

AGENDA | REGULAR TOWN COUNCIL MEETING

July 26, 2022 at 6:00 PM

Council Chambers - Apex Town Hall, 73 Hunter Street

The meeting will adjourn when all business is concluded or 10:00 PM, whichever comes first

Town Council and Administration

Mayor: Jacques K. Gilbert | Mayor Pro Tem: Audra Killingworth
Council Members: Brett D. Gantt; Cheryl F. Stallings; Terry Mahaffey; Edward Gray
Town Manager: Catherine Crosby | Assistant Town Managers: Shawn Purvis and Marty Stone
Town Clerk: Allen Coleman, CMC, NCCCC | Town Attorney: Laurie L. Hohe

COMMENCEMENT

Call to Order | Invocation | Pledge of Allegiance

CONSENT AGENDA

All Consent Agenda items are considered routine, to be enacted by one motion with the adoption of the Consent Agenda, and without discussion. If a Council Member requests discussion of an item, the item may be removed from the Consent Agenda and considered separately. The Mayor will present the Consent Agenda to be set prior to taking action on the following items:

CN1 Resolution - Supporting Federal Funding to Replace the Primary Runway at Raleigh-Durham International Airport

Jacques K. Gilbert, Mayor & Councilmember Brett D. Gantt (sponsor)

- CN2 Annexation No. 729 1302 N. Salem Street 0.4937 acres
 - Allen Coleman, Town Clerk
- CN3 Annexation No. 736 Huxley MSP 71.543 acres

Allen Coleman, Town Clerk

CN4 Appointments - Transit Advisory Committee

Allen Coleman, Town Clerk

CN5 Budget Ordinance Amendment No. 1 - HR - Cost of Living Supplement

Amanda Grogan, Budget and Performance Management Director

CN6 Contract Multi-Year - Charles R. Underwood - Sewer Services - July 1, 2022 through June 30, 2025

Michael Deaton, P.E., Water Resources Director

CN7 Contract Multi-Year - MastTec North America Inc. - General Electric Services - July 1,2022 through June 30, 2025

Eric Neumann, Electrical Utilities Director

CN8 Contract Multi-Year - SiteImprove - July 2022 through June 30, 2025

Stacie Galloway, Communications Director

CN9 Contract Multi-Year - Wake County - Municipal Fire Protection Agreement - July 1, 2022 through June 30, 2025

Jeffrey Maynard, Interim Fire Chief

CN10 Encroachment Agreement - 2210 Winston Circle Lot 2

Marty Stone, Assistant Town Manager

CN11 Ordinance Amendment Section 20-164(40) Production Drive No Parking Zone

David Dillon, Deputy Fire Marshal

CN12 Resolution - Public Sewer Easement Abandonment

Steve Adams, Utility Acquisition Specialist

CN13 Resolution - Abandon Multiple 5' Public Utility Easements

Steve Adams, Utility Acquisition Specialist

CN14 Rezoning Case No. 22CZ03 Sweetwater PUD Amendment S&O

Amanda Bunce, Current Planning Manager

CN15 Tax Report - June 2022

Allen Coleman, Town Clerk

CN16 Triangle Home Services Waterline - Fee-in-Lieu (FIL)

Michael Deaton, P.E., Water Resources Director

CN17 Unified Development Ordinance (UDO) Amendments Statement - June 2022

Dianne Khin, Director of Planning and Community Development

CN18 Unity Mural Design - Proposal - Set Public Hearing

Taylor Wray, Special Events Coordinator

PRESENTATIONS

PR1 Presentation by the Apex Public School Foundation - Quarterly Peak S.T.A.R. Awards

Councilmember Terry Mahaffey (sponsor)

PR2 Proclamation - Retiring Apex American Legion Post 124 Commander Mike Sayer

Jacques K. Gilbert, Mayor & Councilmember Ed D. Gray (sponsor)

REGULAR MEETING AGENDA

Mayor Gilbert will call for additional Agenda items from Council or Staff and set the Regular Meeting Agenda prior to Council actions.

PUBLIC FORUM

Public Forum allows the public an opportunity to address the Town Council. The speaker is requested not to address items that appear as Public Hearings scheduled on the Regular Agenda. The Mayor will recognize those who would like to speak at the appropriate time. Large groups are asked to select a representative to speak for the entire group.

Comments must be limited to 3 minutes to allow others the opportunity to speak.

PUBLIC HEARINGS

PH1	Economic Development Agreement - Mills Chatham Development Group LLC
	Joanna Helms, Economic Development Director

PH2 Rezoning Case No. 22CZ11 1522 Salem Church Road

Amanda Bunce, Current Planning Manager

Rezoning Case No. 22CZ05 Morris Tract PUD

Sarah Van Every, Senior Planner

PH3

PH4 Rezoning Case No. 22CZ06 Yellowbridge PUD

Lauren Staudenmaier, Planner II

PH5 Transportation Plan Amendments - Chapel Ridge Road

Shannon Cox, Long Range Planning Manager

PH6 Rezoning Case No. 22CZ07 Chapel Ridge North PUD

Shelly Mayo, Planner II

OLD BUSINESS - None

UNFINISHED BUSINESS - None

NEW BUSINESS - None

UPDATES BY TOWN MANAGER

CLOSED SESSION

CS1 Closed Session to Consult with Attorney pursuant to NCGS 143-318.11(a)(3)

Laurie Hohe, Town Attorney

ADJOURNMENT

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Jacques K. Gilbert, Mayor

Councilmember Brett D. Gantt (sponsor)

Department(s): Governing Body

Requested Motion

Motion to approve a resolution titled "Resolution in Support of Federal Funding to Replace the Primary Runway at Raleigh - Durham International Airport (RDU)" which strongly the request from RDU for \$275 million in federal funding to replace its primary commercial service runway.

Approval Recommended?

Yes

Item Details

The RDU Airport Authority has developed an array of facilities to meet our region's commercial air service needs since RDU opened in 1943. But today, RDU faces significant capital infrastructure funding challenges.

The Regional Transportation Alliance (RTA), the voice of the regional business community on transportation, released a report (www.letsgetmoving.org/RDUAID) in July 2021 that examines these capital funding challenges and provides recommendations for addressing them. One of the primary challenges addressed is the need for the replacement and relocation of the primary runway 5L-23R at RDU.

RTA, Research Triangle Park (RTP), Triangle-J Council of Governments (TJCOG), and RDU leadership are all focused on federal support for the runway as an urgent funding opportunity, with significant potential benefit for the national commercial aviation system. This resolution indicates Apex Town Council is supportive of this urgent funding opportunity with significant potential benefit to the residents of Apex and the entire Research Triangle region.

Attachments

 Resolution in Support of Federal Funding to Replace the Primary Runway at Raleigh - Durham International Airport (RDU)

A PEH 1873 V CARO

TOWN OF APEX TOWN COUNCIL

Resolution in Support of Federal Funding to Replace the Primary Runway at Raleigh-Durham International Airport (RDU)

WHEREAS, the Town of Apex is a rapidly growing municipality in the rapidly growing Research Triangle region of the rapidly growing State of North Carolina; and

WHEREAS, Residents of Apex heavily rely on Raleigh-Durham International Airport (RDU) for personal and business travel across the United States and to international destinations; and

WHEREAS, RDU is a critical driver of job creation, prosperity and quality of life in Apex and throughout the Research Triangle region generating an estimated \$15 billion economic impact annually; and

WHEREAS, RDU is a medium hub airport that keeps only a fraction of the entitlement funding it generates; and

WHEREAS, RDU's primary commercial runway is nearing its end-of-life due to pavement deterioration; and

WHEREAS, RDU needs additional federal grant funding to help pay for the \$366 million project to keep the runway in operation and allow for a terminal gate expansion as part of RDU's 25-year master plan; and

WHEREAS, without federal grant funding RDU will exhaust its cash reserves and max out its bonding capacity, impacting its ability to finance the terminal gate expansion and other projects that will support the Research Triangle region's growth.

NOW, THEREFORE, BE IT RESOLVED, that we, the Town Council of the Town of Apex strongly supports the request from RDU for \$275 million in federal funding to replace its primary commercial service runway; and

BE IT FURTHER RESOLVED that copies of this resolution are sent to DOT Secretary Pete Buttigieg, Senators Thom Tillis and Richard Burr, and Representative Deborah Ross in an effort to show support for this urgent funding opportunity with significant potential benefit to the residents of Apex and the Research Triangle region.

ADOPTED, this the 26th day of July 2022.

	Jacques K. Gilbert	
Attest:	Mayor	
Allen Colomon CMC NCCCC	_	
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Allen Coleman, CMC, NCCCC	- Page 6 -	

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Allen Coleman, Town Clerk

Department(s): Town Clerk's Office

Requested Motion

Motion to adopt a Resolution Directing the Town Clerk to Investigate Petition Received, to accept the Certificate of Sufficiency by the Town Clerk, and to adopt a Resolution Setting the Date of a Public Hearing for August 09, 2022, on the Question of Annexation - Apex Town Council's intent to annex 1302 North Salem Street, containing 0.4937 acres, Annexation No. 729 into the Town Corporate limits.

<u>Approval Recommended?</u>

Yes

Item Details

The Town Clerk certifies to the investigation of said annexation. Adoption of the Resolution authorizes the Town Clerk to advertise said public hearing by electronic means and on the Town of Apex's website.

Attachments

- Resolution Directing the Town Clerk to Investigate Petition
- Certificate of Sufficiency by the Town Clerk
- Resolution Setting Date of Public Hearing
- Legal Description
- Maps
- Annexation Petition





RESOLUTION DIRECTING THE TOWN CLERK TO INVESTIGATE PETITION RECEIVED UNDER G.S.§ 160A-31

Annexation Petition#729 1302 N. Salem Street – 0.4937 acres

WHEREAS, G.S. §160A-31 provides that the sufficiency of the petition shall be investigated by the Town Clerk before further annexation proceedings may take place; and

WHEREAS, the Town Council of the Town of Apex deems it advisable to proceed in response to this request for annexation;

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Apex, that the Town Clerk is hereby directed to investigate the sufficiency of the above-described petition and to certify to the Town Council the result of his investigation.

This the 26 th day of July, 2022.		
	Jacques K. Gilbert Mayor	
ATTEST:		
Allen L. Coleman, CMC, NCCCC Town Clerk		



CERTIFICATE OF SUFFICIENCY BY THE TOWN CLERK

Annexation Petition #729 1302 N. Salem Street – 0.4937 acres

To: The Town Council of the Town of Apex, North Carolina

I, Allen L. Coleman, Town Clerk, do hereby certify that I have investigated the annexation petition attached hereto, and have found, as a fact, that said petition is signed by all owners of real property lying in the area described therein, in accordance with G.S.§ 160A-31, as amended.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town of Apex, North Carolina this 26th day of July, 2022.

Allen L. Coleman, CMC, NCCCC Town Clerk

(Seal)



RESOLUTION SETTING DATE OF PUBLIC HEARING ON THE QUESTION OF ANNEXATION PURSUANT TO G.S.§ 160A-31 AS AMENDED

Annexation Petition #729 1302 N. Salem Street – 0.4937 acres

WHEREAS, a petition requesting annexation of the area described herein has been received; and

WHEREAS, the Town Council of Apex, North Carolina has by Resolution directed the Town Clerk to investigate the sufficiency thereof; and

WHEREAS, Certification by the Town Clerk as to the sufficiency of said petition has been made;

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Apex, North Carolina that:

Section 1. A public hearing on the question of annexation of the area described herein will be held at the Apex Town Hall at 6 o'clock p.m. on the 9th day of August, 2022.

Section 2. The area proposed for annexation is described as attached.

Section 3. Notice of said public hearing shall be published on the Town of Apex Website, www.apexnc.org, Public Notice, at least ten (10) days prior to the date of said public hearing.

This the 26th day of July, 2022.

Jacques K. Gilbert, Mayor

ATTEST:

Allen L. Coleman, Town Clerk

Attachment: Legal Description

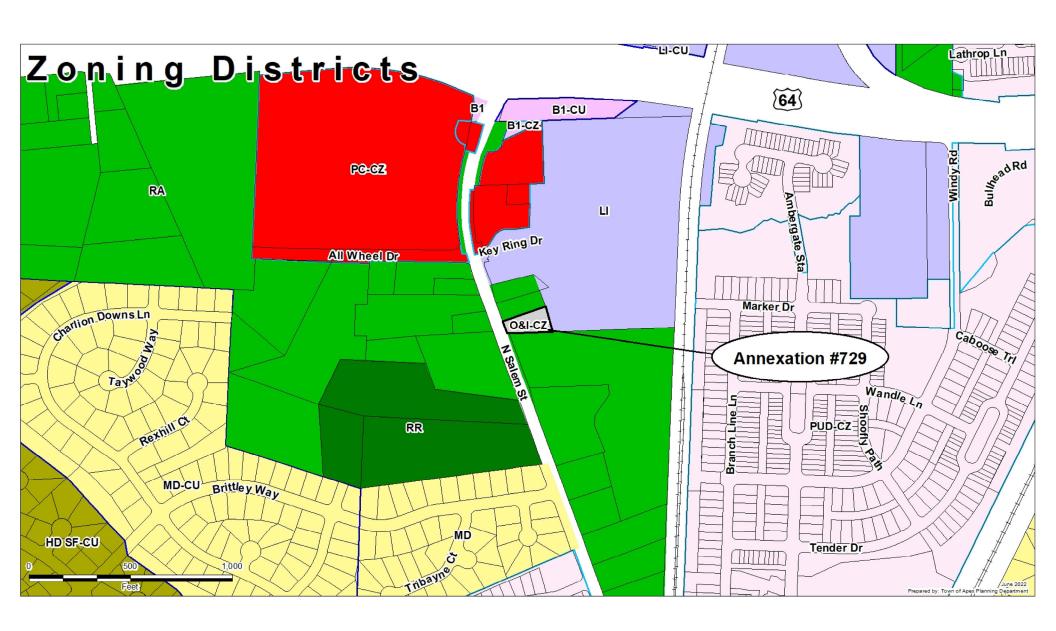
Smith & Smith Surveyors, P.A. P.O. Box 457 Apex, N.C. 27502 (919) 362-7111 Firm License No. C-0155

Lying and being in White Oak Township, Wake County, North Carolina and described more fully as follows to wit:

BEGINNING at an existing angle iron (disturbed) located South 87° 51' 28" West, 599.24 feet from an existing axle "B" bearing NAD 83 (2011) coordinate values of North 726,470.40 feet, East 2,044,983.79 feet (B.M. 2018, Pg. 8); thence South 87° 51' 28" West, 224.88 feet to an existing iron pipe on the eastern right of way of North Salem Street ~ NCSR 5878; thence with North Salem Street right of way North 20° 31' 50" West, 63.98 feet to an existing angle iron; thence North 70° 39' 02" East, 225.00 feet to an existing iron pipe; thence South 15° 27' 44" East, 130.79 feet to the BEGINNING, containing 0.4937 total acres more or less shown on a map prepared by Smith & Smith Surveyors, P.A. entitled "Annexation Map for the Town Of Apex, K-Jive Enterprise, LLC", dated May 11, 2022.

This description prepared for the sole purpose to annex a municipal boundary and for no other use.





PETITION FOR VOLUNTARY ANNEXATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Application #:

Fee Paid

\$ 200.00

Submittal Date:

Check #

1/25/22

To THE TOWN COUNCIL APEX, NORTH CAROLINA

- 1. We, the undersigned owners of real property, respectfully request that the area described in Part 4 below be annexed to the Town of Apex, Wake County, Chatham County, North Carolina.
- 2. The area to be annexed is **contiguous**, **non-contiguous** (satellite) to the Town of Apex, North Carolina and the boundaries are as contained in the metes and bounds description attached hereto.
- 3. If contiguous, this annexation will include all intervening rights-of-way for streets, railroads, and other areas as stated in G.S. 160A-31(f), unless otherwise stated in the annexation amendment.

OWNER INFORMATION Joseph P. Kelly Tro Owner Name (Please Print) 919-363-9274 Phone	O742462489 Deep B O154 Property PIN or Deed Book & Page # Page - C Kelly NC. OFFICE & GN E-mail Address	001 76 72 1A1	
Owner Name (Please Print)	Property PIN or Deed Book & Page #		
Phone	E-mail Address		
Owner Name (Please Print)	Property PIN or Deed Book & Page #		
Phone	E-mail Address		
SURVEYOR INFORMATION			
Surveyor: Smith & Smith			
Phone: 919-362-7111	Fax:		
E-mail Address:			
Annexation Summary Chart			
Property Information	Reason(s) for annexation (select all that apply)		
Total Acreage to be annexed:	Need water service due to well failure	X	
Population of acreage to be annexed:	Need sewer service due to septic system failure	X	
Existing # of housing units:	Water service (new construction)		
Proposed # of housing units:	Sewer service (new construction)		
Zoning District*:	Receive Town Services		

*If the property to be annexed is not within the Town of Apex's Extraterritorial Jurisdiction, the applicant must also submit a rezoning application with the petition for voluntary annexation to establish an Apex zoning designation. Please contact the Department of Planning and Community Development with questions.

	NTARY ANNEXATION		
Application #:	2022-004	Submittal Date:	1-25-22
			Talegar, i
OMPLETE IF IN A LIMITE	D LIABILITY COMPANY		
n witness whereof, Kr	nanager pursuant to authori	a limited liability company, caty duly given, this the 27 day of	used this instrument to be executed in
	Name of Limited Liability	Company to - Tive	LLC
		By: Joseph P.	re of Member/Manager
TATE OF NORTH CAROL OUNTY OF WAKE	INA		
SEASOMMISSION EXPIRES A/24/2023 PUBLIC COMPLETE IF IN A PARTIN	Chuay 20 22	My Commission Expires:	
OMPLETE IF IN A PARTN		a nartnership, caused	this instrument to be executed in its
ame by a member/man	ager pursuant to authority d	uly given, this the day of _	
	Name of Pa		
		Ву:	
		Signa	ture of General Partner
TATE OF NORTH CAROLI OUNTY OF WAKE	NA		
worn and subscribed be	fore me,	a Notary Public	for the above State and County
	. 20		and obtainer,
SEAL		Notar	y Public

PETITION FOR VOLUNTARY ANNEXATION	
Application #: 2022 - 004	Submittal Date: <u>/-25-22</u>
COMPLETE IF SIGNED BY INDIVIDUALS:	
All individual owners must sign. (If additional sign)	ignatures are necessary, please attach an additional sheet.) Signature
Diagram Drivet	Cimatura
Please Print	Signature
Please Print	Signature
Please Print STATE OF NORTH CAROLINA COUNTY OF WAKE	Signature
SWOTH AND SOUD BEFORE ME, ET A. T. OTARY COMPLETE IF A CORPORATION:	McMahon , a Notary Public for the above State and County, 2022. Notary Public My Commission Expires: 29 April 2023
In witness whereof, said corporation has caused	d this instrument to be executed by its President and attested by its sthe day of
	covete Name
SEAL	oorate warne
Attest:	By: President (Signature)
Secretary (Signature)	
STATE OF NORTH CAROLINA COUNTY OF WAKE	
Sworn and subscribed before me,, 2 this theday of, 2	, a Notary Public for the above State and County, 20
SEAL	Notary Public
	My Commission Expires:

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Petition for V

- Page 16 -

Last Updated: November 8, 2021

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Allen Coleman, Town Clerk

Department(s): Town Clerk's Office

Requested Motion

Motion to adopt a Resolution Directing the Town Clerk to Investigate Petition Received, to accept the Certificate of Sufficiency by the Town Clerk, and to adopt a Resolution Setting the Date of a Public Hearing for August 09, 2022, on the Question of Annexation - Apex Town Council's intent to annex 71.543 acres, Huxley MSP, Annexation No. 736 into the Town Corporate limits.

Approval Recommended?

Yes

Item Details

The Town Clerk certifies to the investigation of said annexation. Adoption of the Resolution authorizes the Town Clerk to advertise said public hearing by electronic means and on the Town of Apex's website.

Attachments

- Resolution Directing the Town Clerk to Investigate Petition
- Certificate of Sufficiency by the Town Clerk
- Resolution Setting Date of Public Hearing
- Legal Description
- Maps
- Annexation Petition





RESOLUTION DIRECTING THE TOWN CLERK TO INVESTIGATE PETITION RECEIVED UNDER G.S.§ 160A-31

Annexation Petition#736 Huxley Master Subdivision Plan (MSP) – 71.543 acres

WHEREAS, G.S. §160A-31 provides that the sufficiency of the petition shall be investigated by the Town Clerk before further annexation proceedings may take place; and

WHEREAS, the Town Council of the Town of Apex deems it advisable to proceed in response to this request for annexation;

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Apex, that the Town Clerk is hereby directed to investigate the sufficiency of the above-described petition and to certify to the Town Council the result of his investigation.

This the 26 th day of July, 2022.		
	Jacques K. Gilbert Mayor	
ATTEST:		
Allen L. Coleman, CMC, NCCCC Town Clerk		



CERTIFICATE OF SUFFICIENCY BY THE TOWN CLERK

Annexation Petition#736 Huxley Master Subdivision Plan (MSP) – 71.543 acres

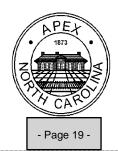
To: The Town Council of the Town of Apex, North Carolina

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town of Apex, North Carolina this 26th day of July, 2022.

Allen L. Coleman, CMC, NCCCC Town Clerk

(Seal)



RESOLUTION SETTING DATE OF PUBLIC HEARING ON THE QUESTION OF ANNEXATION PURSUANT TO G.S.§ 160A-31 AS AMENDED

Annexation Petition#736 Huxley Master Subdivision Plan (MSP) – 71.543 acres

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WHEREAS, the Town Council of Apex, North Carolina has by Resolution directed the Town Clerk to investigate the sufficiency thereof; and

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NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Apex, North Carolina that:

Section 1. A public hearing on the question of annexation of the area described herein will be held at the Apex Town Hall at 6 o'clock p.m. on the 9^{th} day of August, 2022.

Section 2. The area proposed for annexation is described as attached.

Section 3. Notice of said public hearing shall be published on the Town of Apex Website, www.apexnc.org, Public Notice, at least ten (10) days prior to the date of said public hearing.

This the 26th day of July, 2022.

Jacques K. Gilbert, Mayor

ATTEST:

Allen L. Coleman, Town Clerk

Attachment: Legal Description

Hackney Annexation Legal Description PIN No. 0722406699

Beginning at an Existing Iron Pipe Located on the Northern Right of Way of Olive Chapel Road (SR#1160) and having North Carolina Grid Coordinates (NAD83, 2011), N: 719,823.90', E: 2,025,316.49'; Thence, South 11°20'41" East a distance of 30.29' to a Point in the centerline of Olive Chapel Road; Thence, South 11°20'41" East a distance of 29.29' to a Point on the Southern Right of Way of Olive Chapel Road; Thence, with said Southern Right of Way of Olive Chapel Road, South 70°35'43" West a distance of 67.17' to a Point; Thence, North 09°38'52" West a distance of 29.36' to a Point in the centerline of Olive Chapel Road; Thence, North 09°38'52" West a distance of 30.43' to a Point on the Northern Right of Way of Olive Chapel Road; Thence, leaving said Right of way, North 09°38'52" West a distance of 536.92' to a Point; Thence, South 78°41'14" West a distance of 566.96' to a Point; Thence, North 11°18'46" West a distance of 791.04' to a Point; Thence, North 78°41'14" East a distance of 615.50' to an Existing Iron Pipe; Thence, South 11°18'46" East a distance of 500.58' to an Existing Iron Pipe; Thence, South 11°20'41" East a distance of 425.59' to an Existing Iron Pipe being the point and place of Beginning, and having an area of 11.961 Acres (521,009 SF), More or Less.

Hackney Annexation Legal Description PIN No. 0721492956

Beginning at an Existing Iron Pipe Located on the Northern Right of Way of Olive Chapel Road (SR#1160) and having North Carolina Grid Coordinates (NAD83, 2011), N: 719,823.90', E: 2,025,316.49'; Thence continuing along said Right of Way, South 70°32'42" West a distance of 65.39' to a Point; Thence, South 70°31'17" West a distance of 649.92' to a Point, being the **True Point and Place of Beginning**; Thence, South 34°12'20" East a distance of 31.27' to a Point in the centerline of Olive Chapel Road; Thence with said centerline, South 70°19'56" West a distance of 169.20' to a Point; Thence, North 44°47'18" West a distance of 33.43' to a Point located on the Northern Right of Way of Olive Chapel Road; Thence leaving said Right of Way, North 44°47'18" West a distance of 6.65' to a Point; Thence, North 64°57'29" West a distance of 454.32' to a Point; Thence, North 62°35'47" West a distance of 49.52' to a Point; Thence, North 02°31'13" East a distance of 288.73' to an Existing Iron Pipe; Thence, North 02°31'45" East a distance of 382.15' to an Existing Iron Pipe; Thence, South 85°35'51" East a distance of 339.02' to a Point; Thence, South 00°58'41" East a distance of 436.43' to a Point; Thence, South 34°12'20" East a distance of 445.67' to a Point being the **True Point and Place of Beginning**, and having an area of 7.537 Acres (328,294 SF), More or Less.

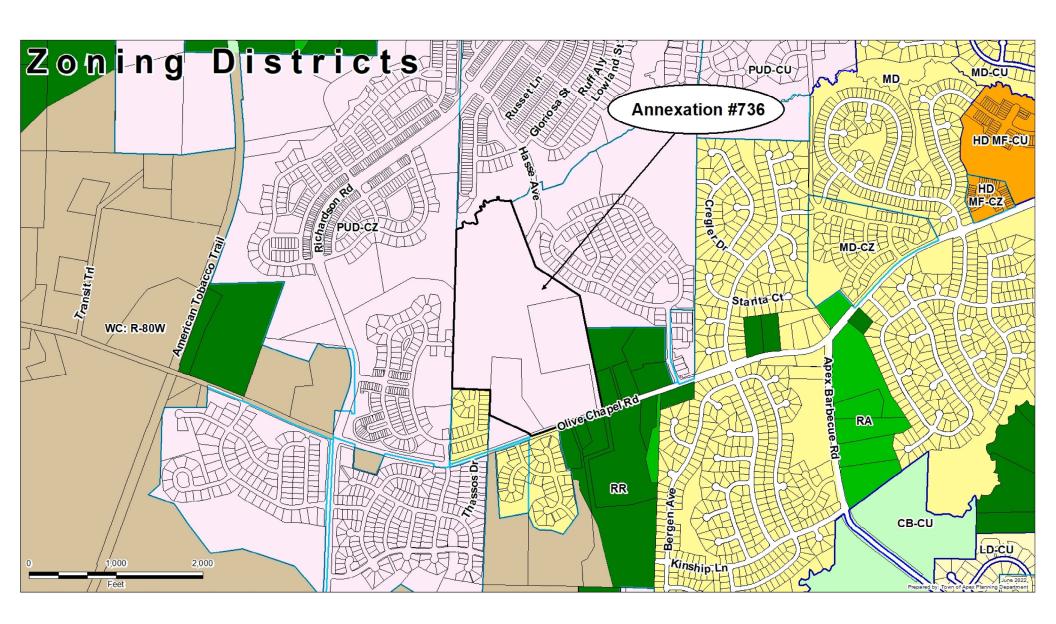
Hackney Annexation Legal Description PIN No. 0722411102

Beginning at an Existing Iron Pipe Located on the Northern Right of Way of Olive Chapel Road (SR#1160) and having North Carolina Grid Coordinates (NAD83, 2011), N: 719,823.90', E: 2,025,316.49'; Thence continuing along said Right of Way, South 70°32'42" West a distance of 65.39' to a Point, being the **True Point and Place of Beginning**; Thence, South 09°38'52" East a distance of 30.43' to a Point in the centerline of Olive Chapel Road; Thence, South 09°38'52" East a distance of 29.36' to a Point on the Southern Right of Way of Olive Chapel Road; Thence continuing along said Right of Way the following four calls, South 70°35'43" West a distance of 159.50' to a Point; Thence, South 70°32'18" West a distance of 144.21' to a Point; Thence, South 70°14'02" West a distance of 34.45' to a Point; Thence,

South 69°49'47" West a distance of 141.71' to a Point; Thence, North 20°06'34" West a distance of 30.38' to a Point located in the centerline of Olive Chapel Road; Thence continuing along said centerline, South 70°29'55" West a distance of 151.57' to a Point; Thence, North 34°12'20" West a distance of 31.27' to a Point located on the Northern Right of Way of Olive Chapel Road; Thence leaving said Right of Way, North 34°12'20" West a distance of 445.67' to a Point; Thence, North 00°58'41" West a distance of 436.43' to a Point; Thence, North 85°35'51" West a distance of 339.02' to an Existing Iron Pipe; Thence, South 02°31'45" West a distance of 382.15' to an Existing Iron Pipe; Thence, North 87°46'36" West a distance of 443.92' to an Existing Iron Pipe; Thence, North 01°42'56" East a distance of 1,191.60' to an Existing Iron Pipe; Thence, North 01°42'19" East a distance of 635.94' to the centerline of a Creek; Thence with the centerline of said creek the following seventy-six (76) calls: North 62°12'20" East a distance of 26.95' to a Point; Thence, North 85°25'51" East a distance of 12.16' to a Point; Thence, South 89°25'18" East a distance of 9.95' to a Point; Thence, North 72°42'15" East a distance of 16.28' to a Point; Thence, North 35°12'38" East a distance of 17.29' to a Point; Thence, North 04°12'00" East a distance of 12.96' to a Point; Thence, North 21°34'14" West a distance of 18.72' to a Point; Thence, North 09°03'47" West a distance of 8.16' to a Point; Thence, North 41°28'27" East a distance of 26.53' to a Point; Thence, South 84°15'14" East a distance of 11.15' to a Point; Thence, South 44°43'11" East a distance of 19.83' to a Point; Thence, South 71°15'05" East a distance of 13.95' to a Point; Thence, South 74°11'34" East a distance of 15.85' to a Point; Thence, South 74°44'51" East a distance of 12.72' to a Point; Thence, South 83°49'13" East a distance of 3.99' to a Point; Thence, North 64°08'10" East a distance of 16.34' to a Point; Thence, North 47°07'30" East a distance of 15.60' to a Point; Thence, South 78°20'55" East a distance of 15.26' to a Point; Thence, South 56°02'16" East a distance of 5.33' to a Point; Thence, South 19°19'09" East a distance of 6.90' to a Point; Thence, South 56°44'29" East a distance of 12.49' to a Point; Thence, South 83°31'01" East a distance of 16.05' to a Point; Thence, North 59°49'27" East a distance of 15.58' to a Point; Thence, North 16°43'28" East a distance of 6.92' to a Point; Thence, North 01°57'42" West a distance of 8.52' to a Point; Thence, North 19°34'33" West a distance of 8.53' to a Point; Thence, North 22°27'53" West a distance of 25.52' to a Point; Thence, North 08°13'00" West a distance of 17.60' to a Point; Thence, North 13°08'01" West a distance of 25.39' to a Point; Thence, North 19°34'33" West a distance of 12.83' to a Point; Thence, North 00°51'00" East a distance of 8.68' to a Point; Thence, North 37°09'53" East a distance of 11.70' to a Point; Thence, North 49°22'35" East a distance of 26.46' to a Point; Thence, North 62°21'20" East a distance of 30.37' to a Point; Thence, North 67°46'29" East a distance of 19.95' to a Point; Thence, North 02°19'02" West a distance of 8.02' to a Point; Thence, North 48°37'20" West a distance of 9.79' to a Point; Thence, North 51°28'51" West a distance of 14.82' to a Point; Thence, North 10°18'42" West a distance of 10.15' to a Point; Thence, North 29°53'30" East a distance of 7.06' to a Point; Thence, North 67°41'49" East a distance of 9.59' to a Point; Thence, South 56°14'07" East a distance of 5.77' to a Point; Thence, South 63°24'14" East a distance of 9.29' to a Point; Thence, South 76°41'34" East a distance of 9.25' to a Point; Thence, North 77°10'45" East a distance of 14.30' to a Point; Thence, North 49°00'07" East a distance of 13.34' to a Point; Thence, North 10°50'19" West a distance of 12.26' to a Point; Thence, North 64°58'17" West a distance of 15.90' to a Point; Thence, North 31°59'29" West a distance of 7.02' to a Point; Thence, North 01°03'18" West a distance of 7.87' to a Point; Thence, North 17°34'16" East a distance of 24.60' to a Point; Thence, North 26°59'18" East a distance of 8.17' to a Point; Thence, South 81°51'44" East a distance of 16.60' to a Point; Thence, South 33°48'00" East a distance of 15.96' to a Point; Thence, South 49°25'00" East a distance of 16.68' to a Point; Thence, North 78°59'30" East a distance of 12.42' to a Point; Thence, North 50°28'53" East a distance of 20.42' to a Point; Thence, North 70°44'43" East a distance of 46.11' to a Point; Thence, South 89°01'57" East a distance of 16.84' to a Point; Thence, South 73°56'31" East a distance of 11.76' to a Point; Thence, North 66°33'30" East a distance of 13.41' to a Point; Thence, North 10°20'58" East a distance of 8.36' to a Point; Thence, North 17°44'49" West a distance of 19.09' to a Point; Thence, North 07°53'24" East a distance of 12.39' to a

Point; Thence, North 59°58'19" East a distance of 13.53' to a Point; Thence, South 42°16'28" East a distance of 13.69' to a Point; Thence, South 04°17'52" West a distance of 12.70' to a Point; Thence, South 10°35'03" West a distance of 9.31' to a Point; Thence, South 32°25'41" East a distance of 5.70' to a Point; Thence, South 46°46'35" East a distance of 17.73' to a Point; Thence, South 60°06'25" East a distance of 16.74' to a Point; Thence, North 86°29'56" East a distance of 19.64' to a Point; Thence, North 81°25'49" East a distance of 16.54' to a Point; Thence, South 80°06'27" East a distance of 29.38' to a Point; Thence, South 84°39'29" East a distance of 22.26' to a Point; Thence, North 58°33'23" East a distance of 13.24' to a Point; Thence, North 74°43'49" East a distance of 8.91' to a Point; Thence leaving the centerline of said creek, South 20°58'05" East a distance of 22.05' to an Existing Iron Pipe; Thence, South 20°45'12" East a distance of 790.03' to an Existing Iron Pipe; Thence, South 56°33'25" East a distance of 611.03' to an Existing Iron Pipe; Thence, South 78°41'14" West a distance of 615.50' to a Point; Thence, South 11°18'46" East a distance of 791.04' to a Point; Thence, North 78°41'14" East a distance of 566.96' to a Point; Thence, South 09°38'52" East a distance of 536.92' to a Point being the **True Point and Place of Beginning**, and having an area of 52.045 Acres (2,267,092 SF), More or Less.





Application #:		Submittal Date:
COMPLETE IF SIGNED BY INDIVIDUALS:		
	4.ee	Signature Signature Signature Signature Signature Signature Signature
Sworn and subscribed before me, this the	TANIMA ON STORES MY	a Notary Public for the above State and County, Notary Public Commission Expires: May 8, 2025
In witness whereof, said corporation in Secretary by order of its Board of Direc	ctors, this the day o	to be executed by its President and attested by its of
SEAL	Corporate Name	
Attest:	Ву:	President (Signature)
Secretary (Signature)		
Secretary (Signature) STATE OF NORTH CAROLINA COUNTY OF WAKE		
STATE OF NORTH CAROLINA COUNTY OF WAKE		, a Notary Public for the above State and County,
STATE OF NORTH CAROLINA COUNTY OF WAKE		a Notary Public for the above State and County,
STATE OF NORTH CAROLINA COUNTY OF WAKE Sworn and subscribed before me,		a Notary Public for the above State and County, Notary Public

PETITION FOR VOLUNTARY ANNEXATION Submittal Date: Application #: COMPLETE IF IN A LIMITED LIABILITY COMPANY a limited liability company, caused this instrument to be executed in In witness whereof,___ its name by a member/manager pursuant to authority duly given, this the ____ day of ______. 20____. Name of Limited Liability Company By: Signature of Member/Manager STATE OF NORTH CAROLINA **COUNTY OF WAKE** Sworn and subscribed before me, _________a Notary Public for the above State and County, **Notary Public SEAL** My Commission Expires: COMPLETE IF IN A PARTNERSHIP _____, a partnership, caused this instrument to be executed in its In witness whereof, __ Name of Partnership _____ By: Signature of General Partner STATE OF NORTH CAROLINA **COUNTY OF WAKE** ______, a Notary Public for the above State and County, Sworn and subscribed before me, _____ **Notary Public SEAL** My Commission Expires:

Petition for V - Page 27 -

FOR APPLICANT USE ONLY PLEASE DO NOT INCLUDE THIS CHECKLIST WITH YOUR APPLICATION SUBMITTAL

COMMON ACRONYMS/DEFINITIONS					
IDT Website	Contractor's Plan	Room	UDO	Town's Unified Deve	lopment Ordinance
TOA	Town of Apex		NCDEQ	North Carolina Dept.	of Environmental Quality
RCA	Resource Conser	vation Area	DDM	Design & Developme	ent Manual
CONTACT INFORMATION					
Department of P Community Deve	_	(919) 249-3426	Soil & Erosi	on Control Officer	(919) 249-1166
Parks, Recreation, and Cultural Resources Department (919) 372-7468		Electric Util	ties Department	(919) 249-3342	
Transportation Engineer (919) 249-3358		Stormwater	& Utility Engineering	(919) 249-3413	

#	REQUIRED PLAT ITEMS
1	The exact boundary lines of the area to be annexed fully dimensioned by lengths and bearings, and the location of intersecting boundary lines of existing town limits, labeled and distinctly marked. Include full right-of-way if the area on both sides is or will be in the corporate limits.
2	Show and label any utility easements with metes and bounds.
3	Accurate locations and descriptions of all monuments, markers, and control points.
4	Ultimate right-of-way widths on all streets.
5	Entitle "ANNEXATION MAP for the TOWN OF APEX" or "SATELLITE ANNEXATION MAP for the TOWN OF APEX", as appropriate.
6	Name of property owner,
7	Name, seal, and registration of Professionally Licensed Surveyor (PLS).
8	Date of the survey and map preparation; a north arrow indicating whether the index is true magnetic North Carolina grid (NAD 83 of NAD 27) or deed; graphic scale; and declination.
9	Names of the township, county, and state.
10	A detailed vicinity map.
11	Include address of property if assigned.
12	Show all contiguous or non-contiguous town limits.
13	The following certification must be placed on the map near a border to allow the map to be sealed: Annexation # I, Donna B. Hosch, MMC, NCCMC, Town Clerk, Apex, North Carolina certify this a true and exact map of annexation adopted the day of, 20, by the Town Council. I set my hand and seal of the Town of Apex, Day/Month/Year Donna B. Hosch, MMC, NCCMC, Town Clerk -Seal-
14	Leave 2 inch by 2 inch space for the Wake County or Chatham County Register of Deeds stamp on the plat. All final plats must be stamped and signed before they can be accepted by the Town.

Page 5 of 5

J. C. Land

PETITION FOR VOLUNTARY ANNEXATION Town of Apex, North Carolina



ANNEXATION PETITION SUBMISSION: Applications are due by 12:00 pm on the first business day of each month. See the "Annexation Petition Schedule" on the website for details.

ANNEXATION FEE: \$200.00

VOLUNTARY ANNEXATION: Upon receipt of a valid petition signed by all of the owners of real property in the area described therein, the Town may annex an area either contiguous or not contiguous to its primary corporate limits when the area meets the standards set out under North Carolina General Statutes 160A-31 and 160A-58.1. A petition submitted pursuant to North Carolina General Statute 160A-58.1 need not be signed by the owners of real property that is wholly exempt from property taxation under the Constitution and laws of North Carolina, nor by railroad companies, public utilities as defined in G.S. 62-3(23), or electric or telephone membership corporations.

HARD COPY SUBMITTAL REQUIREMENTS:

- Town of Apex Petition for Annexation with original wet ink signatures. No photocopies or scanned images.
- Petition Fee

ELECTRONIC SUBMITTAL REQUIREMENTS: IDT Plans

- Town of Apex Petition for Annexation
- Written Metes and Bounds Legal Description: Submit original PDF. Scanned documents will not be accepted.
- Electronic plat submittal (18" x 24")

REVIEW AND APPROVAL PROCESS:

- SUBMITTAL: Submit hard copy application with original wet signatures (no photo copies or scanned images) and fee to the Department of Planning and Community Development and upload an electronic copy of the application, legal description and Annexation Plat via IDT Plans.
- **REVIEW BY STAFF:** The Planning and Community Development Department and Development Services Department review the annexation submission. Comments will be sent to the applicant via email.
- DESIGNATION OF ANNEXATION NUMBER: The application is assigned an annexation number once the annexation petition is received.
- ANNEXATION PLAT SUBMISSION: After the map and legal description are deemed sufficient by the Town of Apex, the applicant is required to submit three (3) Mylar annexation plats to the Department of Planning and Community Development by the due date on the attached Annexation Schedule.
- 1st Town Council Meeting: This Town Council Meeting is typically held the second Tuesday of each month. The Town Council will pass a resolution directing the Town Clerk to investigate the annexation petition. The Town Clerk will present to the Town Council a Certificate of Sufficiency indicating that the annexation petition is complete. A resolution setting the date of the public hearing is then approved.
- LEGAL ADVERTISEMENT: A legal advertisement will be published on the Town of Apex's website no more than 25 days and no less than 10 days prior to the date of the public hearing.
- 2ND TOWN COUNCIL MEETING/PUBLIC HEARING: This Town Council Meeting is typically held the fourth Tuesday of each month. The Town Council will either adopt or deny an ordinance to extend the corporate limits of the Town of Apex.
- RECORDATION: If the annexation is approved by the Town Council, the Town Clerk will have the Annexation Plats recorded at the Wake County or Chatham County Register of Deeds, as appropriate. Wake County or Chatham County will keep one of the recorded plats, one copy will be returned to the Department of Planning and Community Development, and the surveying company is given the remaining recorded Annexation Plat.

FOR WELL AND/OR SEPTIC FAILURES:

If the purpose of the petition is to connect to public water and/or sewer, contact Water Resources Director Michael Deaton at 919-249-3413 or michael.deaton@apexnc.org to confirm that public water and/or sewer is available to the property. In order to receive public water and/or sewer services from the Town of Apex, refer to the checklist of items below to assist with obtaining one or both of these services:

- Apply for a plumbing permit with the Building Inspections and Permitting Department.
- The plumbing permit and associated costs for water and/or sewer will be included with the permit.

Please refer to the Town of Apex Fee Schedule for the list of current fees.

This document is a public record under the N	orth Carolina Public Reco	rds Act and may be published on the Town's website or disclosed to third pa	arties.	
Application #:	Submittal Date:			
Fee Paid \$		Check #		
To THE TOWN COUNCIL APEX, NORTH	CAROLINA			
We, the undersigned owners of r to the Town of Apex,	The Country of the Co	ctfully request that the area described in Part 4 below be an ounty, North Carolina.	nexed	
 The area to be annexed is <u>a co</u> boundaries are as contained in th 		ntiguous (satellite) to the Town of Apex, North Carolina and selection attached hereto.	id the	
3. If contiguous, this annexation will G.S. 160A-31(f), unless otherwise		ing rights-of-way for streets, railroads, and other areas as sta ation amendment.	ited in	
OWNER INFORMATION	And the state of the second			
Judy Hackney		0722411102		
Owner Name (Please Print)		Property PIN or Deed Book & Page #		
919362-7372				
Phone		E-mail Address		
Charles Leon Hackney and Judy G	. Hackney	0722406699		
Owner Name (Please Print)		Property PIN or Deed Book & Page #		
919 362-7372				
Phone		E-mail Address		
Judy Hackney, Trustee of Edwin A. Owner Name (Please Print)	Goodwin	0721492956, 0721491564 Property PIN or Deed Book & Page #		
919 362-7372		Property PIN of Deed Book & Page #		
Phone		E-mail Address		
SURVEYOR INFORMATION	THE STATE OF THE STATE OF			
Surveyor: WithersRavenel				
Phone: 919.469.3340		Fax:		
E-mail Address: bmayo@withersra	avenel.com	=, '•',		
		TO SEE THE BUILDING AND A PROPERTY OF A SECTION AND A SECTION ASSECTATION AND A SECTION AND A SECTION ASSECTATION ASSECTATION AS	CHILL	
Annexation Summary Chart Property Information		Reason(s) for annexation (select all that apply	v)	
	70.70		11	
Total Acreage to be annexed:	70.73	Need water service due to well failure		
Population of acreage to be annexed:	2	Need sewer service due to septic system failure		
Existing # of housing units:	1	Water service (new construction)	Ø	
Proposed # of housing units:	233	Sewer service (new construction)	Ø	
Zoning District*: Apex		Receive Town Services	7	
*If the property to be appeared is not a	within the Town of 4	Apex's Extraterritorial Jurisdiction, the applicant must also sul	hmit	

PETITION FOR VOLUNTARY ANNEXATION

a rezoning application with the petition for voluntary annexation to establish an Apex zoning designation. Please contact the Department of Planning and Community Development with questions.

Petition for V - Page 31 -

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Jacques K. Gilbert, Mayor

Department(s): Governing Body

Requested Motion

Motion to reappoint Nick Bryant, Stuart Wagner, and Andrew Werking to the Transit Advisory Committee, and to reappoint Stuart Wagner as Chair and Andrew Werking as Vice Chair.

Approval Recommended?

Yes

Item Details

The members wishing to be reappointed are Nick Bryant, Stuart Wagner, and Andrew Werking and membership service will begin on July 27, 2022 and end July 27, 2024.

- Nick Bryant, this would be his second term
- Andrew Werking, this would be his second term
- Stuart Wagner, this would be his second term

All members stated interest in returning for another term. No other interest forms have been received via the Town Committee interest form system (Cognito forms).

The Chair and Vice Chair roles are also in need of reappointment. Stuart Wagner is the current Chair and Andrew Werking is the current Vice Chair. Both are interested in continuing those roles for another term.

- Stuart Wagner, this would be his second term as Chair
- Andrew Werking, this would be his second term as Vice Chair

Attachments

None



for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Amanda Grogan, Director

Department(s): Budget and Performance Management

Requested Motion

Motion to approve Budget Amendment 1 to allocate funds for Cost of Living Supplement to Full Time and Part Time Town of Apex Employees

Approval Recommended?

Yes

Item Details

Budget Amendment 1 allocates funds for all part-time and full-time employees to receive a one-time cost of living supplement, approved by Town Council at the June 7, 2022 Budget Workshop. This one-time, lump sum payment will be made by direct deposit.

To be eligible for the payment, employees must be on the Town's payroll and actively employed on July 29th. The amount of the supplement will be as follows, based on employment status/hours worked per week:

Employment Status	Amount
Full-time	\$3,300.00
Part-time (30 hrs/week)	\$2,475.00
Part-time/LSEs*	\$1,650.00

LSE Eligibility: *Employees who hold positions that require a minimum set schedule of 15-19 hours per week, year-round.

Attachments

• Budget Amendment 1



Town of Apex

Budget Ordinance Amendment No. 1

BE IT ORDAINED, by the Council of the Town of Apex that the following Budget Amendment for the Fiscal Year 2022-2023 Budget Ordinance be adopted:

General Fund

Section 1. Revenues:

Appropriated Fund Balance	\$1,771,300	
Total Revenues	\$1,771,300	
Section 2. Expenditures:		
Administration	\$28,900	
Human Resources	\$37,100	
Information Technology	\$63,900	
Legal Services	\$16,500	
Economic Development	\$16,500	
Communications	\$12,400	
Budget & Performance Management	\$28,900	
Finance	\$82,400	
Community Development & Neighborhood Connections	\$8,300	
Planning	\$82,400	
Facility Services	\$28,900	
Police	\$427,300	
911 Communications	\$49,500	
Fire & Rescue	\$389,200	
Transportation & Infrastructure Development	\$70,100	
Public Works Administration	\$16,500	
Streets	\$45,300	
Solid Waste	\$64,400	
Fleet Services	\$20,600	
Inspections & Permitting	\$88,600	
Parks & Recreation	\$181,200	
Cultural Arts Center	\$12,400	
Total Expenditures	\$1,771,300	

Electric Fund

Section 3. Revenues:

Total Revenues	\$144,200
Appropriate Fund Balance	\$144,200

Section 4. Expenditures:

	4444.000
Electric Utility	\$144,200

Water & Sewer Fund

Section 5. Revenues:

Appropriated Fund Balance	\$255,600	
Total Revenues	\$255,600	
Section 6. Expenditures:		
Water/Sewer Administration	\$61,800	
Stormwater	\$24,800	
Water Maintenance	\$78,300	
Sewer Treatment	\$37,100	
Sewer Maintenance	\$53,600	
Total Expenditures	\$255,600	

Section 7. Within five (5) days after adoption, copies of this Amendment shall be filed with the Finance Officer and Town Clerk.

Adopted this the 26th day of July, 2022.	Attest:
Jacques K. Gilbert, Mayor	Allen L. Coleman, CMC, NCCCC
	Town Clerk

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Michael Deaton, P.E., Director

Department(s): Water Resources

Requested Motion

Motion to approve a 3-year Master Services Agreement with Charles R. Underwood, Inc. and to authorize the Town Manager to execute the agreement on behalf of the Town.

<u>Approval Recommended?</u>

Yes

Item Details

Charles R. Underwood, Inc., has historically provided the Town excellent service over the years. This multiyear agreement will secure their services for a 3-yr period, thus providing the Town a reliable contractor who is familiar with the Town's sewer system, and can provide emergency services for pump station components, installations, and repairs. Having this contractor under contract for multiple years will put the Town in position to receive the lowest pricing possible and save staff time managing and processing contracts, but more importantly, will help staff keep our pump stations running during emergency situations thereby preventing backups and sanitary sewer overflows that helps the Town maintain compliance with our NCDEQ Collection System Permit (WQCS00064).

Attachments

Master Services Agreement / Rate Sheet Included



STATE OF NORTH CAROLINA

Contract	Identification	#

COUNTY OF WAKE

MASTER SERVICES AGREEMENT

THIS MASTER SERV	/ICES AGREEMENT (hereinafter "Agreement") is entered into this the
day of	, 2022, by and between, Charles R. Underwood, Inc., a North
Carolina Corporation	with its principal business offices located at 2000 Boone Trail Road,
Sanford, NC 27330 (th	e "Contractor"), and the Town of Apex, a municipal corporation of the
State of North Carolin	a, (the "Town"). Town and Contractor may collectively be referred to as
"Parties" hereinafter.	

WITNESSETH:

WHEREAS, Town, is engaged in the operation of water and sewer utilities, including pipes, drains, facilities, and associated equipment, which from time to time require maintenance, repair, installation, removal, testing, and inspection as well as other projects related to wastewater treatment and soil and erosion control; and

WHEREAS, the professional services of outside firms or consultants and/or others will from time to time in the future be needed by the Town for the services as described above; and

WHEREAS, the professional services of outside firms or consultants and/or others will from time to time in the future be needed by the Town for the services as described above; and

WHEREAS, Contractor provides professional services of the nature required by the Town and employs trained and experienced technical personnel possessing adequate knowledge, skills, and experience to provide such professional services to the Town; and

WHEREAS, the Parties contemplate that the services of the Contractor will be performed in various stages in accordance with separate authorizations to be issued by the Town, and the Parties desire to set forth the basic terms of their agreement in this Master Services Agreement rather than in the separate authorizations issued by the Town; and

WHEREAS, the Parties acknowledge and agree that this Agreement shall act as a base agreement under which the Parties can enter into multiple specific transactions by executing a Purchase Order and written confirmation to proceed pursuant to a Scope of Services, quote, and/or rate sheet; and

WHEREAS, the Parties agree that this Agreement is non-exclusive and does not require or commit the Contractor to being available to perform services until a Scope of Services and quote is submitted, and does not preclude the Town from hiring other vendors or contractors to perform the same or similar work.

NOW THEREFORE, in consideration of the foregoing recitals, and the premises and mutual covenants herein contained, the receipt and adequacy of which is hereby acknowledged, the Parties, intending to be legally bound, hereto do contract and agree as follows:

1. SCOPE OF SERVICES.

The Contractor agrees to perform for the Town the following general services when requested by the Town: <u>Pump station component upgrades</u>, installations, repair, and service.

When service is requested by the Town, Contractor shall provide a detailed Scope of Services and quote that shall be governed by the terms of this Agreement. If a rate sheet is provided and attached to this Agreement then the quote shall be consistent with the rate sheet. The Contractor shall provide a new rate sheet annually for this Agreement. The quote and Scope of Services shall reference this Agreement and this Agreement shall be incorporated into and made a part of the Scope of Services and quote whether or not expressly incorporated by reference in the Scope of Services and quote.

In the event of a conflict between the terms of a Scope of Services, quote, or estimate and this Agreement, this Agreement shall control.

2. SPECIFICATIONS.

Upon request by the Town, Contractor will provide plans and specifications prior to engaging in any services under this Agreement. Contractor hereby acknowledges that it is fully licensed to perform the work contemplated by this Agreement. In the event of a conflict between the provided plans and specifications and this Agreement, this Agreement shall control.

3. TIME OF COMMENCEMENT AND COMPLETION.

This Agreement shall terminate on June 30, 2025 unless terminated sooner in accordance with the terms of this Agreement. Contractor shall commence and complete the work required by this Agreement in accordance with the dates provided in the Scope of Services as agreed upon by the Parties. Contractor shall immediately notify the Town of any event or circumstance that may, immediately or in the future, impede the proper and timely execution of any work so that remedial action may be taken. Contractor shall not begin any work pursuant to this Agreement or a Scope of Services until written confirmation has been provided by the Town. The Parties hereby agree that written confirmation may be provided through electronic communication from the Town's representative identified in Section 13 of this Agreement. If Contractor has not satisfactorily commenced or completed the work within the times specified, the Town may declare such delay a material breach of contract and may pursue all available legal and equitable remedies. Any changes to the schedule(s) provided in the Scope of Services must be agreed to in writing by the Town and the Contractor.

4. CONSIDERATION AND PAYMENT OF SERVICES.

In consideration of the above services, the Town will pay the Contractor the amount authorized by the issued Purchase Order corresponding to the agreed upon Scope of Services and quote. After services are agreed upon pursuant to this Agreement and the associated Scopes of Service, Contractor will invoice the Town for work performed. Town has the right to require the Contractor to produce for inspection all of Contractor's records and charges to verify the accuracy of all invoices. Town shall pay Contractor's invoices within thirty (30) days of receipt unless a bona fide dispute exists between Town and Contractor concerning the accuracy of said invoice or the services covered thereby.

5. INDEMNIFICATION.

To the extent permitted by law, the Contractor agrees to defend, pay on behalf of, indemnify, and hold-harmless the Town of Apex, its elected and appointed officials, employees, agents, and volunteers against any and all claims, demands, suits or losses, including all costs connected therewith, for any damages which may be asserted, claimed or recovered against or from the Town of Apex its elected or appointed officials, employees, agents, and volunteers by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof resulting from the negligence of the Contractor.

6. APPLICABILITY OF LAWS AND REGULATIONS.

The Contractor shall adhere to all laws, ordinances, and regulations of the United States, the State of North Carolina, the County of Wake, and the Town of Apex in the performance of the services outlined in this contract and any attached specifications.

This Agreement shall be governed by the laws of the State of North Carolina. Any and all suits or actions to enforce, interpret or seek damages with respect to any provision of, or the performance or nonperformance of, this Agreement shall be brought in the General Court of Justice of North Carolina sitting in Wake County, North Carolina, or the United States District Court sitting in Wake County, North Carolina, and it is agreed by the Parties that no other court shall have jurisdiction or venue with respect to such suits or actions.

7. E-VERIFY COMPLIANCE.

The Contractor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes (E-Verify). Contractor shall require all of the Contractor's subcontractors to comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes (E-Verify).

8. QUALITY AND WORKMANSHIP.

All work shall be performed to the satisfaction of the Town. The work shall not be considered complete nor applicable payments rendered until the Town is satisfied with the services provided. Contractor shall provide services in accordance with all federal, state and local law and in accordance with all governing agency regulations and shall be held to the same standard and shall exercise the same degree of care, skill and judgment in the performance of services for the Town as is ordinarily provided by a similar professional under the same or similar circumstances at the time in North Carolina.

9. INSURANCE.

The Contractor shall maintain valid general liability insurance in the minimum amount of \$1,000,000, commercial automobile liability insurance in the minimum amount of \$2,000,000, and provide certificates of such insurance naming the Town of Apex as an additional insured by endorsement to the policies. If the policy has a blanket additional insured provision, the contractor's insurance shall be primary and non-contributory to other insurance. Additionally, the contractor shall maintain and show proof of workers' compensation and employer's liability insurance in the minimum amount of \$1,000,000. The Contractor shall provide notice of cancellation, non-renewal or material change in coverage to the Town of Apex within 10 days of their receipt of notice from the insurance company.

All required certificates of insurance, endorsements, and blanket additional insured policy provisions are attached and considered part of this document. Notwithstanding the foregoing, neither the requirement of Contractor to have sufficient insurance nor the requirement that Town is named as an additional insured, shall constitute waiver of the Town's governmental immunity in any respect, under North Carolina law.

10. PRE-PROJECT SAFETY REVIEW MEETING.

If requested by the Town, the Contractor shall attend a pre-project safety review meeting with the contacting Department Head and Supervisors and Safety and Risk Manager prior to the start of work.

11. DEFAULT.

In the event of substantial failure by Contractor to perform in accordance with the terms of this Agreement, Town shall have the right to terminate Contractor upon seven (7) days written notice in which event Contractor shall have neither the obligation nor the right to perform further services under this Agreement.

12. TERMINATION FOR CONVENIENCE.

Town shall have the right to terminate this Agreement for the Town's convenience upon thirty (30) days written notice to Contractor. Contractor shall terminate performance of services on a schedule acceptable to the Town. In the event of termination for convenience, the Town shall pay Contractor for all services satisfactorily performed.

13. NOTICE.

Any formal notice, demand, or request required by or made in connection with this Agreement shall be deemed properly made if delivered in writing or deposited in the United States mail, postage prepaid, to the address specified below.

TO CONTRACTOR: Attn: Kyle Cochran

Contractor: Charles R. Underwood, Inc. Address: 2000 Boone Trail Road

Sanford, NC 27330

Email: kcochran@crupumps.com

TO TOWN: Town of Apex

Attention: Michael Deaton

PO Box 250 Apex, NC 27502

14. DELAY BEYOND THE CONTROL OF THE PARTIES.

Neither Contractor nor Town, having taken commercially reasonable precautions, shall be in default of the provisions of this Agreement for delays in performance due to forces beyond the control of the parties. "Forces beyond the control of the parties" shall mean, but is not limited to, delay caused by natural disaster, fire, flood, earthquakes, storms, lightning, epidemic, pandemic, war, riot, civil disobedience, or other event reasonably outside of the parties' control. Due to the ever-changing circumstances surrounding the COVID-19 pandemic, situations may arise during the performance of this Agreement that affect availability of resources and staff of Contractor or the Town. There could be changes in anticipated performance times and service costs. Contractor will exercise reasonable efforts to overcome the challenges presented by current circumstances. In the event of changes in performance times or service costs caused by the COVID-19 pandemic the Town reserves the right to terminate this Agreement in accordance with its terms. The Parties agree that they shall not be liable to each other for any delays, expenses, losses, or damages of any kind arising out of the impact of the COVID-19 pandemic.

15. NONWAIVER FOR BREACH.

No breach or non-performance of any term of this Agreement shall be deemed to be waived by either party unless said breach or non-performance is waived in writing and signed by the parties.

No waiver of any breach or non-performance under this Agreement shall be deemed to constitute a waiver of any subsequent breach or non-performance and for any such breach or non-performance each party shall be relegated to such remedies as provided by law.

16. CONSTRUCTION.

Should any portion of this Agreement require judicial interpretation, it is agreed that the Court or Tribunal construing the same shall not apply a presumption that the terms hereof shall be more strictly construed against any one party by reason of the rule of construction that a document is to be more strictly construed against the party who prepared the documents.

17. NO REPRESENTATIONS.

The parties hereby warrant that no representations about the nature or extent of any claims, demands, damages, or rights that they have, or may have, against one another have been made to them, or to anyone acting on their behalf, to induce them to execute this Agreement, and they rely on no such representations; that they have fully read and understood this Agreement before signing their names; and that they act voluntarily and with full advice of counsel.

18. SEVERABILITY.

In the event for any reason that any provision or portion of this Agreement shall be found to be void or invalid, then such provision or portion shall be deemed to be severable from the remaining provisions or portions of this Agreement, and it shall not affect the validity of the remaining portions, which portions shall be given full effect as if the void or invalid provision or portion had not been included herein.

19. COUNTERPARTS.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one instrument.

20. MODIFICATION.

This Agreement contains the full understanding of the parties. Any modifications or addendums to this Agreement must be in writing and executed with the same formality as this Agreement.

21. BINDING EFFECT.

The terms of this Agreement shall be binding upon the parties' heirs, successors, and assigns.

22. ASSIGNMENT.

Contractor shall not assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the Town. Nothing contained in this paragraph shall prevent Contractor

from employing such independent consultants, associates, and sub-contractors as it may deem appropriate to assist Contractor in the performance of services rendered.

23. INDEPENDENT CONTRACTOR.

Contractor is an independent contractor and shall undertake performance of the services pursuant to the terms of this Agreement as an independent contractor. Contractor shall be wholly responsible for the methods, means and techniques of performance.

24. NON-APPROPRIATION.

Notwithstanding any other provisions of this Agreement, the parties agree that payments due hereunder from the Town are from appropriations and monies from the Town Council and any other governmental entities. In the event sufficient appropriations or monies are not made available to the Town to pay the terms of this Agreement for any fiscal year, this Agreement shall terminate immediately without further obligation of the Town.

25. IRAN DIVESTMENT ACT CERTIFICATION.

N.C.G.S. 147-86.60 prohibits the State of North Carolina, a North Carolina local government, or any other political subdivision of the State of North Carolina from contracting with any entity that is listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C.G.S. 147-86.58. N.C.G.S. 147-86.59 further requires that contractors with the State, a North Carolina local government, or any other political subdivision of the State of North Carolina must not utilize any subcontractor found on the State Treasurer's Final Divestment List. As of the date of execution of this Agreement the Contractor hereby certifies that the Contractor is not listed on the Final Divestment List created by the North Carolina State Treasurer and that the Contractor will not utilize any subcontractors found on the Final Divestment List.

26. ANTI-HUMAN TRAFFICKING.

The Contractor warrants and agrees that no labor supplied by the Contractor or the Contractor's subcontractors in the performance of this Agreement shall be obtained by means of deception, coercion, intimidation or force, or otherwise in violation of North Carolina law, specifically Article 10A, Subchapter 3 of Chapter 14 of the North Carolina General Statutes, Human Trafficking.

27. NONDISCRIMINATION.

Pursuant to Section 3-2 of the Town of Apex Code of Ordinances, Contractor hereby warrants and agrees that Contractor will not discriminate against a protected class in employment, subcontracting practices, or the solicitation or hiring of vendors, suppliers, or commercial customers in connection with this Agreement. For the purposes of this Agreement "protected class" includes age, race, religious belief or non-belief, ethnicity, color, national origin, creed, sex,

sexual orientation, gender identity, marital status, natural hair style, genetic information, pregnancy, familial status, disability, veteran or military status, or disabled veteran status.

28. ELECTRONIC SIGNATURE.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this Agreement and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The Parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the Agreement and any related documents. If electronic signatures are used the Agreement shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

In witness thereof, the contracting parties, signatures and seals thisday of	
Contractor	Town of Apex
Name: CHARLES RUNDSPUEDS, INC. By: Zuh Coffine	Catherine Crosby, Town Manager
(Signature) Title: General Munegor	
(Secretary, if a corporation)	Attest: Allen Coleman CMC, NCCCC Town Clerk
This instrument has been preaudited in the manne and Fiscal Control Act.	r required by the Local Government Budget
Vance Holloman, Finance Director	



Charles R. Underwood, Inc. 2000 Boone Trail Rd. Sanford. NC 27330 919.775.2463

June 21, 2022

Town of Apex

RE: June 2022 Field Services Rate Schedule (Rev.1)

We are pleased to provide you with our current charge rates for the Calendar Year of 2022. Our rates are as follows:

LABOR RATES

Labor rates are plus mileage and equipment and are from 7 a.m. until 7 p.m. Monday through Friday. After hours and Saturday are subject to a 1.5x overtime rate but will be evaluated on a case-by-case basis. Sunday and Holidays will be double time.

Field Crew: \$100.00 per man per hour portal to portal

Service Technician (for one-man inspections/service) \$125.00 per hour portal to portal

Reliability Specialist Billy Flinchum \$180.00 an hour portal to portal

Shop Rate \$100.00 per manhour for Pump techs, machinist (small machine tool), paint

Large Shop Tool Rate \$150.00 per manhour for 36" lathe & 60" VTL

Water Jet \$150.00 per manhour

No Charge for job inspection by Project Manager or Staff Engineer

MILEAGE

\$3.00 per mile boom trucks

\$2.00 per mile service trucks, flatbed, roll back, gooseneck

\$1.00 all other trucks (1T & Below)

CRU OWNED EQUIPMENT

BOOM TRUCKS

\$150.00 per hour 18-ton crane – charged only when in use \$115.00 per hour 12-ton crane – charged only when in use

BYPASS PUMPS

CD100 \$685.00 per week, plus fuel CD140 \$1985.00 per week, plus fuel CD150 \$1135.00 per week, plus fuel CD225 \$1525.00 per week, plus fuel

*Hoses, fittings, float panels, and any other accessories are at additional cost and will be priced by the job.

CONFINED SPACE EQUIPMENT/ENTRY

Conventional Equipment/Entry/Aeration Methods for Safe Entry - \$300.00 per day / 1,200.00 per week

CORE DRILL \$130.00 a day / \$390.00 a week

<u>LIGHT TOWER</u> \$80.00 a day / \$200.00 a week

MINI-EXCAVATORS

Deere 35D 6358lbs \$500.00 per day / \$1500.00 a week Kubota U35SS 8234lbs \$500.00 per day / \$1500.00 a week

MILLER/BOBCAT WELDER GENERATOR (Trailer Mounted)

250NT 10kw/250amp \$160.00 per day / \$385.00 a week 3/11/22

SCISSOR LIFT 19' \$150 per day / \$600.00 week 3/11/22

SKIDSTEERS

Takeuchi TL230 Series 2 (on tracks) \$500.00 per day / \$1,500.00 a week

TRASH PUMP

2" \$65.00 per day / 195.00 a week 3" \$75.00 per day / 225.00 a week 4" \$95.00 per day / 285.00 a week

WALK BEHIND TRENCH ROLLER 24"-33"

\$490.00 per day / \$1470.00 a week



Charles R. Underwood, Inc. 2000 Boone Trail Rd. Sanford, NC 27330 919.775.2463

MATERIALS

Will be Quoted at time of repair or when requested.

WARRANTY

All work carries a twelve (12) month warranty with the following exceptions:

- All new pumps carry a two (2) year warranty except submersible sewage pump which factory warranty will govern.
- All rebuilt pumps and motors carry a two (2) year warranty except on submersible sewage pumps, which will carry a six-month warranty.
- Any push/pull labor associated with pump repair warranties will be included as part of the warranty.

Terms

Due to the volatile nature of the current market conditions, CRU, Inc. reserves the right to modify and/or change the specified terms of this 2022-2023 rate sheet.
 Notice of any changes and/or modifications of this document will be provided formally in writing a minimum of 30 days prior to the changes taking effect.

We appreciate the opportunity to quote you this information, and if we can be of further service, please advise.

Sincerely,

Charles R. Underwood, Inc.

Zach C. Hinnant, PE

General Manager



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 3/28/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).										
	DUCER				CONTA	CT Taylor Hou	ısel			
Sc	ott Insurance				PHONE	PHONE TO A CALL COOT FAX				
Gr	D Bellemeade Street, Suite 201 eensboro NC 27401				(A/C, No. Ext): / U4-644-898 / (A/C, No); E-MAIL ADDRESS: thousel@scottins.com					
Git	3611SD010 NC 27401				ADDRE					
								RDING COVERAGE		NAIC#
				CHARL05		RA: National				20141
	RED arles R. Underwood, Inc.			CHARLOS	INSURE	RB: FCCI Ins	urance Comp	pany (A)		10178
	ssell Underwood, President				INSURE	RC:	<u> </u>			
	00 Boone Trail Road				INSURE	RD:				
Sa	nford NC 27330				INSURER E :					
					INSURER F:					
CO	VERAGES CER	TIFI	CATE	NUMBER: 1420132756				REVISION NUMBER:		
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IN C	IDICATED. NOTWITHSTANDING ANY RE ERTIFICATE MAY BE ISSUED OR MAY F XCLUSIONS AND CONDITIONS OF SUCH I	QUIF	REME	NT, TERM OR CONDITION THE INSURANCE AFFORDI	OF AN'	Y CONTRACT THE POLICIES	OR OTHER I	DOCUMENT WITH RESPE	CT TO 1	WHICH THIS
INSR LTR	TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
A	X COMMERCIAL GENERAL LIABILITY	Y		CPP 100045049 04		4/1/2022	4/1/2023	EACH OCCURRENCE	s 1,000	. 000
	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED	\$ 100,0	·
	ODDINIONING TO OCCUR							PREMISES (Ea occurrence)		
								MED EXP (Any one person)	\$ 5,000	
								PERSONAL & ADV INJURY	\$ 1,000	,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$ 2,000	,000
	POLICY X PRO- X LOC							PRODUCTS - COMP/OP AGG	\$ 2,000	
	OTHER:							Employee Benefits	\$ 1,000	,000
В	AUTOMOBILE LIABILITY	Y		CA 100011917 06		4/1/2022	4/1/2023	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000	,000
	X ANY AUTO			30				BODILY INJURY (Per person)	\$	83
	OWNED SCHEDULED AUTOS ONLY					j		80DILY INJURY (Per accident)	\$	
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	(Mandatory in NH)							E.L. DISEASE - EA EMPLOYEE		-
	If yes, describe under DESCRIPTION OF OPERATIONS below		<u> </u>					E.L. DISEASE - POLICY LIMIT \$ 1,000		
A	Install Floater Temp Storage Leased/Rented EQ			CPP 100045049 04 CPP 100045049 04		4/1/2022 4/1/2022	4/1/2023 4/1/2023	\$500 Ded \$1,000 Ded	250.0 120.0	
DES	RIPTION OF OPERATIONS / LOCATIONS / VEHICL	Ee /-	COST	1404 Additional Procedus Set and	la manu Fr	attached # : :				
Toy	vn of Apex is an additional insured as res	es (F	ts Ge	neral Liability and Automot	e, may bi bile Liat	e attached it more pility, if require	space is require	contract.		
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CEI	CERTIFICATE HOLDER CANCELLATION									
								· · · · · · · · · · · · · · · · · · ·		
Town of Apex				THE	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.					
PO Box 250 Apex NC 27502				AUTHORIZED REPRESENTATIVE						
				Kurkurutis						
						Due NURW	26-1			

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| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26,2022

Item Details

Presenter(s): Eric Neumann, Electrical Utilities Director

Department(s): Electric

Requested Motion

Motion to approve a multi-year contract with MasTec North America Inc. for the purposes of providing general electric services when requested by the Town including; installation, maintenance, repair, servicing, removal, testing, and inspection of underground electrical lines and poles, as well as other projects related to electric utilities; and authorize the Town Manager to execute the agreement.

<u>Approval Recommended?</u>

Yes

Item Details

On an annual basis, the Electric Department enters into a Master Services Agreement with MasTec North America to provide general electric services for underground electrical lines and poles. With increased demand and to streamline installation and services, this work has previously been contracted out to provide a quicker service turnaround time.

From an efficiency and budget impact standpoint, staff recommends the approval of a multi-year contract which would allow this contract to serve from July 1, 2022 (or date of approval) thru June 30, 2025.

Attachments

• MasTec North America Inc. - Multi-Year Master Service Agreement



STATE OF NORTH CAROLINA

COUNTY OF WAKE

Contract Identification #______ MASTER SERVICES AGREEMENT

THIS MASTER SERVIO	CES AGREEMENT (hereinafter "Agreement") is entered into this the
day of	, 2022, by and between, MasTec North America, Inc., a Florida
Corporation with its prin-	cipal business offices located at 800 S. Douglass Rd., Coral Gables, FL
33134 (the "Contractor"),	and the Town of Apex, a municipal corporation of the State of North
Carolina, (the "Town").	Town and Contractor may collectively be referred to as "Parties"
hereinafter	

WITNESSETH:

WHEREAS, Town, is engaged in the operation of an electric system; and

WHEREAS, the professional services of outside firms or consultants and/or others will from time to time in the future be needed by the Town for the services as described above; and

WHEREAS, Contractor provides professional services of the nature required by the Town and employs trained and experienced technical personnel possessing adequate knowledge, skills, and experience to provide such professional services to the Town; and

WHEREAS, the Parties contemplate that the services of the Contractor will be performed in various stages in accordance with separate authorizations to be issued by the Town, and the Parties desire to set forth the basic terms of their agreement in this Master Services Agreement rather than in the separate authorizations issued by the Town; and

WHEREAS, the Parties acknowledge and agree that this Agreement shall act as a base agreement under which the Parties can enter into multiple specific transactions by executing a Purchase Order and written confirmation to proceed pursuant to a Scope of Services, quote, and/or rate sheet; and

WHEREAS, the Parties agree that this Agreement is non-exclusive and does not require or commit the Contractor to being available to perform services until a Scope of Services and quote is submitted, and does not preclude the Town from hiring other vendors or contractors to perform the same or similar work.

NOW THEREFORE, in consideration of the foregoing recitals, and the premises and mutual covenants herein contained, the receipt and adequacy of which is hereby acknowledged, the Parties, intending to be legally bound, hereto do contract and agree as follows:

1. SCOPE OF SERVICES.

The Contractor agrees to perform for the Town the following general services when requested by the Town: which from time to time requires the installation, maintenance, repair, servicing, removal, testing, and inspection of underground electrical lines and poles, as well as other projects related to electric utilities.

When service is requested by the Town, Contractor shall provide a detailed Scope of Services and quote that shall be governed by the terms of this Agreement. If a rate sheet is provided and attached to this Agreement then the quote shall be consistent with the rate sheet. The quote and Scope of Services shall reference this Agreement and this Agreement shall be incorporated into and made a part of the Scope of Services and quote whether or not expressly incorporated by reference in the Scope of Services and quote.

In the event of a conflict between the terms of a Scope of Services, quote, or estimate and this Agreement, this Agreement shall control.

2. SPECIFICATIONS.

Upon request by the Town, Contractor will provide plans and specifications prior to engaging in any services under this Agreement. Contractor hereby acknowledges that it is fully licensed to perform the work contemplated by this Agreement. In the event of a conflict between the provided plans and specifications and this Agreement, this Agreement shall control.

3. TIME OF COMMENCEMENT AND COMPLETION.

This Agreement shall terminate on _______2025 unless terminated sooner in accordance with the terms of this Agreement. Contractor shall commence and complete the work required by this Agreement in accordance with the dates provided in the Scope of Services as agreed upon by the Parties. Contractor shall immediately notify the Town of any event or circumstance that may, immediately or in the future, impede the proper and timely execution of any work so that remedial action may be taken. Contractor shall not begin any work pursuant to this Agreement or a Scope of Services until written confirmation has been provided by the Town. The Parties hereby agree that written confirmation may be provided through electronic communication from the Town's representative identified in Section 13 of this Agreement. If Contractor has not satisfactorily commenced or completed the work within the times specified, the Town may declare such delay a material breach of contract and may pursue all available legal and equitable remedies. Any changes to the schedule(s) provided in the Scope of Services must be agreed to in writing by the Town and the Contractor.

4. CONSIDERATION AND PAYMENT OF SERVICES.

In consideration of the above services, the Town will pay the Contractor the amount authorized by the issued Purchase Order corresponding to the agreed upon Scope of Services and quote.

Revision date 11/9/2021

After services are agreed upon pursuant to this Agreement and the associated Scopes of Service, Contractor will invoice the Town for work performed. Town has the right to require the Contractor to produce for inspection all of Contractor's records and charges to verify the accuracy of all invoices. Town shall pay Contractor's invoices within thirty (30) days of receipt unless a bona fide dispute exists between Town and Contractor concerning the accuracy of said invoice or the services covered thereby.

5. INDEMNIFICATION.

To the extent permitted by law, the Contractor agrees to defend, pay on behalf of, indemnify, and hold-harmless the Town of Apex, its elected and appointed officials, employees, agents, and volunteers against any and all claims, demands, suits or losses, including all costs connected therewith, for any damages which may be asserted, claimed or recovered against or from the Town of Apex its elected or appointed officials, employees, agents, and volunteers by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof resulting from the negligence of the Contractor.

6. APPLICABILITY OF LAWS AND REGULATIONS.

The Contractor shall adhere to all laws, ordinances, and regulations of the United States, the State of North Carolina, the County of Wake, and the Town of Apex in the performance of the services outlined in this contract and any attached specifications.

This Agreement shall be governed by the laws of the State of North Carolina. Any and all suits or actions to enforce, interpret or seek damages with respect to any provision of, or the performance or nonperformance of, this Agreement shall be brought in the General Court of Justice of North Carolina sitting in Wake County, North Carolina, or the United States District Court sitting in Wake County, North Carolina, and it is agreed by the Parties that no other court shall have jurisdiction or venue with respect to such suits or actions.

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Revision date 11/9/2021

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Town shall have the right to terminate this Agreement for the Town's convenience upon thirty (30) days written notice to Contractor. Contractor shall terminate performance of services on a schedule acceptable to the Town. In the event of termination for convenience, the Town shall pay Contractor for all services satisfactorily performed.

13. NOTICE.

Any formal notice, demand, or request required by or made in connection with this Agreement shall be deemed properly made if delivered in writing or deposited in the United States mail, postage prepaid, to the address specified below.

TO CONTRACTOR: Attn:

Tim Bowes

Contractor:

MasTec

Address:

362 Old Durham Road

Roxboro, NC 27573

Email:

Timothy.Bowes@mastec.com

TO TOWN:

Town of Apex

Attention: Electric Utilities Director

PO Box 250 Apex, NC 27502

Eric Neumann < Eric. Neumann@apexnc.org>

14. DELAY BEYOND THE CONTROL OF THE PARTIES.

Neither Contractor nor Town, having taken commercially reasonable precautions, shall be in default of the provisions of this Agreement for delays in performance due to forces beyond the control of the parties. "Forces beyond the control of the parties" shall mean, but is not limited to, delay caused by natural disaster, fire, flood, earthquakes, storms, lightning, epidemic, pandemic, war, riot, civil disobedience, or other event reasonably outside of the parties' control. Due to the ever-changing circumstances surrounding the COVID-19 pandemic, situations may arise during the performance of this Agreement that affect availability of resources and staff of Contractor or the Town. There could be changes in anticipated performance times and service costs. Contractor will exercise reasonable efforts to overcome the challenges presented by current circumstances. In the event of changes in performance times or service costs caused by the COVID-19 pandemic the Town reserves the right to terminate this Agreement in accordance with its terms. The Parties agree that they shall not be liable to each other for any delays, expenses, losses, or damages of any kind arising out of the impact of the COVID-19 pandemic.

15. NONWAIVER FOR BREACH.

No breach or non-performance of any term of this Agreement shall be deemed to be waived by either party unless said breach or non-performance is waived in writing and signed by the parties. No waiver of any breach or non-performance under this Agreement shall be deemed to constitute a waiver of any subsequent breach or non-performance and for any such breach or non-performance each party shall be relegated to such remedies as provided by law.

16. CONSTRUCTION.

Should any portion of this Agreement require judicial interpretation, it is agreed that the Court or Tribunal construing the same shall not apply a presumption that the terms hereof shall be more strictly construed against any one party by reason of the rule of construction that a document is to be more strictly construed against the party who prepared the documents.

17. NO REPRESENTATIONS.

The parties hereby warrant that no representations about the nature or extent of any claims, demands, damages, or rights that they have, or may have, against one another have been made to them, or to anyone acting on their behalf, to induce them to execute this Agreement, and they rely on no such representations; that they have fully read and understood this Agreement before signing their names; and that they act voluntarily and with full advice of counsel.

18. SEVERABILITY.

In the event for any reason that any provision or portion of this Agreement shall be found to be void or invalid, then such provision or portion shall be deemed to be severable from the remaining provisions or portions of this Agreement, and it shall not affect the validity of the remaining portions, which portions shall be given full effect as if the void or invalid provision or portion had not been included herein.

19. COUNTERPARTS.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one instrument.

20. MODIFICATION.

This Agreement contains the full understanding of the parties. Any modifications or addendums to this Agreement must be in writing and executed with the same formality as this Agreement.

21. BINDING EFFECT.

The terms of this Agreement shall be binding upon the parties' heirs, successors, and assigns.

22. ASSIGNMENT.

Contractor shall not assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the Town. Nothing contained in this paragraph shall prevent Contractor from employing such independent consultants, associates, and sub-contractors as it may deem appropriate to assist Contractor in the performance of services rendered.

Revision date 11/9/2021

23. INDEPENDENT CONTRACTOR.

Contractor is an independent contractor and shall undertake performance of the services pursuant to the terms of this Agreement as an independent contractor. Contractor shall be wholly responsible for the methods, means and techniques of performance.

24. NON-APPROPRIATION.

Notwithstanding any other provisions of this Agreement, the parties agree that payments due hereunder from the Town are from appropriations and monies from the Town Council and any other governmental entities. In the event sufficient appropriations or monies are not made available to the Town to pay the terms of this Agreement for any fiscal year, this Agreement shall terminate immediately without further obligation of the Town.

25. IRAN DIVESTMENT ACT CERTIFICATION.

N.C.G.S. 147-86.60 prohibits the State of North Carolina, a North Carolina local government, or any other political subdivision of the State of North Carolina from contracting with any entity that is listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C.G.S. 147-86.58. N.C.G.S. 147-86.59 further requires that contractors with the State, a North Carolina local government, or any other political subdivision of the State of North Carolina must not utilize any subcontractor found on the State Treasurer's Final Divestment List. As of the date of execution of this Agreement the Contractor hereby certifies that the Contractor is not listed on the Final Divestment List created by the North Carolina State Treasurer and that the Contractor will not utilize any subcontractors found on the Final Divestment List.

26. ANTI-HUMAN TRAFFICKING.

The Contractor warrants and agrees that no labor supplied by the Contractor or the Contractor's subcontractors in the performance of this Agreement shall be obtained by means of deception, coercion, intimidation or force, or otherwise in violation of North Carolina law, specifically Article 10A, Subchapter 3 of Chapter 14 of the North Carolina General Statutes, Human Trafficking.

27. NONDISCRIMINATION.

Pursuant to Section 3-2 of the Town of Apex Code of Ordinances, Contractor hereby warrants and agrees that Contractor will not discriminate against a protected class in employment, subcontracting practices, or the solicitation or hiring of vendors, suppliers, or commercial customers in connection with this Agreement. For the purposes of this Agreement "protected class" includes age, race, religious belief or non-belief, ethnicity, color, national origin, creed, sex, sexual orientation, gender identity, marital status, natural hair style, genetic information, pregnancy, familial status, disability, veteran or military status, or disabled veteran status.

Revision date 11/9/2021

28. ELECTRONIC SIGNATURE.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this Agreement and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The Parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the Agreement and any related documents. If electronic signatures are used the Agreement shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

Toyen of Anov
Town of Apex
Catherine Crosby, Town Manager
Attest:
Donna Hosch, Town Clerk
l by the Local Government Budget
1

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Stacie Galloway, Communications Director

Department(s): Communications

Requested Motion

Motion to approve a 3-year contract with SiteImprove and to authorize the Town Manager to execute the agreement on behalf of the Town.

