and south of Stephenson Road in DeKalb County, Georgia. The development, which is approximately 40.9-acres in size, will include 140 single-family housing units.

The study network, which consists of three (3) intersections, was analyzed for the weekday AM and PM peak hours under adjusted Existing 2020 conditions, Projected 2026 No-Build conditions (six years of background traffic growth), and Projected 2026 Build conditions (six years of background traffic growth plus traffic generated by the proposed *Summertree-Alford Road Tract* development).

All study intersections are expected to operate at an overall acceptable level-of-service under all future conditions. The roadway segments along Stephenson Road to the east and to the west of the development are currently operating at and projected to operate at LOS D under all existing and future scenarios.

## 8.1 RECOMMENDATIONS

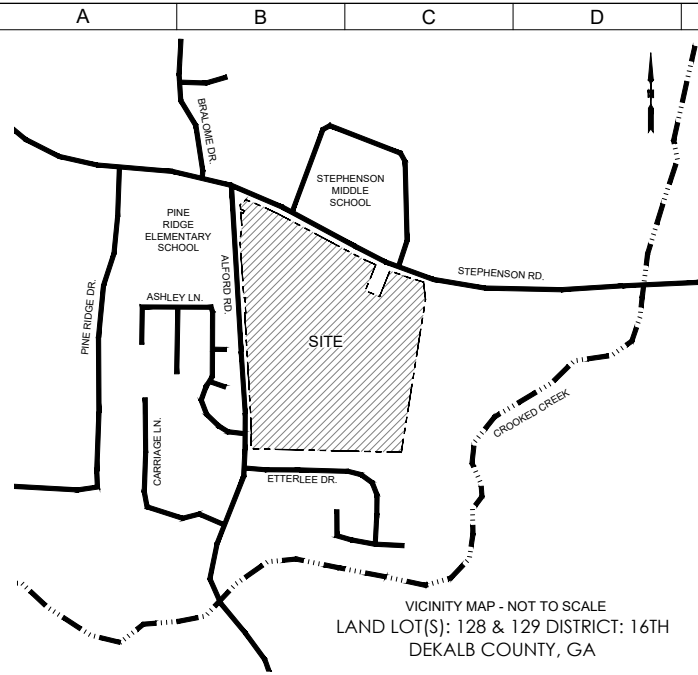
Based on the results of this traffic impact study, no off-site roadway improvements are recommended.

The following improvements are recommended to serve the proposed site:

- Stephenson Road at Site Driveway East (Intersection 4)
  - Along Stephenson Road, construct one (1) eastbound right turn lane.
  - On the site, construct a conventional stop-controlled driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site, per the site plan.
- Alford Road at Site Driveway West (Intersection 5)
  - On the site, construct a conventional stop-controlled driveway with one (1) ingress lane entering the site and one (1) egress lane exiting the site, per the site plan.



# Site Plan



**REQUESTED VARIANCES:**  
 1. GRADED AND REPLANTED BUFFERS AS SHOWN.  
 2. GRADING CAN BE ALLOWED WITHIN THE 75' IMPERVIOUS STREAM SETBACK, BUT NOT THE 50' UNDISTURBED BUFFER.  
 3. CORNER HOMES TO HAVE A STREET SIDE SETBACK OF 10'.

**PROPERTY OWNERS:**  
 PID: 16 128 02 001 - KATHERINE LOUISE BROWN  
 PID: 16-128-02-003 - LOUIS E. BROWN, JR.  
 PID: 16-129-02-009 - SARA K. WARBINGTON, ETAL

**SEWER NOTE:**  
 SEWER WILL BE A GRAVITY LINE AND TIE INTO THE EXISTING SEWER MANHOLE ALONG ALFORD ROAD & ASHLEY LANE.

**WATER NOTE:**  
 EXISTING WATER LINE LOCATED ON STEPHENSON ROAD AND PROVIDED BY DEKALB COUNTY.

**STREET LIGHT NOTE:**  
 FIXTURES AND ILLUMINATION SHALL COMPLY WITH COUNTY STANDARDS.

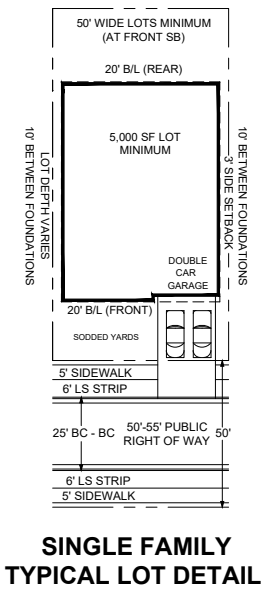
**TREE PRESERVATION NOTE:** EITHER 120 INCHES (DBH) PER ACRE OR 25% OF EXISTING SIGNIFICANT TREES PER ACRE OF SUCH SIGNIFICANT TREES, WHICHEVER IS LESS, SHALL BE PRESERVED ON THE SITE.

= PROPOSED TREE SAVE LIMITS; LIMITS ARE SUBJECT TO CHANGES WITH FURTHER REVIEW OF GRADING AND TREE SURVEY DATA.

A SMALL PORTION OF THIS PROPERTY IS LOCATED IN A FEMA FLOOD PLAIN AS PER FEMA MAP NO. 13089C0113J, DATED MAY 16, 2013



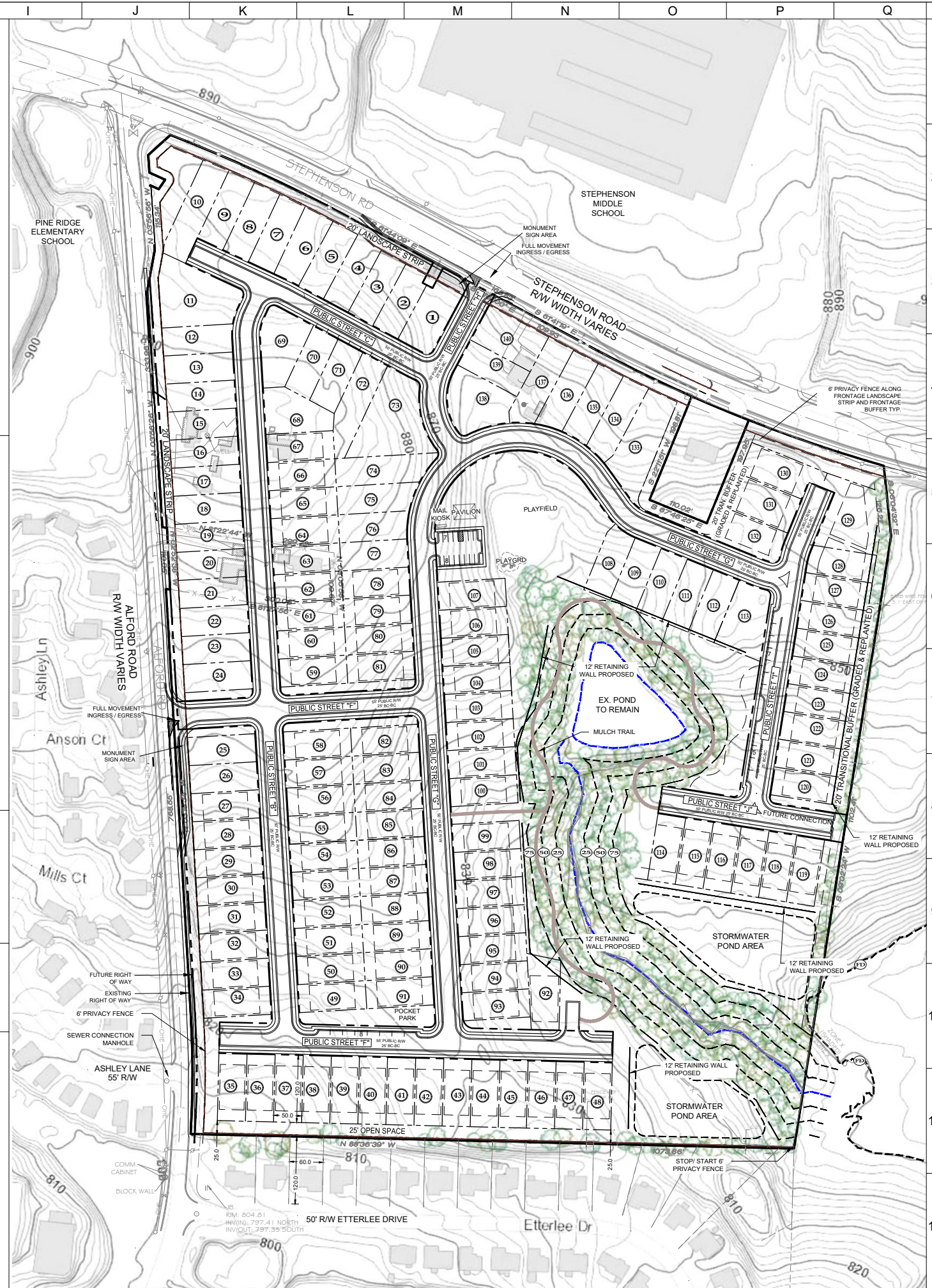
**DRAFT**



GROSS ACRES:	40.91 AC. (1,782,039 SQ. FT.)
EXISTING ZONING:	R100
PROPOSED ZONING:	RSM / DEKALB COUNTY
TOTAL UNITS:	140 UNITS
TOTAL DENSITY:	3.42 U/A
SINGLE FAMILY LOT WIDTH:	50' TYPICAL
MIN. UNIT HEATED AREA:	1,800 SF. (SINGLE FAMILY)
BUILDING SETBACKS:	SINGLE FAMILY DETACHED
FRONT:	20' (20' MIN DRIVEWAYS)
REAR:	20'
SIDE:	3'
BETWEEN FOUNDATIONS (SINGLE FAMILY):	10' BETWEEN FOUNDATIONS
TRANSITIONAL BUFFER:	20' (GRADED AND REPLANTED)
LANDSCAPE STRIP:	20' (ALFORD RD AND STEPHENSON RD)
BUILDING HT. REQUIRED:	35' MAX. (SINGLE FAM.) / 3 STORIES OR 45' MAX. (TOWNHOME)
PARKING REQUIRED:	2.0 / UNIT FOR EACH DWELLING; 0.25 / UNIT FOR GUESTS
OPEN SPACE REQUIRED:	20% OR 8.18 ACRES
OPEN SPACE PROVIDED:	20.9% OR 8.55 ACRES
ENHANCED REQUIRED:	10% OR 4.09 ACRES
ENHANCED PROVIDED:	10% OR 4.09 ACRES
SIDEWALK PROVIDED ON SITE:	
MULCH TRAIL PROVIDED:	+/- 2,000 LF.
LOT COVERAGE ALLOWED:	80% (MAXIMUM PER LOT OR TOTAL PARCEL ACREAGE)
LOT COVERAGE PROVIDED:	

PARKING ANALYSIS			
LOT TYPE	GARAGE/DRIVEWAY	TOTAL PER HOUSE	TOTAL SPACES
FRONT ENTRY	2	2	4
OFF STREET / PARALLEL GUEST / AMENITY PARKING			34
TOTAL PARKING SPACES PROPOSED FOR RESIDENTIAL			594

BOUNDARY SURVEY BY: McNALLY & PATRICK  
 1505 HWY. 29 SOUTH, LAWRENCEVILLE, GEORGIA 30044  
 PHONE: 770.963.8520



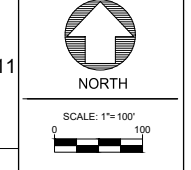
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SURVEYING BY:  
 McNALLY & PATRICK  
 PHONE: (770) 963-8520  
 CONTACT: LLOYD McNALLY, JR.