.Approval Recommended?

Yes

Item Details

SiteImprove is a web-based platform that provides website analytics, and monitors our site for ADA concerns. Apex began using the tool in 2017. The multi-year contract beginning July 2022 will allow the town to lock in the current rate, and eliminate the need to process renewal paperwork through 2025.

Attachments

• Contract Document





Order Form for Town of Apex Offer Valid Through: 7/12/2022 Proposed by: Cassidy Soli Quote Number: Q-137515.3

ORDER FORM

Address Information

Bill To: Town of Apex PO Box 250

Apex NC 27502 United States

Contact Name: Stacie Galloway

Email Address: stacie.galloway@apexnc.org

Ship To:

Town of Apex 73 Hunter Street Apex NC 27502-2312

United States

Phone: (919) 249-1135

Term & Payment Details

Start Date: 7/13/2022 **End Date:** 7/12/2025

Subscription Term: 36 Months **Renewal Price Increase:** N/A

Payment Term: Net 30 days
Payment Method: Bank Transfer

Automatic Renewal: [_]

Panawal Torms N/A

Renewal Term: N/A
Billing Frequency: Annual
Billing Method: Email
Invoice Date: 7/19/2022

Included Services

Subscription Services	Limit Type	Quantity*
Response	Response Check Points	5
Quality Assurance & Policy	Pages	1,500
Analytics	Yearly Page Views	3,000,000
SEO	Pages	1,500
Accessibility	Pages	1,500
Behavior Map	Maps	250



Order Form for Town of Apex Offer Valid Through: 7/12/2022 Proposed by: Cassidy Soli Quote Number: Q-137515.3

Subscription Services	Limit Type	Quantity*	
Standard Support	N/A	1	

^{*}When Subscription Services share the same Limit Type, the Quantity specified represents an aggregated amount, which is shared by these services.

Annual Subscription Fee:USD 8,008.04Annual Subscription Fee:USD 8,008.04Total Subscription Fee:USD 24,024.12

At least 45 days prior the start of a new Billing Frequency Period, Siteimprove will send an invoice for the proportionate Subscription Fee.



Order Form for Town of Apex Offer Valid Through: 7/12/2022 Proposed by: Cassidy Soli Quote Number: Q-137515.3

Purchase Order Information

(Customer to complete) Is a Purchase Order (PO) required for the purchase or payment of the products on this Order Form?] Yes Is PO renewal required for each invoicing term? [] No [] Yes PO Number: PO requests must be sent to: **Billing Information** (Customer to complete) **Billing Contact Name: Billing E-mail: Billing References: E-invoicing Information: Sales Tax Information** (Customer to complete) You may be subject to sales tax (or equivalent) unless you can provide proof of exemption. Are you exempt from sales] Yes, please attach exemption form.

] No.



Order Form for Town of Apex Offer Valid Through: 7/12/2022 Proposed by: Cassidy Soli Quote Number: Q-137515.3

Customer Signature

By signing below, Town of Apex agrees that this Order Form is subject to terms and conditions attached to this Order Form.

On behalf of Customer:
Name:
Date:
Signature



Order Form for Town of Apex Offer Valid Through: 7/12/2022 Proposed by: Cassidy Soli Quote Number: Q-137515.3

STANDARD SUPPORT PLAN

- **1. SELF-HELP RESOURCES**. Customers can take full advantage of Siteimprove self-help tools, available online via our https://support.siteimprove.com/hc/en-gb (https://support.siteimprove.com/). From that page, Customers can find links to technical documentation and knowledge base articles, discuss issues with other users in our community forums, review what's new, read technical notes, and access free webinars.
- **2. PRODUCT SUPPORT AND TRAINING**. Customers can contact Siteimprove for product support, training, and additional services by visiting our https://support.siteimprove.com/hc/en-gb. At that location, Customers can submit a support ticket 24x7 every day of the year.

Service Levels: Siteimprove will utilize commercially reasonable efforts to promptly respond to all requests. Siteimprove aspires to review and respond to at least ninety percent (90%) of all tickets and requests within three (3) Business Days. "Business Days" are defined as the days on which Customer's regional support center is open for business (see Section 3).

- **3. SUPPORT AVAILABILITY**. Siteimprove has regional support centers servicing the Americas, EMEA and APAC. https://support.siteimprove.com/hc/en-gb/articles/360002402297
- **4. SUPPORT CHANGES**. Siteimprove has the sole discretion to change the terms and conditions of the Standard Support Plan.

SITEIMPROVE INTELLIGENCE PLATFORM ("SIP") TERMS OF USE September 2021 -

v. 01.09.2021 -

1. GENERAL TERMS

- a. By accepting a Siteimprove Order Form, by paying the Subscription Fee and/or Prorated Subscription Fee specified in a Siteimprove Order Form or otherwise making use of the Included Services, the Customer agrees to be bound by these terms of use for the Included Services, including the specifications of the Siteimprove Order Form (combined the "Terms"). Furthermore, any action from the Customer specifying its wish to purchase the Included Services after having received these Terms, such as sending a purchase order, shall be considered actively consenting to these Terms.
- b. License Recipient Acceptance. If the Customer is accepting the Siteimprove Order Form as specified above on behalf of a third-party ("License Recipient"), Customer represents and warrants that it has the authority to bind the License Recipient specified in the Order Form to the Terms, and that Customer by accepting the Terms are doing that on behalf of the License Recipient.

2. INVOICING

- a. Invoicing. All invoicing details are specified in the Order Form. If changes are required to the Ship To Address after the Terms are accepted, the Customer is required to submit an Address Change Form. At least forty-five (45) days prior to the start of each Billing Frequency Period, Siteimprove will send an invoice for the Subscription Fee or a proportionate amount, if applicable.
- b. Failure to pay. Late payments may bear interest at the rate of 1% per month, or the highest rate permitted by law, whichever is lowest, from the payment due date until paid in full. Additionally, in the event that an invoice becomes overdue, Siteimprove will notify Customer by phone or email. After Siteimprove has provided notice, Customer will have five (5) business days to pay the overdue invoice. If Customer fails to make the payment by the end of the notice period, then Siteimprove reserves the right to suspend provision of the Included Services until payment has been made.
- c. Taxes. Any applicable taxes will be determined based on the laws and regulations of the taxing authority(ies) governing the Ship To Address provided by the Customer on Siteimprove Order Form.

d. Additional Services Fee. Any Additional Services Fee will be invoiced on your first applicable invoice date.

3. USE OF THE INCLUDED SERVICES

- a. Ownership. Siteimprove owns and shall remain the sole owner of all intellectual property rights vested in the Included Services created prior to or during the performance by the parties under these Terms. This ownership right includes any inventions, patents, utility model rights, copyrights, design rights, mask works, trademark rights, or knowhow, whether registered or not.
- b. Right to Use. Siteimprove grants the Customer the right to use the Included Services (the "Subscription"). The Subscription granted is worldwide, revocable, non-exclusive, non-perpetual and non-transferable. The Customer has no right to retain or to use the Included Services after termination of the Initial Subscription Term or a Renewal Term (if applicable). Customer can create an unlimited number of users to the Included Services. Customer will have access to the Included Services only for those website domain(s) specifically agreed upon with Siteimprove. This right includes updates and new releases of the Included Services, but not new modules/services/products added to the Included Services.
- c. Limitations of use. The Customer's use of the Included Services on such website(s) is subject to the agreed quantities as specified in the Siteimprove Order Form (the "Limits"). If the Customer exceeds the Limits, Siteimprove will notify the Customer of such excess use and discuss appropriate upgrades of the Customer Subscription. Subject to Section 9 below, Customer must be the owner or authorized administrator of the website(s) on which the Included Services are run. Unless agreed otherwise, the Included Services may not be run on any websites that contain sensitive information or special categories of personal data, e.g., as defined in the General Data Protection Regulation (EU) 2016/679 Article 9 or information subject to heightened regulations (e.g., HIPAA, or FERPA). Customer has no right to rent, lease, assign, transfer, sublicense, display or otherwise distribute or make the Included Services available to any third party, unless specifically stated in Section 9 (Assignability). The Included Services may not be (a) used in the performance of services for or on behalf of any third-party or as a service bureau; (b) modified, incorporated into or combined with other software, or created as a derivative work of any part of the Included Services; or (c) used for any illegal purpose. Customer may not modify, disassemble, decompile or otherwise reverse engineer the Included Services nor permit any third-party to do so except as expressly permitted by law.
- d. IP Indemnification. Siteimprove will indemnify and hold Customer harmless from all third-party claims that use of the Included Services constitutes an infringement of any third-party intellectual property right(s), unless such claim is based on Customer's wrongful or illegitimate use of the Included Services. The foregoing states the entire liability of Siteimprove and the sole

and exclusive remedy for Customer with respect to any third-party claim of infringement or misappropriation of intellectual property rights.

e. For Non-Public Website Use. Any use of the Included Services on customer intranet, log-inprotected websites, staging websites, or any other form of non-public websites ("Non-Public Websites") is subject to the obligations set out in this Section 3(e). For Siteimprove to allow that the Included Services are used on a Non-Public Website, Customer must ensure that there is an encrypted line for the secure transport of data between such Non-Public Website and Siteimprove. Customer must ensure that, to the extent necessary, or required by applicable laws, it has an appropriate legal basis for the processing of personal data for the purpose of the Included Services, and that it has the right to disclose any confidential information on the Non-Public Website. Except when expressly agreed, Customer represents and warrants that the information on the Non-Public Website is not subject to heightened regulations (e.g., HIPAA, or FERPA). Additionally, Customer must assign an account with non-administrative rights to the Non-Public Website when using the Included Services on any website behind log-in protection. In the event of any failure by Customer to adhere to the obligations set out in this section, Siteimprove may reject to perform the Included Services on the Non-Public Website. Customer expressly understands and agrees that Siteimprove and its affiliates, directors and employees shall not be liable to Customer under any theory of liability for any direct, indirect, incidental, consequential or other special damages arising out of or due to Customer's use of the Included Services if such use is in breach of Customer's obligations in this section.

4. DATA & PRIVACY

a. GDPR. With respect to obligations to data subjects under the General Data Protection Regulation (EU) 2016/679 ("GDPR"), where applicable, Customer is a "data controller" and Siteimprove is a "data processor" (as such terms are defined in the GDPR). The Included Services are designed and developed to collect and process our Customers' website content and certain operational data in relation thereto. Any personal data processed by Siteimprove when performing the Included Services is processed according to the Customer's instructions and on its behalf. To fulfill both parties' obligations under the GDPR, Customer is responsible for entering into a Data Processing Agreement ("DPA") with Siteimprove which lives up to any then-current legal standards. If the use of the Included Services on Non-Public Websites and/or websites that contain special categories of personal data has been agreed upon, the Customer ensures that the DPA reflects the processing of non-public and/or special categories of personal data. If Customer has not facilitated a DPA to be signed on the day that Customer begins to use the Included Services, the parties are deemed to have entered into Siteimprove's standard DPA available at siteimprove.com/privacy/.

b. CCPA. As between the parties, with respect to obligations to consumers under the California Consumer Privacy Act ("CCPA"), where applicable, Customer is a "business" and Siteimprove

is a "service provider" (as such terms are defined in the CCPA) and each party will be responsible for its respective obligations under the CCPA, as applicable to the Agreement. The Included Services are designed and developed to collect and process our Customers' website content and certain operational data in relation thereto. Any personal data processed by Siteimprove when performing the Included Services is processed according to the Customer's instructions and on its behalf. For more information on Siteimprove's Data Privacy & Security practices, including an optional CCPA Data Processing Agreement, visit siteimprove.com/privacy/.

- c. Data Processing of Users and Customer Contacts. Other than the processing of Customer's data under Section 4(a) and 4(b), Siteimprove collects some general usage and contact information about the users of Siteimprove's services and other contact persons provided by Customer, such as the names and emails of the Siteimprove users, for internal necessary purposes such as customer identification, invoicing, support and sharing information about Siteimprove products to Customer. A detailed description on how Siteimprove processes Customer's data under this section is available at: https://siteimprove.com/privacy/privacy-policy/. In this regard, Siteimprove will be the data controller under GDPR and business under CCPA and the Customer acknowledges and agrees that general customer and user information will be collected for Siteimprove's internal use. The Customer has the right to access, correct, modify and erase any personal data provided by the Customer to Siteimprove. To exercise these rights, contact privacy@siteimprove.com.
- d. Customer Owned Data. All data provided to Siteimprove through the use of the Included Services is and shall remain Customer property. Siteimprove does not resell any Customer owned data. Data mentioned under Section 4(a-b) will not be disclosed or transferred to any third-party unless otherwise specifically agreed. Data mentioned under Section 4(c) will only be disclosed or transferred to a third-party to the extent necessary to provide the Services. To enable Siteimprove to provide Customer with the Included Services, and subject to these Terms, Customer hereby grants to Siteimprove a non-exclusive right to use and process data provided by Customer solely in connection with Siteimprove's operation of the Included Services.

5. LIMITATION OF LIABILITY

Each party shall only be liable for direct damages. As such, each party shall not be liable to the other party for any indirect, special, incidental, or punitive damages caused by Customer's use of the Included Services, including, but not limited to, loss of data, loss of business or any other loss arising out of or resulting from a party's performance under these Terms, even if it has been advised of the possibility of such damages. Except where excluded by applicable law, a party's cumulative liability under these Terms shall not exceed the amount of the Fee. However, in no event shall a party be able to claim a limitation on its liability in the event of; i) non-compliance with obligations concerning personal data; ii) any third-party IP infringement claim, unless such

claim is based on a party's wrongful or illegitimate use of the Included Services; or iii) gross negligence or willful misconduct.

6. REPRESENTATIONS & WARRANTIES

- a. For Siteimprove. Siteimprove represents and warrants that: (i) it has the full power and authority to enter into and perform its obligations under these Terms; and (ii) the Included Services will perform substantially as described in these Terms for the Initial Term and any Renewal Term, provided that it is used in accordance with these Terms, including on the specified domains. These representations and warranties are only for the benefit of Customer.
- b. For Customer. Customer represents and warrants that: (i) it has the full power and authority to enter into and perform its obligations under these Terms; and (ii) it has full and legal right or authorization to display, disclose, transfer, assign or convey the information set forth and accessible on the websites on which the Included Services will be administered.
- c. Disclaimer. Except for the express representations and warranties listed in these Terms, each party makes no representations or warranties of any kind, whether express or implied. No oral or written information or advice given by either party will create a representation or warranty. Specifically, Siteimprove makes no representations or warranties with regard to the use of the Included Services for the purpose of ensuring Customer's compliance with any laws or regulations.

7. TERMINATION OF SERVICES

- a. Termination of Auto-Renewing Subscriptions. During the Initial Subscription Term or any subsequent Renewal Term (if applicable), either party may cancel renewal of the Subscription by giving at least ninety (90) days written notice to the other party prior to the start of a Renewal Term.
- b. Termination with Cause. Without affecting any other right or remedy available to it, either party may terminate the Subscription with immediate effect in the event of a material breach by the other party. Material breach shall include: (i) any violation of the terms of Section 2(b), 3(b-e), 4(c-d), 6(a-b), 8, and 9; (ii) any other breach that a party has failed to cure within fourteen (14) calendar days after receipt of written notice by the other party; (iii) an act of gross negligence or willful misconduct of a party; and (iv) the insolvency, liquidation or bankruptcy of a party.
- c. Reimbursement. In case of Customer termination under Section 7(a) or Siteimprove termination under Section 7(b), Customer remains liable for payment of all Fees owed for the current Subscription Term and will not be entitled to a credit or refund. In case of termination by

Siteimprove under Section 7(a), Customer is entitled to a prorated refund corresponding to the remaining period of the Initial or Renewal Term, whichever is applicable.

8. CONFIDENTIALITY

Siteimprove acknowledges that they have been informed by the Customer that the Customer is required by North Carolina law to disclose "Public Records" as the term is defined by N.C. Gen. Stat. §132-1, upon request. All information disclosed to the Customer by the Siteimprove which is subject to that definition and whose disclosure is not otherwise protected by law will be released by the Town upon request as provided by N.C. Gen. Stat. §132-6. To the extent permitted by North Carolina Law, each of the parties agrees to (a) maintain in confidence any non-public information of the other party, whether written or otherwise, disclosed by the other party in the course of performance of these Terms ('Confidential Information'); (b) use its best endeavors to protect Confidential Information in accordance with the same degree of care with which it protects its own Confidential Information; and (c) not disclose the other party's Confidential Information to any third party, except in response to a valid order by a court or other governmental body or as required by law. The receiving party will promptly give notice to the disclosing party of any disclosure of the other party's Confidential Information.

9. ASSIGNABILITY

These Terms are binding upon and will only benefit the parties. Except as otherwise expressly provided in these Terms, neither party may assign, transfer, convey or encumber these Terms or any rights granted in them without the prior written consent of the other party (such consent not to be unreasonably withheld). Notwithstanding the foregoing, a party shall have the right to assign these Terms to its Affiliates or to a successor entity in the event of a merger, consolidation, transfer, stock purchase, provided the assignee is subject to all obligations under these Terms.

10. LAW & DISPUTE RESOLUTION

a. For Customers in Australia, EEA, Switzerland, Canada & the United States. These Terms and any dispute in relation to the Included Services, or the Customer's use hereof, will be governed by and construed in accordance with the laws of the country, state or province, whichever is applicable, where the Customer is located as specified in the Ship To address of the Order Form (the "Governing Territory"). In the event of any lawsuit or proceeding arising out of or related to these Terms, the courts of the Governing Territory will have exclusive jurisdiction.

b. For Customers in other territories. These Terms and any dispute in relation to the Included Services, or the Customer's use hereof, will be governed by and construed in accordance with the laws of the country where the Siteimprove entity specified in the Order Form is located (the "Governing Territory"). In the event of any lawsuit or proceeding arising out of or related to these Terms, the courts of the Governing Territory will have exclusive jurisdiction.

11. RELATION TO OTHER DOCUMENTS

These Terms constitute the entire agreement between the parties and supersede any prior communications, commitments, or agreements, oral or written, with respect to the subject matter of these Terms. Any other standard or boilerplate terms and conditions included in any document provided by one party to another (e.g., click-wrap agreements and purchase orders) are not to be considered agreed upon and will not be binding on either party. Any changes or modifications to these Terms must be in writing and signed before taking effect.

12. LANGUAGE VERSIONS.

In the event of any discrepancy between the English version of these SIP terms of Use and any other language translation, the English version prevails.

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Jeffrey Maynard, Interim Fire Chief

Department(s): Fire

Requested Motion

Motion to approve a 3-year agreement with Wake County to provide Fire Protection Services in the unincorporated areas of the district (Hipex District) and authorize the Town Manager to execute the agreement on behalf of the Town.

<u>Approval Recommended?</u>

Yes

Item Details

This is a three year Fire Protection Agreement between Wake County and the Town of Apex which enables the Apex Fire Department to provide services in unincorporated Wake County for agreed upon compensation through the cost-share program.

Attachments

• Municipal Fire Protection Agreement FY2023-2025



CONTRACT ROUTING CONTROL SHEET

Routing Order: (1) Department Director, (2) Purchasing and Contract Manager (3) Legal, (4) Risk Manager, (5) Vendor for Signature (6) Finance Director, (7) Town Clerk, (8) Town Council/Town Manager

EVERY SECTION MUST BE COMPLETED

DEPARTMENT: Fire	
Department Contact Person for Contract: Keith McGee	Extension: 1030
Contractor/Vendor Name and address: Wake County	
Contractor/Vendor Phone: Contractor/Vendor Contact Persor	1: Diana McBride, 919-856-6490
Purpose of Contract: Fire Protection Agreement for Apex Fire to provide fire pro-	otection services in unincorporated Wake County.
Amount: Varies by year Budget Code: Revenue	
Type of Contract: ☐ New ■ Renew ☐ Amendment	Exhibits/Attachments included: ■ Yes □ N/A
Department Director's Signature: Keith McGee	Digitally signed by Keth McGes Date: 2022.05.11.1307.32-0400 Date: 5/11/2022
All Contracts should be sent to the Purchasing and Co	e i
whether the contract will need to go to t	he Legal Department for review or not.
LEGAL	N by Christophar Walch
	by Christopher Welch 11 13:12:59 -04000 Date: 05/11/2022
Comments: N/A	
■ Town Council approval required ☐ Town Manager at	ithorized to approve
\square N/A – Purchasing and Contract Manager to forward	
☐ Other Approvals required/permitted:	
RISK MANAGER	
Reviewed by and approved:	Date:
□ N/A – Purchasing and Contract Manager to forward	Datc.
☐ Insurance specifications meet requirements.	
☐ Insurance specifications have been revised.	
A pre-project safety review between the contractor and co	·
Return to Department Contact Person to have contract signed	, , , , , , , , , , , , , , , , , , , ,
Obtain a copy of Certificate of Insurance that includes the pr	oper coverage and shows the Town as an additional insured
FINANCE DIRECTOR	
☐ Sufficient funds are available in the proper category to pa	
☐ This contract is conditioned upon appropriation by the To	
☐ A budget amendment is necessary before this agreement i	s approved.
☐ A budget amendment is attached as required for approval	of this agreement.
Finance Director:	Date: / /20
TOWN CLERK	
	Contractor: YES NOReturn to Department
Council Action Required:- forward to Town Manager Agend	la Date:/20
Approved by Council: \square YES \square NO	•
TOWN MANAGER	
This document has been reviewed and approval is recommend	ded by the Town Manager: \square YES \square NO
T M	D / // // // // // // // // // // // //
Town Manager:	Date: / /20
After approval and signatures, contrast will be sent to the De-	sehesing and Contracts Manager It It to It It
After approval and signatures, contract will be sent to the Pu Department Contact Person for Department to administer.	renasing and Contracts Manager who will return it to the
Scan signed contract to Department contracts folder (include	Routing Sheet and copy of Certificate of Insurance)

FIRE AGREEMENTS - MUNICIPAL

Department: 51 - Fire Services

Vendor: VC0000001131 - TOWN OF APEX

Description of Services: FY23 - FY25 Fire Protection Agreement

BOC Date Approved: 5/2/2022

Contract End Date: 6/30/2025 **Contract Start Date:** 7/1/2022

Max Amount Payable: \$1,328,609.00

Funding Source(s):

Federal X County Grants Other None State

Acct Template Object Description Amount \$1,328,609.00 2023 51F251 2451 Fire Protection Agreement

Competition:

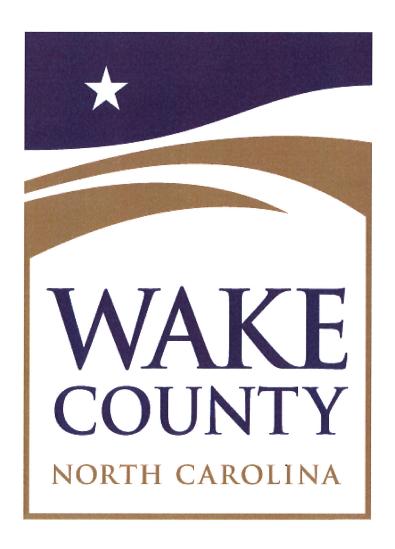
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RFP#: Next Competition: NOT APPL Year Last Competed: NOT APPL

Person Responsible for Monitoring the Contract Performance Requirements: Joe Vindigni

MUNICIPAL FIRE PROTECTION AGREEMENT

Town of Apex



FY2023 - FY2025

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Contract Number:

EC00000000008493

(Please reference this number on your invoices for payment)

STATE OF NORTH CAROLINA COUNTY OF WAKE

THIS AGREEMENT, made and entered into this the 1st day of, July 2022, by and between WAKE COUNTY, hereinafter referred to as the "County", and the Town of Apex hereinafter referred to as the "Town";

RECITALS:

- A. WHEREAS, North Carolina General Statutes §69-25.5 provides that the board of county commissioners may provide for fire protection in a fire protection district by contracting with any incorporated city or town; and
- B. WHEREAS, North Carolina General Statutes §153A-233 additionally provides that a county may contract for fire-fighting or prevention services with counties, cities, or other units of local government, and may for these purposes appropriate funds not otherwise limited as to use by law;
- C. WHEREAS, the Town agrees to contract with Wake County to provide fire protection services; and
- D. WHEREAS, North Carolina General Statutes §159-13 et seq. provides that the county budget ordinance may be in any form that the Board of County Commissioners of any County deems most efficient in enabling it to make the fiscal policy decision embodied therein and provides for a fund for each special district whose taxes are collected by the county; and
- E. WHEREAS, the Town is a municipal corporation authorized to establish, organize, equip, maintain, and furnish fire protection services and other services authorized by its charter to the citizens of its district pursuant to N.C.G.S. 160A-291; and
- F. WHEREAS, the Hipex Fire Insurance and Response District(s) of Wake County have boundaries defined by the most current description on file maintained by the Wake County Geographic Information Services in the Department of Fire Services Office, as illustrated by the map contained in Appendix A; and
- G. WHEREAS, the Town has secured equipment, land and buildings for the operation of Fire Station(s); and
- H. WHEREAS, Wake County presently levies and collects a special tax and is responsible for appropriating the funds derived there from for fire protection in Wake County; and

I. WHEREAS, the County and Town desire to enter into this Agreement for the Town to furnish fire protection for and within the described District.

AGREEMENT

NOW THEREFORE, in consideration of the mutual promises contained herein and other good and valuable considerations, the receipt of which is hereby acknowledged, the parties hereto contract and agree as follows:

Section 1. RECITALS INCORPORATED

The recitals above are part of this Agreement and incorporated herein by reference.

Section 2. USE AND AMOUNT OF SERVICE TAX LEVIED

Wake County agrees to make funds, equipment, facilities and/or personnel available to the Town, from the proceeds of the tax levied from the special fire protection service tax district. The amount of such service tax levy shall be determined by the Board of the County Commissioners from year to year. The County will collect the funds from the special tax as may be levied as provided by law. For each fiscal year, the funds provided from the service tax district shall be based on the needs projected in the budget request jointly submitted by the Town and the County staff to the County Commissioners and as approved by and deemed necessary by the County Commissioners for furnishing fire protection and emergency services within the District.

Special fire district tax funds levied and collected by the County and paid to the Town by the County to provide fire protection pursuant to G.S. 69-25.5 shall be used solely for fire department operations, fire protection and emergency services in the Hipex Insurance and Response Districts as shown in Appendix A and other areas of response as dispatched and to meet the standards established by this Agreement.

Section 3. ACCOUNT MAINTAINED FOR RECEIPTS FROM SERVICE TAX

A separate account shall be maintained by the County for the receipts from the special tax levied for the service tax district. Out of this account:

3.1. The County will pay the retained fees for system-wide services provided in the unincorporated areas of the County, including forestry, fire training, communications (including WECO), County computer-aided dispatch fees for County areas no matter dispatched from Raleigh-Wake or Cary, 800 MHZ radio system and hazardous materials response, and any other fees that may be recommended by the Wake County Fire Commission, herein referred to "Fire Commission" and approved by the County.

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3.2. The County will pay the approved total appropriations for the Town, as calculated according to the cost share methodology in Section 16, in equal monthly payments to said Town in the third week of each month, provided that prior to and as a condition of payment, the Town has submitted such funding request to the Fire Commission in a line item budget format for the Fire Commission's review and recommendation, and the County's Board of Commissioners has reviewed and approved said funding request.

Section 4. SERVICE TAX REVENUES IN EXCESS OF APPROPRIATIONS

Any fire protection service tax district revenues collected annually in excess of the approved total appropriations and retained County fees shall be maintained in the separate account established by the County. The Wake County Fire Commission shall make recommendations to the County for distribution of these revenues. The Wake County Board of Commissioners will issue final approval of distribution.

Section 5. SERVICES FURNISHED BY THE COUNTY

The County shall furnish the following services to the contracting Town for the term of this Agreement:

- 5.1. such vaccinations as are deemed necessary for all full time, part time and volunteer members of the Town's fire department by the County's contracted medical provider in order to maintain such fire protection or special services throughout the County.

 Reimbursement shall be for the cost of the exam multiplied by the Town's Final Fiscal Year Cost Share Percentage (FFYCSP) as determined in Section 15
- 5.2. fire investigation and emergency scene assistance services as requested, and
- 5.3. annual Fitness for Duty medical examinations for Town fire department's fire suppression personnel
 - 5.3.1. Fitness for duty medical exams shall follow NFPA 1582 standards and evaluate the employee's physical ability to perform the essential functions of their job classification. Exams must conform to the Wake County Medical Exam Guidelines or best industry standards as found on the Wake Fire Services website under general documents. Cost for exams, provided by the County's contracted medical provider, shall be paid by the Town with reimbursement provided by the county. Reimbursement shall be for the cost of the exam multiplied by the Town's Final Fiscal Year Cost Share Percentage (FFYCSP) as determined in Section 16
 - 5.3.2. Towns shall have the option of obtaining fitness for duty medical exams for their fire suppression personnel through the department's own medical provider.

- 5.3.3. In such event, physical exam costs eligible for reimbursement shall not exceed the County exam cost, as established through bid process. The actual reimbursement paid by the County shall equal the qualifying exam cost multiplied by the Town's Final Fiscal Year Cost Share Percentage (FFYCSP) as determined in Section 16.
- 5.3.4. Exams provided by Town fire department's medical provider must conform to the Wake County Medical Exam guidelines as found on the Wake County Fire Services website under general documents.
- 5.3.5. To be eligible for reimbursement, Town shall follow Wake County Fire Tax District Medical Program guidelines as outlined in the Wake County Medical Exam guidelines.

Section 6. SERVICES FURNISHED BY TOWN

The Town will furnish fire protection and other emergency services as determined and approved by the Town's governing body and as contracted for by the Board of Commissioners within the District and shall provide the necessary equipment, personnel and those things necessary for furnishing such protection in the District. The services shall be in accordance with minimum standards set forth in this Agreement and all future amendments adopted in accordance with Section 27 of this Agreement. The Town shall furnish said fire protection without charge to all persons and property located in the District in an efficient and workmanlike manner. This provision shall not prohibit the Town from entering into contracts with the Federal, State or local governments, or utility companies for the provision of fire protection services exceeding the scope of this Agreement for a fee. Wake County Fire Services Director or designee approval is required to utilize County Assets outside of the County for any purposes other than mutual aid and automatic aid responses or other agreements. This requirement shall not prohibit the Town from billing for certain services, including but not limited to inspection services, false alarm responses, and hazardous materials mitigation responses, based on a fee schedule or other cost recovery program, provided that such fee schedule has been approved by the governing body.

Section 7. BOOKS AND RECORDS

The County may inspect the financial books and records of the Town at reasonable times during regular business hours of the Town. The Town agrees that it will supply such financial books, records, staff and information or verification as may be reasonably requested by the County. The Town shall maintain an accounting system which provides adequate documentation of all of its receipts and disbursements including, but not limited to, those related to the expenditure of funds subject to this Agreement at a minimum as required by law.

Section 8. ANNUAL REPORT

The Town shall provide to the County an annual audit and accompanying management letter prepared in accordance with generally accepted accounting principles and generally accepted auditing standards

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for the preceding fiscal year as soon as the Town's audit is completed by the Town's auditor, according to the legally established deadlines for municipalities.

In the event that the audit, management letter or self-reporting reveals any reportable and/or material issue(s) with regard to accounting processes; compliance with laws, regulations, or agreement provisions; fraud or abuse; or other financial mismanagement, the Town shall provide a written statement to the County that contains an explanation of each such issue and an action plan (with implementation timetable) for resolving each such issue, and shall provide periodic reports to the County on progress made in resolution of each issue.

Should the Town fail to submit its audit report, unaudited financial statements, and/or any requested follow up documentation to the County within 30 days from time of submittal to the LGC pursuant to G.S. 159-24., the County may suspend all funds immediately until the audit, financial statements, or documentation is delivered as set forth above, except that the County's Director of Finance may grant a reasonable submittal extension if the Town is unable to deliver the audit, financial statements or documentation for reasons beyond the control of the Town.

Section 9. DECISION MAKING PROCESS OPEN TO PUBLIC

The Town acknowledges that it is a public body subject to the provisions of N.C.G.S. Chapter 143, Article 33C and agrees to comply with all provisions of said statute in conducting any decision-making process required by the terms of this Agreement.

Section 10. NON-COMPLIANCE BY TOWN

If the County has a reasonable belief that the Town has violated any provision of this Agreement, the County will provide the Town written notice of the possible noncompliance and initiate an audit to verify compliance. If the County determines that the Town has failed to render the fire protection and services as provided in this Agreement or has otherwise operated in a manner that violates the provisions of this Agreement, then the County shall give the Town ninety (90) days advance written notice that the funds allocated are subject to suspension and shall additionally provide a list of the improvements needed for compliance. If during the said ninety (90) day period, the Town makes improvements satisfactory to the County, no suspension shall occur. During the ninety (90) day period, the Town is not relieved of their responsibility to provide fire protection and emergency services in a manner otherwise consistent with the terms of this Agreement. If after the ninety (90) period, the Town has failed to make satisfactory improvements to comply with this Agreement, then the County may suspend any or all of the monthly payment of funds allocated to the Town pursuant to Section 2 herein.

Section 11. AUTHORITY TO MAINTAIN DELIVERY OF SERVICES

In the event that the Town's governing body determines that the Town is unable to reliably deliver the services described herein, for reasons including, but not limited to, resignation or withdrawal of volunteer, part-time or full-time members or other withdrawal or loss of ability to deliver services, the

Town shall immediately so notify the County, at which time the Town authorizes the County or its agents to suspend the monthly payment to the Town and the Town authorizes the County, as limited by this Section, to use such Town facilities and equipment as are necessary to maintain the delivery of fire services in the Town's contracted county unincorporated service area (to the extent the Town exercises operational control and/or ownership interest over such facilities and equipment), so that an interruption of the Town's ability to deliver fire services will not interfere with the standards of fire protection service provided for in this Agreement. Notwithstanding anything to the contrary in this Section, the County and Town recognize and agree that the Town has an obligation to continue to provide fire protection services within the Town's corporate limits and that existing Town facilities and equipment are necessary and intended for such purposes and therefore no use of Town facilities or equipment by the County shall interfere with, hinder, impede, prevent, or compromise the Town's ability to continue to provide fire protection services with the Town's corporate limits even if the Town ceases to provide services to the county unincorporated service area. The Town's fire chief shall have sole discretion in determining the use and operation of Town facilities and equipment during any period in which the Town is not providing services to the county unincorporated area.

Should such use become necessary, upon the request of the Town, the County and the Town's governing body will jointly select an independent third-party trustee who will regularly evaluate the County's use of such Town facilities, equipment and resources on behalf of the Town. The Wake County Fire Tax District and the Town will be responsible for paying the trustee fees associated with the study. The Town's cost will be based on the current cost share amount at the time of the request. During the time that the Town is unable to provide services, the governing body of the Town shall cooperate with the Fire Commission. The Fire Commission shall determine if the Town is able to resume delivery of reliable service.

Section 12. FINANCIAL COMPLIANCE

The Town acknowledges that it is a local government subject to the provisions of N.C.G.S. Chapter 159, Article 3, "The Local Government and Fiscal Control Act" and agrees to comply and conform with all provisions of said statute in conducting any budget and financial activities required by the terms of this Agreement.

Section 13. DISCONTINUATION OF TOWNS FIRE OPERATIONS

In the event of voluntary (e.g. reorganization or restructuring of services) or involuntary (e.g. bankruptcy or failure to appropriate funding) of the Town's Fire Operations, the Town's inability to provide fire protection services to the district, or the termination of this Agreement, all assets and equipment that have been acquired using solely County funds shall be returned to the County.

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13.1. Real property (including equipment) owned by the Town that was acquired using partial County funding shall either be sold, and the proceeds distributed between the Town and County based upon the original funding Agreement, or the Town shall pay the County an amount equal to their share (based upon the proportions of the original funding Agreement) of the fair market value of the property, which shall in no event be less than the tax value of the property.

Section 14. TOWN'S USE OF FUNDS

The Town shall use the funds subject to this Agreement in accordance with the annual Department Budget. This budget may be amended by the Town within the approved total appropriations made available by this Agreement, provided that all appropriations must be used for furnishing fire protection within said district, and amendments providing for any expenditure that establishes a new operating expense that will extend beyond the current fiscal year shall conform with the requirements of N.C.G.S. Chapter 159, Article 3 "The Local Government Budget and Fiscal Control Act and the requirements of N.C.G.S. Chapter 143, Article 3 "Purchases and Contracts", and N.C.G.S 143 Article 8 "Requirements for Certain Building Contracts" which apply to the Town as a local unit of government.

Section 15. TOWN'S BUDGET PREPARATION

The Town agrees that it shall continue to use the County's electronic financial reporting method, furnished by Wake County for budget preparation and presentation purposes only, based upon the County's "chart of accounts" which provides accurate documentation of all of its receipts and disbursements, including (but not limited to) those related to the funds subject to this agreement, and the Town and County will use the product(s) of that reporting system in the development and analysis of the budget for FY 2023 and subsequent fiscal years.

Section 16. COST SHARE METHODOLOGY

- 16.1. Annually, as part of the budget process, the County shall calculate the percentage of Town Fire Department's annual operating budget of which the County shall base the Town's annual fiscal year's appropriation on. At Town's request, the County agrees to provide reasonable substantiation and additional financial information to permit the Town to audit the County's cost share calculation. The Town and County shall communicate prior to budget submission on potential budget increases outside of uncontrollable expenses.
- 16.2. The cost share percentage (CSP) shall be calculated by using the ratio of County versus Municipal portions of the following elements:

- 16.2.1. <u>Geographic area (GA)</u> geographic area (in square miles) of the fire insurance district in relation to the geographic area of the municipal corporate limits.
- 16.2.2. <u>Total property valuation (TPV)</u> property valuation, as determined by Wake County Tax Administration Department, of the fire insurance district in relation to the property valuation of the municipality.
- 16.2.3. <u>Total heated square footage (THSF)</u> total heated square footage of structures within the fire insurance district in relation to the total heated square footage within the municipality.
- 16.2.4. <u>Fire Department service demand (FDSD)</u> The workload (calls for service) of the fire department within the fire insurance district in relation to the fire department's workload within the municipality.
- 16.2.5. Total population (TP) population as determined by the Wake County Department of Community Services. The population estimates are done by isolating "residential units" from the wake county parcel data and selecting the total parcels for each fire insurance district. The total units are summed then multiplied by the occupancy rate and average person per household based off of US census information.
- 16.3. Each data element shall carry the following weight in calculation of the overall cost share percentage:
 - 16.3.1. Geographic area 7.5 %
 - 16.3.2. Total property valuation 20.0%
 - 16.3.3. Total heated square footage 7.5%
 - 16.3.4. Fire Department service demand 35.0%
 - 16.3.5. Total population 30.0%
- 16.4. Data for each element shall be derived from the following sources on January 1 of each calendar year.
 - 16.4.1. <u>Geographic area</u> Wake County GIS shape file of municipal corporate limits and fire insurance district (current as approved by NCDOI)

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- 16.4.2. Total property valuation Wake County Department of Tax Administration
- 16.4.3. Total heated square footage Wake County Department of Tax Administration
- 16.4.4. Fire Department service demand
 - 16.4.4.1. Annual dispatch incident data from Raleigh Wake Emergency Call Center (RWECC) and Town of Cary Emergency Call center (if needed) for last completed calendar year.
 - 16.4.4.2. Responses for out-of-county incidents shall not be included in cost share calculations
 - 16.4.4.3. Incident responses to any county unincorporated region shall be counted as a "county" response (Responses to the Town of Wendell shall be credited as a "county" response)
 - 16.4.4.4. Incident responses within this contracted cost shares municipal boundaries shall count as a "municipal" response. Responses to other municipal boundaries shall not be counted as a municipal response to departments providing auto or mutual aid. .
- 16.4.5. Total population Wake County Department of Community Services
- 16.5. Calculation of **Final Fiscal Year Cost Share Percentage** (FFYCSP) shall be the based on a rolling average of the last three calendar year's CSPs. Fiscal year appropriations shall be based on the approved Wake County Fire Department municipal operating budget multiplied by the FFYCSP.
- 16.6. Municipal staffing levels funded by county cost share shall be based on approved Wake County Fire Commission staffing levels. County cost share funded municipal fire positions exceeding approved staffing levels but in existence prior to 2017 shall be grandfathered. The funding of additional staffing levels will be consistent with data driven reports that are in accordance with Wake County Long Range Plan Standards & Guiding Principles for on scene personnel in the unincorporated areas of Wake County based on response minimums and Effective Response Force as required. Staffing levels unfunded by Wake County that can be shown to contribute to the arrival of the required staffing levels and Effective Response Force, should be considered for cost share funding first prior to adding additional staffing levels for the Municipal Department. Requested Staffing expansions that address other system needs included but not limited to, geographic coverage, service demand workload, and response time

- goals that are consistent with Wake County Standards & Principles should be considered for funding by Wake County Fire Services, Wake County Fire Commission and Wake County Board of Commissioners.
- 16.7. Wake County Fire Services and Emergency Management along with Wake County Budget & Management Services shall meet with Town representatives during the budget process to properly vet requested budget Increases that are considered controllable or new operational expenditures outside of additional staffing requests and/or items that are a part of the Wake County Fire Tax District Capital Replacement program. Uncontrollable budget increases such as, but not limited too; utility increases, fuel increases, insurance increases, retirement system changes, etc. shall be approved based on documentation provided. If the total submitted budget is below the County's modeled target base (5% increase based on previous fiscal year operating appropriation), the associated funding requested will be included in the Fire Tax District operating budget for consideration. For expansions that cause more than a 5% increase to the total budget submitted, the County and Municipality must agree to the expansion. All budget increases are ultimately at the discretion of the recommending body of the Wake County Fire Commission and contingent upon approval of the Wake County Board of Commissioners.
- 16.8. The calculated FFYCSP shall be applied to the municipal fire department's operating budget, as reviewed and approved by Wake County Fire Services. Items excluded from cost share calculations include:
 - 16.8.1. 800 MHz Radio costs
 - 16.8.2. Computer Aided Dispatch costs (RWECC or Cary Dispatch)
 - 16.8.3. NC Forestry Wildfire Prevention costs
 - 16.8.4. Tone and Voice Pager Maintenance costs
 - 16.8.5. Hazardous Materials Response Program costs
 - 16.8.6. RWECC Dispatch Service costs
 - 16.8.7. Mobile Data Terminal (MDT) connectivity fees
 - 16.8.8. Target Solutions Base Module

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16.8.9. First Due Pre-plan Module

- 16.9. Cost sharing of Capital purchases
 - 16.9.1. The county provides for the following cost sharing of municipal capital expenditures:
 - 16.9.1.1. Firefighter Personnel Protective Equipment (PPE) The county utilizes an RFP process to obtain bid prices for PPE purchases. PPE purchased by the Town will be reimbursed up to the current Wake County PPE bid price multiplied by the Town's FFYCSP according to the established Wake County replacement schedule.
 - 16.9.1.2. Self-Contained Breathing Apparatus (SCBA) The county utilizes an RFP process to obtain bid prices for SCBA purchases. SCBA purchased by the Town will be reimbursed up to the current Wake County SCBA bid price multiplied by the Town's FFYCSP according to the established Wake County replacement schedule.
 - 16.9.1.3. Thermal Imaging Cameras (TIC) The county utilizes an RFP process to obtain bid prices for TIC purchases. TICs purchased by the Town will be reimbursed up to the current Wake County TIC bid price multiplied by the Town's FFYCSP according to the established Wake County replacement schedule.
 - 16.9.1.4. Cardiac Defibrillators (Defib) The county utilizes an RFP process to obtain bid prices for Defib purchases. Defibs purchased by the Town will be reimbursed up to the current Wake County Defib bid price multiplied by the Town's FFYCSP according to the established Wake County replacement schedule.
 - 16.9.1.5. Large firefighting vehicles (LFFV) The county utilizes an RFP process to obtain bid prices for LFFV purchases. LFFVs purchased by the Town will be reimbursed up to the current Wake County LFFVs bid price multiplied by the Town's FFYCSP according to the established Wake County replacement schedule.
 - 16.9.1.6. Small firefighting vehicles (SFFV) The county utilizes an RFP process to obtain bid prices for SFFV purchases. SFFV purchased by the Town will be

- reimbursed up to the current Wake County SFFV bid price multiplied by the Town's FFYCSP according to the established Wake County replacement schedule.
- 16.9.1.7. Facility renovations and repairs The county will reimburse the Town for facility renovations and repairs which have been recommended by the Wake County Fire Commission and approved by the Wake County Board of Commissioners in the annual budget process. Reimbursement shall be the actual cost of the renovation/repair multiplied by the FFYCSP.
- 16.9.1.8. Mobile Data Terminals The County will communicate with the Town and identify replacement cycles for all associated equipment to operate Mobile Data Terminals. Wake County will invoice the Town for its cost share portion of the replacements

16.9.2. New station construction

- 16.9.2.1. Wake County cost share participation on a new municipal fire stations shall be considered based on the Fire Commission adopted policies and funding matrix adopted in November of 2020;
- 16.9.2.2. Wake County's cost-share financial obligation in support of a new facility will be paid in annual installments of no less than 10 years to the municipality on a schedule that coincides with the terms of the loan
- 16.9.2.3. Total funding provided by Wake County as a whole should never exceed 49% of the total construction project cost
- 16.9.2.4. A funding "cap" equal to the municipality's cost-share percentage should be maintained
- 16.9.2.5. A deduction equal to the weighted total for county "area" in the approved cost share metrics should be applied to the total funding amount when significant response improvements are not realized in the county
- 16.9.2.6. Any station rebuild or relocation shall not create district outside of any departments 5-mile response boundaries
- 16.9.2.7. The approval of the Wake County Board of Commissioners is required for all new station construction involving cost share participation by Wake County.

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Section 17. INSURANCE

The Town shall obtain and keep in force during the term of this Agreement and any subsequent renewals of this Agreement the following minimum insurance coverage, providing the Wake County Finance Department with a certificate of insurance upon each policy renewal. Insurance companies must be authorized to do business in North Carolina and have an AM Best rating of "A-/VII" or better; or have reasonable equivalent financial strength to the satisfaction of Wake County's Finance Department. Coverage shall be maintained continuously during the term of this agreement. Any request for consideration of alternate insurance coverage must be approved by Wake County PRIOR TO final execution of this Agreement.

- 17.1. Worker's Compensation, covering both regular employees and volunteers, with minimum limits for Coverage A: Statutory for State of North Carolina, and Coverage B Employers Liability: \$100,000 each accident/\$100,000 disease each employee/\$500,000 disease.
- 17.2. Commercial General Liability, Including Medical Malpractice/Errors and Omissions, with minimum limits of \$1,000,000 per occurrence or incident, including contractual liability.
- 17.3. Commercial Auto Liability, with minimum limits of \$1,000,000 per accident for bodily injury liability and property damage, including coverage for owned, hired, and nonowned vehicles.
- 17.4. Auto Physical Damage Coverage for any vehicle, including permanently attached equipment, listed by the Fire Department on the Fire Tax District replacement schedule, regardless of whether owned by County or Town. Each vehicle shall be insured on an Agree Value basis. Values will be provided by Wake Fire Services at the end of each calendar year. Wake County shall be included as Loss Payee for any County-owned or leased vehicle used in the provision of agreement services; the certificate of insurance must list County-owned vehicles. For the purpose of this section, "Agreed Value" is the value agreed upon by the insured and the insurer at the beginning of the policy period but may be amended by endorsement.
- 17.5. Portable Equipment Coverage for equipment used in the provision of agreement services. For any equipment not insured at replacement cost coverage, Town agrees

- that adequate resources exist to cover any difference between the cost to replace and insurance proceeds in the event of a loss.
- 17.6. Management/Public Officials Liability, with minimum limits of \$1,000,000 per claim and \$2,000,000 aggregate.
- 17.7. Umbrella or Excess Liability, with minimum limits of \$2,000,000, extending coverage over the underlying Employer's Liability; General Liability including Medical Malpractice/Errors and Omissions Liability; Auto Liability; and Management/Public Officials Liability. There shall not be any "drop down deductibles" in areas where underlying coverage is not required but the Umbrella Policy provides coverage.
- 17.8. Fidelity/Employee Dishonesty Coverage, covering all employees and volunteers, with limits not less than \$100,000.
- 17.9. Wake County shall be included as additional insured on the General Liability, including Medical Malpractice/Errors and Omissions; Auto Liability, Management/Public Officials Liability; Umbrella Liability; and loss payee on any policy covering vehicles or other property owned by Wake County or where Wake County has funds at risk.
- 17.10. Claims Made Coverage: Any claims made policy must include either 1. a retroactive date prior to or equal to the effective date of this agreement, or 2. full prior acts coverage. If any policy written on a claims made basis is canceled or non-renewed, it must be replaced with another claims made policy with the same retroactive date as the canceled or non-renewed policy. If this agreement is terminated and not renewed, extended reporting period ("tail") coverage must be purchased and maintained for a period of three years beyond the date of termination. The duty to provide extended coverage as set forth herein survives the effective dates of this Agreement.

Section 18. INDEMNIFICATION

To the extent permitted by N.C. law, the Town shall indemnify and save harmless Wake County from any and all liability and expenses including attorney's fees, court costs, and other costs incurred by Wake County which are caused by the negligence or willful misconduct of the Town, its agents, or employees, provided that such liability arises out of acts for which any defense of governmental, statutory, or common law immunity is not available. The indemnification provided for herein shall not be construed as a waiver of any applicable defense of governmental, statutory, or common law immunity, and shall not prevent the Town from asserting any defense of such immunity; provided that if a court of competent jurisdiction determines that no such immunity applies, then the indemnity provided for herein shall apply.

Section 19. INSURANCE SERVICES OFFICE, INC. RATING

The Town shall make a good faith effort to maintain its current rating, or better, with the North Carolina Department of Insurance, and Insurance Services Office, Inc. The Town shall continuously comply with all applicable laws, ordinances and regulations. Cases in which a Town's fire operation loses or receives a reduced rating will be examined by the Wake County Department of Fire Services. The Wake County Director of Fire Services shall make a report to the Wake County Fire Commission containing recommendations for corrective action.

In the event the Town's fire operation ISO rating falls below a Class 6 public protection classification for fire insurance grading purposes in contracted unincorporated areas, the Town shall prepare and submit to the County a plan to obtain a minimum of a Class 6 public protection classification, such classification to be in effect no later than July 1, 2022. If the Town has a public protection classification equal to or better than a Class 6, the Town is not required to downgrade to a Class 6.

The Town agrees to implement said plan after its completion subject to availability of funds as recommended by the Fire Commission and approved by the Town's governing body.

The Wake County Board of Commissioners reserves the right to alter or merge insurance district boundaries in their sole discretion. The Department of Fire Services will notify the Town when considering insurance district boundary changes. The Town agrees to cooperate with Wake County Fire Services in developing and implementing any County Commission approved insurance and response district changes. Any changes which occur during the life of this agreement shall be identified in an amended insurance and response area map to be attached in Appendix A.

Section 20. STANDARDS OF PERFORMANCE

The Town shall furnish fire protection and emergency services in a professional, efficient and workmanlike manner, in particular so as to meet the requirements of and comply with rules and regulations of the North Carolina Department of Insurance, Insurance Services Office, Inc., Article 11, Chapter 153A of the North Carolina General Statutes, Article 14, Chapter 160A of the North Carolina General Statutes, and other pertinent federal, state and County laws, regulations and standards. The Town agrees to participate jointly with the County in development and implementation of countywide fire service system performance standards through the Fire Commission including (but not limited to) staffing, turnout time, response time, fire and emergency-event outcomes, customer satisfaction and dissatisfaction, documentation consistency and compliance with standard operating procedures.

The following minimal standards of performance are agreed to by the County and the Town and are a part of this agreement:

- 20.1. STAFFING ON SCENE: The Town shall have adopted standard operating guidelines that are in line with the Wake County Long Range Plan Standards & Guiding Principles that addresses the appropriate number of firefighters needed on all types of fire calls. A current copy of the Town's guideline shall be made available to Wake County Department of Fire Services upon request.
- 20.2. AUTOMATIC AID AGREEMENTS: The Town shall provide automatic aid service for all calls for service as documented in Appendix C. Each fire department shall participate in countywide automatic aid through the quickest unit response program. Appropriate units will be dispatched based on quickest response as configured in computer aided dispatch system and automatic vehicle location. Fire stations that are not continuously staffed on a 24 hour a day / 7 day a week basis may or may not participate in quickest unit response inside a municipality's corporate limits.
- 20.3. MUTUAL AID AGREEMENTS: The Town shall cooperate and participate in the most current Wake County Mutual Aid system plan. The Raleigh Wake Emergency Communication Center (RWECC) and Town of Cary Emergency Call Center will automatically dispatch the nearest mutual aid department after failure in 2 minutes and 30 seconds of the initially dispatched department to acknowledge the call. This shall apply to all calls. Wake County will supply the Town with a copy of the officially adopted mutual aid system plan. The agreement can be found as Appendix B of this agreement.
- 20.4. TRAINING: The Town shall have formally adopted written guidelines for appropriate initial training of firefighters and continuing education of firefighters that meet or exceed all state requirements ("Training Guidelines"). The Town shall be responsible for providing Wake County Department of Fire Services with a current, valid copy of the Town's training guidelines and any amendments of the training guidelines that go into effect during this agreement upon request by the County. The training guidelines shall include the following minimum standards:
 - 20.4.1. Initial firefighter training shall include education on hazardous materials responder, National Fire Protection Association (NFPA) 1001 Standard for Firefighter Professional Qualifications, incident command system, and blood borne pathogens.
 - 20.4.2. The Town shall annually conduct and/or participate in a minimum of one (1) live fire training exercise.

- 20.4.3. The Town shall annually participate in a minimum of one (1) multi-company and one (1) multi-department training exercise.
- 20.4.4. No member of the Town's fire department shall engage in structural firefighting without having first completed the Wake County Essentials of Firefighting course or equivalent course as determined by the Town's fire department's chief officer.
- 20.5. DEPRECIATION: Town shall have a depreciation schedule for equipment and property valued over \$25,000.00.
- 20.6. COMMUNITY RISK REDUCTION: The Town shall develop and utilize programs for providing public fire and life safety education to a variety of age groups and occupancies within their service area, based upon the needs of the area served. Documentation of the programs and number of attendees will be maintained by the Town, and be available for review by the County, when desired. The Town shall support public fire education programs through assistance of materials, equipment and personnel from the Wake County Department of Fire Services.
- 20.7. PRE-FIRE INCIDENT SURVEYS: The Town shall develop pre-fire incident surveys and update them annually for all commercial buildings within the fire district. Facilities, which should be given priority, are those buildings displaying NFPA 704 placards, hazardous, institutionalized and assembly occupancies. The Town shall work with local fire code enforcement officials to determine hazards and occupancies. Upon request, the Wake County Department of Fire Services staff shall assist the Town in developing pre-fire incident surveys for buildings within Wake County Department of Fire Services' fire code enforcement service area.
- 20.8. FIRE INVESTIGATIONS: The Town fire officer in charge at all fire scenes, occurring in the unincorporated area of the county, shall attempt to determine the origin and cause of every fire. When the officer in charge cannot determine the origin and cause OR if the cause is suspected to be incendiary in nature, the officer in charge shall request a representative from the Wake County Fire Services Department to assist. The Town shall provide reasonable assistance is needed by Wake County staff at the fire scene. The responsibilities under this section shall be in addition to, and not in replacement of the responsibilities outlined under subsection 20.9 "Post Incident Review".
- 20.9. POST INCIDENT REVIEW: In order to provide a systematic and consistent approach for reviewing and evaluating fire response, the Town shall be required to conduct a post incident review for the following incidents occurring in the unincorporated areas of the county: fires resulting in fatalities, fires resulting in more than \$400,000 property loss, fires resulting in civilian injury fires resulting in firefighter injury, and any other incident

- as determined by the Town. Post incident reviews will be facilitated by a fire service member that has completed a post-incident review training program approved by the Fire Commission, or equivalent training as determined by the Fire Commission.
- 20.10. FIRE HYDRANTS: The Town shall have an adopted guideline that addresses fire hydrant testing and maintenance.
- 20.11. MEDICAL FIRST RESPONDER: Town shall participate in the Wake County Medical First Responder Program. The Town shall conform to the Wake County Medical First Responder policies and procedures and direction of the Wake County Medical Director and Emergency Medical Services Director. The Town shall have an adopted guideline that addresses the Medical First Responder Program and Operation. The most current Medical Responder Guidelines can be found on the Wake Fire Services website under Fire District Documents
- 20.12. EMERGENCY DISASTER RESPONSE: The Town shall follow the Wake County Emergency Operations All Hazards Plan and all applicable appendices.
- 20.13. DISPOSING OF EQUIPMENT: For any equipment acquired wholly or partially with county funding which the town has deemed necessary to sell or donate, the Town shall, to the extent permitted by North Carolina surplus property laws, offer such equipment for sale or donation to other Fire Departments in Wake County prior to offering to outside agencies. All sold or donated items should be within their NFPA-specified service life, in serviceable condition, and retested or recertified by the manufacturer or certified third-party testing organization. For a sale, the Town shall provide the cost share percentage, at the time of original purchase, proceeds of the sale back to the County.
- 20.14. PERSONNEL: The Town agrees to adopt and to initiate compliance with, and enforcement of personnel rules for compensated and volunteer members that are in compliance with FLSA and any other applicable federal or state law, and not substantially and materially different from, or inconsistent with the current Fire Compensation Administrative Guidelines adopted by the Fire Commission or within 30 (thirty) days of Fire Commission revision of such guidelines for volunteer members.

20.15. USE OF COUNTY-OWNED VEHICLES

20.15.1. Vehicle Use. The Town agrees that in the event it uses or leases County-owned vehicles in the performance of duties under this Agreement, the Department shall not make these vehicles available to individual employees or volunteers for

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personal use or other employment not provided for under the Fire Services Contract.

- 20.16. AUXILIARY SERVICES: The Town may choose to provide additional Emergency Services and programs within their response districts. Participation is voluntary. Any Town or fire department choosing to participate in these programs shall have adopted guidelines that address the appropriate functions.
- 20.17. FIRE COMPENSATION ADMINISTRATIVE GUIDELINES: The County and Town agree to meet or exceed the minimum job requirements contained in the Wake County Fire Compensation Administrative Guidelines as approved by the Wake County Board of Commissioners on October 20, 2003 and as they may be amended from time to time during the existence of the Agreement. The Town acknowledges review and acceptance of the most current Wake County Fire Compensation Administrative Guidelines originally effective July 1, 2003 as updated November 2020.
- 20.18. ADVERSE FINDINGS: The Town agrees to notify the Wake County Department of Fire Services within 30 days of any adverse finding by any Municipal, State or Federal agency against the Department, pertaining to employment practices, employee safety, environmental issues, North Carolina Department of Insurance Rating Violations, etc.
- 20.19. EMERGENCY ALERTING: The County agrees to maintain both primary and secondary methods of emergency dispatch alerting for fire department personnel, including but not limited to tone/voice paging systems and countywide alphanumeric paging. The Town agrees to rely only on the countywide alphanumeric and tone/voice paging systems for emergency alerting and response purposes that originate from Raleigh-Wake Communication Center or Town of Cary Communication Center.
- 20.20. WEAPONS: With the exception of sworn law enforcement officers, operating within their jurisdiction, no weapons of any sort are permitted to be carried by Town fire department personnel while performing services under this Agreement within county-owned department vehicles or buildings, or while on calls for service within county fire districts. This applies to all weapons whether concealed or visible. This includes firearms, knives, conducted electrical weapons and chemical irritants, such as mace and pepper spray, but shall exclude any equipment required for the performance of services under this Agreement. This shall not prohibit a lawful concealed handgun permittee from securing a firearm in a locked personal motor vehicle within the trunk, glove box, or other enclosed compartment on or near county owned vehicles or property.

Section 21. RELATIONSHIP OF PARTIES

The Town, including any officer, employee, or agent of the Town is an independent contractor of the County and none of these shall be considered employees of the County. The relationship between the parties shall be limited to the performance of this Agreement in accordance with its terms. County and the Town agree that the Town shall operate and act as an independent contractor in accordance with the standards set forth herein, and the County shall not be responsible for any of the Town's acts or omissions. Neither the Town, any officer, employee, or agent of the Department shall be deemed an officer, employees, or agent of the County. No liability for benefits, such as workers compensation, pension rights, or other provisions shall arise out of or accrue to any party, its officers, agents, or employees as a result of this Agreement or performance thereof.

Section 22. TERM OF AGREEMENT

The term of this agreement shall be for three (3) years, beginning on July 1, 2022 and ending on June 30, 2025, unless earlier terminated by either party in accordance with Section 24 of this agreement. This term is subject to the continued legal existence of the District(s) and the Town.

Section 23. NON-ASSIGNABILITY

This agreement may not be transferred, assigned, or subcontracted by the Town without the written consent of the County.

Section 24. TERMINATION

This agreement may be terminated by either party with or without cause upon advance written notice to the other party, served upon the other party by certified mail at least three hundred sixty-five (365) days prior to termination. Failure of the County and the Town to agree upon the amount of funding shall terminate this agreement in accordance with this section of this Agreement. The Town acknowledges that the 365-day prior notice requirement is calculated to allow sufficient time to provide alternate fire protection for the covered district in the event of a termination. Unless the parties mutually agree in writing to an earlier termination, the Town is required to provide fire protection up until the effective date of termination. Upon termination of this agreement, Town agrees to reimburse County for the County's share of equipment, apparatus and facilities funded, in part, by the Fire Tax District. Reimbursement shall be based upon current value of said items multiplied by the cost share percentage in effect at time of item purchase.

Section 25. RESERVATION OF RIGHTS

Wake County reserves the right to provide the highest level of fire protection and emergency services possible, subject to the availability of funding.

Section 26. NO WAIVER

Failure of the County to enforce any of the provisions of this Agreement at any time, or to request performance by the Town pursuant to any of the provisions of this Agreement at any time shall in no way be construed as a waiver of such provisions, nor in any way affect the validity of this Agreement, or

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any part thereof, or the right of the County to enforce each and every provision. In the event that there is disagreement between representatives of the County Department of Fire Services and the Town as to the meaning and/or applicability of any section of the Agreement, the County and the Town shall endeavor in good faith to mediate the disagreement and agree to select and share the cost (if any) of the services of a trained community mediator to mediate the disagreement. However, nothing herein shall be construed to prevent either party from seeking legal or equitable relief in a court of competent jurisdiction.

Section 27. AMENDMENTS

It is recognized and agreed to by the County and the Town that specific amendments may be necessary on an individual department-by-department basis. Any amendment to this Agreement shall be made in writing and signed by both parties in order to be effective. All contract amendments shall be listed in Appendix E

Section 28. NO THIRD-PARTY BENEFICIARIES

This contract is not intended for the benefit of any third party. The rights and obligations contained herein belong exclusively to the parties hereto and shall not confer any rights or remedies upon any person or entity other than the parties hereto.

Section 29. ENTIRE AGREEMENT

The terms and provisions herein contained constitute the entire agreement by and between the County and the Town and shall supersede all previous communications, representation or agreement, either oral or written between the parties hereto with respect to the subject matter hereof; except, that this paragraph shall not be construed to supersede any existing and applicable Mutual Aid Agreements.

Section 30. NOTICES

All notices, reports, records, or other communications which are required or permitted to be given to the parties under the terms of this Agreement shall be sufficient in all respects if given in writing and delivered in person, or by confirmed Electronic Version of Contract. Town may convert a signed original of the Agreement to an electronic record pursuant to a North Carolina Department of Natural and Cultural Resources approved procedure and process for converting paper records to electronic records for record retention purposes. Such electronic record of the Agreement shall be deemed for all purposes to be an original signed Agreement.

If to Wake County:
Mr. Darrell Alford
Wake County Department of Fire Services
P.O. Box 550
331 South McDowell Street
Raleigh, North Carolina

Contract Number: EC0000000008493
(Please reference this n - Page 96 - invoices for payment)

Telephone: (919) 856-6349 Facsimile: (919) 856-6236

If to Town:

Town of Apex Catherine Crosby, Town Manager 73 Hunter Street Apex, NC 27502

Telephone: (919) 249-1042

Section 31. GOVERNING LAW

The Parties acknowledge that North Carolina law shall govern this Agreement.

Section 32. SEVERABILITY

If any provision of this Agreement shall be determined to be unenforceable by a court of competent jurisdiction, such determination will not affect any other provision of this Agreement.

Section 33. COUNTERPARTS

This Agreement may be executed in several counterparts, each of which shall be deemed an original.

Section 34. NO WAIVER OF SOVEREIGN IMMUNITY

The County and the Town agree that nothing herein shall be construed to mandate purchase of insurance by the County pursuant to N.C.G.S. 153A-435; or to be inconsistent with Wake County's "Resolution Regarding Limited Waiver of Sovereign Immunity" enacted October 6, 2003; or to in any other way waive the County's defense of sovereign or governmental immunity from any cause of action alleged or brought against the County for any reason if otherwise available as a matter of law. Nothing herein shall be construed to constitute waiver of the Town's governmental immunity in any respect, under North Carolina law.

Section 35. VERIFICATION OF EMPLOYEE WORK AUTHORIZATION

To ensure compliance with the E-Verify requirements of the General Statutes of North Carolina, all contractors, including any subcontractors employed by the contract(s), by submitting a bid, proposal or any other response, or by providing any material, equipment, supplies, services, etc, attest and affirm that they are aware and in full compliance with Article 2 of Chapter 64, (NCGS 64-26(a)) relating to the E-Verify requirements.

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(Please reference this number on your invoices for payment)

Section 36. IRAN DIVESTMENT. By signing this agreement, Town certifies that as of the date of execution, receipt, or submission they are not listed on the Final Divestment List created by the NC Office of State Treasurer pursuant to NCGS 147 Article 6E, Iran Divestment Act, Iran Divestment Act Certification. Town shall not utilize any subcontractor that is identified on the Final Divestment List. Any organization defined under NCGS 147-86.80(2), Divestment from Companies Boycotting Israel, shall not engage in business totaling more than \$1,000 with any company/business, etc. that boycotts Israel. A list of companies that boycott Israel is maintained by the NC Office of State Treasurer, pursuant to NCGS 147-86.81(a)(1). Any company listed as boycotting Israel is not eligible to do business with any State agency or political subdivision of the State.

Section 37. NON-DISCRIMINATION. In consideration of signing this Agreement, the Parties hereby agree not to discriminate in any manner on the basis of race, natural hair or hairstyles, ethnicity, creed, color, sex, pregnancy, marital or familial status, sexual orientation, gender identity or expression, national origin or ancestry, marital or familial status, pregnancy, National Guard or veteran status, religious belief or non-belief, age, or disability with reference to the subject matter of this Contract. The Parties agree to comply with the provisions and intent of Wake County Ordinance SL 2017-4. This provision shall be binding on the successors and assigns of the Parties with reference to the subject matter of this Agreement.

Section 38. EFFECTIVE DATE OF AGREEMENT

The effective date of this Agreement shall be the date upon which Wake County executes this agreement. This date shall be reflected in the first paragraph of this Agreement. The terms and conditions of this Agreement shall apply to the entire Term as set forth in Section 22 or as amended by the parties.

IN TESTIMONY WHEREOF, the County has caused this instrument to be executed by the Wake County Manager, and the Town has caused this instrument to be signed in its name by its President, attested by its Secretary, and its corporate seal hereto affixed, all by authorization of its Board of Directors duly given.

This the	dav	≀of	. 20	

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(Please reference this n - Page 98 - r invoices for payment)

WAKE	COUNTY
BY:	
	David Ellis or designee
	Wake County Manager
BY:	
	Darrell Alford
	Wake County Fire Services & Emergency Management Director
	strument has been pre-audited in the manner required by the Local Government Budget and Control Act.
	Finance Director or designee
This pe	erson is responsible for monitoring the contract performance requirement is Joe Vindigni.
	Department Head Initials
Town	of Apex
BY:	
	Town Manager

Contract Number:

EC00000000008493

(Please reference this number on your invoices for payment)

BUSINESS ASSOCIATE AGREEMENT

This Agreement is made effective the 1st day of July, 2022, by and between WAKE COUNTY, hereinafter referred to as "Covered Entity", and TOWN OF APEX, hereinafter referred to as "Business Associate"; also referred to herein individually as a "Party" and collectively as the "Parties".

WITNESSETH:

WHEREAS, Sections 261 through 264 of the federal Health Insurance Portability and Accountability Act of 1996, Public Law 104-191 directs the Department of Health and Human Services to develop standards to protect the security, confidentiality and integrity of health information; and

WHEREAS, Covered Entity is or may be subject to the requirements of 42 U.S.C. Section 1320(d) *et seq* enacted by the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and regulations promulgated thereunder at 45 CFR Parts 160 and 164 (the "Privacy Regulations" and "Security Regulations"); and

WHEREAS, Covered Entity and Business Associate are or may be subject to the requirements of Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), codified at 45 CFR Part 160 and Part 164, subparts A and C (the "Security Rule"), subparts A and D (the "Breach Notification Rule"), and subparts A and E (the "Privacy Rule") and Subtitle D of the Health Information Technology for Economic and Clinical Health Act of 2009 ("HITECH") (collectively the "HIPAA Rules") which expands the scope of privacy and security protections available under HIPAA to Protected Health Information managed via electronic health records; and

WHEREAS, the Parties wish to enter into or have entered into an arrangement whereby Business Associate will provide certain services to Covered Entity ("Services Agreement"), and, pursuant to such Services Agreement, Business Associate is or may be considered a "Business Associate" of Covered Entity as defined in the HIPAA Rules; and

WHEREAS, Business Associate may have or require access to Protected Health Information as defined in the HIPAA Rules in fulfilling its responsibilities under such Services Agreement;

THEREFORE, in consideration of the Parties' continuing obligations under the Services Agreement, compliance with the HIPAA Rules, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree to the following provisions in order to address the requirements of the HIPAA Rules and to protect the interests of both Parties.

SECTION I

DEFINITIONS

1.1 Catch-All definition:

The following terms used in this Agreement shall have the same meaning as those terms in the HIPAA Rules: Breach, Data Aggregation, Designated Record Set, Disclosure, Health Care Operations, Individual, Minimum Necessary, Notice of Privacy Practices, Protected Health Information, Required By Law, Secretary, Security Incident, Subcontractor, Unsecured Protected Health Information, and Use.

1.2 Specific definitions:

"Business Associate" shall generally have the same meaning as the term "business associate" in 45 CFR §160.103, and in reference to the party to this agreement, shall mean TOWN OF APEX.

"Covered Entity" shall generally have the same meaning as the term "covered entity" at 45 CFR §160.103, and in reference to the party to this agreement, shall mean Wake County.

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"HIPAA Rules" shall mean the Privacy, Security, Breach Notification, and Enforcement Rules at 45 CFR Part 160 and Part 164 and Subtitle D of the Health Information Technology for Economical and Clinical Health Act which is Title XIII of the American Recovery and Reinvestment Act of 2009.

"HITECH or HITECH Standards" means the privacy, security, and security breach notification provisions applicable to a Business Associate under Subtitle D of the Health Information Technology for Economical and Clinical Health Act which is Title XIII of the American Recovery and Reinvestment Act of 2009.

SECTION II

COORDINATION WITH HIPAA RULES

- 2.1 In the event of an inconsistency between the provisions of this Agreement and mandatory provisions of the HIPAA Rules, as amended, the HIPAA Rules in effect at the time shall control. Where provisions of this Agreement are different than those mandated in the HIPAA Rules, but are nonetheless permitted by the HIPAA Rules, the provisions of this Agreement shall control.
- 2.2 The parties agree that, in the event that any documentation of the Services Agreement pursuant to which Business Associate provides services to Covered Entity contains provisions relating to the use or disclosure of Protected Health Information which are more restrictive than the provisions of this Agreement, the provisions of the more restrictive documentation will control. The provisions of this Agreement are intended to establish the minimum requirements regarding Business Associate's use and disclosure of Protected Health Information.

SECTION III

OBLIGATIONS AND ACTIVITIES OF BUSINESS ASSOCIATE

- 3.1 Business Associate acknowledges and agrees that all Protected Health Information that is created, received, stored or transmitted by the Covered Entity and disclosed or made available in any form, including paper record, oral communication, audio recording, and electronic display by Covered Entity or its operating units to Business Associate or created, received, stored or transmitted by Business Associate on Covered Entity's behalf shall be subject to this Agreement.
- 3.2 Business Associate agrees to not use or further disclose Protected Health Information other than as permitted or required by the Services Agreement or as required by law.
- 3.3 Business Associate agrees to use appropriate safeguards to prevent any use or disclosure of Protected Health Information other than as provided by this Agreement, and to comply with Subpart C of 45 CFR Part 164 and HITECH Standards to prevent use or disclosure of Protected Health Information other than as provided for by this Agreement.
- Business Associate agrees to report to Covered Entity any use or disclosure of Protected Health Information not provided for by this Agreement of which it becomes aware, including breaches of Unsecured Protected Health Information as required by at 45 CFR § 164.410, and any Security Incident of which it becomes aware. Business Associate will make this report to the Covered Entity's Privacy Officer and Security Officer within twenty-four (24) hours after discovery. This report will include at least the following information (a) nature of the non-permitted or violating use or disclosure or Security Incident; and (b) the PHI used or disclosed (c) the identification of each individual whose unsecured PHI has been, or is reasonably believed by the Business Associate to have been accessed, acquired, used, or disclosed during the breach (d) any other information requested by Covered Entity that must be included in the notification to the individual pursuant to at 45 CFR § 164.404.

- 3.5 In the event of a potential or actual Breach, Business Associate shall cooperate with the Covered Entity to investigate, perform risk analyses, notify appropriate government, regulatory authorities, media, or individuals as required by law or generate statute and to mitigate any harmful effect that is known to Business Associate and the Covered Entity as a result of a use or disclosure of Protected Health Information by Business Associate in violation of the requirements of this Agreement. The Business Associate shall be responsible for the direct costs of implementing these efforts to the extent that the actual or potential Breach is caused by the willful neglect, material breach or violation of the Agreement by the Business Associate.
- In accordance with 45 CFR § 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, Business Associate may disclose protected health information to a downstream business associate that is an agent or subcontractor and may allow the agent or subcontractor to create, receive, maintain, or transmit Protected Health Information on its behalf only if the Business Associate enters and maintains a written agreement with the agent or subcontractor pursuant to which the agent or subcontractor agrees to the same restrictions, conditions, and requirements that apply through this Agreement to Business Associate with respect to such information. This requirement applies to any person or entity who performs functions or activities that involve access to information created, received, maintained, or transmitted by the Business Associate. Nothing in this Section shall be deemed to permit a Business Associate to use an agent or subcontractor not approved by Covered Entity to perform work as may be provided in the Services Agreement.
- 3.7 Business Associate agrees to make available Protected Health Information in a designated record set to the Covered Entity to the extent and in the manner required by 45 CFR § 164.524.
- 3.8 Business Associate agrees to make amendment(s) to Protected Health Information in a designated record set as directed or agreed to by the Covered Entity pursuant to 45 CFR § 164.526; or take other measures as necessary to satisfy Covered Entity's obligations under 45 CFR § 164.526.
- 3.9 Business Associate agrees to maintain and make available the information required to provide an accounting of disclosures to the Covered Entity as necessary to satisfy the Covered Entity's obligations under 45 CFR § 164.528.
- 3.10 Business Associate agrees to make internal practices, books, and records relating to the use and disclosure of Protected Health Information created, received, maintained, or transmitted by Business Associate on behalf of, Covered Entity available to the Covered Entity, or at the request of the Covered Entity to the Secretary of Health and Human Services.
- 3.11 Business Associate agrees to document any disclosures of and make Protected Health Information available for purposes of accounting of disclosures, as required under 45 CFR § 164.528.

SECTION IV

PERMITTED USES AND DISCLOSURES BY BUSINESS ASSOCIATE

- 4.1 Except as otherwise limited in this Agreement, Business Associate may use or disclose Protected Health Information to perform functions, activities, or services for, or on behalf of, Covered Entity as specified in the Services Agreement, provided that such use or disclosure would not violate the HIPAA Rules and/or HITECH Section 13405(a) if done by Covered Entity.
- 4.2 Business Associate may use or disclose Protected Health Information as required by law.
- 4.3 Business Associate agrees to make and use reasonable efforts to limit disclosures and requests for Protected Health Information to the minimum necessary to accomplish the intended purpose of the use, disclosure, or request consistent with 45 CFR § 164.502(b).

TERM AND TERMINATION

- 5.1 **Term**. The term of this agreement shall be effective as of the date first written above, and shall terminate upon the last to occur of 1) termination of the Services Agreement 2) when all of the Protected Health Information or Electronic Protected Health Information provided by Covered Entity to Business Associate, or created, received, stored or transmitted by Business Associate on behalf of Covered Entity, is destroyed or returned to Covered Entity; or, if it is infeasible to return or destroy Protected Health Information or Electronic Protected Health Information, until protections are extended to such information, in accordance with the termination provisions in this Section.
- Termination for Cause. Upon Covered Entity's knowledge of a material breach of this Agreement by Business Associate, Covered Entity shall have the right to immediately terminate this Agreement and the Services Agreement.
- 5.3 Obligations of Business Associate upon Termination.
 - a. Upon termination of this Agreement for any reason, or upon request of Covered Entity, whichever occurs first, Business Associate shall return or destroy all Protected Health Information received from Covered Entity, or created, received, stored or transmitted by Business Associate on behalf of Covered Entity that the Business Associate still maintains in any form. This provision shall apply to Protected Health Information that is in the possession of subcontractors or agents of Business Associate. Business Associate, their subcontractors, or agents shall retain no copies of the Protected Health Information.
 - b. In the event that Business Associate determines that returning or destroying the Protected Health Information is infeasible, Business Associate shall provide to Covered Entity notification of the conditions that make return or destruction infeasible. Upon mutual agreement of the Parties that return or destruction of Protected Health Information is infeasible, Business Associate shall extend the protections of this Agreement to such Protected Health Information and limit further uses and disclosures of such Protected Health Information to those purposes that make the return or destruction infeasible, for so long as Business Associate maintains such Protected Health Information. Business Associate shall return to Covered Entity, or if agreed to by Covered Entity, destroy the Protected Health Information retained by Business Associate, its agents, or subcontractors when the conditions that make return or destruction infeasible no longer exist.

SECTION VI

MISCELLANEOUS

- 6.1 **No Rights in Third Parties.** Except as expressly stated herein or the HIPAA Rules, the Parties to this Agreement do not intend to create any rights in any third parties.
- 6.2 **Survival**. The obligations of Business Associate under this Section shall survive the expiration, termination, or cancellation of this Agreement, the Services Agreement and/or the business relationship of the parties, and shall continue to bind Business Associate, its agents, employees, contractors, successors, and assigns as set forth herein.
- 6.3 **Amendment**. This Agreement may be amended or modified only in a writing signed by the Parties. The Parties agree that this Agreement will be automatically amended to conform to any changes in the HIPAA Rules as is necessary for a Covered Entity to comply with.
- 6.4 **Assignment**. No Party may assign its respective rights and obligations under this Agreement without the prior written consent of the other Party.

- 6.5 **Independent Contractor.** None of the provisions of this Agreement are intended to create, nor will they be deemed to create any relationship between the Parties other than that of independent parties contracting with each other solely for the purposes of effecting the provisions of this Agreement and any other agreements between the Parties evidencing their business relationship.
- 6.6 **Governing Law.** This Agreement will be governed by the laws of the State of North Carolina.
- 6.7 **No Waiver.** No change, waiver or discharge of any liability or obligation hereunder on any one or more occasions shall be deemed a waiver of performance of any continuing or other obligation, or shall prohibit enforcement of any obligation, on any other occasion.
- 6.8 **Interpretation.** Any ambiguity of this Agreement shall be resolved in favor of a meaning that permits Covered Entity to comply with the HIPAA Rules.
- 6.9 **Severability.** In the event that any provision of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, the remainder of the provisions of this Agreement will remain in full force and effect.
- 6.10 **Notice.** Any notification required in this Agreement shall be made in writing to the representative of the other Party who signed this Agreement or the person currently serving in that representative's position with the other Party.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year written above.

BUSINESS ASSOCIATE:	COVERED ENTITY:
TOWN OF APEX	WAKE COUNTY
Ву:	Ву:
Name: Catherine Crosby Title: Town Manager	Name: Title:
Dated:	Dated:

Fire Protection Agreement Appendix A Fire Insurance and Response District Map

INSURANCE DISTRICT Fire Stations HIPEX FIRE DISTRICT HIPEX Map Information: 0 0.375 0.75 [₱] DocuSign Envelope ID: FC524581-5FA5-415A-84F4-53CAD285D629 - Page 106 -

Fire Protection Agreement Appendix B Mutual Aid Agreement

WAKE COUNTY FIRE PROTECTION MUTUAL AID AGREEMENT WAKE COUNTY, NORTH CAROLINA

THIS AGREEMENT made and entered into this 1st day of July, 2022, by and between COUNTY OF WAKE, the TOWN OF APEX FIRE DEPARTMENT, INC., NORTHERN WAKE FIRE DEPARTMENT, INC., TOWN OF CARY, DURHAM HIGHWAY FIRE PROTECTION ASSOCIATION, INC., FAIRVIEW RURAL FIRE DEPARTMENT, INC., TOWN OF FUQUAY VARINA FIRE DEPARTMENT, INC., GARNER VOLUNTEER FIRE-RESCUE, INC., TOWN OF HOLLY SPRINGS FIRE DEPARTMENT, INC., HOPKINS FIRE DEPARTMENT, INC., TOWN OF KNIGHTDALE FIRE DEPARTMENT INC., TOWN OF MORRISVILLE FIRE DEPARTMENT INC., ROLESVILLE RURAL FIRE DEPARTMENT, INC., SWIFT CREEK RURAL FIRE DEPARTMENT, INC., TOWN OF WAKE FOREST FIRE DEPARTMENT, INC., WAKE-NEW HOPE VOLUNTEER FIRE DEPARTMENT INC., WENDELL-HOLMES RURAL FIRE DEPARTMENT, INC., WESTERN WAKE FIRE RESCUE FIRE DEPARTMENT, INC., TOWN OF ZEBULON FIRE DEPARTMENT, and the (referred to herein as "the parties").

WITNESSETH:

WHEREAS, N.C. Gen Stat. § 58-83-1 authorizes counties, municipal corporations and fire protection districts to send (or decline to send) firefighters and firefighting equipment beyond the response areas that they normally serve (a practice generally known as "mutual aid"), provides for retention of rights, privileges and immunities enjoyed by firefighters in their response areas when those firefighters respond beyond those response areas, and further provides for retention of rights, privileges and immunities of counties, municipal corporations and fire protection districts enjoyed by those agencies in their response areas when those agencies respond beyond those response areas; and

WHEREAS, it is in the best interests of Wake County, municipal corporations within Wake County and private non-profit corporation fire departments with which Wake County contracts for fire services to engage in the practice of mutual aid and this commitment has previously been formalized in a written Mutual Aid Agreement;

WHEREAS, the parties desire to reaffirm their commitment to the Mutual Aid Agreement and update the Mutual Aid Agreement to reflect the current parties to the Mutual Aid Agreement.

WHEREAS, the previous Mutual Aid Agreement and mutual aid between fire departments extended pursuant to N.C. Gen. Stat. § 58-83-1 without a written agreement is acknowledged as valid and nothing herein shall be construed to the contrary.

NOW, THEREFORE, in consideration of the mutual covenants contained herein by and among the parties hereto, it is hereby agreed as follows:

1. The following definitions are herewith adopted as part of this Agreement:

- a. FIRE CHIEF means the chief operating officer of a lawfully organized fire department;
- b. FIRE DEPARTMENT means any subdivision of County or municipal government that delivers fire protection services, or a private non-profit corporation that delivers fire protection services within Wake County pursuant to a contract with Wake County;
- c. MEMBER means (and is limited to) a <u>bona fide</u> employee or member in good standing of a subdivision of County or municipal government or private non-profit corporation fire department that delivers fire protection services, and that is party to this Agreement.
- d. FIRE PROTECTION SERVICES includes (but is not limited to) firefighting, hazardous-materials release control, emergency medical event response, technical rescue response (including, but not limited to, structural collapse rescue, confined-space rescue, and water rescue) and such other emergency response activities that are customarily associated with fire department response, or are otherwise authorized by state law, subject to the limitations contained elsewhere in this Agreement.
- e. MUTUAL AID RESPONSE is a response of the personnel and equipment of a fire department party to this Agreement requested by the fire chief of a fire department party to this Agreement, or his or her designee, in command of an emergency response activity, and is in addition to, and does not supersede or void any automatic-aid response.
- 2. Each fire department party to this Agreement agrees to:
 - a. Provide for a written standard operating procedure that gives direction to fire department members on how a mutual aid response will be summoned (on the part of a requesting fire department) or undertaken (on the part of a responding fire department;
 - b. Procure and maintain, at its sole and exclusive expense, insurance coverage, including: comprehensive liability, personal injury, property damage, and worker's compensation.
 - c. Assume responsibility for implementation and coordination of an incident command system at a mutual aid event that incorporates the operations of responding departments into that system, including delivery of assignments, information and direction to the ranking officer of the responding fire department present at the mutual aid scene;
 - d. Except in cases of willful misconduct, gross negligence, or bad faith, waive any and all claims of liability against a fire department requesting mutual aid for death or injury of any member, for damage, theft, loss or

destruction of any fire department equipment or personal property of fire department members in connection with response to, operation at, and/or return from a mutual aid event;

- e. To the extent permitted by law, indemnify and hold harmless any fire department, fire chief or fire department member responding to a request for mutual aid from third-party claims arising from third-party personal injury or property damage in connection with provision of fire protection services at that mutual aid event, or any fire department that elects to respond to a mutual aid request in a manner different from the request, or any fire department that elects not to respond to a mutual aid request because of immediate community protection needs of its own. All activities performed under this agreement are deemed to be governmental functions;
- f. Waive any and all claims against a fire department requesting mutual aid for any costs incurred in connection with response to, operation at, and/or return from a mutual aid event, including (but not limited to) salaries, reimbursements or other compensation (nominal or otherwise) and costs of apparatus and other equipment operation, except that a responding department that expends materials that, by their nature, are consumed in connection with their intended use (such as firefighting foams and substantially similar extinguishing, foaming, sealing or other agents) in connection with delivery of fire protection services may present to the requesting department an itemized statement of costs for such materials, upon receipt of which such materials shall be paid for by the requesting department;
- g. Refrain from undertaking any fire protection service activity, including (but not limited to) technical rescue activities, when the responding department is neither trained nor equipped to undertake such activity, and so advise the requesting department's incident commander upon request for delivery of such service; and
- h. Upon request, to furnish to the Wake County Fire Marshal information on fire protection service equipment, capabilities and personnel so that the Fire Marshal may maintain a "mutual aid resource database" for use by all parties to the Agreement.
- 3. This Agreement shall remain in effect from the date of execution until June 30, 2023, and, thereafter shall renew automatically on July 1 of each subsequent year, except that:
 - (a) A party to this Agreement may elect to terminate its participation upon Sixty-day written notice, mailed via registered mail-return receipt requested to the Wake County Fire Marshal; or

- (b) A party to this Agreement may propose an amendment to this Agreement, applicable to all parties, to the Wake County Fire Commission for public discussion and review, and for approval by the Wake County Board of Commissioners. An amendment applicable to all parties requires the joinder of all Parties.
- 4. Upon initiation of this Agreement, and not less frequently than annually, the Wake County Fire Services shall furnish to all parties to this agreement a list of all parties to this Agreement. In the event that a party to this Agreement elects to terminate its participation, the Fire Services Director shall notify all other parties to the Agreement of such action by conventional mail, electronic mail and facsimile as soon as possible after the Fire Marshal's receipt of notice of such termination. The joinder of the other Parties is not required for a Party to terminate. The termination is not effective until sixty days from the Director of Fire Services and Emergency Management receipt of written notice from the terminating Party.
- 5. Nothing in this Agreement will be deemed to interfere with the right of any party to enter into a mutual aid agreement with a fire department outside of Wake County.
- 6. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.
- 7. Nothing in this Agreement shall be construed to mandate purchase of insurance by any municipality pursuant to N.C.G.S. 160A-485 or County pursuant to N.C.G.S. 153A-435 to in any way waive any parties' defense of sovereign or governmental immunity from any cause of action alleged or brought against any party for any reason if otherwise available as a matter of law. No officer, agent or employee of any party shall be subject to any personal liability by reason of the execution of this Agreement or any other documents related to the transactions contemplated hereby. Such officers, agents, or employees shall be deemed to execute this Agreement in their official capacities only, and not in their individual capacities. This section shall not relieve any such officer, agent or employee from the performance of any official duty provided by law.
- 8. This Agreement and its signature pages may be executed in several counterparts, each of which shall be deemed an original.

IN WITNESS WHEREOF, the parties have hereunto set their hands, the day and year first written above.

Dated	d this	_ day of	6/28/2022	, 2022.
This	oerson is res	sponsible fo	r monitoring the c	contract performance requirement is:
Josep	oh Vindigni			Department Head Initials
WAK	E COUNTY	ı bv:		
BY:	David a			DATE:
		୍ୟ ମଧ୍ୟ ପ୍ରଥମ କ		
	Wake Cou	nty Manage	r	
	DocuSigned			
BY:	R. Defreder	alford		
			vices Director	
		,		
TOW	N OF APEX			
	DocuSigned b	у:		6 /17 /2022
BY:	Cathorinad	(Katy) Crosl	21/	DATE: 6/17/2022
	Town Man		Эу	
		J		
BAYL	EAF VOLUI	NTEER FIR	E DEPARTMENT	· INC d/h/a
	THERN WA	KE FIRE DE	EPARTMENT, INC	
BY:	BocuSigned to			DATE: 6/20/2022
ΟΙ.	Gary Vic	rson		DATE
	Board Pres			
TOWI	N OF CARY			
DV.	Puss Own			DATE: 6/15/2022
BY:	Rus 755 15 15 15 15 15 15 15 15 15 15 15 15 1			DATE:
	Deputy To		•	
DURH			ROTECTION AS	SOCIATION, INC.
BY:	DocuSigned b	,		DATE: 6/15/2022
DI.	David B. M	<u>'</u>		DATE
	Fire Chief			

FAIR	VIEW RURAL FIRE DEPARTMENT, INC.	
BY:	John Maser Es Board President	DATE:
TOW BY:	N OF FUQUAY VARINA Docusigned by: Adams Mitchell	DATE: 6/24/2022
GAR BY:	Town Manager NER VOLUNTEER FIRE-RESCUE, INC. Stew Woodall Board President	DATE: 6/15/2022
TOW BY:	N OF HOLLY SPRINGS Pocusigned by: Law by Harrington Town Manager	_ DATE: 6/15/2022
HOP BY:	KINS FIRE DEPARTMENT, INC. Docusigned by: David ABtinn 4F3 Board President	DATE:
TOW BY:	N OF KNIGHTDALE Bill Summers BilloSummers Town Manager	DATE: 6/15/2022
TOW BY:	N OF MORRISVILLE Scott Griddle Fire Chief	DATE:_ ^{6/20/2022}

ROLE	ESVILLE RURAL FIRE DEPARTMENT, INC.	
BY:	Charles Spencer Jones Charles Spencer Jones	DATE:
OWNE	Board President	
SWIF	T CREEK RURAL FIRE DEPARTMENT, INC.	
BY:	In San	DATE: ^{6/15/2022}
	l an গ্রিণ্ড কিলার্ড Board President	
TOW	N OF WAKE FOREST Docusigned by:	
BY:	Ronaldemany Ec	DATE:
	Ronald Eange Fire Chief	
WAK	E-NEW HOPE VOLUNTEER FIRE DEPARTME	ENT INC.,
BY:	DocuSigned by:	DATE: 6/16/2022
	Jimmyc Massey Board President	
WENI	DELL-HOLMES RURAL FIRE DEPARTMENT,	INC.
BY:	Brian Stades	DATE: 6/17/2022
	Brian Staples	
	Fire Chief	
WES	TERN WAKE FIRE RESCUE FIRE DEPARTME	ENT, INC.
BY:	Brian McJeaters	DATE: 6/15/2022
	Brian-WioFeaters	
	Board President	
IWOT	N OF ZEBULON FIRE DEPARTMENT	
BY:	Christopher C. Perry Christopher C. Perry	DATE: 6/15/2022
	Fire Chief	

Fire Protection Agreement Appendix C Automatic Aid Agreement

WAKE COUNTY FIRE PROTECTION AUTOMATIC AID AGREEMENT WAKE COUNTY, NORTH CAROLINA

THIS AGREEMENT made and entered into this 1st day of July, 2022, by and between the TOWN OF APEX FIRE DEPAREMENT, NORTHERN WAKE FIRE DEPARTMENT, INC., TOWN OF CARY, DURHAM HIGHWAY FIRE PROTECTION ASSOCIATION, INC., FAIRVIEW RURAL FIRE DEPARTMENT, INC., TOWN OF FUQUAY VARINA FIRE DEPARTMENT, GARNER VOLUNTEER FIRE-RESCUE, INC., TOWN OF HOLLY SPRINGS FIRE DEPARTMENT, HOPKINS FIRE DEPARTMENT, INC., TOWN OF KNIGHTDALE FIRE DEPARTMENT, TOWN OF MORRISVILLE FIRE DEPARTMENT, ROLESVILLE RURAL FIRE DEPARTMENT, INC., TOWN OF WAKE FOREST FIRE DEPARTMENT, WAKE-NEW HOPE VOLUNTEER FIRE DEPARTMENT INC., WENDELL-HOLMES RURAL FIRE DEPARTMENT, INC., WESTERN WAKE FIRE RESCUE FIRE DEPARTMENT, INC., TOWN OF ZEBULON FIRE DEPARTMENT, and the COUNTY OF WAKE

WITNESSETH:

WHEREAS, the General Assembly of North Carolina did enact into law an act to authorize automatic aid assistance between fire departments whereby full authority may be exercised by fire departments to send firemen and apparatus beyond the territorial limits which they normally serve, said act having been codified as Chapter 58, Section 83-1, of the General Statutes of North Carolina; and

WHEREAS, the parties to this Agreement are bodies politic and corporate, municipalities or fire departments ("Parties") desiring to participate in Automatic Aid; and

WHEREAS, the Parties desire to provide the highest level of fire protection possible to their respective fire districts along with the lowest possible ISO public protection classification ratings; and

WHEREAS, the Parties desire to enter into an agreement whereby automatic aid assistance as described therein will be provided for all fire calls as provided in closest unit dispatch based on Computer Aided Dispatch Rules and Automatic Vehicle Location; and

WHEREAS, Wake County has written automatic aid protocols which are maintained and utilized by the Raleigh Wake and Cary Communications Center (RWCCC) and utilized on all structure fires whereby RWCCC simultaneously dispatches the automatic aid departments;

WHEREAS, the purpose of this agreement is to provide each of the Parties hereto, through their mutual cooperation, a pre-determined plan; as agreed upon in dispatch protocol, by which each of them render aid to the other in case of any incident;

WHEREAS, it is deemed to be in the public interest for the Parties hereto to enter into an Agreement for automatic aid assistance, and in order to increase fire defenses and to assure proper fire control, as well as providing reserves needed to assure the community of adequate protection.

WHEREAS, by action of the undersigned officials, this agreement for reciprocal automatic aid assistance was duly authorized.

NOW THEREFORE, in consideration of the mutual covenants contained herein by and among the parties hereto, it is hereby agreed:

- 1. That automatic aid assistance will be provided in the areas within the Incorporated and Unincorporated areas of Wake County, without boundaries or district lines based on Computer Aided Dispatch Rules.
- 2. The Automatic Aid department shall be dispatched with the initial alarm.
- 3. Automatic Aid assistance received for all structure related calls will be a minimum engine for first arriving unit, and or other units as needed to complete the required compliment to fill the assignment. The Fire Chief, Officer in Charge or Incident Commander of the Fire Department in whose community or fire district where the emergency exist should in all instances be in command or participate as to aspects of strategy, fire control tactics and overall direction of the operations if same is available on scene.
- 4. It shall be the responsibility of the officer of the fire department of the responding party that all personnel responding to the assistance are responsible persons and that the conduct and actions of said personnel shall be the responsibility of the party sending assistance.
- 5. That each party to this agreement shall assume all costs of salaries, wages, bonuses, or other compensation for its own personnel that responds for duty under the terms of this agreement and shall also assume all costs involving the use of apparatus, equipment, tools used specifically in response to the request for aid and shall make no charge for such use to the party requesting assistance.
- 6. Pursuant to N.C.G.S. § 58-83-1, a party that responds to an emergency incident outside the territorial limits which it normally serves shall have all authority, rights, privileges and immunities, including coverage under Workers' Compensation Laws, as it has when responding to a call and while working at an emergency inside the territorial limits normally served.
- 7. The party responding to the automatic aid under the terms of this agreement shall assume all liability and responsibility for damage to its own apparatus and/or equipment. The party responding shall also assume all liability and responsibility for any damage caused by its own apparatus while responding to or returning from a specific location.
- 8. All parties will work with their respective Emergency Communications Center Directors to maintain accurate information pertaining to this automatic aid agreement.
- 9. This Agreement shall remain in effect from the date of execution until June 30, 2023, and thereafter shall renew automatically on July 1 of each subsequent year with no lapse.
- 10. With the authority of its governing board, a party to this Agreement may terminate its participation by giving sixty (60) days' written notice, mailed via registered mail-return receipt requested to the Wake County Director of Fire Services and Emergency Management.

- 11. A party to this Agreement may propose an amendment to this Agreement, applicable to all parties, to the Wake County Fire Commission for public discussion and review, and for approval by the Wake County Board of Commissioners. An amendment applicable to all parties requires the approval and signature of all Parties.
- 12. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.
- 13. Nothing in this Agreement shall be construed to mandate purchase of insurance by any municipality pursuant to N.C.G.S. 160A-485 or County pursuant to N.C.G.S. 153A-435 to in any way waive any parties' defense of sovereign or governmental immunity from any cause of action alleged or brought against any party for any reason if otherwise available as a matter of law. No officer, agent or employee of any party shall be subject to any personal liability by reason of the execution of this Agreement or any other documents related to the transactions contemplated hereby. Such officers, agents, or employees shall be deemed to execute this Agreement in their official capacities only, and not in their individual capacities. This section shall not relieve any such officer, agent or employee from the performance of any official duty provided by law.
- 14. This Agreement and its signature pages may be executed in several counterparts, each of which shall be deemed an original.

IN WITNESS WHEREOF, the parties have hereunto set their hands, the day and year

first written above.	,
Dated this day of6/28/2022	, 2022.
This person is responsible for monitoring the contract	et performance requirement is:
Joseph Vindigni	Department Head Initials
WAKE COUNTY BY: David Ellis David Ellissoredesignee	DATE: 6/28/2022
Wake County Manager BY: Darrell Afford Wake County Fire Services Director	

TOW	N OF APEX	
BY:	Docusigned by:	DATE: 6/16/2022
ы.	Catherine (Katy) Crosby	D/(IL
	Town Manager	
BAYL	EAF VOLUNTEER FIRE DEPARTMENT, INC.	d/b/a
	THERN WAKE FIRE DEPARTMENT, INC.	
DV.	DocuSigned by:	DATE:_6/20/2022
BY:	Gary Vickerson	DATE.
	Board President	
TOW	N OF CARY	
IOVVI	DocuSigned by:	
BY:	Russ Overton	DATE:
	Russ®verton	
	Deputy Town Manager	
DUR	HAM HIGHWAY FIRE PROTECTION ASSOCIA — Docusigned by:	TION, INC.
BY:	2 M. T	DATE: 6/15/2022
υ.	David B : Methulty	<i>DT</i> (12.
	Board President	
FAIR\	VIEW RURAL FIRE DEPARTMENT, INC.	
	DocuSigned by:	6/22/2022
BY:	LA SEMI ED TA AGGAM SES	DATE: 6/22/2022
	John পাঞ্জপ্র Board President	
	200.0.7.00.00	
TOW	N OF FUQUAY VARINA	
	DocuSigned by:	- . 6/24/2022
BY:	Adany (Viterial)	DATE: 6/24/2022
	Town Manager	
GARI	NER VOLUNTEER FIRE-RESCUE, INC.	
BY:	Steve Woodall	DATE: 6/15/2022
υ 1.	Steve Woodall	D/ (1 L
	Board President	

BY: Kandy Harrington DATE: 6/15/2022 Randy Harrington	
Rantwiteman	
Town Manager	
Towit ivialiage	
HOPKINS FIRE DEPARTMENT, INC.	
DocuSigned by:	
BY: DATE: 6/17/2022 David BEFF 1994F3	
Board President	
TOWN OF KNIGHTDALE	
BY: Docusigned by: DATE: 6/21/2022	
BY: Summers DATE: 6/21/2022 DATE: 6/21/2022	
Town Manager	
TOWN OF MORRISVILLE —DocuSigned by:	
BY: Suff (riddle DATE: 6/20/2022	
S cott/গুলাববাe ঃ Fire Chief	
Fire Cities	
ROLESVILLE RURAL FIRE DEPARTMENT, INC.	
DocuSigned by:	
BY: Charles Spencer Jones DATE: 6/17/2022 Charles Spencer Jones	
Board President	
SWIFT CREEK RURAL FIRE DEPARTMENT, INC.	
BY: DATE: 6/15/2022	
BY: DATE: 6/15/2022	
Board President	
TOWN OF WAKE FOREST DocuSigned by:	
BY: Kon Early DATE: 6/17/2022	
Romalet Early	

WAKE	E-NEW HOPE VOLUNTEER FIRE DEPARTME	NT INC.,
BY:	James Man	DATE: 6/16/2022
	Jimmy=1Messey	
	Board President	
WEN	DELL-HOLMES RURAL FIRE DEPARTMENT,	INC.
D) (DocuSigned by:	DATE 6/17/2022
BY:	Brian Staples Brian Staples	DATE: 6/17/2022
	Fire Chief	
	Fire Ciller	
WEST	TERN WAKE FIRE RESCUE FIRE DEPARTME	ENT, INC.
BY:	Brian McFeaters	DATE: 6/15/2022
	Brian McFeaters	
	Board President	
1WOT	N OF ZEBULON FIRE DEPARTMENT	
	DocuSigned by:	6 /4 5 /2022
BY:	Christopher C. Perry ChristopheroC. Perry	DATE: 6/15/2022
	Fire Chief	

Fire Protection Agreement Appendix D FEMA Disaster Services

STATE OF NORTH CAROLINA COUNTY OF WAKE

MEMORANDUM OF AGREEMENT FEMA DISASTER SERVICES

WHEREAS, the Wake County Department of Public Safety and Wake County Fire Departments agree to provide and promote the highest level of emergency/diseasor zervices possible for the citizens of Wake County, and

WHEREAS, the Fire Department is contently under contract with Wake County Government to provide fire protection and emergency services and is a participant in the Wake County Mutual Aid Plan, and

WHEREAS, the Fire Department voluntarily agrees to accept emergency/disaster services for a designed geographical area, and

NOW THEREFORE, the APEX VOL. Fire Department agrees to become a participating party in this agreement.

It is further understood that the participating party agrees to provide the following services upon request during time of emergencies/disasters: 1) Debris Removal: 2) Debris Clearance; 3) Traffic Control; 4) other life serving and property protection measures as necessary.

This Memorandum of Agreement will be in effect from September 5, 1996 until such time as either party desires to withdraw.

Executed this the 5th day of September, 1996.

Chief Administrative Officer of the Fire Department

Wake, County Fire / Rescue Director

915196

Date

Fire Protection Agreement Appendix E Business Associate Agreement Fire Protection Agreement Appendix F Contract Amendments

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Marty Stone, Assistant Town Manager

Department(s): Administration

Requested Motion

Motion to approve an encroachment agreement between the Town and property owners Timothy M. Murphy and wife, Vanessa L. Murphy to install pool equipment that will encroach 9 square feet, AC condenser that will encroach 9 square feet and another AC condenser that will encroach 13 square feet onto the Public Utility Easement (Sewer) and authorize the Town Manager to execute the same.

Approval Recommended?

Yes

Item Details

The proposed Encroachment Agreement is between the Town and property owners Timothy M. Murphy and wife, Vanessa L. Murphy (Grantees) for the property described as a residential lot known as Wake County PIN #0731-29-0118, Book of Maps 2020, Page 01640, lot is also known as 2210 Winston Circle, Apex, NC 27502. Grantees wish to install certain improvements, more particularly described as pool equipment that will encroach 9 square feet, AC condenser that will encroach 9 square feet and another AC condenser that will encroach 13 square feet onto the Public Utility Easement (Sewer).

Attachments

- Encroachment Agreement
- Exhibit A



After Recording Mail To:

Development Services

Town of Apex PO Box 250 Apex, NC 27502

STATE OF NORTH CAROLINA COUNTY OF WAKE

ENCROACHMENT AGREEMENT

THIS ENCROACHMENT AGREEMENT, being made this _____ day of _____, 2022, by and between Timothy M. Murphy and wife, Vanessa L. Murphy, hereinafter referred to as "Grantees," and the Town of Apex, hereinafter referred to as the "Town."

WHEREAS, the Grantees are the owners of a certain residential lot of land in the County of Wake, State of North Carolina, which is designated as PIN #0731-29-0118 by the Wake County Revenue Department and more particularly described as Lot 2 of the subdivision known as Winston as shown on that certain plat recorded in Book of Maps 2020, Page 01640, Wake County Registry (hereinafter the "Subdivision Plat"). The residential lot is also known as 2210 Winston Circle, Apex, NC 27502. The residential lot described in this paragraph is hereinafter referred to as the "Residential Lot."

WHEREAS, the Town is the owner of a **TOA PUE (Sewer)** as shown on the **Subdivision Plat** hereinafter referred to as the "**Public Utility Easement**."

WHEREAS, Grantees wish to install certain improvements, more particularly described as pool equipment that will encroach 9 square feet, AC condenser that will encroach 9 square feet and another AC condenser that will encroach 13 square feet onto the Public Utility Easement (Sewer), which serves the Residential Lot, hereinafter referred to as the "Encroachment," all as shown on the attached Exhibit A. Grantees desire to make certain agreements and covenants regarding the Encroachment.

- Page 127 -

WHEREAS, the Town, under the terms and conditions herein set forth, is willing to allow the above-described Encroachment upon the **Public Utility Easement**.

NOW, THEREFORE, in consideration of these promises and other consideration, the receipt and sufficiency of which is hereby acknowledged, Grantees and the Town hereby covenant and agree:

- 1. Subject to the terms herein, the Town agrees to allow Grantees, and Grantees' successors and assigns at Grantees' sole risk and expense, to encroach into the **Public Utility Easement** of the Town as shown in the attached **Exhibit A**, and incorporated by reference as though fully set forth herein.
- 2. The Encroachment shall not be enlarged or increased beyond the Encroachment shown in the **Exhibit A** and described in this Encroachment Agreement. Grantees are responsible for any and all expenditures of labor or materials required for the installation, erection, repair, removal, or maintenance of the above-referenced Encroachment.
- 3. Grantees are to be fully responsible for any and all property damage or injury or death of any person which results from any and all negligence, omission, defect in design, maintenance, or workmanship created by the Encroachment described herein, or any cause of action arising out of the installation, maintenance, removal, destruction, or location of said Encroachment.
- 4. Grantees agree to and do hereby hold the Town, its officers, council members and employees harmless from any and all liability arising out of such negligence, omission, defect or other cause of action; that it will defend the Town, its officers, council members and employees, and pay all attorney fees in any and all actions brought as a result of such; and that it will indemnify the Town, its officers, council members, and employees against any and all loss sustained by reason of such negligence, omission, defect, or other cause of action, claim, cost, or expense arising out of the installation, maintenance, removal, or location of said Encroachment.
 - 5. Sections 3 and 4 shall survive the termination of this Encroachment Agreement for any reason.
- 6. All notices required herein shall be deemed given by depositing such in the United States mail, first class, and addressed to:

To Town:

Town Manager

Town of Apex PO Box 250

Apex, NC 27502

To Grantees: Timothy M. Murphy and Vanessa L. Murphy

2210 Winston Circle

Apex, NC 27502

In the event there is a dispute between the parties concerning the interpretation of the terms

of this Encroachment Agreement or their respective rights and obligations hereunder, such dispute or

controversy shall be adjudged pursuant to the laws of the State of North Carolina.

Grantees agree to abide by all applicable laws, regulations, statutes and ordinances.

This Encroachment Agreement shall not divest the Town of any rights or interest in said Public

Utility Easement and the Town may terminate this Encroachment Agreement by giving Grantees ninety

(90) days written notice of termination. Prior to the termination date, Grantees shall remove, at their

own expense, all or part of the Encroachment as specified by the Town.

10. If the Town deems, within its sole discretion, that there is not time to give Grantees notice as

provided in Paragraph 9 and that removal of the Encroachment is necessary in order to operate, protect,

maintain, modify, replace, add-to or improve its facilities located within the Public Utility Easement,

then no notice shall be required and the Town may remove the Encroachment from the Public Utility

Easement without cost, risk or liability to the Town.

11. Grantees agree to pay and reimburse the Town the entire expense and cost of removal of the

Encroachment in the event that the Town removes the Encroachment as provided in Paragraph 10 or if

Grantees fail to remove the Encroachment within the time limit after receiving notice under Paragraph

9.

12. Grantees, if not self-performing the installations that are the subject of this Agreement, agree

to purchase or cause to be procured from a responsible insurance carrier or carriers authorized under

the laws of the State of North Carolina, valid general liability insurance in the minimum amount of

\$500,000 and provide a certificate of such insurance naming the Town of Apex as additional insured by

endorsement to the policy. Where the Grantees are self-performing the installations, Grantees shall

show proof of homeowner's insurance with personal liability coverage in a minimum amount of at least \$300,000. Grantees shall provide notice of cancellation, non-renewal or material change in coverage to the Town of Apex within 10 days of their receipt of notice from the insurance company.

- 13. Notwithstanding Section 14 below, Grantees shall be released from its obligation under this Encroachment Agreement only upon the assumption of said obligations either by a successor in title to real property known as **Wake County PIN #0731-29-0118**, **2210 Winston Circle, Apex, NC 27502**. The Town's consent to such assumption and release shall be required but shall not be withheld, conditioned or delayed if, as reasonably determined by the Town, the party assuming Grantees obligations possesses adequate financial resources and ownership interest, and Grantees delegate and proposed assignee assume and agree to fulfill, in writing, all of Grantees duties set forth in this Encroachment Agreement.
- 14. The right to encroach is appurtenant to and runs with the land hereinabove referred to and shall forever be subject to the conditions above agreed on between the parties. This Encroachment Agreement is binding upon the heirs, assigns, transferees, and successors in interest of the Grantees and shall, upon execution, be recorded in the Office of the Register of Deeds of Wake County, North Carolina.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

In testimony whereof, said Grantee and said Town have here unto set their hands and seals, the day and year first above written.

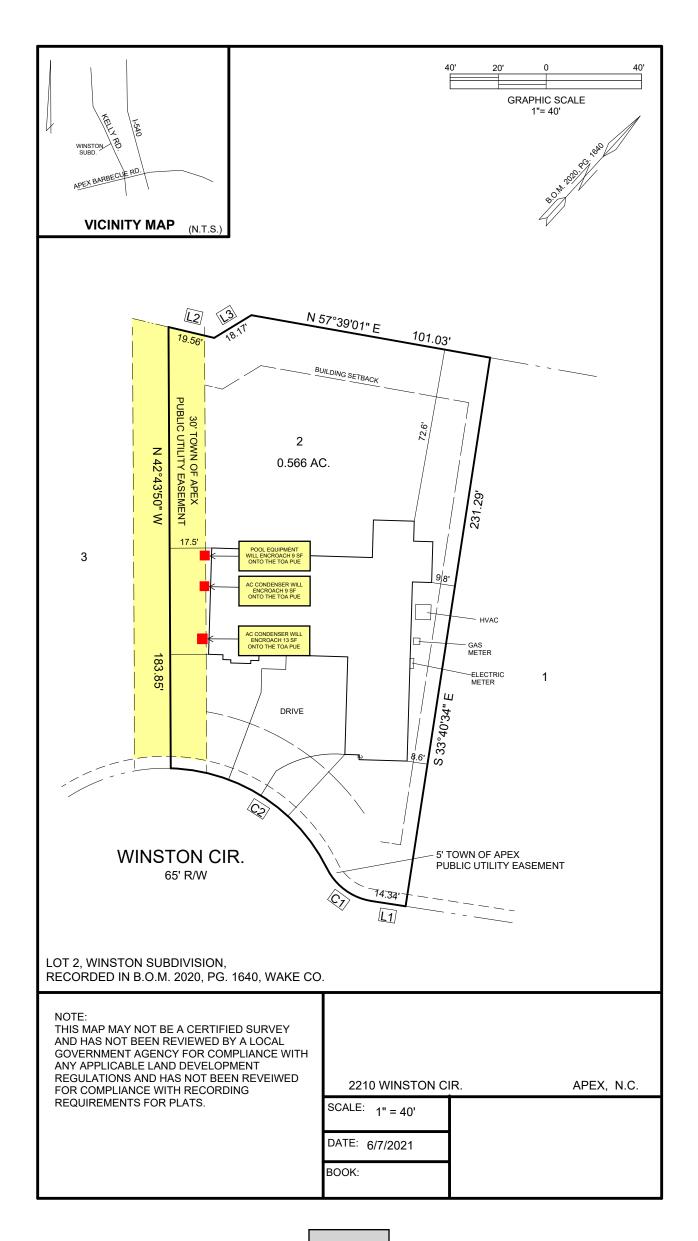
GRANTEES
By:
By: <u>Uake Do L Mur dy</u> Vanessa L. Murphy
STATE OF NORTH CAROLINA COUNTY OF [county in which acknowledgement taken]
I, do hereby certify that <u>Timothy M. Murphy</u> , personally appeared before me this day and acknowledged the due execution of the foregoing instrument.
Witness my hand and official stamp or seal, this leading of 2022.
Divyakant M. Gandhi
[Signature of Notary Public] My Commission Expires: NOTARY PUBLIC, North Carolin Wake County My Commission Expires December 19, 2025

STATE OF NORTH CAROLINA
COUNTY OF [county in which acknowledgement taken]
I, do hereby certify that <u>Vanessa L. Murphy</u> , personally appeared before me this day and acknowledged the due execution of the foregoing instrument.
Witness my hand and official stamp or seal, this day of
[Signature of Notary Public]
My Commission Expires: Divyakant M. Gandhi NOTARY PUBLIC, North Carolina Wake County My Commission Expires December 19, 2025

TOWN OF APEX

	Catherine Crosby	
(Corporate Seal)	Town Manager	
ATTEST:		
Allen Coleman, CMC, NCCCC Town Clerk		
STATE OF NORTH CAROLINA COUNTY OF [_	aken]
l, certify that <u>Allen Coleman</u> personally <u>Town Clerk</u> for the <u>Town of Apex, a N</u> duly given and as the act of the corpo its <u>Town Manager</u> , sealed with its cor	a Notary Public of came before me this day an North Carolina Municipal Corporation, the foregoing instrur	County, North Carolina, and acknowledged that he is the poration, and that by authority ment was signed in its name by
Witness my hand and official stamp o		
[Signature of Notary Public]		(Seal)
My Commission Expires:		

EXHIBIT A



| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): David Dillon, Deputy Fire Marshal

Department(s): Fire Department

Requested Motion

Motion to approve an Ordinance amending Section 20-164 to add subsection (40) establishing a No Parking Zone on the east side of Production Drive, from a point 500 feet south of Reliance Avenue to a point 750 feet south of Reliance Avenue.

<u>Approval Recommended?</u>

Yes

Item Details

Currently, there is parking activity occurring on both sides of Production Drive that is inhibiting emergency ingress for fire trucks to serve the three (3) businesses along the end of the street. Fire Department staff investigated this issue on multiple occasions in July 2022 and requests a No Parking Zone on the east side of Production Drive beginning 500 feet south of Reliance Avenue and terminating at a point 750 feet south of Reliance Avenue, at the end of the public street. The fire hydrant is also located on the east side so prohibiting parking on that side will allow easier access to it. Parking will still be permitted on the west side of the street. Production Drive will eventually be extended south to Pristine Water Drive with future development and parking activity will be reevaluated at that time.

Attachments

Ordinance 2022-____



TOWN OF APEX, NORTH CAROLINA ORDINANCE NO. 2022-____-

AN ORDINANCE AMENDING SECTION 20-164 "NO PARKING ZONES" OF THE APEX TOWN CODE OF ORDINANCES

NOW, as follows:	THEREFORE, BE IT ORDAINED by the Town Council of the Town of Apex
Section 1.	That Section 20-164 of the Town of Apex Code of Ordinances is hereby amended to add subsection (40) as follows:
	Sec. 20-164. – No parking zones.
	(40) Along the east side of Production Drive from a point 500 feet south of Reliance Avenue to a point 750 feet south of Reliance Avenue.
Section 2.	The Town Clerk and/or Town Manager are hereby authorized to renumber, revise formatting, correct typographic errors, to verify and correct cross references, indexes and diagrams as necessary to codify, publish, and/or accomplish the provisions of this Ordinance or future amendments as long as doing so does not alter the terms of this Ordinance.
Section 3.	It is the intention of the governing body, and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Ordinances and the sections of this ordinance may be renumbered to accomplish such intention.
Section 4.	Severability, Conflict of Laws. If this ordinance or application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given separate effect and to the end the provisions of this ordinance are declared to be severable. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.
Section 5.	Effective Date. This ordinance shall be effective upon adoption.

Introduced by Council Member:

Seconded by Council Member:

This the _____ day of _________, 2022.

TOWN OF APEX, NORTH CAROLINA

ATTEST:	Jacques K. Gilbert Mayor
Allen L. Coleman, CMC, NCCCC Town Clerk	
APPROVED AS TO FORM:	
Laurie L. Hohe Town Attorney	

Town of Apex Ordinance 20-164 (40):

No Parking Zone proposed for east side of Production Drive, from 500 feet south of Reliance Avenue to 750 feet south of Reliance Avenue (end of public street), as requested by Apex Fire Department



No Parking Zone

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Steve Adams, Utility Acquisition Specialist

Department(s): Administration / Development and Operations

Requested Motion

Motion to approve a resolution titled "Resolution to Abandon a Portion of Sanitary Sewer Easement" which will abandon lots identified as Lots 357-368, Parkside at Bella Casa, Phase 11.

Approval Recommended?

Yes

Item Details

Town of Apex presently has a sewer easement interest across several lots in the Bella Casa neighborhood that was set aside as a "20' Sewer Easement for Future Development".

Town staff has determined that there is no need for this easement presently or in the future and seeks to abandon the easement

Attachments

- Resolution to Abandon a Portion of Sanitary Sewer Easement
- Parkside Bella Case Vicinity Map Page 1421
- Parkside Bella Case Vicinity Map Page 1422



Resolution	2022-	
Resolution	2022-	

RESOLUTION TO ABANDON A PORTION OF A SANITARY SEWER EASEMENT

WHEREAS, the Town of Apex presently has a sanitary sewer easement interest in that certain area designated as "20' TOA Sanitary Sewer Easement for Future Development" (the "Easement"); as shown on that certain survey plat entitled "Plat of Correction for: Parkside at Bella Casa Phase 11" by James Wade Atkinson, Jr., Surveyor, said survey plat being recorded in Book of Maps 2014, Pages 1421-1422, and attached hereto as **Exhibit A** (the "Survey"); and

WHEREAS, that portion of the Easement located within the lots identified as Lots 357-368, Parkside at Bella Casa, Phase 11, as shown on said Survey, is no longer needed because the Town has no future purpose for this portion of the Easement; and

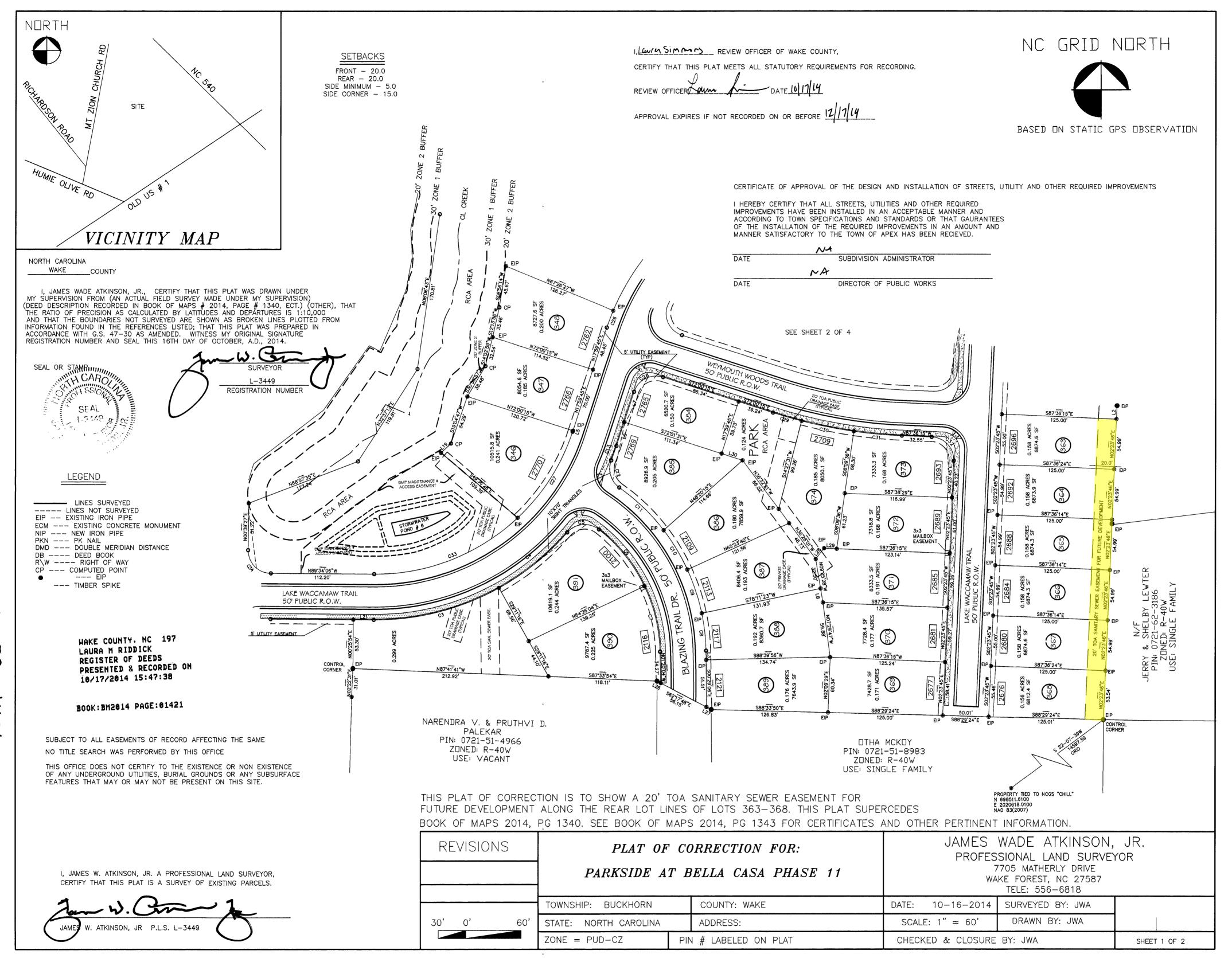
WHEREAS, the Town Council considers it advisable to abandon a portion of the Easement.

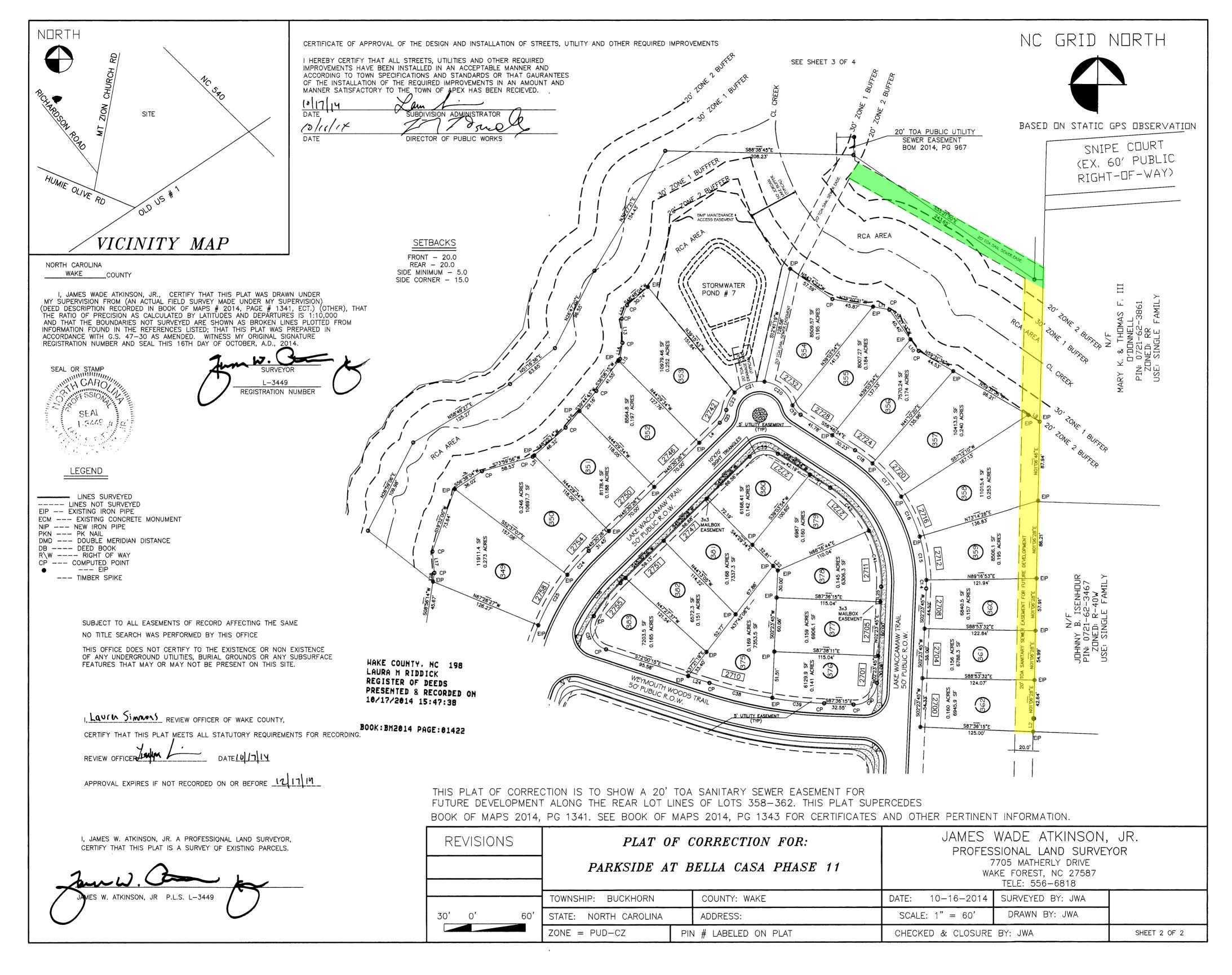
NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Apex that portion of the Easement located within the lots identified as Lots 357- 368, Parkside at Bella Casa, Phase 11 is hereby abandoned; provided however, the Town retains all easement rights and interests in that portion of the Easement located north of the lots identified as Lots 357 and 358 and within the Resource Conservation Area identified on the Survey.

Upon motion duly made by Council Member, the above resolution was Town Council at the meeting held on the day of, 202	s duly adopted by the Ape
Upon call for a vote the following Council Members voted in	the affirmative:
and the following Council Members voted in the negative:	

	This the	day of	, 2022.	
			TOWN OF APEX	
ATTEST:			Catherine Crosby Town Manager	
Allen Cole	man, Town Clerk,	, CMC, NCCCC		

 $To a \verb|\| Parkside-Bella Casa-Phase 11 \verb|\| abandonment of sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement \verb|\| resolution to abandon sewer easement easem$





| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Steve Adams, Utility Acquisition Specialist

Department(s): Administration / Development and Operations

Requested Motion

Motion to approve a resolution titled "Resolution to Abandon Multiple 5' Public Utility Easements" which will abandon eleven (11) existing 5' public utility easements as identified in the resolution and referenced Exhibit A.

<u>Approval Recommended?</u>

Yes

Item Details

Utilities have been installed and portions of 5'blanket public utility easement are no longer needed. Developer has requested the utility easement be abandoned to accommodate retaining walls.

Attachments

- Resolution to Abandon Multiple 5' Public Utility Easements
- Exhibit A (Survey)



Resolution 2	2022-
--------------	-------

A RESOLUTION TO ABANDON MULTIPLE 5' PUBLIC UTILITY EASEMENTS

WHEREAS, the Town of Apex presently has existing public utility easement interests as shown in Book of Maps 2021 Page 1886, Wake County Registry and as shown on the survey attached hereto as Exhibit A; and

WHEREAS, the developer desires the Town to abandon those portions of 5' public utility easements in those certain areas designated as "Existing 5' TOA Public Utility Easement To Be Abandoned" as shown on that certain survey plat entitled "Easement Abandonment Plat The Courtyards on Holt for Epcon Holt Road, LLC" prepared by Advanced Civil Design, dated Jun 27, 2022, said survey being attached hereto as **Exhibit A**; and

WHEREAS, the public utility easements are further labeled and identified on Exhibit A as follows:

- A: Existing 5' TOA Public Utility Easement to be Abandoned (706 SF);
- B: Existing 5' TOA Public Utility Easement to be Abandoned (522 SF);
- C: Existing 5' TOA Public Utility Easement to be Abandoned (700 SF);
- D: Existing 5' TOA Public Utility Easement to be Abandoned (652 SF);
- E: Existing 5' TOA Public Utility Easement to be Abandoned (584 SF);
- F: Existing 5' TOA Public Utility Easement to be Abandoned (582 SF);
- G: Existing 5' TOA Public Utility Easement to be Abandoned (450 SF);
- H: Existing 5' TOA Public Utility Easement to be Abandoned (427 SF);
- I: Existing 5' TOA Public Utility Easement to be Abandoned (691 SF);
- J: Existing 5' TOA Public Utility Easement to be Abandoned (833 SF);
- K: Existing 5' TOA Public Utility Easement to be Abandoned (542 SF);

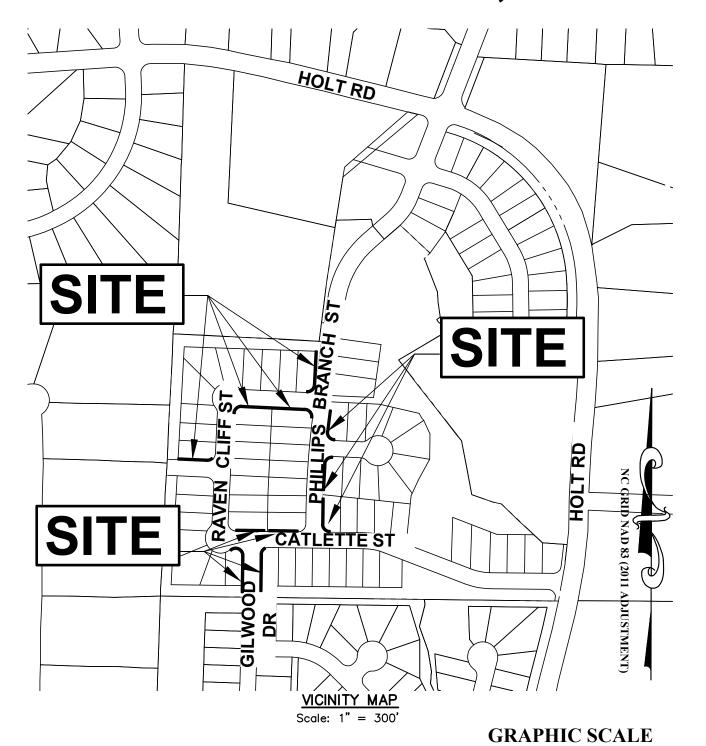
WHEREAS, these portions of the existing easements the easements described above are no longer needed and the Town Council considers it advisable to abandon these easements.

NOW, THEREFORE, BE IT RESOLVED by the Town Council of the Town of Apex hereby abandons the portions of public utility easement interests identified in the attached Exhibit A as easement areas A through K, provided however, the Town specifically retains any and all property interest it may have in the property not specifically identified as abandoned herein.

Upon motion duly made by Coun	cil Member_		,	and duly	second	ed by
Council Member	, the above	resolution	was dul	y adopted	by the	Apex
Town Council at the meeting held on the _	day of _		2022, in	the Town	Hall.	

Upon call for a vote the following Council	cil Members voted in the affirmative:
and the following Council Members vote	ed in the negative:
This theday of	., 2022.
	TOWN OF APEX
	- W C''II - W
	Jacques K. Gilbert, Mayor Town of Apex
EST:	-
L. Coleman, CMC, NCCCC Clerk	
of Apex	

EASEMENT ABANDONMENT PLAT THE COURTYARDS ON HOLT **FOR EPCON HOLT ROAD, LLC**



	LINE TABLE		
LINE	DISTANCE	BEARING	
L1	5.00'	N01°38'31"E	
L2	105.40'	N02°56'21"E	
L3	5.00'	S88°01'35"E	
L4	107.70'	S02°56'21"W	
L5	5.00'	N82°40'25"W	
L6	102.97	N87°14'05"W	
L7	5.00'	S02°45'55"W	
L8	102.97	S87°14'05"E	
L9	5.00'	N81°59'05"W	
L10	5.00'	N02°45'59"E	
L11	5.00'	S02°45'55"W	
L12	5.00'	N87°47'33"W	
L13	41.64'	S00°42'37"W	
L14	5.00'	N88°22'38"W	
L15	41.64'	N00°42'37"E	
L16	5.00'	N00°42'35"E	
L17	5.00'	N03°11'00"E	
L18	90.68'	S87°14'05"E	

LINE TABLE			
LINE DISTANCE		BEARING	
L19	5.00'	S42°14'05"E	
L20	90.72'	N87°14'05"W	
L21	5.00'	N89°17'25"W	
L22	114.51	N00°42'37"E	
L23	5.00'	N41°48'19"W	
L24	114.51	S00°42'37"W	
L25	115.00'	N00°42'37"E	
L26	5.00'	S30°13'33"E	
L27	115.00'	S00°42'37"W	
L28	5.00'	N89 ° 17'25"W	
L29	90.00'	N89°17'25"W	
L30	5.00'	N00°42'35"E	
L31	90.00'	S89°17'25"E	
L32	5.00'	S00°42'35"W	
L33	5.00'	N00°42'35"E	
L34	89.33'	N89 ° 17'25"W	
L35	4.00'	S00°42'35"W	
L36	20.00'	S89°17'25"E	

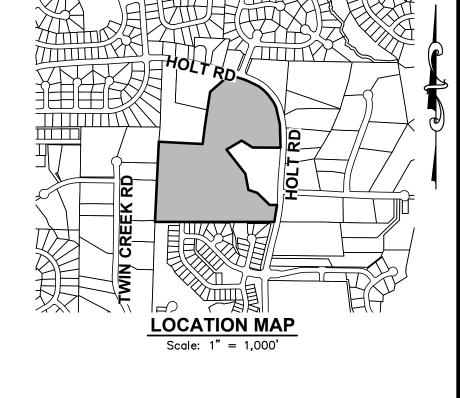
LINE TABLE			
DISTANCE	BEARING		
1.00'	N00°42'35"E		
69.33'	S89°17'25"E		
95.00'	N87°14'05"W		
5.00'	N87°14'05"W		
95.00'	S87°14'05"E		
	1.00' 69.33' 95.00' 5.00'		

	1 men – 300 leet
35"E	
25"E	
)5"W	
)5"W	NOTE:
05"E	1. Purpose of this plat is to abandon portions of existing 5—foot Town of Apex Public Utility Easements as
	shown on Book of Maps 2021, Page

1884 on Lots 10, 11, 20, 41, 42, 50, 56, 57, & 63	25, 34,
SITE DATA:	
Zoning District: Case #:	PUD-CZ 18CZ29
Annexation Number: HIST. PIN: 0743236975	#680

HIST. PIN:	0743236975	#680
HIST. PIN:	0743237810	#680
HIST. PIN:	0743234100	#680
HIST. PIN:	0743225750	#680
HIST. PIN:	0743229697	#680
HIST. PIN: HIST. PIN:	orent Tracts: 0743236975 0743237810 0743234100 0743225750 0743229679 Tota	0.090 Ac. 0.433 Ac. 16.559 Ac. 1.781 Ac. 1.780 Ac. 20.643 Ac.

Setback Requirements: Front - 20' Side - 5' Corner Side - 10' Rear - 10'



	CURVE TABLE				
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD DIST.
C1	089°49'35"	20.00'	31.36'	N47°51'08"E	28.24'
C2	084°45'01"	25.00'	36.98'	S50°23'25"W	33.70'
С3	094°33'39"	20.00'	33.01'	N39°57'15"W	29.39'
C4	094°33'39"	25.00'	41.26'	S39°57'15"E	36.73'
C5	090'00'00"	20.00'	31.42'	S47°45'55"W	28.28'
C6	090'00'00"	25.00'	39.27	N47°45'55"E	35.36'
C7	093°41'06"	25.00'	40.88'	S40°23'32"E	36.47'
C8	001°33'53"	2475.00'	67.59'	S07°13'58"W	67.59'
С9	001°33'53"	2470.00'	67.46	N07°13'58"E	67.45
C10	093°41'06"	20.00'	32.70'	N40°23'32"W	29.18'
C11	088*39'22"	20.00'	30.95	S48°26'15"W	27.95'
C12	001°54'07"	2470.00'	81.99'	S03°09'30"W	81.99'
C13	001°54'07"	2475.00'	82.16'	N03°09'30"E	82.15'
C14	088'39'22"	25.00'	38.68'	N48°26'15"E	34.94'
C15	090°00'02"	25.00'	39.27	S44°17'24"E	35.36'
C16	000°54'45"	2475.00'	39.42'	S01°10'00"W	39.42'
C17	000°54'45"	2470.00'	39.34'	N01°10'00"E	39.34'
C18	090°00'02"	20.00'	31.42'	N44°17'24"W	28.28'
C19	045°00'00"	20.00'	15.71'	N70°15'55"E	15.31'
C20	045°00'00"	25.00'	19.63'	S70°15'55"W	19.13'
C21	132°30'56"	20.00'	46.26	N65°32'51"W	36.61'
C22	132°30'56"	25.00'	57.82	S65*32'51"E	45.77'
C23	059°03'50"	25.00'	25.77	N30°14'32"E	24.65'
C24	059°03'50"	20.00'	20.62	S30°14'32"W	19.72'

LOCATION MAP Scale: 1" = 1,000'	FIRM #
	NT PLAT HOLT

EASEMENT ABANDONMER THE COURTYARDS ON EPCON HOLT ROAD, $\frac{\circ}{2}$

County,

White Oak

Apex

of

Revisions: 2022-04-28 T 2022-05-16 T 2022-06-03 T 2022-06-22 T 2022-06-27 T

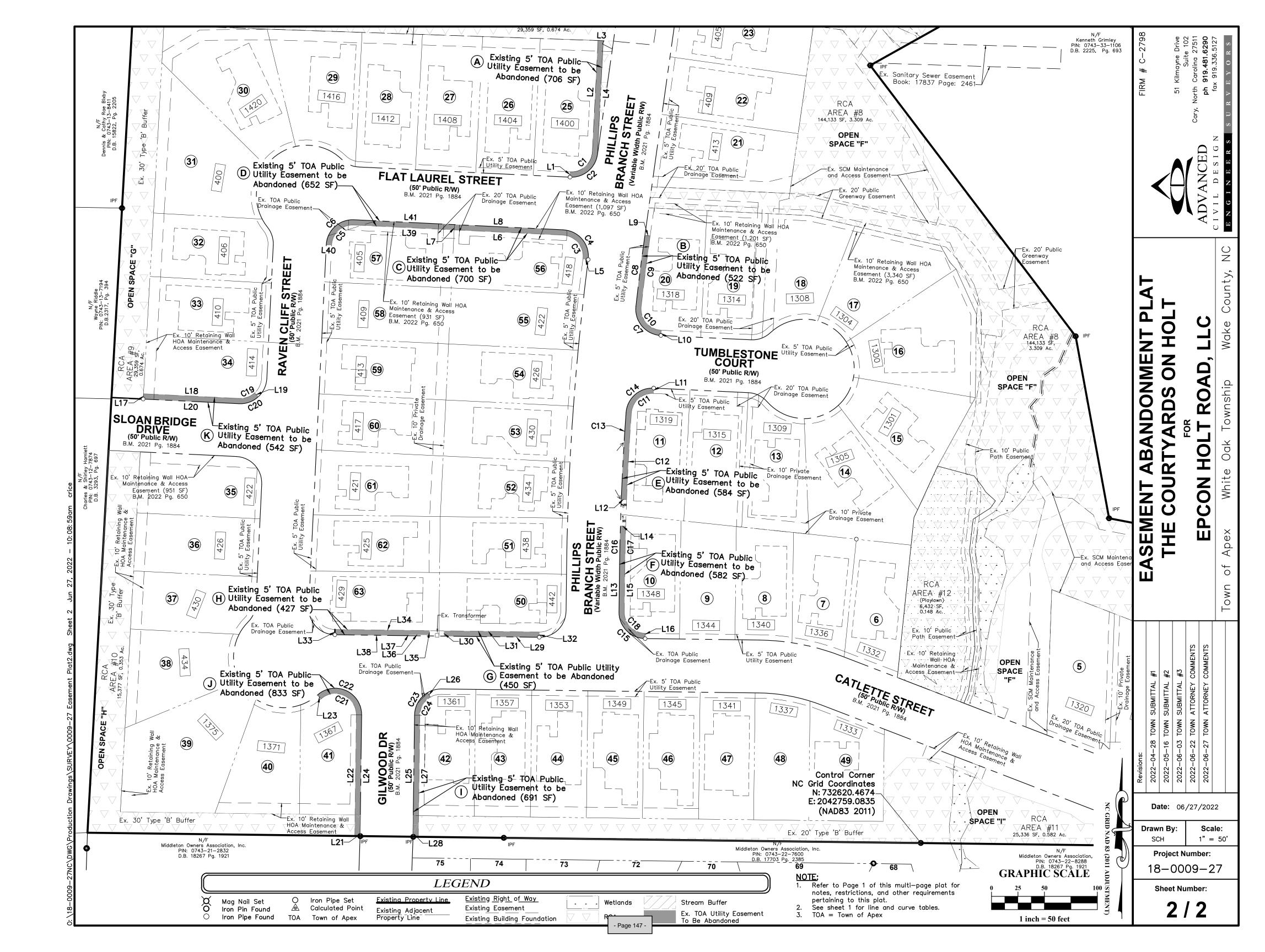
Date: 06/27/2022

Drawn By: AS NOTED

Project Number: 18-0009-27

> **Sheet Number:** 1/2

Page 146 -



for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Amanda Bunce, Current Planning Manager

Department(s): Planning and Community Development

Requested Motion

Motion to approve the Statement of the Town Council and Ordinance for Rezoning Case #22CZ03 Sweetwater PUD Amendment, David Schmidt, ExperienceOne Homes, LLC, petitioner, for the properties located at 0 & 3233 US 64 Hwy W, 0 Core Banks St, and 1051 & 1075 Newland Ave (PINs 0722453275, 0722456374, 0722458740, 0722550034, 0722544876, & 0722544404).

<u>Approval Recommended?</u>

The Planning and Community Development Department recommends approval.

Item Details

Rezoning Case #22CZ03 was approved at the June 14, 2022 Town Council meeting.

Attachments

- Statement of the Town Council
- Ordinance to Amend the Official Zoning District Map



STATEMENT OF TOWN COUNCIL AND ORDINANCE AMENDING THE OFFICIAL ZONING DISTRICT MAP OF THE TOWN OF APEX TO CHANGE THE ZONING OF APPROXIMATELY 44.76 ACRES LOCATED AT 0 & 3233 US 64 HWY W, 0 CORE BANKS ST, and 1051 & 1075 NEWLAND AVE FROM PLANNED UNIT DEVELOPMENT-CONDITIONAL ZONING (PUD-CZ #18CZ01) TO PLANNED UNIT DEVELOPMENT-CONDITIONAL ZONING (PUD-CZ)

#22CZ03

WHEREAS, David Schmidt, ExperienceOne Homes, LLC, owner/applicant (the "Applicant"), submitted a completed application for a conditional zoning on the 1st day of February 2022 (the "Application"). The proposed conditional zoning is designated #22CZ03;

WHEREAS, the Director of Planning and Community Development for the Town of Apex, Dianne Khin, caused proper notice to be given (by publication and posting) of a public hearing on #22CZ03 before the Planning Board on the 11th day of April 2022;

WHEREAS, the Apex Planning Board held a public hearing on the 11th day of April 2022, gathered facts, received public comments and formulated a recommendation regarding the application for conditional zoning #22CZ03. A motion was made by the Apex Planning Board to recommend approval with conditions as recommended by staff; the motion passed unanimously for the application for #22CZ03;

WHEREAS, pursuant to N.C.G.S. §160D-601 and Sec. 2.2.11.E of the Unified Development Ordinance, the Director of Planning and Community Development caused proper notice to be given (by publication and posting), of a public hearing on #22CZ03 before the Apex Town Council on the 26th day of April 2022;

WHEREAS, the Apex Town Council held a public hearing on the 26th day of April 2022. Amanda Bunce, Current Planning Manager, presented the Planning Board's recommendation at the public hearing;

WHEREAS, all persons who desired to present information relevant to the application for #22CZ03 and who were residents of Apex or its extraterritorial jurisdiction, or who owned property adjoining the property for which the conditional zoning is sought, were allowed to present evidence at the public hearing before the Apex Town Council. No one who wanted to speak was turned away;

WHEREAS, the Apex Town Council finds that the approval of the rezoning is consistent with the 2045 Land Use Plan and other adopted plans in that: The 2045 Land Use Map designates this area as Mixed Use: High Denisty Residential/Office Employment/Commercial Services. This designation on the 2045 Land Use Map includes the zoning district Planned Unit Development-Conditional Zoning (PUD-CZ) and the Apex Town Council has further considered that the rezoning to Planned Unit Development-Conditional Zoning (PUD-CZ) will allow development to accommodate the growth in population, economy, and infrastructure consistent with that contemplated by the 2045 Land Use Map;

WHEREAS, the Apex Town Council finds that the approval of the rezoning is reasonable and in the public interest in that: The rezoning provides more flexibility for development while providing a greater buffer or planting area than currently required in addition to a greater setback for most vertical construction from the current right-of-way of US Highway 64 to mitigate the impact of right-of-way acquisition that will be needed for a future interchange at Richardson Road and US Highway 64; and

WHEREAS, the Apex Town Council by a vote of 3 to 2 approved Application #22CZ03 rezoning the subject tract located at 3233 US 64 Highway, 0 Core Banks St., 0 US 64 Highway, 1051 & 1075 Newland Ave from Planned Unit Development-Conditional Zoning (PUD-CZ #18CZ01) to Planned Unit Development-Conditional Zoning (PUD-CZ).

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF APEX

<u>Section 1</u>: The lands that are the subject of the Ordinance are those certain lands described in Attachment "A" – Legal Description which is incorporated herein by reference, and said lands are hereafter referred to as the "Rezoned Lands."

Ordinance Amending the Official Zoning District Map #22CZ03

<u>Section 2</u>: The Town of Apex Unified Development Ordinance, including the Town of Apex North Carolina Official Zoning District Map which is a part of said Ordinance, is hereby amended by changing the zoning classification of the "Rezoned Lands" from Planned Unit Development-Conditional Zoning (PUD-CZ #18CZO1) to Planned Unit Development-Conditional Zoning (PUD-CZ) District, subject to the conditions stated herein.

<u>Section 3</u>: The Director of Planning and Community Development is hereby authorized and directed to cause the said Official Zoning District Map for the Town of Apex, North Carolina, to be physically revised and amended to reflect the zoning changes ordained by this Ordinance.

Section 4: The "Rezoned Lands" are subject to the conditions in Attachment "B" Sweetwater PUD which are imposed as part of this rezoning.

<u>Section 5</u>: The "Rezoned Lands" shall be perpetually bound to the conditions imposed including the uses authorized, unless subsequently changed or amended as provided for in the Unified Development Ordinance. Site plans for any development to be made pursuant to this amendment to the Official Zoning District Map shall be submitted for site plan approval as provided for in the Unified Development Ordinance.

Section 6: This Ordinance shall be in full force and effect from and after its adoption.

Motion by Council Member______

Seconded by Council Member(s) voting "aye."

With ____ Council Member(s) voting "no."

This the ____ day of ______ 2022.

TOWN OF APEX

Allen Coleman, CMC, NCCCC
Town Clerk

APPROVED AS TO FORM:

Town Attorney

Attachment "A"

<u>LAND DESCRIPTION FOR REZONING</u> PROPERTY OF EXPERIENCEONE HOMES, LLC KEPE1 STC, LLC

LYING AND BEING IN WHITE OAK TOWNSHIP, WAKE COUNTY, NORTH CAROLINA

COMMENCING AT A POINT, SAID POINT BEING THE NORTH EASTERN MOST PROPERTY CORNER OF KEPE1 STC, LLC AS RECORDED IN DEED BOOK 18792 PAGE 51 LYING ON THE SOUTHERN MARGIN OF US HIGHWAY 64) AND BEING A COMMON CORNER WITH 64 WEST BUSINESS CONDOS AS RECORDED IN DEED BOOK 8609 PAGE 1464; HAVING NORTH CAROLINA GRID COORDINATES OF NORTHING: 725,901.98' EASTING: 2,025,327.66' AS SHOWN IN BOOK OF MAPS 2016 PAGE 588; POINT IS HEREBY KNOW AS *THE POINT OF BEGINNING*.

THENCE LEAVING MARGIN OF US 64 HIGHWAY IN A SOUTHERLY DIRECTION ALONG SAID COMMON LINE OF 64 WEST BUSINESS CONDOS PROPERTY S 01° 32' 52" W FOR A DISTANCE 687.66 FEET TO A POINT; SAID POINT BEING A COMMON CORNER WITH HWY 64 HOLDINGS; THENCE. S 88° 31' 32" E FOR A DISTANCE OF 190.35 FEET TO A POINT: THENCE. S 32° 00' 30" E FOR A DISTANCE OF 333.97 FEET TO A POINT; THENCE, S 00° 50' 49" E FOR A DISTANCE OF 414.52 FEET TO A POINT; SAID POINT LYING ALONG THE COMMON BOUNDARY OF THE ANS TRUST PROPERTY AT THE CENTERLINE OF CHANTICLAIR DRIVE; THENCE ALONG THE CENTER OF SAID DRIVE, S 27° 32' 58" W FOR A DISTANCE OF 176.79 FEET TO A POINT; THENCE, S 27° 37' 14" W FOR A DISTANCE OF 111.78 FEET TO A POINT; SAID POINT BEING THE CENTERLINE OF A ROUND-A-BOUT IN CORE BANKS STREET; THENCE ALONG SAID STREET, N 76° 56' 05" W FOR A DISTANCE OF 160.47 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT, WITH A RADIUS OF 1000.00 FEET HAVING CHORD BEARING AND OF N 80° 40' 51" W FOR A DISTANCE OF 135.75' FEET TO A POINT; THENCE, N 84° 34' 21" W FOR A DISTANCE OF 209.33 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT, WITH A RADIUS OF 1000.00 FEET HAVING CHORD BEARING AND OF N 73° 28' 23" W FOR A DISTANCE OF 385.03' FEET TO A POINT; THENCE, N 61° 45' 27" W FOR A DISTANCE OF 253.57 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT, WITH A RADIUS OF 700.00 FEET HAVING CHORD BEARING AND OF N 76° 06' 06" W FOR A DISTANCE OF 346.63' FEET TO A POINT; THENCE, S 89° 33' 47" W FOR A DISTANCE OF 7.59 FEET TO A POINT; SAID POINT BEING THE INTERSECTION OF CORE BANKS STREET AND THE COMMON BOUNDARY LINE OF STALEY C. SMITH AND AARON E. SMITH JR.; THENCE IN A NORTHERLY DIRECTION ALONG SAID COMMON LINE, N 00° 26' 13" W FOR A DISTANCE OF 1102.81 FEET TO A POINT; SAID POINT BEING A COMMON CORNER OF SKJD HOLDINGS. LLC AND LYING ON THE SOUTHERN MARGIN OF US 64 HIGHWAY; THENCE WITH SAID MARGIN, N 82° 54' 21" E FOR A DISTANCE OF 1231.79 FEET TO A POINT; SAID POINT BEING THE POINT AND PLACE OF BEGINNING, HAVING AN AREA OF 1,949,585 SQUARE FEET OR 44.76 ACRES MORE OR LESS.

BEING A PORTION OF PROPERTY ACQUIRED BY OWNERS IN DEED BOOK 16739 PAGE 1802 AND DEED BOOK 16823 PAGE 2446 OF THE WAKE COUNTY REGISTRY.

Attachment B

Sweetwater PUD Amendment

Proposed Rezoning Changes

June 16, 2022

(Limited to Mixed-Use Portion of Project – North of Core Banks Street Only)

The PUD will retain all of the conditions from rezoning #16CZ21, #17CZ21 and #18CZ01 except:

I. Revision to Section 6:

Section 6: Design Controls

NONRESIDENTIAL/MIXED-USE AREAS:

Residential: Maximum 230 units: 2nd story and above only (no other residential permitted in

this section).

Office: A minimum of 80,000 55,000 square feet of office will be provided in this section.

II. Revision to Section 11:

Section 11: Public Facilities

<u>Water and Sanitary Sewer</u>: All lots will be served by Town of Apex public sanitary sewer and water. Refer to PD Plan Sheet 3 for conceptual connections to infrastructure within adjacent development and roadways in accordance with the minimum criteria of the Town of Apex Standards and Specifications. The utility design shall meet the requirements of the Town of Apex Utilities Master Plan. Concurrently with the Town of Apex construction plan review, the Town of Cary will only review and approve the sewer connection directly connecting to Reedy Branch outfall. Developer shall construct all water and sewer infrastructure for any specific phase prior to approval of the first plat for that specific phase.

Roadway: Internal Streets will be designed to Town of Apex public roads standards. The proposed development roadway system will be in accordance with the Apex Thoroughfare and Collector Street Plan. A functional alignment for the future Richardson Road thoroughfare will be created with the input from NCDOT and Town of Apex from its intersection with US 64 to the edge of the project area. The ultimate cross-section for the future Richardson Road will be 4 lane median divided facility on a 100-foot public right-of-way. In the initial phases of the development, the developer will construct a 2-lane median divided road. The final design will be determined at Master Subdivision Plan. The intersection of the future Richardson Road and US Highway 64 will comply with the NCDOT US 64 corridor plan, with interim measures. to accommodate the ultimate

design for the interchange. The developer will be responsible for construction of the interim measures deemed appropriate for by the Traffic Impact Analysis and NCDOT design criteria. Traffic calming devices, such as roundabouts, neighborhood traffic mini-circles and neckdown traffic facilities, will be incorporated at various locations within the proposed street network system. Based on neighborhood input and concurrences with Staff, a proposed traffic circle with directional islands will be located on Timken Forest Drive and the proposed street to the portion of the residential subdivision located adjacent to Abbington Subdivision.

Refer to PD Plan Sht-2 for proposed access points and planned/future connectivity access points shown are conceptual and will be finalized at the subdivision plan stage based on review of the Traffic Impact Analysis findings and recommendations. These findings and recommendations are:

- 1. The developer shall construct Richardson Road, serving as the major north-south thoroughfare south of US 64, on a minimum 100-foot public right-of-way as a median divided two-lane shoulder section thoroughfare or similar to be determined at the time of the subdivision and site plan submittal, allowing for future expansion to four-lane divided when needed. Developer shall construct Richardson Road and the required collector streets (except for the final lift of asphalt) prior to the first building permit.
- 2. The developer shall propose a conceptual design for the future interchange at US 64 if offered as an alternative to the interchange recommended in the US 64 Corridor Study. Reservation of future public right of way for the interchange shall be determined based on Town of Apex and NCDOT review and approval of the interchange concept(s) if not based on the US 64 Corridor Study. This reservation shall be included in development plans and occur at the time of platting parcels for development adjacent to US 64. Surplus parking and related facilities (lighting, landscaping, and storm drainage, etc.) can be constructed within the reservation area; with the understanding that these improvements may be removed in the future. The developer shall make the necessary provisions to accommodate future loss of parking by appropriate site planning including addition of a 50' Type A Buffer behind the reservation area.
- 3. The developer shall construct a superstreet with left turn crossovers and downstream U-Turns on US 64 at the intersection of Richardson Road and Jenks Road based on the recommendations in the TIA and the US 64 Corridor Study subject to final approval. Final approval of storage lengths, lane geometry, and installation of traffic signals is subject to Town of Apex and NCDOT review and approval at the time of site and/or subdivision plans. The developer shall construct improvements according to the Town of Apex TIA review letter dated January 2, 2015, or as otherwise approved by Town of Apex and NCDOT during site and subdivision plan approval. Developer shall construct these US 64 improvements prior to the first building permit: the signal will be installed when warranted.
- 4. The developer shall monitor the superstreet intersections on US 64 during the development of Phase 1 (residential) and install traffic signals when warranted if not determined to be a responsibility of others prior to that time. Traffic signals at one or more locations on the superstreet may be warranted prior to build-out of Phase 1. This requirement does not prevent other developers from studying and installing traffic signals

and/or additional turning lanes if determined to be necessary improvements by other as part of other development approvals. If not installed in prior years, the developer shall install traffic signals and additional lanes recommended in the TIA as needed to serve site traffic during Phase 2 subject to Town of Apex and NCDOT review and approval.

- 5. The developer shall remove the concrete diverter island on Beaver Creek Commons Drive at Kelly Road and restripe as a through-left lane prior to first plat.
- 6. The developer shall provide traffic calming features in the horizontal design and layout of the street(s) connecting the proposed development and Stratford at Abbington subject to Town of Apex review and approval at the time of subdivision plans.

<u>Alleys</u>: The alleys will be constructed in accordance with Town of Apex Standards and Specifications.

<u>Sidewalks</u>: Sidewalks shall be provided on both sides of all streets and cul-de-sacs within the subdivision.

The following is a new condition that is being added with this rezoning:

I. New Section 17: Environmental Advisory Board

1. At least one (1) pet waste station shall be installed near the Hotel if the Hotel permits pets.

II. New Section 18: Additional Zoning Conditions (22CZ03)

- 1. Excluding the gas canopy, a minimum 100' setback for vertical construction from US 64 shall be provided.
- 2. Along US 64 east of Richardson Road, the Developer shall provide a 75' Type 'A' Buffer.
- 3. Along US 64 west of Richardson Road, the Developer shall provide an additional planting area between the 50' and the back of curb that is no less than 10' in width. This area may be disturbed and shall be replanted to a Type 'A' Buffer standard.

SWEETWATER PUD AMENDMENT PLANS

APEX, NC JANUARY 2, 2018

REVISED: SEPTEMBER 18, 2018

REVISED: FEBRUARY 1, 2022 **REVISED: MARCH 11, 2022**

VICINITY MAP

1" = 1500'



	PO BOX 5509
	CARY, NC 27512
	CAR1, NO 27512
KEP APEX, LLC	
	7001 BRUSH HOLLOW ROAD
	STE 200
	WESTBURY, NY 11590
KEPE1 HOLDINGS, LLC	
	7001 BRUSH HOLLOW ROAD
	STE 200
	WESTBURY, NY 11590
DEVELOPERS	
DAVID SCHMIDT	ExperienceOne Homes, LLC
LANNY CALDWELL	POST OFFICE BOX 5509
COREY SCHMIDT	CARY, NC 27512
	PHONE: 919-991-1402

THIS PROJECT WAS REVIEWED BY THE PRCR ADVISORY COMMISSION ON DECEMBER 10, 2014 AND UNANIMOUSLY RECOMMENDS DEDICATION OF THE NECESSARY PUBLIC GREENWAY EASEMENTS AND CONSTRUCTION OF THE PUBLIC GREENWAY CONSISTENT WITH THE PRGOS MASTER PLAN. THE DEVELOPER WILL RECEIVE CREDIT FOR CONSTRUCTING THE GREENWAY AGAINST THE SUBDIVISION PARKS AND RECREATION FEES.

CE GROUP, INC.

301 GLENWOOD AVE RALEIGH, NC 27603 PHONE: 919-367-8790

MITCH CRAIG, PE

LICENCE# 034332

REQUIRED ROADWAY IMPROVEMENTS:

A. THE DEVELOPER SHALL CONSTRUCT RICHARDSON ROAD, SERVING AS THE MAJOR NORTH-SOUTH THOROUGHFARE SOUTH OF US 64, ON A MINIMUM 100 FOOT PUBLIC RIGHT OF WAY AS A MEDIAN DIVIDED TWO-LAN SHOULDER SECTION THOROUGHFARE OR SIMILAR TO BE DETERMINED AT THE TIME OF SUBDIVISION AND SITE PLAN SUBMITTAL, ALLOWING FOR FUTURE EXPANSION TO FOUR-LANE DIVIDED WHEN NEEDED. DEVELOPER SHALL CONSTRUCT RICHARDSON ROAD AND THE REQUIRED COLLECTOR STREETS EXCEPT FOR THE FINAL LIFT OF ASPHALT PRIOR TO THE FIRST BUILDING PERMIT.

B. THE DEVELOPER SHALL PROPOSE A CONCEPTUAL DESIGN FOR THE FUTURE INTERCHANGE AT US 64 IF OFFERED AS AN ALTERNATIVE TO THE INTERCHANGE RECOMMENDED IN THE US 64 CORRIDOR STUDY. RESERVATION OF FUTURE PUBLIC RIGHT OF WAY FOR THE INTERCHANGE SHALL BE DETERMINED BASED ON TOWN OF APEX AND NCDOT REVIEW AND APPROVAL OF THE INTERCHANGE CONCEPT(S) IF NOT BASED ON US 64 CORRIDOR STUDY. THIS RESERVATION SHALL BE INCLUDED IN DEVELOPMENT PLANS AND OCCUR AT THE TIME OF PLATTING PARCELS FOR DEVELOPMENT ADJACENT TO US 64. SURPLUS PARKING AND RELATED FACILITIES (LIGHTING, LANDSCAPING, AND STORM DRAINAGE, ETC.) CAN BE CONSTRUCTED WITHIN THE RESERVATION AREA; WITH THE UNDERSTANDING THAT THESE IMPROVEMENTS MAY BE REMOVED IN FUTURE. THE DEVELOPER SHALL MAKE NECESSARY PROVISIONS TO ACCOMMODATE FUTURE LOSS OF PARKING BY APPROPRIATE SITE PLANNING INCLUDING ADDITION OF A 50' TYPE A BUFFER BEHIND THE RESERVATION AREA.

THE DEVELOPER SHALL CONSTRUCT A SUPERSTREET WITH LEFT TURN CROSSOVERS AND DOWNSTREAM U-TURNS ON US 64 AT THE INTERSECTION OF RICHARDSON ROAD AND JENKS ROAD BASED ON TOWN OF APEX AND NCDOT REVIEW AND APPROVAL OF THE INTERSECTION OF RICHARDSON ROAD AND JENKS ROAD BASED ON THE RECOMMENDATIONS IN THE TIA AND THE US 64 CORRIDOR STUDY SUBJECT TO FINAL APPROVAL. FINAL APPROVAL OF STORAGE LENGTHS, LANE GEOMETRY, AND INSTALLATION OF TRAFFIC SIGNALS IS SUBJECT TO TOWN OF APEX AND NCDOT REVIEW AND APPROVAL AT THE TIME OF SITE AND/OR SUBDIVISION PLANS. THE DEVELOPER SHALL CONSTRUCT IMPROVEMENTS ACCORDING TO THE TOWN OF APEX TIA REVIEW LETTER DATED JANUARY 2, 2015, OR AS OTHERWISE APPROVED BY TOWN OF APEX AND NCDOT DURING SITE AND SUBDIVISION PLAN APPROVAL. DEVELOPER SHALL CONSTRUCT THESE US 64 IMPROVEMENTS PRIOR TO THE FIRST BUILDING PERMIT: THE SIGNAL WILL BE INSTALLED WHEN WARRANTED.

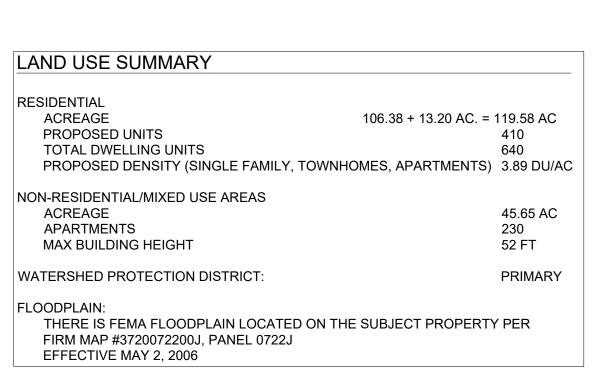
D. THE DEVELOPER SHALL MONITOR THE SUPERSTREET INTERSECTIONS ON US 64 DURING DEVELOPMENT OF PHASE 1 RESIDENTIAL AND INSTALL TRAFFIC SIGNALS WHEN WARRANTED IF NOT DETERMINED TO BE A RESPONSIBILITY OF OTHERS PRIOR TO THAT TIME. TRAFFIC SIGNALS AT ONE OR MORE LOCATIONS ON THE SUPERSTREET MAY BE WARRANTED PRIOR TO BUILD-OUT OF PHASE1. THIS REQUIREMENT DOES NOT PREVENT OTHER DEVELOPERS FROM STUDYING AND INSTALLING TRAFFIC SIGNALS AND/OR ADDITIONAL TURNING LANES IF DETERMINED TO BE NECESSARY IMPROVEMENTS BY OTHERS AS PART OF OTHER DEVELOPMENT APPROVALS. IF NOT INSTALLED IN PRIOR YEARS, THE DEVELOPER SHALL INSTALL TRAFFIC SIGNALS AND ADDITIONAL LANES RECOMMENDED IN THE TIA AS NEEDED TO SERVE SITE TRAFFIC DURING PHASE 2 SUBJECT TO TOWN OF APEX AND NCDOT REVIEW AND APPROVAL.

E. THE DEVELOPER SHALL REMOVE THE CONCRETE DIVERTER ISLAND ON BEAVER CREEK COMMONS DRIVE AT KELLY ROAD AND RE-STRIPE

AS A THROUGH-LEFT LAN PRIOR TO FIRST PLAT. F. THE DEVELOPER SHALL PROVIDE TRAFFIC CALMING FEATURES IN THE HORIZONTAL DESIGN AND LAYOUT OF THE STREET(S) CONNECTING THE PROPOSED DEVELOPMENT AND STRATFORD AT ABBINGTON SUBJECT TO TOWN OF APEX REVIEW AND APPROVAL AT THE TIME OF

WATER AND SEWER IMPROVEMENTS: DEVELOPER SHALL CONSTRUCT ALL WATER AND SEWER INFRASTRUCTURE FOR ANY SPECIFIC PHASE PRIOR TO APPROVAL OF THE FINAL PLAT FOR THAT SPECIFIC PHASE.