DEVELOPER  
**PARKLAND COMMUNITIES**  
 JIM JACOBI, 404.456.6562  
 JIM@PARKLANDCC.COM

Site Concept Plan for  
**STEPHENSON ROAD TRACT**  
 800 ALFORD ROAD  
 LL 128 & 129 - DISTRICT 16TH  
 PARCEL # 16-128-02-001

Orig. Issue  
 Designed by BW  
 Checked by JJ  
 Project # 19073



Rezoning Plan

8-21-2020

# Traffic Count Data



ALL TRAFFIC DATA SERVICES

(303) 216-2439

www.alltrafficdata.net

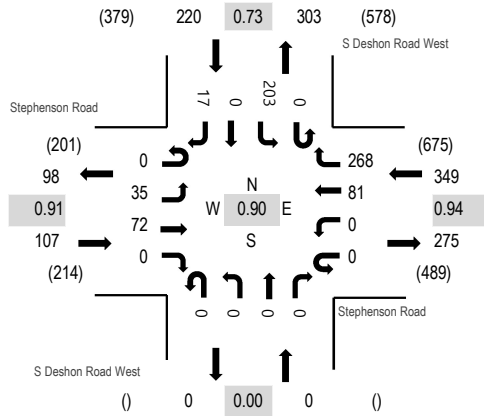
**Location:** 5 S Deshon Road West & Stephenson Road AM

**Date:** Thursday, August 6, 2020

**Peak Hour:** 08:00 AM - 09:00 AM

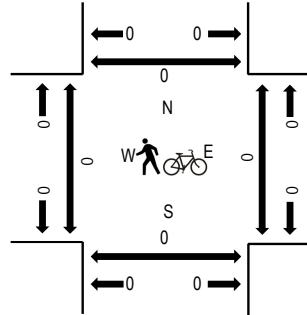
**Peak 15-Minutes:** 08:15 AM - 08:30 AM

**Peak Hour - Motorized Vehicles**



Note: Total study counts contained in parentheses.

**Peak Hour - Pedestrians/Bicycles in Crosswalk**



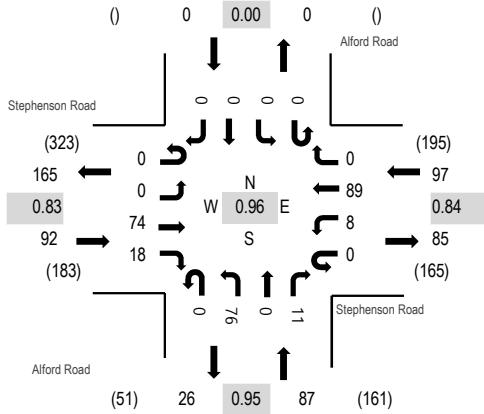
**Traffic Counts - Motorized Vehicles**

Interval Start Time	Stephenson Road Eastbound				Stephenson Road Westbound				S Deshon Road West Northbound				S Deshon Road West Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
7:00 AM	0	7	16	0	0	0	24	54	0	0	0	0	0	0	35	0	5	141	592	0	0	0	0
7:15 AM	0	7	18	0	0	0	28	45	0	0	0	0	0	0	26	0	5	129	603	0	0	0	0
7:30 AM	0	11	21	0	0	0	17	65	0	0	0	0	0	40	0	8	162	661	0	0	0	0	
7:45 AM	0	7	20	0	0	0	14	79	0	0	0	0	0	38	0	2	160	673	0	0	0	0	
8:00 AM	0	10	22	0	0	0	15	64	0	0	0	0	0	37	0	4	152	676	0	0	0	0	
8:15 AM	0	9	15	0	0	0	22	66	0	0	0	0	0	68	0	7	187	676	0	0	0	0	
8:30 AM	0	11	18	0	0	0	24	67	0	0	0	0	0	52	0	2	174	676	0	0	0	0	
8:45 AM	0	5	17	0	0	0	20	71	0	0	0	0	0	46	0	4	163	676	0	0	0	0	

**Peak Rolling Hour Flow Rates**

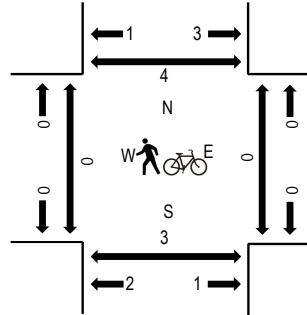
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3
Lights	0	35	66	0	0	0	78	261	0	0	0	0	0	196	0	17	653
Mediums	0	0	6	0	0	0	3	6	0	0	0	0	0	5	0	0	20
Total	0	35	72	0	0	0	81	268	0	0	0	0	0	203	0	17	676

**Peak Hour - Motorized Vehicles**



Note: Total study counts contained in parentheses.

**Peak Hour - Pedestrians/Bicycles in Crosswalk**



**Traffic Counts - Motorized Vehicles**

Interval Start Time	Stephenson Road Eastbound				Stephenson Road Westbound				Alford Road Northbound				Alford Road Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	10	7	0	2	28	0	0	18	0	4	0	0	0	0	69	276	0	0	0	1
7:15 AM	0	0	18	5	0	0	27	0	0	18	0	4	0	0	0	0	72	276	0	0	0	2
7:30 AM	0	0	20	1	0	5	18	0	0	20	0	3	0	0	0	0	67	265	0	0	2	0
7:45 AM	0	0	26	5	0	1	16	0	0	20	0	0	0	0	0	0	68	273	0	0	1	1
8:00 AM	0	0	22	5	0	2	18	0	0	19	0	3	0	0	0	0	69	263	0	0	4	2
8:15 AM	0	0	15	3	0	1	28	0	0	13	0	1	0	0	0	0	61		0	0	3	2
8:30 AM	0	0	24	3	0	2	20	0	0	23	0	3	0	0	0	0	75		0	0	0	0
8:45 AM	0	0	11	8	0	1	26	0	0	11	0	1	0	0	0	0	58		0	2	4	1

**Peak Rolling Hour Flow Rates**

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right					
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	72	18	0	7	88	0	0	74	0	11	0	0	0	0	270				
Mediums	0	0	2	0	0	1	1	0	0	2	0	0	0	0	0	0	6				
Total	0	0	74	18	0	8	89	0	0	76	0	11	0	0	0	0	276				

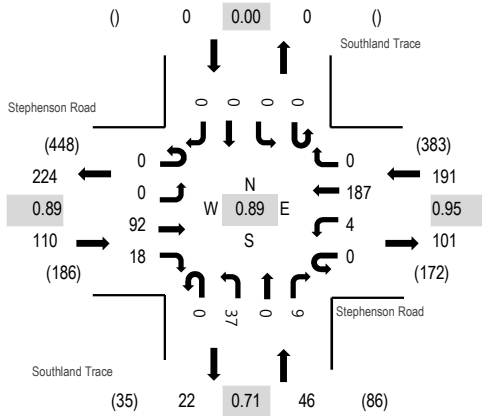
**Location:** 7 Southland Trace & Stephenson Road AM

**Date:** Thursday, August 6, 2020

**Peak Hour:** 07:45 AM - 08:45 AM

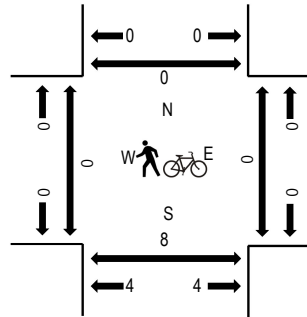
**Peak 15-Minutes:** 07:45 AM - 08:00 AM

### Peak Hour - Motorized Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts - Motorized Vehicles

Interval Start Time	Stephenson Road Eastbound				Stephenson Road Westbound				Southland Trace Northbound				Southland Trace Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
7:00 AM	0	0	12	0	0	0	0	48	0	0	9	0	3	0	0	0	0	72	326	0	0	1	0
7:15 AM	0	0	18	2	0	1	51	0	0	10	0	0	0	0	0	0	0	82	342	0	0	0	0
7:30 AM	0	0	14	2	0	1	48	0	0	9	0	0	0	0	0	0	0	74	334	0	0	1	0
7:45 AM	0	0	27	4	0	2	51	0	0	8	0	6	0	0	0	0	0	98	347	0	0	1	0
8:00 AM	0	0	24	2	0	0	44	0	0	17	0	1	0	0	0	0	0	88	329	0	0	3	0
8:15 AM	0	0	19	5	0	1	41	0	0	6	0	2	0	0	0	0	0	74		0	0	2	0
8:30 AM	0	0	22	7	0	1	51	0	0	6	0	0	0	0	0	0	0	87		0	0	2	0
8:45 AM	0	0	23	5	0	2	41	0	0	8	0	1	0	0	0	0	0	80		0	0	0	0

### Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total						
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right							
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Lights	0	0	86	17	0	4	185	0	0	37	0	8	0	0	0	0	0	337					
Mediums	0	0	6	1	0	0	2	0	0	0	0	1	0	0	0	0	0	10					
Total	0	0	92	18	0	4	187	0	0	37	0	9	0	0	0	0	0	347					

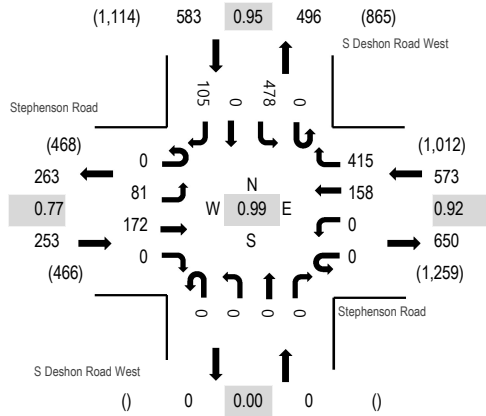
**Location:** 5 S Deshon Road West & Stephenson Road PM