RALEIGH,NC 27603 PHONE: 919-367-8790 www.cegroupinc.com License # C-1739



SITE SUMMARY RCA AREAS (16CZ21, 17CZ21, 18CZ01) REQUIRED: 164.79 AC TOTAL TRACT(S) AREA: AREA OF DEVELOPMENT: 164.79 AC - PERCENTAGES BELOW ARE OF DEVELOPED AREA RCA BUFFERS 45.65 AC (27.70%) NON-RESIDENTIAL AREA (PHASES 9 & 10) RCA1 STREAM BUFFERS 0.00 AC RCA2 PERIMETER BUFFERS 1.90 AC RCA3 OTHER BUFFERS (TRACT PIN 0722730032) 0.00 AC RCA4 STREET BUFFERS (RICHARDSON RD) 1.70 AC 3.60 AC (2.18%) RESIDENTIAL AREA (PHASES 1-8) 106.38 AC (65.55%) RCA1 STREAM BUFFERS 26.41 AC RCA2 PERIMETER BUFFERS 1.34 AC RCA4 STREET BUFFERS (RICHARDSON RD) 1.88 AC 29.63 AC (17.98%) TOTAL RCA AREA = DEDICATED VACANT TRACT (NOT PART OF DEVELOPED AREA)

RCA3 OTHER BUFFERS (TRACT PIN 0722730032)

RCA AREA AS A PERCENTAGE OF DEVELOPED AREA: 28.18%

TOTAL RCA AREA:

4	REVISED PER COMMENTS DATED 2/18/22	03/11/22
3	OWNER REVISIONS	02/01/22
2	REVISED PER COMMENTS DATED 2/19/18	09/07/18
1	REVISED PER COMMENTS DATED 1/22/18	02/09/18
NO.	REVISION	DATE

AUTUMN

46.43 AC

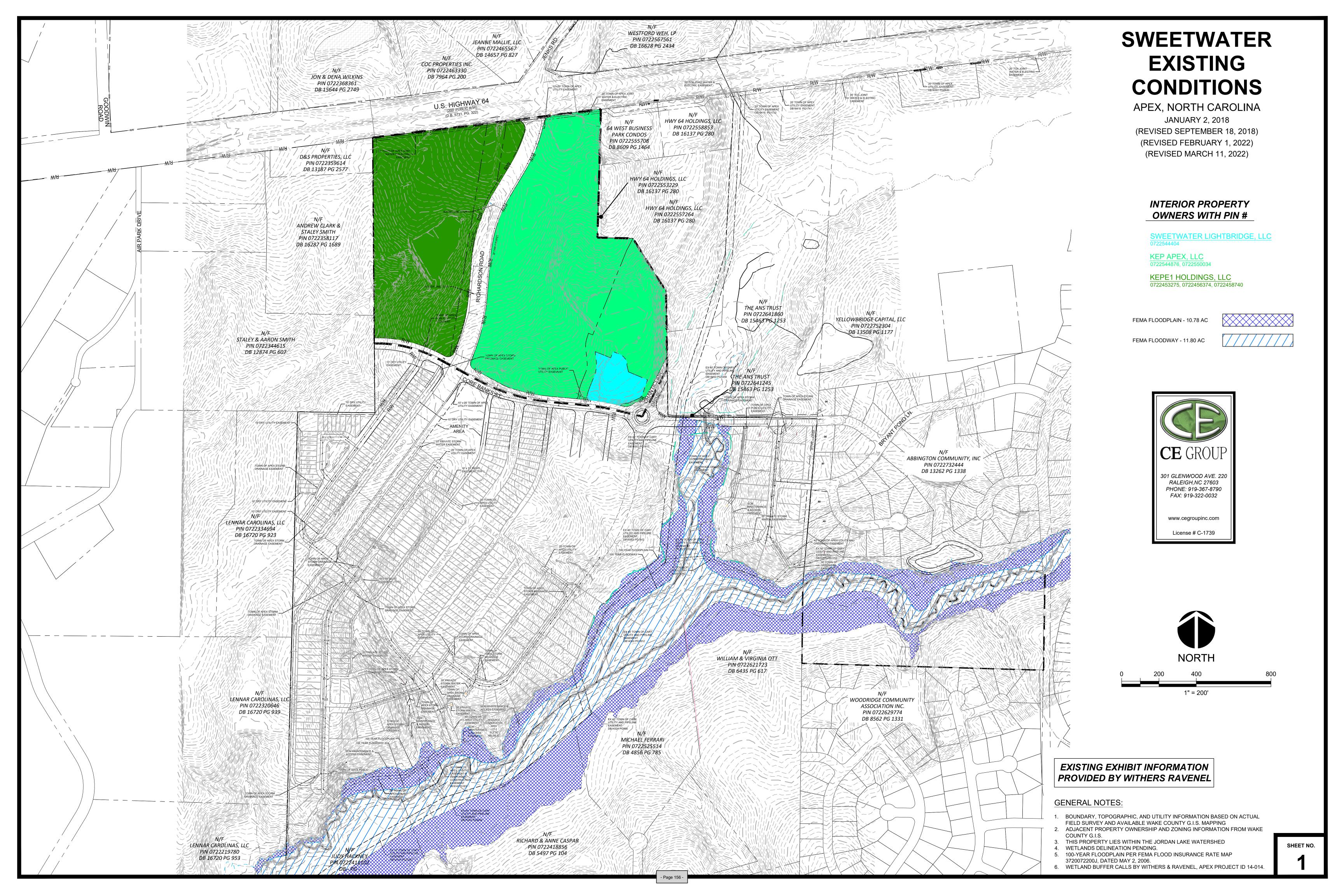
SWEETWATER LIGHTBRIDGE, LLC 0722544404	
KEP APEX, LLC 0722544876, 0722550034	41.42 AC.
KEPE1 HOLDINGS, LLC 0722453275, 0722456374, 0722458740	

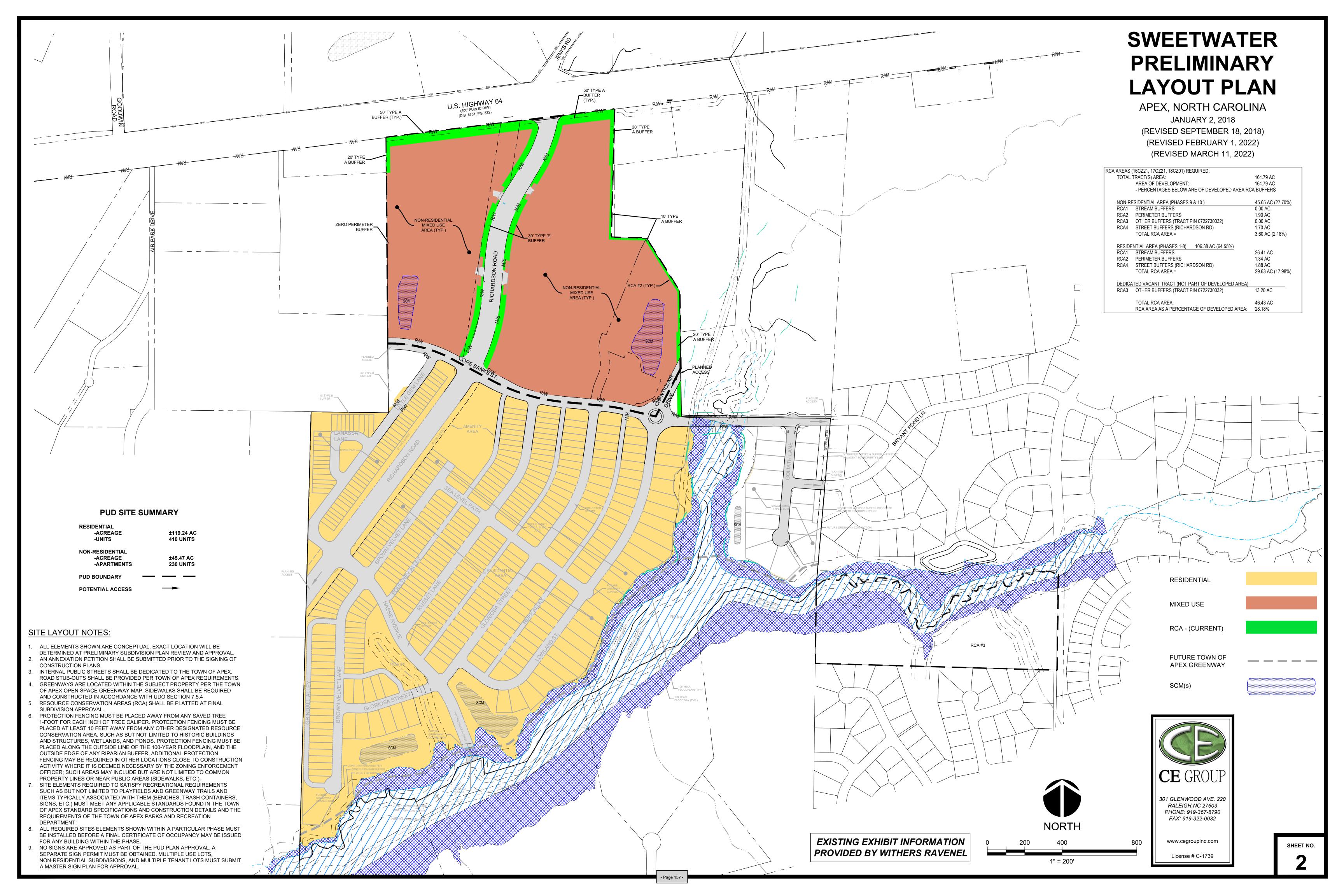
OVERALL PUD INFORMATION:

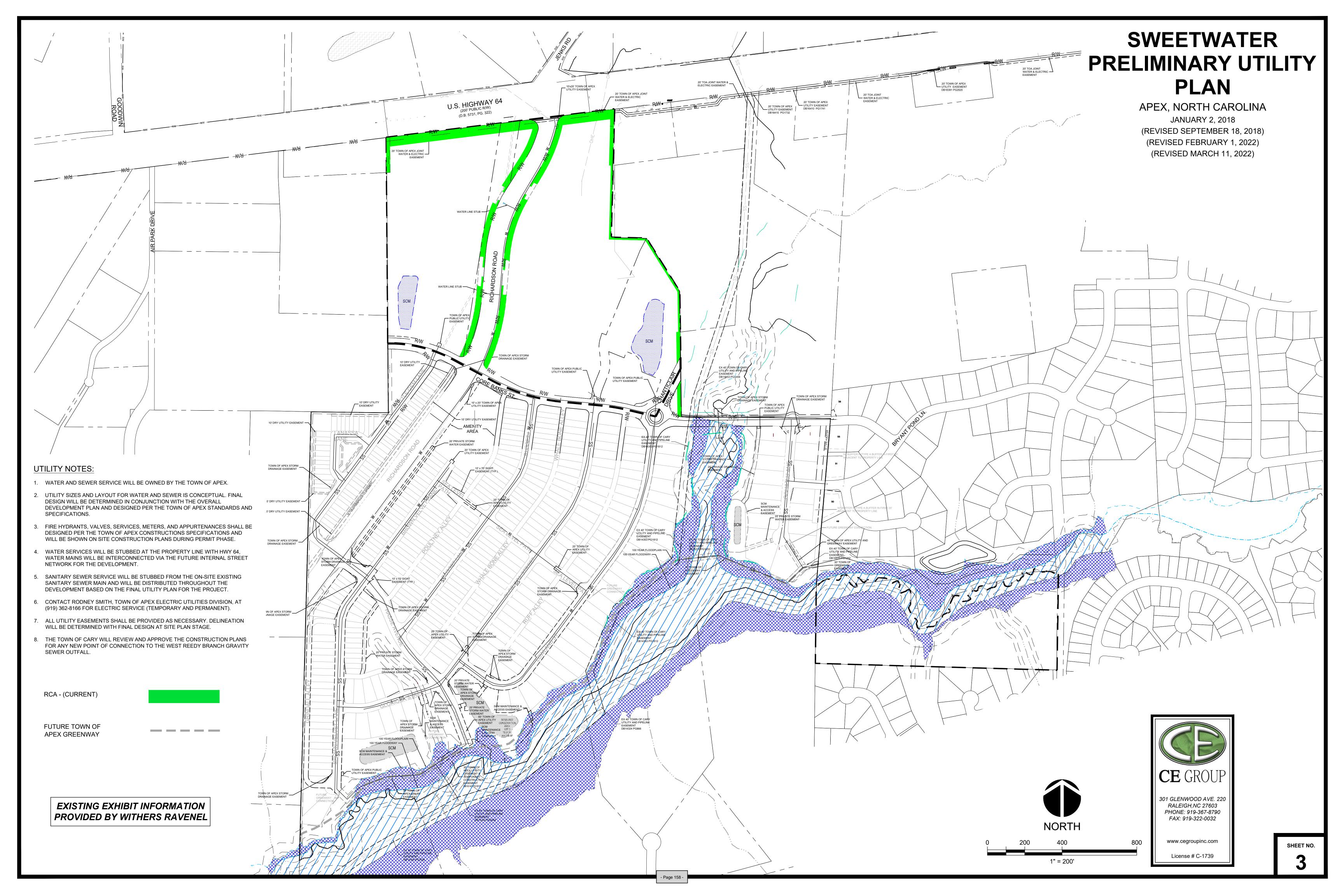
AREA OF PUD MODIFICATION:

MIXED USE DESIGNATED AREA= AREA IN R.O.W. = TOTAL MIXED USE DESIGNATED AREA=	45.65 AC 4.23 AC 41.42 AC
0722730032* = *PARCEL LOCATED OUTSIDE OF MIXED USED DESIGNATED AREA	13.20 AC.
TOTAL ACRES FOR ZONING=	164.79 AC.
CURRENT ZONING:	PUD-CZ
PROPOSED ZONING:	PUD-CZ
WATERSHED:	PRIMARY
HISTORIC STRUCTURES:	NONE

EXISTING EXHIBIT INFORMATION PROVIDED BY WITHERS RAVENEL







for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Allen Coleman, Town Clerk

Department(s): Town Clerk's Office

Requested Motion

Motion to approve the Apex Tax Report dated June 08, 2022.

Approval Recommended?

Yes

Item Details

At the regular meeting held on July 11, 2022, the Wake County Board of Commissioners approved the Apex Tax Report dated June 08, 2022.

<u>Attachments</u>

Tax Report





Board of Commissioners P.O. Box 550 • Raleigh, NC 27602

TEL 919 856 6180 FAX 919 856 5699

SIG HUTCHINSON, CHAIR SHINICA THOMAS, VICE-CHAIR VICKIE ADAMSON MATT CALABRIA MARIA CERVANIA SUSAN EVANS JAMES WEST

July 12, 2022

Mr. Allen Coleman Town Clerk Town of Apex Post Office Box 250 Apex, North Carolina 27502

Dear Mr. Coleman:

The Wake County Board of Commissioners, in regular session on July 11, 2022, approved and accepted the enclosed tax report for the Town of Apex.

The attached adopted actions are submitted for your review; no local board action is required.

Sincerely,

Yvonne Gilyard ()

Deputy Clerk to the Board

Wake County Board of Commissioners

Enclosure(s)

Wake County Tax Administration DATE TIME PAGE Rebate Details 06/08/2022 11:44:46 AM 1 APEX APEX 1 APEX	TOTAL PROCESS ACCOUNT TAX YEAR BILLING OWNER REBATED DATE NUMBER YEAR FOR TYPE		4.52 05/17/2022 0006116958 2021 2021 000000 BARRINGTON HOMES INC	4.52 1 Properties Rebated		6,550.79 05/17/2022 0000193961 2020 2020 000000 RHYAL APEX INC 6,723.19 05/12/2022 0000193961 2021 2021 000000 RHYAL APEX INC	13,273.98 2 Properties Rebated		8.58 05/13/2022 0006931679 2021 2021 000000 CARMONA, AGUSTINE 233.61 05/17/2022 0006945589 2022 2021 000000 PINNIX, GREGORY ANTOINE 133.02 05/17/2022 0006945706 2022 2021 000000 PINNIX, GREGORY ANTOINE 192.54 05/09/2022 0006945706 2022 2021 000000 PINNIX, GREGORY ANTOINE
	BILLED INTEREST		0.00	0.00		0.00	0.00		0.00
	LATE		0.41	0.41		0.00	0.00		0.78
	CITY		00.00	0.00		0.00	0.00		30.00
	PROPERTY	INTS	4.11	4.11	SI	6,550.79 6,723.19	13,273.98	UNTS	7.80 203.61 103.02 162.54
WAKE COUNTY SORTH CARDINAL	REBATE NUMBER	BUSINESS ACCOUNTS	815896	SUBTOTALS FOR BUSINESS ACCOUNTS	BUSINESS REAL ESTATE ACCOUNTS	816027 815656	SUBTOTALS FOR BUSINESS REAL ESTATE ACCOUNTS	INDIVIDUAL PROPERTY ACCOUNTS	815779 816028 816029 815206

WAKE COUNTY
* (> 9

NUMBER

PAGE 7

11:44:56 AM TIME TAX YEAR BILLING OWNER YEAR FOR TYPE 06/08/2022 DATE **Properties Rebated** ACCOUNT NUMBER Wake County Tax Administration 05/01/2022 - 05/31/2022 v Rebate Details TOTAL PROCESS REBATED DATE APEX 585.16 BILLED INTEREST 0.00 2.36 LATE LIST CITY TAG 90.00 492.80 PROPERTY WILDLIFE BOAT SUBTOTALS FOR INDIVIDUAL PROPERTY ACCOUNTS ACCOUNTS

Properties Rebated	Properties Rebated for City
1	6
151.47	14,015.13
0.00	0.00
13.77	16.54
0.00	90.00
137.70	13,908.59
SUBTOTALS FOR WILDLIFE BOAT ACCOUNTS	TOTAL REBATED FOR APEX
- Page 16	62 -

SCHMIDT, DANIEL WILLIAM

0.00

13.77

0.00

137.70

815421

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Michael Deaton, P.E., Director

Department(s): Water Resources

Requested Motion

Motion to approve a Fee-in-Lieu (FIL) in the amount of \$64,777.75 for a 12-inch waterline located along the US64 frontage of the proposed Triangle Home Services site.

Approval Recommended?

Yes

Item Details

The FIL is being sought instead of actually installing the water main as part of the development project. At this time, the adjacent parcels to this development do not have available water for connection. The Legacy project, which is next to this project on the west, will bring water from Olive Chapel Road and up to US64 but their schedule is behind Triangle Home Services. Once Legacy is constructed, the Town can use the FIL funds to build the waterline. The Triangle Home Services site will utilize an on-site well for their water needs.

Attachments

FIL estimate





July 5, 2022

Mr. James Gregg Town of Apex Engineering P.O. Box 250 Apex, NC 27502 james.gregg@apexnc.org

Re: Triangle Home Services – Waterline Fee-in-Lieu

Apex, NC

Per Town of Apex standards, the above project requires a 12" waterline to be extended across the property. For various reasons, the project requests a fee-in-lieu for the amount associated with the installation of said waterline. Attached is an engineer's estimate for construction of the 12" waterline. Unit prices taken from the Town of Apex Bond spreadsheet.

Sincerely,

Daniel H. Woods, P.E. **Peak Engineering & Design, PLLC**

enclosures



Triangle Home Services Waterline Fee-in-Lieu

12" Waterline Estimate

Item	Unit Cost	Quantity	Total
Mobilization	\$5,000.00 /LS	1 LS	\$5,000.00
Erosion Control	\$1,000.00 /LS	1 LS	\$1,000.00
12" DIP Waterline	\$52.00 /LF	470 LF	\$24,440.00
12" Waterline Bends	\$500.00 /SY	5 SY	\$2,500.00
12" Gate Valves	\$2,500.00 /SY	2 SY	\$5,000.00
Blow off Assembly	\$3,500.00 /SY	1 SY	\$3,500.00
Fire Hydrant Assembly	\$5,500.00 /CY	1 CY	\$5,500.00
2" Surface Asphalt Repair	\$12.33 /SY	115 SY	\$1,417.95
2.5" Intermediat Asphalt Repair	\$15.45 /SY	115 SY	\$1,776.75
8" ABC Pavment Repair	\$12.50 /LF	115 SY	\$1,437.50
24" Curb and Gutter	\$25.00 /SY	10	\$250.00
Total			\$51,822.20
25% Adjustment Factor			\$12,955.55
12" Final Estimate			\$64,777.75

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Dianne Khin, Director of Planning and Community Development

Department(s): Planning and Community Development

Requested Motion

Motion to approve the Statement of the Apex Town Council pursuant to G.S. 160D-605(a) addressing action on the Unified Development Ordinance (UDO) Amendments of June 28, 2022.

Approval Recommended?

The Planning and Community Development Department recommends approval.

Item Details

Attachments

• Statement of Town Council



STATEMENT OF THE APEX TOWN COUNCIL PURSUANT TO G.S. 160D-605(a) ADDRESSING ACTION ON THE UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENTS OF JUNE 28, 2022

Pursuant to G.S. §160D-601 and Sec. 2.2.11.E of the Unified Development Ordinance, the Director of Planning and Community Development for the Town of Apex, Dianne Khin, caused proper notice to be given (by publication and posting), of a public hearing on UDO Amendments before the Town Council on the 3rd day of June 2022.

The Apex Town Council held a public hearing on the 28th day of June 2022. Amanda Bunce, Current Planning Manager presented the Planning Board's vote to recommend approval by a vote of 6-0 at the public hearing.

All persons who desired to present information relevant to the UDO Amendments and who were residents of Apex or its extraterritorial jurisdiction were allowed to present evidence at the public hearing before the Apex Town Council. No one who wanted to speak was turned away.

The Town Council on the 28th day of June 2022 by a vote of 5 to 0, approved the Ordinance for UDO Amendments.

The Apex Town Council finds from information and testimony provided at the public hearing that the approval of the various UDO Amendments of June 28, 2022 are consistent with the Advance Apex: The 2045 Plan and reasonable and in the public interest for the following reason(s):

- 1. The amendments to UDO Sec. 8.1.6 *Retaining Structures* provide standards for retaining structures associated with walk-out basements.
- 2. The amendments to UDO Table 5.2.2.B.4 *Permitted Encroachments into Required Setbacks* remove HVAC and mechanical units from the appurtenances section and allows them to be placed anywhere in the side yard or rear yard to be consistent with state building code provisions.
- 3. The amendments to UDO Secs. 4.3.2.N *Use Classifications, Public and Civic Uses*; 4.3.5.G *Use Classifications, Retail Sales and Service*; and 4.4.5.G *Supplemental Standards, Commercial Uses, Retail Sales and Service* allow "pet crematory" as an accessory use in "Kennel", "Pet services", and "Veterinary Clinic or Hospital".
- 4. The amendments to UDO Sec. 4.5.6.C *Accessory Apartment* allow accessory apartments outside of the Small Town Character Overly District to be up to 40% of the heated square footage of the principal single-family dwelling.
- 5. The amendment to UDO Table 8.3-1: *Off-Street Parking Schedule* "A" removes "outdoor" from the use "Kennel, outdoor" in order to be consistent with the "Kennel" use listed in Article 4: *Use Regulations*.
- 6. The amendments to UDO Sec. 8.3.6 *Parking Lot Design Standards* specify when wheel stops are required in parking lots and provide an exception to the standard concrete wheel stop on historic properties with gravel parking.

	Jacques K. Gilbert Mayor
ATTEST:	
Allen Coleman, CMC, NCCCC Town Clerk	
Date	

for consideration by the Apex Town Council

Item Type: CONSENT AGENDA

Meeting Date: July 26, 2022

Item Details

Presenter(s): Taylor Wray, Special Events Coordinator

Department(s): Parks, Recreation and Cultural Resources

Requested Motion

Motion to schedule a public hearing, per the Town's Public Art Policy, for Tuesday, August 9, 2022, and consider the unity mural design created by artist, Loren Pease, at that time.

<u>Approval Recommended?</u>

Yes

Item Details

At their June 8, 2021 meeting, the Town Council approved the concept of a Unity Mural. On October 12, 2021, the location of the side retention wall at the Apex Police Station was approved. This design has been reviewed by the Unity Mural subcommittee and approved by the Public Art Committee on June 27, 2022. That subcommittee consisted of representation from the Apex Police Department, Apex High School's Student Equity Team, and several others. Per the guidelines of the Town's Public Art Plan, the Public Art Committee is now ready to make a recommendation to the Town Council regarding the proposed Unity Mural design.

Attachments

• Unity Mural Design July 2022



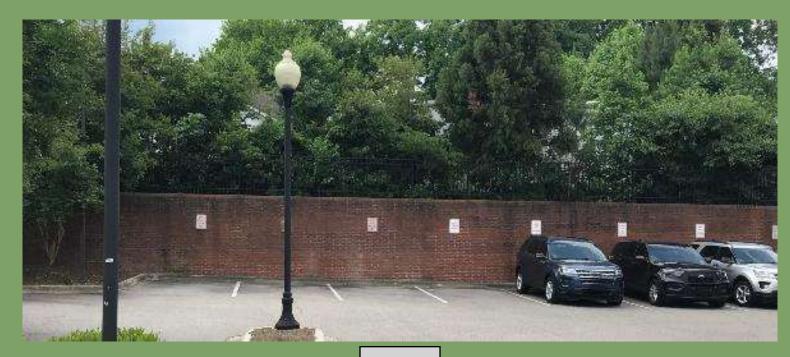




Unity Mural Apex Public Art Committee July 2022

Location

- 205 Saunders Street
 - Wall to the left of the Apex Police Department building



Proposed Design

• Created by artist, Loren Pease



for consideration by the Apex Town Council

Item Type: PRESENTATION

Meeting Date: July 26, 2022

Item Details

Presenter(s): Councilmember Terry Mahaffey, Sponsor

Stephanie Mitchell of the Apex Public School Foundation

Department(s): Apex Town Council and Apex Public School Foundation

Requested Motion

Presentation of the Peak S.T.A.R. Award - two recipients

Approval Recommended?

N/A

Item Details

The Apex Town Council is pleased to work in partnership with the Apex Public School Foundation (APSF) to present the Peak S.T.A.R. Award to a deserving Apex school staff member, teacher, or someone in school administration. This award will be presented quarterly by the Apex Town Council and the APSF.

Attachments

N/A



for consideration by the Apex Town Council

Item Type: PRESENTATION

Meeting Date: July 26,2022

Item Details

Presenter(s): Jacques K. Gilbert, Mayor

Councilmember Ed D. Gray (sponsor)

Department(s): Governing Body

Requested Motion

Motion to approve a proclamation declaring Friday, July 29, 2022 as "Mike Sayers Appreciation Day" for his many years of extraordinary public service to the community and congratulate him on his retirement from the Apex American Legion Post 124.

Approval Recommended?

Yes

Item Details

Mike Sayers has courageously served as the Commander for Apex American Legion Post 124 for 13 years and worked tirelessly for military veterans across our community. Mr. Sayers was instrumental in the completion of the Military Services Memorial in downtown Apex and has single handedly developed many programs and activities to increase the visibility of the Apex American Legion. Mr. Sayers has been a phenomenal civic leader and outstanding contributor to the Town who will be greatly missed upon his retirement.

Attachments

Proclamation





TOWN OF APEXICAROLINA

Proclamation

Mike Sayers Appreciation Day

from the Office of the Mayor

WHEREAS, The National American Legion was chartered by Congress in 1919 and continues to serve as the nation's largest military advocacy group focusing on service to veterans, servicemembers, and communities; and

WHEREAS, the Apex American Legion Post 124 was officially formed in 1995 and has consistently supported the community with Memorial, Patriots, and Veterans Day services; and

WHEREAS, Post 124 provides support for local veterans and families as well as advancing the principle of Americanism though an oratorical contest and sponsorship of high school students to Boys State and Girls State; and

WHEREAS, Mike Sayers has courageously served as the Commander for Apex American Legion Post 124 for 13 years and worked tirelessly for military veterans across our community; and

WHEREAS, Mr. Sayers was instrumental in the completion of the Military Services Memorial in downtown Apex and has single handedly developed many programs and activities to increase the visibility of the Apex American Legion; and

WHEREAS, Mr. Sayers has been a phenomenal civic leader and outstanding contributor to the Town who will be greatly missed upon his retirement; and

NOW, THEREFORE, I, Jacques K. Gilbert, Mayor of the Town of Apex, do hereby recognize Mike Sayers for his many years of extraordinary public service and proclaim Friday, July 29, 2022 as "Mike Sayers Appreciation Day".

I hereby set my hand and have caused the Seal of the Town of Apex, North Carolina, to be affixed. This the 26th day of July 2022.

Jacques K. Gilbert, Mayor

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: July 26, 2022

Item Details

Presenter(s): Joanna Helms, Director

Department(s): Economic Development

Requested Motion

Public Hearing and possible motion to approve an Economic Development Agreement with Mills Chatham Development Group LLC (MCDG) and to authorize the Town Manager to execute the same.

Approval Recommended?

Yes

Item Details

MCDG and its affiliates propose to commercially develop a portion of a site near the intersection of US Highway 64 and NC Highway 751 in Chatham County. The site has previously been annexed by the Town of Apex. MCDG intends to make a capital investment of \$25 million for real property, infrastructure improvements and a facility. This investment represents a project referred to as "Project Real" that intends to create a minimum of 180 full time jobs for a warehouse, distribution and company headquarters operation. In addition, MCDG affiliates intend to invest another \$68 million for future infrastructure and facilities at the site. Therefore, the Town, upon completion of construction and the improvements, shall reimburse costs associated with extension and installation of public utilities, specifically water and sewer, in an amount not to exceed \$2.2 million.

Attachments

Development Agreement



STATE OF NORTH CAROLINA

ECONOMIC DEVELOPMENT AGREEMENT (APEX DEVELOPMENT SITE – PROJECT REAL)

COUNTY OF CHATHAM

This **ECONOMIC DEVELOPMENT AGREEMENT** ("**Agreement**") is entered into and effective as of this ___ day of ______, 2022 ("**Effective Date**") by and among **MILLS CHATHAM DEVELOPMENT GROUP, LLC,** a North Carolina limited liability company (the "**MCDG**"), and the **TOWN OF APEX**, North Carolina, a municipal corporation of the State of North Carolina (the "**Town**"), and describes the agreement between the parties relating to an economic development project (as described herein, and commonly known as "**Project Real**") located in the Town of Apex, North Carolina.

RECITALS

WHEREAS, pursuant to North Carolina General Statute 158-7.1, the Town of Apex is authorized to make appropriation for economic development purposes when the Council determines the appropriations will increase the population, taxable property, employment, industrial output, or business prospects of the town; and

WHEREAS, the Town is vitally interested in the economic welfare of its citizens and the creation and maintenance of sustainable jobs for its citizens in strategically important industries and therefore wishes to provide the necessary conditions to stimulate investment in the local economy and promote business, resulting in the creation of a substantial investment in the Town and to encourage economic growth and development opportunities which the Town has determined will be made possible pursuant to the Project (as defined below); and

WHEREAS, MCDG has contracted with an affiliate of BIN – AG LLC, a North Carolina limited liability company ("BIN - AG") to develop the portion of the Site (as defined herein) owned by MCDG, including the design and construction of certain infrastructure improvements and an industrial or commercial building which will be leased to an affiliate of MCDG. MCDG intends to make a capital investment for the real property, infrastructure improvements and facility, of at least \$25,000,000.00 (the "Capital Investment"); and

WHEREAS, the portion of the Site to be owned by BIN - AG or an affiliate of BIN - AG will be developed for the benefit of future tenants that would bring additional jobs and investment to the Town. In connection therewith, BIN - AG intends to make a capital investment of at least \$68,750,000.00 for the infrastructure improvements and industrial or commercial buildings at the Site (as defined below); and

WHEREAS, such infrastructure and the building to be owned by MCDG and located on the Site are referred to as the "MCDG Facility;" the infrastructure and building to be owned by BIN – AG or an affiliate of BIN – AG and located on the Site are referred to as the "BIN – AG Facility;" and all of the facilities located on the Site are collectively referred to as the "Facilities;" and

WHEREAS, in order to locate the Project on the Site, a sewer and water line extension would be required to provide sewer and water services to the Site. The extension would benefit Project Real and future companies locating on the Site; and

WHEREAS, the Town recognizes that the Project will bring direct and indirect benefits to the Town, including needed infrastructure, job creation, economic diversification and stimulus in technology and manufacturing skills, and has offered economic development incentives (the "**Town Incentives**" as defined below) to induce MCDG to locate the Project at the Site; and

WHEREAS, MCDG fully intends to establish through the Project an important presence in the Town by making a substantial investment in the Project and hereby affirms that the terms of this Agreement, including specifically the Town Incentives and other assistance described in this Agreement, constitute a dispositive inducement for MCDG and its tenant to locate and develop the Facility at the Site.

Based on the above Recitals and the Terms contained below, which the parties acknowledge constitute sufficient consideration to make this Agreement legally binding and enforceable, the parties agree as set forth below.

TERMS

I. TOWN INCENTIVES GENERALLY

The Town will provide incentives, as specified below, so long as the provisions of this Agreement are specifically met.

II. TOWN ECONOMIC DEVELOPMENT INCENTIVES RELATED LAND DEVELOPMENT AND INFRASTRUCTURE

A. Town's Incentives

Upon the completion of construction of the Improvements, as described below and in Section III, the Town will reimburse costs associated with the extension and specifically installation of public utilities, water and sewer, "Improvement(s)") to the Site in an amount not to exceed two-million two hundred thousand dollars (\$2,200,000.00) ("Maximum Town Incentive"). Improvements are described more specifically in the construction plans which have been or will be submitted to and approved by the Town. MCDG will provide evidence of the amount and completion of the construction of the Facilities and Improvements to the Town. Such evidence will include an AIA certificate of substantial completion signed by MCDG's architect, civil engineer and general contractor, as applicable for Facilities and EJCDC C-625 Certificate of Substantial Completion signed by MCDG's engineer and general contractor, as applicable. The County Assessor may request additional evidence reasonably necessary to properly assess each phase of the Facility.

B. <u>Town Incentive payments.</u>

Upon certification, inspection, and acceptance of the Improvements, the Town shall make ten (10) annual Town Incentive payments to MCDG. Each payment shall be \$220,000 and in no event shall the total Town Incentive paid to MCDG under this agreement exceed \$2,200,000.00. The initial payment shall be made within six (6) months following the acceptance of the Improvements by the Town, and the remaining payments shall be made annually thereafter as provided herein so long as this Agreement remains in effect.

III. MCDG OBLIGATIONS.

A. <u>Improvements to the property.</u>

MCDG and BIN - AG, at their sole cost and expense, shall construct the Improvements described above; construct Facilities and develop the Project known as Project Real on a tract or tracts of land owned by MCDG consisting of approximately 54.51 acres; and a tract or tracts of land to be owned by BIN - AG consisting of approximately 77.6 acres, all such tracts located at the intersection of US-64 and NC-751 in the County of Chatham, North Carolina (collectively, the "Site"). The Site is denoted on the map attached as Exhibit A. The tax parcels included in the Site are provided in the table attached as Exhibit B.

Certification, Inspection, and Acceptance of Improvements.

Upon completion of construction of the Improvements, MCDG shall provide the Town with written certification and as-built drawings from MCDG's designated consulting engineering firm that the Improvements are complete and have been constructed and installed in compliance with this Agreement and within appropriate Town easements or fee simple parcels. The Improvements shall be offered for public dedication to the Town upon completion of construction and shall be subject to inspection and acceptance by the Town. Thereafter, the Town shall own the Improvements, have exclusive possession and control of the Improvements and responsibility for maintenance thereof. In the event that any defect or breach of warranty claim becomes known to the Town after acceptance and dedication of the Improvements to the Town, MCDG agrees either to assign such rights and claims to the Town as directed by the Town and reasonably cooperate with the Town in the Town's pursuit of its rights and claims against the contractor or other party responsible for the defect or breach of warranty. In the event any recovery is actually received by MCDG, MCDG shall promptly pay over such recovery to the Town.

B. Job creation.

MCDG, whether directly or indirectly through its affiliates, lessees, licensees, vendors, or tenants, is expected to create a minimum of one hundred eighty (180)

¹ Confirming if this is available. If not, we would propose substituting the tax parcel maps.

new full time jobs (herein "Qualified Jobs") within the Town of Apex (Chatham County) by the date that is thirty-six (36) months following the Effective Date. The expected median average hourly wage for the Qualified Jobs at the Project is expected to be above the then-current median average hourly wage paid in Chatham County. The term "median average hourly wage" is defined as the median average hourly wage for all insured industries in the County as determined by the Employment Security Commission for the most recent period for which data is available. The Parties acknowledge that the median average hourly wage in Chatham County, according to data provided by the NC Department of Commerce, is currently \$20.98 per hour with an annual average wage of \$42,789.00.

C. Tax Generation.

The Project is expected to generate Property Tax Revenue, whether directly or indirectly through MCDG, BIN – AG, and their affiliates, lessees, licensees, vendors, or tenants, from the Site over its first ten years of operations, following the Effective Date, on the following schedule:

	Estimated Tax		Estimated Tax	Company	Net Tax	Cumulative
Year	Value*	Tax Rate**	Revenue	Incentive†	Revenue	Tax Revenue
2025	\$ 93,750,000	0.390	\$ 365,625	\$ 329,063	\$ 36,563	\$ 36,563
2026	\$ 93,750,000	0.405	\$ 379,688	\$ 341,719	\$ 37,969	\$ 74,531
2027	\$ 93,750,000	0.405	\$ 379,688	\$ 341,719	\$ 37,969	\$ 112,500
2028	\$ 93,750,000	0.405	\$ 379,688	\$ -	\$ 379,688	\$ 492,188
2029	\$ 93,750,000	0.380	\$ 356,250	\$ -	\$ 356,250	\$ 848,438
2030	\$ 93,750,000	0.380	\$ 356,250	\$ -	\$ 356,250	\$ 1,204,688
2031	\$ 93,750,000	0.380	\$ 356,250	\$ -	\$ 356,250	\$ 1,560,938
2032	\$ 93,750,000	0.380	\$ 356,250	\$ -	\$ 356,250	\$ 1,917,188
2033	\$ 93,750,000	0.360	\$ 337,500	\$ -	\$ 337,500	\$ 2,254,688
2034	\$ 93,750,000	0.360	\$ 337,500	\$ -	\$ 337,500	\$ 2,592,188
2035	\$ 93,750,000	0.360	\$ 337,500	\$ -	\$ 337,500	\$ 2,929,688

Assumptions

Highlighted years indicate revaluation years

It is recognized that these are revenue projections, based on current tax rates and tax structure.

D. <u>Commencement of Operations.</u> MCDG, whether directly or indirectly through its affiliates, lessees, licensees, vendors, or tenants, is expected to commence operations within two and one-half (2.5) years of the Effective Date.

^{*} Estimates are derived from expected investment for Project Real (\$25M) and subsequent projects (\$68.75M) on The Site and are subject to change based on actual costs of construction and equipment.

^{**}Tax rate is for estimate purposes only and based on the current rate with future adjustments made to reflect an estimated revenue-neutral tax rate occurring with Wake County revaluations. The setting of the tax rate is at the sole discretion of the Apex Town Council on an annual basis.

[†]Years 2025 through 2027 reflect potential economic development tax incentives typically provided by Apex to new industries that provide significant investment and job creation. The current incentive policy is a 90% grant back for three years.

E. Other.

- (1) <u>Permits.</u> MCDG shall obtain and maintain all permits and approvals required by federal, state and local law for the construction and operation of the proposed Improvements and the Project.
- Quarterly Reports. MCDG shall provide the Town's Economic Development Director with copies of all monthly and/or quarterly tax and wage statements, at the time of filing, for MCDG and for each tenant or vendor of MCDG conducting business on the Site or operating as part of the Project for purposes of demonstrating compliance with the requirements of Sections IV.B. and C. below. Said statements and other documents may be necessary to allow the Town to determine compliance with the Jobs Creation and Tax Revenue benchmarks.
- (3) <u>Extensions</u>. For good cause, including Force Majeure, the time for performance of any obligation set forth herein may be extended by the party to whom the performance is due; provided that the aggregate of extensions may not cause the time for completion of the Improvements to extend beyond five years from the Effective Date.

IV. REDUCTION AND RECAPTURE OF INCENTIVES

The Parties acknowledge that the creation of Qualified Jobs and additional Capital Investment, with corresponding projected increases in tax revenue to the Town, are the essence of this Agreement and form the legal basis for the Town's participation. Pursuant to NCGS § 158-7.1(h), the Town's remedies for failure by MCDG to meet its obligations as set out herein are:

- A. If MCDG, along with that of its tenants, lessees, affiliates or Agents, fails to construct the contemplated Improvements within the times set out in this Agreement, then the Town may elect to terminate this Agreement under the provisions of paragraph F below.
- B. If MCDG, along with that of its tenants, lessees, affiliates or Agents, does not reach the number of Qualified Jobs as outlined in paragraph III.B as shown on its Quarterly Report within the times set out in this Agreement, then the Town may elect to terminate this Agreement under the provisions of paragraph F below.
- C. Failure to maintain jobs. For any year in which MCDG, along with that of its tenants, lessees, affiliates or Agents, fails to retain the number of Qualified Jobs actually created in the prior years under this Agreement, the Town may elect to terminate this Agreement under the provisions of paragraph F below.
- D. Failure to Maintain Property Tax Revenue. Notwithstanding the initial capital investment, if MCDG, BIN AG, and their successors or assigns, with their tenants, lessees, affiliates or Agents, fail to maintain a total level property tax revenue within Chatham County at the levels and for the periods of time set forth

- in paragraph III.C then the Town may elect to terminate this Agreement under the provisions of paragraph F below, subject to the revenue catch up provisions of paragraph I below.
- E. If MCDG, along with that of its tenants, lessees, affiliates or Agents, is not current on all other taxes, fees, assessments or other amounts owed to the Town related to the Project at the time a Town Incentive is to be paid, in addition to any other remedies provided by law, this Agreement may be terminated.
- F. Termination. Upon failure of MCDG to meet its Obligations as set forth herein, the Town may elect to terminate this Agreement in whole or in part. If the Town elects to terminate, notice of termination shall be given in the manner set forth in Section IX.C. Failure of the Town to elect termination in whole or in part shall not constitute a waiver of the right of the Town to make such election at a later time. Nothing herein shall prohibit the parties from negotiating an alternative remedy for the failure of MCDG to meet one or more of its obligations, consistent with North Carolina law.
- G. The provisions of this Section IV survive the termination of this Agreement.
- H. Alternative Remedies for Partial Performance. To the extent permitted by North Carolina law, MCDG and Town agree that the following remedies or "claw backs" may be applied in the case of partial performance by Company.
- I. In the event of a failure by MCDG, along with that of its tenants, lessees, affiliates or Agents, to create or maintain the minimum number of Qualified Jobs, MCDG shall pay to Town an amount equal to the economic impact credit that MCDG received for each Qualified Job not created as required per this Agreement. The "economic impact credit" per job is defined as the Maximum Town Incentive less the 10-year average cumulative tax revenue estimate divided by the total number of Qualified Jobs.² For purposes of this section, the parties acknowledge the "economic impact credit" per job equals five thousand, one-hundred forty dollars (\$5,140.00). For example, if MCDG's job creation is 20 less Qualified Jobs than that required by this agreement, MCDG would be required to reimburse the Town \$102,800³. In the event that MCDG fails to make the Capital Investment or that the Project for any reason fails to generate the projected property tax revenue as shown on the table in Sec. III.C, then MCDG shall pay to the Town the difference between the projected tax revenue and the actual tax revenue, subject to adjustment pursuant to the "Revenue Catch Up" provision below.
- J. Revenue Catch Up. For any year in which the actual property tax revenues are less than the projected property tax revenues, MCDG shall be required to pay Town the difference, provided that Town may defer said payment for up to two years in order

 $^{^{2}}$ Maximum Incentive - 10 yr avg tax / number of jobs required (\$2,200,000 - \$1,274,872 = \$925,128) / 180 = \$5,139.60 Rounded to \$5,140

 $^{^{3}}$ \$5,140 multiplied by 20 = \$102,800/

to allow for the recognition of any surplus revenue in subsequent years, unless the deficit occurs in year 10, in which case MCDG shall pay the Town any difference between the total projected tax revenue and the actual tax revenue.

Nothing herein shall prevent the parties from negotiating other remedies for partial performance, as allowed by North Carolina law and in no event shall MCDG be required to pay to Town an amount greater than the amount of Town Incentives actually paid by Town to MCDG pursuant to the terms of this Agreement.

V. RIGHT TO CURE

In the event the Town determines that MCDG is deficient in its obligations under this Agreement, the Town shall provide written notice of deficiency to MCDG describing the nature of the deficiency and the steps required to cure the deficiency. For each year in which a deficiency occurs, MCDG shall have a twelve (12) month cure period from the time it receives notice of the deficiency to provide written evidence to the Town that the deficiency has been cured, did not occur, or was cured prior to receipt of notice of deficiency. In the event MCDG does not cure or provide evidence of compliance within the twelve (12) month cure period, MCDG shall forfeit any Incentive Payment to which the deficiency applies. No default or deficiency by MCDG shall result in a termination or limitation of any rights of MCDG unless and until the Town shall have notified MCDG in writing of said default or deficiency. Upon the cure of any deficiency, the Town Incentive payment shall be restored and shall be payable within thirty (30) days following the cure date.

VI. INDEMNIFICATION AND LIMITATIONS

MCDG will indemnify and hold harmless the Town and its Town Council, and employees and agents (the "Indemnified Parties") for damages imposed upon them by a court of final determination based on any claims of third parties arising out of any act or omission of MCDG in the performance required of it by this Agreement, provided, however, that such indemnification (i) is not contrary to law and (ii) shall not apply to third party claims arising out of or relating to a negligent act or omission of the Town. The Town agrees that none of the foregoing shall be construed to release Town from the obligations it has undertaken elsewhere in this Agreement, in connection with the Town Incentives or otherwise. Except as otherwise set forth, each Indemnified Party and MCDG agree to pay their own costs incurred in such connection, including all costs incurred in connection with the preparation of this Agreement.

MCDG SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY CLAIMS ARISING OUT OF ANY ACT OR OMISSION OF MCDG IN THE PERFORMANCE REQUIRED OF IT BY THIS AGREEMENT FOR SPECIAL INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING LOST REVENUES AND PROFITS, EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF THOSE DAMAGES. This provision also applies to the indemnity set forth in the above paragraph.

VII. DISCLAIMER OF WARRANTIES

MCDG acknowledges that the Town has not designed the Facility or the Improvement(s), that the Town has not supplied any plans or specifications with respect thereto and that the Town: (a) is not a manufacturer of, or dealer in, any of the component parts of the Facility or Improvement(s), (b) has not made any recommendation, given any advice nor taken any other action with respect to (i) the choice of any supplier, vendor or designer of, or any other contractor with respect to the Facility or Improvement(s) or any property or rights relating thereto, or (ii) any action taken or to be taken with respect to the Facility or Improvement(s) or any component part thereof or any property or rights relating thereto at any stage of the construction, (c) has not at any time had physical possession of the Facility or Improvement(s) or any component part, and (d) has not made any warranty or other representation, express or implied, that the Facility or Improvement(s) or any component part or any property or rights relating thereto (i) will not result in or cause injury or damage to persons or property, (ii) has been or will be properly designed, or will accomplish the results which MCDG intended, or (iii) is safe in any manner or respect.

The Town makes no express or implied warranty or representation of any kind whatsoever with respect to the Facility or Improvement(s) or any component part, including but not limited to any warranty or representation with respect to the merchantability or the fitness or suitability for any particular purpose, and further including the design or condition, the safety, workmanship, quality, or capacity; compliance with the requirements of any law, rule, specification or contract pertaining thereto; any latent defect; the ability of the Facility or Improvement(s) to perform any function; or any other characteristic of the Facility or Improvement(s); it being agreed that as between the Town and MCDG, MCDG is to bear all risks relating to the Facility or Improvement(s), its completion or the transactions contemplated hereby and MCDG waives the benefits of any and all implied warranties and representation of the Town.

The provisions of this Section VII shall survive the termination of this Agreement.

VIII. TERMINATION OF AGREEMENT

Unless terminated earlier as provided in section IV.F, this Agreement shall terminate at the end of the tenth year after the Town has made the last of the Town Incentive payments to MCDG, or upon payment of the Maximum Town Incentive payments if sooner, as required by this Agreement. After such termination, this Agreement will be null and void, and the parties to this Agreement will have no further obligations from one to the other thereafter, except as specifically noted in this Agreement. Provided, however, in no event will any payment be made by the Town to MCDG after December 31, 2038.

IX. ASSIGNMENTS

MCDG shall not assign this Agreement or any portion thereof without the written consent

of the Town, which consent shall not be unreasonably withheld, conditioned, or delayed, nor shall MCDG assign any Town Incentive payments due or to become due to it under this Agreement without the written consent of the Town, which consent shall not be unreasonably withheld, conditioned, or delayed; provided, however, MCDG shall be permitted to (i) assign this Agreement or any portion thereof, or any funds due or to become due to it hereunder, to any direct or indirect wholly-owned subsidiary or other related party of MCDG, and (ii) any Tax Incentive payments actually received by MCDG to any other party..

X. REPRESENTATIONS

MCDG represents as of the date of this Agreement as follows:

- A. MCDG (i) is a limited liability company duly organized and validly existing under the laws of its state of incorporation; (ii) is duly qualified to transact business and is in good standing in North Carolina; (iii) is not in violation of any provision of its organizational documents; (iv) has full corporate power to own its properties and conduct its business; (v) has full power and authority to enter into this Agreement and to enter into and carry out the transactions contemplated by this Agreement; (vi) by proper action has duly authorized the execution and delivery of this Agreement; and (vii) is not in default under any provision of this Agreement.
- B. The execution and delivery of this Agreement neither conflicts with, nor will result in, a breach or default under its organizational documents; nor, to the best of its knowledge, will its execution and delivery conflict with, or result in, a breach or default under the terms, conditions, or provisions of any statute, order, rule, regulation, agreement, or instrument to which each such company is a party or by which it is bound; nor will its execution and delivery result in the imposition of any lien on its property.
- C. MCDG has duly authorized, executed, and delivered this Agreement, and to MCDG's knowledge, this Agreement constitutes its legal, valid, and binding obligations, enforceable in accordance with its terms.

The Town represents as of the date of this Agreement as follows:

- A. At the time of execution of this Agreement, the Town (i) has full power and authority to enter into this Agreement and to enter into and carry out the transactions contemplated by this Agreement; (ii) by proper action has duly authorized the execution and delivery of this Agreement; and (iii) is not in default under any provisions of this Agreement.
- B. The Town has duly authorized, executed, and delivered this Agreement, and this Agreement constitutes the Town's legal, valid, and binding obligation, enforceable in accordance with its terms.

- C. To the Town's knowledge, there is no litigation or proceeding pending or threatened against the Town or affecting it which would adversely affect the validity of this Agreement.
- D. To the best of the Town's knowledge at the time of execution of this Agreement, the Town is not in default under any provision of State law which would affect its existence or its powers.
- E. To the best of the Town's knowledge at the time of execution of this Agreement, no official of the Town has any interest (financial, employment, or other) in MCDG or the transactions contemplated by this Agreement.
- F. With respect to this Agreement, Town has complied fully with all requirements of N.C. Gen. Stat. §158-7.1, to the Town's ability and knowledge.

NO PROVISION OF THIS AGREEMENT SHALL BE CONSTRUED INTERPRETED AS CREATING A PLEDGE OF THE FAITH AND CREDIT OF THE TOWN WITHIN THE MEANING OF ANY CONSTITUTIONAL DEBT LIMITATION. NO **PROVISION** THIS **AGREEMENT** OF SHALL BECONSTRUED INTERPRETED AS DELEGATING GOVERNMENTAL POWERS NOR AS A DONATION OR A LENDING OF THE CREDIT OF THE TOWN WITHIN THE MEANING OF THE STATE CONSTITUTION. THIS AGREEMENT SHALL NOT DIRECTLY OR INDIRECTLY OR CONTINGENTLY OBLIGATE THE TOWN TO MAKE ANY PAYMENTS BEYOND THOSE APPROPRIATED IN THE SOLE DISCRETION OF THE TOWN FOR ANY FISCAL YEAR IN WHICH THIS AGREEMENT SHALL BE IN EFFECT. NO PROVISION OF THIS AGREEMENT SHALL BE CONSTRUED TO PLEDGE OR TO CREATE A LIEN ON ANY CLASS OR SOURCE OF THE TOWN'S MONEYS, NOR SHALL ANY PROVISION OF THIS AGREEMENT RESTRICT TO ANY EXTENT PROHIBITED BY LAW, ANY ACTION OR RIGHT OF ACTION ON THE PART OF ANY FUTURE TOWN GOVERNING BODY. TO THE EXTENT OF ANY CONFLICT BETWEEN THIS ARTICLE AND ANY OTHER PROVISION OF THIS AGREEMENT, THIS ARTICLE TAKES PRIORITY.

XI. MISCELLANEOUS

- A. <u>Definitions</u>. All terms with initial capitals used in this Agreement and not otherwise defined will have the meanings ascribed to those terms in Webster's <u>Third New International Dictionary</u>.
- B. <u>Governing Law</u>. The parties intend that the law of the State of North Carolina will govern this Agreement.

C. Notices.

(1) Any communication required or permitted by this Agreement must be in writing except as expressly provided otherwise in this Agreement.

(2) Any communication under this Agreement shall be sufficiently given and deemed given when delivered by hand or after being deposited in the mail by first-class certified mail, postage prepaid, and addressed as follows:

(i) If to MCDG: Mills Chatham Development Group, LLC

Attn: Mr. Hager Rand, Manager

3214 Hillsborough Road Durham, NC 27705 Telephone: 919-383-2058

Email: Hagerr@durhamcoke.com

With a copy to: Manning, Fulton & Skinner, P.A.

Attn: Eugene F. Dauchert, Jr. 280 S. Mangum Street, Suite 130

Durham, NC 27701 Telephone: 919-510-9286

Email: dauchert@manningfulton.com

(ii) If to the TOWN: Town of Apex

Attn: Town Manager

PO Box 250 Apex, NC 27502

With copy to: Town of Apex

Attn: Town Attorney

PO Box 250 Apex, NC 27513

Any addressee may designate additional or different addresses for communications by notice given under this Section to each other.

- D. <u>Non-Business Days.</u> If the date for making any payment or performing any act or exercising any right is not a business day, such payment must be made or act performed or right exercised on or before the next business day.
- E. <u>Entire Agreement: Amendments</u>. This Agreement, including Exhibits, which are incorporated by reference, constitutes the entire contract between the parties. This Agreement may not be changed except in writing signed by both parties.
- F. <u>Binding Effect.</u> This Agreement is binding upon, inures to the benefit of and is enforceable by the parties and their respective successors and assigns. There are no other agreements or other conditions precedent to the binding nature of the

- respective obligations of the Town, other than the performance by MCDG of its obligations under this Agreement.
- G. <u>Time</u>. TIME IS OF THE ESSENCE of this Agreement and each and of each and every provision hereof.
- H. <u>Liability of Officers and Agents</u>. No officer, agent, or employee of the Town or MCDG shall be subject to any personal liability or accountability by reason of the execution of this Agreement or any other documents related to the transactions contemplated hereby. Such officers, agents, or employees shall be deemed to execute such documents in their official capacities only, and not in their individual capacities. This Section shall not relieve any such officer, agent, or employee from the performance of any official duty provided by law.
- I. <u>Counterparts.</u> This Agreement may be executed in several counterparts, including separate counterparts. Each shall be an original, but all of them together constitute the same instrument.
- J. <u>Provide W-9</u>. MCDG shall provide a completed W-9 form to the Town upon execution of this Agreement.
- K. <u>Dissolution of MCDG</u>. If the legal entity of either MCDG is dissolved or suspended and MCDG does not notify the Town of such dissolution within thirty (30) business days and/or the entity status is not reinstated within sixty (60) business days, this Agreement, at the sole option of the Town, shall be declared null and void or MCDG may be allowed to execute a new Agreement showing the correct legal entity of MCDG.
- L. Notice of Potential Disclosure of Confidential Information. MCDG acknowledges that it has been informed by the Town that the Town is required by North Carolina law to disclose "Public Records" as the term is defined by N.C. Gen. Stat. §132-1, upon request. All information disclosed to the Town by MCDG which is subject to that definition and whose disclosure is not otherwise protected by law will be released by the Town upon request as provided by N.C. Gen. Stat. §132-6. The Town may withhold from disclosure confidential records as defined by N.C. Gen. Stat. §132-1.2. MCDG acknowledges that it has read and is familiar with the Town's obligations of public disclosure of documents and the definitions of confidential documents as contained in Chapter 132 of the North Carolina General Statutes. In order to prevent the disclosure of the confidentiality of information identified by MCDG as a trade secret or as "confidential" pursuant to N.C. Gen. Stat. §132.1.2 the Town shall, if it receives a request for disclosure of such information, notify MCDG of such request so that MCDG may defend any claims or disputes arising from efforts of others to cause such trade secrets to be disclosed as a public record. The parties agree that this Section will survive the termination of the Agreement.

- M. Force Majeure. Any delay in the performance of any of the duties or obligations of either party (the "Delayed Party") shall not be considered a breach of this Agreement and the time required for performance shall be extended for a period equal to the period of such delay, provided that such delay arises out of or is caused by, directly or indirectly, (i) forces beyond the Delayed Party's control, including, without limitation, strikes, work stoppages, lockouts, job actions, boycotts, accidents, acts of war or terrorism, insurrections, civil or military disturbances, riots, nuclear or natural catastrophes, earthquakes, fire, flood, pandemics, epidemics, public health emergency, state of declared emergency, loss or malfunctions of utilities, communications or computer (software and hardware) services (ii) with regard to MCDG, the inability to obtain the governmental permits or approvals (including zoning) necessary for the acquisition of the land or undertaking and operating the facility after a good faith effort to obtain same has been made; (iii) with regard to MCDG, shortages of materials or energy; (iv) changes in laws; or (v) other causes beyond the control of and arising without the fault or negligence of the Delayed Party (each of them a "Force Majeure Event"). The Delayed Party shall give prompt notice to the other party of such cause, and shall take whatever reasonable steps are necessary to relieve the effect of such cause as promptly as possible. No such event shall excuse the payment of any sums due and payable hereunder on the due date except any payment due upon the occurrence of any act or event for which delayed performance is excused as provided above.
- N. <u>Severability</u>. If any court of competent jurisdiction holds any provision of this Agreement invalid or unenforceable, then (a) such holding shall not invalidate or render unenforceable any other provision of this Agreement, unless such provision is contingent on the invalidated provision; and (b) the remaining terms hereof shall, in such event, constitute the parties' entire agreement.
- O. <u>Audit Right</u>. The Town reserves the right to require a certified audit or may perform the audit through the use of its staff pertaining to MCDG's compliance with any provision in this Agreement during normal business hours and upon reasonable prior notice.

[Signature Pages to Follow]

IN WITNESS, the parties have caused this Agreement to be executed in their corporate names by their duly authorized officers, all as of the date first above written.

[SEAL]	TOWN OF APEX NORTH CAROLINA
ATTEST: By: Allen Coleman, CMC, NCCCC Town Clerk	By: Jacques Gilbert Mayor Town of Apex
TOWN OF APEX This instrument has been preaudited in the manne and Fiscal Control Act.	r required by the Local Government Budget
, Finance Director Town of Apex, North Carolina Date:	

[Signature Pages Continue]

MILLS CHATHAM DEVELOPMENT GROUP, LLC, a North Carolina limited liability company

By:		
•	M. Hager Rand, Manager	

[End Signature Pages]

Exhibit A

Property Description or Map

[SITE PLAN]

Exhibit B

Tax Parcels

2021 Baseline Tax Parcel No.(s): <u>0060523</u>, <u>0071694</u>, <u>0073702</u>, <u>0017900*</u>

2021 Baseline Tax Information

*Parcel numbers prior to change of ownership and recordation of recombination / subdivision plat; Parcel 0017900 has been subdivided into two separate tax parcels and assigned Tax Parcel No.(s) 0017900 and 95398.

Parcel No.:	0060523	0071694	0073702	0017900 and 95398	Total
Real Property Assessed Value:	\$8,869	\$288,863	\$332,840	\$159,507	\$790,079
Chatham County Taxes Paid	\$69.56	\$2,357.91	\$2,620.56	\$1,232.99	\$6,281.01
Town of Apex Taxes Paid	\$0	\$0	\$0	\$0	\$0
Total Taxes Paid	\$69.56	\$2,357.91	\$2,620.56	\$1,232.99	\$6,281.01

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: July 26, 2022

Item Details

Presenter(s): Amanda Bunce, Current Planning Manager

Department(s): Planning and Community Development

Requested Motion

Public Hearing and possible motion to approve Rezoning Application #22CZ11 1522 Salem Church Road. The applicant, Joshua Blackley, seeks to rezone approximately 1.22 acres from Residential Agricultural (RA) to High Density Single Family-Conditional Zoning (HDSF-CZ). The proposed rezoning is located at 1522 Salem Church Road.

Approval Recommended?

The Planning and Community Development Department recommends approval.

The Planning Board held a public hearing on July 26, 2022 and by a vote of 6-1 recommended approval with the conditions offered by the applicant.

Item Details

The property to be rezoned is identified as PIN 0743815090.

<u>Attachments</u>

- Staff Report
- Vicinity Map
- Application



Rezoning #22CZ11 1522 Salem Church Rd

July 26, 2022 Town Council Meeting



All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 1522 Salem Church Road

Applicant/Owners: Joshua Blackley / Philip and Michele Blackley

PROJECT DESCRIPTION:

Acreage: ±1.22 **PIN:** 0743815090

Current Zoning: Residential Agricultural (RA)

Proposed Zoning: High Density Single-Family Residential-Conditional Zoning (HDSF-CZ)

Current 2045 Land Use Map: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map will change to: Medium/High Density Residential

Town Limits: ETJ

Adjacent Zoning & Land Uses:

	Zoning	Land Use
No ath.	Medium Density Residential-Conditional	Salem Church Rd; Single-family Residential
North:	Zoning (MD-CZ #15CZ15)	(Westhigh subdivision)
South:	Residential Agricultural (RA)	Single-family Residential
East:	Planned Unit Development-Conditional Zoning (PUD-CZ #15CZ13)	Townhomes (Salem Pointe subdivision)
West:	Residential Agricultural (RA)	Single-family Residential

Existing Conditions:

The subject property is ± 1.22 acres and is located on the south side of Salem Church Rd. east of Salem Pointe townhomes. There is a single-family home on the property.

Neighborhood Meeting:

The applicant conducted a neighborhood meeting on April 7, 2022. The neighborhood meeting report is attached.

WCPSS Coordination:

A Letter of Impact from Wake County Public School System (WCPSS) was received for this rezoning and is included in the staff report packet. WCPSS indicates that schools at the high school grade level within the current assignment area for the proposed rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated. School expansion or construction within the next five years may address concerns at the high school grade level.

2045 LAND USE MAP:

The 2045 Land Use Map identifies the subject property as Medium Density Residential which supports up to seven (7) units per acre. The proposed rezoning to High Density Single-Family Residential-Conditional Zoning

Rezoning #22CZ11 1522 Salem Church Rd

July 26, 2022 Town Council Meeting



(HDSF-CZ) is not consistent with that land use classification as it permits up to eight (8) units per acre. If the property is rezoned as proposed, the 2045 LUM will automatically be amended to the Medium/High Density Residential classification per NCGS 160D-605(a). The Salem Pointe townhomes development to the east is zoned PUD-CZ with a maximum density of six (6) units per acre.

PROPOSED ZONING CONDITIONS:

Limitation of Uses:

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

Permitted Uses and Limitations:

- 1. Townhouse
- 2. Accessory Apartment

Conditions:

- 1. At least 1 pet waste station shall be installed.
- 2. Where possible, the main roof areas shall be oriented north and south.
- 3. Protrusions on south facing roofs shall be minimized or grouped to the extent possible.
- 4. A mix of brick, wood, stone, fiber cement and/or wood composite materials shall be used.
- 5. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 6. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 7. The garage shall not protrude more than 1 foot out from the front façade and front porch.
- 8. Garage doors shall have windows, decorative details or carriage-style adornments on them.
- 9. The roof shall be pitched at 5:12 or greater.
- 10. The roofline cannot be a single mass; it must be broken up horizontally and vertically between every unit.

EAB RECOMMENDATIONS:

The Apex Environmental Advisory Board (EAB) held a pre-application meeting for this rezoning on February 17, 2022. The zoning conditions suggested by the EAB are listed below along with the applicant's response to each condition.

EAB Suggested Condition	Applicant's Response
Increase design storm pre- and post-attenuation requirement to include the 25-year storm.	Not added
Proposing to install at least 1 pet waste station in the future development.	Added
Include solar conduit in building design.	Not added
If possible, install a minimum of a 3-kilowatt solar PV system (about 10 panels) to the rooftops of two homes.	Not added
Where possible, orient the major roof toward the south.	Added
Minimize roof protrusions on roofs facing toward a southern direction or group the protrusions to the extent possible.	Added

Rezoning #22CZ11 1522 Salem Church Rd

July 26, 2022 Town Council Meeting



EAB Suggested Condition	Applicant's
	Response
Include International Dark Sky Association compliance standards.	Not added
Outdoor lighting shall be shielded in a way that focuses lighting to the ground.	
 Lighting that minimizes the emission of blue light to reduce glare shall be used. 	
o Lighting with a color temperature of 3000K or less shall be used for outside	
installations in nonresidential or multifamily areas.	

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of Rezoning #22CZ11 with the conditions as offered by the applicant.

PLANNING BOARD RECOMMENDATION:

The Planning Board held a public hearing on July 11, 2022 and by a vote of 6-1 recommended approval with conditions as proposed by the applicant.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING:

This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

The 2045 Land Use Map (LUM) designates the subject property as Medium Density Residential which supports up to seven (7) units per acre. The proposed zoning district is not consistent with that land use classification as it permits up to eight (8) units per acre. If the properties are rezoned to HDSF-CZ as proposed, the 2045 LUM will automatically be amended to Medium/High Density Residential per NCGS 160D-605(a).

The proposed rezoning is reasonable and in the public interest because it will allow for development that is consistent in density and architectural design with the subdivision to the east. Approval of the rezoning will also allow for the New Derby Lane street stub to be extended and serve the proposed development.

CONDITIONAL ZONING STANDARDS:

The Planning Board shall find the HDSF-CZ designation demonstrates compliance with the following standards. 2.3.3.F:

Legislative Considerations

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

- 1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.
- 2) Compatibility. The proposed Conditional Zoning District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

Rezoning #22CZ11 1522 Salem Church Rd

July 26, 2022 Town Council Meeting



- 3) Zoning district supplemental standards. The proposed Conditional Zoning District use's compliance with Sec 4.4 Supplemental Standards, if applicable.
- 4) Design minimizes adverse impact. The design of the proposed Conditional Zoning District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.
- 5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.
- 6) Impact on public facilities. The proposed Conditional Zoning District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
- 7) Health, safety, and welfare. The proposed Conditional Zoning District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.
- 8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning District use is substantially detrimental to adjacent properties.
- 9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
- 10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.



PETITION TO AMEND THE OFFICIAL ZONING MAP							
This documenthird parties.	nt is a public reco	rd under the North Carolina	Public Records A	ct and may be	published on th	ne Town's website	e or disclosed to
Application	#:	22CZ11	Subr	mittal Date:	5-2-22		
		-	Fee	Paid:	\$1,000		
Project Info	ormation						
•	4500	Calam Church	Dood				
Project Nan		Salem Church		\	0750		
Address(es)		Salem Church	Road, A	Apex, N	IC 2752	3	
PIN(s): 0	<u>7438150</u>	90					
						_	.22
Current Zor	ing: RA		Proposed	d Zoning:	HDSF-C	CZ (8 uni	ts/acre)
Current 204	5 LUM Classifi	cation(s): Mediun	n Densit	y Resid	lential (7	7 units/ad	cre)
Is the propo	sed rezoning o	consistent with the 2045	LUM Classifica	tion(s)? Y	'es	No]
If any port	ion of the proj	ect is shown as mixed use	e (3 or more st	ripes on the	2045 Land Us	se Map) provid	le the following:
Are	a classified as ı	nixed use:			Acreage:	N/A	
Are	a proposed as	non-residential developn	nent:		Acreage:	N/A	
Pero	cent of mixed u	ise area proposed as non	-residential:		Percent:	N/A	
Applicant I							
		Blackley					
Name:	-	alem Church R	and				
Address:	_	diem Church K	Uau	NC			07500
City:	Apex	7 7007	State:	NC		Zip:	27523
Phone:	919-337	7-7827	E-mail:	josnu	a.g.blac	kley@gn	naii.com
Owner Info	ormation						
Name:	Philip ar	nd Michele Bla	ckley				
Address:	1522 Sa	alem Church R	oad				
City:	Apex		State:	NC		Zip:	27523
Phone:	919-868-3871		E-mail:	-	ey1418@gmai	·	
A mount lufa							
Agent Info		Plackley					
Name:	Justiua	Blackley					
Address:							
City:			State:			Zip:	
Phone:			E-mail:				
Other cont	acts:						

- Page 201 - Last Updated: July 1, 2021

PETITION INFORMATION

Application #:

22CZ11

Submittal Date:

An application has been duly filed requesting that the property described in this application be rezoned from RA to HDSF-CZ. It is understood and acknowledged that if the property is rezoned as requested, the property described in this request will be perpetually bound to the use(s) authorized and subject to such conditions as imposed, unless subsequently changed or amended as provided for in the Unified Development Ordinance (UDO). It is further understood and acknowledged that final plans for any specific development to be made pursuant to any such Conditional Zoning shall be submitted for site or subdivision plan approval, as required by the UDO. Use additional pages as needed.

PROPOSED USES:

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

1	1. Townhouse	21	
2	2. Accessory Apartment	22	
3		23	
4		24	
5		25	
6		26	
7		27	
8		28	
9		29	
10		30	
11		31	
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15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

PETITION INFORMATION

Application #:

22CZ11

Submittal Date:

PROPOSED CONDITIONS:

The applicant hereby requests that the Town Council of the Town of Apex, pursuant to the Unified Development Ordinance, approve the Conditional Zoning for the above listed use(s) subject to the following condition(s). Use additional pages as needed.

- At least 1 pet waste station shall be installed
- Where possible, the main roof areas shall be oriented north and south.
- Protrusions on south facing roofs shall be minimized or grouped to the extent possible Architectural zoning conditions:
- A mix of brick, wood, stone, fiber cement and/or wood composite materials shall be used
- Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted
- House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door
- The garage shall not protrude more than 1 foot out from the front façade and front porch.
- Garage doors shall have windows, decorative details or carriage-style adornments on them.
- The roof shall be pitched at 5:12 or greater.
- The roofline cannot be a single mass; it must be broken up horizontally and vertically between every unit.

LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest. Use additional pages as needed.

1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

The proposed zoning is not consistent with the 2045 Land Use Map (LUM). The 2045 LUM plans for Medium Density Residential (7 units/acre), this application is requesting HDSF-CZ (8 units/acre). The neighboring development (Salem Pointe) is a PUD and therefore has a higher density. HDSF-CZ will allow the new homes to better match existing homes.

2) *Compatibility.* The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

Proposed zoning conditions listed above are aimed to aesthetically match existing homes in Salem Pointe on New Derby Lane. Allowing a zoning of HDSF-CZ would allow for a more compatible addition to the exisiting neighborhood.

PETITION INFORMAT	TON				
Application #:	22CZ11	Submitta	ıl Date:		
3) Zoning district sup Supplemental Standa		ne proposed Conditiona	I Zoning (CZ) District use's	compliance with Sec	c 4.4
The proposed re	-zoning/developn	nent will comply a	as applicable to Se	c 4.4 Supplem	ental
Standards.					
adverse effects, inclu	ding visual impact of thing lands regarding tras	ne proposed use on ad	onditional Zoning (CZ) Dis- ljacent lands; and avoida very, parking and loading	nce of significant ad	lverse
The proposed	development m	inimizes advers	se effects on adja	acent lands.	The
proposed de	evelopment w	ould adjoin a	an exisiting de	evelopment	
•	on from significant deter	• •	Zoning District use's mini air resources, wildlife hab		
The proposed	development wil	l minimize envir	onmental impact	. Minimal imp	acts
are expected, e	xtra attention will	be focused on t	he nearby pond d	uring construc	tion.
6) Impact on public fo	acilities The proposed Co	onditional Zoning (CZ) D	District use's avoidance of	having adverse imna	cts on
			ewater facilities, parks, sci	-	
No impact is	expected to	public faciliti	es.		
7) Health, safety, and	welfare. The proposed	Conditional Zoning (CZ)	District use's effect on the	e health, safety, or w	elfare
of the residents of the					
ino impact is	expected to	nealth, safet	ty and welfare),	

PETITION INFORMATION
Application #: 22CZ11 Submittal Date:
8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.
Proposed future development is not expected to be detrimental to adjacent properties
A neighborhood meeting was completed on April 7th, 2022. Comments and concerns
were normal and nothing detrimental was brought forward, these can be found
later in application.
9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
Minimal to no impact is expected regarding traffic impact or noise. A trip generation
letter is included in this application and the addition of 9 units or less would no
require a Traffic Impact Analysis (TIA).
10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.
Upon re-zoning, approval of the site plan would be subject to applicable UDO requirements.

Philin an	Application #: 22CZ11 Philip and Michele Blackley		Submittal Date:
· ······p u			is the owner* of the property for which the attached
applicat	ion is being s	ubmitted:	
	Land Use A	mendment	
V			anned Development rezoning applications, this s consent to zoning conditions that are agreed to by the application is approved.
	Site Plan		
	Subdivision	ı	
	Variance		
	Other:	West to	
The proj	perty address	is: 1522 Salem Church	Road
The age	nt for this pro	ject is: Joshua Blackley	
	☐ I am the	owner of the property and w	ill be acting as my own agent
Agent N		Joshua Blackley	
Address	:	1522 Salem Church Road	
	ne Number:	919-337-7827	
Telepho			
Telepho E-Mail A	ddress:	joshua.g.blackley@gmail.c	om
	Address:	joshua.g.blackley@gmail.co Signature(s) of Owner(s)* Philip Blackley Michele Blackley	Philip Blackley 4-20-2022 Type or print name Date Michele S. Blackley 4-20-20

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

Residences	lication #:	22CZ1	1	Submittal Date:
The ur	ndersigned, s or affirms		Blackl	(the "Affiant") first being duly sworn, hereby
1.	owner, 1522 Salem	over eighteen or is the Church Road, Apen ted herein (the	authorized K, NC 27523	age and authorized to make this Affidavit. The Affiant is the sole agent of all owners, of the property located at and legally described in Exhibit "A" attached hereto and
2.	This Affida		nip is made for	r the purpose of filing an application for development approval with
3.				, Affiant acquired ownership by deed, dated, ister of Deeds Office on, in Book Page
4.	indicating		lationship gra	the owner(s) of the Property, Affiant possesses documentation inting the Affiant the authority to apply for development approval
5.	in interest ownership Affiant's o claim or a acting as a nor is any Property.	Aft. ; have been in o. Since taking wnership or riction has been an authorized a	fiant has claim sole and und possession c ght to possess brought again agent for own ion pending a	operty, from the time Affiant was deeded the Property on hed sole ownership of the Property. Affiant or Affiant's predecessors disturbed possession and use of the property during the period of of the Property on, no one has questioned sion nor demanded any rents or profits. To Affiant's knowledge, no not affiant (if Affiant is the owner), or against owner(s) (if Affiant is her(s)), which questions title or right to possession of the property, against Affiant or owner(s) in court regarding possession of the
STATE (OF NORTH	CAROLINA W Han	wer	(Type of printe name
74.1	llip -	Blackban	fiant, persona	ally known to me or known to me by said Affiant's presentation of personally appeared before me this day and acknowledged the
		execution of t		
	New	Nyllia Mann NOTARY PUBL Hanover Count Nor Expires Jan	hy NC	Notary Public State of North Carolina My Commission Expires: 1/13/26

- Page 207 -

AFFIDAVIT OF OWNERSHIP: EXHIBIT A – LEGAL DESCRIPTION

Application #:	22CZ11	Submittal Date:
		Insert legal description below.
From Exhibit "A'	of Deed:	
corner of the gra Road), South 88 degrees 45 minu Sutton; thence N corner for said S to the point and	antors herein, 3 degrees 40 utes 04 secon North 84 degre Sutton; thence place of BEG entitled "Prop	enter line of S.R. 1614 (Salem Church Road), it being a runs thence with the center line of S.R. 1614 (Salem Church minutes 31 seconds East 211.37 feet; thence South 06 ids East 229.63 feet to a stake, a new corner for Don S. ees 46 minutes West 276.20 feet to a stake, another new North 09 degrees 59 minutes 50 seconds East 211.02 feet INNING, containing 1.218 acres and being designated as erty of Ray T. Williams, et al" dated April 9, 1973 by Smith



Wake County Real Estate Data **Account Summary**

<u>iMaps</u> Tax Bills

Real Estate ID 0099973

R-<10-HS

AP

RA

1.22

PIN # 0743815090

Account Search



Land Class

Spec Dist(s)

History ID 1

History ID 2

Permit Date

Acreage

Permit #

ETJ

Zoning

Location Address Property Description 1522 SALEM CHURCH RDSALEM CHURCH RD

Land Sale Date

Land Sale Price

Total Units

Recycle Units

Apt/SC Sqft

Heated Area

Improvement Summary

Pin/Parcel History Search Results New Search

Land Use Value

1

1

1,299

Use Value Deferment

Historic Deferment

Total Deferred Value

Use/Hist/Tax Relief

Total Value Assessed*

Assessed



\$172,867

Property Owner BLACKLEY, DONNA BLACKLEY, PHILIP (Use the Deeds link t	256 MARILYN CIR CARY NC 27513-5212				Property Location Address 1522 SALEM CHURCH RD APEX NC 27523-7563				
Administrative Data	1	Information	n		Assesse	sessed Value			
Old Map #	570-00000-0089								
Map/Scale	0743 20	Deed Dat	te	7/29	/2015	Land Valu	ie Assessed	\$146,500	
VCS	20AP900	Book & P	age	16101	1240	Bldg. Valu	ue Assessed	\$26,367	
City			Stamps						
Fire District	23	Pkg Sale	Date	11/6	/1998				
Township	WHITE OAK	Pkg Sale	Price	\$3	0,000	Tax Relie	f		

*Wake County assessed building and land values reflect the market value as of January 1, 2020, which is the date of the last county-wide revaluation. Any inflation, deflation or other economic changes occurring after this date does not affect the assessed value of the property and cannot be lawfully considered when reviewing the value for adjustment.

The January 1, 2020 values will remain in effect until the next county-wide revaluation. Until that time, any real estate accounts created or new construction built is assessed according to the 2020 Schedule of Values.

For questions regarding the information displayed on this site, please contact the Department of Tax Administration at Taxhelp@wakegov.com or call 919-856-5400.



WAKE COUNTY. NC 152 LAURA M RIDDICK REGISTER OF DEEDS PRESENTED & RECORDED ON 07/29/2015 14:10:28

BOOK:016101 PAGE:01240 - 01243

Excise Tax: \$ NO REVENUE

Recording Time, Book & Page

BRIEF DESCRIPTION: Salem Church Road

PARCEL IDENTIFICATION NO.: 0099973

Mail To: Grantee
Prepared By: Jonathan T. Sizemore, Attorney at Law
Adams, Howell, Sizemore & Lenfestey, PA
(NO TITLE SEARCH OR TAX ADVICE GIVEN)

STATE OF NORTH CAROLINA COUNTY OF WAKE

OUITCLAIM DEED

This QUITCLAIM DEED is made this 17th day of June, 2015, by and between **Don S. Sutton and wife, Miranda W. Sutton**, whose address is 4034 Berman Edge Road, Holly Springs, NC 27540, party of the first part, hereinafter referred to as the Grantor; and **Donna Michele Sutton Blackley and husband, Philip Lamar Blackley**, whose address is 215 Marilyn Circle, Cary, NC 27513, party of the second part, hereinafter referred to as the Grantees.

WITNESSETH:

WHEREAS Grantor for and in consideration of the Sum of Ten Dollars (\$10.00) and other good and valuable consideration, receipt of which is hereby acknowledged, has given, granted, bargained, sold and conveyed, and by these presents does hereby give, grant, bargain, sell and convey unto the Grantees all of that certain piece, parcel or tract of land situated, lying and being in Wake County, North Carolina, and more particularly described as follows:

See Exhibit "A" attached hereto.

This property is not the primary residence of the Grantor.

Exhibit "A"

BEGINNING at a nail in the center line of S.R. 1614 (Salem Church Road), it being a corner of the grantors herein, runs thence with the center line of S.R. 1614 (Salem Church Road), 04 seconds East 229.63 feet to a stake, a new corner for Don S. Sutton; thence North 84 North 09 degrees 46 minutes West 276.20 feet to a stake, another new corner for said Sutton; thence containing 1.218 acres and being designated as Tract A on map entitled "Property of Ray T. Williams, et al" dated April 9, 1973 by Smith and Smith, Surveyors.

TO HAVE AND TO HOLD the above described lands and premises, together with all appurtenances thereunto belonging, or in anywise appertaining, unto the Grantees, their heirs, appurtenances dictodards forever, but subject always, however, to the limitations set out above.

AND the said Grantor, party of the first part, makes no warranty, express or implied, as to title to the property hereinabove described.

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal and does adopt the printed word "SEAL" beside his name as his lawful seal.

(SEAL)

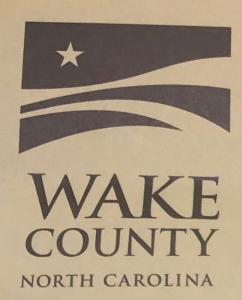
STATE OF NORTH CAROLINA COUNTY OF WAKE

I, Jonathan T. Sizemore, a Notary Public, do hereby certify that Don S. Sutton and Miranda W. Sutton, personally appeared before me this date, and being duly sworn, executed the foregoing instrument.

Notary Pullic

My Commission Expires:

(Notary Seal)





Please retain yellow trailer page

It is part of the recorded document and must be submitted with the original for rerecording.

Laura M. Riddick Register of Deeds

Wake County Justice Center 300 South Salisbury Street, Suite 1700 Raleigh, NC 27601

☐ New Time Stamp	\$25 Non-Standard Fee
Additional Document Fee	Additional Reference Fee

This Customer Group

This Document

of Time Stamps Needed

- Page 213 -

of Pages 4-G



Wake County Residential Development Notification

Developer Company Information						
Company Name	Not determined at this time, only re-zoning requested					
Company Phone Number	Not determined at this time, only re-zoning requested					
Developer Representative Name	Not determined at this time, only re-zoning requested					
Developer Representative Phone Number	Not determined at this time, only re-zoning requested					
Developer Representative Email	Not determined at this time, only re-zoning requested					

New Residential Subdivision Information							
Date of Application for Subdivision	Not determined at this time, only re-zoning requested						
City, Town or Wake County Jurisdiction	Apex, NC						
Name of Subdivision	Not determined at this time, only re-zoning requested						
Address of Subdivision (if unknown enter nearest cross streets)	1522 Salem Church Road						
REID(s)							
PIN(s)	0743815090						

Please complete each section of this form and submit with your application.

Town of Apex staff will enter this information into the online WCPSS form.

Please send any questions about this form to:

studentassignment-gis-group@wcpss.net

Projected Dates Information						
Subdivision Completion Date 01 July 2024						
Subdivision Projected First Occupancy Date 01 August 2024						

	Lot by Lot Development Information																
Unit Type	Total # of Units	Senior Living	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	Squar Rar	e Foot nge	Price	Range	Å	Anticipate	ed Compl	etion Uni	ts & Date	es
								Min	Max	Low	High	Year	# Units	Year	# Units	Year	# Units
Single Family																	
Townhomes	9						Х	1200	3000	300,000	750,000	2024	9				
Condos																	
Apartments																	
Other	22CZ11																

SITE ADDRESS	PIN NUM	OWNER	Mailing Address		
6 NEW DERBY LN	0743819023	AGGARWAL, KAPISH KUMAR	846 NEW DERBY LN	APEX NC 27523-6409	
5 SALEM POINTE PL	0743808641	ALB TRINITY LLC	855 SALEM POINTE PL	APEX NC 27523-6416	
0 NEW DERBY LN	0743818082	ARYAL, SANAT SHARMA, SHRISTI	850 NEW DERBY LN	APEX NC 27523-6409	
SALEM POINTE PL	0743808727	ARYAL, YOUB ARYAL, PADMA PANDEY	856 SALEM POINTE PL	APEX NC 27523-6416	
22 SALEM CHURCH RD	0743815090	BLACKLEY, DONNA MICHELE SUTTON BLACKLEY, PHILIP LAMAR	256 MARILYN CIR	CARY NC 27513-5212	
SALEM POINTE PL	0743808746	BYRD, KRISTOPHER LEON BYRD, ALISHA MARLENE	854 SALEM POINTE PL	APEX NC 27523-6416	
13 TAHOE GLEN PL	0743815358	CANNADAY, ROBERT BRUCE CANNADAY, SARAH TUYEN	1013 TAHOE GLEN PL	CARY NC 27513-5811	
2 NEW DERBY LN	0743819073	CASSAS, CHRISTY M	842 NEW DERBY LN	APEX NC 27523-6409	
S SALEM POINTE PL	0743900736	COHEN, ANNA	1602 SHEPHERDS GLADE DR	APEX NC 27523-6949	
05 FAIR WEATHER CT	0743801745	COLEMAN, WILLIAM B COLEMAN, MONICA H	1505 FAIR WEATHER CT	APEX NC 27523-5987	
2 NEW DERBY LN	0743818052	CULOTTA, OLIVIA M	852 NEW DERBY LN	APEX NC 27523-6409	
3 SALEM POINTE PL	0743808671	DAIGLE, MELINDA B	853 SALEM POINTE PL	APEX NC 27523-6416	
09 SALEM CHURCH RD	0743813303	ELLIOTT, DAVID JOSHUA ELLIOTT, KIMBERLY ANDRA	1509 SALEM CHURCH RD	APEX NC 27523-7564	
NEW DERBY LN	0743819053	FINDIK, KASIM FINDIK, GAMZE	844 NEW DERBY LN	APEX NC 27523-6409	
ALEM CHURCH RD	0743814248	GARBETT, ASHLEY W WAPLES, ASHLEY LYNN	1521 SALEM CHURCH RD	APEX NC 27523-7564	
AHOE GLEN PL	0743817208	GLEN AT WESTHIGH OWNERS ASSOCIATION INC	CHARLESTON MANAGEMENT	812 SALEM WOODS DR	RALEIGH NC 27615-3346
SALEM POINTE PL	0743808691	GU, LONG	851 SALEM POINTE PL	APEX NC 27523-6416	
5 NEW DERBY LN	0743808838	HARTMAN, JOANN M	855 NEW DERBY LN	APEX NC 27523-6409	
12 SALEM CHURCH RD	0743805704	HESTER, EDWARD L III HESTER, PATSY P	1512 SALEM CHURCH RD	APEX NC 27523-7563	
3 NEW DERBY LN	0743808858	HU, JACK WEIYU	853 NEW DERBY LN	APEX NC 27523-6409	
NEW DERBY LN	0743809898	HUANG, CHARLES SHOU SHEN	841 NEW DERBY LN	APEX NC 27523-6409	
NEW DERBY LN	0743809848	HUDSON, TAYLER M HUDSON, MEGAN NICOLE	845 NEW DERBY LN	APEX NC 27523-6409	
SALEM POINTE PL	0743809766	IMMANI, SATYA SRINIVAS IMMANI, SANGEETHA	844 SALEM POINTE PL	APEX NC 27523-6416	
SALEM POINTE PL	0743809632	JUNG, CLINTON NATHANIEL JUNG, PATRICIA SUE	847 SALEM POINTE PL	APEX NC 27523-6416	
NEW DERBY LN	0743900838	KONAKALLA, AYYAPPA SRAVANTHI CHAKKA, NAGA RATHNA SUBHA	837 NEW DERBY LN	APEX NC 27523-6409	
S SALEM POINTE PL	0743809746	LANGKAMP, SCOTT MICHAEL LANGKAMP, CARMELA MARIA	846 SALEM POINTE PL	APEX NC 27523-6416	
S SALEM POINTE PL	0743807796	LIN, SHIH-CHUN	858 SALEM POINTE PL	APEX NC 27523-6416	
3 FAIR WEATHER CT	0743800709	MALLOY, JOHN F MALLOY, KAREN	1503 FAIR WEATHER CT	APEX NC 27523-5987	
9 TAHOE GLEN PL	0743815350	MUDIGONDA, SARATH CHANDRA KARRA, SRIVALLI	1009 TAHOE GLEN PL	CARY NC 27513-5811	
3 NEW DERBY LN	0743809878	NEUPANE, PADAM NEUPANE, BISHNU	843 NEW DERBY LN	APEX NC 27523-6409	
2 SALEM POINTE PL	0743809796	PANDEY, PRABHAKAR MISHRA, PREETI	842 SALEM POINTE PL	APEX NC 27523-6416	
NEW DERBY LN	0743910003	PANIGRAHI, SANGRAM KESHARI MISHRA, PRACHI	840 NEW DERBY LN	APEX NC 27523-6409	
NEW DERBY LN	0743808888	RASH, FAITH G	851 NEW DERBY LN	APEX NC 27523-6409	
2 SALEM POINTE PL	0743808776	REN, TIANTIAN	2508 SIDEWINDER CT	APEX NC 27523-8503	
6 NEW DERBY LN	0743910043	SAINI, VINOD KUMAR SAINI, ALKA	836 NEW DERBY LN	APEX NC 27523-6409	
NEW DERBY LN	0743817064	SALEM POINTE OWNERS ASSOCIATION INC	1100 PERIMETER PARK DR STE 112	MORRISVILLE NC 27560-9119	
4 SALEM CHURCH RD	0743809469	SALEM POINTE OWNERS ASSOCIATION INC	REALMANAGE	PO BOX 803555	DALLAS TX 75380-3555
EW DERBY LN	0743819029	SALEM POINTE OWNERS ASSOCIATION INC	8480 HONEYCUTT RD STE 200	RALEIGH NC 27615-2261	
NEW DERBY LN	0743818032	SCRUGGS, ASHLYN LUELLA TRUSTEE THE ASHLYN LUELLA SCRUGGS REVOCABLE TRUST	854 NEW DERBY LN	APEX NC 27523-6409	
5 TAHOE GLEN PL	0743815262	SHADFORTH, IAN PAUL YAU, JEAN CHRISTINE	1005 TAHOE GLEN PL	CARY NC 27513-5811	
NEW DERBY LN	0743808807	SHOEMAKER, ABIGAIL	857 NEW DERBY LN	APEX NC 27523-6409	
NEW DERBY LN	0743818002	STOVER, REX ALAN	856 NEW DERBY LN	APEX NC 27523-6409	
5 SALEM CHURCH RD	0743811314	TEW, DONALD R TEW, DEBRA P	1505 SALEM CHURCH RD	APEX NC 27523-7564	
9 SALEM CHURCH RD	0743818238	WARWICK, JOHN W	1535 SALEM CHURCH RD	APEX NC 27523-7564	
NEW DERBY LN	0743809828	ZHANG, ZHIQIANG WANG, SHUO	847 NEW DERBY LN	APEX NC 27523-6409	
		APEX TOWN OF	PO BOX 250	APEX NC 27502-0250	
		Current Tenant	1522 Salem Church RD	APEX NC 27523	
		Current Tenant	1529 Salem Church RD	APEX NC 27523	
		Current Tenant	1531 Salem Church RD	APEX NC 27523	
		Current Tenant	838 Salem Pointe PL	APEX NC 27523	
		Current Tenant	852 Salem Pointe PI	APEX NC 27523	

The attachments on the following pages were mailed to the above addresses on March 22, 2022.

NOTICE OF NEIGHBORHOOD MEETING

This attachment was mailed on March 22, 2022 to the addresses provided by the Town of Apex.

or disc	ocument is a public record under the losed to third parties. ch 22nd, 2022	North Carolina Public I	Records Act and may be pub	olished on the Town's website
Date				
You a	Neighbor: re invited to a neighborhood mee 2 Salem Church Road	ting to review and o	discuss the development 0743815090	proposal at
	Address(es)		PI	N(s)
for the neight opportunity opportunity the approximatily opportunity opportuni	ordance with the Town of Apex None applicant to discuss the proborhood organizations before the tunity to raise questions and discritted. If you are unable to attend, poplicant. Notified neighbors may ronce an application has been opment Map or the Apex Defivorment Map or the Apex	ject and review the submittal of an apuss any concerns abblease refer to the Pequest that the appushment to the evelopment Report Community-Development	ne proposed plans with oplication to the Town. To out the impacts of the project Contact Information olicant provide updates a Town, it may be tracket located on the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town, it means the Town the Tow	adjacent neighbors and this provides neighbors an roject before it is officially on page for ways to contact nd send plans via email or sed using the Interactive vn of Apex website at
	ghborhood Meeting is required be	ecause this project i	ncludes (check all that ap	
App	lication Type Rezoning (including Planned Unit	t Development)		Approving Authority Town Council
	Major Site Plan	. Development,		Technical Review Committee (staff)
	Special Use Permit		Board of Adjustment (QJPH*)	
	Residential Master Subdivision P		· · · · · · · · · · · · · · · · · · ·	Technical Review Committee (staff)
	-Judicial Public Hearing: The Board	•		
	ollowing is a description of the pro re requesting to Re-Zone 1522 Salem Chu			
	re development would be a townho			
	·		·	
Estin	nated submittal date: 01 June	2022		
ME	ETING INFORMATION:	D		
Pro	perty Owner(s) name(s):	Philip L. Blac		
App	licant(s):		ey and Joshua G. Bla	
	tact information (email/phone):		ngmail.com (919) 337-7	
	eting Address:		See attachment for di	al-in and link
Dat	e/Time of meeting**:	Thursday, April 7t	h, 2022 5pm - 7pm	
	come: 5pm Project letings shall occur between 5:00 p.r		15pm Question &	
holida Develo	ys). If you have questions about the geopment Department at 919-249-3426 planning efforts at http://www.apexr	eneral process for this . You may also find in	application, please contact formation about the Apex F	the Planning and Community

This attachment was mailed on March 22, 2022 to the addresses provided by the Town of Apex.

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:			
Project Name: 1522 Salem C	Church Roa	d	Zoning: RA
Location: 1522 Salem Church Roa	ıd		
Property PIN(s): <u>0743815090</u>	Acreage,	/Square Feet:	1.22
Property Owner: Philip L. Black	lev		
Address: 1522 Salem Church R			
City: Apex		State: NC	zip: 27523
Phone: 919-868-3871	Email: philip	blackley14	118@gmail.com
Developer: Owner			
Address:			
City:	State:		Zip:
Phone: F	ax:	E	
Engineer: Joshua G. Blackley			
Address: 1522 Salem Church F	Road		
City: Apex		State:NC	_{Zip:} 27523
Phone: 919-337-7827 F	ax:	E	mail: joshua.g.blackley@gmail.com
Builder (if known): Unknown at	this time		
Address:			
City:		State:	Zip:
Phone: F	ax:	E	mail:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning and Community Development Department Main Number	
(Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department	
Angela Reincke, Parks and Greenways Planner	(919) 249-7468
Public Works - Transportation	
Russell Dalton, Traffic Engineering Manager	(919) 249-3358
Water Resources Department	
Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation &	(919) 249-3537
Erosion Control)	
James Gregg, Utility Engineering Manager (Water & Sewer)	(919) 249-3324
Electric Utilities Division	
Rodney Smith, Electric Technical Services Manager	(919) 249-3342

This attachment was mailed on March 22, 2022 to the addresses provided by the Town of Apex.

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 2nd and 4th Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4d a27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

Last Updated: December 21, 2021

COMMON CONSTRUCTION ISSUES & Wof Apex.

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction: Non-Emergency Police 919-3

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 a.m. to 8:30 p.m. so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday through Friday from 8:00 a.m. to 5:00 p.m. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic: James Misciagno 919-372-747

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control: Water Resources – Infrastructure Inspections 919-362-8166

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Water Resources – Infrastructure Inspections at 919-249-3427. The Town will get NCDOT involved if needed.

Parking Violations: Non-Emergency Police 919-362-8661

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road: James Misciagno 919-372-7470

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported to James Misciagno. He will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams: James Misciagno 919-372-7470 Danny Smith Danny.Smith@ncdenr.gov

Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the appropriate repairs with the developer. Impacts to the streams and stream buffers should also be reported to Danny Smith (danny.smith@ncdenr.gov) with the State.

Dust: James Misciagno 919-372-7470

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash: James Misciagno 919-372-7470

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported to James Misciagno at 919-372-7470. He will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins: James Misciagno 919-372-7470

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported to James Misciagno at 919-372-7470 so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures: Jessica Bolin 919-249-3537

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported to Jessica Bolin at 919-249-3537.

Electric Utility Installation: Rodney Smith 919-249-3342

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department. Contact Rodney Smith at 919-249-3342.

This attachment was mailed on March 22, 2022 to the addresses provided by the Town of Apex.

ZOOM MEETING INSTRUCTIONS

Join Zoom Meeting

https://us05web.zoom.us/j/87110182084?pwd=aXY5YUxtVkpUUmhYMVJKZHlpWitPUT09

Meeting ID: 871 1018 2084

Passcode: 613735
One tap mobile

+16465588656,,87110182084#,,,,*613735# US (New York)

+13017158592,,87110182084#,,,,*613735# US (Washington DC)

Dial by your location

+1 646 558 8656 US (New York)

+1 301 715 8592 US (Washington DC)

+1 312 626 6799 US (Chicago)

+1 669 900 9128 US (San Jose)

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

Meeting ID: 871 1018 2084

Passcode: 613735

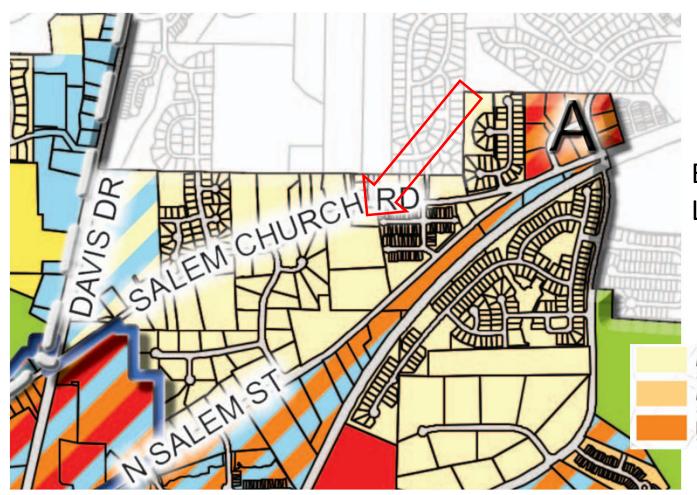
Find your local number: https://us05web.zoom.us/u/ld4smydDNF

This attachment was mailed on March 22, 2022 to the addresses provided by the Town of Apex.

Land Proposed for Re-Zoning



This attachment was mailed on March 22, 2022 to the addresses provided by the Town of Apex.



Excerpt from 2045 Land Use Map

Medium Density Residential
Single-family homes, duplexes, and townhomes

Medium/High Density Residential
Single-family homes, duplexes, triplexes, quadplexes, and High Density Residential townhomes, Townhomes, triplexes, quadplexes, and apartments

Conceptual Design – Possible Layout with 8 Townhomes



SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Philip and Michele Blackley					
Applicant(s): Joshua Blackley					
Contact information (email/phone): 919-337-7827; joshua.g.blackley@gmail.com					
Meeting Address: Zoom Call, Call-in information provided in mail					
Date of meeting: April 7th, 2022 Time of meeting: 5pm - 7pm					
Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted. Questions/Concerns noted by neighbors and applicants responses are summarion the next page. This summary was emailed to participants the following day a no additional comments were received. None of the concerns discussed warrance change to the re-zoning plans/application.	and				
Applicant's Response:					
Question/Concern #2:					
Applicant's Response:					
Question/Concern #3:					
Applicant's Response:					
Question/Concern #4:					
Applicant's Response:					

QUESTION/CONCERN	APPLICANT RESPONSE
What will happen to the tree line adjacent to Salem Pointe?	There will be a 15 foot buffer required on that property line. If the trees are not on the property of 1522 Salem Church Road then they will remain in place.
What will be the cost of new townehomes?	The cost will depend on the approved site plan but the intent is for the future development to match existing homes so the cost should be comparable to Salem Pointe
What is the plan for storm water retention? A storm water retention pond on the property would be a safety concern.	The intent is to tie-in to the existing storm water retention pond that is currently servicing Salem Pointe. If that is not possible, exact location of pond would be decided during the site plan
Would the future development join the exisiting HOA at Salem Pointe?	This will be determined at a later time but it would make sense for that to happen.
What will be the design of the future homes?	The intent is for the future development to match existing homes at Salem Pointe so the design of the homes will be similar to existing homes.
Would future residents of the homes use the Playground at Salem Pointe?	This would depend on HOA approval.
Will only adding a small amount of units look odd? Why are they not doing one large development?	The site plan will be approved by the town and the intent would be for the development to be aesthetically pleasing. The owner only owns 1522 Salem Church Road so this is the only part of the area that is under their control at this time.
Will the construction traffic use New Derby Lane during contruction?	It is likely that they would access the property directly from Salem Church Road during site civil work (grading) but during vertical construction, yes, they would likely need to use New Derby Lane for access.
What about debris/dirt during contruction.	"COMMON CONSTRUCTION ISSUES & WHO TO CALL" was provided in the handout. For this issue the contact is James Misciagno at 919-372-7470
Parking is already a challenge in the neighborhood, this will add to the problem.	This concern is noted. There is a required amount of guest parking per unit which will be discussed during the site plan.
There is a concern that the increased traffic will be a safety concern.	A traffic impact analysis will be conducted. Minimal traffic impact is anticipiated as the amound of units added would be 9 or less.
There is a preference for the entrance to be off Salem Church Road instead of New Derby Lane.	This concern is noted. The entrance will likely be from New Derby Lane based but will be finalized during the site plan.
Will there be enough turnaround space for waste and emergency trucks?	This question is noted and will be discussed during the site plan.
It is preferred that the homes have 2 car garages to mitigate parking issues.	This concern is noted and will be discussed during the site plan.
It is preferred that there are fences around the new development for privacy.	This concern is noted and will be discussed during the site plan. There are buffer requirements that will be followed as per the UDO.

```
17:01:51 From Christy Cassas to Everyone:
17:03:12 From Faith to Everyone:
17:03:27 From JH to Everyone:
       weiyuhu@hotmail.com
17:40:11 From patsy hester to Everyone:
       1512 Salem Church Road
17:40:56 From patsy hester to Everyone:
       How will resients access the townhouses?
17:41:20 From patsy hester to Everyone:
       What about traffic an off street parking?
17:42:48 From Joshua Blackley to Everyone:
       Access is planned to be from existing road at New Derby Lane
17:45:10 From patsy hester to Everyone:
       hat kin of boundary will be provided? Will there be fencing erected? That
would infringe on our property since it is so close to this
17:45:58 From patsy hester to Everyone:
       There is no fence beyon the roag area - it is basically open!!!
17:46:33 From patsy hester to Everyone:
       sorry about the typing. But this seems to be tight for 8 townhouses.
17:46:59 From patsy hester to Everyone:
       Yees, our side since we live here.
17:47:43 From Joshua Blackley to Everyone:
        30 foot buffer off salem church road, 15 foot buffer required between the
townhomes, 20 foot buffer required of adjoining single family property
17:48:43 From patsy hester to Everyone:
       We already have a problem with traffic coming fast aroun the curve that is
dangerous. More housing is going to affect it even more.
17:49:36 From patsy hester to Everyone:
       No more entrances!!
17:49:37 From Joshua Blackley to Everyone:
       A traffic analysis will be completed to account for new traffic
17:56:40 From patsy hester to Everyone:
        Request builder/developer erect fences to provide privacy and protection
for us.
17:57:40 From Joann to Everyone:
        Joann Hartman
17:57:47 From patsy hester to Everyone:
       please add me to email list phester@yahoo.com so we do not have to enter a
long zoom address!!
17:58:45 From patsy hester to Everyone:
       Does a 2 car garage require more room?
17:59:30 From patsy hester to Everyone:
        is this being done by the owners?
18:01:02 From Christy Cassas to Everyone:
       Appreciate your presentation, today. Thank you. Need to head out.
18:01:42 From patsy hester to Everyone:
        2021 N Salwm St is being rezoned for 6 acres to buld townhomes.
18:03:35 From patsy hester to Everyone:
```

where is the music? We are tight behind and do not hear it/

18:05:13 From patsy hester to Everyone:

Behind us on the right .

18:05:35 From patsy hester to Everyone:

actually to the right of our neighbor's

18:06:45 From patsy hester to Everyone:

The ones next door do not have a 20 ft buffer - the fence is right on top of our field fencing.

18:07:02 From patsy hester to Everyone:

It would be better if there were fewer townhouses.

18:07:36 From patsy hester to Everyone:

builders do not always follow protocol

18:09:20 From patsy hester to Everyone:

I though your grandparents owned the land

18:10:02 From patsy hester to Everyone:

OK, so Don & Mandy sold to your dad.

18:10:51 From patsy hester to Everyone:

The HOA for this one should be much lower since there is less space

18:11:53 From patsy hester to Everyone:

Bye

18:12:38 From Joshua Blackley to Everyone:

Rezoning done by owners

18:12:55 From Joshua Blackley to Everyone:

Site plan will be done by future developer/builder

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: Zoom Call, Call-in information provided in mail				
Date of meeting: April 7th, 2022	Time of meeting: 5pm - 7pm			
Property Owner(s) name(s): Philip and Michele Blackley				
Applicant(s): Joshua Blackley				

Please <u>print</u> your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	Christy Cassas	842 New Derby Lane			
2.	Faith Rash	851 New Derby Lane			
3.	Jack Hu	853 New Derby Lane			
4.	Joann Hartman	855 New Derby Lane			
5.	Patsy Hester	1512 Salem Church Road			
6.	Philip Blackley, Owner				
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

Use additional sheets, if necessary.

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

ı, Phi	lip Blackley	, do hereby declar	e as follows:	
,	Print Name	•		
1.	I have conducted a Neighborh Master Subdivision Plan, or S <i>Meeting</i> .			
2.	The meeting invitations were mall property owners and tenaneighborhood association that of 14 days in advance of the Ne	ents abutting and within 300 represents citizens in the notificing ighborhood Meeting.	feet of the subject cation area via first clas	property and any
3.	The meeting was conducted at	Zoom Meeting		(location/address)
	on April 7th, 2022	(date) from 5pm	(start time) to 7pm	(end time).
4.	I have included the mailing list, map/reduced plans with the ap	_	et, issue/response sun	nmary, and zoning
5.	I have prepared these materials	in good faith and to the best o	f my ability.	
STATE	Date OF NORTH CAROLINA	By: Riljo V	Palley	
COUNT	YOEWAKE New Hanol	ev		
	and subscribed before me, Ny , on this the 20 day of		a Notary Public for the	above State and
My Cor	Nyfila Mann NOTARY PUBLIC New Hanover County, NC nmission Expires January 13, 2026	Nylica (Notary Public Mann Print Name Expires: 1/(3/2	

April 15th, 2022

Town of Apex Planning and Community Development P.O. Box 250 Apex, NC 27502

Subject: **Trip Generation Study** 1522 Salem Church Road

This letter provides trip generation information for the proposed Re-Zoning and therefore possible future development at 1522 Salem Church Road located in Apex, NC. The purpose of this study is to illustrate the trip generation estimates with the addition of nine or fewer townhomes to the existing neighborhood. The existing development (Salem Pointe) consists of 70 townhomes. The proposed Re-Zoning would allow for the addition of no more than nine additional townhomes. Access to the new homes will be provided through existing connection at New Derby Lane. During the Pre-Application meeting with the Town of Apex (Town) it was stated that a Traffic Impact Analysis will not be required for the site, provided the site will not generate more trips than 1,000 daily trips or 100 trips during either the AM or PM peak hour. Trip Generation was completed according to the rates and methodology outlined in the ITE Trip Generation Manual, 10th Edition.

The below table shows a summary of the trip generation estimate.

Location	ITE Code	Size	Daily Traffic	AM Peak Hour	PM Peak Hour
Existing Townhomes	220	70 Units	513	33	39
Proposed Development	220	9 Units	66	5	5
	TOTAL	79 Units	579	38	44

ITE Trip Generation Manual #220 – Multifamily Housing (Low-Rise) – containing one or two floors.

ITE 220 = 7.32 Daily Trips per Dwelling Unit

ITE 220 = .46 AM Peak Hour Trips per Dwelling Unit

ITE 220 = .56 PM Peak Hour Trips per Dwelling Unit

It is estimated that the addition of the (9) units to the existing development would add 66 vehicle trips per day and an additional 5 trips for both the AM and PM peak hours. It is our understanding that with the totals in the above table that a Traffic Impact Analysis can be waived, with the low total number of trips expected to be generated a full traffic study does not appear necessary.

If you should have any questions or concerns please contact me at 919-337-7827.

Sincerely,

Joshua Blackley Civil Engineer

Rezoning Case: #22CZ11 1522 Salem Church Rd

Planning Board Meeting Date: July 11, 2022



Report Requirements:

Per NCGS §160D-604(b), all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Per NCGS §160D-604(d), the Planning Board shall advise and comment on whether the proposed action is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

PROJECT DESCRIPTION: Acreage: PIN(s):	±1.22 0743815090	
Current Zoning:	Residential Argricultrural (RA	s)
Proposed Zoning:	High Density Single-Family Re	esidential-Conditional Zoning (HDSF-CZ)
Current 2045 Land Use Map:	Medium Density Residential	
If rezoned as proposed, the 2	045 Land Use Map Designation	on will change to: Medium/High Density Residential
Town Limits:	ETJ	
Applicable Officially Adopte The Board must state whether if applicable. Applicable plans h 2045 Land Use Map Consistent Map will automatically be an	the project is consistent or inconsistent or inconsistent Inconsistent	Reason: If rezoned, the 2045 Land Use
✓ Apex Transportation Plan ✓ Consistent	n Inconsistent	Reason:
Parks, Recreation, Open Consistent	Space, and Greenways Plan Inconsistent	Reason:

Rezoning Case: #22CZ11 1522 Salem Church Rd

Planning Board Meeting Date: July 11, 2022



Legislative Considerations:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1.	Consistency with 2045 Land Use Plan. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Plan.					
	✓ Consistent	Inconsistent	Reason: If rezoned, the 2045 Land U	se		
Map	will automatically be amende	ed to Medium/High D	Density Residential.			
2.	Compatibility. The proposed location and compatibility with Consistent	- ·	CZ) District use's appropriateness for its propounding land uses. Reason:	osed		
3.	Zoning district supplemental swith Sec. 4.4 Supplemental Star		ed Conditional Zoning (CZ) District use's compl	iance		
4.	minimization of adverse effect	cts, including visual im	he proposed Conditional Zoning (CZ) District npact of the proposed use on adjacent lands; nding lands regarding trash, traffic, service deling and not create a nuisance. Reason:	; and		
5.	_	otection from significa	sed Conditional Zoning District use's minimization of water and air resources, wies. Reason:	ldlife		

Rezoning Case: #22CZ11 1522 Salem Church Rd

Planning Board Meeting Date: July 11, 2022



6.	Impact on public facilities. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
	✓ Consistent
7.	Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ. Consistent Reason:
8.	Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties. ✓ Consistent ☐ Inconsistent Reason:
9.	Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. Consistent Reason:
10.	Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics. Consistent Reason:

Rezoning Case: #22CZ11 1522 Salem Church Rd

Planning Board Meeting Date: July 11, 2022



Planning Board Recommendation:

	Motion:	To recommend approval as presented			
- 1	ntroduced by Planning Board member:	Ryan Akers			
	Seconded by Planning Board member:				
	Approval: the project is consistent wit considerations listed above.	th all applicable officially adopted plans and the applicable legislative			
✓		is not consistent with all applicable officially adopted plans and/or the as noted above, so the following conditions are recommended to be ke it fully consistent:			
Condit	tions as presented.				
	Denial: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above. With 6 Planning Board Member(s) voting "aye" With 1 Planning Board Member(s) voting "no"				
	Reasons for dissenting votes:				
	Tina Sherman - Inconsistent with the 2045 Land Use Map.				
	This report reflects the recommendation of the Planning Board, this the <u>11th</u> day of <u>July</u> 2022. Attest:				
	Negel 15	Dianne Khin Digitally signed by Dianne Khin Date: 2022.07.11 20:54:06 -04'00'			
Regir	nald Skinner, Planning Board Chair	Dianne Khin, Director of Planning and Community Development			















WebEdits









Municode Mtgs 🚳 Plan Viewer 😗 iMAPS 🌎 IDT 🦠 ExecuTime





of 2 Q

> TOWN OF APEX POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502

PUBLIC NOTIFICATION OF PUBLIC HEARINGS CONDITIONAL ZONING #22CZ11 1522 Salem Church Road

Pursuant to the provisions of North Carolina General Statutes §1600-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Yown of Apex. The purpose of these hearings is to consider the following:

Owner/Applicant: Philip & Michele Blackley **Authorized Agent: Joshua Blackley** Property Address: 1522 Salem Church Road Acreage: ±1.22 acres Property Identification Number (PIN): 0743815090

Public Hearing Location: Apex Town Hall

PHONE 919-249-3426

Current 2045 Land Use Map Designation: Medium Density Residential

Council Chamber, 2nd Floor

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium/High Density Residential Existing Zoning of Property: Residential Agricultural (RA)

Proposed Zoning of Property: High Density Single Family-Conditional Zoning (HDSF-CZ)

73 Hunter Street, Apex, North Carolina Planning Board Public Hearing Date and Time: July 11, 2022 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexic.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Planning Board meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube Evestream at https://www.youtube.com/c/townofapexgov.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www. Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.spanc.org/DocumentCenter/View/39390/22C21

Dianne F. Khin, AICP

ng and Community Development

Published Dates: June 27-July 11, 2022

- Page 235 -





























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Dianne F. Khin, AICP



Director of Planning and Community Development







Published Dates: June 27-July 11, 2022



NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ11 1522 Salem Church Boad

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte 4160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del avuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Philip & Michele Blackley Agente autorizado: Joshua Blackley

Dirección de la propiedad: 1522 Salem Church Road

TO COMPANY OF BUILDING

Superficie: ±1.22 acres

Números de identificación de la propiedad: 0743815090
Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a: Medium/High Density Residential

Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)

Ordenamiento territorial propuesto para la propiedad: High Density Single Family-Conditional Zoning (HDSF-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 11 de julio de 2022 4:30 P.M. Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente

enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el dia de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public hearing@apexnc. presentaria a la secretaria de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250. Apex. NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión de la Junta de Planificación se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.voutube.com/c/townofaper

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediacio



Los propietarios, inquellores y aspriariones de verions en un radio de 300 nies del Ordenamiento Territorial Condicional

propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especifica nte. La ubicación de la propiedad tambiér puede verse aquí: https://maps.raleigh ormentCenter/View/478. Si tiene pregunta el Departamento de Planificación y Desarrollo Comunitario al relacionados aqui: https://www.api

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2045 aquí:

micarse con

Fechas de publicación: 27 de junio-11 de julio de 2022



PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ11 1522 Salem Church Road

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Owner/Applicant: Philip & Michele Blackley

Authorized Agent: Joshua Blackley

Property Address: 1522 Salem Church Road

Acreage: ±1.22 acres

Property Identification Number (PIN): 0743815090

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium/High Density Residential

Existing Zoning of Property: Residential Agricultural (RA)

Proposed Zoning of Property: High Density Single Family-Conditional Zoning (HDSF-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

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A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:

Published Dates: June 27-July 11, 2022



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Dianne F. Khin, AICP
Director of Planning and Community Development

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ11
1522 Salem Church Road

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Philip & Michele Blackley **Agente autorizado:** Joshua Blackley

Dirección de la propiedad: 1522 Salem Church Road

Superficie: ±1.22 acres

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Medium/High Density Residential

Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)

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Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 11 de julio de 2022 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a <u>public.hearing@apexnc.org</u>, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión de la Junta de Planificación se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/39390/22CZ11.

Dianne F. Khin, AICP



TOWN OF APEX

POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ11

1522 Salem Church Road

Project Location:

1522 Salem Church Road

Applicant or Authorized Agent:

Joshua Blackley

Firm:

N/A

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on June 27, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

6/30/2002

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me,

Jeri Chastain Rederson, a Notary Public for the above

State and County, this the

30 day of June , 202 2.

Jew Chastain Pederson Notary Public

My Commission Expires: 3 / 10 / 2024

TOWN OF APEX POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ11 1522 Salem Church Road

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Owner/Applicant: Philip & Michele Blackley

Authorized Agent: Joshua Blackley

Property Address: 1522 Salem Church Road

Acreage: ±1.22 acres

Property Identification Number (PIN): 0743815090

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium/High Density Residential

Existing Zoning of Property: Residential Agricultural (RA)

Proposed Zoning of Property: High Density Single Family-Conditional Zoning (HDSF-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the office of the Town Clerk, (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Town Council meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at https://www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/39390/22CZ11.

Dianne F. Khin, AICP
Director of Planning and Community Development

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ11
1522 Salem Church Road

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Philip & Michele Blackley **Agente autorizado:** Joshua Blackley

Dirección de la propiedad: 1522 Salem Church Road

Superficie: ±1.22 acres

Números de identificación de la propiedad: 0743815090

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:

Medium/High Density Residential

Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)

Ordenamiento territorial propuesto para la propiedad: High Density Single Family-Conditional Zoning (HDSF-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio, 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a <u>public.hearing@apexnc.org</u>, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/39390/22CZ11.

Dianne F. Khin, AICP Directora de Planificación y Desarrollo Comunitario



















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of 2













PUDISHMO DARKE JUN 1-25, 2022



NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ11

1522 Salem Church Road

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Philip & Michele Blackley

Agente autorizado: Joshua Blackley

Dirección de la propiedad: 1522 Salem Church Road

Superficie: ±1.22 acres

Números de identificación de la propiedad: 0743815090

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:

Medium/High Density Residential Ordenamiento territorial existente de la propiedad: Residential Agricultural (RA)

Ordenamiento territorial propuesto para la propiedad: High Density Single Family-Conditional Zoning (HDSF-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso 73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Las comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio, 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexec.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotan

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexns presentaria a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.voutube.com/c/townofapexer

Mapa de las inmediaciones



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional populación han recibido esta potificación por corren postal de primera clase. Todas las partes interesadas queden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aqui: https://maps.raleshnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aqui: https://maps.raleshnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aqui: www.apasrc.com/Document/Center/Niew/428. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.ore/DocumentCent

Fechas de publicación: 1 - 26 de julio de 2022

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of 2 Q





TOWN OF APEX POST OFFICE BOX 250 APEX, NORTH CAROUNA 27502 DHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS CONDITIONAL ZONING #22CZ11 1522 Salem Church Road

Pursuant to the provisions of North Carolina General Statutes §260D-602 and to the Town of Apex Unified Developme Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Owner/Applicant: Philip & Michele Blackley Authorized Agent: Joshua Blackley Property Address: 1522 Salem Church Road Acreage: ±1.22 acres

Property Identification Number (PIN): 0743815090

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium/High Density Residential Existing Zoning of Property: Residential Agricultural (RA)

Proposed Zoning of Property: High Density Single Family-Conditional Zoning (HDSF-CZ)

Public Hearing Location: Apex Town Hall Council Chamber, 2rd Floor

73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.voutube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the office of the Town Clerk, (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Town Council meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS \$156A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

Vicinity Man



ers, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sen this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.ralegincc.gov/maps. The 2045 Land Use Map may be viewed online at www.apeonc.org/DocumentCenter/View/478. You may call 919-249-3426 Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apasrc.org/DocumentCenter/View/39390/22C211

Dianne F. Khin, AJCP

nity Development

Published Dates: July 1-26, 2022

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TOWN OF APEX

POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ11

1522 Salem Church Road

Project Location:

1522 Salem Church Road

Applicant or Authorized Agent:

Joshua Blackley

Firm:

N/A

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on July 1, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

7/7/2022

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me,

Teri Chastain Peders M., a Notary Public for the above

7 day of July , 2022.

N

Jew Chastain Peders M.

Notary Public

State and County, this the

JERI CHASTAIN PEDERSON Notary Public Wake County, North Carolina

My Commission Expires March 10, 2024

My Commission Expires: 3 10 12024





Student Assignment

5625 Dillard Drive Cary, NC, 27518 Email: studentassignment@wcpss.net

June 24, 2022

Dianne Khin, AICP Director, Department of Planning and Community Development Town of Apex Dianne.Khin@apexnc.org

Dear Dianne,

The Wake County Public School System (WCPSS) Office of School Assignment received information about a proposed rezoning/development within the Town of Apex planning area. We are providing this letter to share information about WCPSS's capacity related to the proposal. The following information about the proposed rezoning/development was provided through the Wake County Residential Development Notification database:

tel: (919) 431-7333 fax: (919) 694-7753

- Date of application: May 1, 2022
- Name of development: 22CZ11 1522 Salem Church Rd
- Address of rezoning: 1522 Salem Church Rd
- Total number of proposed residential units: 9
- Type(s) of residential units proposed: Townhomes

•	1 9 1	ype(s) of residential units proposed. Townhomes					
					f application, the Office of Sch mpacts to the Wake County P		•
			8		rent assignment area for the post have sufficient capacity for for	-	
	\boxtimes	rezoni	ng/development are anticij	pated to	hin the current assignment are to have <u>insufficient</u> capacity for current assignment area shoul	future	students;
			Elementary		Middle	\boxtimes	High
The	fol	llowing	mitigation of capacity con-	cerns d	ue to school construction or e	xpansio	n is anticipated:
		Not ap	plicable - existing school c	capacity	is anticipated to be sufficient	•	
		School	expansion or construction	within	the next five years is not anti	cipated	to address concerns.
	\boxtimes	School expansion or construction within the next five years may address concerns at these grade levels:					
			Elementary		Middle	\boxtimes	High
		_	sharing this information wroposed rezoning/develop		Town of Apex Planning Board	d and To	own Council as they
Sinc	ere	ely,			- Page 246 -		

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: July 26, 2022

Item Details

Presenter(s): Sarah Van Every, Senior Planner

Department(s): Planning and Community Development

Requested Motion

Public Hearing and possible motion to approve Rezoning Application #22CZ05 Morris Tract PUD. The applicant, Brendie Vega, WithersRavenel, seeks to rezone approximately 17.09 acres from Rural Residential (RR) to Planned Unit Development-Conditional Zoning (PUD-CZ).

Approval Recommended?

The Planning and Community Development Department recommends approval.

The Planning Board held a public hearing on July 11, 2022 and, by a vote of 7-0, recommended approval with the conditions offered by the applicant.

Item Details

The properties to be rezoned are identified as PINs 0732295017, 0732289587, 0732382530, & 07323827.

Attachments

- Staff Report
- Vicinity Map
- Application



Rezoning #22CZ05 Morris Tract PUD

July 26, 2022 Town Council Meeting



All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 0, 7208, & 7208-B, and 7304 Morris Acres Road

Applicant/Agent: Brendie Vega, WithersRavenel

Owners: Edith S. Morris, NCDOT Turnpike Authority

PROJECT DESCRIPTION:

Acreage: ±17.09 acres

PINs: 0732295017, 0732289587, 0732382530, & 07323827

Current Zoning: Rural Residential (RR)

Proposed Zoning: Planned Unit Development-Conditional Zoning (PUD-CZ)

2045 Land Use Map: Medium Density Residential

Town Limits: 0732382709 & 0732295017 are in the ETJ; 0732289587 & 0732382530

are in Town limits

Adjacent Zoning & Land Uses:

	Zoning	Land Use
North:	Rural Residential (RR); Medium Density- Conditional Use (MD-CU #94CU01)	Single-family residential; Vacant
South:	Planned Unit Development-Conditional Zoning (PUD-CZ #15CZ22)	Morris Acres Rd; Multi-family (Flats at 540); Single-family residential (540 Townes)
East:	Medium Density-Conditional Use (MD-CU #94CU01); Conservation Buffer (CB)	Single-family residential (Walden Creek); Vacant
West:	Rural Residential (RR)	Morris Acres Road; Vacant

EXISTING CONDITIONS:

The subject properties are located on the north side of Morris Acres Road, just east of NC 540. There are two dwellings and several existing structures on the properties related to the previously rural setting of these properties.

NEIGHBORHOOD MEETING:

The applicant conducted a neighborhood meeting on January 26, 2022. The neighborhood meeting report is attached.

WCPSS Coordination:

A Letter of Impact from Wake County Public School System (WCPSS) was received for this rezoning and is included in the staff report packet. WCPSS indicates that elementary, middle, and high schools within the current assignment area for this rezoning/development are anticipated to have sufficient capacity for future students.

2045 LAND USE MAP:

The 2045 Land Use Map designates the subject properties as Medium Density Residential. The proposed

Rezoning #22CZ05 Morris Tract PUD

July 26, 2022 Town Council Meeting



rezoning to Planned Unit Development-Conditional Zoning (PUD-CZ) is consistent with that Land Use Map designation. The proposed rezoning includes a mix of single-family attached (townhouse) and single-family detached residential uses with a maximum of 6.44 dwelling units per acre.

A portion of this site is identified within the Transit Oriented Development (TOD) Context Area with Advance Apex. The location is appropriate for higher density uses like townhomes due to the proximity to NC 540 Hwy, the adjacent Flats at 540 multi-family development, and the 540 Townes development, as well as proximity to a future transit corridor. TOD development typically dictates transit-supportive densities, which is a minimum of seven (7) units per acre for a circulator bus service and a minimum 15 units per acre for fixed route bus service. The Morris Tract PUD proposes a maximum density of 6.44 units per acre, contributing to an overall density that supports future transit.

PLANNED UNIT DEVELOPMENT PLAN:

The applicant is proposing a Planned Unit Development Plan with uses and development standards as follows:

Permitted Uses:

The development will include office, retail and residential uses. The Rezoned Lands may be used for, and only for, the uses listed below. The permitted uses are subject to the limitation and regulations stated in the UDO and any additional limitation or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

- Accessory apartment
- Townhouse
- Single family
- Recreation Facility, private
- Park, active
- Park, passive
- Utility, minor

Proposed Design Controls:

Density

The PUD Plan proposes an overall maximum residential density of 6.44 dwelling units per acre. The overall residential development shall not exceed 110 dwelling units. The minimum lot size for single-family detached homes is 6,000 sq ft and the minimum lot width for townhomes is 22 ft.

Height

The maximum building height shall be:

Single-family detached: 50' Townhouses: 50'

Setbacks

octodens.					
	Proposed Minimum Setbacks				
	Front (from façade)	5′			



	Proposed Minimum Setbacks		
Single-family, detached	Front (from garage to back of sidewalk)	20′	
	Side	5′	
	Corner side	8'	
	Rear	10'	
Townhouse –	Front (from façade)	10'	
front loaded	Front (from garage to back of sidewalk)	20′	
	Side	5′	
	Corner side	10'	
	Rear	10′	
	Building to building	10'	
Townhouse –	Front (from façade)	10'	
alley loaded	Side	5′	
	Corner side	10'	
	Rear	5′	
	Building to building	10'	

Buffers

The following buffers are proposed by this PUD.

Perimeter Buffers:	UDO Required	Proposed	
Northern Boundary	20' Type B	20' Type B	
Eastern Boundary	20' Type B	20' Type A	
Morris Acres Road	30' Type E Undisturbed;	30' Type E Undisturbed;	
(units facing the street)	50' Type A/B Disturbed*	50' Type A/B Disturbed	
Morris Acres Road	30' Type B Undisturbed;	30' Type B Undisturbed;	
(units oriented away	50' Type A/B Disturbed*	50' Type A/B Disturbed	
from the street)			

^{*}Disturbed portion of 50' Thoroughfare Buffer shall be planted to a Type A buffer standard; undisturbed portion of 50' Thoroughfare Buffer shall be supplemented to a Type B buffer standard.

Built Upon Area

The proposed maximum built upon area is 70%.

Resource Conservation Area

This PUD shall be subject to, and meet the requirements of Section 8.1.2 of the UDO, *Resource Conservation Area* and Section 2.3.4 *Planned Development Districts*. The site shall dedicate a minimum of 20% of the overall site area upon site plan submittal.

Parking

Parking for the development shall meet the requirements of UDO Section 8.3.

Rezoning #22CZ05 Morris Tract PUD

July 26, 2022 Town Council Meeting



ZONING CONDITIONS

The following conditions shall also apply:

- Alleys for units facing Morris Acres Road will accommodate water and sewer utilities within the Town's existing alley cross section subject to staff review and approval at the time of subdivision and construction plans. Public utility easements may be granted on private property to accommodate appurtenances and maintenance.
- 2. Homeowner Association covenants shall not restrict the construction of accessory dwelling units.
- 3. No homes will be platted within 50 feet of the eastern property line.

Architectural Standards

The proposed development offers the following architectural controls to ensure a consistency of character throughout the development, while allowing for enough variety to create interest and avoid monotony. Changes to the exterior materials, roof, windows, doors, process, trim, etc. are allowable with administrative approval at the staff level. Further details shall be provided at the time of development plan submittal. The following conditions shall apply:

A. Residential Development

Single Family Detached:

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements, and trim are permitted.
- 2. The roof shall be pitched at 5:12 or greater for 75% of the building designs.
- 3. A varied color palette shall be utilized throughout the development to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 4. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 5. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
- 6. Garage doors must have windows, decorative details or carriage-style adornments on them.
- 7. The visible side of a townhouse on a corner lot facing the public street shall contain at least two decorative elements such as, but not limited to, the following elements:
 - Windows
 - Bay window
 - Recessed window
 - Decorative window
 - Trim around the windows
 - Wrap around porch or side porch
 - Two or more building materials
 - Decorative brick/stone
 - Decorative trim

- Decorative shake
- Decorative air vents on gable
- Decorative gable
- Decorative cornice
- Column
- Portico
- Balcony
- Dormer

<u>Single Family Attached (Townhouses):</u>

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. The roofline cannot be a single mass; it must be broken up horizontally and vertically between every unit.

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- 3. Garage doors must have windows, decorative details or carriage-style adornments on them.
- 4. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
- 5. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 6. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three (3) color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 7. The visible side of a townhouse on a corner lot facing the public street shall contain at least 2 decorative elements such as, but not limited to, the following elements:
 - Windows
 - Bay window
 - Recessed window
 - Decorative window
 - Trim around the windows
 - Wrap around porch or side porch
 - Two or more building materials
 - Decorative brick/stone
 - Decorative trim

- Decorative shake
- Decorative air vents on gable
- Decorative gable
- Decorative cornice
- Column
- Portico
- Balcony
- Dormer

PUBLIC FACILITIES:

The project's construction will consist of the extension of public facilities to serve the site. All public facilities and infrastructure shall comply with the Town of Apex Sewer and Water Master Plans and the Town of Apex Standards and Specifications.

Sewer is available at an outfall at the tributary of the Reedy Branch outfall that runs through a Town of Apex owned parcel. A capacity study shall be provided at Construction Drawing submittal.

Extension of water shall be provided to the proposed development with access to a 12" water line in Morris Acres Road.

STORMWATER MANAGEMENT:

This PUD shall meet all stormwater management requirements for quality and quantity treatment in accordance with Section 6.1.7 of the UDO.

- 1. This project is located within the Beaver Creek basin and will be required to attenuate the 1-, 10-, 25-, and 100-year storms.
- To the extent practicable the stormwater discharge from the onsite SCM(s) will be routed to discharge stormwater from the SCM(s) via a pipe underneath Morris Acres Road (i.e. to the downstream side) subject to Town of Apex and NCDOT approvals.
- 3. The former pond on the east side of the property was previously breached and the outflow was diverted away from properties with PINs 0732387613, 0732387723, and 0732387823 via an open channel. The proposed project will either pipe or maintain an open channel that continues to direct the natural flow to a point downstream of these properties, subject to Town of Apex, NCDWR, and USACE approvals.

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AFFORDABLE HOUSING:

Of the one hundred (100) permitted townhouse dwellings, at least two (2) residential restricted median-income affordable housing townhouse ownership units (Affordable Housing Units) shall be constructed on-site and sold at a mutually agreeable maximum affordable housing median-income ownership initial sales price (includes unit price and lot price) that is calculated based upon the one- hundred percent (100%) of the Raleigh, NC Metropolitan Statistical Area (MSA) Area Median Income (AMI) as most recently published by the U.S. Department of Housing and Urban Development (HUD).

The Affordable Housing Units shall be occupied by low or median-income households earning no more than one hundred percent (100%) of the Raleigh, NC MSA AMI, adjusted for family size as most recently published by HUD. A restrictive covenant (i.e., resale deed restriction) with a minimum affordability period of ten (10) years shall be recorded against each Affordable Housing Unit concurrently at the close of escrow upon the sale of each Affordable Housing Units to memorialize the affordable housing terms and conditions.

The two (2) Affordable Housing Unit lots shall be identified on the Master Subdivision Final Plat, which may be amended from time to time. A restrictive covenant (i.e. affordable housing agreement) between the Town and Applicant shall be recorded against the two (2) Affordable Housing Unit lots prior to the issuance of a building permit for such lots to memorialize the affordable housing terms and conditions of the approved zoning condition.

Final Affordable Housing Unit floor plan selection which includes the unit size and bedroom size will be at the discretion of the developer. Developer will be responsible for performing marketing, applicant screening and selection process and management of the Affordable Housing Units during the affordability period with oversight and support provided by Town staff.

APEX TRANSPORTATION PLAN/ACCESS and CIRCULATION:

The proposed PUD is consistent with the Apex Transportation Plan. The proposed PUD includes two (2) points of access onto Morris Acres Road, an existing 3-lane Thoroughfare on the Thoroughfare and Collector Street Plan. This project shall provide minimum frontage widening based on ½ of a 3-lane thoroughfare section with side path and public right-of-way dedication based on an eighty foot (80') right-of-way along Morris Acres Road. The site will promote connectivity to undeveloped property with street stubs to the north.

A 10-foot Side Path shall be provided along the frontage of Morris Acres Road, in accordance with the Transportation Plan & UDO. Sidewalks at least five (5) feet in width shall be provided on both sides of all internal streets, including cul-de-sac(s). For alley-loaded townhouses that front Morris Acres Road, a minimum five-foot (5') sidewalk connection between the townhouse units and the 10-foot Side Path along Morris Acres Road shall be provided. These connections will perpendicularly cross the 30-foot Thoroughfare Buffer along Morris Acres Road.

The nearest transit stop for the local GoApex Route 1 is anticipated to be located at the Beaver Creek Commons shopping center. Regional Transit can be accessed along NC 55 Hwy. The subject site is located within the Transit Oriented Development Context Area.

Refer to the concept plan of the PUD plan for proposed access points, stub streets, and planned vehicular connectivity. All access and circulation is conceptual and shall be finalized at the time of Master Subdivision Plan or Minor Site Plan review and approval.

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Roadway improvements, subject to modification and final approval by the Town of Apex and NCDOT, are part of the site plan and construction plan approval process. A traffic study has been performed as part of this PUD rezoning consistent with the Town's standards for the same. Based upon the traffic study, no off-site improvements are recommended for this development.

ENVIROMENTAL ADVISORY BOARD:

The Apex Environmental Advisory Board (EAB) held a pre-application meeting for this rezoning on December 15, 2021. The zoning conditions suggested by the EAB are listed below along with the applicant's response to each condition.

EAB Suggested Condition	Applicant's
	Response
Increase design storm for retention basins in flood-prone areas. Increase	Added
design storm pre- and post-attenuation requirement to the 100-year storm.	
Install signage near environmental sensitive areas in order to:	Added
Reduce pet waste near SCM drainage areas; and	
Eliminate fertilizer near SCM drainage areas.	
Increase biodiversity:	Added
Plant pollinator-friendly flora	
Plant native flora	
Provide diverse and abundant pollinator and bird food sources (e.g. nectar,	Added
pollen, and betties from blooming plants) that bloom in succession from spring	
to fall.	
Include landscaping that requires less irrigation and chemical use and plant	Added
warm season grasses for drought-resistance.	
Increase the number of native hardwood species planted to 3, preferably 4	Added (3 species)
Install pet waste stations in neighborhoods	Added
Include solar conduit in building design for all buildings	Added
Install a solar PV system of minimum 4 kilowatts on 20% of the pre-buyer	Not added
constricted homes (spec homes).	
Post 'solar options' sign at the entry to this development during construction.	Not added
The constructions should also be energy star rated.	
Increase width of vegetated buffer along the east side of the property from 20'	Not added
to at least 60' Type A.	
Existing trees greater than 18" in diameter that are removed by site	Not added
development shall be replaced by planting a 1.5" caliper native tree from the	
Town of Apex Design and Development Manual either on–site or at an	
alternative location approved by Town Planning Staff, above and beyond	
standard UDO requirements.	

The applicant shall provide the following EAB Conditions:

 Post development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1year, 10-year, and 100-year storm events in accordance with the Unified Development Ordinance. Treatment for the first 1-inch of runoff will be provided such that the removal of 85% Total Suspended Solids is achieved.

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- 2. The project shall install at least one (1) pet waste disposal reminder sign per SCM. The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- 3. The project shall install at least one (1) sign per SCM about not using fertilizer near an SCM drainage area. The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- 4. The project shall select and install tree, shrub, and perennial species with special attention to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall.
- 5. The project shall ensure that at least 75% of the landscaping shall be native species. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.
- 6. The project shall plant warm season grasses in order to minimize the need for irrigation and chemical use.
- 7. A minimum of three (3) native hardwood tree species shall be used for the landscaping on site.
- 8. The project shall install at least one (1) pet waste station at each play lawn.

PARKS, RECREATION, AND CULTURAL RESOURCES ADVISORY COMMISSION:

The Parks, Recreation, and Cultural Resources Advisory Commission reviewed the Morris Tract PUD project at their March 30, 2022 meeting. The Commission made a unanimous recommendation for a fee-in-lieu of dedication. The recommendation is based on 2022 rates and proposed maximum lot count provided:

Single-family detached Units: $$3,753.89 \times 10 = $37,538.90$ Single-family attached Units: $$2,528.25 \times 100 - $252,525$

Total residential fee in lieu per current unit count: \$290,063.90

Staff note: The fee-in-lieu rate is based on the date of PUD approval, not on the date of the Commission's recommendation.

PLANNING BOARD RECOMMENDATION:

The Planning Board held a public hearing on July 11, 2022 and unanimously voted to recommend approval with conditions offered by the applicant.

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of Rezoning #22CZ05 Morris Tract PUD with the conditions offered by the applicant.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING:

This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

The 2045 Land Use Map designates the site as Medium Density Residential. The proposed PUD is consistent with that land use classification. The proposed rezoning includes a mix of residential uses that will provide for transition in density from the surrounding residential uses.

The proposed rezoning is reasonable and in the public interest because it provides an adequate transition in the height and density from the existing multi-family and townhome uses to the south

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and the existing single-family residential development to the east. The proposed rezoning allows for a maximum of 6.44 dwelling units per acre, which contributes to an overall density that supports future transit within the Transit Oriented Development (TOD) Context Area, as adopted with Advance Apex.

PLANNED UNIT DEVELOPMENT DISTRICT AND CONDITIONAL ZONING STANDARDS: Standards

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments.

- 1) Planned Unit Development (PUD-CZ) District In approving a Planned Development (PD) Zoning District designation for a PUD-CZ, the Town Council shall find the PUD-CZ district designation and PD Plan for PUD-CZ demonstrates compliance with the following standards:
 - (a) Development parameters
 - (i) The uses proposed to be developed in the PD Plan for PUD-CZ are those uses permitted in Sec. 4.2.2 *Use Table*.
 - (ii) The uses proposed in the PD Plan for PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of non-residential land area is included in certain mixed use areas as specified on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown in the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.
 - (iii) The dimensional standards in Sec. 5.1.3 *Table of Intensity and Dimensional Standards, Planned Development Districts* may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
 - (iv) The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details*, and greenway improvements as required by the Town of Apex Parks, Recreation, Greenways, and Open Space Plan and the Apex Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.
 - (v) The design of development in the PD Plan for PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient compact network of streets. Cul-de-sacs shall be avoided unless the

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design of the subdivision and the existing or proposed street system in the surrounding area indicate that a through street is not essential in the location of the proposed culde-sac, or where sensitive environmental areas such as streams, floodplains, and wetlands would be substantially disturbed by making road connections.

- (vi) The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.
- (vii) The development proposed in the PD Plan for PUD-CZ has architectural and design standards that are exceptional and provide higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.
- b) Off-street parking and loading. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.3 Off-Street Parking and Loading, except that variations from these standards may be permitted if a comprehensive parking and loading plan for the PUD-CZ is submitted as part of the PD Plan that is determined to be suitable for the PUD-CZ, and generally consistent with the intent and purpose of the off-street parking and loading standards.
- c) RCA. The PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.1.2 Resource Conservation Area, except that the percentage of RCA required under Sec. 8.1.2 may be reduced by the Town Council by no more than ten percent (10%) provided that the PD Plan for PUD-CZ includes one or more of the following:
 - (i) A non-residential component; or
 - (ii) An overall density of 7 residential units per acre or more; or
 - (iii) Environmental measures including but not limited to the following:
 - (b) The installation of a solar photovoltaic (PV) system on a certain number or percentage of single-family or townhouse lots or on a certain number or percentage of multifamily, mixed-use, or nonresidential buildings. All required solar installation shall be completed or under construction prior to 90% of the building permits being issued for the approved number of lots or buildings. For single-family or townhouse installations, the lots on which these homes are located shall be identified on the Master Subdivision Plat, which may be amended;
 - (c) The installation of a geothermal system for a certain number or percentage of units within the development; or
 - (c) Energy efficiency standards that exceed minimum Building Code requirements (i.e. SEER rating for HVAC).

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- d) Landscaping. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.2 Landscaping, Buffering and Screening, except that variations from these standards may be permitted where it is demonstrated that the proposed landscaping sufficiently buffers uses from each other, ensures compatibility with land uses on surrounding properties, creates attractive streetscapes and parking areas and is consistent with the character of the area. In no case shall a buffer be less than one half of the width required by Sec. 8.2 or 10 feet in width, whichever is greater.
- e) Signs. Signage in the PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.7 Signs, except that the standards can be varied if a master signage plan is submitted for review and approval concurrent with the PD plan and is determined by the Town Council to be suitable for the PUD-CZ and generally consistent with the intent and purpose of the sign standards of the UDO. The master signage plan shall have design standards that are exceptional and provide for higher quality signs than those in routine developments and shall comply with Sec. 8.7.2 Prohibited Signs.
- f) Public facilities. The improvements standards and guarantees applicable to the public facilities that will serve the site shall comply with Article 7: Subdivision and Article 14: Parks, Recreation, Greenways, and Open Space.
 - (i) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site transportation circulation system. The on-site transportation circulation system shall be integrated with the off-site transportation circulation system of the Town. The PD Plan for PUD-CZ shall be consistent with the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details* and show required right-of-way widths and road sections. A Traffic Impact Analysis (TIA) shall be required per Sec. 13.19.
 - (ii) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site system of potable water and wastewater lines that can accommodate the proposed development, and are efficiently integrated into off-site potable water and wastewater public improvement plans. The PD Plan shall include a proposed water and wastewater plan.
 - (iii) Adequate off-site facilities for potable water supply, sewage disposal, solid waste disposal, electrical supply, fire protection and roads shall be planned and programmed for the development proposed in the PD Plan for PUD-CZ, and the development is conveniently located in relation to schools and police protection services.
 - (iv) The PD Plan shall demonstrate compliance with the parks and recreation requirements of Sec. Article 14: *Parks, Recreation, Greenways, and Open Space* and Sec. 7.3.1 *Privately-owned Play Lawns* if there is a residential component in the PUD-CZ.
- g) Natural resource and environmental protection. The PD Plan for PUD-CZ demonstrates compliance with the current regulatory standards of this Ordinance related to natural resource and environmental protection in Sec. 6.1 Watershed Protection Overlay District, Sec. 6.2 Flood Damage Prevention Overlay District, and Sec. 8.1 Resource Conservation.

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- h) Storm water management. The PD Plan shall demonstrate that the post-development rate of on-site storm water discharge from the entire site shall not exceed pre-development levels in accordance with Sec. 6.1.7 of the UDO.
- i) Phasing. The PD Plan for PUD-CZ shall include a phasing plan for the development. If development of the PUD-CZ is proposed to occur in more than one phase, then guarantees shall be provided that project improvements and amenities that are necessary and desirable for residents of the project, or that are of benefit to the Town, are constructed with the first phase of the project, or, if this is not possible, then as early in the project as is technically feasible.
- j) Consistency with 2045 Land Use Map. The PD Plan for PUD-CZ demonstrates consistency with the goals and policies established in the Town's 2045 Land Use Map.
- k) Complies with the UDO. The PD Plan for PUD-CZ demonstrates compliance with all other relevant portions of the UDO.

Legislative Considerations

The Town Council shall find the PUD-CZ designation demonstrates compliance with the following standards. Sec. 2.3.3.F:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

- 1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.
- 2) Compatibility. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.
- 3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec. 4.4 Supplemental Standards, if applicable.
- 4) Design minimizes adverse impact. The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.
- 5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

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- 6) Impact on public facilities. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
- 7) *Health, safety, and welfare.* The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.
- 8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.
- 9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
- 10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

Sarah Van Every

From: Serge Grebenschikov

Sent: Friday, April 22, 2022 2:40 PM **To:** Overcash, Lyle; Russell Dalton

Cc: Randy King (randy.king@pultegroup.com); Rosamond, Morgan

Subject: RE: Morris Acres Site

Lyle,

Thank you for sending this over. I have no issues with the trip generation of this development, and I concur with the recommendations that nothing else is needed from a traffic impact analysis standpoint for this development.

Kind regards

Serge Grebenschikov, PE

Traffic Engineer
Public Works & Transportation – Traffic
PO Box 250
Apex, NC 27502
P: (919) 372-7448

E: Serge.Grebenschikov@apexnc.org

From: Overcash, Lyle <Lyle.Overcash@kimley-horn.com>

Sent: Friday, March 11, 2022 9:00 AM

To: Russell Dalton < Russell.Dalton@apexnc.org>; Serge Grebenschikov < Serge.Grebenschikov@apexnc.org>

Cc: Randy King (randy.king@pultegroup.com) <randy.king@pultegroup.com>; Rosamond, Morgan

<Morgan.Rosamond@kimley-horn.com>

Subject: RE: Morris Acres Site

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Hey Russell, even though a full TIA wasn't required, it was easier just to format the report that way. So, please find attached the Morris Acres TIA for your review and comment.

Thanks,

Lyle

Lyle Overcash, PE

Kimley-Horn | 421 Fayetteville Street, Suite 600, Raleigh NC 27601

Direct: 919.678.4131 | Mobile: 919.906.4511

From: Russell Dalton < Russell. Dalton@apexnc.org>

Sent: Friday, February 25, 2022 8:12 AM

To: Overcash, Lyle < Lyle. Overcash@kimley-horn.com >; Serge Grebenschikov < Serge. Grebenschikov@apexnc.org >

Cc: Randy King (randy.king@pultegroup.com) <randy.king@pultegroup.com>; Rosamond, Morgan

<Morgan.Rosamond@kimley-horn.com>

Subject: RE: Morris Acres Site

Thanks Lyle! Based on this a TIA is not required but a traffic assessment letter for the access points would be helpful to address any questions from residents and to satisfy any questions from NCDOT.

Russell H. Dalton, PE
Traffic Engineering Manager
Public Works & Transportation
Town of Apex
www.apexnc.org
919-249-3358

From: Overcash, Lyle [mailto:Lyle.Overcash@kimley-horn.com]

Sent: Thursday, February 24, 2022 5:57 PM

To: Russell Dalton <Russell.Dalton@apexnc.org>; Serge Grebenschikov <Serge.Grebenschikov@apexnc.org>

Cc: Randy King (randy.king@pultegroup.com>; Rosamond, Morgan

<Morgan.Rosamond@kimley-horn.com>

Subject: RE: Morris Acres Site

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Russell,

Randy asked me to send over the max trip generation for the site to show that we don't trigger an official TIA. Land use totals most likely will be less than this, but we wanted to be conservative when we were assessing the site access points. Thanks,

Lyle

Lyle Overcash, PE

Kimley-Horn | 421 Fayetteville Street, Suite 600, Raleigh NC 27601

Direct: 919.678.4131 | Mobile: 919.906.4511

From: Russell Dalton < Russell.Dalton@apexnc.org>

Sent: Thursday, February 3, 2022 10:53 AM

To: Overcash, Lyle <Lyle.Overcash@kimley-horn.com>; Serge Grebenschikov <Serge.Grebenschikov@apexnc.org>

Subject: RE: Morris Acres Site

OK thanks! That is fine with us, just the trip generation and evaluating the site access if it falls below the TIA threshold.

Russell H. Dalton, PE
Traffic Engineering Manager
Public Works & Transportation
Town of Apex
www.apexnc.org
919-249-3358

From: Overcash, Lyle [mailto:Lyle.Overcash@kimley-horn.com]

Sent: Wednesday, February 02, 2022 12:25 PM

To: Russell Dalton < Russell.Dalton@apexnc.org >; Serge Grebenschikov < Serge.Grebenschikov@apexnc.org >

Subject: RE: Morris Acres Site

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Yes, the client informed me yesterday of the additional units. Since it doesn't meet Town or NCDOT TIA requirements, we'll probably just do a traffic assessment for the client just in case there's questions about traffic going forward.

Lyle Overcash, PE

Kimley-Horn | 421 Fayetteville Street, Suite 600, Raleigh NC 27601

Direct: 919.678.4131 | Mobile: 919.906.4511

From: Russell Dalton < Russell.Dalton@apexnc.org > Sent: Wednesday, February 2, 2022 11:22 AM

To: Overcash, Lyle <Lyle.Overcash@kimley-horn.com>; Serge Grebenschikov <Serge.Grebenschikov@apexnc.org>

Subject: RE: Morris Acres Site

I also wanted to point out that their PUD submittal I'm looking at now proposes 110 maximum dwelling units so it's usually a good idea that the tripgen/analysis match the PUD text in terms of units. Thanks!

Russell H. Dalton, PE
Traffic Engineering Manager
Public Works & Transportation
Town of Apex
www.apexnc.org
919-249-3358

From: Russell Dalton

Sent: Tuesday, February 01, 2022 8:24 AM

To: Overcash, Lyle <Lyle.Overcash@kimley-horn.com>; Serge Grebenschikov <Serge.Grebenschikov@apexnc.org>

Subject: RE: Morris Acres Site

Lyle,

Not sure if you've run the tripgen yet but does that exceed 1000 daily or 100 peak hour? If not we may just need a trip generation memo for the new proposal.

Thank you.

Russell H. Dalton, PE
Traffic Engineering Manager
Public Works & Transportation
Town of Apex
www.apexnc.org
919-249-3358

From: Overcash, Lyle [mailto:Lyle.Overcash@kimley-horn.com]

Sent: Monday, January 31, 2022 5:22 PM

To: Russell Dalton <Russell.Dalton@apexnc.org>; Serge Grebenschikov <Serge.Grebenschikov@apexnc.org>

Subject: Morris Acres Site

Notice: This message is from an external sender.

Do not click links or open attachments unless you trust the sender, and can verify the content is safe.

Russell/Serge,

Pulte has asked me to prepare an analysis for the Morris Acres site, formerly The Wayforth at Apex site. They're planning on 86 townhomes and 9 single family units. We were planning on updating the former 2019 TIA (attached) to reflect the new unit counts and redo the traffic counts, would that be sufficient? Last study looked at these intersections:

- Morris Acres Road at Jenks Road
- Morris Acres Road at Reedybrook Crossing/Site Driveway
- Morris Acres Road at Creekside Landing
- Morris Acres Road at US 64 WB
- Morris Acres Road at Site Driveways

We'll probably collect new counts as well, since the last ones were 2018 Thanks,

Lyle

Lyle Overcash, PE

Kimley-Horn | 421 Fayetteville Street, Suite 600, Raleigh NC 27601

Direct: 919.678.4131 | Mobile: 919.906.4511

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PLANNED UNIT DEVELOPMENT APPLICATION		
This document is a public record under the North Carolina Public Records Act and may be published on the Town's website	or disclos	sed to
third parties		

This documen third parties.	t is a pub	olic record under the North Carolina Public	Records Act	t and may be	published on	the Town's we	ebsite or disclosed to
Application	#:	22CZ05	_	Submittal	Date:		2/1/2022
Fee Paid	_	\$	_	Check #	_		
PETITION T	O AME	ND THE OFFICIAL ZONING DISTRIC	T MAP				
Project Nam	ne: I	Morris Tract PUD					
Address(es)	: <u>7</u>	7208-B, 7208, and 0 Morris Acre	es Rd				
PIN(s) 0	732289	9587, 0732382530, and 0732382	2709				
						Acreage:	16.955
Current Zon	ing: R	Rural Residential (RR)	Propo	sed Zoning	g: PUD-C	CZ	
Current 204	5 LUM [Designation: Medium-densi	ty Reside	ential			
Is the propo	sed rezo	oning consistent with the 2045 LUM	Classificat	ion(s)?	Yes 🗏	١	No 🗆
If any portion	on of the	e project is shown as mixed use (3 o	r more stri	ipes on the	2045 Land U	Jse Map) pro	ovide the following:
Are	ea classi	fied as mixed use:			Acreage:	n/a	
Are	ea propo	osed as non-residential development	t:		Acreage:	n/a	
Per	cent of	mixed use area proposed as non-res	idential:		Percent:	n/a	
Applicant Ir	nformati	ion					
Name:	Withe	rsRavenel					
Address:	137 S	Wilmington St., Suite 200					
City:	Raleig	 gh	State:	NC		Zi	p: 27601
Phone:	(919)	535-5212	E-mail:	bvega@)withersrav		
Owner Info	rmation						
	Edith I						
Name:		Morris Acres Rd.					
Address:	Apex	WIOTHS / KOI CO TKG.	Chahai	NC		7:	n· 27532
City:	- Трех		State:	110		Zi	p: <u>27002</u>
Phone:			E-mail:				
Agent Infor	mation						
Name:	Withe	rsRavenel					
Address:	137 S	Wilmington St, Suite 200					
City:	Raleig	gh	State:	NC		Zi	p: 27601
Phone:	(919)	535-5212	E-mail:	bvega@)withersrav	enel.com	
Other conta	cts:	etang@withersravenel.com					

This documenthird parties. Application Fee Paid	t is a public record under the North Carolina Public #: \$: Records Act	t and may be Submittal Check #		the Town's we	
PETITION T	O AMEND THE OFFICIAL ZONING DISTRIC	Т МАР				
Project Nam	ne: Morris Tract PUD					
Address(es)	7304 Morris Acres Rd.					
PIN(s)	0732295017					
_					Acreage:	0.142
Current Zon			sed Zoning	g: PUD-0	CZ	
Current 204	5 LUM Designation: Medium-dens	ity Reside	ential			
Is the propo	sed rezoning consistent with the 2045 LUM	Classificat	ion(s)?	Yes 🗏	N	lo 🗆
If any portion	on of the project is shown as mixed use (3 o	r more stri	pes on the	2045 Land l	Jse Map) pro	ovide the following:
Are	ea classified as mixed use:			Acreage:	n/a	
Are	ea proposed as non-residential developmen	t:		Acreage:	n/a	
Per	cent of mixed use area proposed as non-re	sidential:		Percent:	n/a	
Applicant Ir	nformation					
Name:	WithersRavenel					
Address:	137 S Wilmington St., Suite 200					
City:	Raleigh	State:	NC		Zi	_{p:} 27601
Phone:	(919) 535-5212	_ E-mail:	bvega@	withersray	enel.com	
Owner Info	rmation					
Name:	North Carolina Department of Transp	ortation	Turnpike	Authority		
Address:	1505 Mail Service Center					
City:	Raleigh	State:	NC		Zi	_{p:} 27699-1505
Phone:		E-mail:				
Agent Infor	mation					
Name:	WithersRavenel, Brendie Vega					
Address:	137 S Wilmington St., Suite 200					
City:	Raleigh	State:	NC		Zi	_{p:} 27601
Phone:	(919) 535-5201	- E-mail:	bvega@	withersray		
Other conta	etang@withersravenel.com	-				

				_	
PLANNED UNIT DEVE	LOPMENT APPLICATION				
Application #:	22CZ05	Sub	mittal Date:	_2/1/22	
PLANNED UNIT DEVE	LOPMENT DISTRICT STA	NDARDS:			
exceptional quality cor amenities; incorporate compatibility with surr greater efficiency in the Districts shall not be u	exibility in site design recommunity designs that preserved and in the later ounding land uses and relayout and provision of sed as a means of circunt text and plan should design recommendations.	serve critical environr ayout of buildings, Res neighborhood characte roads, utilities, and otl nventing the Town's a	nental resources; source Conservat er; provide high c ner infrastructure dopted land deve	provide high qualition Area and circula quality architecture; a. The Planned Develelopment regulation	y community ation; ensure and provide opment (PD) s for routine
LEGISLATIVE CONSIDI	ERATIONS - CONDITION	AL ZONING			
which are consideration zoning district rezoning	opose site-specific standa ons that are relevant to the grequest is in the public in t is relevant to the public	ne legislative determin nterest. These conside	nation of whether rations do not ex	r or not the propose clude the legislative	ed conditional
	045 Land Use Map. The consistency with the pur	· · · · · · · · · · · · · · · · · · ·			
The proposal is cor	sistent with the 204	5 Land Use Map.	Planned Unit I	Development is	an
allowable zoning di	strict in the Medium	Density Residenti	al land use ma	ap classification	and the
proposed condition	s maintain the densi	ty within the 3-7 d	welling units p	er acre range.	
	e proposed Conditional Z character of surrounding		e's appropriatend	ess for its proposed	location and
The proposed uses	for Morris Tract PU	D are limited to sir	ngle-family ho	mes and townho	uses which
are primary uses in	the Medium Density	Residential futur	e land classific	cation. There is a	an existing
single-family neighb	oorhood to the north	east; however, the	southwest ha	as a high-density	residential/
commercial service	s/ office employmen	t future land class	ification. The	PUD would softe	en the
	the existing single-fa lemental standards. The ds, if applicable.	, ,			with Sec 4.4
There are no supple	emental standards li	sted for single-fan	nily detached h	nomes and attac	hed
townhouse units.					

PETITION PROCESS INFORMATION

4) Design minimizes adverse impact. The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

The development will minimize adverse impact. It will have landscaped buffers on all sides which will ameliorate any disturbance to neighbors and visually screen the development. Limiting the permitted uses to single-family dwellings and townhouse units will significantly reduce any impacts to surrounding property. SCMs will be sized to the 100-year storm event.

5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

The development minimizes environmental impact. The design avoids disturbing wetlands and streams, and the much of the remainder of the site is currently cleared. SCMs will be sized to the 100 year storm event, and the applicant will work with the neighbors to understand their experience with stormwater and their concerns.

6) Impact on public facilities. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

The site will have minimal impact on public facilities. Based on conversations with the Town of Apex staff, it is the applicant's understanding that a development of this nature will neither overwhelm public facilities nor detract from service availability. Further evaluation of public facilities will be required at the Construction Drawing Stage.

7) Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

This development will not harm the health, safety, or welfare of residents of the Town or the ETJ. It will add quality housing stock to the community. There is no reason to believe that the presence of additional housing will pose a threat to the Town of Apex or its ETJ.

8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

The development will not be detrimental to adjacent properties. Like the proposed neighborhood, the adjacent properties contain residential uses. In addition, appropriate perimeter buffers will be installed to alleviate any disturbance to existing properties. The new development will be - Page 269 - Ind engineered to deter nuisances. carefully designed to blend with adjacent

PETITION PROCESS INFORMATION

9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

Single-family dwellings and townhouses are generally regarded as low-intensity uses. They produce fewer impacts than other land uses. In addition, the numerous points of ingress and egress provided will provide for connectivity and disperse traffic. Stubs are provided to the north for future connectivity.

10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

The proposed district, associated uses, layout, and general development characteristics comply with the applicable requirements of the Unified Development Ordinance.

TOWN OF APEX UTILITIES OFFER AND AGREEMENT

Application #: 22CZ05

Submittal Date:

2/1/22

Town of Apex 73 Hunter Street P.O. Box 250 Apex, NC 27502 919-249-3400

7208, 0, and 0 Morris Acres Rd.
(the "Premises")
The Town of Apex offers to provide you with electric utilities on the terms described in this Offer & Agreement. I you accept the Town's offer, please fill in the blanks on this form and sign and we will have an Agreement once signed by the Town.
Edith S. Morris, the undersigned customer ("Customer") hereby irrevocably chooses and selects the Town of Apex (the "Town") as the permanent electric supplier for the Premises. Permanent service to the Premises will be preceded by temporary service if needed.
The sale, delivery, and use of electric power by Customer at the Premises shall be subject to, and in accordance with, all the terms and conditions of the Town's service regulations, policies, procedures and the Code of Ordinances of th Town.
Customer understands that the Town, based upon this Agreement, will take action and expend funds to provide the requested service. By signing this Agreement the undersigned signifies that he or she has the authority to select the electric service provider, for both permanent and temporary power, for the Premises identified above.
Any additional terms and conditions to this Agreement are attached as Appendix 1. If no appendix is attached thi Agreement constitutes the entire agreement of the parties.
Acceptance of this Agreement by the Town constitutes a binding contract to purchase and sell electric power.
Please note that under North Carolina General Statute §160A-332, you may be entitled to choose another electric supplier for the Premises.
Upon acceptance of this Agreement, the Town of Apex Electric Utilities Division will be pleased to provide electric service to the Premises and looks forward to working with you and the owner(s).
ACCEPTED:

TOWN OF APEX

Authorized Agent

DATE:

16 of 20

Planned Unit Develoment-Conditional Zoning Application

Last Updated: June 13, 2016

App	lication #:	22CZ05	Submittal Date:	2/1/22	
	indersigned, 🖺		(the "Affiant")	first being duly sworn, her	reby
1.	Affiant is ov owner, or	er eighteen (18) years of age is the authorized age		the property located	at
2.		t of Ownership is made for the	purpose of filing an application	n for development approval v	with
3.		he owner of the Property, Affi d in the Wake County Register		ed, dated P	, Page
4.	indicating th	the authorized agent of the e agency relationship granting the owner(s).			
	in interest had ownership. Staffiant's own claim or action acting as an anor is any claim or is any claim.	the owner of the Propert, Affiant has claimed so ave been in sole and undisture Since taking possession of the nership or right to possession r on has been brought against A authorized agent for owner(s); laim or action pending against day of	ole ownership of the Property. bed possession and use of the Property on or demanded any rents or profilant (if Affiant is the owner),), which questions title or right	Affiant or Affiant's predecess e property during the period no one has questio ofits. To Affiant's knowledge or against owner(s) (if Affiant t to possession of the proper art regarding possession of	sors d of ned no nt is erty,
			Brendie	Vead	
COUNT	OF NORTH CAP Y OF <u>Wak</u>	e		Type or print na	
Bre	endie Ve	a Notary Public in and fo	nown to me or known to me l	by said Affiant's presentation	n of
	fiant's Dy i		rsonally appeared before me	this day and acknowledged	the
due an	d voluntary ex	NOTARY PUBLIC COUNTY	Notary Public State of North Carolina My Commission Expires:	McGing 8/11/2025	-

AFFIDAVIT OF OWNERSHIP

Appl	ication #:	22CZ05	Submittal Date: 2/1/22
	ndersigned, or affirms a		(the "Affiant") first being duly sworn, hereby
1.	owner, 0	or is the authoriz O Morris Acres Rd	and legally described in Exhibit "A" attached hereto and
2.			("). For the purpose of filing an application for development approval with
3.	If Affiant is	the owner of the Prop	erty, Affiant acquired ownership by deed, dated 10/15/2013 Register of Deeds Office on 03/20/2018, in Book 2018 Page
4.	indicating t		of the owner(s) of the Property, Affiant possesses documentation granting the Affiant the authority to apply for development approval
5.	in interest ownership. Affiant's ov claim or ac acting as a	Affiant has chave been in sole and Since taking possession or right to postion has been brought an authorized agent for	Property, from the time Affiant was deeded the Property on aimed sole ownership of the Property. Affiant or Affiant's predecessors undisturbed possession and use of the property during the period of on of the Property on 10/15/2013, no one has questioned session nor demanded any rents or profits. To Affiant's knowledge, no against Affiant (if Affiant is the owner), or against owner(s) (if Affiant is owner(s)), which questions title or right to possession of the property, against Affiant or owner(s) in court regarding possession of the
			Brendie Veger (seal)
			Brendie Vega
	OF NORTH C Y OF <u>W A</u> (4		Type or print name
I, the	undersigne	d, a Notary Public ir	and for the County of $\underline{\qquad}$ hereby certify that
Breno	die Vega	, Affiant, per	onally known to me or known to me by said Affiant's presentation of
said Aff	iant's <u>D</u> vi	urs Licunse	, personally appeared before me this day and acknowledged the
due and	d voluntary e	execution of the forego	ng Affidavit.
	[NOTAR	Y SEAL] ZOOBO: 26, 20	Abrid Spittel Oling Spittel Notary Public State of North Carolina My Commission Expires: 000000 201 2020

- Page 273 -

AGEN	T AUTHORIZAT	TION FORM			
Applic	cation #:	22CZ05	Submittal Date:2	/1/22	
Edith M	orris		is the owner* of the property for which the attached		
applica	ition is being su	ubmitted:			
	Land Use Ar	mendment			
	8		anned Development rezoning applic s consent to zoning conditions that application is approved.		
	Site Plan				
	Subdivision				
	Variance				
	Other:				
The pro	operty address	is: 7304, 7208, and 0 M	forris Acres Rd.		
The age	ent for this pro	ject is: WithersRavenel, Ed	Tang and Brendie Vega		
	☐ I am the	owner of the property and w	ill be acting as my own agent		
Agent I		WithersRavenel			
Addres		137 S Wilmington St., Suit	e 200, Raleigh, NC 27601		
Teleph	one Number:	(919) 535-5212			
E-Mail	Address:	bvega@withersravenel.com	m		
		Signature(s) of Owner(s)* Edith S. N	Marris Morris Type or print name	1-31-2022 Date	
		-	Type or print name	Date	

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

Last Updated: August 30, 2019

AGENT	A UTHORIZATION	ON FOF	RM				
Applicat	ion #:	22CZ05		Submittal Date: _	2/1/2	2	
NC DEPT	OF TRANSPO	ORTAT	TION (NCDOT)	is the owner* of the pr	operty fo	or which the	attached
application	on is being sub	mitted	l:				
7	au	ıthoriza	itional Zoning and Planned ation includes express con nich will apply if the applic	sent to zoning condition			y the
	Site Plan						
/	Subdivision						
	Variance						
	Other:						
The prop	erty address is	:	7304 Morris Acres Road,	PIN # 0732295017			
The agen	t for this proje	ct is:	WithersRavenel, Ed Tang	, and Brendie Vega			
	☐ I am the ov	wner o	f the property and will be	acting as my own agent			
Agent Na	ıme:	Withe	ersRavenel				
Address:		137 S	S. Wilmington St., Suite 200	0, Raleigh, NC 27601			
Telephor	ne Number:	(919)	535-5212				
E-Mail A	ddress:	bvega	a@withersravenel.com, eta	ang@withersravenel.com	1		
				Digitally signed by Brian Rogel Date: 2022.06.10 14:37:44 -04			
		Brian	Rogers			6/10/22	
				Type or print n	ame		Date
				Type or print n	ame	-	Date

Attach additional sheets if there are additional owners.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

Last Updated: July 14, 2021

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Affidavit of Ownership: Exhibit A – Legal Description Submittal Date: 2/1/22 Application #: -22CZ05 Insert legal description below. See attached.