**Date:** Thursday, August 6, 2020

**Peak Hour:** 05:00 PM - 06:00 PM

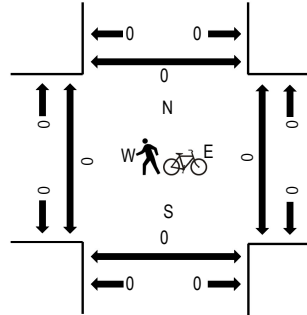
**Peak 15-Minutes:** 05:30 PM - 05:45 PM

### Peak Hour - Motorized Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts - Motorized Vehicles

Interval Start Time	Stephenson Road Eastbound				Stephenson Road Westbound				S Deshon Road West Northbound				S Deshon Road West Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	21	40	0	0	0	28	72	0	0	0	0	0	132	0	15	308	1,183	0	0	0	0
4:15 PM	0	14	31	0	0	0	30	78	0	0	0	0	0	112	0	14	279	1,217	0	0	0	0
4:30 PM	0	16	41	0	0	0	38	90	0	0	0	0	0	106	0	18	309	1,291	0	0	0	0
4:45 PM	0	13	37	0	0	0	38	65	0	0	0	0	0	110	0	24	287	1,339	0	0	0	0
5:00 PM	0	20	45	0	0	0	37	95	0	0	0	0	0	128	0	17	342	1,409	0	0	0	0
5:15 PM	0	19	38	0	0	0	38	117	0	0	0	0	0	112	0	29	353		0	0	0	0
5:30 PM	0	28	54	0	0	0	37	95	0	0	0	0	0	119	0	24	357		0	0	0	0
5:45 PM	0	14	35	0	0	0	46	108	0	0	0	0	0	119	0	35	357		0	0	0	0

### Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3
Lights	0	81	169	0	0	0	157	409	0	0	0	0	0	465	0	105	1,386
Mediums	0	0	3	0	0	0	1	5	0	0	0	0	0	11	0	0	20
Total	0	81	172	0	0	0	158	415	0	0	0	0	0	478	0	105	1,409

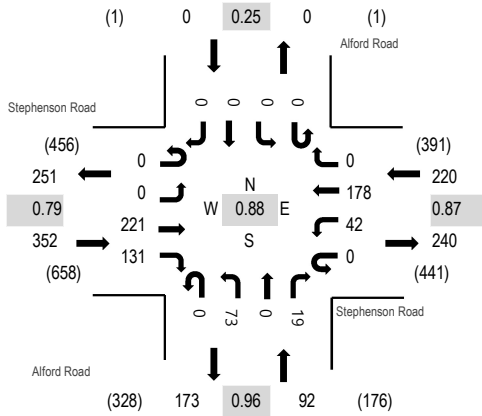
**Location:** 6 Alford Road & Stephenson Road PM

**Date:** Thursday, August 6, 2020

**Peak Hour:** 05:00 PM - 06:00 PM

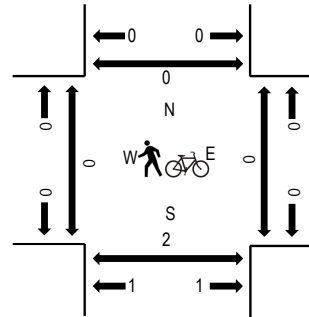
**Peak 15-Minutes:** 05:30 PM - 05:45 PM

### Peak Hour - Motorized Vehicles



Note: Total study counts contained in parentheses.

### Peak Hour - Pedestrians/Bicycles in Crosswalk



### Traffic Counts - Motorized Vehicles

Interval Start Time	Stephenson Road Eastbound				Stephenson Road Westbound				Alford Road Northbound				Alford Road Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	1	0	51	33	0	8	24	0	0	12	0	7	0	0	0	0	136	562	0	0	0	0
4:15 PM	0	0	45	39	0	5	42	0	0	15	0	6	0	0	0	0	152	587	0	0	0	0
4:30 PM	0	0	39	30	0	7	52	0	0	20	1	6	0	1	0	0	156	598	0	0	0	0
4:45 PM	0	0	44	24	0	9	24	0	0	15	0	2	0	0	0	0	118	631	0	0	1	0
5:00 PM	0	0	53	34	0	9	41	0	0	22	0	2	0	0	0	0	161	664	0	0	0	0
5:15 PM	0	0	52	35	0	9	45	0	0	14	0	8	0	0	0	0	163		0	0	1	0
5:30 PM	0	0	82	31	0	9	44	0	0	17	0	6	0	0	0	0	189		0	0	0	0
5:45 PM	0	0	34	31	0	15	48	0	0	20	0	3	0	0	0	0	151		0	0	1	0

### Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lights	0	0	218	129	0	42	177	0	0	73	0	19	0	0	0	0	0	658				
Mediums	0	0	3	2	0	0	1	0	0	0	0	0	0	0	0	0	0	6				
Total	0	0	221	131	0	42	178	0	0	73	0	19	0	0	0	0	664					



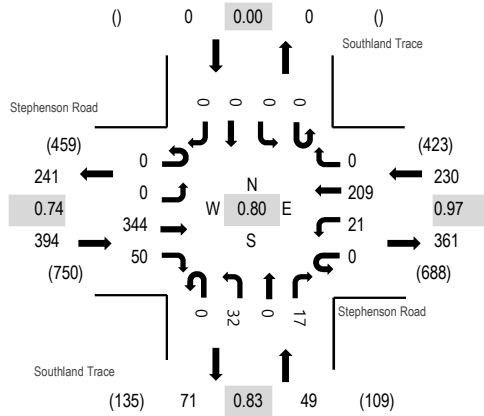
**Location:** 7 Southland Trace & Stephenson Road PM

**Date:** Thursday, August 6, 2020

**Peak Hour:** 05:00 PM - 06:00 PM

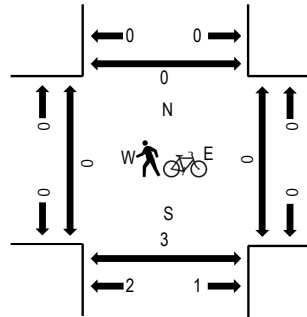
**Peak 15-Minutes:** 05:30 PM - 05:45 PM

**Peak Hour - Motorized Vehicles**



Note: Total study counts contained in parentheses.

**Peak Hour - Pedestrians/Bicycles in Crosswalk**



**Traffic Counts - Motorized Vehicles**

Interval Start Time	Stephenson Road Eastbound				Stephenson Road Westbound				Southland Trace Northbound				Southland Trace Southbound				Total	Rolling Hour	Pedestrian Crossings				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North	
4:00 PM	0	0	80	10	0	2	37	0	0	0	7	0	9	0	0	0	0	145	609	0	0	0	0
4:15 PM	0	0	91	17	0	3	44	0	0	0	7	0	5	0	0	0	0	167	627	0	0	0	0
4:30 PM	0	0	68	14	0	3	55	0	0	0	12	0	6	0	0	0	0	158	617	0	0	0	0
4:45 PM	0	0	64	12	0	3	46	0	0	0	10	0	4	0	0	0	0	139	669	0	0	0	0
5:00 PM	0	0	87	11	0	2	56	0	0	0	7	0	0	0	0	0	0	163	673	0	0	1	0
5:15 PM	0	0	76	13	0	7	49	0	0	0	5	0	7	0	0	0	0	157		0	0	1	0
5:30 PM	0	0	118	15	0	4	55	0	0	0	10	0	8	0	0	0	0	210		0	0	0	0
5:45 PM	0	0	63	11	0	8	49	0	0	0	10	0	2	0	0	0	0	143		0	0	1	0

**Peak Rolling Hour Flow Rates**

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	339	50	0	21	207	0	0	32	0	17	0	0	0	0	666
Mediums	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7
Total	0	0	344	50	0	21	209	0	0	32	0	17	0	0	0	0	673

# All Traffic Data Services

[www.alltrafficdata.net](http://www.alltrafficdata.net)

Site Code: 1  
 Station ID: 1  
 STEPHENSON ROAD WEST OF  
 ALFORD ROAD  
 Latitude: 0' 0.0000 Undefined

Start Time	06-Aug-20 Thu	EB		Hour Totals		WB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		12	36			13	48				
12:15		10	45			7	48				
12:30		8	43			11	46				
12:45		7	43	37	167	5	40	36	182	73	349
01:00		3	49			5	34				
01:15		10	53			11	40				
01:30		9	48			7	38				
01:45		9	44	31	194	0	58	23	170	54	364
02:00		3	43			0	43				
02:15		4	49			5	42				
02:30		3	60			6	41				
02:45		2	42	12	194	1	45	12	171	24	365
03:00		6	50			1	36				
03:15		6	51			10	47				
03:30		7	52			7	50				
03:45		5	59	24	212	2	41	20	174	44	386
04:00		4	79			10	40				
04:15		3	75			6	51				
04:30		6	70			4	64				
04:45		2	68	15	292	5	57	25	212	40	504
05:00		6	79			6	51				
05:15		8	64			12	49				
05:30		8	113			14	68				
05:45		6	59	28	315	13	67	45	235	73	550
06:00		9	84			15	50				
06:15		9	72			32	67				
06:30		10	79			36	65				
06:45		10	72	38	307	36	60	119	242	157	549
07:00		19	70			45	61				
07:15		19	62			42	40				
07:30		23	79			43	54				
07:45		28	68	89	279	41	48	171	203	260	482
08:00		28	62			39	48				
08:15		20	41			33	32				
08:30		22	54			46	36				
08:45		20	48	90	205	38	46	156	162	246	367
09:00		30	42			39	34				
09:15		26	41			38	33				
09:30		33	41			38	21				
09:45		38	23	127	147	38	25	153	113	280	260
10:00		34	22			44	30				
10:15		24	29			43	27				
10:30		45	23			39	28				
10:45		36	22	139	96	33	21	159	106	298	202
11:00		32	20			34	19				
11:15		35	16			33	15				
11:30		35	21			36	14				
11:45		40	27	142	84	36	10	139	58	281	142
Total		772	2492			1058	2028			1830	4520
Percent		23.7%	76.3%			34.3%	65.7%			28.8%	71.2%
Grand Total		772	2492			1058	2028			1830	4520
Percent		23.7%	76.3%			34.3%	65.7%			28.8%	71.2%