Legal description for Tract 1 "Edith Morris"

Beginning at an Existing Axle located at the Southwest corner of a tract of land owned by Wilma Lee Morris, PIN No. 0732298556, Recorded at Book of Maps 2001, Page 291, Wake County Registry. Said Existing Axle having North Carolina Geodetic Coordinates (NAD 83; 2011) N: 729,123.48', E: 2,032,670.88' Thence, South 88°52'12" East a distance of 904.77' to an Existing Iron Pipe; Thence North 89°57'34" East a distance of 36.59' to an Existing Iron Rebar; Thence North 89°44'31" East a distance of 62.17' to an Existing Iron Pipe; Thence South 02°27'02" West a distance of 119.42' to an Existing Iron Rebar; Thence South 02°22'53" West a distance of 111.43' to an Existing Iron Rebar; Thence South 02°18'02" West a distance of 92.88' to an Existing Iron Rebar; Thence South 02°21'36" West a distance of 208.96' to an Existing Iron Rebar; Thence South 02°22'28" West a distance of 428.91' to a New Iron Pipe located on the Northern Right of Way of Morris Acres Road; Thence continuing along said Right of Way, North 62°20'05" West a distance of 374.12' to a Point; Thence leaving said Right of Way, North 11°17'51" East a distance of 318.24' to a Point; Thence North 83°39'21" West a distance of 217.02' to a Point; Thence North 05°16'39" East a distance of 54.78' to a Point; Thence North 88°49'51" West a distance of 125.97' to a Point; Thence South 02°21'09" West a distance of 48.00' to a Point; Thence North 89°50'51" West a distance of 48.48' to a Point; Thence North 62°23'51" West a distance of 165.92' to a Point; Thence South 27°36'09" West a distance of 122.99' to a Point; Thence with a curve to the right having a radius of 783.00', an arc length of 399.10', a chord bearing of North 37°42'52" West, and distance of 394.79', to a New Iron Pipe; Thence North 02°05'21" East a distance of 182.00' to an Existing Iron Rebar; Thence South 88°46'47" East a distance of 131.45' to an Existing Axle, Being the Point and Place of **Beginning**, and having an area of 14.129 Acres (615,464 Square Feet), More or Less.

Legal description for Tract 2 "Edith Morris"

Beginning at a Point located on the Northern Right of Way of Morris Acres Road, said Point also being the Southeast corner of a tract of land owned by Edith Morris, PIN No. 0732289587, Recorded at Deed Book 2450, Page 555, Wake County Registry. Said Point having North Carolina Geodetic Coordinates (NAD 83; 2011) N: 728,411.08′, E: 2,033,127.17′, Thence North 05°16′39" East a distance of 244.89′ to a Point; Thence South 83°39′21" East a distance of 217.02′ to a Point; Thence South 11°17′51" West a distance of 318.24′ to a Point; Thence North 62°20′05" West a distance of 198.57′ to a Point, Being the Point and Place of **Beginning**, and having an area of 1.306 Acres (56,885 Square Feet), More or Less.

Legal description for Tract 3 "Edith Morris"

Beginning at a Point located on the Northern Right of Way of Morris Acres Road, said Point also being the Southeast corner of a tract of land owned by Edith Morris, PIN No. 0732289587, Recorded at Deed Book 2450, Page 555, Wake County Registry. Said Point having North Carolina Geodetic Coordinates (NAD 83; 2011) N: 728,411.08′, E: 2,033,127.17′, Thence, North 62°20′05″ West a distance of 121.61′ to an Existing NCDOT Right of Way Disc; Thence North 26°40′56″ East a distance of 20.62′ to an Existing NCDOT Right of Way Disc; Thence North 62°34′09″ West a distance of 156.03′ to a Point; Thence with a curve to the right having a radius of 783.00′, an arc length of 137.84′, a chord bearing of North 57°21′34″ West, and distance of 137.66′, to a Point; Thence North 27°36′09″ East a distance of 122.99′ to a Point; Thence South 62°23′51″ East a distance of 165.92′ to a Point; Thence South 89°50′51″ East a distance of 48.48′ to a Point; Thence North 02°21′09″ East a distance of 48.00′ to a Point; Thence South 88°49′51″

Attachment A

East a distance of 125.97' to a Point; Thence South 05°16'39" West a distance of 54.78' to a Point; Thence South 05°16'39" West a distance of 244.89' to a Point, Being the Point and Place of **Beginning**, and having an area of 1.520 Acres (66,198 Square Feet), More or Less.

Legal description for PIN No. 0732295017 - NCDOT Parcel

Beginning at an Existing Iron Rebar, said Rebar being located N 88°46'47" West a distance of 131.45' from an existing Axle located at the Southwest corner of a tract of land owned by Wilma Lee Morris, PIN No. 0732298556, Recorded at Book of Maps 2001, Page 291, Wake County Registry. Said Existing Axle having North Carolina Geodetic Coordinates (NAD 83; 2011) N: 729,123.48', E: 2,032,670.88'; Thence South 02°05'21" West a distance of 182.00' to a New Iron Pipe;

Thence with a curve to the right having a radius of 783.00', an arc length of 190.70', a chord bearing of North 16°13'03" West, and distance of 190.22', to an Existing Iron Pipe;

Thence South 89°15'20" East a distance of 59.77' to an Existing Iron Rebar, being the point and place of Beginning, and having an area of 0.142 Acres (6,173 SF), More or Less.



Wake County Residential Development Notification

	Developer Company Information	
Company Name	Pulte Home Company, LLC	
Company Phone Number	(919)369-4602	
Developer Representative Name	WithersRavenel	
Developer Representative Phone Number	(919) 535-5212	
Developer Representative Email	bvega@withersravenel.com	

New Residential Subdivision Information					
Date of Application for Subdivision	02/01/2022				
City, Town or Wake County Jurisdiction	Town of Apex				
Name of Subdivision	Morris Acres				
Address of Subdivision (if unknown enter nearest cross streets)	7304, 7208, and 0 Morris Acres Rd.				
REID(s)	0181252, 0205072, 0099535, and 0456020				
PIN(s)	0732295017, 0732382709, 0732289587, and 0732382530				

Please complete each section of this form and submit with your application.

Town of Apex staff will enter this information into the online WCPSS form.

Please send any questions about this form to: studentassignment-gis-group@wcpss.net

	Projected Dates Information	国际公司工作等的基础程度
Subdivision Completion Date	Dec 2025	
Subdivision Projected First Occupancy Date	June 2024	

						Lot by L	ot Deve	lopment	Informat	ion			No.				
Unit Type	Total # of Units	Senior Living	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	21	e Foot nge	Price	Range	,	Anticipate	ed Compl	etion Unit	ts & Dat	es
								Min	Max	Low	High	Year	# Units	Year	# Units	Year	# Units
Single Family	8					6	2	2400	2900	500000	600000	2024	4	2025	4	7 7	1
Townhomes	100					80	20	2100	2500	400000	500000	2024	50	2025	50		
Condos																	
Apartments																	
Other																	

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

, Bre	ndie Vega	, do hereby de	eclare as follows:	
8	Print Name	,		
1.	I have conducted a Neighborho Master Subdivision Plan, or Sp <i>Meeting</i> .			
2.	The meeting invitations were ma all property owners and tenan neighborhood association that r of 14 days in advance of the Nei	nts abutting and within epresents citizens in the n	300 feet of the subject p	roperty and any
3.	The meeting was conducted at	on WebEx	(1	ocation/address)
	on <u>01/26/2022</u>	(date) from 6pm	(start time) to 8pm	(end time).
4.	I have included the mailing list, map/reduced plans with the app		sheet, issue/response sumi	mary, and zoning
5.	I have prepared these materials	in good faith and to the bo	est of my ability,	
Jar	27, 2022	By: Brey	die Veger	
	Date			
	OF NORTH CAROLINA Y OF WAKE			
	and subscribed before me, Ab , on this the 27 day of 3			above State and
	SEAL		Olmif Spitte Notary Public	<u> </u>
	MARKEL SA MARKET		Abriel Spittel Print Name	
	NOTARL & AUBLIC COUNTY	My Commissi	ion Expires: <u>October g</u>	m 190910

20220201 Morris Acres PUD Notification List

SITE ADDRESS	PIN NUM	OWNER	MAILING ADDRESS 1	MAILING ADDRESS 2	MAILING ADDRESS 3
) TUNISIAN DR 16 WALDEN WOODS DR	0732380119 0732398073	540 TOWNES HOA, INC ADDEN, NICOLE	1225 CRESCENT GRN STE 250 2516 WALDEN WOODS DR	CARY NC 27518-8119 APEX NC 27523-6245	
20 MORRIS ACRES RD	0732387152	ALPS LP	1143 EXECUTIVE CIR STE B	CARY NC 27511-4571	
ALDEN WOODS DR	0732397559	APEX TOWN OF	PO BOX 250	APEX NC 27502-0250	
REEDYBROOK CRSG	0732286392	BEAVER CREEK CROSSING LLC	TODD COPELAND	168 BUSINESS PARK DR STE 200	VIRGINIA BEACH VA 23462-6532
FLINTS POND CIR	0732389017	BECKER, GARY A BECKER, BARBARA J	2505 FLINTS POND CIR	APEX NC 27523-4813	
WALDEN CREEK DR WALDEN WOODS DR	0732480456 0732396202	CARNER, CHRISTOPHER DAVID CARNER, BRIDGET MARIE CAUTHEN, JOHNSON JR CAUTHEN, DEBORAH	2412 WALDEN CREEK DR 2521 WALDEN WOODS DR	APEX NC 27523-4844 APEX NC 27523-6245	
JNISIAN DR	0732382191	CHEN, WANLING	829 TUNISIAN DR	APEX NC 27523-7537	
LINTS POND CIR	0732388153	CHENEY, BRADEN D MACKEY, HEATHER ANN	2507 FLINTS POND CIR	APEX NC 27523-4813	
PEAKSIDE DR	0732382024	CHO, EUNA K CHO, REX H	2100 PEAKSIDE DR	APEX NC 27523-7540	
EEN CITY CRES UNISIAN DR	0732377766	CITISIDE AT BEAVER CREEK CROSSING HOA INC	CHARLESTON MGMT 803 TUNISIAN DR	PO BOX 97243	RALEIGH NC 27624-7243
UNISIAN DR UNISIAN DR	0732380249 0732381102	DIAZ, CYNTHIA I COLON CADENA, ARGYL I RAMIREZ DUSUNG ENTERPRISE INC	5603 HIGHCROFT DR	APEX NC 27523-7537 CARY NC 27519-8830	
WALDEN WOODS DR	0732397014	FALKANGER, JEFFREY J FALKANGER, KERRY C	2517 WALDEN WOODS DR	APEX NC 27523-6245	
TUNISIAN DR	0732380268	GAYLES, ANTHONY DARON	805 TUNISIAN DR	APEX NC 27523-7537	
JENKS RD	0732393853	GREEN ACRES OF APEX LLC	7328 JENKS RD	APEX NC 27523-7811	
WALDEN WOODS DR	0732389588	GROSSER, DONALD B JR GROSSER, CYNTHIA S GUPTA. SAURABH MITTAL. SONAL	2503 WALDEN WOODS DR	APEX NC 27523-6245 APEX NC 27523-7537	
UNISIAN DR WALDEN WOODS DR	0732381272 0732396197	HARPER, PAUL MARK HARPER, RENAE KEY	815 TUNISIAN DR 2519 WALDEN WOODS DR	APEX NC 27523-7537 APEX NC 27523-6245	
TUNISIAN DR	0732381049	HONG, GIN JONG DAVIS	102 BRASS RING CT	CARY NC 27513-3616	
TUNISIAN DR	0732380310	HOUSTON, MICHAEL J HOUSTON, KRISTIN A	231 CANDIA LN	CARY NC 27519-8810	
WALDEN WOODS DR	0732480708	ISAACS, DANIEL J	2502 WALDEN WOODS DR	APEX NC 27523-6245	
WALDEN WOODS DR WALDEN WOODS DR	0732397472 0732389603	KAPLAN, PETER KAPLAN, ERIN B	2524 WALDEN WOODS DR 2505 WALDEN WOODS DR	APEX NC 27523-6245 APEX NC 27523-6245	
TUNISIAN DR	0732383044	KOESTER, JOHN D KOESTER, JOHANNA P LAO. TERENCE LAO. CATHERINE	1301 MAGNOLIA BEND LOOP	CARY NC 27523-6245	
REEDYBROOK CRSG	0732289185	LAXMANA, RAJINEESH KUMAR VUMMIDISINGH LAXMANA, SREE HARSHITHA VUMMIDISINGH	100 COLUMBUS DR APT 1611	JERSEY CITY NJ 07302-5557	
TUNISIAN DR	0732380174	LIN, SEN	812 TUNISIAN DR	APEX NC 27523-7537	
UNISIAN DR	0732382119	LIU, XINGJUN XING, JUN	112 WYNSTONE CT	COLMAR PA 18915-3104	
TUNISIAN DR TUNISIAN DR	0732381281 0732373978	LUO, JING OUYANG, WEN MADHVANI, VIRAT K MADHVANI, KAJAL V	817 TUNISIAN DR 317 MILLICENT WAY	APEX NC 27523-7537 MORRISVILLE NC 27560-7299	
TUNISIAN DR TUNISIAN DR	0732373978	MAGNOLIA PROPERTY MANAGEMENT LLC	203 SAGERVIEW WAY	DURHAM NC 27713-6191	
TUNISIAN DR	0732381244	MIDOLO, ANDREA	813 TUNISIAN DR	APEX NC 27523-7537	
PEAKSIDE DR	0732381071	MISTRY, DHANSUKH MISTRY, SHILA D	2104 PEAKSIDE DR	APEX NC 27523-7540	
MORRIS ACRES RD	0732289587	MORRIS, EDITH S	7208 MORRIS ACRES RD	APEX NC 27523-5822	
NKS RD	0732298556 0732396483	MORRIS, WILMA LEE MULCAHY, JOHN M MULCAHY, MICHELE A	7328 JENKS RD 2526 WALDEN WOODS DR	APEX NC 27523-7811 APEX NC 27523-6245	
WALDEN WOODS DR MORRIS ACRES RD	0732396483	NC DEPT OF TRANSPORTATION TURNPIKE AUTHORITY	TRANSPORTATION SECTION	1505 MAIL SERVICE CTR	RALEIGH NC 27699-1505
ORRIS ACRES RD	0732284334	NC DOT TRNPK AUTHORITY	MARTIN T MCCRACKEN	1505 MAIL SERVICE CTR	RALEIGH NC 27699-1500
WALDEN WOODS DR	0732387613	PARKER, DAVID PARKER, ROBYN	2509 WALDEN WOODS DR	APEX NC 27523-6245	
WALDEN WOODS DR	0732398344	PETERSON, DAVID R PETERSON, GAIL C	2522 WALDEN WOODS DR	APEX NC 27523-6245	
TUNISIAN DR WALDEN WOODS DR	0732383061 0732396402	PULIJALA, DHEERAJ KUMAR PULIJALA, CHAITANYA PYNE, CRAIG A GALIEN, KIMBERLY L	843 TUNISIAN DR 2528 WALDEN WOODS DR	APEX NC 27523-7537 APEX NC 27523-6245	
TUNISIAN DR	0732381216	RAJARAM, NARAYAN K UTHAMARAJAN, ARTHI	2774 WILLOW ROCK LN	APEX NC 27523-6245 APEX NC 27523-8515	
TUNISIAN DR	0732382147	RAMSEY, FRANCES B	823 TUNISIAN DR	APEX NC 27523-7537	
FLINTS POND CIR	0732388289	SAFIAN, DAVID SAFIAN, MICHELLE	2506 FLINTS POND CIR	APEX NC 27523-4813	
REEDYBROOK CRSG	0732289182	SARTORI, JEANETTE	8006 REEDYBROOK XING	APEX NC 27523-7542	
FLINTS POND CIR PEAKSIDE DR	0732387292 0732381092	SIMMONS, RYAN KENNETH SIMMONS, KRYSTAL MARIE SINGH, ISHA	2508 FLINTS POND CIR 2102 PEAKSIDE DR	APEX NC 27523-4813 APEX NC 27523-7540	
FLINTS POND CIR	0732389347	SIT, ANITA YIN CHING LEUNG	2504 FLINTS POND CIR	APEX NC 27523-7540 APEX NC 27523-4813	
TUNISIAN DR	0732382164	SMITH, DERMOT J SMITH, JENNIFER R	825 TUNISIAN DR	APEX NC 27523-7537	
WALDEN WOODS DR	0732387923	STEVENS, GREGORY W STEVENS, YOKO FUSE	2515 WALDEN WOODS DR	APEX NC 27523-6245	
TUNISIAN DR	0732373986	V & V PROPERTY GROUP LLC	317 MILLICENT WAY	MORRISVILLE NC 27560-7299	
TUNISIAN DR 1 WALDEN WOODS DR	0732381121 0732387723	VACCA, STACY ELLEN VOJTICEK, BRANDON M VOJTICEK, LEIGH ANN	816 TUNISIAN DR 2511 WALDEN WOODS DR	APEX NC 27523-7537 APEX NC 27523-6245	
WALDEN WOODS DR	0732387823	WEISS, GEOFFREY L	2513 WALDEN WOODS DR	APEX NC 27523-6245	
TUNISIAN DR	0732380287	WEST, DONALD EUGENE II	807 TUNISIAN DR	APEX NC 27523-7537	
WALDEN WOODS DR	0732398164	WILLIAMS, STACEY D WILLIAMS, JOHN C	2518 WALDEN WOODS DR	APEX NC 27523-6245	
WALDEN WOODS DR	0732398254	WOODIE, KEITH AUSTIN, HOLLY	2520 WALDEN WOODS DR	APEX NC 27523-6245	
ΓUNISIAN DR ΓUNISIAN DR	0732383018 0732373993	WRIGHT, STEVEN C ZENG, XIAOMING ZHOU, FAN	831 TUNISIAN DR 128 VALLEY VIEW DR	APEX NC 27523-7537 CHAPEL HILL NC 27516-6260	
UNISIAN DR	0732382173	ZHANG, DONG	2134 CRIGAN BLUFF DR	CARY NC 27513-8356	
		RS FINCHER & COMPANY, LLC	PO BOX 1117	APEX NC 27502	
		Current Tenant	7409 Jenks RD	APEX NC 27523	
		Current Tenant	7208B Morris Acres RD	APEX NC 27523	
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Current Tenant	819 Tunisian DR	APEX NC 27523
Current Tenant	827 Tunisian DR	APEX NC 27523
Current Tenant	841 Tunisian DR	APEX NC 27523
Current Tenant	845 Tunisian DR	APEX NC 27523
Current Tenant	847 Tunisian DR	APEX NC 27523
Current Tenant	849 Tunisian DR	APEX NC 27523
Current Tenant	853 Tunisian DR	APEX NC 27523



January 12, 2022

RE: Morris Tract PUD

Dear Resident or Property Owner:

Please find enclosed an invitation for a neighborhood meeting for the proposed rezoning of 17.09 acres at 7304 and 7208 Morris Acres Rd. (Wake County PINs 0732295017, 0732382709, 0732289587, and 0732382530) from Rural Residential (RR) to Planned Unit Development – Conditional Zoning (PUD-CZ). The proposal would limit the permitted uses to single-family detached residential dwellings and townhouses.

The meeting will take place virtually on Wednesday, January 26th, 2022 from 6 pm to 8 pm on WebEx. You can join by computer, smartphone, tablet, or other internet-enabled device by using the meeting link.

Register in advance at https://bit.ly/3EYyb2r. You can also access the registration page using the camera on your smartphone to scan the code below.



There are several ways to access the virtual meeting. To join by phone, use +1-415-655-0001 US Toll, access code: 2421 385 3483. You can also use the event link, https://bit.ly/3eTO53G, or use the camera on your smartphone to scan the code below.



Future meetings will include a Planning Board meeting and a legislative hearing before Town Council. If you are unable to attend the meeting, would like to talk outside of the meeting, or have any other questions or concerns, please email bvega@withersravenel.com or call 919-535-5212. If you have questions for the Town, the Planner on the rezoning case is Liz Loftin: Liz.Loftin@apexnc.org or 919-249-3439.

Sincerely,

WithersRavenel

Brendie Vega, ACIP, CNU-A Director of Planning

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:		
Project Name: Morris Tract PUD		Zoning: Rural Residential (RR)
Location: 7304 and 7208 Morris Acres	Rd.	-
Property PIN(s):0732295017, 0732382709, A 0732289587, and 0732382530	creage/Square Feet:	17.09 acres
Property Owner: Edith Morris		
Address: 7208 Morris Acres Rd.		
City: Apex	State: NC	_{Zip:} 27523-5822
Phone: Email:		
Property Owner: North Carolina Depar	tment of Transporta	ation Turnpike Authority
Address: Transportation Section, 1505	Mail Service Cente	r
City: Raleigh	State: NC	_{Zip:} 27699-1505
Phone: Fax:	Em	ail:
Engineer: WithersRavenel		
Address: 115 MacKenan Dr.		
City: Cary	State: NC	_{Zip:} 27511
Phone: (919) 469-3340 Fax:	Em	ail: bvega@withersravenel.com
Builder (if known):		
Address:		
City:	State:	Zip:
Phone: Fax:	Em	ail:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning and Community Development Department Main Number	
(Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department	
Angela Reincke, Parks and Greenways Planner	(919) 249-7468
Public Works - Transportation	
Russell Dalton, Senior Transportation Engineer	(919) 249-3358
Water Resources Department	
Jessica Bolin, Environmental Engineering Manager (Stormwater, Sedimentation &	(919) 249-3537
Erosion Control)	
James Gregg, Utility Engineering Manager (Water & Sewer)	(919) 249-3324
Electric Utilities Division	
Rodney Smith, Electric Technical Services Manager	(919) 249-3342

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 2nd and 4th Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4d a27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

Last Updated: June 21, 2021

COMMON CONSTRUCTION ISSUES & WHO TO CALL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction: Non-Emergency Police

19-362-8661

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 a.m. to 8:30 p.m. so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday through Friday from 8:00 a.m. to 5:00 p.m. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:

James Misciagno

919-372-7470

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control:

Water Resources – Infrastructure Inspections

19-362-8166

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Water Resources – Infrastructure Inspections at 919-249-3427. The Town will get NCDOT involved if needed.

Parking Violations:

Non-Emergency Police

919-362-8661

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road:

James Misciagno

919-3/2-/4

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported to James Misciagno. He will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:

James Misciagno

919-372-7470

Danny Smith <u>Danny.Smith@ncdenr.gov</u>

Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the appropriate repairs with the developer. Impacts to the streams and stream buffers should also be reported to Danny Smith (danny.smith@ncdenr.gov) with the State.

Dust:

James Misciagno

919-372-7470

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

Trash:

James Misciagno

919-372-7470

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported to James Misciagno at 919-372-7470. He will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:

James Misciagno

919-372-7470

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported to James Misciagno at 919-372-7470 so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures:

Jessica Bolin

919-249-3537

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported to Jessica Bolin at 919-249-3537.

Electric Utility Installation:

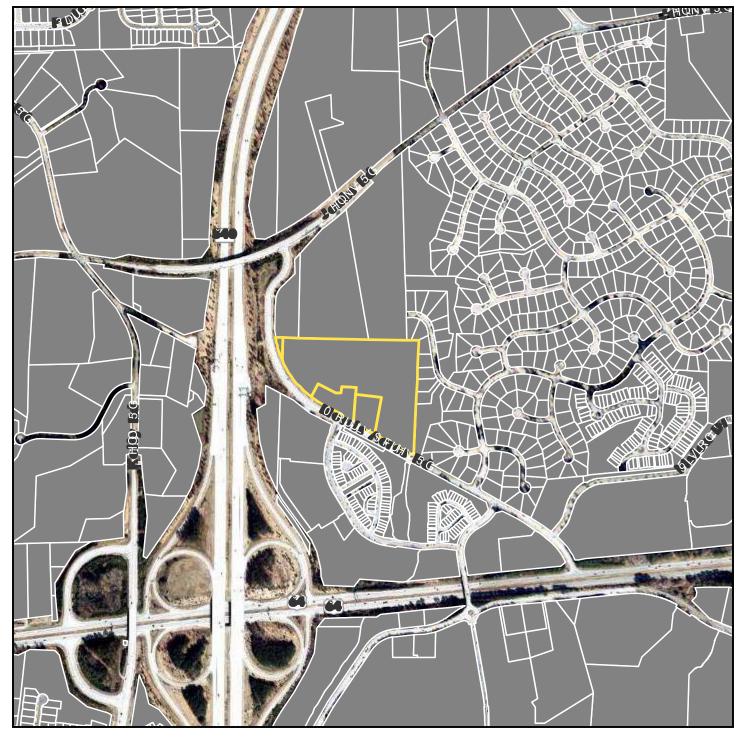
Rodney Smith

919-249-3342

Last Updated: June 21, 2021

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department. Contact Rodney Smith at 919-249-3342.

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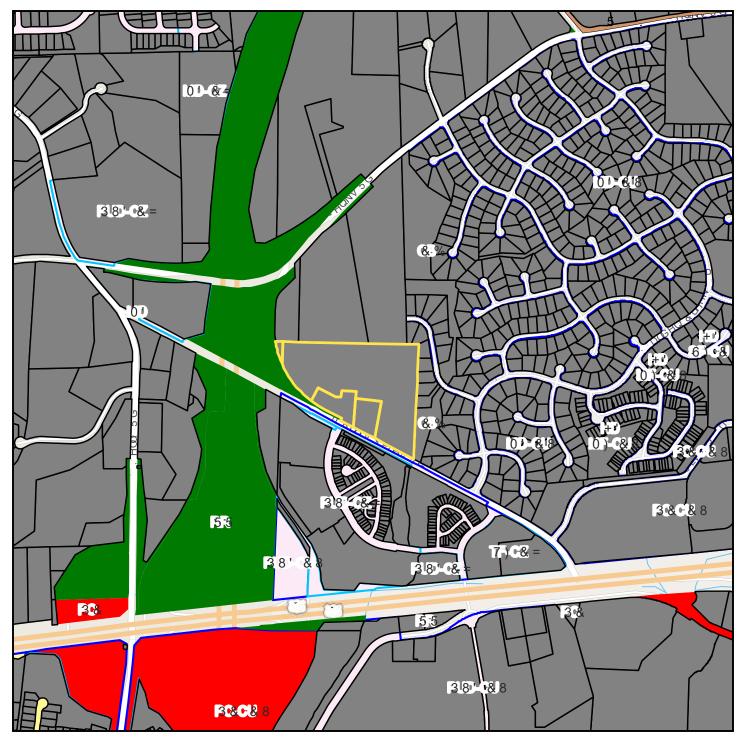


ORUULV 7UDFW 38'





'LVFODLPHU
LODSV PDNHV HYHU\ HIIRUW WR SURGXFH
WKH PRVW FXUUHQW DQG DFFXUDWH LQIR
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DQG D2J7HVXUYH\V 1R ZDUUDQWLHV H[SUH
DUH SURYLGHG IRU WKH GDWD WKHUHLQ



ORUULV 7UDFW 38'





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MORRIS TRACT PUD

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address: Virtual - Webex	
Date of meeting: 1/26/2022	Time of meeting: 6 - 8 p.m.
Property Owner(s) name(s): Edith Morris and NCDOT	
Applicant(s): WithersRavenel	

Please <u>print</u> your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	See attached.				
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

Use additional sheets, if necessary.

Name	Email Address	When Registered	Address 1	Address 2	City	State	ZIP	Phone
Gail Peterson		1/26/2022 18:11	2522 Walden Woods Drive		Apex	Nc	27523	
Donald Grosser		1/26/2022 18:03	2503 Walden Woods Drive		Apex	North Carolina	27523	
Ryan Simmons		1/26/2022 17:58	2508 Flints Pond Cir		Apex	NC	27523	
Randy King		1/26/2022 17:48						
PAUL HARPER		1/24/2022 19:54	2519 Walden Woods Dr		Apex	NC	27523	
Keith Woodie		1/21/2022 11:16	2520 Walden Woods Dr		Apex	NC	27523	
David Parker		1/21/2022 10:01	2509 Walden Woods Dr		Apex	NC	27523	
Brandon Vojticek		1/18/2022 8:53	2511 Walden Woods Dr		Apex	NC	27523	
braden cheney		1/16/2022 8:31	2507 Flints Pond Circle		Apex	NC	27523	
Deborah Cauthen		1/14/2022 13:12	2521 Walden Woods Drive		Apex	NC	27523	
Caroline Richardson		1/6/2022 9:03	137 S Wilmington St.	Suite 200	Raleigh	NC	27601	
Ed Tang		1/6/2022 9:03	137 S Wilmington St.	Suite 200	Raleigh	NC	27601	
Brian Lussier		1/6/2022 9:03	137 S Wilmington St.	Suite 200	Raleigh	NC	27601	
Brendy Vega		1/6/2022 9:03	137 S Wilmington St.	Suite 200	Raleigh	NC	27601	

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Edith Morris and NCDC	DT
Applicant(s): WithersRavenel	
Contact information (email/phone): Brendie Vega, k	ovega@withersravenel.com
Meeting Address: Virtual (Webex)	
Date of meeting: January 26, 2022	_ Time of meeting: 6:00 to 8:00 p.m.

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1:

Stormwater. Attendees asked about plans for stormwater management on the site.

Applicant's Response:

The project team understands that there are existing stormwater concerns in the area, specifically at Flint's Pond and along Walden Woods Drive. The team shared that its priority is to divert as much water from the subdivision as possible. The project will be engineered to withstand a 100-year flood event, which is above and beyond Town standards. The rate of discharge will be less than or equal to current conditions.

Question/Concern #2:

Buffers. Neighbors had questions regarding buffering along the eastern boundary of the property. Several neighbors expressed interest in installing a wooden fence.

Applicant's Response:

The applicant showed the location of the 20-foot Type A buffer on the bubble diagram.

The team explained that existing trees will not be disturbed in the buffer and that further surveying is needed to determine if a fence would be useful with the topography.

Question/Concern #3:

Sanitary Sewer. Neighbors asked about the placement of the sewer in relationship to the stream.

Applicant's Response:

At this time, the applicant does not have a definite answer; however, the sewer line may run under the stream. The team will be conducting extensive field research to determine the appropriate path.

Question/Concern #4:

Units, Location, and Construction Timeline. Neighbors asked about the number of units and the construction timeline.

Applicant's Response:

The applicant responded that there will be at most eight single-family detached units to the northeast and 102 townhouse units to the southwest. Once approved by Council, the applicant cannot make significant changes to the PUD and will be bound to the layout

shown on the bubble diagram. Land description of the bubble diagram. Land description will start in summer 2023, and home construction will start in summer 2024.

MORRIS TRACT

PLANNED UNIT DEVELOPMENT

Apex, North Carolina

June 22, 2022

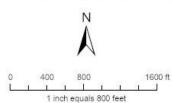
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I. VICINITY MAP



Morris Tract PUD



II. PROJECT INFORMATION

Project	Morris Tract PUD
PINS	0732295017, 0732382709, 0732289587, and 0732382530
Preparer Information	WithersRavenel 115 MacKenan Drive Cary, NC 27511
	Brendie Vega, AICP, CNU-A Ed Tang, PE P: 919.469.3340 F: 919.467.6008 bvega@withersravenel.com etang@withersravenel.com
Traffic Consultant	Kimley-Horn
Current Zoning Designation	Rural Residential (RR)
Proposed Zoning Designation	Planned Unit Development (PUD-CZ)
Current 2045 Land Use Map Designation	Medium Density Residential
Area of Tracts	17.09 acres

III. PURPOSE STATEMENT

A. Unified Development Ordinance (UDO) Sections 2.3.4.F.1.

- ◆ The PD Plan encourages cluster and compact development to the greatest extent possible. The PD plan will be interrelated and linked internally and externally by pedestrian ways, bikeways, and other transportation systems.
- Sidewalks at least five (5) feet in width are provided on all streets throughout the subdivision, as well as sidewalk at least five (feet) in width that will be installed on the frontage of Morris Acres Road.
- Cul-de-sac(s) will be avoided where environmental features do not constrain the site, and instead will provide connections to existing street(s) and stub(s) to future roads.
- ♦ The development is compatible with the character of the site, where a change to existing land use patterns in the area has increased the surrounding densities and introduced nonresidential uses.
- ◆ The site is within one-half mile of retail, dining, financial institutions, and personal services. Future residents will be able to easily access many necessities and entertainment while minimizing vehicle trips traveled and trip length.
- The PD Plan proposes architectural standards that are exceptional and provide highquality design while incorporating energy saving features.

B. Conditional Zoning Standards - UDO Sections 2.3.3.F.1-10

- ◆ The PUD Plan is consistent with the 2045 Land Use Map, which has identified this area as Medium Density Residential which allows for single-family homes, duplexes, and townhouses.
- ♦ The proposed plan is consistent with the changing character of the neighborhood. The Town's adopted 2045 plans, are demonstrative of the changes that have occurred and are proposed for this area.
- ♦ The Zoning district supplemental standards do not apply to the uses that have been listed in the List of Uses.
- ◆ Adverse impacts will be minimal since there are currently residences in this location that are served by private services. Annexation into the Town will provide the new subdivision with trash, public water and sewer, and Town of Apex public safety services.
- ♦ While not yet designed, the subdivision will incorporate recommendations made by the Environmental Advisory Board to minimize environmental impacts.
- ◆ The proposed Conditional Zoning District uses will meet the UDO's requirements for public improvement. A fee-in-lieu will be provided to the Town of Apex for parks and recreation, while other public services will benefit from the tax base provided by the increased tax value of the current properties.
- ◆ The proposed District will meet or exceed the Town's requirements which are meant to protect the health, safety, and welfare of the Town and ETJ residents.
- ◆ There will be no substantial detriment to the adjacent properties. The addition of residential at a slightly higher density than what is existing will not be a substantial detriment to adjacent properties.

- ◆ The use will not constitute a nuisance or hazard as residential uses are inherently intended for the use, enjoyment, and safety of residents in their homes.
- ◆ The proposed Conditional Zoning district use will meet or exceed the applicable provisions of the Ordinance except where noted in this document and as permitted by the Conditional Zoning process.

IV. PERMITTED USES

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

A. Residential

- ♦ Single-family
- ♦ Townhouse, attached
- ♦ Recreation facility, private
- ♦ Accessory apartment
- ♦ Utility, Minor
- ♦ Park, Active
- ♦ Park, Passive

V. PROPOSED CONDITIONS

- 1. Alleys for units facing Morris Acres Road will accommodate water and sewer utilities within the Town's existing alley cross section subject to staff review and approval at the time of subdivision and construction plans. Public utility easements may be granted on private property to accommodate appurtenances and maintenance.
- 2. Homeowner Association covenants shall not restrict the construction of accessory dwelling units.
- 3. No homes will be platted within 50 feet of the eastern property line.

VI. DESIGN CONTROLS

A. Intensity and Density

Maximum Density	6.44 Dwelling Units/Acre				
Maximum Dwelling Units	110 (10 single-family dwelling units and 100 townhomes)				
Maximum Building Height	50 ft				
Setbacks, Single-family Detached	ss, Single-family Detached Front: S 5 ft from façade		Rear: 10 ft		
20 ft from garage to back of sidewalk		Corner Side: 8 ft			
Setbacks, Townhouses, Front-loaded	ownhouses, Front-loaded Front: 10 ft from façade		Rear: 10 ft		
20 ft from garage to back of sidewalk		Building to Building: 10 ft			
Setbacks, Townhouses, Alley-loaded Front: 10 ft from façade		Side: 5 ft Corner Side: 10 ft	Rear: 5 ft		
		Building to Building: 10 ft			
Minimum Lot Size, Single-family Detached	6,000 square feet				
Minimum lot width, Townhouses	22 feet				
Maximum Built Upon Area Permitted (PUD-CZ)	70%				
Proposed Built Upon Area	70%				

B. Perimeter Buffers

North	20-foot Type B
East	20-foot Type A
Morris Acres Rd.	30-foot Type E Undisturbed
(Units facing the street)	50-foot Type A/B Disturbed
Morris Acres Rd.	30-foot Type B Undisturbed
(Units oriented away from the street)	50-foot Type A/B Disturbed

VII. ARCHITECTURAL CONTROLS

A. Single-family Detached

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements, and trim are permitted.
- 2. The roof shall be pitched at 5:12 or greater for 75% of the building designs.
- 3. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 4. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 5. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
- 6. Garage doors must have windows, decorative details, or carriage-style adornments on them.
- 7. The visible side of a single-family detached dwelling unit on a corner lot facing the public street shall contain at least two decorative elements such as, but not limited to, the following:
 - ♦ Windows
 - ♦ Bay window
 - ♦ Recessed window
 - ♦ Decorative window
 - ♦ Trim around the windows
 - ♦ Wrap-around porch or side porch
 - ♦ Two or more building materials
 - ♦ Decorative brick/stone
 - ♦ Decorative trim

- Decorative shake
- ♦ Decorative air vents on gables
- ♦ Decorative gable
- ♦ Decorative cornice
- ♦ Column
- ♦ Portico
- ♦ Balcony
- ♦ Dormer

B. Townhouses

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements, and trim are permitted.
- 2. The roofline cannot be a single mass. It must be broken up horizontally and vertically between every unit.
- 3. Garage doors must have windows, decorative details, or carriage-style adornments on them.
- 4. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
- 5. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 6. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 7. The visible side of a townhouse on a corner lot facing the public street shall contain at least two decorative elements such as, but not limited to, the following:

- ♦ Windows
- Bay window
- ♦ Recessed window
- ♦ Decorative window
- ♦ Trim around the windows
- ♦ Wrap-around porch or side porch
- ♦ Two or more building materials
- ♦ Decorative brick/stone
- ♦ Decorative trim

- ♦ Decorative shake
- ♦ Decorative air vents on gables
- ♦ Decorative gable
- ♦ Decorative cornice
- ♦ Column
- ♦ Portico
- ♦ Balcony
- ♦ Dormer

VIII. SIGNAGE

All signage in the Morris Tract PUD will comply with the requirements in Section 8.7 of the Town of Apex UDO.

IX. PARKING AND LOADING

The parking requirements of the Town of Apex UDO Section 8.3 will be met.

X. ENVIRONMENTAL ADVISORY BOARD (EAB) RECOMMENDATIONS

The Morris Tract PUD was heard at the EAB on December 16, 2021. The applicant has agreed to the following.

- Post development peak runoff shall not exceed pre-development peak runoff for the 24-hour, 1-year, 10-year, and 100-year storm events in accordance with the Unified Development Ordinance. Treatment for the first 1-inch of runoff will be provided such that the removal of 85% Total Suspended Solids is achieved.
- 2. The project shall install at least one (1) pet waste disposal reminder sign per Stormwater Control Measure (SCM). The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- 3. The project shall install at least one (1) sign per SCM about not using fertilizer near an SCM drainage area. The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- 4. The project shall ensure that at least 75% of the landscaping shall be native species. Landscaping shall be coordinated with and approved by the Planning Department at site or subdivision review.

- 5. The project shall select and install tree, shrub, and perennial species with special attention to providing diverse and abundant pollinator and bird foot sources, including plants that bloom in succession from spring to fall.
- 6. The project shall plant warm season grasses in order to minimize the need for irrigation and chemical use.
- 7. A minimum of three (3) native hardwood tree species shall be used for the landscaping on site.
- 8. The project shall install at least one (1) pet waste station at each play lawn.
- 9. All homes shall be pre-configured with conduit for a solar energy system.

XI. NATURAL RESOURCE AND ENVIRONMENTAL DATA

A. Watershed

The properties in the PD Plan are located in the Primary Watershed Overlay District and the Beaver Creek Basin.

B. FEMA Floodplain

No regulatory FEMA mapped floodplain exists on site.

C. Resource Conservation Area

The site is subject to the Resource Conservation Area (RCA) requirements outlined in the Town of Apex UDO in Section 8.1. This project shall dedicate a minimum 20% of RCA for the overall site area upon site plan submittal.

According to the North Carolina Historic Preservation Office's records, the subject site does not contain historic structures.

XII. STORMWATER MANAGEMENT

- 1. This project is located within the Beaver Creek basin and will be required to attenuate the 1-, 10-, 25-, and 100-year storms.
- 2. To the extent practicable the stormwater discharge from the onsite SCM(s) will be routed to discharge stormwater from the SCM(s) via a pipe underneath Morris Acres Road (i.e. to the downstream side) subject to Town of Apex and NCDOT approvals.
- 3. The former pond on the east side of the property was previously breached and the outflow was diverted away from properties with PINs 0732387613, 0732387723, and 0732387823 via an open channel. The proposed project will either pipe or maintain an open channel that continues to direct the natural flow to a point downstream of these properties, subject to Town of Apex, NCDWR, and USACE approvals.

XIII. PARKS, RECREATION, & CULTURAL RESOURCES (PRCR) ADVISORY COMMISSION

The PRCR Advisory Commission unanimously recommended a fee-in-lieu of dedication for the Morris Tract PUD at their March 30, 2022 meeting. The rate of the fee is set at the time of Town Council approval of the rezoning and is based on a maximum of 110 single family attached and detached units and runs with the life of the project. If approved in 2022, the rate would be \$3,753.89 for Single Family Detached and \$2,528.25 for Single Family Attached units.

XIV. PUBLIC FACILITIES REQUIREMENTS

A. Sanitary Sewer Service

Sewer is available at an outfall at the tributary of the Reedy Branch outfall that runs through a Town of Apex owned parcel.

A capacity study shall be provided at Construction Drawing submittal.

B. Water Service

Extension of water shall be provided to the proposed development with access to 12" water line in Morris Acres Road.

C. Gas and Electric Service

Electric services will be extended to the site.

D. Roadways

The site shall require an internal public roadway network and privately maintained parking spaces. The transportation system shall be consistent with the Town of Apex Comprehensive Transportation Plan and Bicycle and Pedestrian System Plan and the Town of Apex Standard Specifications and Standard Details.

The Transportation plan designates Morris Acres Road as an 80-foot minimum right-of-way with a minimum 10-foot Side Path.

E. Transit

The nearest transit stop for the local GoApex Route 1 is anticipated to be located at the Beaver Creek Commons shopping center. Regional Transit can be accessed along NC 55 Hwy. The subject site is located within the Transit Oriented Development Context Area.

F. Pedestrian Facilities

A 10-foot Side Path shall be provided along the frontage of Morris Acres Road, in accordance with the Transportation Plan & UDO.

Sidewalks at least five (5) feet in width shall be provided on both sides of all internal streets, including cul-de-sac(s).

For alley-loaded townhouses that front Morris Acres Road, a minimum five-foot (5') sidewalk connection between the townhouse units and the 10-foot Side Path along Morris Acres Road shall be provided. These connections will perpendicularly cross the 30-foot Thoroughfare Buffer along Morris Acres Road.

XV. PHASING

The site is anticipated to be developed in two (2) phases.

XVI. AFFORDABLE HOUSING

Of the one hundred (100) permitted townhouse dwellings, at least two (2) residential restricted median-income affordable housing townhouse ownership units (Affordable Housing Units) shall be constructed on-site and sold at a mutually agreeable maximum affordable housing median-income ownership initial sales price (includes unit price and lot price) that is calculated based upon the one-hundred percent (100%) of the Raleigh, NC Metropolitan Statistical Area (MSA) Area Median Income (AMI) as most recently published by the U.S. Department of Housing and Urban Development (HUD).

- ◆ The Affordable Housing Units shall be occupied by low or median-income households earning no more than one hundred percent (100%) of the Raleigh, NC MSA AMI, adjusted for family size as most recently published by HUD.
- ♦ A restrictive covenant (i.e., resale deed restriction) with a minimum affordability period of ten (10) years shall be recorded against each Affordable Housing Unit concurrently at the close of escrow upon the sale of each Affordable Housing Units to memorialize the affordable housing terms and conditions.
- ♦ The two (2) Affordable Housing Unit lots shall be identified on the Master Subdivision Final Plat, which may be amended from time to time.
- A restrictive covenant (i.e. affordable housing agreement) between the Town and Applicant shall be recorded against the two (2) Affordable Housing Unit lots prior to the issuance of a building permit for such lots to memorialize the affordable housing terms and conditions of the approved zoning condition.
- Final Affordable Housing Unit floor plan selection which includes the unit size and bedroom size will be at the discretion of the developer.
- ◆ The Developer will be responsible for performing marketing, applicant screening and selection process, and management of the Affordable Housing Units during the affordability period with oversight and support provided by Town staff.

XVII. ELEVATIONS

Elevations will comply with the Architectural and Design Controls for the Morris Tract PUD. Elevations submitted with this PD Plan are representative of what may be provided.

XVIII. CONSISTENCY WITH ADVANCE APEX

The Plan is consistent with the Advance Apex Plan and Land Use Map.

The Apex 2045 Land Use Map identifies the subject parcels as Medium Density Residential. Medium Density Residential lands are characterized by single-family homes, duplexes, quadplexes, and townhomes with densities no less than three (3) and no more than seven (7) dwelling units per acre. Medium Density Residential provides a transition from the more urbanized areas of Apex to low-density neighborhoods.

The proposed density of 6.44 dwelling units per acre and proposed uses meet the Medium Density Residential standards. In addition, once established, the proposed development will soften the transition between large rural lands and residential neighborhoods and commercial areas.

XIX. CONSISTENCY WITH THE UDO

The proposed development is consistent with all applicable requirements of the Town of Apex UDO.

XX. COMPLIANCE WITH COMPREHENSIVE TRANSPORTATION PLAN AND BICYCLE AND PEDESTRIAN SYSTEM PLAN

The proposed development complies with the applicable requirements of the Town of Apex Comprehensive Transportation Plan and Bicycle and Pedestrian System Plan.

XXI. CONFORMITY WITH TOWN OF APEX ADOPTED PLANS AND POLICIES

In addition to being consistent with the Town's Advance Apex Comprehensive Plan, Unified Development Ordinance, and the Comprehensive Transportation Plan and Bicycle and Pedestrian System Plan, the proposed development is designed to conform with the following plans and their subsequent maps:

- Parks, Recreation, Greenways, and Open Space Master Plan
 - The development is designed with 10' path adjoining Morris Acres Road as detailed in the Master Plan map.
- Collection System Facility Plan (Master Sewer Plan)

- The development is proximate to adequate water and sewer infrastructure within the Beaver Creek outfall (see Section XIV).
- NC 540/Western Wake Freeway Plan
 - The development is identified as "Medium Density Residential" which is consistent with the proposed use of the site.

PLANNED UNIT DEVELOPMENT

MORRISTRACT

TOWN OF APEX, WAKE COUNTY, NORTH CAROLINA

1ST SUBMITTAL: FEBRUARY 1, 2022 /2ND SUBMITTAL: MARCH 11, 2022

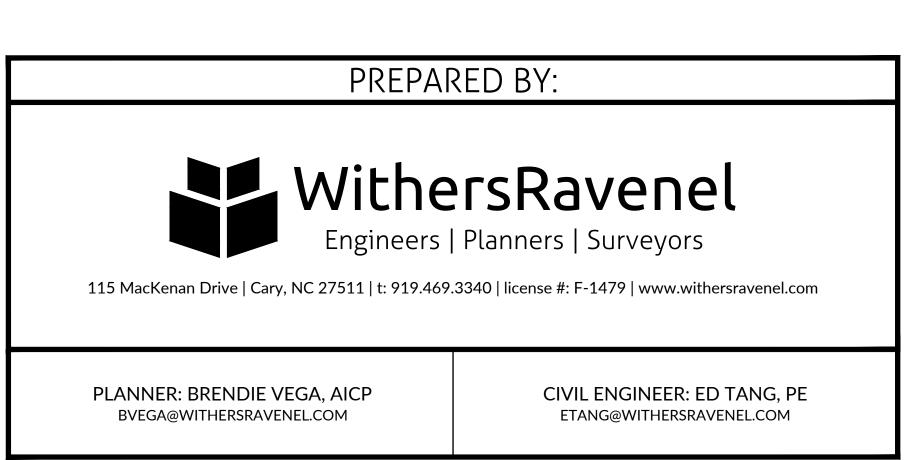
3RD SUBMITTAL: APRIL 8, 2022 4TH SUBMITTAL: MAY 13, 2022 5TH SUBMITTAL: MAY 27, 2022 PLANNING BOARD SUBMITTAL: JUNE 30, 2022

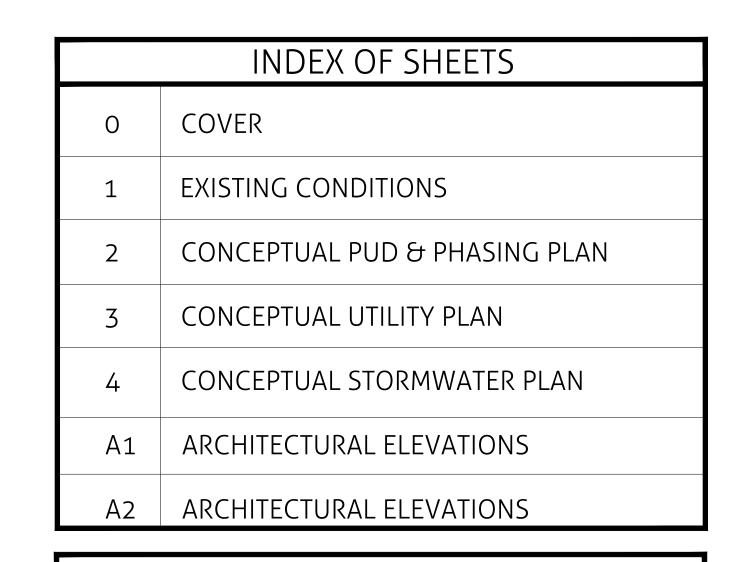
		SITE	EDP	ATA					
LAND OWNERS:	NCDOT 1505 MAIL SERVICE CENTER RALEIGH, NC 27699 ATTN: BRIAN ROGERS			EDITH MORRIS 7208 MORRIS ACRES RD APEX, NC 27523					
2045 LAND USE PLAN DESIGNATION	CURRENT			MEDIUM DEN	ISITY RESI	DENTIAL			
	PROPOSEI	D		NO CHANGE					
ZONING	CURRENT			RURAL RESI	DENTIAL (R	R)			
	PROPOSEI	D		PUD-CZ					
AREA OF TRACTS IN PROPOSED PUD	0732-29-50	 17		0.14 AC.					
	0732-38-27			14.12 AC .					
	0732-28-95	87		1.52 AC.					
	0732-38-25	30		1.31 AC.					
	TOTAL =			17.09 AC.					
REQUESTED SEWER CAPACITY	120 GPD * :	3 BEDROOMS * 1	10 UNITS	= 39,600 GPD					
PARKING REQUIREMENTS		SINGLE FAMILY DETACHED: 2 SPACES PER UNIT TOWNHOMES: 2 SPACES PER UNIT PLUS 0.25 FOR GUEST PARKING							
PARKING PROVIDED		SINGLE FAMILY DETACHED: 2 SPACES PER UNIT X 10 UNITS = 20 SPACES TOWNHOMES: 2 SPACES PER UNIT PLUS 0.25 FOR GUEST PARKING X 100 UNITS = 225 SPACES							
RESIDENTIAL DENSITY	MAXIMUM	MAXIMUM 6.44 DU/ACRE							
PROPOSED UNITS	MAXIMUM			110 UNITS (10 SINGLE FAMILY DWELLING AND 100 TOWNHOMES)					
MIN . LOT SIZE (SINGLE FAMILY)	6,000 SF								
MIN . LOT WIDTH (TOWNHOMES)	22 FT								
BUILDING HEIGHT	MAXIMUM			42 FT					
SINGLE FAMILY BUILDING SETBACKS	FRONT	5 FT*, 20 FT**	REAR	10 FT	SIDE	5 FT	CORNER	8 FT	
TOWNHOUSE (FRONT-LOADED) SETBACKS	FRONT	10 FT*, 20 FT**	REAR	10 FT	SIDE	5 FT	10 FT BUIL	DING TO BUILDING	
TOWNHOUSE (ALLEY-LOADED) SETBACKS	FRONT	10 FT*	REAR	5 FT	SIDE	5 FT	10 FT BUIL	DING TO BUILDING	
TOWNHOUSE SETBACKS	CORNER S	SIDE (BOTH FROM	NT AND AL	LEY LOAD)	•	10 FT	•		
WATERSHED	PROPERT'	Y LOCATED WITH	IIN THE PI	RIMARY WATE	RSHED PR	OTECTION OV	ERLAY DISTR	ICT.	
REQUIRED RCA	20% PER	UDO SECTION 8.	1.2.C.4						
MAX. BUILT UPON AREA	70% IMPEI	RVIOUS							
HISTORIC STRUCTURES	NONE								
COMMUNITY AMENITIES	PERMANENT FEATURES MAY INCLUDE, BUT NOT LIMITED TO: FIRE PIT WITH SEATING, BENCHES ALONG PEDESTRIAN PATHWAYS, LAWN GAME SPACES, PEDESTRIAN PLAZAS WITH PLANTERS. COMMUNITY AMENITIES SHALL MEET THE REQUIREMENTS OF UDO SECTION 8.4								
SITE BUFFERS	NORTH		20' TYPE B BUFFER						
	EAST		20' TYPE A BUFFER						
	SOUTH (MORRIS ACRES RD)		UNITS FACING THE STREET: 30' TYPE E BUFFER UNITS ORIENTED AWAY FROM THE STREET: 30' TYPE B BUFFER						

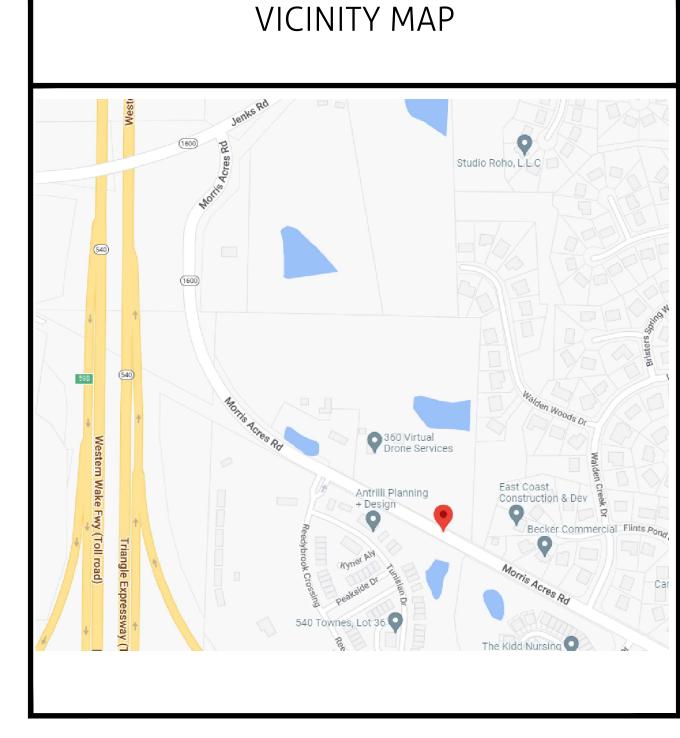
OF 110 SINGLE FAMILY ATTACHED AND DETACHED UNITS AND RUNS WITH THE LIFE OF THE PROJECT. IF APPROVED IN 2022, THE RATE WOULD BE \$3,753.89 FOR SINGLE FAMILY DETACHED AND \$2,528.25 FOR SINGLE FAMILY ATTACHED UNITS.

*19' FROM GARAGE TO LOT LINE AND 20' FROM GARAGE TO BACK OF SIDEWALK



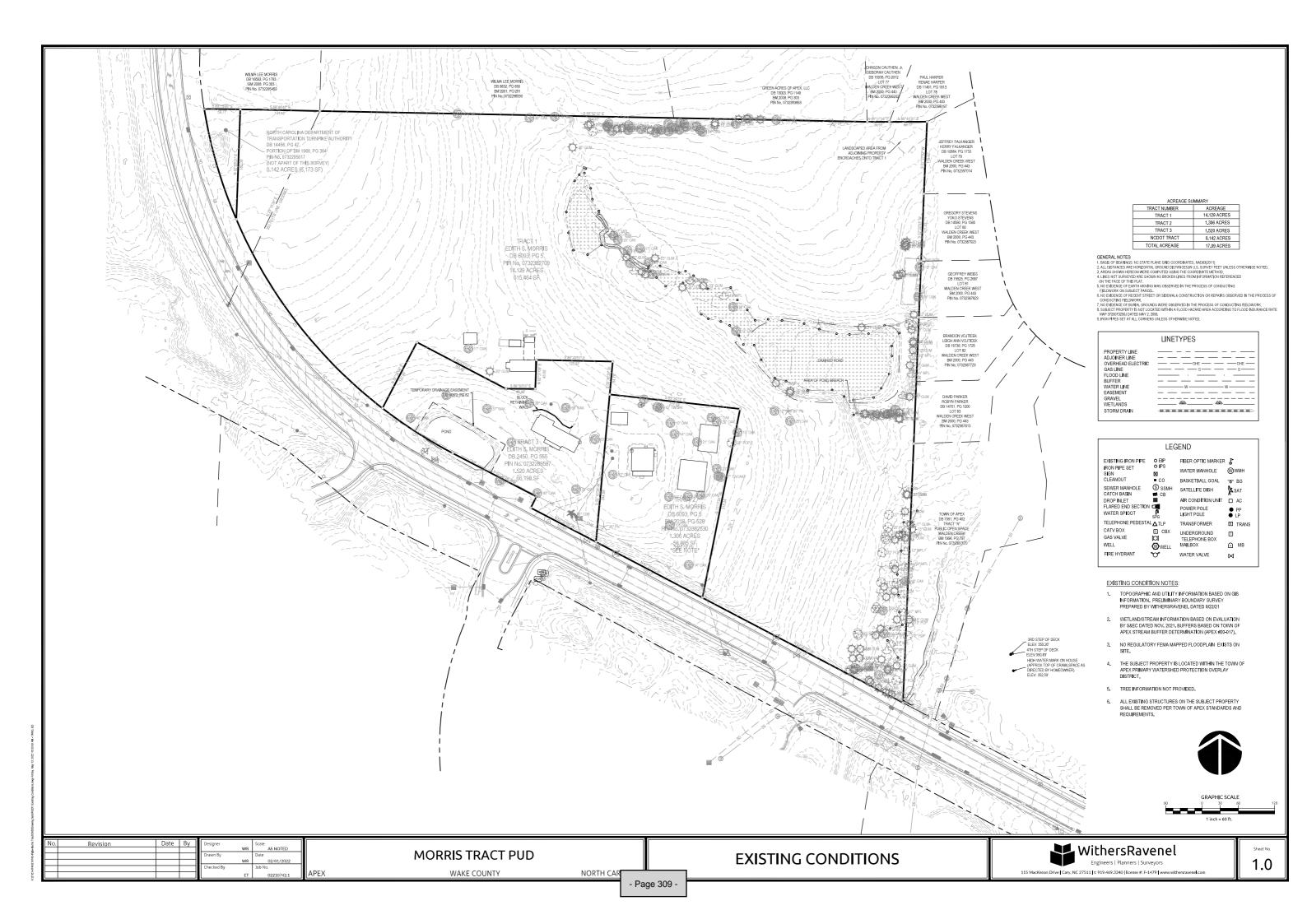






DEVELOPER **PULTE GROUP** 1225 CRESCENT GREEN DRIVE CARY, NC 27518 ATTN: RANDY KING, PE

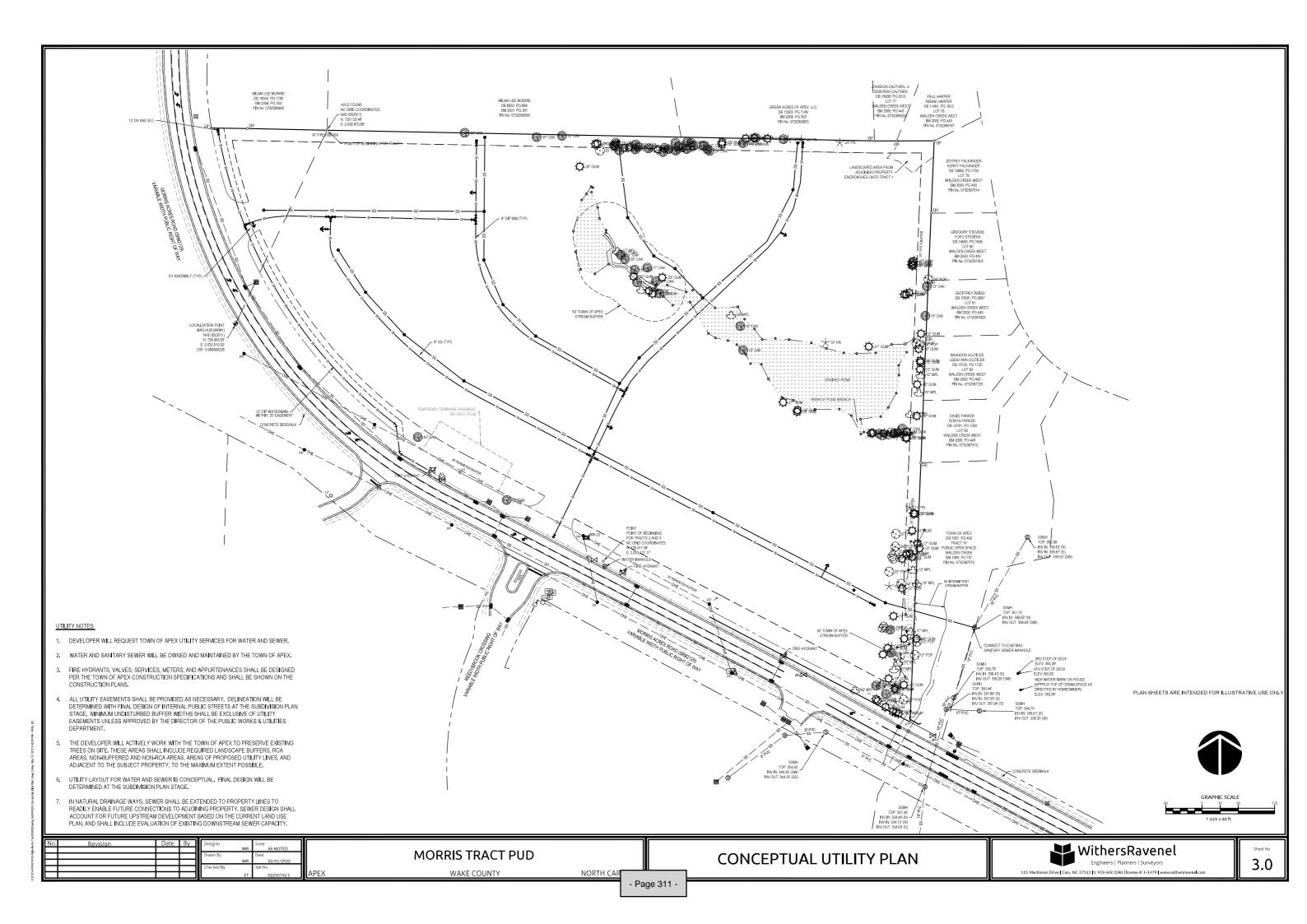
REZONING CASE #22CZ05

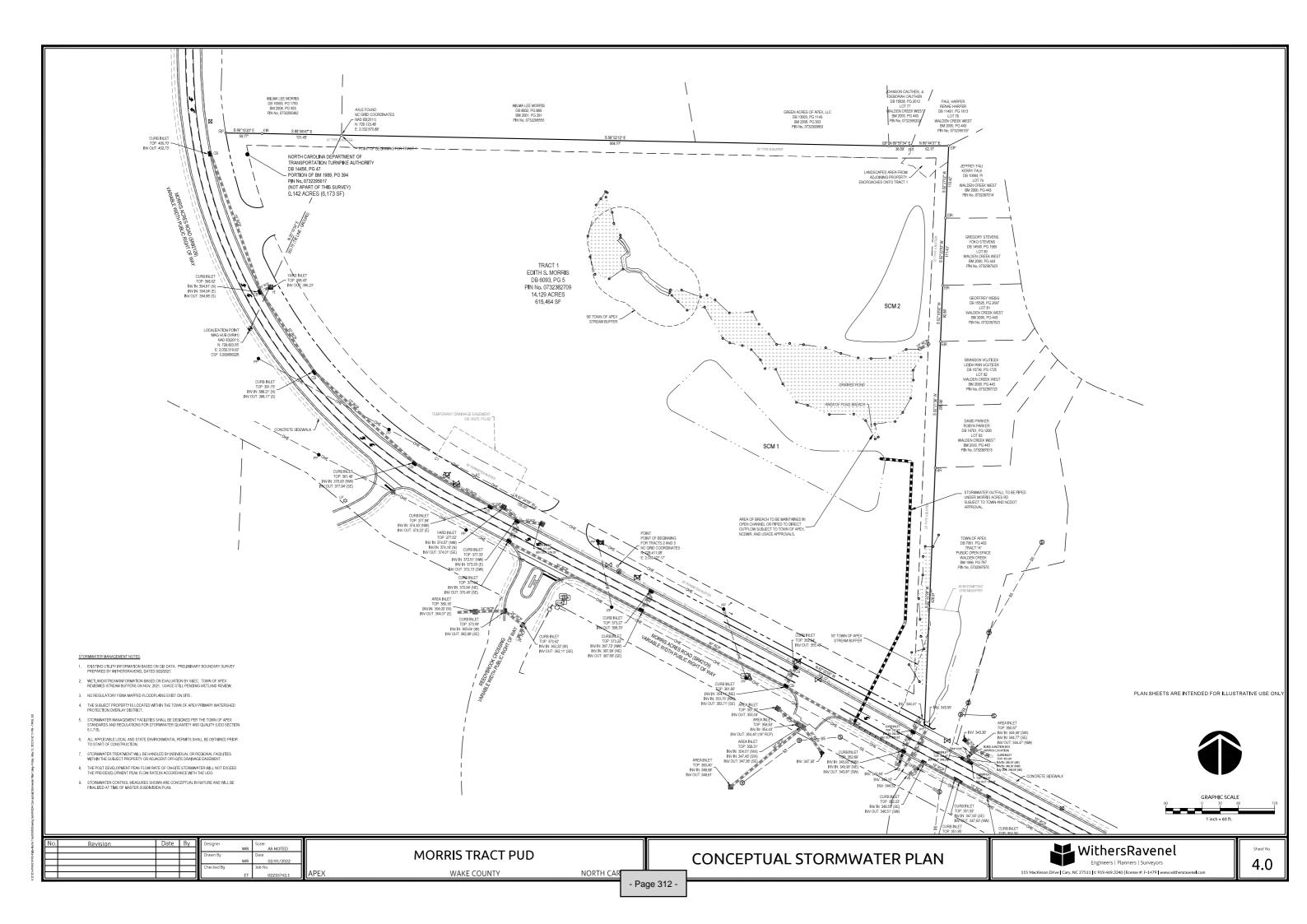


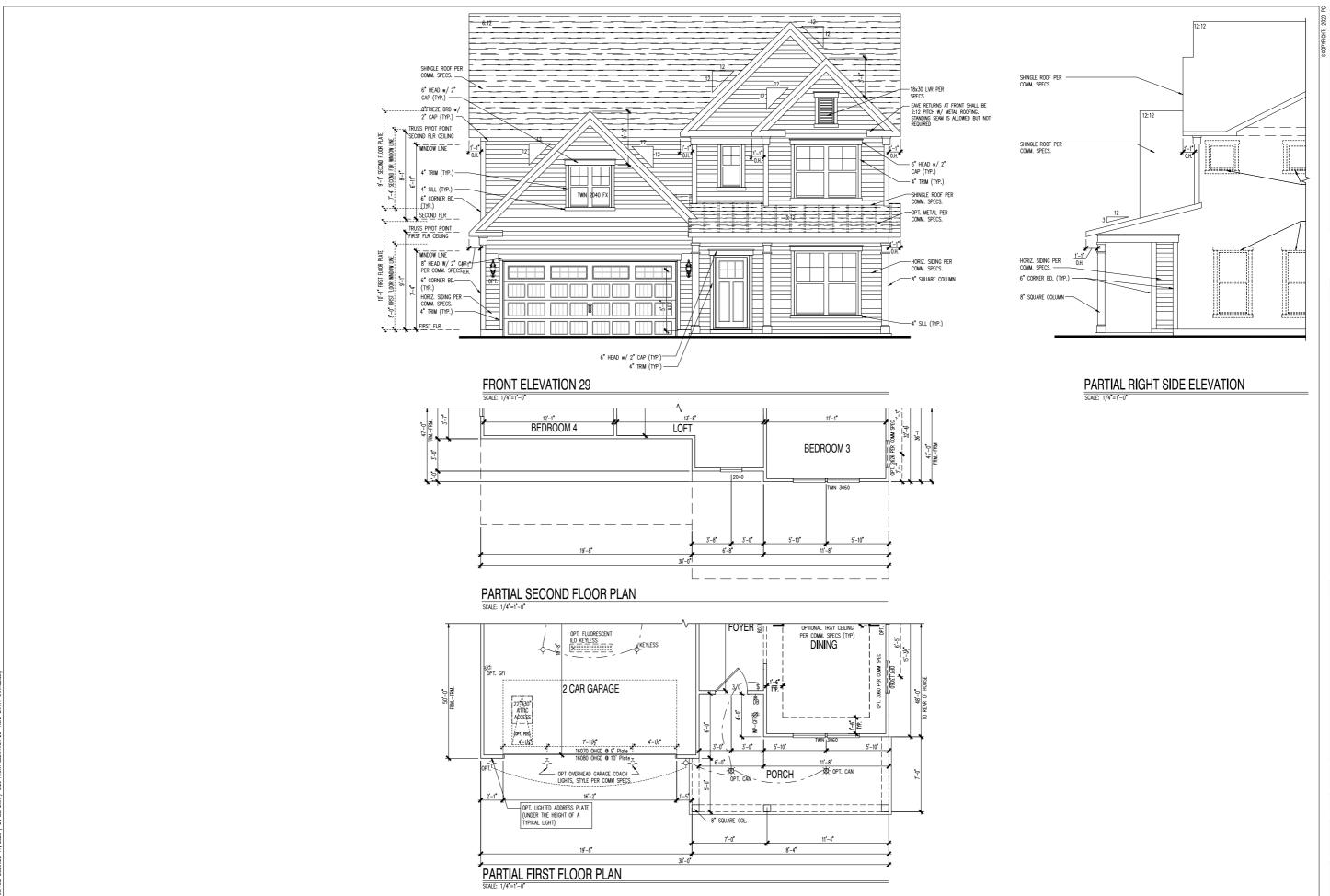


MORRIS TRACT PUD

CONCEPT PLAN FOR ILLUSTRATIVE PURPOSES ONLY







Southeast Zone 2475 Northwinds Pkwy, Suite 600 Alpharetta, GA. 30009 (770) 381-3450

PulteGroup

The CONTINENTAL FRONT ELLY GARAGE

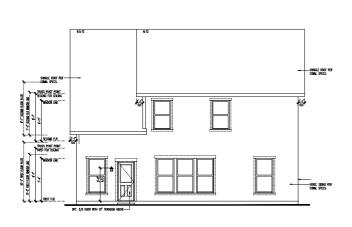
INITIAL RELEASE DATE: 02/29/2010 REV# DATE/DESCRIPTION

Single Family

SPECIFICATION LEVEL

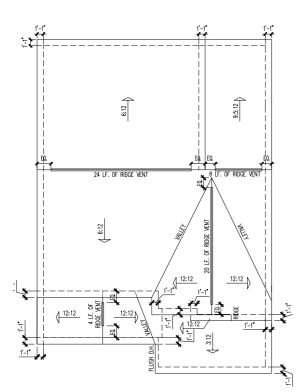
Continental

3.29



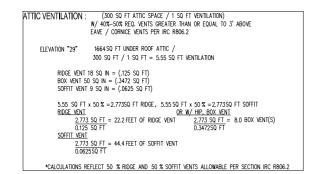
REAR ELEVATION 29

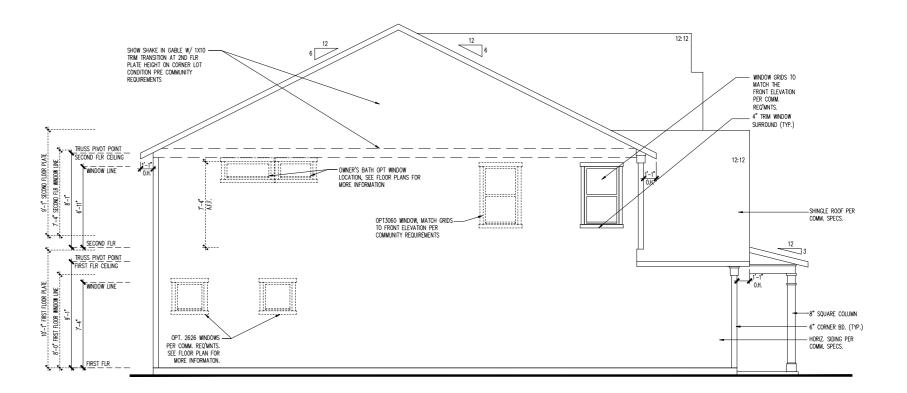
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ROOF PLAN ELEV. 29

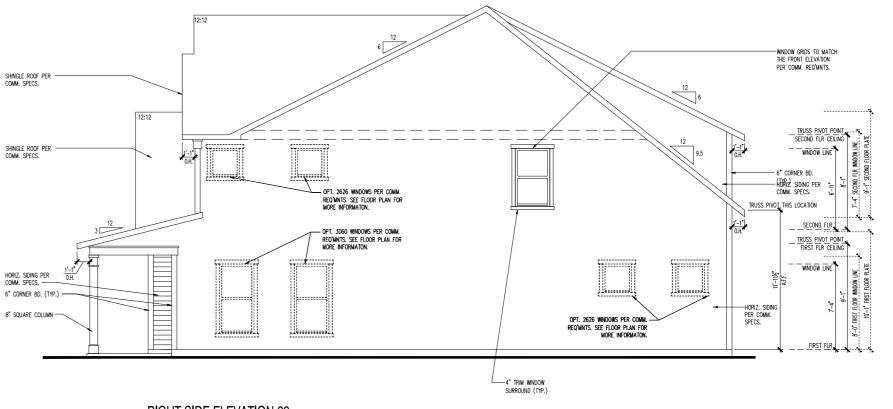
SCALE: 1/8"=1'-0"





LEFT SIDE ELEVATION 29

SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION 29

SCALE: 1/4"=1'-0"

Southeast Zone 2475 Northwinds Pkwy, Suite 600 Alpharetta, GA. 30009 (770) 381-3450

PulteGroup

The CONTINENTAL SIDE AND REAR ELEVATION 29

PROJECT TYPE Single Family

SPECIFICATION LEVEL Pulte

PLAN NAME Continental NPC NUMBER 1917.200

3.SR.29









Hutton / Summerford

Elevations

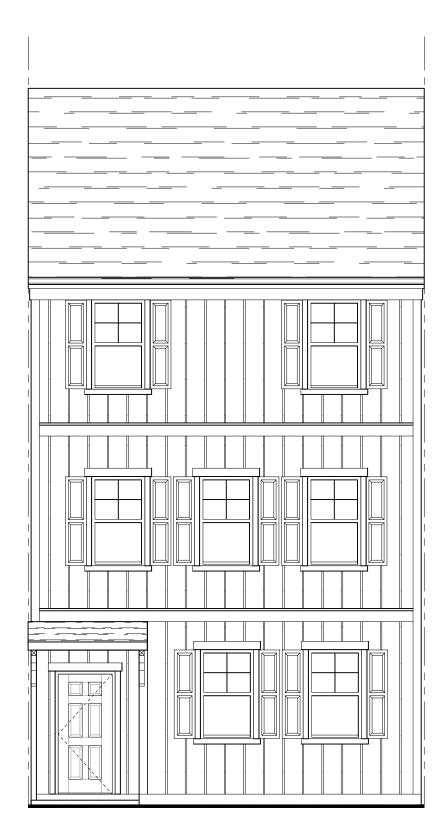


REAR ELEVATION



Hutton / Summerford

Elevations



REAR GARAGE ELEVATION "1"

SCALE: 3/16" = 1'-0" (11x17 SHEET)



Nolen, Jacobs



REAR GARAGE ELEVATION "2"

SCALE: 3/16" = 1'-0" (11x17 SHEET)



Nolen, Jacobs

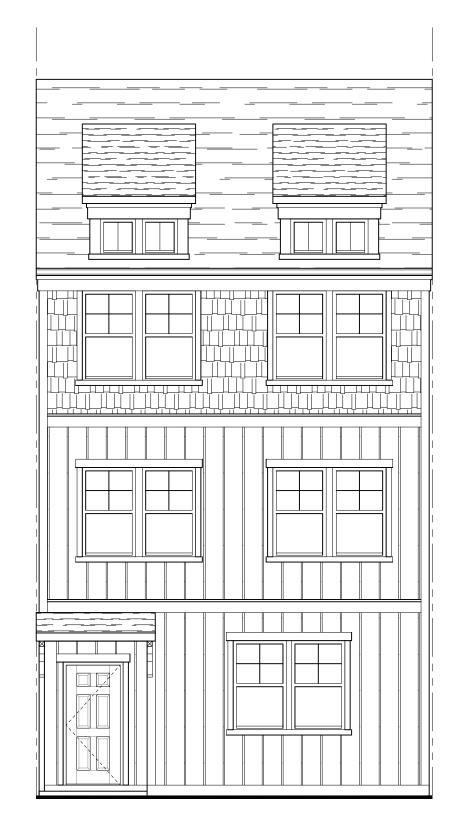


REAR GARAGE ELEVATION "3"

SCALE: 3/16" = 1'-0" (11x17 SHEET)



Nolen, Jacobs



REAR GARAGE ELEVATION "4"

SCALE: 3/16" = 1'-0" (11x17 SHEET)



Nolen, Jacobs



REAR GARAGE ELEVATION "5"

SCALE: 3/16" = 1'-0" (11x17 SHEET)



Nolen, Jacobs



REAR GARAGE ELEVATION "6"

SCALE: 3/16" = 1'-0" (11x17 SHEET)

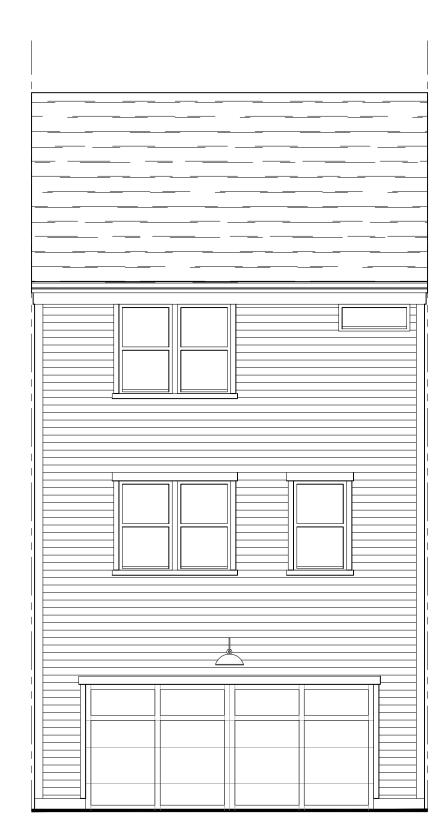


Nolen, Jacobs



SIDE ELEVATION - REAR GARAGE (END UNIT)

SCALE: 3/16" = 1'-0" (11x17 SHEET)



REAR ELEVATION - REAR GARAGE

SCALE: 3/16" = 1'-0" (11x17 SHEET)



Nolen, Jacobs







FRONT GARAGE ELEVATION "2" FRONT GARAGE ELEVATION "5"

SCALE: 1/8" = 1'-0" (11x17 SHEET) SCALE: 1/8" = 1'-0" (11x17 SHEET) FRONT GARAGE ELEVATION "4" FRONT GARAGE ELEVATION "6" SCALE: 1/8" = 1'-0" (11x17 SHEET)

SCALE: 1/8" = 1'-0" (11x17 SHEET)





NPC #2942-5.200

Jekyll, Jellicoe, Nolen, Jacobs



MEMORANDUM

To: Russell Dalton, P.E.

Serge Grebenschikov, P.E.

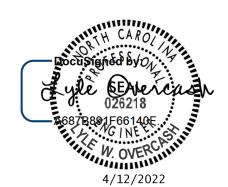
Town of Apex

From: Lyle Overcash, P.E.

Kimley-Horn and Associates, Inc.

Date: April 12, 2022

Subject: Morris Acres Development - Apex, NC



Kimley-Horn and Associates, Inc. has performed a Trip Generation Memorandum for the Morris Acres Development, a proposed residential project located on the east side of Morris Acres Road between Jenks Road and Walden Creek Drive in Apex, North Carolina. The property is currently occupied by a few single-family homes and as currently envisioned will consist of a maximum 110 townhomes and 10 single-family homes. Refer to the attached concept plan. The build-out of the project is anticipated in the year 2025.

Access to the Morris Acres Development is proposed via two driveways on Morris Acres Road. The North Site Driveway will have one egress lane and one ingress lane and is proposed to be located approximately 1,025 feet south of the intersection of Jenks Road at Morris Acres Road. The Site Driveway will also have one egress lane and one ingress lane and is proposed to be located approximately 750 feet south of the North Site Driveway and connect to Reedybrook Crossing. Refer to the attached figure for more details on the site driveways.

As shown in Table 1, the proposed development has the potential to generate 902 new trips during a typical weekday with 66 new trips during the AM peak hour and 79 new trips during the PM peak hour.

	Table 1 ITE Traffic Generation (Vehicles)								
Land Use	Land Use	Intensity Daily		ily	AM I			Peak our	
Code				ln	Out	ln	Out	In	Out
210	Single-Family Detached Housing	10	d.u.	61	61	2	7	7	4
220	Multifamily Housing (Low-Rise)	110	d.u.	390	390	14	43	43	25
	Total Net New External Trips			451	451	16	50	50	29



The Town of Apex's trip generation threshold of 1,000 vehicles per day and 100 vehicles per hour for a Traffic Impact Analysis (TIA). Therefore, this proposed development is below the Town of Apex's TIA threshold and no formal TIA is required by either the Town or NCDOT.

Morris Acres Road consists of a three-lane cross section with a center two-way left-turn lane. Therefore, no roadway improvements are recommended to be performed to accommodate projected site traffic volumes.

The build-out roadway laneage is shown on the attached figure.

Should you have any questions or comments, please do not hesitate to contact me at (919) 678-4131 or lyle.overcash@kimley-horn.com.

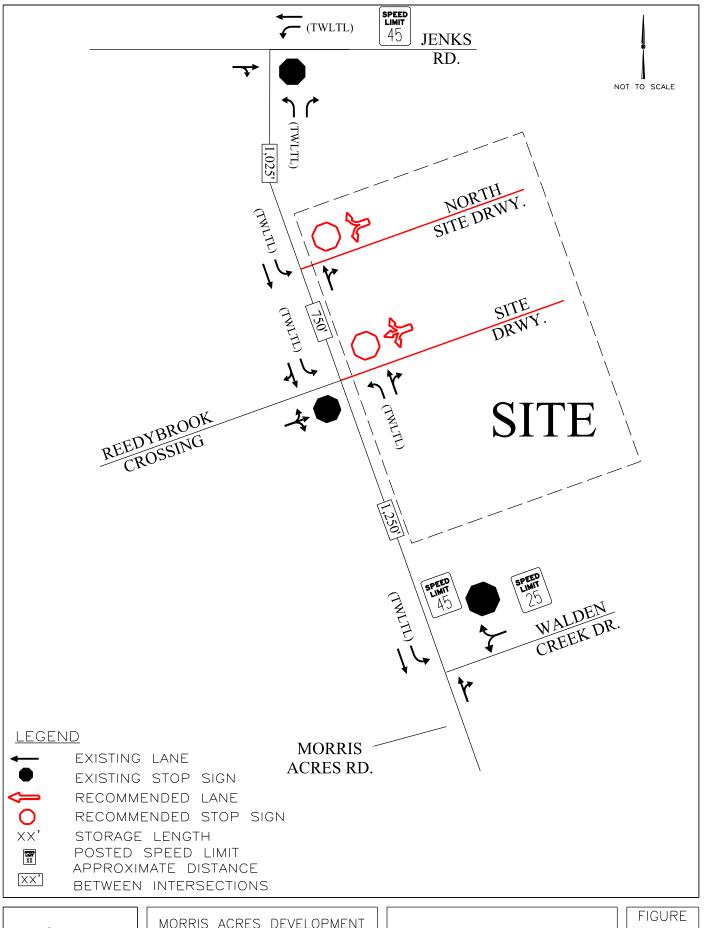
Attachments: Conceptual Site Plan, Build-Out Roadway Laneage

THS DOCIMENT, TOGENER WITH THE CONCEPTS AND DESIGNS PRESENTED HERBIN, AS AN INSTRUMENT OF SERVICE, IS INTENCED ONLY FOR THE PURPOSE AND CLIENT FOR WIMEY—HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMEY—HORN AND ASSOCIATES, INC. CONCEPTUAL SITE PLAN

FIGURE

MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS

Kimley » Horn



Kimley »Horn

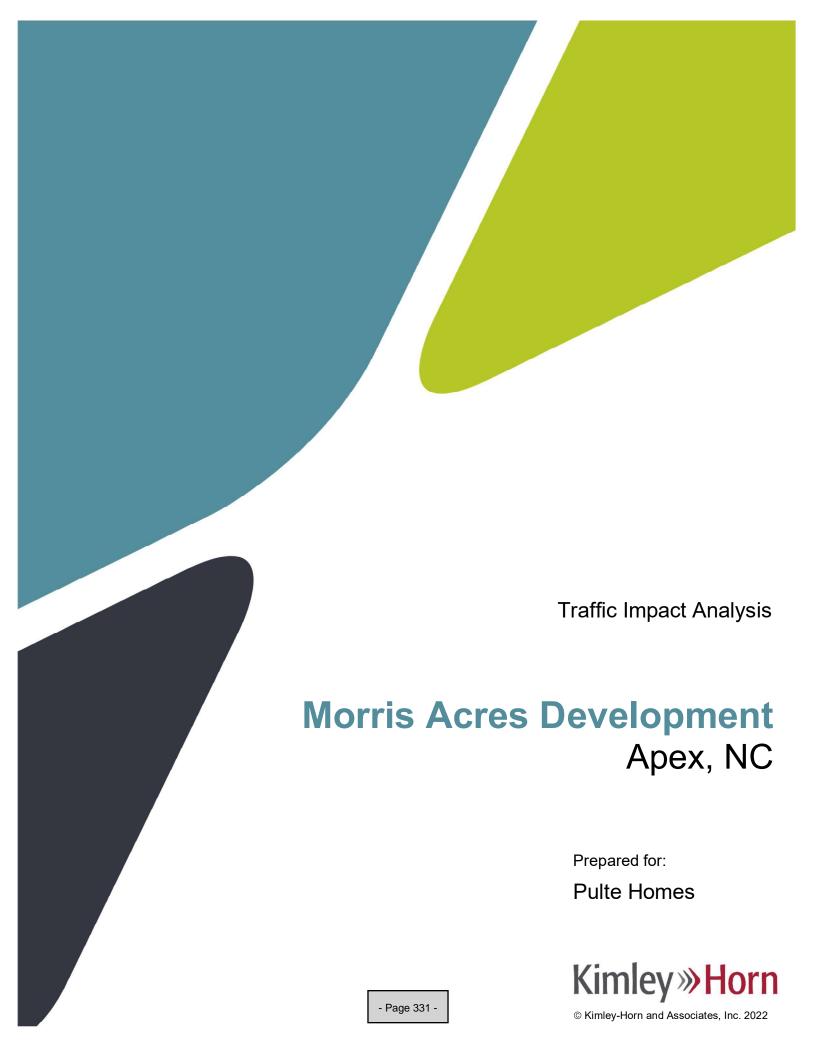
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUIRELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN

MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

- Page 330 -

BUILD-OUT ROADWAY LANEAGE

D ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



Traffic Impact Analysis

Morris Acres Development Apex, NC

Prepared for:

Pulte Homes

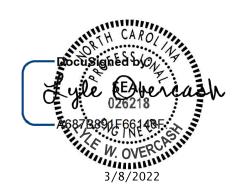
© Kimley-Horn and Associates, Inc. 2022

Traffic Impact Analysis for Morris Acres Development Apex, North Carolina

Prepared for:
Pulte Homes
Cary, NC

Prepared by:
Kimley-Horn and Associates, Inc.
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

March 2022 019867003







Executive Summary

Kimley-Horn and Associates, Inc. has performed a Traffic Impact Analysis for the Morris Acres Development, a proposed residential project located on the east side of Morris Acres Road between Jenks Road and Walden Creek Drive in Apex, North Carolina. The property is currently occupied by a few single-family homes and as currently envisioned will consist of a maximum 110 townhomes and 10 single-family homes. The development is proposed to be accessed via two driveways on Morris Acres Road, and build-out of the project is anticipated in the year 2025.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with the development. The traffic conditions studied include the existing (2022) traffic condition as well as the projected (2025) background and build-out traffic conditions.

As shown in Table ES-1, the proposed development has the potential to generate 902 new trips during a typical weekday with 66 new trips during the AM peak hour and 79 new trips during the PM peak hour.

Table ES-1 ITE Traffic Generation (Vehicles)									
Land Use	Land Use	Intensity Daily In Out			Peak our		Peak our		
Code				ln	Out	In	Out	In	Out
210	Single-Family Detached Housing	10	d.u.	61	61	2	7	7	4
220	Multifamily Housing (Low-Rise)	110	d.u.	390	390	14	43	43	25
Total 1	Net New External Trips	120	d.u.	451	451	16	50	50	29

Capacity analyses were performed using Synchro Version 11 software. Table ES-2 summarizes the operation of the study intersections for the AM and PM peak hour traffic conditions.

Table ES-2 Level-of-Service Summary					
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)			
Jenks Road at Morris Acres Road (Unsignalized)					
Existing (2022) Traffic	NB – B (11.8) WBL – A (7.9)	NB – B (14.2) WBL – A (8.1)			
Background (2025) Traffic	NB – B (12.3) WBL – A (8.0)	NB – C (15.5) WBL – A (8.2)			
Build-out (2025) Traffic	NB – B (12.4) WBL – A (8.0)	NB – C (16.2) WBL – A (8.3)			

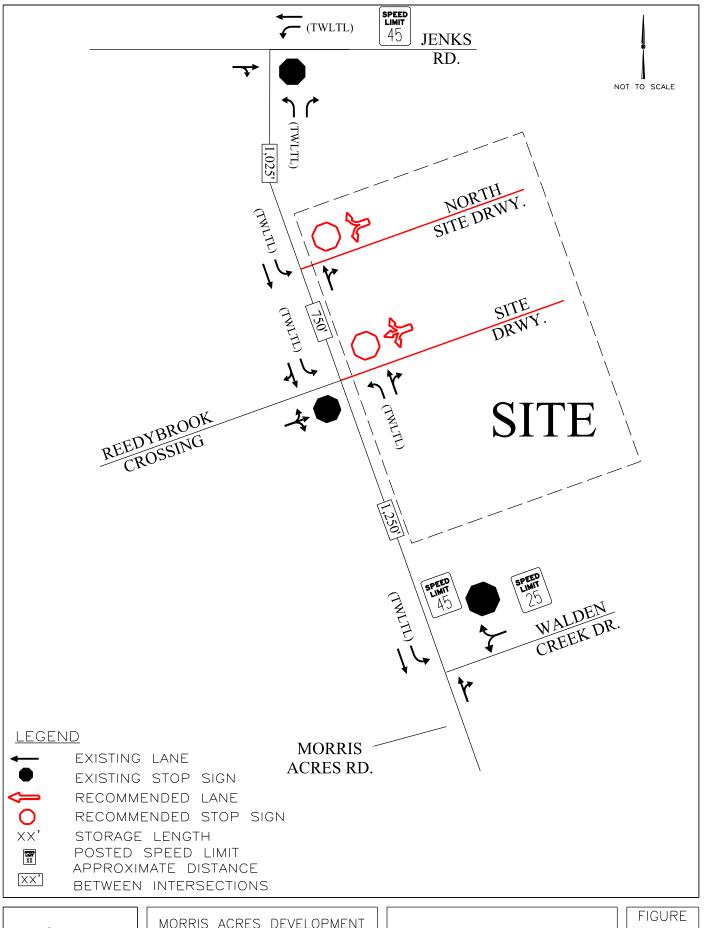


Table ES-2 (cont.) Level-of-Service Summary				
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)		
Morris Acres Road at Reedybroo	k Crossing/Site Driveway	(Unsignalized)		
Existing (2022) Traffic	EB – A (9.4) NBL – A (7.4)	EB – B (10.0) NBL – A (7.6)		
Background (2025) Traffic	EB – A (9.5) NBL – A (7.4)	EB – B (10.1) NBL – A (7.6)		
Build-out (2025) Traffic	EB – B (10.3) WB – B (10.3) NBL – A (7.4) SBL – A (7.6)	EB – B (11.6) WB – B (11.8) NBL – A (7.6) SBL – A (7.9)		
Morris Acres Road at Wa	lden Creek Drive (Unsign	nalized)		
Existing (2022) Traffic	WB – A (10.2) SBL – A (7.7)	WB – B (11.3) SBL – A (7.9)		
Background (2025) Traffic	WB – B (10.4) SBL – A (7.8)	WB – B (11.6) SBL – A (8.0)		
Build-out (2025) Traffic	WB – B (10.6) SBL – A (7.8)	WB – B (11.9) SBL – A (8.1)		
Morris Acres Road at North Site Driveway (Unsignalized)				
Build-out (2025) Traffic	WB – A (9.7) SBL – A (7.7)	WB – B (10.4) SBL – A (7.8)		

Analyses indicate that all of the study intersections are expected to operate at an acceptable LOS at project build-out with only minor increases in delays and queues associated with the addition of site traffic.

No roadway improvements are recommended to be performed to accommodate projected site traffic volumes.

The build-out roadway laneage is shown on Figure ES-1.



Kimley»Horn

MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

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BUILD-OUT ROADWAY LANEAGE ES-1



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1.0 Introduction

Kimley-Horn and Associates, Inc. has performed a Traffic Impact Analysis for the Morris Acres Development, a proposed residential project located on the east side of Morris Acres Road between Jenks Road and Walden Creek Drive in Apex, North Carolina. The property is currently occupied by a few single-family homes and as currently envisioned will consist of a maximum 110 townhomes and 10 single-family homes. The development is proposed to be accessed via two driveways on Morris Acres Road, and build-out of the project is anticipated in the year 2025.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with the development. The traffic conditions studied include the existing (2022) traffic condition as well as the projected (2025) background and build-out traffic conditions.

Town of Apex transportation staff were consulted regarding the elements to be covered in this analysis.



2.0 Inventory

2.1 Study Area

The study area for this development in includes the following intersections:

- Jenks Road at Morris Acres Road
- Morris Acres Road at Reedybrook Crossing/Site Driveway
- Morris Acres Road at Walden Creek Drive
- Morris Acres Road at North Site Driveway

Figure 1 shows the site location. The conceptual site plan is shown on Figure 2.

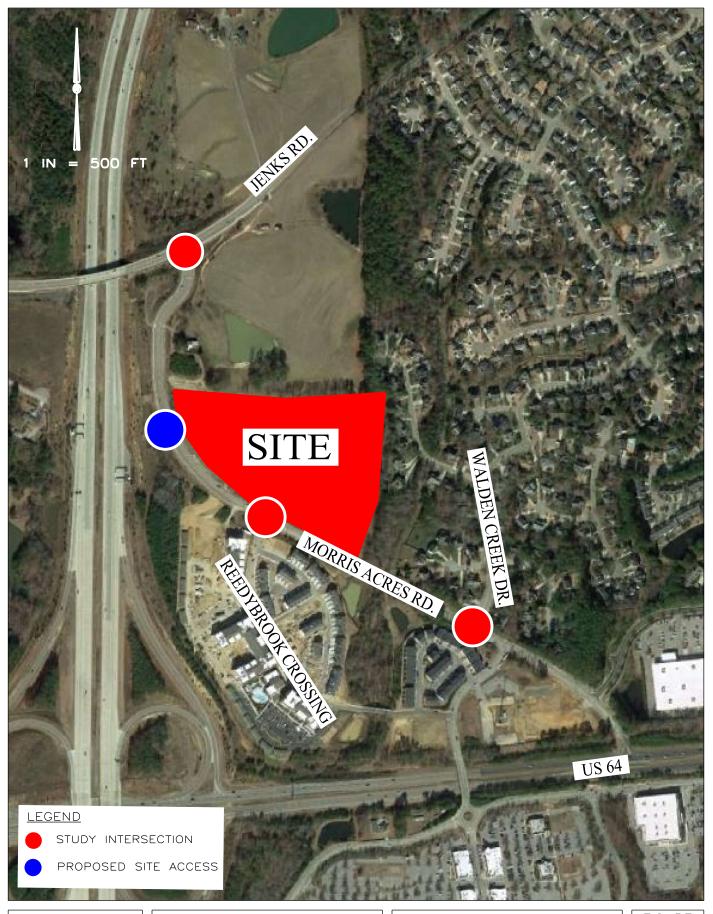
2.2 Existing Conditions

The Morris Acres Development is proposed to be located generally east of Morris Acres Road between Jenks Road and Walden Creek Drive in Apex, North Carolina. Roadways in the study area include Jenks Road, Walden Creek Drive, and Morris Acres Road (formerly Green Level Church Road). The existing roadway laneage is shown in **Figure 3**.

Jenks Road is a 2-lane undivided roadway with a posted speed limit of 45 miles per hour (mph) in the vicinity of Morris Acres Road. The estimated 2022 annual average daily traffic (AADT) volume from is approximately 3,100 vehicles per day (vpd) east of Morris Acres Road. Jenks Road is designated to be a 3-lane thoroughfare section per the Town of Apex Thoroughfare and Collector Street Plan.

Walden Creek Drive is a 2-lane undivided roadway with a posted speed limit of 25 mph. The estimated 2022 ADT volume is approximately 1,100 vpd. Walden Creek Drive is designated to be a minor collector on the Town of Apex Thoroughfare and Collector Street Plan.

Morris Acres Road (formerly Green Level Church Road) is a 3-lane undivided roadway with a center two-way left-turn lane (TWLTL) in the vicinity of the site with a posted speed limit of 45 mph. The estimated 2022 AADT volume from NCDOT is approximately 3,700 vpd south of Jenks Road. Morris Acres Road has already been widened to the designated 3-lane thoroughfare per the Town of Apex Thoroughfare and Collector Street Plan.



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MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

SITE LOCATION

FIGURE 1

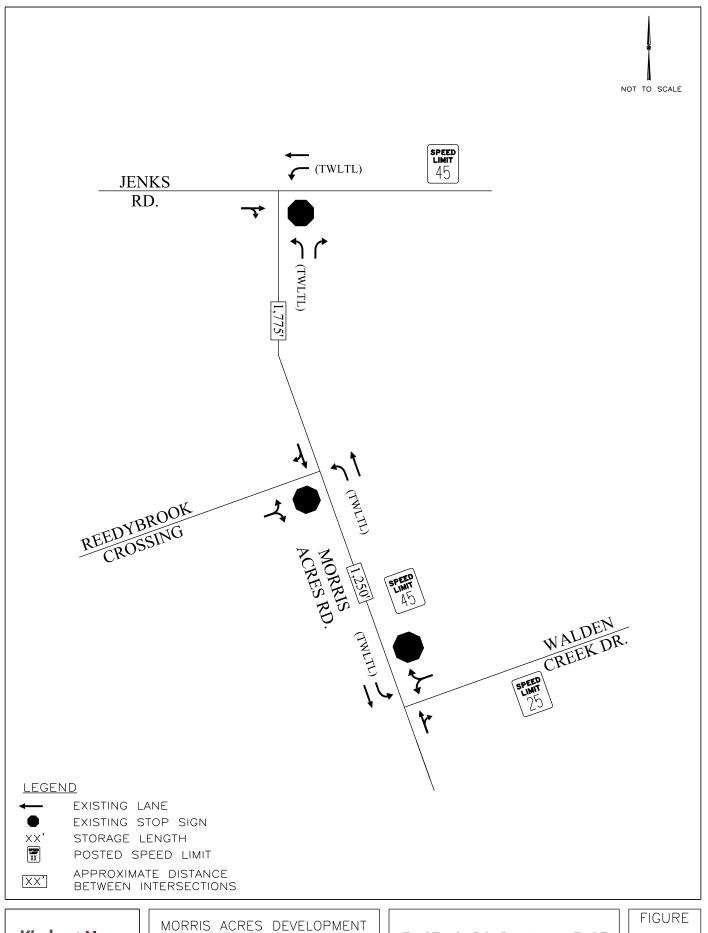
- Page 342 - D ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER BE WITHOUT LUBBILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

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FIGURE

MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT ANALYSIS

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MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

EXISTING ROADWAY LANEAGE

3

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3.0 Traffic Generation

The traffic generation potential of the proposed development was determined using the traffic generation rates published in *Trip Generation* (Institute of Transportation Engineers, Eleventh Edition, 2021). As currently envisioned the development will consist of a maximum 110 townhomes and 10 single-family homes. Table 3.0 summarizes the estimated traffic generation for the proposed development.

	Table 3.0 ITE Traffic Generation (Vehicles)								
Land Use	Land Use	Intensity Daily In Out			Peak our		Peak our		
Code				ln	Out	In	Out	ln	Out
210	Single-Family Detached Housing	10	d.u.	61	61	2	7	7	4
220	Multifamily Housing (Low-Rise)	110	d.u.	390	390	14	43	43	25
Total	Net New External Trips	120	d.u.	451	451	16	50	50	29

Table 3.0 shows the proposed development has the potential to generate 902 new trips during a typical weekday with 66 new trips during the AM peak hour and 79 new trips during the PM peak hour.

Detailed trip generation calculations are included in the Appendix of this report.



4.0 Site Traffic Distribution

The projected site-generated trips were assigned to the surrounding roadway network. The directional distribution and assignment for this development were based on a review of surrounding land uses and traffic patterns in the study area. As the nearby intersection of Morris Acres Road at US 64 Westbound is limited to right-in/right-out access, separate inbound and outbound distributions were developed for the site to account for anticipated travel paths.

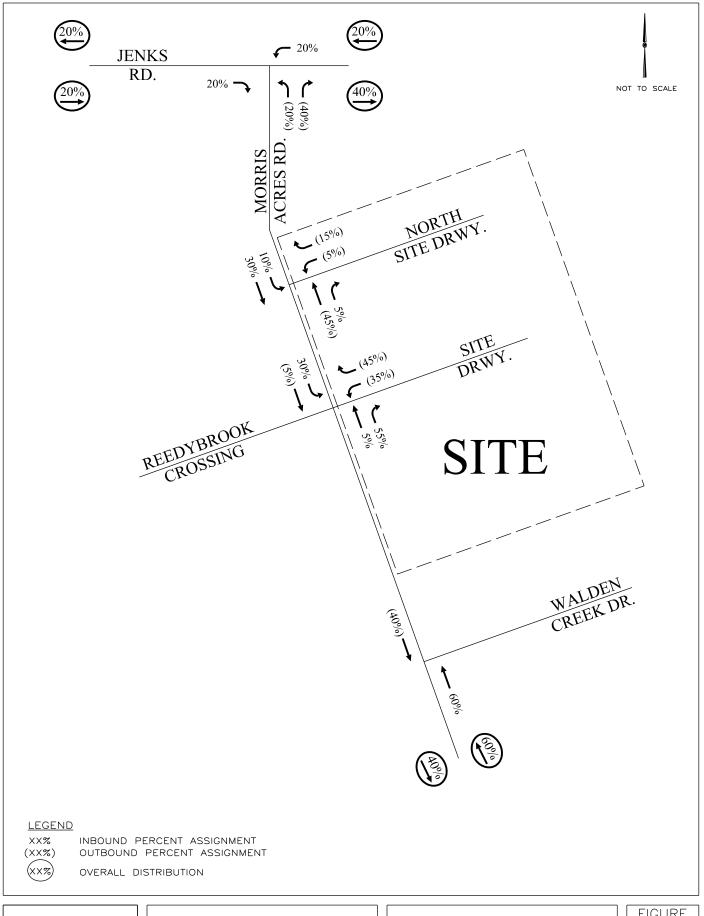
The inbound site traffic distribution used for the site was:

- 60% from the south on Morris Acres Road
- 20% from the east on Jenks Road
- 20% from the west on Jenks Road

The outbound site traffic distribution used for the site was:

- 40% to the east on Jenks Road
- 40% to the south on Morris Acres Road
- 20% to the west on Jenks Road

The site traffic distribution and percent assignment for site are shown on Figure 4.



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MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

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SITE TRAFFIC DISTRIBUTION AND PERCENT ASSIGNMENT

FIGURE

4



5.0 Projected Traffic Volumes

5.1 Existing Traffic

AM peak hour (7:00 to 9:00 AM) and PM peak hour (4:00 to 6:00 PM) turning movement counts were performed at the following intersections:

•	Jenks Road at Morris Acres Road	February 10, 2022
•	Morris Acres Road at Reedybrook Crossing	February 10, 2022
•	Morris Acres Road at Walden Creek Drive	February 10, 2022

The existing AM and PM peak hour traffic volumes are shown on **Figures 5** and **6**, and the traffic count data are included in the Appendix.

5.2 Traffic Growth

Background traffic growth is the increase in traffic due to usage increases and non-specific growth throughout the area. An annual growth rate of 3% was applied to the existing volumes up to the year 2025. Background growth calculations are detailed on intersection spreadsheets in the Appendix of this report.

Background traffic volumes consisting of existing and historic growth are shown on **Figures 5** and **6** for the AM and PM peak hours, respectively.

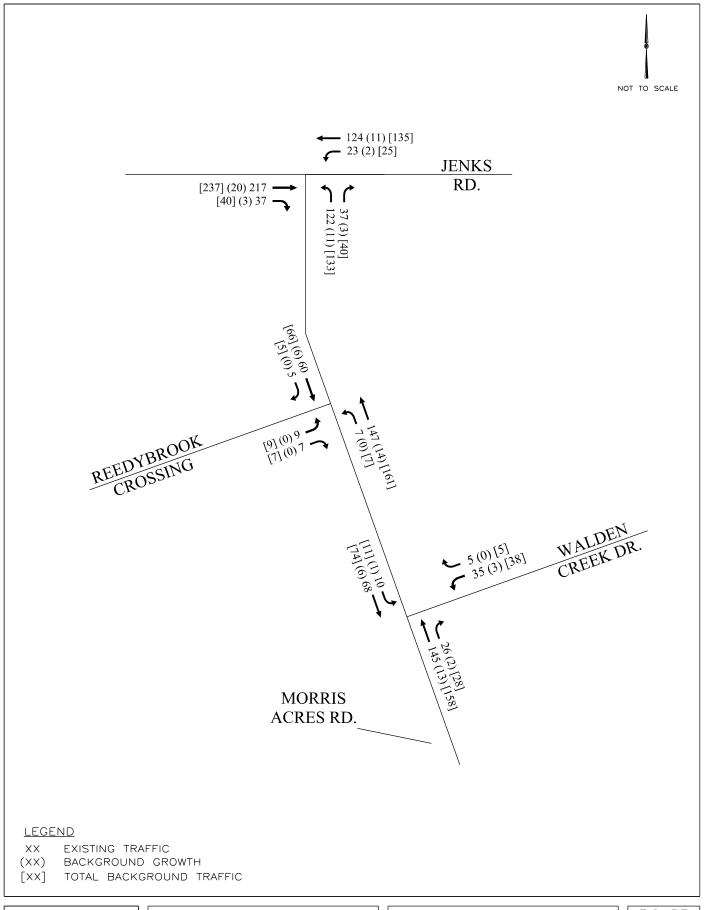


5.3 Site Traffic

The projected site traffic was generated and assigned to the adjacent roadway network according to the distribution discussed previously in Section 4.0. The site traffic volumes for the AM and PM peak hours are shown in **Figures 7** and **8**, respectively.

5.4 Build-Out Traffic

To obtain the projected (2025) build-out traffic volumes, the projected site traffic were added to the projected (2025) background traffic. Traffic volume calculations are detailed in intersection spreadsheets in the Appendix of this report. **Figures 7** and **8** show the projected (2025) AM and PM peak hour build-out traffic volumes, respectively.





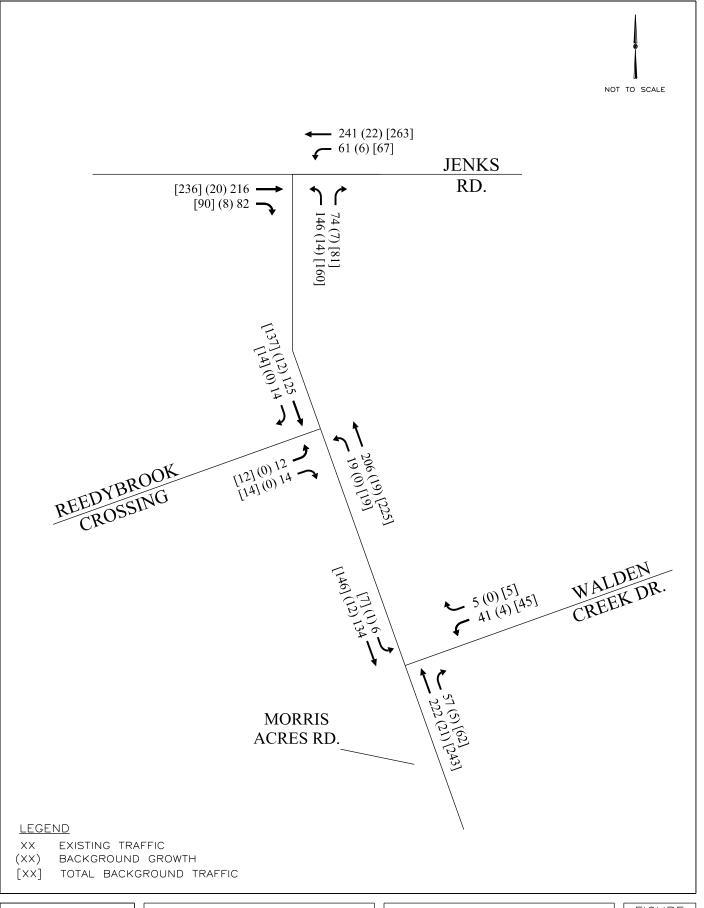
MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A EXISTING AND PROJECTED (2025) BACKGROUND AM PEAK HOUR TRAFFIC VOLUMES FIGURE

5

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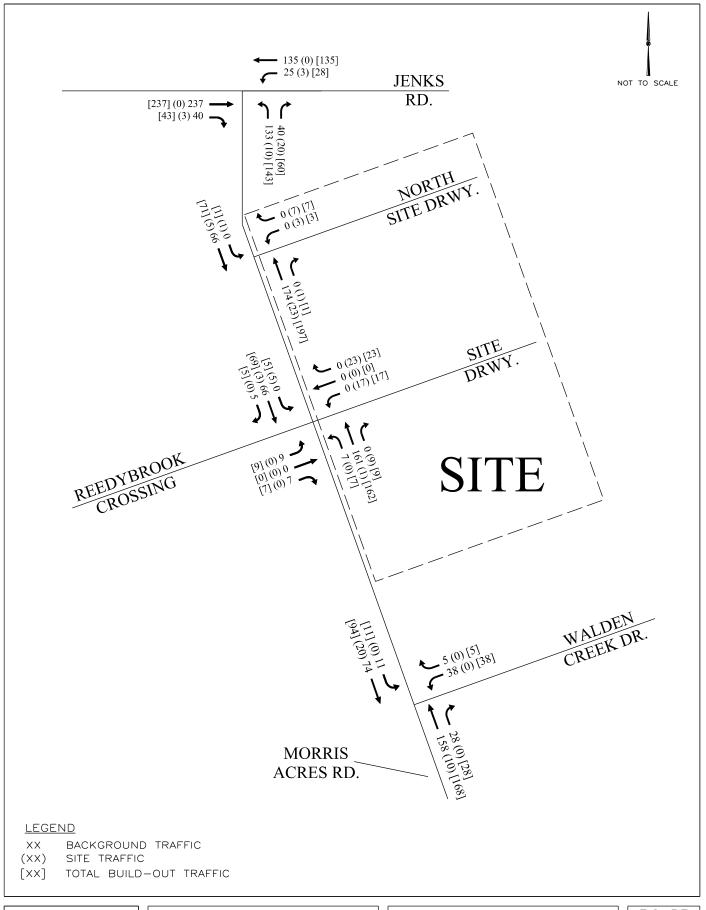


MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

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EXISTING AND PROJECTED (2025) BACKGROUND PM PEAK HOUR TRAFFIC VOLUMES FIGURE

6

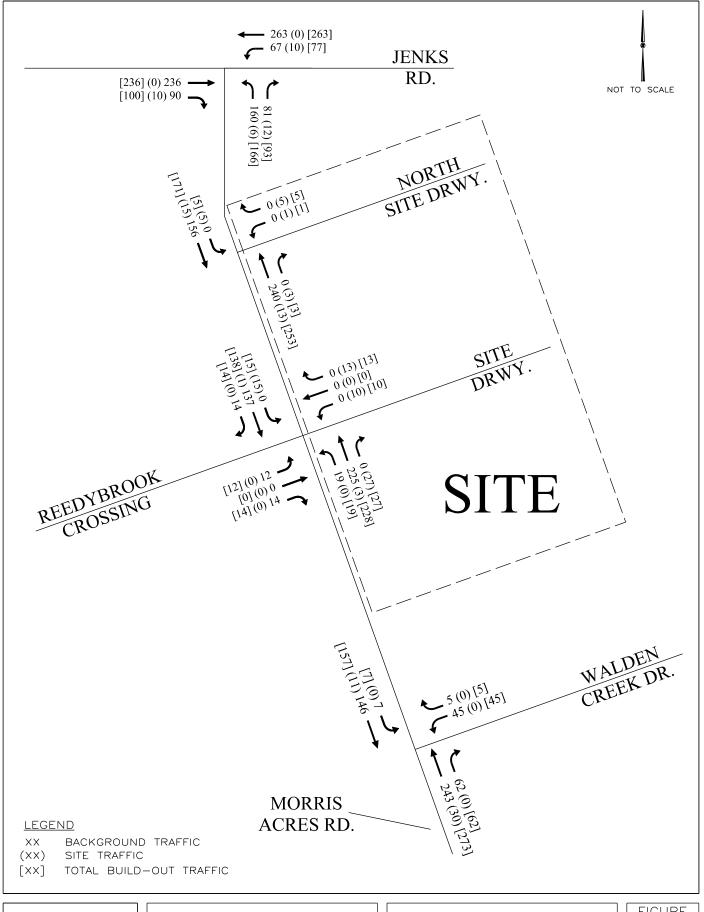




MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

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PROJECTED (2025) BUILD-OUT AM PEAK HOUR TRAFFIC VOLUMES FIGURE 7



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MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

PROJECTED (2025) BUILD-OUT PM PEAK HOUR TRAFFIC VOLUMES FIGURE 8

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6.0 Capacity Analysis

Capacity analyses (see Appendix) were performed for the AM and PM peak hours for the existing traffic condition and the projected (2025) background and build-out traffic conditions using Synchro Version 11 software to determine the operating characteristics of the adjacent road network and the impacts of the proposed project.

Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a set time duration. Capacity is combined with Level-of-Service (LOS) to describe the operating characteristics of a road segment or intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A representing the shortest average delays and F representing the longest average delays. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection operation.

For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by Synchro Version 11 or computable using methodology published in the *Highway Capacity Manual*. It is typical for stop sign controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. Table 6.0-A lists the LOS control delay thresholds published in the *Highway Capacity Manual* for signalized and unsignalized intersections.

	Table 6.0-A Level-of-Service Control Delay Thresholds						
Level-of- Service Signalized Intersections – Control Delay Per Vehicle [sec/veh] Unsignalized Intersections – Average Control Delay [sec/veh] & Qualitative Operational Description							
A	≤ 10	≤ 10					
В	> 10 – 20	> 10 – 15	Short Delays				
С	> 20 – 35	> 15 – 25					
D	> 35 – 55	> 25 – 35	M 1 4 D 1				
Е	> 55 – 80	> 35 – 50	Moderate Delays				
F	> 80	> 50	Long Delays				

Existing peak hour factors (PHF) were used at all existing intersections for all conditions except at new intersections, where a PHF of 0.90 was used.

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Capacity analyses were performed for the existing (2022) traffic condition and the projected (2025) background and build-out traffic conditions for the following intersections:

- Jenks Road at Morris Acres Road
- Morris Acres Road at Reedybrook Crossing/Site Driveway
- Morris Acres Road at Creekside Landing Drive
- Morris Acres Road at North Site Driveway

Table 6.0-B summarizes the LOS and delay (seconds per vehicle) for all of the study intersections for the existing (2022) traffic condition and the projected (2025) background and build-out traffic conditions. All capacity analyses are included in the Appendix and are briefly summarized in the following sub-sections.

Table 6.0-B Level-of-Service Summary						
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)				
Jenks Road at Morri	s Acres Road (Unsignalize	ed)				
Existing (2022) Traffic	NB – B (11.8) WBL – A (7.9)	NB – B (14.2) WBL – A (8.1)				
Background (2025) Traffic	NB – B (12.3) WBL – A (8.0)	NB – C (15.5) WBL – A (8.2)				
Build-out (2025) Traffic	NB – B (12.4) WBL – A (8.0)	NB – C (16.2) WBL – A (8.3)				
Morris Acres Road at Reedybroo	Morris Acres Road at Reedybrook Crossing/Site Driveway (Unsignalized)					
Existing (2022) Traffic	EB – A (9.4) NBL – A (7.4)	EB – B (10.0) NBL – A (7.6)				
Background (2025) Traffic	EB – A (9.5) NBL – A (7.4)	EB – B (10.1) NBL – A (7.6)				
Build-out (2025) Traffic	EB – B (10.3) WB – B (10.3) NBL – A (7.4) SBL – A (7.6)	EB – B (11.6) WB – B (11.8) NBL – A (7.6) SBL – A (7.9)				
Morris Acres Road at Wa	alden Creek Drive (Unsign	nalized)				
Existing (2022) Traffic	WB – A (10.2) SBL – A (7.7)	WB – B (11.3) SBL – A (7.9)				
Background (2022) Traffic	WB – B (10.4) SBL – A (7.8)	WB – B (11.6) SBL – A (8.0)				
Build-out (2025) Traffic	WB – B (10.6) SBL – A (7.8)	WB – B (11.9) SBL – A (8.1)				
Morris Acres Road at No	rth Site Driveway (Unsign	nalized)				
Build-out (2025) Traffic	WB – A (9.7) SBL – A (7.7)	WB – B (10.4) SBL – A (7.8)				



6.1 Jenks Road at Morris Acres Road

Analyses indicate that the unsignalized intersection of Jenks Road at Morris Acres Road currently operates with short delays on the minor street approach (Morris Acres Road) in both the AM and PM peak hours. The intersection is expected to continue to operate with short delays and queues in the year 2025 with or without the proposed project in place, and no roadway improvements are recommended to accommodate projected site traffic.

Table 6.1 summarizes the operation of the intersection of Jenks Road at Morris Acres Road for the existing (2022) and projected (2025) background and build-out traffic conditions.

Table 6.1 Level-of-Service Jenks Road at Morris Acres Road (Unsignalized)					
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)			
Existing (2022) Traffic	NB – B (11.8) WBL – A (7.9)	NB – B (14.2) WBL – A (8.1)			
Background (2025) Traffic	NB – B (12.3) WBL – A (8.0)	NB – C (15.5) WBL – A (8.2)			
Build-out (2025) Traffic	NB – B (12.4) WBL – A (8.0)	NB – C (16.2) WBL – A (8.3)			



6.2 Morris Acres Road at Reedybrook Crossing/Site Driveway

Analyses indicate that the intersection of Morris Acres Road at Reedybrook Crossing currently operates with short delays on the minor street approach (Reedybrook Crossing) in both the AM and PM peak hours, and the intersection is expected to continue to operate with short delays in the background traffic condition.

The Morris Acres Development proposes to construct a site driveway aligning with Reedybrook Crossing, providing one ingress lane and one egress lane. Analyses indicate that at project build-out both minor street approaches (Reedybrook Crossing and the Site Driveway) are expected to operate with short delays and queues. No roadway improvements are recommended to be performed as part of this development

Table 6.2 summarizes the operation of the intersection of Morris Acres Road at Reedybrook Crossing/Site Driveway for the existing (2022) and projected (2025) background and build-out traffic conditions.

Table 6.2 Level-of-Service Morris Acres Road at Reedybrook Crossing/Site Driveway (Unsignalized)			
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	
Existing (2022) Traffic	EB – A (9.4) NBL – A (7.4)	EB – B (10.0) NBL – A (7.6)	
Background (2025) Traffic	EB – A (9.5) NBL – A (7.4)	EB – B (10.1) NBL – A (7.6)	
Build-out (2025) Traffic	EB – B (10.3) WB – B (10.3) NBL – A (7.4) SBL – A (7.6)	EB – B (11.6) WB – B (11.8) NBL – A (7.6) SBL – A (7.9)	



6.3 Morris Acres Road at Walden Creek Drive

Analyses indicate that the unsignalized intersection of Morris Acres Road at Walden Creek Drive currently operates with short delays on the minor street approach (Walden Creek Drive) in both the AM and PM peak hours, and the intersection is expected to continue to operate with short delays in the background traffic condition. No roadway improvements are recommended to be performed at this intersection to accommodate projected site traffic volumes.

Table 6.3 summarizes the operation of the intersection of Morris Acres Road at Walden Creek Drive for the existing (2022) and projected (2025) background and build-out traffic conditions.

Table 6.3 Level-of-Service Morris Acres Road at Walden Creek Drive (Unsignalized)			
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	
Existing (2022) Traffic	WB – A (10.2) SBL – A (7.7)	WB – B (11.3) SBL – A (7.9)	
Background (2025) Traffic	WB – B (10.4) SBL – A (7.8)	WB – B (11.6) SBL – A (8.0)	
Build-out (2025) Traffic	WB – B (10.6) SBL – A (7.8)	WB – B (11.9) SBL – A (8.1)	



6.4 Morris Acres Road at North Site Driveway

A full-movement site driveway is proposed to be constructed on Morris Acres Road approximately 750 feet north of Reedybrook Crossing. Analyses indicate that the intersection is expected to operate with short delays and queues on the minor street approach (North Site Driveway) at project build-out. No roadway improvements are recommended to be performed as part of this development

Table 6.4 summarizes the operation of the intersection of Morris Acres Road at North Site Driveway for the projected (2025) build-out traffic condition.

Table 6.4 Level-of-Service Morris Acres Road at North Site Driveway (Unsignalized)			
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	
Build-out (2025) Traffic	WB – A (9.7) SBL – A (7.7)	WB – B (10.4) SBL – A (7.8)	

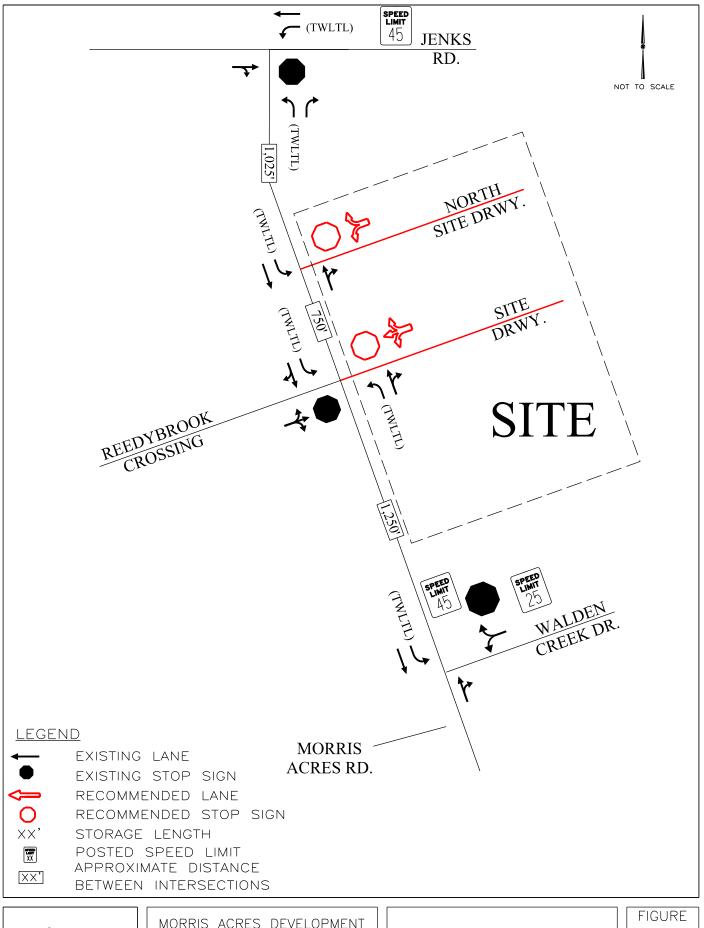


7.0 Recommendations

Analyses indicate that all of the study intersections are expected to operate at an acceptable LOS at project build-out with only minor increases in delays and queues associated with the addition of site traffic.

No roadway improvements are recommended to be performed to accommodate projected site traffic volumes.

The build-out roadway laneage is shown on **Figure 9**.



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MORRIS ACRES DEVELOPMENT APEX, NC TRAFFIC IMPACT A

BUILD-OUT ROADWAY LANEAGE

9

Appendix

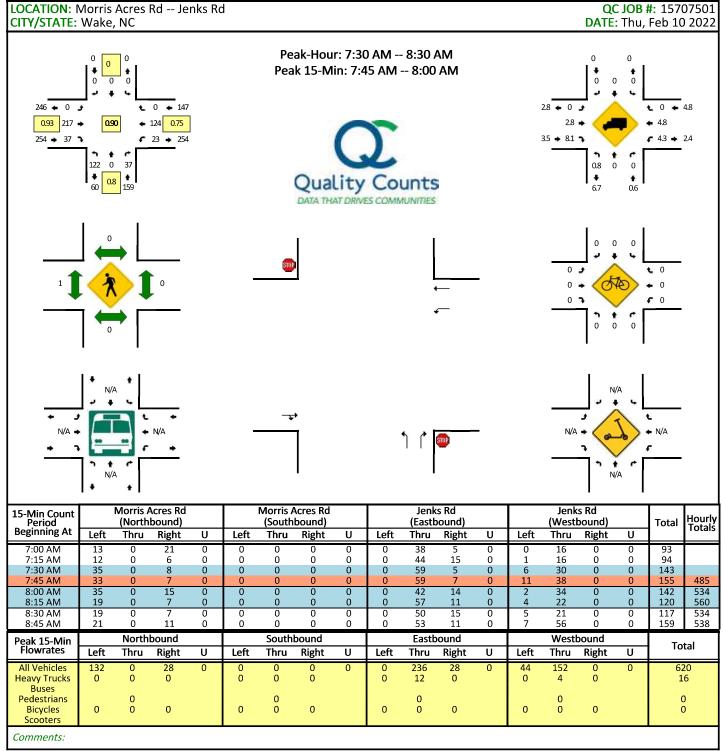
Appendix A: Trip Generation

Morris Acres Development Table 1 - Trip Generation

Land Use	Inte	neity		Daily		AN	/I Peak Ho	ur	PI	/I Peak Ho	our
Land USE	Inter	isity	Total	ln	Out	Total	In	Out	Total	In	Out
210 Single Family Detached Housing	10	d.u.	122	61	61	9	2	7	11	7	4
220 Multifamily Housing (Low-Rise)	110	d.u.	780	390	390	57	14	43	68	43	25
Total Net New External Trips			902	451	451	66	16	50	79	50	29

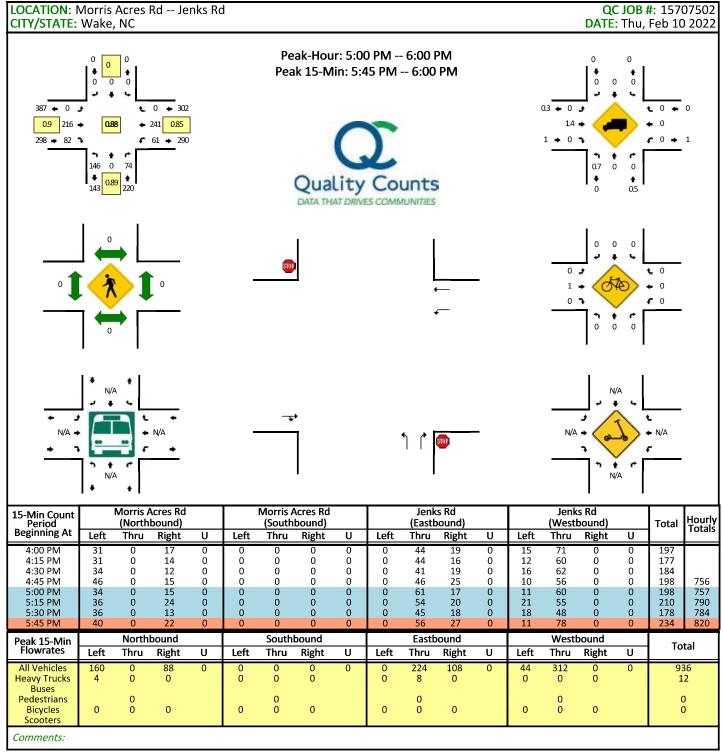
^{*}ITE 11th Edition equations used

Appendix B: Traffic Count Data



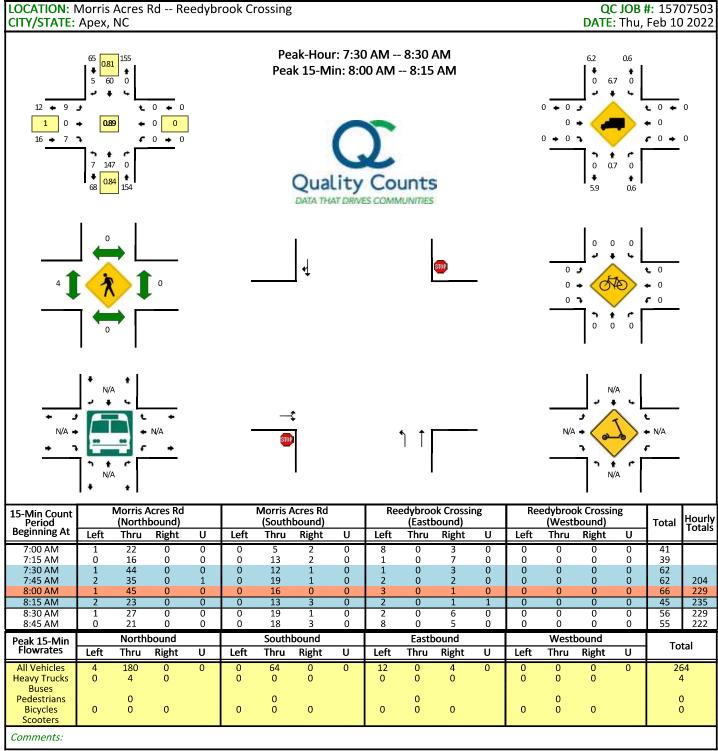
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SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212



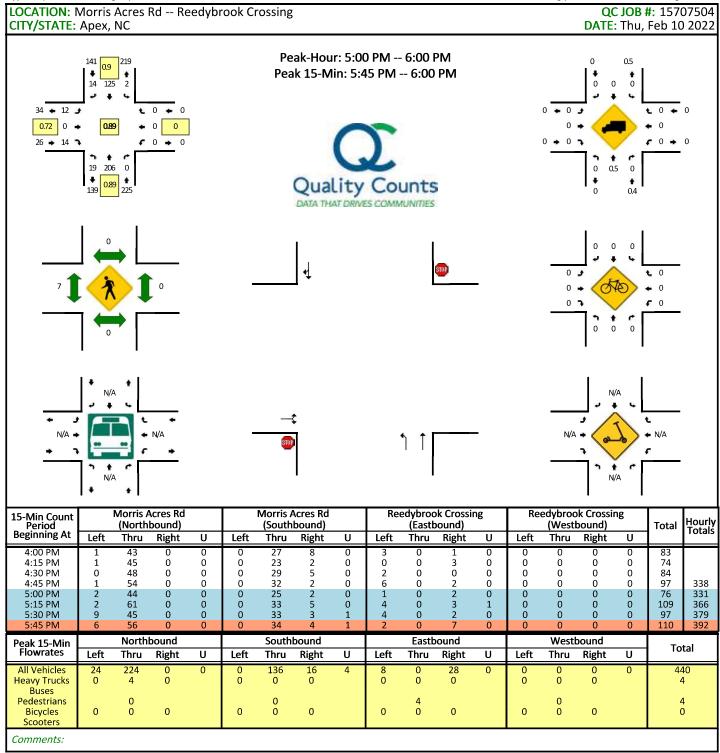
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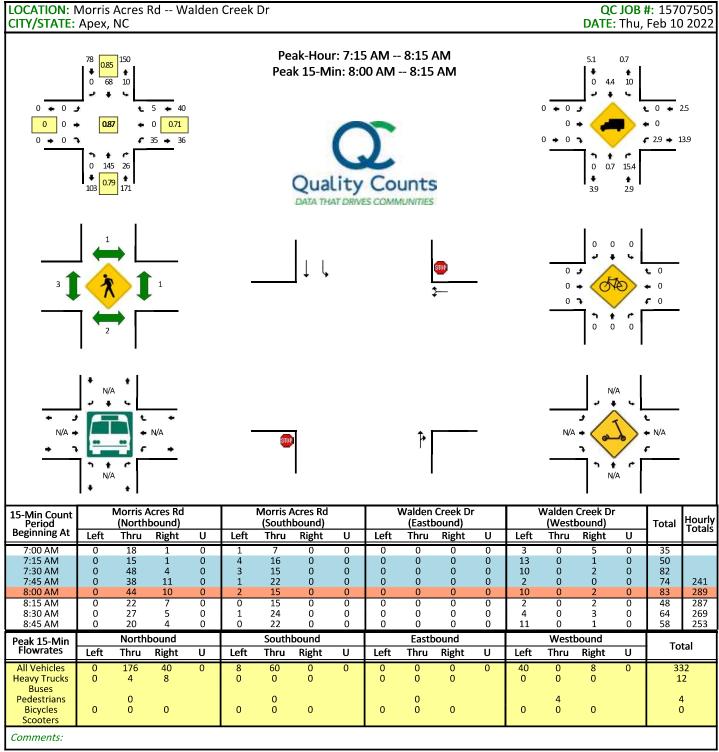
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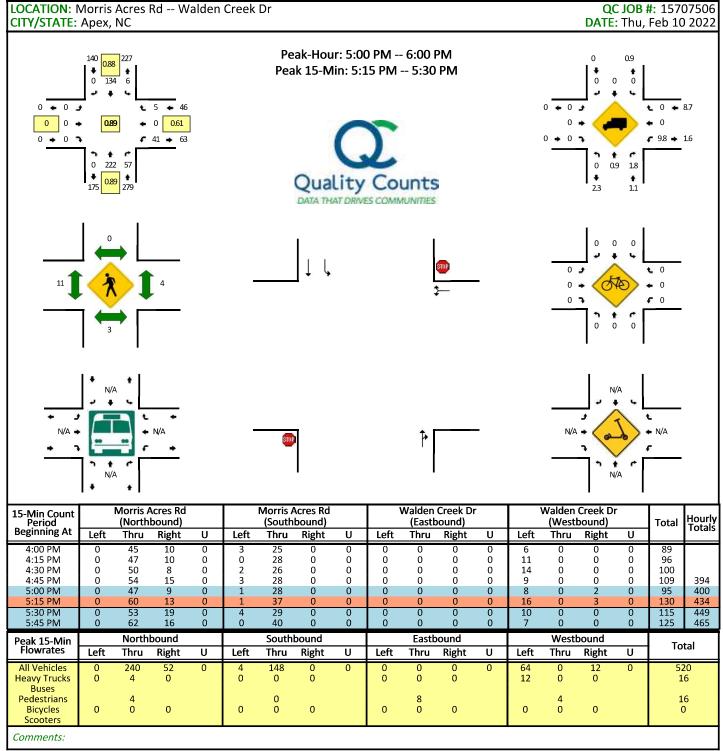
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Appendix C: Intersection Spreadsheets

			AM In	AM Out	PM In	PM Out
Project:	Morris Acres Development	Net New Trips:	16	50	50	29
Location:	Apex, NC					
Ct. Date	2/10/2022	_		_		
N/S Street:	Morris Acres Road	Annual Growth Rate:	3.0%	Exist	ting Year:	2022
E/W Street:	Jenks Road	Growth Factor:	0.092727	Build	out Year:	2025

AM PEAK HOUR AM PHF = 0.9

					MI I III — (•••						
		Jenks Road			Jenks Road		M	lorris Acres Ro	ad		-	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022 Traffic Count	0	217	37	23	124	0	122	0	37	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic	0	217	37	23	124	0	122	0	37	0	0	0
Growth Factor (0.03 per year)	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093
2025 Background Growth	0	20	3	2	11	0	11	0	3	0	0	0
2025 Background Traffic	0	237	40	25	135	0	133	0	40	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	0%	20%	20%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	3	3	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	20%	0%	40%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	10	0	20	0	0	0
Total Project Traffic	0	0	3	3	0	0	10	0	20	0	0	0
2025 Buildout Total	0	237	43	28	135	0	143	0	60	0	0	0
Percent Impact (Approach)		1.1%			1.8%			14.8%			-	

Overall Percent Impact 5.6%

PM PEAK HOUR PM PHF = 0.88

		Jenks Road	•		Jenks Road		M	Iorris Acres Ro	ad		-	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022 Traffic Count	0	216	82	61	241	0	146	0	74	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic	0	216	82	61	241	0	146	0	74	0	0	0
Growth Factor (0.03 per year)	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093
2025 Background Growth	0	20	8	6	22	0	14	0	7	0	0	0
2025 Background Traffic	0	236	90	67	263	0	160	0	81	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	0%	20%	20%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	10	10	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	20%	0%	40%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	6	0	12	0	0	0
Total Project Traffic	0	0	10	10	0	0	6	0	12	0	0	0
L												
2025 Buildout Total	0	236	100	77	263	0	166	0	93	0	0	0
Percent Impact (Approach)	1	3.0%		1	2.9%			6.9%			-	

Overall Percent Impact 4.1%

 $k: \ |ral_tpto|_traffic | 019867003 \ morris \ acres \ pulte - apex | t4 - analysis | [morris acres - tiadata.xls] int. \ \#1 - analysis | [morris acres - tiadata.xls] | the second of$

Ct. Date 2/10/2022

N/S Street: Morris Acres Road Annual Growth Rate: 3.0% Existing Year: 2022

E/W Street: Reedybrook Crossing/North Site Driveway Growth Factor: 0.092727 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.89

				1 1	VI I III – U	.07						
	Re	edybrook Cros	ssing		Site Driveway	1	M	lorris Acres Ro	ad	M	orris Acres Ro	ad
l		Eastbound	Ü		Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022 Traffic Count	9	0	7	0	0	0	7	147	0	0	60	5
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic	9	0	7	0	0	0	7	147	0	0	60	5
Growth Factor (0.03 per year)	0,000	0.000	0.000	0.000	0.000	0.000	0,000	0.093	0.000	0.000	0.093	0.000
2025 Background Growth	0	0	0	0	0	0	0	14	0	0	6	0
2025 Background Traffic	9	0	7	0	0	0	7	161	0	0	66	5
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	5%	55%	30%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	1	9	5	0	0
Percent Assignment Outbound	0%	0%	0%	35%	0%	45%	0%	0%	0%	0%	5%	0%
Outbound Project Traffic	0	0	0	17	0	23	0	0	0	0	3	0
Total Project Traffic	0	0	0	17	0	23	0	1	9	5	3	0
2025 Buildout Total	9	0	7	17	0	23	7	162	9	5	69	5
Percent Impact (Approach)		0.0%			100.0%			5.6%			10.1%	

Overall Percent Impact 18.5%

PM PEAK HOUR PM PHF = 0.89

	Re	edybrook Cross	sing		Site Driveway		M	orris Acres Ro	ad	N	Iorris Acres Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022 Traffic Count	12	0	14	0	0	0	19	206	0	0	125	14
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic	12	0	14	0	0	0	19	206	0	0	125	14
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.093	0.000
2025 Background Growth	0	0	0	0	0	0	0	19	0	0	12	0
2025 Background Traffic	12	0	14	0	0	0	19	225	0	0	137	14
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	5%	55%	30%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	3	27	15	0	0
Percent Assignment Outbound	0%	0%	0%	35%	0%	45%	0%	0%	0%	0%	5%	0%
Outbound Project Traffic	0	0	0	10	0	13	0	0	0	0	1	0
Total Project Traffic	0	0	0	10	0	13	0	3	27	15	1	0
2025 Buildout Total	12	0	14	10	0	13	19	228	27	15	138	14
Percent Impact (Approach)		0.0%			100.0%			10.9%			9.6%	

Overall Percent Impact 14.1%

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Project:	Morris Acres Development	Net New Trips:	16	50	50	29
Location:	Apex, NC		Ct. Date	2/10/2022		
N/S Street:	Morris Acres Road	Annual Growth Rate:	3.0%	Existry Year:	2022	
E/W Street:	Walden Creek Drive	Growth Factor:	0.092727	Buildur Year:	2025	

AM PEAK HOUR AM PHF = 0.87

					7.81	VI I III - 0	107						
			-		Wa	alden Creek Dr	ive	M	orris Acres Ro	ad	M	orris Acres Ro	ad
			Eastbound			Westbound			Northbound			Southbound	
Description	I	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022 Traffic Count		0	0	0	35	0	5	0	145	26	10	68	0
Count Balancing		0	0	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic		0	0	0	35	0	5	0	145	26	10	68	0
Growth Factor (0.03 per year)	0	.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093
2025 Background Growth		0	0.075	0.075	3	0.033	0.073	0.055	13	2	1	6	0.073
2025 Background Growth		U	U	U	,	U	U	ľ	13	2	1	· ·	U
2025 Background Traffic		0	0	0	38	0	5	0	158	28	11	74	0
Project Traffic													
Percent Assignment Inbound		0%	0%	0%	0%	0%	0%	0%	60%	0%	0%	0%	0%
Inbound Project Traffic		0	0	0	0	0	0	0	10	0	0	0	0
Percent Assignment Outbound		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%
Outbound Project Traffic		0	0	0	0	0	0	0	0	0	0	20	0
Outound Foject Traine		U	U	U	0	U	U	0	U	U	"	20	U
Total Project Traffic		0	0	0	0	0	0	0	10	0	0	20	0
2025 Buildout Total		0	0	0	38	0	5	0	168	28	11	94	0
Percent Impact (Approach)			-			0.0%			5.1%			19.0%	

Overall Percent Impact 8.7%

PM PEAK HOUR PM PHF = 0.89

		-		W	alden Creek D	rive	M	orris Acres Ro	ad	M	orris Acres Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022 Traffic Count	0	0	0	41	0	5	0	222	57	6	134	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2022 Existing Traffic	0	0	0	41	0	5	0	222	57	6	134	0
Growth Factor (0.03 per year)	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093
2025 Background Growth	0	0	0	4	0	0	0	21	5	1	12	0
2025 Background Traffic	0	0	0	45	0	5	0	243	62	7	146	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	60%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	30	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	11	0
				l .						_		
Total Project Traffic	0	0	0	0	0	0	0	30	0	0	11	0
2025 Buildout Total	0	0	0	45	0	5	0	273	62	7	157	0
Percent Impact (Approach)	- 0	-		+-	0.0%		 	9.0%	02		6.7%	-
i creent impact (Appitacii)				I .	0.070			7.070			0.770	

Overall Percent Impact 7.5%

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Project: Morris Acres Development Net New Trips: 16 50 50 29
Location: Apex, NC
Scenario: Traffic Impact Analysis
Ct. Date Balance with Jenks at Morris Acres

N/S Street: North Site Driveway

Annual Growth Rate: 3.0% Existing Year: 2022

E/W Street: North Site Driveway Growth Factor: 0.092727 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

		No	orth Site Drivey	vay	No	orth Site Drivev	vay	M	Iorris Acres Ro	ad	N.	Iorris Acres Ro	ad
			<u>Eastbound</u>			Westbound			Northbound			Southbound	
Descrip	tion	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022	Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count B	alancing	0	0	0	0	0	0	0	159	0	0	60	0
2022	Existing Traffic	0	0	0	0	0	0	0	159	0	0	60	0
Groudh	Factor (0.03 per year)	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093
2025	Background Growth				0.093	0.093			15	0.093			
2025	background Growth	0	0	0	l "	U	0	0	15	U	0	6	0
2025	Background Traffic	0	0	0	0	0	0	0	174	0	0	66	0
Project	Traffic												
Percent .	Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	5%	10%	30%	0%
Inbound	Project Traffic	0	0	0	0	0	0	0	0	1	1	5	0
Percent	Assignment Outbound	0%	0%	0%	5%	0%	15%	0%	45%	0%	0%	0%	0%
	d Project Traffic	0	0	0	3	0	7	0	23	0	0	0	0
Total Pi	roject Traffic	0	0	0	3	0	7	0	23	1	1	5	0
2025	Buildout Total	0	0	0	3	0	7	0	197	1	1	71	0
Percent 2	Impact (Approach)		-			100.0%			12.1%			8.3%	

Overall Percent Impact 14.3%

PM PEAK HOUR PM PHF = 0.90

		No	orth Site Drivey	vay	No	rth Site Drivey	vay	M	Iorris Acres Ro	ad	M	orris Acres Ro	ad
			Eastbound			Westbound			Northbound			Southbound	
Descript	tion	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2022	Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count B:	alancing	0	0	0	0	0	0	0	220	0	0	143	0
2022	Existing Traffic	0	0	0	0	0	0	0	220	0	0	143	0
Growth 1	Factor (0.03 per year)	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093
2025	Background Growth	0	0	0	0	0	0	0	20	0	0	13	0
2025	Background Traffic	0	0	0	0	0	0	0	240	0	0	156	0
Project '	Traffic												
Percent A	Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	5%	10%	30%	0%
Inbound	Project Traffic	0	0	0	0	0	0	0	0	3	5	15	0
Percent A	Assignment Outbound	0%	0%	0%	5%	0%	15%	0%	45%	0%	0%	0%	0%
Outboun	d Project Traffic	0	0	0	1	0	5	0	13	0	0	0	0
Total Pr	oject Traffic	0	0	0	1	0	5	0	13	3	5	15	0
2025	Buildout Total	0	0	0	1	0	5	0	253	3	5	171	0
Percent I	mpact (Approach)		-			100.0%			6.3%			11.4%	

Overall Percent Impact 9.6%

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3/7/22

Appendix D: Synchro & SimTraffic Output: Existing (2022)

Intersection						
Int Delay, s/veh	3.7					
	EDT	EDD	\\/DI	\\/DT	NDI	NIDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	}	07	ነ	104	100	77
Traffic Vol, veh/h	217	37	23	124	122	37
Future Vol, veh/h	217	37	23	124	122	37
Conflicting Peds, #/hr	_ 0	_ 0	_ 0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	150	0
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	8	4	5	2	2
Mvmt Flow	241	41	26	138	136	41
				,00	.00	- ' '
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	282	0	452	262
Stage 1	-	-	-	-	262	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	-	-	4.14	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.236	_		3.318
Pot Cap-1 Maneuver	_	_	1269	_	565	777
Stage 1	-	-	-	_	782	-
Stage 2	_	_	_	-	842	_
Platoon blocked, %	_	_		_	UTL	
Mov Cap-1 Maneuver	_		1269	_	554	777
Mov Cap-1 Maneuver	_	_	1203	-	619	- 111
·		-				
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	825	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.2		11.8	
HCM LOS					В	
Minor Lane/Major Mvmt	1	NBLn11	VBLn2	EBT	EBR	WBL
Capacity (veh/h)		619	777	-	-	1269
HCM Lane V/C Ratio		0.219	0.053	-	-	0.02
HCM Control Delay (s)		12.4	9.9	-	-	7.9
HCM Lane LOS		В	Α	-	-	A
HCM 95th %tile Q(veh)		0.8	0.2	_	_	0.1
2(1011)						

Intersection						
Int Delay, s/veh	8.0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		*	↑	1	
Traffic Vol, veh/h	9	7	7	147	60	5
Future Vol, veh/h	9	7	7	147	60	5
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	-	100	INOHE	_	INOHE
			-	0	0	-
Veh in Median Storage		-				-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	7	2
Mvmt Flow	10	8	8	165	67	6
Major/Minor I	Minor2	-	Major1	N	/lajor2	
Conflicting Flow All	251	70	73	0	-	0
Stage 1	70	-	-	-		-
Stage 2	181	_	-	-	_	_
	6.42	6.22	4.12	-	-	-
Critical Hdwy			4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	738	993	1527	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	734	993	1527	-	-	-
Mov Cap-2 Maneuver	739	-	-	-	-	-
Stage 1	948	-	-	-	_	-
Stage 2	850	-	-	_	-	_
- 1gv -						
			h 150		-	
Approach	EB		NB		SB	
HCM Control Delay, s	9.4		0.3		0	
HCM LOS	Α					
Minor Lane/Major Mvm	n t	NBL	NDT	EBLn1	SBT	SBR
	IL					SDR
Capacity (veh/h)		1527	-		-	-
HCM Lane V/C Ratio		0.005	-	0.022	-	-
HCM Control Delay (s)		7.4	-	9.4	-	-
HCM Lane LOS		Α	-	Α	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.7					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y	_	₽	00	ሻ	†
Traffic Vol, veh/h	35	5	145	26	10	68
Future Vol, veh/h	35	5	145	26	10	68
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	-	-	-	50	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	2	2	15	10	4
Mvmt Flow	40	6	167	30	11	78
				_		
	Minor1		//ajor1		Major2	
Conflicting Flow All	282	182	0	0	197	0
Stage 1	182	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.2	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	_	_	-	-
Follow-up Hdwy	3.527	3.318	_	_	2.29	_
Pot Cap-1 Maneuver	706	861	-	_	1329	-
Stage 1	847	-	_	_	-	_
Stage 2	921	_	_	_		_
Platoon blocked, %	JZI				_	
Mov Cap-1 Maneuver	700	861	<u>-</u>	<u>-</u>	1329	-
•					1329	-
Mov Cap-2 Maneuver	718	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	914	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.2		0		1	
HCM LOS	В					
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	733	1329	-
HCM Lane V/C Ratio		-	-	0.063		-
HCM Control Delay (s)	_	_		7.7	_
HCM Lane LOS		_	-	В	Α	_
HCM 95th %tile Q(veh)	_	_	0.2	0	-
TION JOHN JOHN W(VEI	'/	_	_	0.2	U	_

Intersection							
Int Delay, s/veh	4.4						
		ED.5	14/51	VA/D.T.	NE	NES	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	1→		ሻ	↑		7	
Traffic Vol, veh/h	216	82	61	241	146	74	
Future Vol, veh/h	216	82	61	241	146	74	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	-	-	100	-	150	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	
Mymt Flow	245	93	69	274	166	84	
	_ 10	- 00	- 00		.00	- U 1	
Major/Minor M	1ajor1		Major2		Minor1		
Conflicting Flow All	0	0	338	0	704	292	
Stage 1	-	-	-	-	292	-	
Stage 2	-	-	-	-	412	-	
Critical Hdwy	-	_	4.12	-	6.42	6.22	
Critical Hdwy Stg 1	-	_	_	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	_	
Follow-up Hdwy	_	_	2.218	_		3.318	
Pot Cap-1 Maneuver	-	_	1221	-	403	747	
Stage 1	_	_		_	758	- ' ' -	
Stage 2	_	_	_	-	669	_	
Platoon blocked, %	_	_		_	505		
Mov Cap-1 Maneuver	_		1221		380	747	
Mov Cap-1 Maneuver	_		1221	-	485	141	
Stage 1	_	_	_		758		
		-			631		
Stage 2	-	-	-	-	031	-	
Approach	EB		WB		NB		
HCM Control Delay, s	0		1.6		14.2		
HCM LOS					В		
Minor Lane/Major Mvm	t 1	NBLn11	VBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)		485	747	-	-	1221	-
HCM Lane V/C Ratio		0.342	0.113	-	-	0.057	-
HCM Control Delay (s)		16.2	10.4	-	-	8.1	-
HCM Lane LOS		С	В	-	-	Α	-
HCM 95th %tile Q(veh)		1.5	0.4	_	_	0.2	_
		1.5	J. 1			7.2	

Intersection						
Int Delay, s/veh	1					
-	•				057	055
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		ሻ	↑	1	
Traffic Vol, veh/h	12	14	19	206	125	14
Future Vol, veh/h	12	14	19	206	125	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	16	21	231	140	16
Major/Minor	Minor2		Major1	٨	/lajor2	
		148		0		^
Conflicting Flow All	421		156		-	0
Stage 1	148	-	-	-	-	-
Stage 2	273	- 00	1 10	-	-	-
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		2.218	-	-	-
Pot Cap-1 Maneuver	589	899	1424	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	580	899	1424	-	-	-
Mov Cap-2 Maneuver	635	-	-	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	10		0.6		0	
HCM LOS	В		0.0		U	
HCIVI LOS	D					
Minor Lane/Major Mvn	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1424	-	754	-	-
HCM Lane V/C Ratio		0.015	-	0.039	-	-
HCM Control Delay (s)		7.6	-	10	-	-
HCM Lane LOS		Α	-	В	-	-
HCM 95th %tile Q(veh)	0	_	0.1	-	-
	,			• • •		

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	. A.		1			^
Traffic Vol, veh/h	41	5	222	57	6	134
Future Vol, veh/h	41	5	222	57	6	134
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	-	-	-	50	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	10	2	2	2	2	2
Mvmt Flow	46	6	249	64	7	151
WWIIICTIOW	70	U	270	0-1		101
Major/Minor N	/linor1		/lajor1		Major2	
Conflicting Flow All	446	281	0	0	313	0
Stage 1	281	-	-	-	-	-
Stage 2	165	-	-	-	-	-
Critical Hdwy	6.5	6.22	-	_	4.12	_
Critical Hdwy Stg 1	5.5	-	_	_	_	_
Critical Hdwy Stg 2	5.5	_	_	_	_	_
Follow-up Hdwy	3.59	3.318	_	_	2.218	_
Pot Cap-1 Maneuver	555	758	_	_	1247	_
Stage 1	749	-			1271	_
Stage 2	845		_		_	_
	045	-	-	-	-	
Platoon blocked, %	FF0	750	-	-	1017	-
Mov Cap-1 Maneuver	552	758	-	-	1247	-
Mov Cap-2 Maneuver	611	-	-	-	-	-
Stage 1	749	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Approach	WB		NB		SB	
	11.3		0		0.3	
HCM LOS			U		0.3	
HCM LOS	В					
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)				624	1247	_
HCM Lane V/C Ratio		_		0.083		_
HCM Control Delay (s)		_	_	11.3	7.9	_
HCM Lane LOS					7.9 A	
	\	-	-	В		-
HCM 95th %tile Q(veh))	-	-	0.3	0	-

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	35	82	45
Average Queue (ft)	5	34	17
95th Queue (ft)	24	60	37
Link Distance (ft)			939
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100	150	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Morris Acres Road & Reedybrook Crossing

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	30	5
Average Queue (ft)	13	0
95th Queue (ft)	37	5
Link Distance (ft)	370	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Morris Acres Road & Walden Creek Drive

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	60	20
Average Queue (ft)	25	1
95th Queue (ft)	53	11
Link Distance (ft)	326	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Network Summary

Network wide Queuing Penalty: 0

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	4	43	108	62
Average Queue (ft)	0	14	45	23
95th Queue (ft)	5	38	81	45
Link Distance (ft)	606			939
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100	150	
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Intersection: 2: Morris Acres Road & Reedybrook Crossing

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	44	24
Average Queue (ft)	19	1
95th Queue (ft)	44	11
Link Distance (ft)	370	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Morris Acres Road & Walden Creek Drive

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	74	18
Average Queue (ft)	29	1
95th Queue (ft)	60	8
Link Distance (ft)	326	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Appendix E: Synchro & SimTraffic Output: Background (2025)

Intersection							
Int Delay, s/veh	3.8						
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	1→		ሻ	†	ሻ	7	
Traffic Vol, veh/h	237	40	25	135	133	40	
Future Vol, veh/h	237	40	25	135	133	40	
Conflicting Peds, #/hr	0	0	0	0	0	0	
_	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None		None	-	None	
Storage Length	_	NOITE	100	-	150	0	
Veh in Median Storage,		-	100	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	90	90	90	90	90	90	
Heavy Vehicles, %	3	8	4	5	2	2	
Mvmt Flow	263	44	28	150	148	44	
Major/Minor M	ajor1		Major2		Minor1		
Conflicting Flow All	0	0	307	0	491	285	
Stage 1	_	_	-	-	285		
Stage 2	_	_	_	_	206	_	
Critical Hdwy	_	_	4.14	_	6.42	6.22	
Critical Hdwy Stg 1	_	_	7.17	_	5.42	0.22	
Critical Hdwy Stg 2	_	_	-	-	5.42	-	
	-	-	2.236	-	3.518		
Follow-up Hdwy	-	-	1242	-	537	754	
Pot Cap-1 Maneuver	-	-	1242	-			
Stage 1	-	-	-	-	763	-	
Stage 2	-	-	-	-	829	-	
Platoon blocked, %	-	-	1015	-			
Mov Cap-1 Maneuver	-	-	1242	-	525	754	
Mov Cap-2 Maneuver	-	-	-	-	598	-	
Stage 1	-	-	-	-	763	-	
Stage 2	-	-	-	-	810	-	
Approach	EB		WB		NB		
	0		1.2		12.3		
HCM LOS	U		1.2				
HCM LOS					В		
Minor Lane/Major Mvmt	1	NBLn11	NBLn2	EBT	EBR	WBL	
Capacity (veh/h)		598	754	_		1242	
HCM Lane V/C Ratio			0.059	_		0.022	
HCM Control Delay (s)		13	10.1	_	_	8	
HCM Lane LOS		В	В	_	_	A	
HCM 95th %tile Q(veh)		1	0.2	_	_	0.1	
HOW SOUL WILL CHANGE		- 1	0.2	-	-	U. I	

Intersection 0.0
Int Delay, s/veh 0.8
Movement EBL EBR NBL NBT SBT SBR
Lane Configurations Y 7 1
Traffic Vol, veh/h 9 7 7 161 66 5
Future Vol, veh/h 9 7 7 161 66 5
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 - 100
Veh in Median Storage, # 0 0 0 -
Grade, % 0 0 0 -
Peak Hour Factor 89 89 89 89 89
Heavy Vehicles, % 2 2 2 2 7 2
Mvmt Flow 10 8 8 181 74 6
Major/Minor Minor2 Major1 Major2
Conflicting Flow All 274 77 80 0 - 0
Stage 1 77
Stage 2 197
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 716 984 1518
Stage 1 946
Stage 2 836
Platoon blocked, %
Mov Cap-1 Maneuver 712 984 1518
Mov Cap-2 Maneuver 723
Stage 1 941
Stage 2 836
Glaye Z 000
Approach EB NB SB
HCM Control Delay, s 9.5 0.3 0
HCM LOS A
Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR
Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR Capacity (veh/h) 1518 - 818
Capacity (veh/h) 1518 - 818
Capacity (veh/h) 1518 - 818 HCM Lane V/C Ratio 0.005 - 0.022

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
		WBR		INBK		
Lane Configurations	Y	-	}	00	<u>ነ</u>	↑
Traffic Vol, veh/h	38	5	158	28	11	74
Future Vol, veh/h	38	5	158	28	11	74
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	-	-	-	50	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	2	2	15	10	4
Mvmt Flow	44	6	182	32	13	85
		-				
	Minor1		Major1		//ajor2	
Conflicting Flow All	309	198	0	0	214	0
Stage 1	198	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.2	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.29	-
Pot Cap-1 Maneuver	681	843	_	-	1310	-
Stage 1	833	-	_	_	_	_
Stage 2	911	_	_	_	_	_
Platoon blocked, %	J11		_			_
Mov Cap-1 Maneuver	674	843	_	-	1310	_
•	701		-	-	1310	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.4		0		1	
HCM LOS	В		U			
TIOWI LOO	U					
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	_	715	1310	_
HCM Lane V/C Ratio		_	_	0.069	0.01	_
HCM Control Delay (s))	_	_		7.8	_
HCM Lane LOS		_		В	Α	_
HCM 95th %tile Q(veh	1)	-	_	0.2	0	_
HOW SOUL WILLE CA (VEH	IJ	-	-	U.Z	U	-

Intersection						
Int Delay, s/veh	4.8					
• •		EDD	WBL	WDT	NDI	NBR
	EBT	EBR		WBT	NBL	
Lane Configurations	1	00	\	1000	100	7
Traffic Vol, veh/h	236	90	67	263	160	81
Future Vol, veh/h	236	90	67	263	160	81
Conflicting Peds, #/hr	_ 0	_ 0	_ 0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	150	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	268	102	76	299	182	92
NA ' (NA)			4			
	ajor1		Major2		Minor1	
Conflicting Flow All	0	0	370	0	770	319
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	451	-
Critical Hdwy	-	-	4.12	_	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	_	5.42	-
Follow-up Hdwy	_	_	2.218	_	3.518	3.318
Pot Cap-1 Maneuver	_	_	1189	_	369	722
Stage 1	_	_		_	737	-
Stage 2	_			_	642	_
Platoon blocked, %	_	-	-	-	042	-
•		-	1100	-	245	700
Mov Cap-1 Maneuver	-	-	1189	-	345	722
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	737	-
Stage 2	-	-	-	-	601	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.7		15.5	
HCM LOS					С	
Minor Lane/Major Mvmt	1	NBLn11	VBLn2	EBT	EBR	WBL
Capacity (veh/h)		456	722	-		1189
HCM Lane V/C Ratio		0.399		_		0.064
HCM Control Delay (s)		18	10.7	_		
HCM Lane LOS						
		C	В	-	-	A
HCM 95th %tile Q(veh)		1.9	0.4	-	-	0.2

Intersection						
Int Delay, s/veh	1					
		EDD	NDI	NDT	ODT	ODD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		ሻ	↑	7	
Traffic Vol, veh/h	12	14	19	225	137	14
Future Vol, veh/h	12	14	19	225	137	14
Conflicting Peds, #/hr		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None		None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storag		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	16	21	253	154	16
	Minor2		Major1		/lajor2	
Conflicting Flow All	457	162	170	0	-	0
Stage 1	162	-	-	-	-	-
Stage 2	295	-	-	-	-	-
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	562	883	1407	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	755	_	_	_	_	_
Platoon blocked, %				_	_	_
Mov Cap-1 Maneuver	554	883	1407	_	_	_
Mov Cap-2 Maneuver		-		_	_	_
Stage 1	854					
Stage 2	755	_		_	_	
Staye 2	733	_	_	_	<u>-</u>	<u>-</u>
Approach	EB		NB		SB	
HCM Control Delay, s	10.1		0.6		0	
HCM LOS	В					
		1151	NET		007	000
Minor Lane/Major Mvr	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1407	-		-	-
HCM Lane V/C Ratio		0.015	-	0.04	-	-
HCM Control Delay (s	()	7.6	-	10.1	-	-
HCM Lane LOS		Α	-	В	-	-
HCM 95th %tile Q(vel	1)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
		WBR		NBK		
Lane Configurations	¥	-	♣	00	Ĭ	110
Traffic Vol, veh/h	45	5	243	62	7	146
Future Vol, veh/h	45	5	243	62	7	146
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	-	-	-	50	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	10	2	2	2	2	2
Mvmt Flow	51	6	273	70	8	164
	•		~			
	Minor1		/lajor1		Major2	
Conflicting Flow All	488	308	0	0	343	0
Stage 1	308	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.5	6.22	_	-	4.12	-
Critical Hdwy Stg 1	5.5	_	_	_	_	_
Critical Hdwy Stg 2	5.5	_	_	_	_	_
Follow-up Hdwy		3.318	_	_	2.218	_
Pot Cap-1 Maneuver	525	732	_	_	1216	_
Stage 1	728	- 102			1210	_
	832		-	-	_	
Stage 2	032	-	-	-	-	-
Platoon blocked, %	-04		-	-	1010	-
Mov Cap-1 Maneuver	521	732	-	-	1216	-
Mov Cap-2 Maneuver	588	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	11.6		0		0.4	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		1151	-		1216	051
HCM Lane V/C Ratio		-				-
		-			0.006	-
HCM Control Delay (s)		-	-	•	8	-
HCM Lane LOS		-	-	В	A	-
HCM 95th %tile Q(veh))	-	-	0.3	0	-

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	28	78	57
Average Queue (ft)	4	38	19
95th Queue (ft)	20	67	40
Link Distance (ft)			939
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100	150	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Morris Acres Road & Reedybrook Crossing

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	35	3
Average Queue (ft)	12	0
95th Queue (ft)	36	3
Link Distance (ft)	370	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Morris Acres Road & Walden Creek Drive

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	54	28
Average Queue (ft)	23	2
95th Queue (ft)	50	14
Link Distance (ft)	326	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	9	52	118	74
Average Queue (ft)	1	20	51	25
95th Queue (ft)	6	45	94	53
Link Distance (ft)	606			939
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100	150	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 2: Morris Acres Road & Reedybrook Crossing

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	42	21
Average Queue (ft)	17	2
95th Queue (ft)	42	12
Link Distance (ft)	370	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Morris Acres Road & Walden Creek Drive

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	68	24
Average Queue (ft)	30	2
95th Queue (ft)	59	13
Link Distance (ft)	326	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Appendix F: Synchro & SimTraffic Output: Build-Out (2025)