ADT                      ADT 6,350                      AADT 6,350

# All Traffic Data Services

[www.alltrafficdata.net](http://www.alltrafficdata.net)

Site Code: 2  
Station ID: 2  
STEPHENSON ROAD WEST OF SR 124

Latitude: 0' 0.0000 Undefined

Start Time	06-Aug-20 Thu	EB		Hour Totals		WB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		9	57			10	72				
12:15		10	67			11	59				
12:30		5	65			7	58				
12:45		12	49	36	238	14	63	42	252	78	490
01:00		6	74			7	49				
01:15		7	57			10	59				
01:30		4	63			6	45				
01:45		5	64	22	258	5	47	28	200	50	458
02:00		5	40			5	41				
02:15		3	56			2	48				
02:30		7	67			5	65				
02:45		7	63	22	226	1	50	13	204	35	430
03:00		7	69			5	69				
03:15		4	75			1	46				
03:30		5	66			3	71				
03:45		10	73	26	283	5	71	14	257	40	540
04:00		3	63			3	72				
04:15		3	69			8	60				
04:30		9	74			2	62				
04:45		4	53	19	259	3	56	16	250	35	509
05:00		14	72			4	71				
05:15		14	81			2	81				
05:30		12	88			5	85				
05:45		23	76	63	317	6	76	17	313	80	630
06:00		24	70			10	88				
06:15		31	72			14	82				
06:30		29	66			14	96				
06:45		32	63	116	271	15	57	53	323	169	594
07:00		44	54			24	70				
07:15		41	57			41	68				
07:30		56	58			29	61				
07:45		54	63	195	232	40	68	134	267	329	499
08:00		51	63			30	63				
08:15		50	44			41	65				
08:30		44	39			37	60				
08:45		41	40	186	186	40	56	148	244	334	430
09:00		59	40			33	41				
09:15		50	49			32	53				
09:30		55	41			44	32				
09:45		44	29	208	159	42	37	151	163	359	322
10:00		52	31			51	29				
10:15		45	32			50	37				
10:30		54	14			35	29				
10:45		73	25	224	102	41	29	177	124	401	226
11:00		56	17			41	16				
11:15		38	21			33	23				
11:30		54	20			46	29				
11:45		60	15	208	73	53	13	173	81	381	154
Total		1325	2604			966	2678			2291	5282
Percent		33.7%	66.3%			26.5%	73.5%			30.3%	69.7%
Grand Total		1325	2604			966	2678			2291	5282
Percent		33.7%	66.3%			26.5%	73.5%			30.3%	69.7%
ADT		ADT 7,573									
				AADT 7,573							

# All Traffic Data Services

[www.alltrafficdata.net](http://www.alltrafficdata.net)

Site Code: 3  
 Station ID: 3  
 SR 124 NORTH ASBURY DRIVE -  
 HIGHTOWER TRAIL  
 Latitude: 0' 0.0000 Undefined

Start Time	06-Aug-20 Thu	NB		Hour Totals		SB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		34	179			44	205				
12:15		37	189			44	189				
12:30		41	216			28	223				
12:45		38	202	150	786	42	215	158	832	308	1618
01:00		43	212			21	211				
01:15		31	207			35	206				
01:30		34	233			23	217				
01:45		20	215	128	867	27	206	106	840	234	1707
02:00		26	207			21	204				
02:15		21	244			17	218				
02:30		23	252			21	227				
02:45		18	251	88	954	13	222	72	871	160	1825
03:00		25	217			23	205				
03:15		24	260			21	251				
03:30		18	256			16	248				
03:45		42	273	109	1006	31	233	91	937	200	1943
04:00		29	224			27	272				
04:15		18	250			43	308				
04:30		43	291			43	315				
04:45		26	274	116	1039	54	275	167	1170	283	2209
05:00		56	308			49	303				
05:15		64	290			59	333				
05:30		65	334			78	383				
05:45		81	357	266	1289	120	323	306	1342	572	2631
06:00		76	357			112	316				
06:15		103	293			143	296				
06:30		168	268			141	265				
06:45		186	212	533	1130	169	265	565	1142	1098	2272
07:00		179	199			169	232				
07:15		181	208			186	231				
07:30		234	252			186	211				
07:45		197	186	791	845	178	222	719	896	1510	1741
08:00		218	188			198	182				
08:15		169	173			192	192				
08:30		166	133			196	233				
08:45		151	145	704	639	209	161	795	768	1499	1407
09:00		150	157			174	165				
09:15		156	148			183	146				
09:30		171	146			202	134				
09:45		163	124	640	575	199	118	758	563	1398	1138
10:00		170	101			187	105				
10:15		158	110			201	103				
10:30		160	94			195	84				
10:45		178	82	666	387	163	89	746	381	1412	768
11:00		179	67			209	75				
11:15		164	60			166	71				
11:30		189	73			211	69				
11:45		185	66	717	266	219	67	805	282	1522	548
Total		4908	9783			5288	10024			10196	19807
Percent		33.4%	66.6%			34.5%	65.5%			34.0%	66.0%
Grand Total		4908	9783			5288	10024			10196	19807
Percent		33.4%	66.6%			34.5%	65.5%			34.0%	66.0%

ADT                      ADT 30,003                      AADT 30,003

# Volume Development (Trip Generation and Growth Rate Calculations)

**Trip Generation Analysis (10th Ed. with 2nd Edition Handbook Daily IC & 3rd Edition AM/PM IC)**  
**Summertree-Alford Road Tract**  
**DeKalb County, GA**

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<b>Proposed Site Traffic</b>								
210 Single-Family Detached Housing	140 d.u.	1,418	104	26	78	140	88	52
<b>Gross Trips</b>		<b>1,418</b>	<b>104</b>	<b>26</b>	<b>78</b>	<b>140</b>	<b>88</b>	<b>52</b>
Residential Trips		1,418	104	26	78	140	88	52
<i>Mixed-Use Reductions</i>		0	0	0	0	0	0	0
<i>Alternative Mode Reductions</i>		0	0	0	0	0	0	0
Adjusted Residential Trips		1,418	104	26	78	140	88	52
<i>Mixed-Use Reductions - TOTAL</i>		0	0	0	0	0	0	0
<i>Alternative Mode Reductions - TOTAL</i>		0	0	0	0	0	0	0
<i>Pass-By Reductions - TOTAL</i>		0	0	0	0	0	0	0
<b>New Trips</b>		<b>1,418</b>	<b>104</b>	<b>26</b>	<b>78</b>	<b>140</b>	<b>88</b>	<b>52</b>
<b>Driveway Volumes</b>		<b>1,418</b>	<b>104</b>	<b>26</b>	<b>78</b>	<b>140</b>	<b>88</b>	<b>52</b>

### Summertree-Alford Rd Tract Growth Rate Table

Source:	GDOT
Location:	Stephenson Road w/o Alford Road
Route #:	00510900
Route Type:	Minor Collector (Urban)
Station:	089-0458
Capacity:	

Count Year	Volume	Growth Rate
2013	7,400	
2014	7,400	0.00%
2015	7,400	0.00%
2016	7,400	0.00%
2017	7,400	0.00%
2018	7,510	1.49%

<b>Avg. 1 Year Rates 2013-2018</b>	<b>0.30%</b>
------------------------------------	--------------

Source:	GDOT
Location:	Stephenson Road e/o Vigo Drive
Route #:	00067600
Route Type:	Minor Collector (Urban)
Station:	089-0461
Capacity:	

Count Year	Volume	Growth Rate
2013	6,810	
2014	6,810	0.00%
2015	7,090	4.11%
2016	7,260	2.40%
<b>2017</b>	<b>7,210</b>	-0.69%
2018	7,320	1.53%

<b>Avg. 1 Year Rates 2013-2018</b>	<b>1.45%</b>
------------------------------------	--------------

DeKalb County Population Annual Growth (2010-2019):

**\*Bolder data is from actual count years.**

<b>CHOSEN GROWTH RATE: 1.0%</b>
---------------------------------

Source:	GDOT
Location:	Rockbridge Road w/o Monteagle Trace
Route #:	00518900
Route Type:	Minor Arterial (Urban)
Station:	089-3449
Capacity:	

Count Year	Volume	Growth Rate
2013	15,100	
2014	15,100	0.00%
2015	16,200	7.28%
<b>2016</b>	<b>15,800</b>	-2.47%
2017	16,700	5.70%
<b>2018</b>	<b>14,100</b>	-15.57%

<b>Avg. 1 Year Rates 2013-2018</b>	<b>-1.36%</b>
<b>Avg. 1 Year Rates 2016-2018</b>	<b>-5.53%</b>

**Annual Growth**  
1.04%

# Intersection Volume Worksheets



**INTERSECTION VOLUME DEVELOPMENT**

**Intersection #1**

**Southland Trace at Stephenson Road**

**AM PEAK HOUR**

Description	Southland Trace <u>Northbound</u>			Southland Trace <u>Southbound</u>			Stephenson Road <u>Eastbound</u>			Stephenson Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2020 Traffic Volumes	37	0	9	0	0	0	0	92	18	4	187	0
Pedestrians		8			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	8		0
Heavy Vehicles	0	0	1	0	0	0	0	6	1	0	2	0
Heavy Vehicle %	2%	0%	11%	0%	0%	0%	0%	7%	6%	2%	2%	0%
Peak Hour Factor		0.89			0.89			0.89			0.89	
Adjustment	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Adjusted 2020 Volumes	93	0	23	0	0	0	0	230	45	10	468	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	99	0	24	0	0	0	0	244	48	11	497	0
<b>Project Trips</b>												
Trip Distribution IN								70%				
Trip Distribution OUT											70%	
Residential Trips	0	0	0	0	0	0	0	18	0	0	55	0
Total Project Trips	0	0	0	0	0	0	0	18	0	0	55	0
<b>2026 Buildout Total</b>	<b>99</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>262</b>	<b>48</b>	<b>11</b>	<b>552</b>	<b>0</b>

**PM PEAK HOUR**

Description	Southland Trace <u>Northbound</u>			Southland Trace <u>Southbound</u>			Stephenson Road <u>Eastbound</u>			Stephenson Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2020 Traffic Volumes	32	0	17	0	0	0	0	344	50	21	209	0
Pedestrians		3			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	3		0
Heavy Vehicles	0	0	0	0	0	0	0	5	0	0	2	0
Heavy Vehicle %	2%	0%	2%	0%	0%	0%	0%	2%	2%	2%	2%	0%
Peak Hour Factor		0.80			0.80			0.80			0.80	
Adjustment	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Adjusted 2020 Volumes	48	0	26	0	0	0	0	516	75	32	314	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	51	0	28	0	0	0	0	548	80	34	333	0
<b>Project Trips</b>												
Trip Distribution IN								70%				
Trip Distribution OUT											70%	
Residential Trips	0	0	0	0	0	0	0	62	0	0	36	0
Total Project Trips	0	0	0	0	0	0	0	62	0	0	36	0
<b>2026 Buildout Total</b>	<b>51</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>610</b>	<b>80</b>	<b>34</b>	<b>369</b>	<b>0</b>

**INTERSECTION VOLUME DEVELOPMENT**

Intersection #2  
Alford Road at Stephenson Road  
AM PEAK HOUR

Description	Alford Road Northbound				Alford Road Southbound				Stephenson Road Eastbound				Stephenson Road Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	76	0	11	0	0	0	0	0	0	74	18	0	8	89	0
Pedestrians	3				4				0				0			
Conflicting Pedestrians	0				0				4				3			
Heavy Vehicles	0	2	0	0	0	0	0	0	0	0	2	0	0	1	1	0
Heavy Vehicle %	0%	3%	0%	2%	0%	0%	0%	0%	0%	0%	3%	2%	0%	13%	2%	0%
Peak Hour Factor	0.96				0.96				0.96				0.96			
Adjustment		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Adjusted 2020 Volumes	0	190	0	28	0	0	0	0	0	0	185	45	0	20	223	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	202	0	30	0	0	0	0	0	0	196	48	0	21	237	0
<b>Project Trips</b>																
Trip Distribution IN											50%	15%			5%	
Trip Distribution OUT		15%		5%											50%	
Residential Trips	0	12	0	4	0	0	0	0	0	0	13	4	0	1	39	0
Total Project Trips	0	12	0	4	0	0	0	0	0	0	13	4	0	1	39	0
<b>2026 Buildout Total</b>	<b>0</b>	<b>214</b>	<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>209</b>	<b>52</b>	<b>0</b>	<b>22</b>	<b>276</b>	<b>0</b>

**PM PEAK HOUR**

Description	Alford Road Northbound				Alford Road Southbound				Stephenson Road Eastbound				Stephenson Road Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	73	0	19	0	0	0	0	0	0	221	131	0	42	178	0
Pedestrians	2				0				0				0			
Conflicting Pedestrians	0				0				0				2			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	3	2	0	0	1	0
Heavy Vehicle %	0%	2%	0%	2%	0%	0%	0%	0%	0%	0%	2%	2%	0%	2%	2%	0%
Peak Hour Factor	0.88				0.88				0.88				0.88			
Adjustment		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Adjusted 2020 Volumes	0	110	0	29	0	0	0	0	0	0	332	197	0	63	267	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	117	0	31	0	0	0	0	0	0	352	209	0	67	283	0
<b>Project Trips</b>																
Trip Distribution IN											50%	15%			5%	
Trip Distribution OUT		15%		5%											50%	
Residential Trips	0	8	0	3	0	0	0	0	0	0	44	13	0	4	26	0
Total Project Trips	0	8	0	3	0	0	0	0	0	0	44	13	0	4	26	0
<b>2026 Buildout Total</b>	<b>0</b>	<b>125</b>	<b>0</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>396</b>	<b>222</b>	<b>0</b>	<b>71</b>	<b>309</b>	<b>0</b>

**INTERSECTION VOLUME DEVELOPMENT**

Intersection #3  
S Deshon Road West at Stephenson Road  
AM PEAK HOUR

Description	S Deshon Road West Northbound				S Deshon Road West Southbound				Stephenson Road Eastbound				Stephenson Road Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	0	0	0	0	203	0	17	0	35	72	0	0	0	81	268
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	5	0	0	0	0	6	0	0	0	3	6
Heavy Vehicle %	0%	0%	0%	0%	0%	2%	0%	2%	0%	2%	8%	0%	0%	0%	4%	2%
Peak Hour Factor	0.90				0.90				0.90				0.90			
Adjustment		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Adjusted 2020 Volumes	0	0	0	0	0	508	0	43	0	88	180	0	0	0	203	670
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	0	0	0	0	539	0	46	0	93	191	0	0	0	215	711
<b>Project Trips</b>																
Trip Distribution IN								10%								20%
Trip Distribution OUT										10%	20%					
Residential Trips	0	0	0	0	0	0	0	3	0	8	16	0	0	0	5	0
Total Project Trips	0	0	0	0	0	0	0	3	0	8	16	0	0	0	5	0
<b>2026 Buildout Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>539</b>	<b>0</b>	<b>49</b>	<b>0</b>	<b>101</b>	<b>207</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>220</b>	<b>711</b>

**PM PEAK HOUR**

Description	S Deshon Road West Northbound				S Deshon Road West Southbound				Stephenson Road Eastbound				Stephenson Road Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	0	0	0	0	478	0	105	0	81	172	0	0	0	158	415
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	11	0	0	0	0	3	0	0	0	1	5
Heavy Vehicle %	0%	0%	0%	0%	0%	2%	0%	2%	0%	2%	2%	0%	0%	0%	2%	2%
Peak Hour Factor	0.99				0.99				0.99				0.99			
Adjustment		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Adjusted 2020 Volumes	0	0	0	0	0	717	0	158	0	122	258	0	0	0	237	623
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	0	0	0	0	761	0	168	0	130	274	0	0	0	252	661
<b>Project Trips</b>																
Trip Distribution IN								10%								20%
Trip Distribution OUT										10%	20%					
Residential Trips	0	0	0	0	0	0	0	9	0	5	10	0	0	0	18	0
Total Project Trips	0	0	0	0	0	0	0	9	0	5	10	0	0	0	18	0
<b>2026 Buildout Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>761</b>	<b>0</b>	<b>177</b>	<b>0</b>	<b>135</b>	<b>284</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>270</b>	<b>661</b>

**INTERSECTION VOLUME DEVELOPMENT**

Intersection #4  
Site Driveway East/ at Stephenson Road  
AM PEAK HOUR

Description	Site Driveway East				Southbound				Stephenson Road Eastbound				Stephenson Road Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	85	0	0	0	97	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	2%	0%
Peak Hour Factor	0.96				0.96				0.96				0.96			
Adjustment		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Adjusted 2020 Volumes	0	0	0	0	0	0	0	0	0	0	213	0	0	0	243	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	0	0	0	0	0	0	0	0	0	226	0	0	0	258	0
<b>Project Trips</b>																
Trip Distribution IN												50%		25%	5%	
Trip Distribution OUT		50%		25%						5%						
Residential Trips	0	39	0	20	0	0	0	0	0	0	4	13	0	7	1	0
Total Project Trips	0	39	0	20	0	0	0	0	0	0	4	13	0	7	1	0
<b>2026 Buildout Total</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>230</b>	<b>13</b>	<b>0</b>	<b>7</b>	<b>259</b>	<b>0</b>

**PM PEAK HOUR**

Description	Site Driveway East				Southbound				Stephenson Road Eastbound				Stephenson Road Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	240	0	0	0	220	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	2%	0%
Peak Hour Factor	0.88				0.88				0.88				0.88			
Adjustment		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Adjusted 2020 Volumes	0	0	0	0	0	0	0	0	0	0	360	0	0	0	330	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	0	0	0	0	0	0	0	0	0	382	0	0	0	350	0
<b>Project Trips</b>																
Trip Distribution IN												50%		25%	5%	
Trip Distribution OUT		50%		25%						5%						
Residential Trips	0	26	0	13	0	0	0	0	0	0	3	44	0	22	4	0
Total Project Trips	0	26	0	13	0	0	0	0	0	0	3	44	0	22	4	0
<b>2026 Buildout Total</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>385</b>	<b>44</b>	<b>0</b>	<b>22</b>	<b>354</b>	<b>0</b>

**INTERSECTION VOLUME DEVELOPMENT**

Intersection #5  
Alford Road at /Site Driveway West  
AM PEAK HOUR

Description	Alford Road Northbound				Alford Road Southbound				Eastbound				Site Driveway West Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	0	87	0	0	0	26	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	0%	2%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.96				0.96				0.96				0.96			
Adjustment		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Adjusted 2020 Volumes	0	0	218	0	0	0	65	0	0	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	0	231	0	0	0	69	0	0	0	0	0	0	0	0	0
<b>Project Trips</b>																
Trip Distribution IN				5%			20%									
Trip Distribution OUT													5%		20%	
Residential Trips	0	0	0	1	0	5	0	0	0	0	0	0	0	4	0	16
Total Project Trips	0	0	0	1	0	5	0	0	0	0	0	0	0	4	0	16
<b>2026 Buildout Total</b>	<b>0</b>	<b>0</b>	<b>231</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>69</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>16</b>

**PM PEAK HOUR**

Description	Alford Road Northbound				Alford Road Southbound				Eastbound				Site Driveway West Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2020 Traffic Volumes	0	0	92	0	0	0	173	0	0	0	0	0	0	0	0	0
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	0%	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.88				0.88				0.88				0.88			
Adjustment		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Adjusted 2020 Volumes	0	0	138	0	0	0	260	0	0	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
2026 Background Traffic	0	0	146	0	0	0	276	0	0	0	0	0	0	0	0	0
<b>Project Trips</b>																
Trip Distribution IN				5%			20%									
Trip Distribution OUT													5%		20%	
Residential Trips	0	0	0	4	0	18	0	0	0	0	0	0	0	3	0	10
Total Project Trips	0	0	0	4	0	18	0	0	0	0	0	0	0	3	0	10
<b>2026 Buildout Total</b>	<b>0</b>	<b>0</b>	<b>146</b>	<b>4</b>	<b>0</b>	<b>18</b>	<b>276</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>10</b>

# *Synchro* Analysis Reports

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	230	45	10	468	93	23
Future Vol, veh/h	230	45	10	468	93	23
Conflicting Peds, #/hr	0	0	8	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	240	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	7	6	2	2	2	11
Mvmt Flow	258	51	11	526	104	26

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	317	0	814
Stage 1	-	-	-	-	266
Stage 2	-	-	-	-	548
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1243	-	347
Stage 1	-	-	-	-	779
Stage 2	-	-	-	-	579
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1234	-	340
Mov Cap-2 Maneuver	-	-	-	-	340
Stage 1	-	-	-	-	773
Stage 2	-	-	-	-	571

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	381	-	-	1234	-
HCM Lane V/C Ratio	0.342	-	-	0.009	-
HCM Control Delay (s)	19.3	-	-	7.9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↖	↗
Traffic Vol, veh/h	0	185	45	20	223	0	190	0	28	0	0	0
Future Vol, veh/h	0	185	45	20	223	0	190	0	28	0	0	0
Conflicting Peds, #/hr	4	0	0	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	140	-	-	140	-	-	-	-	230	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	3	2	13	2	0	3	0	2	0	0	0
Mvmt Flow	0	193	47	21	232	0	198	0	29	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	236	0	0	243	0	0	494	498	220	-	521	-
Stage 1	-	-	-	-	-	-	220	220	-	-	278	-
Stage 2	-	-	-	-	-	-	274	278	-	-	243	-
Critical Hdwy	4.1	-	-	4.23	-	-	7.13	6.5	6.22	-	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	-	5.5	-
Follow-up Hdwy	2.2	-	-	2.317	-	-	3.527	4	3.318	-	4	-
Pot Cap-1 Maneuver	1343	-	-	1262	-	-	484	477	820	0	463	0
Stage 1	-	-	-	-	-	-	780	725	-	0	684	0
Stage 2	-	-	-	-	-	-	730	684	-	0	708	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1338	-	-	1258	-	-	476	466	818	-	452	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	557	529	-	-	452	-
Stage 1	-	-	-	-	-	-	778	723	-	-	670	-
Stage 2	-	-	-	-	-	-	718	670	-	-	706	-

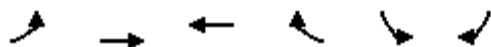
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.7			14.3			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	557	818	1338	-	-	1258	-	-	-
HCM Lane V/C Ratio	0.355	0.036	-	-	-	0.017	-	-	-
HCM Control Delay (s)	15	9.6	0	-	-	7.9	-	-	0
HCM Lane LOS	C	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	1.6	0.1	0	-	-	0.1	-	-	-



HCM 6th Signalized Intersection Summary  
 3: Stephenson Rd & S Deshon Rd W

Summertree-Alford TIA  
 Existing 2020 AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	180	203	670	508	43
Future Volume (veh/h)	88	180	203	670	508	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1781	1841	1870	1870	1870
Adj Flow Rate, veh/h	98	200	226	744	564	48
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	8	4	2	2	2
Cap, veh/h	358	941	762	1199	610	543
Arrive On Green	0.05	0.53	0.41	0.41	0.34	0.34
Sat Flow, veh/h	1781	1781	1841	1585	1781	1585
Grp Volume(v), veh/h	98	200	226	744	564	48
Grp Sat Flow(s),veh/h/ln	1781	1781	1841	1585	1781	1585
Q Serve(g_s), s	2.8	5.5	7.6	20.0	28.3	1.9
Cycle Q Clear(g_c), s	2.8	5.5	7.6	20.0	28.3	1.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	358	941	762	1199	610	543
V/C Ratio(X)	0.27	0.21	0.30	0.62	0.92	0.09
Avail Cap(c_a), veh/h	443	941	762	1199	749	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	11.6	18.2	5.2	29.3	20.7
Incr Delay (d2), s/veh	0.4	0.5	1.0	2.4	15.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.1	3.2	17.0	14.2	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.0	12.1	19.2	7.6	44.6	20.8
LnGrp LOS	B	B	B	A	D	C
Approach Vol, veh/h		298	970		612	
Approach Delay, s/veh		12.8	10.3		42.8	
Approach LOS		B	B		D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.6	44.4		37.8		55.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	9.0	34.0		39.0		49.0
Max Q Clear Time (g_c+I1), s	4.8	22.0		30.3		7.5
Green Ext Time (p_c), s	0.1	3.5		1.5		1.1
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			21.3			
HCM 6th LOS			C			

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	516	75	32	314	48	26
Future Vol, veh/h	516	75	32	314	48	26
Conflicting Peds, #/hr	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	240	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	645	94	40	393	60	33

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	742	0	1121
Stage 1	-	-	-	-	648
Stage 2	-	-	-	-	473
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	865	-	228
Stage 1	-	-	-	-	521
Stage 2	-	-	-	-	627
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	863	-	214
Mov Cap-2 Maneuver	-	-	-	-	214
Stage 1	-	-	-	-	519
Stage 2	-	-	-	-	590

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	25.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	265	-	-	863	-
HCM Lane V/C Ratio	0.349	-	-	0.046	-
HCM Control Delay (s)	25.7	-	-	9.4	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.5	-	-	0.1	-

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↖	↗
Traffic Vol, veh/h	0	332	197	63	267	0	110	0	29	0	0	0
Future Vol, veh/h	0	332	197	63	267	0	110	0	29	0	0	0
Conflicting Peds, #/hr	0	0	0	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	140	-	-	140	-	-	-	-	230	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	2	2	2	2	0	2	0	2	0	0	0
Mvmt Flow	0	377	224	72	303	0	125	0	33	0	0	0

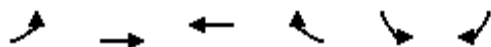
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	303	0	0	603	0	0	938	938	491	-	1050	-
Stage 1	-	-	-	-	-	-	491	491	-	-	447	-
Stage 2	-	-	-	-	-	-	447	447	-	-	603	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.12	6.5	6.22	-	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	-	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.518	4	3.318	-	4	-
Pot Cap-1 Maneuver	1269	-	-	975	-	-	244	266	578	0	229	0
Stage 1	-	-	-	-	-	-	559	552	-	0	577	0
Stage 2	-	-	-	-	-	-	591	577	-	0	492	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1269	-	-	973	-	-	230	246	577	-	212	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	357	360	-	-	212	-
Stage 1	-	-	-	-	-	-	558	551	-	-	534	-
Stage 2	-	-	-	-	-	-	547	534	-	-	491	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.7			18.6			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	357	577	1269	-	-	973	-	-	-
HCM Lane V/C Ratio	0.35	0.057	-	-	-	0.074	-	-	-
HCM Control Delay (s)	20.4	11.6	0	-	-	9	-	-	0
HCM Lane LOS	C	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	1.5	0.2	0	-	-	0.2	-	-	-

HCM 6th Signalized Intersection Summary  
 3: Stephenson Rd & S Deshon Rd W

Summertree-Alford TIA  
 Existing 2020 PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	258	237	623	717	158
Future Volume (veh/h)	122	258	237	623	717	158
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	261	239	629	724	160
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	355	916	693	1205	695	618
Arrive On Green	0.06	0.49	0.37	0.37	0.39	0.39
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	123	261	239	629	724	160
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.1	8.3	9.2	15.8	39.0	6.8
Cycle Q Clear(g_c), s	4.1	8.3	9.2	15.8	39.0	6.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	355	916	693	1205	695	618
V/C Ratio(X)	0.35	0.28	0.34	0.52	1.04	0.26
Avail Cap(c_a), veh/h	410	916	693	1205	695	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	15.1	22.7	4.8	30.5	20.7
Incr Delay (d2), s/veh	0.6	0.8	1.4	1.6	45.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.4	4.1	15.1	24.8	7.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.6	15.9	24.1	6.4	76.1	20.9
LnGrp LOS	B	B	C	A	F	C
Approach Vol, veh/h		384	868		884	
Approach Delay, s/veh		16.4	11.2		66.1	
Approach LOS		B	B		E	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.9	43.1		45.0		55.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	9.0	34.0		39.0		49.0
Max Q Clear Time (g_c+I1), s	6.1	17.8		41.0		10.3
Green Ext Time (p_c), s	0.1	3.4		0.0		1.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			34.9			
HCM 6th LOS			C			

Intersection						
Int Delay, s/veh	2.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	244	48	11	497	99	24
Future Vol, veh/h	244	48	11	497	99	24
Conflicting Peds, #/hr	0	0	8	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	240	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	7	6	2	2	2	11
Mvmt Flow	274	54	12	558	111	27

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	336	0	864
Stage 1	-	-	-	-	282
Stage 2	-	-	-	-	582
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1223	-	325
Stage 1	-	-	-	-	766
Stage 2	-	-	-	-	559
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1214	-	318
Mov Cap-2 Maneuver	-	-	-	-	318
Stage 1	-	-	-	-	760
Stage 2	-	-	-	-	551

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	21.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	357	-	-	1214	-
HCM Lane V/C Ratio	0.387	-	-	0.01	-
HCM Control Delay (s)	21.3	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.8	-	-	0	-

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↖	↗
Traffic Vol, veh/h	0	196	48	21	237	0	202	0	30	0	0	0
Future Vol, veh/h	0	196	48	21	237	0	202	0	30	0	0	0
Conflicting Peds, #/hr	4	0	0	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	140	-	-	140	-	-	-	-	230	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	3	2	13	2	0	3	0	2	0	0	0
Mvmt Flow	0	204	50	22	247	0	210	0	31	0	0	0

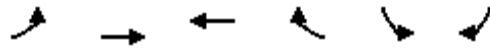
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	251	0	0	257	0	0	523	527	232	-	552	-
Stage 1	-	-	-	-	-	-	232	232	-	-	295	-
Stage 2	-	-	-	-	-	-	291	295	-	-	257	-
Critical Hdwy	4.1	-	-	4.23	-	-	7.13	6.5	6.22	-	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	-	5.5	-
Follow-up Hdwy	2.2	-	-	2.317	-	-	3.527	4	3.318	-	4	-
Pot Cap-1 Maneuver	1326	-	-	1246	-	-	463	459	807	0	444	0
Stage 1	-	-	-	-	-	-	769	716	-	0	673	0
Stage 2	-	-	-	-	-	-	715	673	-	0	699	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1321	-	-	1242	-	-	456	448	805	-	433	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	542	516	-	-	433	-
Stage 1	-	-	-	-	-	-	767	714	-	-	658	-
Stage 2	-	-	-	-	-	-	702	658	-	-	697	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.6			15			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	542	805	1321	-	-	1242	-	-	-
HCM Lane V/C Ratio	0.388	0.039	-	-	-	0.018	-	-	-
HCM Control Delay (s)	15.8	9.7	0	-	-	8	-	-	0
HCM Lane LOS	C	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	1.8	0.1	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary  
 3: Stephenson Rd & S Deshon Rd W

Summertree-Alford TIA  
 No-Build 2026 AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	93	191	215	711	539	46
Future Volume (veh/h)	93	191	215	711	539	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1781	1841	1870	1870	1870
Adj Flow Rate, veh/h	103	212	239	790	599	51
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	8	4	2	2	2
Cap, veh/h	336	917	738	1205	640	570
Arrive On Green	0.05	0.51	0.40	0.40	0.36	0.36
Sat Flow, veh/h	1781	1781	1841	1585	1781	1585
Grp Volume(v), veh/h	103	212	239	790	599	51
Grp Sat Flow(s),veh/h/ln	1781	1781	1841	1585	1781	1585
Q Serve(g_s), s	3.1	6.2	8.5	22.7	30.9	2.0
Cycle Q Clear(g_c), s	3.1	6.2	8.5	22.7	30.9	2.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	336	917	738	1205	640	570
V/C Ratio(X)	0.31	0.23	0.32	0.66	0.94	0.09
Avail Cap(c_a), veh/h	415	917	738	1205	730	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	12.7	19.6	5.4	29.4	20.2
Incr Delay (d2), s/veh	0.5	0.6	1.2	2.8	18.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.4	3.6	19.0	15.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.3	13.3	20.8	8.2	47.5	20.3
LnGrp LOS	B	B	C	A	D	C
Approach Vol, veh/h		315	1029		650	
Approach Delay, s/veh		14.0	11.2		45.4	
Approach LOS		B	B		D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.8	44.2		40.2		55.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	9.0	34.0		39.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	24.7		32.9		8.2
Green Ext Time (p_c), s	0.1	3.3		1.3		1.1
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			22.8			
HCM 6th LOS			C			

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	548	80	34	333	51	28
Future Vol, veh/h	548	80	34	333	51	28
Conflicting Peds, #/hr	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	240	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	685	100	43	416	64	35

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	788	0	1190
Stage 1	-	-	-	-	688
Stage 2	-	-	-	-	502
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	831	-	207
Stage 1	-	-	-	-	499
Stage 2	-	-	-	-	608
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	829	-	193
Mov Cap-2 Maneuver	-	-	-	-	193
Stage 1	-	-	-	-	498
Stage 2	-	-	-	-	567

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	29.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	241	-	-	829	-
HCM Lane V/C Ratio	0.41	-	-	0.051	-
HCM Control Delay (s)	29.9	-	-	9.6	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	1.9	-	-	0.2	-



Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↖	↗
Traffic Vol, veh/h	0	352	209	67	283	0	117	0	31	0	0	0
Future Vol, veh/h	0	352	209	67	283	0	117	0	31	0	0	0
Conflicting Peds, #/hr	0	0	0	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	140	-	-	140	-	-	-	-	230	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	2	2	2	2	0	2	0	2	0	0	0
Mvmt Flow	0	400	238	76	322	0	133	0	35	0	0	0

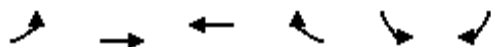
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	322	0	0	640	0	0	995	995	521	-	1114	-
Stage 1	-	-	-	-	-	-	521	521	-	-	474	-
Stage 2	-	-	-	-	-	-	474	474	-	-	640	-
Critical Hdwy	4.1	-	-	4.12	-	-	7.12	6.5	6.22	-	6.5	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.5	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.5	-	-	5.5	-
Follow-up Hdwy	2.2	-	-	2.218	-	-	3.518	4	3.318	-	4	-
Pot Cap-1 Maneuver	1249	-	-	944	-	-	224	247	555	0	210	0
Stage 1	-	-	-	-	-	-	539	535	-	0	561	0
Stage 2	-	-	-	-	-	-	571	561	-	0	473	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1249	-	-	942	-	-	210	226	554	-	193	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	338	343	-	-	193	-
Stage 1	-	-	-	-	-	-	538	534	-	-	516	-
Stage 2	-	-	-	-	-	-	525	516	-	-	472	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.8			20.2			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	554	1249	-	-	942	-	-	-
HCM Lane V/C Ratio	0.393	0.064	-	-	-	0.081	-	-	-
HCM Control Delay (s)	22.4	11.9	0	-	-	9.2	-	-	0
HCM Lane LOS	C	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	1.8	0.2	0	-	-	0.3	-	-	-

HCM 6th Signalized Intersection Summary  
 3: Stephenson Rd & S Deshon Rd W

Summertree-Alford TIA  
 No-Build 2026 PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	274	252	661	761	168
Future Volume (veh/h)	130	274	252	661	761	168
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	131	277	255	668	769	170
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	346	916	687	1200	695	618
Arrive On Green	0.06	0.49	0.37	0.37	0.39	0.39
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	131	277	255	668	769	170
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.4	8.9	10.0	17.7	39.0	7.3
Cycle Q Clear(g_c), s	4.4	8.9	10.0	17.7	39.0	7.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	346	916	687	1200	695	618
V/C Ratio(X)	0.38	0.30	0.37	0.56	1.11	0.28
Avail Cap(c_a), veh/h	394	916	687	1200	695	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	15.3	23.2	5.1	30.5	20.8
Incr Delay (d2), s/veh	0.7	0.8	1.5	1.9	67.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.7	4.4	16.8	29.0	7.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.9	16.1	24.7	7.0	97.8	21.1
LnGrp LOS	B	B	C	A	F	C
Approach Vol, veh/h		408	923		939	
Approach Delay, s/veh		16.7	11.9		83.9	
Approach LOS		B	B		F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.3	42.7		45.0		55.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	9.0	34.0		39.0		49.0
Max Q Clear Time (g_c+I1), s	6.4	19.7		41.0		10.9
Green Ext Time (p_c), s	0.1	3.5		0.0		1.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			42.5			
HCM 6th LOS			D			

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	262	48	11	552	99	24
Future Vol, veh/h	262	48	11	552	99	24
Conflicting Peds, #/hr	0	0	8	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	240	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	4
Mvmt Flow	294	54	12	620	111	27

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	356	0	946 302
Stage 1	-	-	-	-	302 -
Stage 2	-	-	-	-	644 -
Critical Hdwy	-	-	4.12	-	6.42 6.24
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	-	-	2.218	-	3.518 3.336
Pot Cap-1 Maneuver	-	-	1203	-	290 733
Stage 1	-	-	-	-	750 -
Stage 2	-	-	-	-	523 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1194	-	283 727
Mov Cap-2 Maneuver	-	-	-	-	283 -
Stage 1	-	-	-	-	744 -
Stage 2	-	-	-	-	515 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	24.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	321	-	-	1194	-
HCM Lane V/C Ratio	0.431	-	-	0.01	-
HCM Control Delay (s)	24.4	-	-	8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0	-

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↖	↗
Traffic Vol, veh/h	0	209	52	22	276	0	214	0	34	0	0	0
Future Vol, veh/h	0	209	52	22	276	0	214	0	34	0	0	0
Conflicting Peds, #/hr	4	0	0	3	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	140	-	-	140	-	-	-	-	230	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	5	2	2	2	2	2	2	2	2
Mvmt Flow	0	218	54	23	288	0	223	0	35	0	0	0

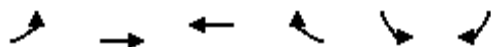
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	292	0	0	275	0	0	582	586	248	-	613	-
Stage 1	-	-	-	-	-	-	248	248	-	-	338	-
Stage 2	-	-	-	-	-	-	334	338	-	-	275	-
Critical Hdwy	4.12	-	-	4.15	-	-	7.12	6.52	6.22	-	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Follow-up Hdwy	2.218	-	-	2.245	-	-	3.518	4.018	3.318	-	4.018	-
Pot Cap-1 Maneuver	1270	-	-	1271	-	-	424	422	791	0	408	0
Stage 1	-	-	-	-	-	-	756	701	-	0	641	0
Stage 2	-	-	-	-	-	-	680	641	-	0	683	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1265	-	-	1267	-	-	417	411	789	-	398	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	512	488	-	-	398	-
Stage 1	-	-	-	-	-	-	754	699	-	-	627	-
Stage 2	-	-	-	-	-	-	668	627	-	-	681	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.6			16.3			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	512	789	1265	-	-	1267	-	-	-
HCM Lane V/C Ratio	0.435	0.045	-	-	-	0.018	-	-	-
HCM Control Delay (s)	17.3	9.8	0	-	-	7.9	-	-	0
HCM Lane LOS	C	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	2.2	0.1	0	-	-	0.1	-	-	-

HCM 6th Signalized Intersection Summary  
 3: Stephenson Rd & S Deshon Rd W

Summertree-Alford TIA  
 Build 2026 AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	101	207	220	711	539	49
Future Volume (veh/h)	101	207	220	711	539	49
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1856	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	230	244	790	599	54
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	3	2	2	2	2
Cap, veh/h	341	961	752	1204	637	567
Arrive On Green	0.05	0.52	0.40	0.40	0.36	0.36
Sat Flow, veh/h	1781	1856	1870	1585	1781	1585
Grp Volume(v), veh/h	112	230	244	790	599	54
Grp Sat Flow(s),veh/h/ln	1781	1856	1870	1585	1781	1585
Q Serve(g_s), s	3.4	6.6	8.7	23.0	31.4	2.2
Cycle Q Clear(g_c), s	3.4	6.6	8.7	23.0	31.4	2.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	341	961	752	1204	637	567
V/C Ratio(X)	0.33	0.24	0.32	0.66	0.94	0.10
Avail Cap(c_a), veh/h	411	961	752	1204	701	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	12.8	19.8	5.6	30.0	20.6
Incr Delay (d2), s/veh	0.6	0.6	1.1	2.8	19.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.6	3.7	19.3	16.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.4	13.4	21.0	8.4	49.8	20.7
LnGrp LOS	B	B	C	A	D	C
Approach Vol, veh/h		342	1034		653	
Approach Delay, s/veh		14.0	11.3		47.4	
Approach LOS		B	B		D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.2	44.8		40.5		56.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	9.0	35.0		38.0		50.0
Max Q Clear Time (g_c+l1), s	5.4	25.0		33.4		8.6
Green Ext Time (p_c), s	0.1	3.4		1.1		1.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			23.4			
HCM 6th LOS			C			

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↘	↑	↘	↗
Traffic Vol, veh/h	230	13	7	259	39	20
Future Vol, veh/h	230	13	7	259	39	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	240	14	7	270	41	21

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	254	0	524
Stage 1	-	-	-	-	240
Stage 2	-	-	-	-	284
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1311	-	514
Stage 1	-	-	-	-	800
Stage 2	-	-	-	-	764
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1311	-	511
Mov Cap-2 Maneuver	-	-	-	-	589
Stage 1	-	-	-	-	800
Stage 2	-	-	-	-	760

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	647	-	-	1311	-
HCM Lane V/C Ratio	0.095	-	-	0.006	-
HCM Control Delay (s)	11.1	-	-	7.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	20	231	1	7	69
Future Vol, veh/h	4	20	231	1	7	69
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	21	241	1	7	72

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	328	242	0	0	242	0
Stage 1	242	-	-	-	-	-
Stage 2	86	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	666	797	-	-	1324	-
Stage 1	798	-	-	-	-	-
Stage 2	937	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	662	797	-	-	1324	-
Mov Cap-2 Maneuver	662	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	771	1324
HCM Lane V/C Ratio	-	-	0.032	0.006
HCM Control Delay (s)	-	-	9.8	7.7
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

**Intersection**

Int Delay, s/veh 2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	610	80	34	369	51	28
Future Vol, veh/h	610	80	34	369	51	28
Conflicting Peds, #/hr	0	0	3	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	240	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	763	100	43	461	64	35

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	866
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	777
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	775
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	38.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	-	-	775	-
HCM Lane V/C Ratio	0.484	-	-	0.055	-
HCM Control Delay (s)	38.2	-	-	9.9	0
HCM Lane LOS	E	-	-	A	A
HCM 95th %tile Q(veh)	2.4	-	-	0.2	-



Intersection												
Int Delay, s/veh	3.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↖	↗		↖	↗
Traffic Vol, veh/h	0	396	222	71	309	0	125	0	34	0	0	0
Future Vol, veh/h	0	396	222	71	309	0	125	0	34	0	0	0
Conflicting Peds, #/hr	0	0	0	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	140	-	-	140	-	-	-	-	230	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	450	252	81	351	0	142	0	39	0	0	0

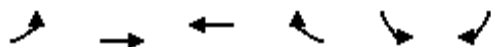
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	351	0	0	704	0	0	1091	1091	578	-	1217	-
Stage 1	-	-	-	-	-	-	578	578	-	-	513	-
Stage 2	-	-	-	-	-	-	513	513	-	-	704	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	-	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	-	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	-	4.018	-
Pot Cap-1 Maneuver	1208	-	-	894	-	-	192	215	516	0	181	0
Stage 1	-	-	-	-	-	-	501	501	-	0	536	0
Stage 2	-	-	-	-	-	-	544	536	-	0	440	0
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1208	-	-	892	-	-	178	195	515	-	164	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	308	314	-	-	164	-
Stage 1	-	-	-	-	-	-	500	500	-	-	487	-
Stage 2	-	-	-	-	-	-	495	487	-	-	439	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			1.8			23.4			0		
HCM LOS							C			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	308	515	1208	-	-	892	-	-	-
HCM Lane V/C Ratio	0.461	0.075	-	-	-	0.09	-	-	-
HCM Control Delay (s)	26.3	12.6	0	-	-	9.4	-	-	0
HCM Lane LOS	D	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	2.3	0.2	0	-	-	0.3	-	-	-

HCM 6th Signalized Intersection Summary  
 3: Stephenson Rd & S Deshon Rd W

Summertree-Alford TIA  
 Build 2026 PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	135	284	270	661	761	177
Future Volume (veh/h)	135	284	270	661	761	177
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	136	287	273	668	769	179
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	346	935	704	1199	677	602
Arrive On Green	0.06	0.50	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	136	287	273	668	769	179
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.5	9.1	10.7	17.8	38.0	7.9
Cycle Q Clear(g_c), s	4.5	9.1	10.7	17.8	38.0	7.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	346	935	704	1199	677	602
V/C Ratio(X)	0.39	0.31	0.39	0.56	1.14	0.30
Avail Cap(c_a), veh/h	393	935	704	1199	677	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	14.8	22.8	5.1	31.0	21.7
Incr Delay (d2), s/veh	0.7	0.8	1.6	1.9	78.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.7	4.7	16.5	30.4	8.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	15.6	24.4	7.0	109.5	21.9
LnGrp LOS	B	B	C	A	F	C
Approach Vol, veh/h		423	941		948	
Approach Delay, s/veh		16.2	12.1		93.0	
Approach LOS		B	B		F	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.4	43.6		44.0		56.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0
Max Green Setting (Gmax), s	9.0	35.0		38.0		50.0
Max Q Clear Time (g_c+I1), s	6.5	19.8		40.0		11.1
Green Ext Time (p_c), s	0.1	3.7		0.0		1.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			46.0			
HCM 6th LOS			D			

Intersection						
Int Delay, s/veh	0.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↘	↙
Traffic Vol, veh/h	385	44	22	354	26	13
Future Vol, veh/h	385	44	22	354	26	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	-	200	200	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	438	50	25	402	30	15

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	488	0	890
Stage 1	-	-	-	-	438
Stage 2	-	-	-	-	452
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1075	-	313
Stage 1	-	-	-	-	651
Stage 2	-	-	-	-	641
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1075	-	306
Mov Cap-2 Maneuver	-	-	-	-	431
Stage 1	-	-	-	-	651
Stage 2	-	-	-	-	626

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	480	-	-	1075	-
HCM Lane V/C Ratio	0.092	-	-	0.023	-
HCM Control Delay (s)	13.3	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T		T
Traffic Vol, veh/h	3	13	146	4	22	276
Future Vol, veh/h	3	13	146	4	22	276
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	15	166	5	25	314

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	533	169	0	0	171	0
Stage 1	169	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	507	875	-	-	1406	-
Stage 1	861	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	496	875	-	-	1406	-
Mov Cap-2 Maneuver	496	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	688	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	765	1406
HCM Lane V/C Ratio	-	-	0.024	0.018
HCM Control Delay (s)	-	-	9.8	7.6
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

# GRTA Generalized Annual Average Daily Volumes

**TABLE 5**

Generalized Annual Average Daily Volumes for Use in GRTA's DRI Review											
<b>State Two-Way Arterials</b>			<b>Freeways</b>								
<b>Unsignalized (Uninterrupted Flow)</b>			<b>Group I (w/in urban area 500,000+ w/in 5 miles of CBD)</b>								
<b>Lanes /Divided</b>	<b>Level of Service</b>					<b>Lanes</b>	<b>Level of Service</b>				
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
2/undivided	8,900	13,900	18,900	24,800	33,100	4	21,200	34,300	51,500	66,200	81,700
4/divided	21,500	35,800	50,100	60,100	71,600	6	32,600	52,700	79,000	101,600	125,400
6/divided	32,200	53,700	75,200	90,200	107,400	8	44,500	71,800	107,800	138,600	171,100
						10	55,600	89,800	134,700	173,200	213,800
						12	65,200	105,400	158,100	203,200	250,900
<b>Interrupted Flow</b>			<b>Group II (w/in urban area 500,000+ not included in Group I)</b>								
<b>Class I (&gt; 2 signalized intersections per mile)</b>			<b>Level of Service</b>			<b>Level of Service</b>			<b>Level of Service</b>		
<b>Lanes /Divided</b>	<b>A**</b>	<b>B</b>	<b>C</b>	<b>D***</b>	<b>E***</b>	<b>Lanes</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
2/undivided	N/A	10,800	15,600	16,600	16,600	4	20,900	32,800	49,200	62,600	74,500
4/divided	N/A	23,500	33,200	35,000	35,000	6	32,100	50,400	75,600	96,200	114,500
6/divided	N/A	35,800	49,900	52,500	52,500	8	43,800	68,800	103,200	131,300	156,300
8/divided	N/A	45,300	61,400	64,400	64,400	10	54,700	86,000	129,000	164,200	195,400
						12	64,100	100,800	151,200	192,400	229,100
<b>Class II (2-4.5 signalized intersections per mile)</b>			<b>Level of Service</b>			<b>Non-State Roadways (Major City/County Roads)</b>					
<b>Lanes /Divided</b>	<b>A**</b>	<b>B**</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>Level of Service</b>					
						<b>Lanes</b>	<b>A**</b>	<b>B**</b>	<b>C</b>	<b>D</b>	<b>E</b>
2/undivided	N/A	N/A	9,900	14,900	16,200	2/undivided	N/A	N/A	8,600	14,600	16,000
4/divided	N/A	N/A	22,900	32,500	34,300	4/divided	N/A	N/A	19,800	31,700	33,900
6/divided	N/A	N/A	35,500	48,900	51,700	6/divided	N/A	N/A	30,800	47,800	51,000
8/divided	N/A	N/A	44,700	60,100	63,400	<b>Other Signalized Roadways (Signalized Intersection Analysis)</b>					
<b>Class III (&gt; 4.5 signalized intersections per mile but not in CBD)</b>			<b>Level of Service</b>			<b>Level of Service</b>					
<b>Lanes /Divided</b>	<b>A**</b>	<b>B**</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>Lanes</b>	<b>A**</b>	<b>B**</b>	<b>C</b>	<b>D</b>	<b>E</b>
2/undivided	N/A	N/A	3,300	12,100	15,800	2/undivided	N/A	N/A	4,800	10,900	11,900
4/divided	N/A	N/A	7,800	27,800	33,600	4/divided	N/A	N/A	11,600	23,800	25,400
6/divided	N/A	N/A	12,100	43,300	50,500	<b>Adjustments (Divided/Undivided)</b>					
8/divided	N/A	N/A	15,300	54,200	62,100	(Alter corresponding two-way volumes by indicated percentage)					
<b>Class IV (&gt; 4.5 signalized intersections per mile within CBD)</b>			<b>Level of Service</b>			<b>Left Turn Adjustment</b>					
<b>Lanes /Divided</b>	<b>A**</b>	<b>B**</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>Lanes</b>	<b>Median</b>	<b>Bays</b>	<b>Adjustment Factor</b>		
2/undivided	N/A	N/A	3,700	13,800	15,300	2	divided	Yes	+5%		
4/divided	N/A	N/A	8,900	29,900	32,600	2	undivided	No	-20%		
6/divided	N/A	N/A	14,000	45,500	49,000	Multi	undivided	Yes	-5%		
8/divided	N/A	N/A	17,500	56,200	60,100	Multi	undivided	No	-25%		
* This table is based on the 1997 Highway Capacity Manual and data generated by the Florida DOT. For the purposes of GRTA review this table can be used for Level of Service Analysis in Section 2.2. ** Cannot be achieved. *** Volumes are comparable because intersection capacities have been reached.						<b>One-Way Adjustment</b>					
						(Alter corresponding two-way volumes by indicated percentage)					
						<b>One-Way Lanes</b>	<b>Equivalent 2-Way Lanes</b>	<b>Adjustment Factor</b>			
						2	4	-40%			
						3	6	-40%			
						4	8	-40%			
						5	8	-25%			
SOURCE: The Florida Department of Transportation, Systems Planning Office, 605 Suwannee Street - Mail Station # 19, Tallahassee, Florida, 32399-0450 September 1998 - www.dot.state.fl.us/planning <<<The assumptions made in the development of this table appear in the 1998 Level of Service Handbook published by Florida DOT.>>>											