Intersection						
Int Delay, s/veh	4.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1		ሻ	↑		7
Traffic Vol, veh/h	237	43	28	135	143	60
Future Vol, veh/h	237	43	28	135	143	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	150	0
Veh in Median Storage,	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	8	4	5	2	2
Mvmt Flow	263	48	31	150	159	67
		.0	•			•
	1ajor1		Major2		Minor1	
Conflicting Flow All	0	0	311	0	499	287
Stage 1	-	-	-	-	287	-
Stage 2	-	-	-	-	212	-
Critical Hdwy	-	-	4.14	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.236	-	3.518	3.318
Pot Cap-1 Maneuver	_	_	1238	_	531	752
Stage 1	_	_	-	-	762	-
Stage 2	_	_	_	_	823	_
Platoon blocked, %	_	_		_	0_0	
Mov Cap-1 Maneuver	_	_	1238	_	518	752
Mov Cap-2 Maneuver	_	_	1200	_	593	- 102
Stage 1		_	_	_	762	_
Stage 2	-	_	_	_	802	_
Staye 2	-	_	_	_	002	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.4		12.4	
HCM LOS					В	
Minor Lane/Major Mvm	t I	VBLn1		EBT	EBR	WBL
Capacity (veh/h)		593	752	-	-	1238
HCM Lane V/C Ratio		0.268	0.089	-	-	0.025
HCM Control Delay (s)		13.3	10.3	-	-	8
HCM Lane LOS		В	В	-	-	Α
HCM 95th %tile Q(veh)		1.1	0.3	-	-	0.1

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		*	1>		*	1>	
Traffic Vol, veh/h	9	4	7	17	4	23	7	162	9	5	69	5
Future Vol, veh/h	9	4	7	17	4	23	7	162	9	5	69	5
Conflicting Peds, #/hr		0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	_	None	_	_	None	_	_	None	_	_	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storag	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	_	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	7	2
Mvmt Flow	10	4	8	19	4	26	8	182	10	6	78	6
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	311	301	81	302	299	187	84	0	0	192	0	0
Stage 1	93	93	-	203	299	107	04	-	_	132	-	-
Stage 2	218	208	-	99	96	-	-	-	-	-	_	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	_	-	4.12	_	-
Critical Hdwy Stg 1	6.12	5.52	0.22	6.12	5.52	0.22	4.12		_	4.12	_	_
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	_	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	_	- -	2.218		_
Pot Cap-1 Maneuver	642	612	979	650	613	855	1513	_	<u>-</u>	1381	-	<u>-</u>
Stage 1	914	818	313	799	733	000	1010	_	- -	1001	_	_
Stage 2	784	730	_	907	815	-	-	-	<u>-</u>	_	_	-
Platoon blocked, %	704	130	-	307	013	_	_	_	_		_	_
Mov Cap-1 Maneuver	614	606	979	636	607	855	1513	_	-	1381	_	
Mov Cap-1 Maneuver		606	513	636	607	-	1010	_	_	1001	_	_
Stage 1	909	815	-	795	729	-	-	-	-		-	
Stage 2	752	726		891	812	_			_		_	_
Olage Z	102	120		001	012	_						
Approach	EB			WB			NB			SB		
				10.3			0.3			0.5		
HCM LOS	10.3 B						0.5			0.5		
HCM LOS	В			В								
Minor Lane/Major Mvr	nt	NBL	NBT	NRR	EBLn1V	VRI n1	SBL	SBT	SBR			
Capacity (veh/h)		1513	NDI	TIDIT	704	731	1381	UDI	ODIT			
HCM Lane V/C Ratio		0.005	-	-	0.032	0.068	0.004	_	-			
HCM Control Delay (s	.\	7.4	-	-	10.3	10.3	7.6		-			
HCM Lane LOS)		-	-	10.3 B	10.3 B	7.6 A	-	-			
HCM 95th %tile Q(vel	2)	A 0	-	-	0.1	0.2	0	-	-			
	IJ	U	_	-	0.1	0.2	U	-	-			

Intersection Int Delay, s/veh 1.6					
Movement WBL WE	RD NII	ВТ	NBR	SBL	SBT
			NDK	SDL 1	
		}	20		↑
Traffic Vol, veh/h 38		68	28	11	94
Future Vol, veh/h 38		68	28	11	94
Conflicting Peds, #/hr 0	0	0	0	0	0
Sign Control Stop St			Free	Free	Free
RT Channelized - No			None	-	None
Storage Length 0	-	-	-	50	-
Veh in Median Storage, # 0	-	0	-	-	0
Grade, % 0	-	0	-	-	0
		87	87	87	87
Heavy Vehicles, % 3	2	2	15	10	4
Mvmt Flow 44	6 1	93	32	13	108
Majay/Minay Minayd	Maia	1		Anin m	
Major/Minor Minor1	Majo			Major2	
	09	0	0	225	0
Stage 1 209	-	-	-	-	-
Stage 2 134	-	-	-	-	-
J	22	-	-	4.2	-
Critical Hdwy Stg 1 5.43	-	-	-	-	-
Critical Hdwy Stg 2 5.43	-	-	-	-	-
Follow-up Hdwy 3.527 3.3	18	-	-	2.29	-
Pot Cap-1 Maneuver 651 8	31	-	-	1298	-
Stage 1 824	-	-	-	-	-
Stage 2 890	-	-	-	-	-
Platoon blocked, %		-	-		-
	31	_	_	1298	_
Mov Cap-2 Maneuver 681	-	_	-	-	_
Stage 1 824	_	_	_	_	_
Stage 2 881	_	_	_	_	_
Otage 2 001					
Approach WB	1	NB		SB	
HCM Control Delay, s 10.6		0		0.8	
HOW CONTION Delay, 5 10.0					
, .					
HCM LOS B	DT NI		DL .4	ODI	ODT
HCM LOS B Minor Lane/Major Mvmt NI		BRWI		SBL	SBT
HCM LOS B Minor Lane/Major Mvmt NI Capacity (veh/h)	<u>3T NE</u> -	-	696	1298	SBT -
HCM LOS B Minor Lane/Major Mvmt NI Capacity (veh/h) HCM Lane V/C Ratio		-	696 0.071	1298 0.01	
HCM LOS B Minor Lane/Major Mvmt NI Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	-	-	696 0.071 10.6	1298 0.01 7.8	-
HCM LOS B Minor Lane/Major Mvmt NI Capacity (veh/h) HCM Lane V/C Ratio	-	-	696 0.071	1298 0.01	-

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		1→		*	^
Traffic Vol, veh/h	4	7	197	4	4	71
Future Vol, veh/h	4	7	197	4	4	71
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	-	_	-	100	-
Veh in Median Storage		_	0	-	-	0
Grade, %	0	_	0	<u>-</u>	_	0
Peak Hour Factor	90	90	90	90	90	90
	2	2	2	2	2	2
Heavy Vehicles, %	4					
Mvmt Flow	4	8	219	4	4	79
Major/Minor I	Minor1	N	/lajor1	l	Major2	
Conflicting Flow All	308	221	0	0	223	0
Stage 1	221	_	_	_	_	_
Stage 2	87	_	_	_	_	_
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		_	_	2.218	_
Pot Cap-1 Maneuver	684	819			1346	_
Stage 1	816	-	_		1040	_
Stage 2	936	_	-	-		
	930	-	-	-	-	
Platoon blocked, %	600	010	-	-	1246	-
Mov Cap-1 Maneuver	682	819	-	-	1346	-
Mov Cap-2 Maneuver	702	-	-	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	9.7		0		0.4	
HCM LOS	A		· ·		0.1	
TIOM EGG	,,					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-		1346	-
HCM Lane V/C Ratio		-	-	0.016	0.003	-
HCM Control Delay (s)		-	_	9.7	7.7	-
HCM Lane LOS		-	-	Α	Α	-
HCM 95th %tile Q(veh)	-	-	0	0	-
70000 00(1011	,			J	_	

Intersection						
Int Delay, s/veh	5.2					
-	EBT	EBR	WBL	WBT	NBL	NBR
		EDK				
Lane Configurations	136	100	77	100	166	7
Traffic Vol, veh/h	236	100	77	263	166	93
Future Vol, veh/h	236	100	77	263	166	93
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	450	None
Storage Length	_	-	100	-	150	0
Veh in Median Storage,		-	-	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	268	114	88	299	189	106
Major/Minor Ma	ajor1	ı	Major2		Minor1	
Conflicting Flow All	0	0	382	0	800	325
Stage 1	-		302	-	325	323
Stage 2	-	-	-	-	475	-
	-	-	4.12		6.42	6.22
Critical Hdwy Critical Hdwy Stg 1		-	4.12	-	5.42	0.22
	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	2.218	-	3.518	2 240
Follow-up Hdwy	-	-				
Pot Cap-1 Maneuver	-	-	1176	-	354 732	716
Stage 1	-	-	-	-		-
Stage 2	-	_	_	-	626	-
Platoon blocked, %	-	-	4470	-	007	740
Mov Cap-1 Maneuver	-	-	1176	-	327	716
Mov Cap-2 Maneuver	-	-	-	-	440	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	579	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.9		16.2	
HCM LOS	J		1.5		C	
TIOW EOO						
Minor Lane/Major Mvmt	ľ	VBLn1		EBT	EBR	WBL
Capacity (veh/h)		440	716	-	-	1176
HCM Lane V/C Ratio		0.429	0.148	-	-	0.074
HCM Control Delay (s)		19.2	10.9	-	-	8.3
HCM Lane LOS		С	В	-	-	Α
HCM 95th %tile Q(veh)		2.1	0.5	-	-	0.2
•						

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	4	LDIX	1100	4	TIDIT	7	1>	HOIL	ħ	1	OBIT
Traffic Vol, veh/h	12	4	14	10	4	13	19	228	27	15	138	14
Future Vol, veh/h	12	4	14	10	4	13	19	228	27	15	138	14
Conflicting Peds, #/hr		0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	- -	- -	None	-	-	None	-	-	None	-	-	None
Storage Length	_	_	-	_	_	-	100	_	-	100	_	-
Veh in Median Storag	e.# -	0	_	_	0	_	-	0	_	-	0	_
Grade, %	-	0	_	_	0	_	_	0	_	_	0	_
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	4	16	11	4	15	21	256	30	17	155	16
Major/Minor	Minor2			Minor1			Major1			Major2		
	520	525	163	520	518	271	171	0	0	286	0	0
Conflicting Flow All Stage 1	197	197	103	313	313	211	1/1		U	∠00		
Stage 1	323	328	-	207	205	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	U.ZZ	6.12	5.52	0.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 2	6.12	5.52	<u>-</u>	6.12	5.52	_	_	_	<u>-</u>	<u>-</u>	-	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218		-	2.218	-	_
Pot Cap-1 Maneuver	467	4.018	882	467	4.016	768	1406	_	_	1276	-	_
Stage 1	805	738	002	698	657	100	1700			1210	_	-
Stage 2	689	647	-	795	732	<u>-</u>	_	_	_	-	_	-
Platoon blocked, %	003	047	_	133	132	<u>-</u>			_	_	_	_
Mov Cap-1 Maneuver	445	445	882	446	449	768	1406	_	_	1276	_	
Mov Cap-1 Maneuver		445	- 002	446	449	700	1700			1210	_	
Stage 1	793	728	-	688	647	-				-	_	
Stage 2	661	637	_	766	722	_				_	_	_
Olage Z	501	001		100	122							
Approach	EB			WB			NB			SB		
HCM LOS				11.8			0.5			0.7		
HCM LOS	В			В								
Minor Long/Major Ma	t	NDI	NDT	NDD		MDL1	CDI	CDT	CDD			
Minor Lane/Major Mvi	ΠL	NBL	NBT	NBK	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1406	-	-	579	560	1276	-	-			
HCM Lane V/C Ratio		0.015	-	-	0.058			-	-			
HCM Control Delay (s	5)	7.6	-	-	11.6	11.8	7.9	-	-			
HCM Lane LOS	1. \	A	-	-	В	В	A	-	-			
HCM 95th %tile Q(vel	n)	0	-	-	0.2	0.2	0	-	-			

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		1>		ሻ	<u> </u>
Traffic Vol, veh/h	45	5	273	62	7	157
Future Vol, veh/h	45	5	273	62	7	157
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	-	-	-	50	-
Veh in Median Storage	, # 0	_	0	_	-	0
Grade, %	0	_	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	10	2	2	2	2	2
Mvmt Flow	51	6	307	70	8	176
		•				
NA=:==/NA:===	A: A		1-:1		4-:0	
	/linor1		Major1		Major2	
Conflicting Flow All	534	342	0	0	377	0
Stage 1	342	-	-	-	-	-
Stage 2	192	-	-	-	-	-
Critical Hdwy	6.5	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	493	701	-	-	1181	-
Stage 1	702	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	490	701	-	-	1181	-
Mov Cap-2 Maneuver	565	-	-	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Approach	WB		NB		SB	
	11.9		0		0.3	
HCM Control Delay, s HCM LOS	11.9 B		U		0.5	
HOW LOS	D					
Minor Lane/Major Mvm	t	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	576	1181	_
HCM Lane V/C Ratio		-	-	0.098	0.007	-
HCM Control Delay (s)		-	-	11.9	8.1	-
HCM Lane LOS		-	-	В	Α	-
HCM 95th %tile Q(veh)		-	-	0.3	0	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WDL	אטא	IND I	NDK	SBL 1	<u>SB1</u>
Traffic Vol, veh/h		5	253	1		T 171
	4	5		4	5	
Future Vol, veh/h	4	5	253	4	5	171
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	6	281	4	6	190
Majar/Minar	11:1		1-:1		Maia #0	
	Minor1		//ajor1		Major2	
Conflicting Flow All	485	283	0	0	285	0
Stage 1	283	-	-	-	-	-
Stage 2	202	-	-	-	-	-
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	541	756	-	-	1277	-
Stage 1	765	-	-	-	-	-
Stage 2	832	_	_	_	_	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	538	756	_	_	1277	_
Mov Cap-2 Maneuver	607	-			1211	_
Stage 1	765	_	-	_	_	
	828		-	-		-
Stage 2	020	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	10.4		0		0.2	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		-	-	682	1277	-
HCM Lane V/C Ratio		-	-	0.015	0.004	-
HCM Control Delay (s)		-	-		7.8	-
HCM Lane LOS		-	_	В	Α	_
HCM 95th %tile Q(veh)	-	_	0	0	_
TIOM JOHN JOHN WINE WINELL	,			U	U	

Intersection: 1: Morris Acres Road & Jenks Road

Movement	WB	NB	NB
Directions Served	L	L	R
Maximum Queue (ft)	38	87	46
Average Queue (ft)	6	40	20
95th Queue (ft)	26	70	37
Link Distance (ft)			948
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100	150	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Morris Acres Road & Reedybrook Crossing/Site Driveway

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	33	51	10	10
Average Queue (ft)	16	24	0	0
95th Queue (ft)	41	45	6	6
Link Distance (ft)	371	307		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Morris Acres Road & Walden Creek Drive

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	57	16
Average Queue (ft)	25	1
95th Queue (ft)	51	11
Link Distance (ft)	326	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 4: Morris Acres Road & North Site Driveway

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	23	16
Average Queue (ft)	7	1
95th Queue (ft)	24	8
Link Distance (ft)	372	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 1: Morris Acres Road & Jenks Road

Movement	EB	WB	NB	NB
Directions Served	TR	L	L	R
Maximum Queue (ft)	15	56	153	76
Average Queue (ft)	1	19	58	27
95th Queue (ft)	7	46	112	52
Link Distance (ft)	606			948
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100	150	
Storage Blk Time (%)		0	1	0
Queuing Penalty (veh)		0	1	0

Intersection: 2: Morris Acres Road & Reedybrook Crossing/Site Driveway

Movement	EB	WB	NB	SB	
Directions Served	LTR	LTR	L	L	
Maximum Queue (ft)	45	43	27	28	
Average Queue (ft)	19	20	3	2	
95th Queue (ft)	44	44	17	15	
Link Distance (ft)	371	307			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Morris Acres Road & Walden Creek Drive

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	67	21
Average Queue (ft)	29	1
95th Queue (ft)	58	11
Link Distance (ft)	326	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		50
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 4: Morris Acres Road & North Site Driveway

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	23	14
Average Queue (ft)	5	1
95th Queue (ft)	20	10
Link Distance (ft)	372	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1

Certificate Of Completion

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Lyle.Overcash@kimley-horn.com

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Payment Events	Status	Timestamps
Completed	Security Checked	3/8/2022 2:39:57 PM
Signing Complete	Security Checked	3/8/2022 2:39:57 PM
Certified Delivered	Security Checked	3/8/2022 2:39:26 PM
Envelope Sent	Hashed/Encrypted	3/8/2022 2:39:16 PM
Envelope Summary Events	Status	Timestamps
Notary Events	Signature	Timestamp
Witness Events	Signature	Timestamp
Carbon Copy Events	Status	Timestamp
Certified Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Editor Delivery Events	Status	Timestamp
In Person Signer Events	Signature	Timestamp

Rezoning Case: 22CZ05 Morris Tract PUD

Planning Board Meeting Date: July 11, 2022



Report Requirements:

Per NCGS §160D-604(b), all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Per NCGS §160D-604(d), the Planning Board shall advise and comment on whether the proposed action is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

consideration or appro	val of the proposed amendment by the Town Council.
PROJECT DESCRIPTIO Acreage: PIN(s):	<u>N:</u> ±17.09 acres 0732295017, 0732289587, 0732382530, & 07323827
Current Zoning:	Rural Residential (RR)
Proposed Zoning:	Planned Unit Development-Conditional Zoning (PUD-CZ)
2045 Land Use Map:	Medium Density Residential
Town Limits:	0732382709 & 0732295017 are in the ETJ; 0732289587 & 0732382530 are in Town limits
	whether the project is consistent or inconsistent with the following officially adopted plans, le plans have a check mark next to them.
✓ Apex Transport ✓ Consistent	ation Plan Inconsistent Reason:
Parks, Recreation Consistent	n, Open Space, and Greenways Plan Inconsistent Reason:

Rezoning Case: 22CZ05 Morris Tract PUD

Planning Board Meeting Date: July 11, 2022



Legislative Considerations:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1.	•	• •	nditional Zoning (CZ) District use's appropriateness ses, goals, objectives, and policies of the 2045 Land
	✓ Consistent	Inconsistent	Reason:
2.	Compatibility. The propose location and compatibility were Consistent		District use's appropriateness for its proposed nding land uses. Reason:
3.	Zoning district supplemental with Sec. 4.4 Supplemental Consistent		Conditional Zoning (CZ) District use's compliance Reason:
4.	minimization of adverse ef	fects, including visual impoverse impacts on surroundi	proposed Conditional Zoning (CZ) District use's act of the proposed use on adjacent lands; and ing lands regarding trash, traffic, service delivery, and not create a nuisance. Reason:
		_	
5.	_	protection from significant	d Conditional Zoning District use's minimization of deterioration of water and air resources, wildlife Reason:

Rezoning Case: 22CZ05 Morris Tract PUD

Planning Board Meeting Date: July 11, 2022



7. Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.	6.	Impact on public facilities. The proposed Conditional Zon impacts on public facilities and services, including roads schools, police, fire and EMS facilities. Consistent Inconsistent	
or welfare of the residents of the Town or its ETJ. Consistent			
or welfare of the residents of the Town or its ETJ. Consistent		Hardth anfatr and malfana The man and Conditional 7	viv (C7) District conformation the levelth confet.
9. Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. Consistent	7.	or welfare of the residents of the Town or its ETJ.	
9. Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. Consistent			
9. Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. Consistent			
a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. ✓ Consistent ☐ Inconsistent Reason: 10. Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.	8.	substantially detrimental to adjacent properties.	
a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. ✓ Consistent ☐ Inconsistent Reason: 10. Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.			
a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. ✓ Consistent ☐ Inconsistent Reason: 10. Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.			
complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.	9.	a nuisance or hazard due to traffic impact or noise, or be the Conditional Zoning (CZ) District use.	cause of the number of persons who will be using
complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.			
complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.			
	10.	complies with all standards imposed on it by all other layout, and general development characteristics.	applicable provisions of this Ordinance for use,

Rezoning Case: 22CZ05 Morris Tract PUD

Planning Board Meeting Date: July 11, 2022



		TY CARO
Plan	nning Board Recommendation:	
	Motion:	To recommend approval as presented.
ı	Introduced by Planning Board member:	Tina Sherman
	Seconded by Planning Board member:	Keith Braswell
	Approval: the project is consistent with considerations listed above.	h all applicable officially adopted plans and the applicable legislative
√	• • •	is not consistent with all applicable officially adopted plans and/or ns as noted above, so the following conditions are recommended to make it fully consistent:
As pre	esented.	
	Denial: the project is not consistent legislative considerations as noted about	with all applicable officially adopted plans and/or the applicable ove. With 7 Planning Board Member(s) voting "aye" With 0 Planning Board Member(s) voting "no"
	Reasons for dissenting votes:	
This	report reflects the recommendation of	the Planning Board, this the <u>11th</u> day of <u>July</u> 2022.
Atte	st:	
/	Megul 19	Dianne Khin Digitally signed by Dianne Khin Date: 2022.07.11 17:33:53

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Reginald Skinner, Planning Board Chair

Dianne Khin, Director of Planning and

Community Development



POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ05 MORRIS TRACT PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant/Authorized Agent: Brendie Vega, WithersRavenel **Property Addresses:** 0, 7208, 7208-B, & 7304 Morris Acres Road

Acreage: ±17.09 acres

Property Identification Numbers (PINs): 0732295017, 0732382709, 0732289587, & 0732382530

2045 Land Use Map Designation: Medium Density Residential

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: July 11, 2022 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit https://www.apexnc.org/ on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Planning Board meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/38187.

Dianne F. Khin, AICP
Director of Planning and Community Development

Published Dates: June 24 – July 11, 2022

APEX, NORTH CAROLINA 27502 TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ05 MORRIS TRACT PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante/Agente autorizado: Brendie Vega, WithersRavenel

Dirección de las propiedades: 0, 7208, 7208-B, & 7304 Morris Acres Road

Superficie: ±17.09 acres

Números de identificación de las propiedades: 0732295017, 0732382709, 0732289587, & 0732382530

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning

(PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 11 de julio de 2022 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.apexnc.org/ el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión de la Junta de Planificación se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/38187.

> Dianne F. Khin, AICP Directora de Planificación y Desarrollo Comunitario

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POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ05
MORRIS TRACT PUD (PLANNED UNIT
DEVELOPMENT)

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant/Authorized Agent: Brendie Vega, WithersRavenel **Property Addresses:** 0, 7208, 7208-B, & 7304 Morris Acres Road

Acreage: ±17.09 acres

Property Identification Numbers (PINs): 0732295017, 0732382709, 0732289587, & 0732382530

Current 2045 Land Use Map Designation: Medium Density Residential

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council.

Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Town Council meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at https://www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/38187.

Dianne F. Khin, AICP
Director of Planning and Community Development

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ05 MORRIS TRACT PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante/Agente autorizado: Brendie Vega, WithersRavenel

Dirección de las propiedades: 0, 7208, 7208-B, & 7304 Morris Acres Road

Superficie: ±17.09 acres

Números de identificación de las propiedades: 0732295017, 0732382709, 0732289587, & 0732382530

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio de 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

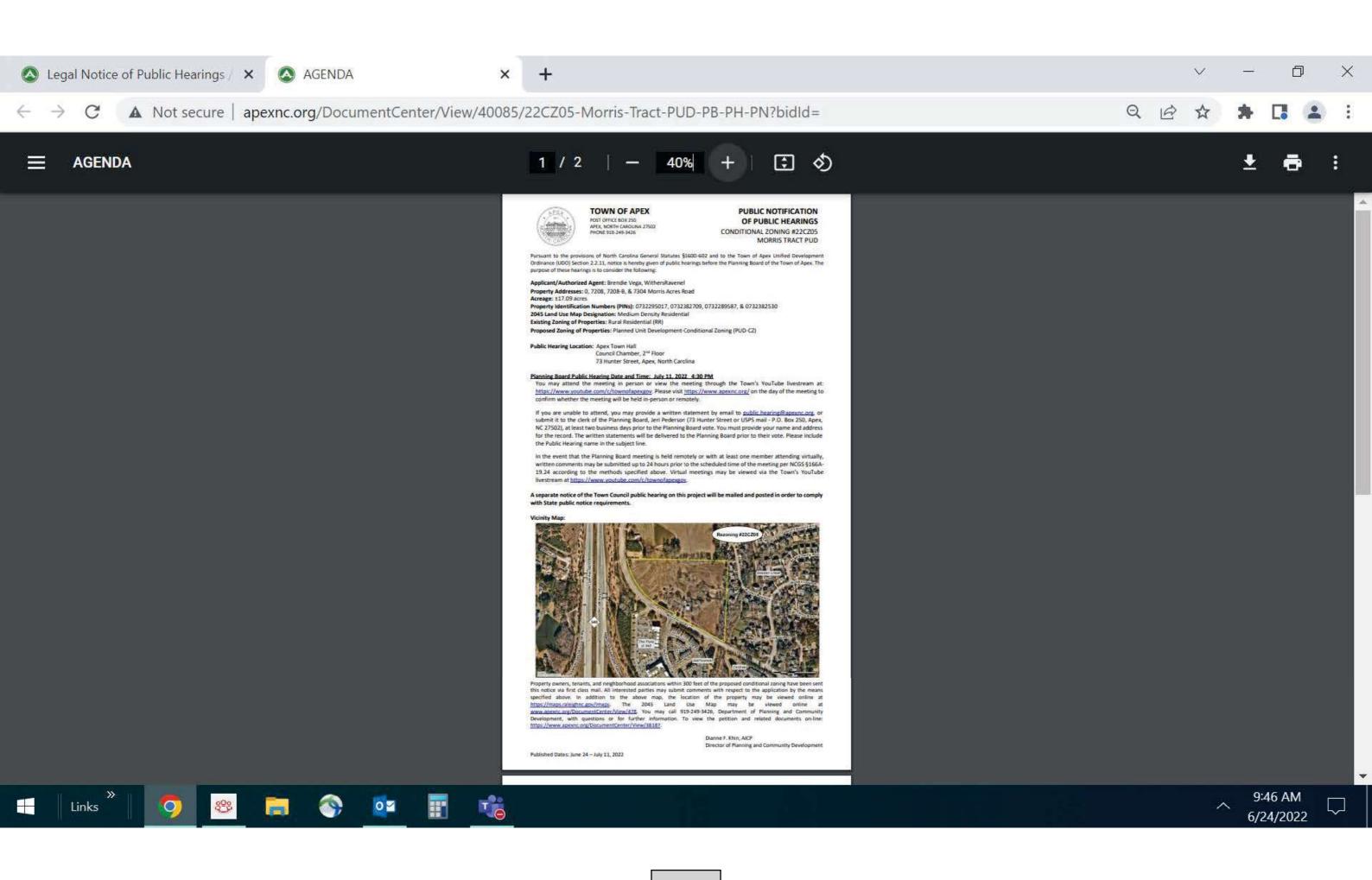
En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

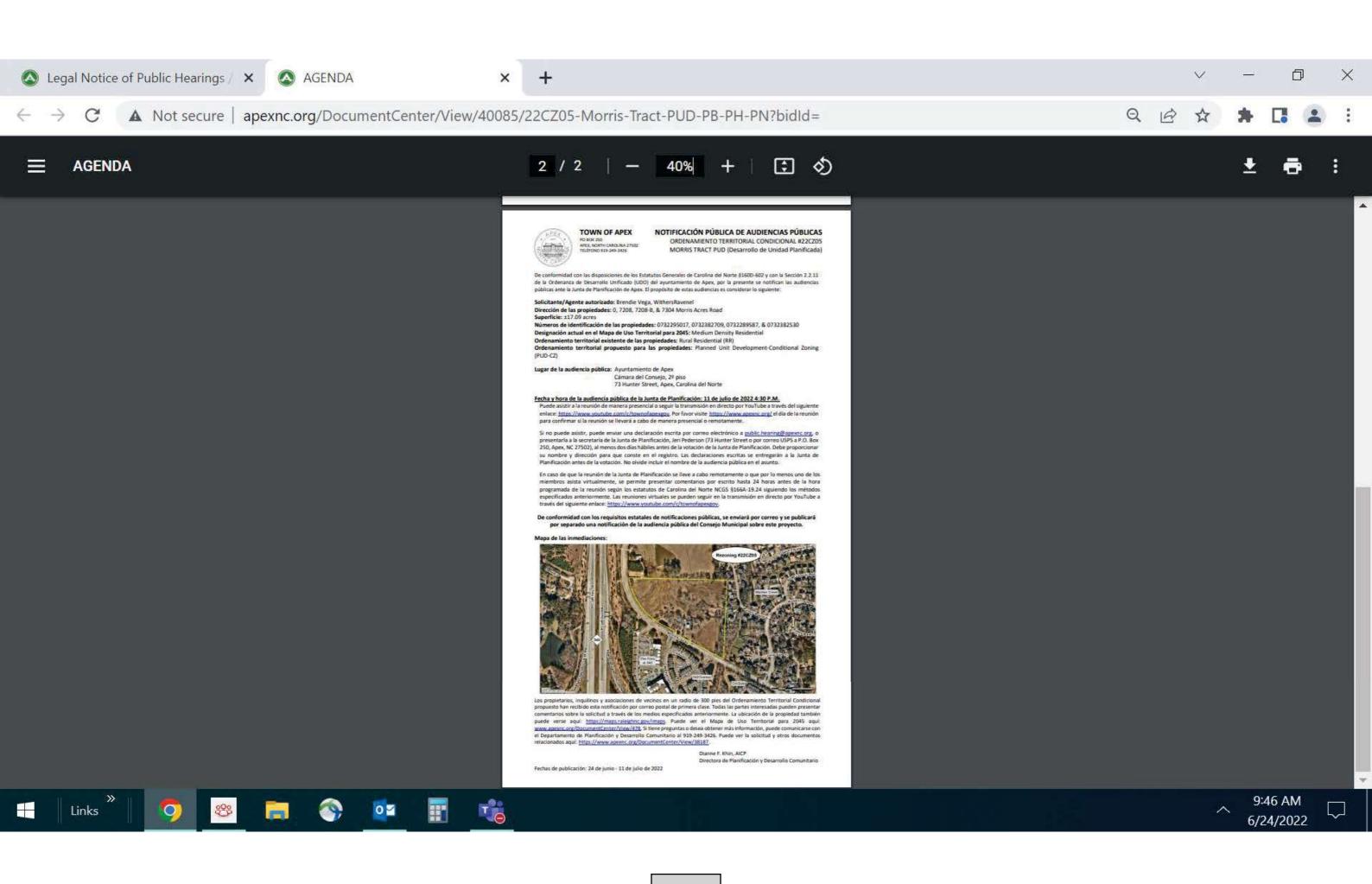
Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/38187.

Dianne F. Khin, AICP
Directora de Planificación y Desarrollo Comunitario





nc.org/DocumentCenter/View/40132/22CZ05-Morris-Tract-PUD-TC-PH-COMBINED

















TOWN OF APEX POST OFFICE BOX 250 APEX. NORTH CARDLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ05 MORRIS TRACT PUD (PLANNED UNIT DEVELOPMENT)

Pursuant to the provisions of North Carolina General Statutes \$1600-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant/Authorized Agent: Brendie Vega, WithersRavenel Property Addresses: 0, 7208, 7208-B, & 7304 Morris Acres Road Acreage: ±17.09 acres

Property Identification Numbers (PINs): 0732295017, 0732382709, 0732289587, & 0732382530

Current 2045 Land Use Map Designation: Medium Density Residential

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall Council Chamber, 2nd Floor 73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Town Council meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/38187,

> Dianne F. Khin, AICP Director of Planning and Community Development

Published Dates: July 1 - 26, 2022













nc.org/DocumentCenter/View/40129/22CZ07-TC-Notice-Combined



e-Combined







TOWN OF APEX PO BOX 250 APEX, NORTH CAROLINA 27502 TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ07 Chapel Ridge North PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte \$1600-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: High Street District Development, Inc.

Agente autorizado: Joshua Dix

Dirección de las propiedades: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd, and 1512 Clark Farm Rd Superficie: ±20.62 acres

Números de identificación de las propiedades: 0732340602, 0732347912, 0732343920, 0732354594, 0732352538, 0732249869, & 0732256180.

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio de 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public hearing@apexnc.org. o presentaria a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.voutube.com/c/townofapexgov

Mapa de las inmediaciones



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighoc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/38521

> Dianne F. Khin, AICP Directora de Planificación y Desarrollo Comunitario

Fechas de publicación: 1 de julio - 26 de julio de 20





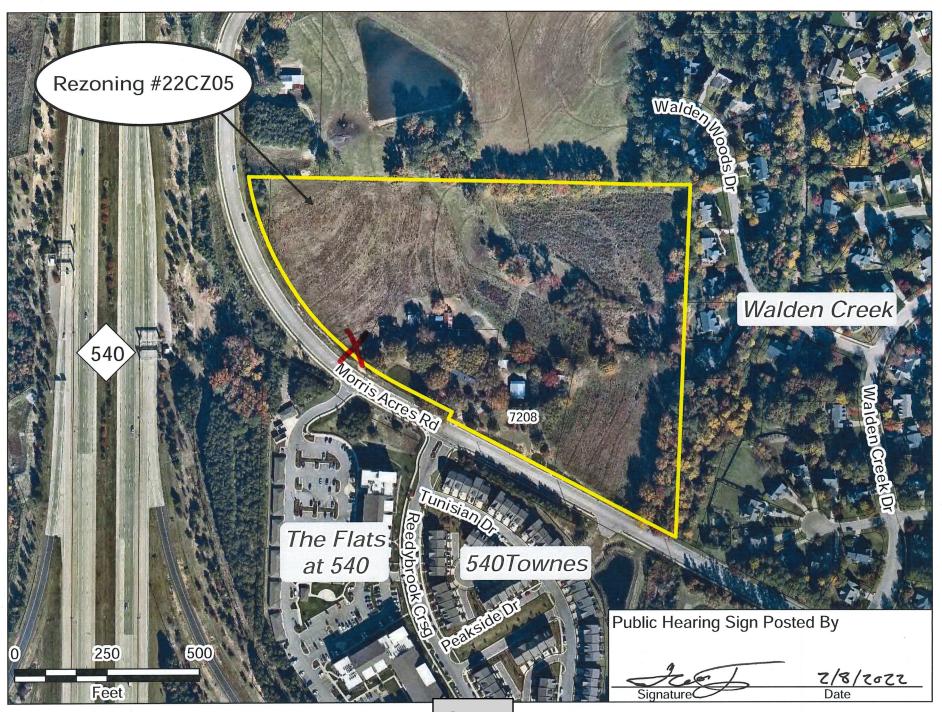














POST OFFICE BOX 250 APEX. NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ05

Morris Tract PUD

Project Location:

0, 7208, 7208-B, & 7304 Morris Acres Road

Applicant or Authorized Agent:

Brendie Vega

Firm:

WithersRavenel

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on June 24, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy and mailing addresses of property owners and tenants within 300' of the land subject to notification.

6/27/2022

Director of Planning and Community Development

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me,

Jeri Chastain Pederson a Notary Public for the above

State and County, this the

day of

, 202 2

JERI CHASTAIN PEDERSON Notary Public Wake County, North Carolina My Commission Expires March 10, 2024

My Commission Expires: 3 / 10 / 2024



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Applicant or Authorized Agent:

Brendie Vega

Firm:

WithersRavenel

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on July 1, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy and mailing addresses of property owners and tenants within 300' of the land subject to notification.

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me,

Jeri Chastain Rederson, a Notary Public for the above

State and County, this the

day of

JERI CHASTAIN PEDERSON

Notary Public Wake County, North Carolina My Commission Expires March 10, 2024

My Commission Expires: 3 1 10 1 2024



Student Assignment

5625 Dillard Drive Cary, NC, 27518 Email: studentassignment@wcpss.net

April 13, 2022

Dianne Khin, AICP
Director, Department of Planning and Community Development
Town of Apex
Dianne.Khin@apexnc.org

Dear Dianne,

The Wake County Public School System (WCPSS) Office of School Assignment received information about a proposed rezoning/development within the Town of Apex planning area. We are providing this letter to share information about WCPSS's capacity related to the proposal. The following information about the proposed rezoning/development was provided through the Wake County Residential Development Notification database:

- Date of application: February 1, 2022
- Name of development: 22CZo5 Morris Tract PUD
- Address of rezoning: 0, 7304, & 7208 Morris Acres Rd
- Total number of proposed residential units: 110
- Type(s) of residential units proposed: 100 Townhomes, 10 Single-family detached

Based on the information received at the time of application, the Office of School Assignment is providing the following assessment of possible impacts to the Wake County Public School System:

\square	Schools at <u>all</u> grade levels within the current assignment area for the proposed rezoning/development are anticipated to have <u>sufficient</u> capacity for future students.					
	rezoni	ng/development are antici	pated to	hin the current assignment are to have <u>insufficient</u> capacity for current assignment area should	future s	students;
		Elementary		Middle		High
The fo	llowing	mitigation of capacity con	cerns d	ue to school construction or ex	kpansior	n is anticipated:
	Not ap	oplicable – existing school o	apacity	is anticipated to be sufficient.		
	Schoo	l expansion or constructior	within	the next five years is not antic	cipated t	to address concerns
☐ School expansion or construction within the next five years may address concerns at these grade levels:						
		Elementary		Middle		High
Thank you for sharing this information with the Town of Apex Planning Board and Town Council as they consider the proposed rezoning/development.						
Sincerely, Glenn Carrozza						

www.wcpss.net

tel: (919) 431-7333

fax: (919) 694-7753

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: July 26, 2022

Item Details

Presenter(s): Lauren Staudenmaier, Planner II

Department(s): Planning and Community Development

Requested Motion

Public Hearing and possible motion to approve Rezoning Application #22CZ06 Yellowbridge PUD. The applicant, Matthew Carpenter for Lennar Carolinas, seeks to rezone approximately 48.24 acres from Rural Residential (RR) to Planned Unit Development-Conditional Zoning (PUD-CZ). The proposed rezoning is located at 2813 & 2817 US 64 Highway West.

Approval Recommended?

The Planning and Community Development Department recommends approval.

The Planning Board held a public hearing on July 11, 2022 and by a vote of 4-3 recommended approval of the rezoning with the following additional condition offered by the applicant: "6' opaque privacy fence shall be installed by developer along inside of the buffer along southern property line."

Item Details

The properties to be rezoned are identified as PINs 0722743789 & 0722752304.

Attachments

- Staff Report
- Vicinity Map
- Application



Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 2813 & 2817 US 64 Highway West

Applicant/Agent: Matthew Carpenter, Parker Poe/ Tucker Ennis, Lennar Carolinas, LLC.,

Owner: Yellowbridge Capital, LLC.

PROJECT DESCRIPTION:

Acreage: ±48.24 acres

PINs: 0722743789 & 0722752304
Current Zoning: Rural Residential (RR)

Proposed Zoning: Planned Unit Development-Conditional Zoning (PUD-CZ)

Current 2045 Land Use Map: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium Density

Residential and Commercial Services

Town Limits: ETJ

Adjacent Zoning & Land Uses:

	Zoning	Land Use	
Wake County Highway District (HD); North: Planned Unit Development-Conditional Zoning (PUD-CZ #18CZ31)		Commercial; US 64 Highway West; Single- family Residential (Westford subdivision)	
South: Planned Unit Development-Conditional Use (PUD-CU #04CU15)		Single-family Residential (Stratford at Abbington subdivision)	
East: Rural Residential (RR); Medium Density Residential (MD)		Vacant; Single-family Residential (Abbington subdivision)	
West: Rural Residential (RR)		Vacant	

EXISTING CONDITIONS:

The properties are situated on the south side of US 64 Highway West, adjacent to Chanticlair Drive. The properties are north of Stratford at Abbington, west of Abbington, and east of Sweetwater subdivisions. The property located on 2817 US 64 Highway West is vacant with existing vegetation and a stream that bisects the property from west to east; and the property located on 2813 US 64 Highway West contains residential structures.

NEIGHBORHOOD MEETING:

The applicant conducted two neighborhood meetings on February 23, 2022 and June 8, 2022. The neighborhood meeting reports are attached.

WCPSS Coordination:

A Letter of Impact from Wake County Public School System (WCPSS) was received for this rezoning and is included in the staff report packet. WCPSS indicates that elementary and high schools within the current assignment area for this rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated. School

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



expansion or construction within the next five years may address concerns at the elementary and high school grade level.

2045 LAND USE MAP:

The 2045 Land Use Map designates the subject properties as Medium Density Residential. The residential portion of the proposed rezoning to Planned Unit Development-Conditional Zoning (PUD-CZ) is consistent with that Land Use Map designation. The proposed rezoning also includes commercial uses in an area adjacent to US 64 Highway West. If the properties are rezoned as proposed, the 2045 Land Use Map will automatically be amended to Medium Density Residential and Commercial Services per NCGS 160D-605(a).

PLANNED UNIT DEVELOPMENT PLAN:

The applicant is proposing a Planned Unit Development Plan with uses and development standards as follows:

Permitted Uses:

The development will include office, retail and residential uses. The Rezoned Lands may be used for, and only for, the uses listed below. The permitted uses are subject to the limitation and regulations stated in the UDO and any additional limitation or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

Residential Uses

- Single-family
- Townhouse
- Accessory apartment*

Recreational Uses

- Park, active
- Greenway
- Park, passive

Non-Residential

- Restaurant, general
- Restaurant, drive-through
- Medical or dental office or clinic
- Medical or dental laboratory
- Office, business or professional
- Publishing office
- Artisan Studio
- Barber and beauty shop
- Book store
- Convenience store
- Dry cleaners and laundry service
- Farmer's market
- Financial institution

- Recreation facility, private
- Utility, minor
- Grocery, general
- Grocery, specialty
- Health/fitness center or spa
- Kennel
- Newsstand or gift shop
- Personal service
- Pharmacy
- Printing and copying service
- Real estate sales
- Repair services, limited
- Retail sales, general
- Studio for art
- Tailor shop

^{*}Homeowners Association covenants shall not restrict the construction of accessory dwelling units.

Rezoning #22CZ06 Yellowbridge PUD

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- Floral shop
- Gas and fuel, retail
- Greenhouse or nursery, retail
- Utility, minor

- Upholstery shop
- Pet services
- Day care facility
- Veterinary clinic or hospital

Proposed Design Controls:

Residential:

Proposed Land Area: 44.93 acres
Maximum Number of units: 160 units
Maximum Density: 3.6 units per acre
Maximum Building Height: 45 feet, 3 stories

Maximum Built-Upon Area: 70%

Front Loaded Townhouse Minimum Lot Width: 18' Rear Loaded Townhouse Minimum Lot Width: 18'

Single-family Minimum Lot Width: 50'*
Single-family Minimum Lot Size: 6,000 sf

*Single-family detached homes adjacent to the Property's southernmost property line adjacent to the Abbington neighborhood from the northwestern corner of PIN 0722645333 to the northeastern corner of PIN 0722748868 shall have a minimum lot width of 60 feet.

Non-Residential:

Proposed Land Area: 3.5 acres

Maximum Building Square Feet: 25,000 sf

Maximum Building Height: 50'
Maximum Built-Upon Area: 70%

Setbacks

	Proposed Minimum Setbacks			
Front Loaded	Front	10'		
Townhouse	Side	0' (5' for end units)		
	Rear	5′		
	Corner Side	8′		
	Minimum Building Separation	10'		
	Minimum Buffer/RCA	10' for buildings; 5' for parking areas		
Rear Loaded	Front	5′		
Townhouse	Side	0' (5' for end units)		
	Rear	5′		
	Corner	8′		
	Minimum Building Separation	10'		
Single-Family	Front	20'		
Detached	Side	6'		
	Rear	15'		
	Corner	8′		
	Minimum Buffer/RCA	10' for buildings; 5' for parking areas		

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	Proposed Minimum Setbacks		
Non-Residential	Front (US-64)	10'	
	Side	10'	
	Rear	10'	
	Corner Side	10'	
	From Buffer/RCA	10' for buildings; 5' for parking areas	

Proposed RCA & Buffers

The proposed Yellowbridge PUD is located west of the Highway 540 Corridor and is required to provide a minimum 30% of RCA for the residential district and 25% RCA for the commercial district.

Residential and Non-Residential Buffers:

Residential and Non-Residential Bullets		
Perimeter Buffers:	UDO Required	Proposed
Along the Property's shared	20' Type A	30' Type A
property line with PIN 0722762014		
Along the Property's US-64	100' Type A/50' Type A (UDO	50' Type A*
Highway West frontage east of PIN	Section 8.2.6.B.5.f.ii.c)	
0722762014		
Along the Property's US-64	100' Type A	100' Type E
Highway West frontage west of PIN		
0722762014		
Along the Property's westernmost	20' Type B (Land Use Class 2 or 3);	20' Type B
boundary	10' Type B (Land Use Class 1)	
Along the north and south side of	10' Type A (Land Use Class 2 or 3);	10' Type D
Chanticlair Drive west of the Single-	10' Type D (Alley-loaded homes	
family Detached homes to the	facing a major collector)	
north of Chanticlair Drive		
Along the north side of Chanticlair	Within residential developments,	10' Type D
Drive adjacent to the Single-family	no street front buffer is required	
Detached homes north of	on minor collectors or residential	
Chanticlair Drive	streets	
Along the Property's easternmost	10' Type B (Land Use Class 2 or 3);	10' Type B
boundary adjacent to PIN	20' Type A (Land Use Class 4 or 5)	
0722850629		
Along the gas easement	20' Type B	10' Type A along both sides
		of gas easement (20' total)
Along the Property's southern	20' Type B (Land Use Class 2 or 3)	50' Type A** with a
property line from the northwest		minimum of 6 ft. tall
corner of PIN 0722645333 to the		opaque privacy fence along
northeast corner of PIN		the north edge of the
0722741431**		buffer
Along the Property's southern	20' Type B (Land Use Class 2 or 3)	50' Type A*** with a
property line from the northeast		minimum of 6 ft. tall
corner of PIN 0722741431 to the		opaque privacy fence along
northwest corner of PIN		the north edge of the
0722748868***		buffer

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



- * The Development shall meet requirements (i) through (iii) in UDO Section 8.2.6(B)(5)(f)(ii)(c) to reduce the buffer width along US-64 Highway West to 50 feet.
- ** This portion of the perimeter buffer shall remain undisturbed and supplemented with Type A buffer plantings.
- *** This portion of the perimeter buffer shall be cleared, graded, include a minimum 3-foot berm, and be replanted to a Type A buffer standard.

ZONING CONDITIONS

The following conditions shall also apply:

- 1. Homeowners Association covenants shall not restrict the construction of accessory dwelling units.
- 2. All heavy duty construction traffic shall enter and exit the site via US-64 Highway West. Heavy duty construction traffic shall not use Chanticlair Drive, Rothwood Way, or Lyndenbury Drive. "No Construction Traffic" signage shall be posted along Chanticlair Drive and Rothwood Way.
- 3. All dwelling units shall be pre-configured with conduit for a solar energy system.
- 4. The project shall install at least one (1) sign per SCM discouraging the use of fertilizer and to reduce pet waste near SCM drainage areas. The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- 5. The project shall install a minimum of two (2) pet waste stations.
- 6. The project shall plant drought resistant warm season grasses throughout the development to minimize irrigation and chemical use.
- 7. Stormwater control devices shall be designed and constructed so that post development peak runoff does not exceed pre-development peak runoff conditions for the 24-hour, 1 year, 10 year, and 25 year storm events.
- 8. Landscaping shall include at least four (4) native hardwood tree species throughout the Development.
- 9. No clearing or land disturbance shall be permitted within the riparian buffer, except the minimum necessary to install required road and utility infrastructure and SCM outlets. The SCM water storage and treatment shall not be permitted within the riparian buffer. Sewer infrastructure shall be designed to minimize impacts to riparian buffers.
- 10. Any outdoor lighting installed in the commercial area and on private amenities, signs, landscaping, walls, or fences shall be full cutoff LED fixtures with a maximum color temperature of 3000k. This condition shall not apply to lighting on single-family homes, townhouses, accessory buildings, or street lighting.
- 11. At least 75% of plants shall be native species. Landscaping will be coordinated with and approved by the Planning Department at site or subdivision review.
- 12. The Development shall include a minimum of two (2) residential restricted affordable housing townhouse or detached single-family median-income ownership units (the "Affordable Units"). The Affordable Units shall be constructed on-site and sold (includes unit price and lot price) at a mutually agreeable maximum affordable housing median-income ownership initial sales price (the "Initial Sales Price"). The Affordable Units shall be occupied by low or median-income households earning no more than one-hundred percent (100%) of the Raleigh NC Metropolitan Statistical Area (MSA), Area Median Income (AMI), adjusted for family size as most recently published by HUD (the "Income Limit"). For purposes of calculating the Initial Sales Price for the Affordable Units, affordable shall mean a reasonable down payment and monthly housing costs expected during the first calendar year of occupancy, including utilities or utility allowances, mortgage loan principal and interest, mortgage insurance, property taxes, homeowner's insurance, homeowner's association dues, if any, and all other property assessments, dues and fees assessed as a condition of property ownership, which does not exceed thirty percent (30%) times (x's) one-hundred percent

Rezoning #22CZ06 Yellowbridge PUD

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(100%) times (x's) the annual median-income limit (100% AMI Category), based on a family size that is equal to the actual number of bedrooms as the Affordable Units, applicable to the Raleigh, NC MSA as most recently published by the HUD. A restrictive covenant (i.e. resale deed restriction) with a minimum affordability period of fifteen (15) years (the "Affordability Period") shall be recorded in the Wake County Registry against each of the Affordable Units concurrently at the close of escrow upon the sale of the Affordable Units. A restrictive covenant (i.e. affordable housing agreement) between the Town and applicant shall be recorded in the Wake County Registry against each of the lots for the Affordable Units prior to the issuance of a building permit for such lots to memorialize the affordable housing terms and conditions of the approved zoning condition. The Affordable Units may be townhouses or single-family detached houses, at the discretion of the developer, and shall be designated on the Master Subdivision Final Plat, which may be amended from time to time. Final Affordable Housing Unit floor plan selection which includes the unit size and bedroom size will be at the discretion of the developer. The Affordable Units may be provided in multiple phases or in one single phase. Developer will work with the Town to identify qualifying buyers for the first sale of the Affordable Units (the "First Sale"). Following the First Sale of the Affordable Units, Developer shall not be responsible for managing the Affordable Units or performing marketing, applicant screening, and selection related to future sales of the Affordable Units. Town staff will assist with the administrative duties of the Affordable Units during the Affordable Period.

Architectural Standards

The proposed development offers the following architectural controls to ensure a consistency of character throughout the development, while allowing for enough variety to create interest and avoid monotony. Changes to the exterior materials, roof, windows, doors, process, trim, etc. are allowable with administrative approval at the staff level. Further details shall be provided at the time of development plan submittal. The following conditions shall apply:

RESIDENTIAL DISTRICT DESIGN GUIDELINES

Single-Family Detached:

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. The roof shall be pitched at 5:12 or greater for 75% of the building designs.
- 3. Eaves shall project at least 12 inches from the wall of the structure.
- 4. Garage doors shall have windows, decorative details or carriage-style adornments on them.
- 5. The garage shall not protrude more than 1 foot out from the front façade and front porch.
- 6. Garages on the front façade of a home that faces the street shall not exceed 30% of the total width of the house and garage together.
- 7. The visible side of a home on a corner lot facing the public street shall contain at least 3 decorative elements such as, but not limited to, the following elements:
 - Windows
 - Bay window
 - Recessed window
 - Decorative window
 - Trim around the windows
 - Wrap around porch or side porch
 - Two or more building materials
 - Decorative brick/stone
 - Decorative trim

- Decorative shake
- Decorative air vents on gable
- Decorative gable
- Decorative cornice
- Column
- Portico
- Balcony
- Dormer

Rezoning #22CZ06 Yellowbridge PUD

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- 8. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 9. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 10. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
- 11. Front porches shall be a minimum of 5 feet deep.
- 12. No more than 25% of lots may be accessed with J-driveways. There shall be no more than 3 such homes in a row on any single block. Any lots eligible for a J-driveway home shall be identified on the Final Plat.

Townhouses (front and alley loaded):

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. The roofline cannot be a single mass; it must be broken up horizontally and vertically between every unit.
- 3. Garage doors must have windows, decorative details or carriage-style adornments on them.
- 4. House entrances for units with front-facing single-car garages shall have a covered porch/stoop area leading to the front door.
- 5. The garage cannot protrude more than 1 foot out from the front façade or front porch.
- 6. The visible side of a townhome on a corner lot facing the public street shall contain at least 3 decorative elements such as, but not limited to, the following elements:
 - Windows
 - Bay window
 - Recessed window
 - Decorative window
 - Trim around the windows
 - Wrap around porch or side porch
 - Two or more building materials
 - Decorative brick/stone
 - Decorative trim

- Decorative shake
- Decorative air vents on gable
- Decorative gable
- Decorative cornice
- Column
- Portico
- Balcony
- Dormer
- 7. Building facades shall have horizontal relief achieved by staggering the units.
- 8. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 9. The rear and side elevations of the units with right-of-way frontage shall have trim around the windows.

COMMERCIAL DISTRICT DESIGN GUIDELINES

- 1. Architectural treatments such as varying roof forms, façade articulation, breaks in roof, walls with texture materials and ornamental details shall be incorporated to add visual interest.
- 2. Large expanses of blank walls greater than 25 feet in length or height shall be broken up with windows or other architectural features to reduce visual impacts.
- 3. Roof features may include flat roofs with parapet, hip roofs or awnings with metal or canvas material.

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



COMMERCIAL DISTRICT MATERIALS

Non-residential exteriors shall incorporate variation in materials. The front façade and other facades located along a public right-of-way may include:

- 1. Brick and/or stone masonry
- 2. Decorative concrete block (integral color or textured)
- 3. Stone accents
- 4. Aluminum storefronts with anodized or pre-finished colors
- 5. EIFS cornices, and parapet trim
- 6. EIFS or synthetic stucco shall not be used in the first four feet above grade and shall be limited to only 25% of each building façade
- 7. Precast concrete
- 8. Soffit and fascia materials to be considered include EIFS with crown trim elements
- 9. Cementitious siding

Rear elevations of non-residential buildings facing opaque landscape buffers or not visible from vehicular use areas or public rights-of-way may incorporate decorative concrete masonry, metal coping, or EIFS trim.

NATURAL RESOURCE AND ENVIRONMENTAL DATA

The Property is within the Beaver Creek Basin, Jordan Lake Watershed, and Primary Watershed Protection Overlay District as shown on the Town of Apex Watershed Protection Overlay Map 2019. The project site does not sit within a designated current or future 100-year floodplain as shown on the Town of Apex Watershed & FEMA Map dated April 2015. FIRM Panel 3720072200J dated May 2, 2006 does not include a floodplain within the property boundary.

PARKING

Parking for the development shall meet the requirements of UDO Section 8.3.

PUBLIC FACILITIES:

The proposed PUD shall be designed to comply with the Town's Sewer and Water Master Plan and Standards and Specifications. The development will be served water and sewer by the Town of Apex.

STORMWATER MANAGEMENT:

The PUD stormwater control devices shall be designed and constructed to exceed UDO standards so that the post development peak runoff does not exceed pre-development peak runoff conditions for the 24-hour, 1 year, 10 year, and 25 year storm events. The development shall meet all stormwater management requirements for quality and quantity treatment in accordance with UDO Section 6.1.

APEX TRANSPORTATION PLAN/ACCESS and CIRCULATION:

The proposed PUD is consistent with the Apex Transportation Plan and Bicycle Pedestrian System Plan.

- All proposed driveway access and improvements on state-maintained roadways are subject to both Apex and NCDOT review and approval.
- A maximum of one (1) access point shall be proposed on US 64, to be constructed as a left-in/right-in/right-out public street access at the existing median break with a stop-controlled northbound approach with one lane of ingress and one lane of egress and an exclusive eastbound right turn lane with a minimum 100 feet of storage and appropriate deceleration length and taper on US Hwy 64.

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



Improve the median break and construct physical separation between turn lanes to accommodate trucks and prevent both improper left turns and vehicular turning-movement conflicts.

- Construct an exclusive eastbound U-turn median break on US Hwy 64, approximately halfway
 between the site access at the existing median break and Kellyridge Drive including a U-turn lane with
 a minimum of 100 feet of storage and appropriate deceleration length and taper. If the eastbound Uturn lane is removed from the existing median break location to the west, extend the storage to 150
 feet at this location.
- Consistent with the Transportation Plan Thoroughfare and Collector Street Map, Chanticlair Drive shall be extended westward as a Major Collector Street with a minimum 60-foot right-of-way, consistent with Town Standards.
- No residential driveways shall be permitted on existing or future Major Collector Street(s).
- Rothwood Way shall be extended north and stubbed to the southernmost property line of PIN 0722850629. Homes located on Rothwood Way shall take driveway access from Rothwood Way.
- The extension of Chanticlair Drive shall be constructed concurrently with the project but shall remain closed to traffic between Yellowbridge and Abbington subdivisions until such time that the 50th CO is approved for Yellowbridge. The form of closure shall be noted on the subdivision plan and subject to Town staff approval.
- Potential Access Points shown on the Conceptual Site Plan and Conceptual Utility Plan (C100) are
 not shown in exact locations but show required connections. Connections may only be removed
 from the subdivision connectivity requirements of the PUD if the developer shows to the satisfaction
 of the Planning Director, in consultation with the Technical Review Committee (TRC), that the
 construction of the connection would be impractical based on environmental conditions found in
 the field at the time of Master Subdivision Plan approval.

ENVIRONMENTAL ADVISORY BOARD:

The Apex Environmental Advisory Board (EAB) held a pre-application meeting for this rezoning on February 17, 2022. The zoning conditions suggested by the EAB are listed below along with the applicant's response to each condition.

EAB Suggested Condition	Applicant's Response
Solar conduit shall be included in building designs.	Added
Pet waste stations shall be installed.	Added
Include landscaping that requires less irrigation and chemical use.	Added
o Plant warm season grasses for drought-resistance.	
Increase the number of native hardwood species planted to 3.	Added
Increase design storm pre- and post-attenuation requirement to include the	Added
25-year storm.	
Install solar PV systems to 50 homes with a minimum 4 kilowatts DC power	Not added
rating (approximately 12 panels).	
Install signage near environmental sensitive areas in order to:	Added
o Reduce pet waste near SCM drainage areas.	
o Eliminate fertilizer near SCM drainage areas.	
Increase biodiversity.	Not added
o Plant pollinator-friendly flora.	
o Plant native flora (Refer to the Apex Design & Development Manual	
for approved native species).	



EAB Suggested Condition	Applicant's Response
Implement green infrastructure.	Added
o Provide diverse and abundant pollinator and bird food sources (e.g.	
nectar, pollen, and berries from blooming plants) that bloom in	
succession from spring to fall.	
o Plant warm season grasses to reduce irrigation.	
Add information signage or other marking at the boundary of lots when they	Not added
are adjacent to a wooded or natural condition resource conservation area	
(RCA) indicating that the area beyond the sign is RCA and is not to be	
disturbed.	
Apply for green building certifications, such as LEED, Energy Star, BREEAM,	Not added
Green Globes, NGBS Green, or Green Guard.	
Include International Dark Sky Association compliance standards.	Added
o Outdoor lighting shall be shielded in a way that focuses lighting to	
the ground.	
o Lighting that minimizes the emission of blue light to reduce glare	
shall be used.	
o Lighting with a color temperature of 3000K or less shall be used for	
outside installations in non-residential use cases.	
Add a zoning condition which minimizes tree clearing, installation of an SCM,	Added
or infrastructure in any zone of the riparian buffer, except as necessary for	
the installation of Town of Apex utilities.	
Add a zoning condition that indicates that species native to the eastern US	Added
shall be used to meet the landscaping requirements for Section 8.2 of the	
UDO up to 75-80%.	

PARKS, RECREATION, AND CULTURAL RESOURCES ADVISORY COMMISSION:

The Parks, Recreation, and Cultural Resources Advisory Commission reviewed the Yellowbridge PUD project at their April 27, 2022 meeting. The Commission made a recommendation for a fee-in-lieu of dedication for a maximum of 50 single-family detached units and 110 single-family attached units. The recommendation is based on the current 2022 fee rate of single-family detached units for \$3,753.89 and single-family attached units for \$2,528.25. The total residential fee in lieu per current unit count is \$465,802.

PLANNING BOARD RECOMMENDATION:

The Planning Board held a Public Hearing on July 11, 2022 and by a vote of 4-3 recommended approval of the rezoning with the following additional condition offered by the applicant: "6' opaque privacy fence shall be installed by developer along inside of the buffer along southern property line." The reason for the dissenting vote was due to:

- No clear community entry and exist design from Us 64. Only existing driveway to be used as
 construction access which may not hold weight of construction trucks and equipment. Using this
 driveway goes over the stream as construction access will affect the environment with all
 construction debris.
- 2. Scale and proportion of lot widths and sizes of homes are not gradual. There needs to be a transition from Sweetwater community to the west lots are tighter, to Abbington and Stratford community wider lots; bigger homes.
- 3. Insufficient space in elementary and high schools.

STAFF REPORT

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



4. Chanticlair Road connection may become "beltway" with traffic holdup from construction trucks in and out on US 64 Highway.

One Planning Board member agreed with #1-#3. Another Planning Board member agreed with #1-#4; also, the developer should continue to work with neighbors as was done for Morris Tract, but neighbors need to come up with a more cohesive ask.

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of Rezoning #22CZ06 Yellowbridge PUD as proposed by the applicant.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING:

This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

The 2045 Land Use Map designates the subject properties as Medium Density Residential. The residential portion of the proposed rezoning to Planned Unit Development-Conditional Zoning (PUD-CZ) is consistent with that Land Use Map designation. The proposed rezoning also includes a commercial uses in an area adjacent to US 64 Highway West. If the properties are rezoned as proposed, the 2045 Land Use Map will automatically be amended to Medium Density Residential and Commercial Services per NCGS 160D-605(a).

Approval of the proposed rezoning is reasonable and in the public interest because it will provide a transition between higher and lower residential densities, while providing commercial development along US 64 Highway. The proposed rezoning also provides additional environmental conditions and a minimum of two affordable housing units.

PLANNED UNIT DEVELOPMENT DISTRICT AND CONDITIONAL ZONING STANDARDS: Standards

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments.

- 1. Planned Unit Development (PUD-CZ) District
 In approving a Planned Development (PD) Zoning District designation for a PUD-CZ, the Town
 Council shall find the PUD-CZ district designation and PD Plan for PUD-CZ demonstrates compliance
 with the following standards:
 - a) Development parameters
 - (i) The uses proposed to be developed in the PD Plan for PUD-CZ are those uses permitted in Sec. 4.2.2 *Use Table.*
 - (ii) The uses proposed in the PD Plan for PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of non-residential land area is included in certain mixed use areas as specified

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



- on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown in the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.
- (iii) The dimensional standards in Sec. 5.1.3 Table of Intensity and Dimensional Standards, Planned Development Districts may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
- (iv) The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details*, and greenway improvements as required by the Town of Apex Parks, Recreation, Greenways, and Open Space Plan and the Apex Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.
- (v) The design of development in the PD Plan for PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient compact network of streets. Cul-de-sacs shall be avoided unless the design of the subdivision and the existing or proposed street system in the surrounding area indicate that a through street is not essential in the location of the proposed cul-desac, or where sensitive environmental areas such as streams, floodplains, and wetlands would be substantially disturbed by making road connections.
- (vi) The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.
- (vii) The development proposed in the PD Plan for PUD-CZ has architectural and design standards that are exceptional and provide higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.
- b) Off-street parking and loading. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.3 Off-Street Parking and Loading, except that variations from these standards may be permitted if a comprehensive parking and loading plan for the PUD-CZ is submitted as part of the PD Plan that is determined to be suitable for the PUD-CZ, and generally consistent with the intent and purpose of the off-street parking and loading standards.
- c) RCA. The PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.1.2 Resource Conservation Area, except that the percentage of RCA required under Sec. 8.1.2 may be reduced by the Town Council by no more than 10% provided that the PD Plan for PUD-CZ includes one or more of the following:
 - (i) A non-residential component;
 - (ii) An overall density of 7 residential units per acre or more; or
 - (iii) Environmental measures including but not limited to the following:
 - a. The installation of a solar photovoltaic (PV) system on a certain number or percentage of single-family or townhouse lots or on a certain number or percentage of multifamily, mixed-use, or nonresidential buildings. All required solar installation shall be completed or under construction prior to 90% of the building permits being issued for the approved number of lots or buildings. For single-family or townhouse

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



- installations, the lots on which these homes are located shall be identified on the Master Subdivision Plat, which may be amended;
- b. The installation of a geothermal system for a certain number or percentage of units within the development; or
- c. Energy efficiency standards that exceed minimum Building Code requirements (i.e. SEER rating for HVAC).
- d) Landscaping. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.2 Landscaping, Buffering and Screening, except that variations from these standards may be permitted where it is demonstrated that the proposed landscaping sufficiently buffers uses from each other, ensures compatibility with land uses on surrounding properties, creates attractive streetscapes and parking areas and is consistent with the character of the area. In no case shall a buffer be less than one half of the width required by Sec. 8.2 or 10 feet in width, whichever is greater.
- e) Signs. Signage in the PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.7 Signs, except that the standards can be varied if a master signage plan is submitted for review and approval concurrent with the PD plan and is determined by the Town Council to be suitable for the PUD-CZ and generally consistent with the intent and purpose of the sign standards of the UDO. The master signage plan shall have design standards that are exceptional and provide for higher quality signs than those in routine developments and shall comply with Sec. 8.7.2 Prohibited Signs.
- f) Public facilities. The improvements standards and guarantees applicable to the public facilities that will serve the site shall comply with Article 7: Subdivision and Article 14: Parks, Recreation, Greenways, and Open Space.
 - (i) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site transportation circulation system. The on-site transportation circulation system shall be integrated with the off-site transportation circulation system of the Town. The PD Plan for PUD-CZ shall be consistent with the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details* and show required right-of-way widths and road sections. A Traffic Impact Analysis (TIA) shall be required per Sec. 13.19.
 - (ii) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site system of potable water and wastewater lines that can accommodate the proposed development, and are efficiently integrated into off-site potable water and wastewater public improvement plans. The PD Plan shall include a proposed water and wastewater plan.
 - (iii) Adequate off-site facilities for potable water supply, sewage disposal, solid waste disposal, electrical supply, fire protection and roads shall be planned and programmed for the development proposed in the PD Plan for PUD-CZ, and the development is conveniently located in relation to schools and police protection services.
 - (iv) The PD Plan shall demonstrate compliance with the parks and recreation requirements of Sec. Article 14: *Parks, Recreation, Greenways, and Open Space* and Sec. 7.3.1 *Privately-owned Play Lawns* if there is a residential component in the PUD-CZ.
- g) Natural resource and environmental protection. The PD Plan for PUD-CZ demonstrates compliance with the current regulatory standards of this Ordinance related to natural resource and environmental protection in Sec. 6.1 Watershed Protection Overlay District, Sec. 6.2 Flood Damage Prevention Overlay District, and Sec. 8.1 Resource Conservation.
- h) Storm water management. The PD Plan shall demonstrate that the post-development rate of on-site storm water discharge from the entire site shall not exceed pre-development levels in accordance with Sec. 6.1.7 of the UDO.

STAFF REPORT

Rezoning #22CZ06 Yellowbridge PUD

July 26, 2022 Town Council Meeting



- Phasing. The PD Plan for PUD-CZ shall include a phasing plan for the development. If development of the PUD-CZ is proposed to occur in more than one phase, then guarantees shall be provided that project improvements and amenities that are necessary and desirable for residents of the project, or that are of benefit to the Town, are constructed with the first phase of the project, or, if this is not possible, then as early in the project as is technically feasible.
- j) Consistency with 2045 Land Use Map. The PD Plan for PUD-CZ demonstrates consistency with the goals and policies established in the Town's 2045 Land Use.
- k) Complies with the UDO. The PD Plan for PUD-CZ demonstrates compliance with all other relevant portions of the UDO.

CONDITIONAL ZONING STANDARDS:

The Town Council shall find the PUD-CZ designation demonstrates compliance with the following standards. 2.3.3.F:

Legislative Considerations

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

- 1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.
- 2) Compatibility. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.
- 3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 Supplemental Standards, if applicable.
- 4) Design minimizes adverse impact. The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.
- 5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.
- 6) Impact on public facilities. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
- 7) Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.
- 8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.
- 9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
- 10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.



	nt is a public record under the North Carolina Public	Records Ac	t and may be	publis	shed or	n the Town's	websit	e or disclosed to
Application	#:	_	Submittal	Date:		March 1, 2	022; Re	evised June 10, 2022
Fee Paid	\$	_	Check#					
PETITION 1	O AMEND THE OFFICIAL ZONING DISTRIC	Т МАР						
Project Nar	_{ne:} Yellowbridge							
Address(es)	2813 and 2817 US 64 Hwy V	V						
PIN(s) 0	722743789 and 0722752304							
						_ Acreage	: 4	8.24 acres
Current Zor	ning: Rural Residential (RR)	Propo	osed Zoning	g: _	Planned	Unit Developm	ent- Con	ditional Zoning (PUD-CZ)
Current 204	15 LUM Designation: Medium Der	sity Res	sidential					
Is the propo	osed rezoning consistent with the 2045 LUM	Classificat	tion(s)?	Yes			No	(Due exclusively to the commercial use along US-64)
If any porti	on of the project is shown as mixed use (3 o	r more stri	ipes on the	2045	Land	Use Map)	provid	de the following:
Ar	ea classified as mixed use:			Acre	age:	N/A		
Ar	ea proposed as non-residential development	::		Acre	age:	N/A		
Percent of mixed use area proposed as non-residential: Percent:								
Applicant I	nformation							
Name:	Lennar Carolinas, LLC c/o Matth	ew Car	penter					
Address:	301 Fayetteville Street, Suite 140	00						
City:	Raleigh	State:	NC				Zip:	27601
Phone:	(919) 835-4032	E-mail:	matthe	wca	rpen	ter@par	kerp	oe.com
Owner Info	rmation							
Name:	Yellowbridge Capital, LLC							
Address:	113 Mill Point Road							
City:	Kitty Hawk	State:	NC				Zip:	27949-4082
Phone:		E-mail:						
Agent Infor	mation							
Name:	Lennar Carolinas, LLC attn. Tucl	ker Enn	is					
Address:	1100 Perimeter Park Drive, Suite	e 112						
City:	Morrisville	State:	NC				Zip:	27560
, Phone:	(919) 835-4032	· E-mail:	tucker.	enni	s@le	ennar.cc		
Other conta	acts:	-						

- Page 441 -

PLANNED UNIT DEVELOPMENT APPLICATION Marrals 4, 2000

Application #:	Submittal Date:	March 1, 2022
Application	Subilitai Bate.	

PLANNED UNIT DEVELOPMENT DISTRICT STANDARDS:

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments. The PD text and plan should demonstrate how the standards of Sec. 2.3.4.F are met be the proposed rezoning.

LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest. Use additional pages as needed.

1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

The property is designated as Medium Density Residential on the Land Use Map ("LUM") which contemplates both single-family detached homes and townhomes with densities up to 6 units an acre. Medium Density Residential developments are intended to provide a transition from more urbanized areas of Apex to lower density neighborhoods. The PUD contemplates a mix of single-family detached homes and townhomes at an overall density of approximately 3.2 units/acre, well within the LUM's suggested density. Additionally, the denser townhomes will provide a density transition between US-64, future commercial uses fronting 64, and lower density single-family detached homes to the south. Accordingly, the proposed PUD is consitent with the LUM designation and the Town of Apex Comprehensive Plan (the "Comp Plan") as a whole.

2) Compatibility. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

The overall density proposed by the PUD is consistent with existing residential development in this area. Lot types have been strategically located (single-family detached homes on large lots located adjacent to the Abbington neighborhood) to ensure compatibility with the existing Abbington neighborhood to the south and east. A 50-foot planted buffer has also been provided along the southern property line to maintain a level of privacy for homeowners adjacent to the south. Further, architectural conditions in the PUD text will help ensure high quality construction adn compatibility with the character of the surrounding area.

3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 *Supplemental Standards*, if applicable.

The PUD will comply with Supplemental Standards in UDO Section 4.4, to the extent they are applicable.

PETITION PROCESS INFORMATION

4) Design minimizes adverse impact. The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

As shown on the Concept Plan, the proposed development will include several transportation improvements that will improve connectivity including the extension of Chanticlair Drive which currently stubs to the edge of the Abbington neighborhood, and a direct US-64 access point that will serve the proposed development and the Abbington Neighborhood. As stated above, the project has been designed to ensure compatibility of land uses and includes several buffers to help minimize adverse impacts.

5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

The property is located within the Beaver Creek Drainage Basin and is thus within the Primary Watershed Protection Overlay District as shown on the Town of Apex Watershed Protection Map. This PUD will comply with all built upon area, vegetated conveyances, structural SCMs and riparian stream buffer requirements of UDO Section 6.1.7. The PUD will provide at least 30% Resource Conservation Area ("RCA") as required by the UDO. The PUD text also offers environmental commitments which include planting of drought resistant warm grasses, planting of at least four native hardwood tree species, and implementation of stormwater control devices that exceed UDO requirements.

6) *Impact on public facilities*. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

As discussed above, the proposed development will include several traffic improvements. Water and sewer services are available to the site and the proposed development will not have adverse impacts on potable water and wastewater facilities, parks, schools, police, fie, or EMS facilities.

7) Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

The proposed PUD will improve the public health, safety, and welfare by providing a mix of housing types in a location convenient to existing restaurants, retail, and Town services.

8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

The proposed residential use is consistent with existing residential development in the area. As discussed above, the Concept Plan has been designed to mitigate adverse effects on adjacent properties.

PETITION PROCESS INFORMATION

9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

The proposed residential use is consistent with existing residential development in the area. As discussed above, the Concept Plan has been designed to mitigate adverse effects on adjacent properties.

10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

The PUD will be governed by the regulations contained in the attached PUD Text and Concept Plan. The PUD will comply with all other regulations of the UDO to the extent they do not conflict with the PUD regulations.

DEVELOPMENT NAME APPROVAL APPLICATION

Application #:	Submittal Date:							
Proposed Subdivision/Development Information								
Description of location: 2813 and 2817 US 64 Hwy W								
Nearest intersecting roads: US 64 Hwy W and Kellyridge Dr.								
Wake County PIN(s): 0722743789 and 0722752304								
Township: White Oak								
Contact Information (as appropriate)								
Contact person: Lennar Carolinas, LLC c/o Matthew C	arpenter							
	ımber: N/A							
Address: 301 Fayetteville Street, Suite 1400, Raleigh, NC 27601								
E-mail address:matthewcarpenter@parkerpoe.com								
Owner: Yellowbridge Capital, LLC								
Phone number: Fax number:								
Address: 113 Mill Point Road, Kitty Hawk, NC, 27949-4082								
E-mail address:								
Proposed Subdivision/Development Name								
1 st Choice: Yellowbridge								
2 nd Choice (Optional):								
Town of Apex Staff Approval:								
Town of Apex Planning Department Staff	Date							

TOWN OF APEX UTILITIES OFFER AND AGREEMENT

Application #:		Submittal Date:								
	73 H P.O. Box 2 91	wn of Apex Hunter Street 50 Apex, NC 27502 9-249-3400 INA CUSTOMER SELECTION AGREEMENT								
2813 and 2817 US 64 Hwy W										
	(the "Premises")									
The Town of Apex offers to provide you with electric utilities on the terms described in this Offer & Agreement. If you accept the Town's offer, please fill in the blanks on this form and sign and we will have an Agreement once signed by the Town. Yellowbridge Capital, LLC , the undersigned customer ("Customer") hereby irrevocably chooses and selects the Town of Apex (the "Town") as the permanent electric supplier for the Premises. Permanent service to the Premises will be preceded by temporary service if needed.										
The sale, delivery, and use of electric power by Customer at the Premises shall be subject to, and in accordance with, all the terms and conditions of the Town's service regulations, policies, procedures and the Code of Ordinances of the Town.										
the requested service	e. By signing this Agreement the und	on this Agreement, will take action and expend funds to provide ersigned signifies that he or she has the authority to select the ary power, for the Premises identified above.								
	nal terms and conditions to this Agree tes the entire agreement of the partie	ement are attached as Appendix 1. If no appendix is attached this es.								
Acceptance	Acceptance of this Agreement by the Town constitutes a binding contract to purchase and sell electric power.									
Please note that under North Carolina General Statute §160A-332, you may be entitled to choose another electric supplier for the Premises.										
Upon acceptance of this Agreement, the Town of Apex Electric Utilities Division will be pleased to provide electric service to the Premises and looks forward to working with you and the owner(s).										
ACCEPTED:										
	owbridge Capital, LLC	TOWN OF APEX								
Tucker Er	nnis	BY:								
	Authorized Agent	Authorized Agent								
DATE: 3/1/2022		DATE:								

AGENT	AUTHORIZATIO	ON FORM												
Applica	ation #:		Submittal Date:											
ellowbr	idge Capital, Ll	_C	is the owner* of the property	is the owner* of the property for which the attached										
applicat	ion is being sub	omitted:												
Ø	Land Use Am	endment												
Ø	au		ed Dèvelopment rezoning applications that a coloring conditions that a coloring conditions that a coloring conditions that a coloring condition is approved.											
	Site Plan													
	Subdivision		¥ •											
	Variance													
	Other:													
The pro	perty address is	2813 and 2817 US 64 I	Hwy W, Apex, NC, 27523											
The age	nt for this proje	ect is: Tucker Ennis												
	☐ I am the o	wner of the property and will !	pe acting as my own agent											
Agent N	lame:	Tucker Ennis												
Address	::	1100 Perimeter Park Drive, S	uite 112, Morrisville, NC 27560	į										
Telepho	ne Number:	(919) 835-4032												
E-Mail A	Address:	tucker.ennis@lennar.com												
		Signature(s) of Owner(s)*	mich											
	¥	as agent for Yellowbridge	Example 2 Type or print name	2/24/22 Date										
		GERALD L. HO		2/24/22										
			Type or print name	Date										

Attach additional sheets if there are additional owners.

*Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Pursuant to Article 40 of Chapter 66 of the North Carolina General Statutes (the Uniform Electronic Transactions Act) this application and all documents related hereto containing an electronic or digitized signature are legally binding in the same manner as are hard copy documents executed by hand signature. The parties hereby consent to use electronic or digitized signatures in accordance with the Town's Electronic Signature Policy and intend to be bound by the application and any related documents. If electronic signatures are used the application shall be delivered in an electronic record capable of retention by the recipient at the time of receipt.

Last Updated: August 30, 2019

AFFIDAVIT OF OWNERSHIP Application #: Submittal Date: The undersigned, Tucker Ennis (the "Affiant") first being duly sworn, hereby swears or affirms as follows: 1. Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the sole owner, or is the authorized agent of all owners, of the property located at 2813 and 2817 US 64 Hwy W ___ and legally described in Exhibit "A" attached hereto and incorporated herein (the "Property"). This Affidavit of Ownership is made for the purpose of filing an application for development approval with 2. the Town of Apex. 3. Affiant is the authorized agent of the owner(s) of the Property, Affiant possesses documentation indicating the agency relationship granting the Affiant the authority to apply for development approval on behalf of the owner(s). 4. To Affiant's knowledge, no claim or action has been brought against the owners of the property which questions title or right to possession of the property, nor is any claim or action pending against Affiant or owner(s) in court regarding possession of the Property. This the 254 day of FEBRUARY , 20 22. Tucker Fnnis STATE OF NORTH CAROLINA COUNTY OF Wake I, the undersigned, a Notary Public in and for the County of Dundy hereby certify that Tucker Emis , Affiant, personally known to me or known to me by said Affiant's presentation of _____, personally appeared before me this day and acknowledged the said Affiant's____ due and voluntary execution of the foregoing Affidavit. Elisabeth Women Notary Public State of North Carolina My Commission Expires: June 18, 2024 [NOTARY SEAL]

18 of 20

Planned Unit Development-Conditional Zoning Application

ELISABETH WARREN otary Public, North Carolina Durham County My Commission Expires June 18, 2024

Exhibit A

To Owner Affidavit for Yellowbridge Rezoning Legal Description

PIN# 0722752304 & 0722743789

All that certain real property situated in White Oak Township, Wake County, North Carolina, described as follows:

Beginning at a set iron rod on the northern right of way line of Chanticlair Drive, said iron rod marking the southwestern corner of Lot 74 as said lot is shown and so designated on that certain subdivision plat entitled "Windsor at Abbington - Phase 1, Section A, Map 2, Lots 24-27 & 65-74" recorded in Book of Maps 1998, Page 203, Wake County Registry; thence along the northern right of way line of Chanticlair Drive, South 89°37'45" West 280.73 feet to a set iron rod; thence South 00°22'15" East 30.04 feet to a set iron rod at the centerline of the western terminus of Chanticlair Drive and the northeastern corner of the 0.08 acre Reserved Area depicted on that certain subdivision plat entitled "Stratford at Abbington, Phase 1: Lots 1-31, 65-75, Owner: Highway 64, LLC" recorded in Book of Maps 2006, Pages 2638 to 2640, Wake County Registry; thence along the northern and western boundary of said Reserved Area and continuing along the northwestern boundary of said Stratford at Abbington subdivision the following nine courses: (1) South 89°37'45" West 118.01 feet to a set iron rod; (2) South 05°29'21" West 40.93 feet to a set iron rod; (3) South 01°54'29" East 98.00 feet to a set iron rod; (4) South 11°29'28" East 62.80 feet to a set iron rod; (5) South 22°27'50" West 118.06 feet to a found iron pipe; (6) South 70°08'38" West 118.71 feet to a found iron pipe; (7) South 77°30'46" West 65.05 feet to a found iron pipe; (8) South 73°46'05" West 40.75 feet to a found iron pipe; and (9) South 73°28'08" West 311.49 feet to a found iron pipe at an angle point in the northern boundary of Lot 64 as said lot is shown and so designated on that certain subdivision plat entitled "Stratford at Abbington, Phase 2: Lots 32-64, Owner: Highway 64, LLC" recorded in Book of Maps 2008, Pages 33 and 34, Wake County Registry; thence along the northern boundary of said Stratford at Abbington Phase 2 subdivision South 82°16'49" West 758.57 feet to a found iron pipe with cap at the northwestern corner of Lot 56 of said Stratford at Abbington Phase 2 subdivision, said point also being on the eastern boundary of Lot 2 as said lot is shown and so designated on that certain plat entitled "Recombination Survey for Cecil V. Campfield and Wife Sharon K. Campfield" recorded in Book of Maps 1995, Page 334, Wake County Registry; thence along the eastern boundary of said Campfield plat the following two courses: (1) North 03°08'59" East 417.75 feet to a found bent iron pipe; and (2) North 03°12'21" East 406.54 feet to a found iron pipe with cap at the southeastern corner of Lot 'A' as said lot is shown and so designated on that certain plat entitled "Recombination for Joel V. Perry" recorded in Book of Maps 1985, Page 522, Wake County Registry; thence along the eastern boundary of said Perry plat North 03°11'42" East 841.95 feet to a found iron rod with cap on the southern right of way line of U.S. Highway 64; thence along said southern right of way line North 82°54'26" East 331.57 feet to a set iron rod at the northwestern corner of the parcel depicted on that certain plat entitled "Boundary Survey, Property of Calvin Mills, Prepared for David and Sharon Raymer" recorded in Book of Maps 2004, Page 698, Wake County Registry; thence along the western, southern and eastern boundary of said Mills plat the following three courses: (1) South 07°08'43" East 189.52 feet to a found iron pipe; (2) North 82°51'17" East 420.02 feet to a found iron pipe; and (3) North 07°08'43" West 189.14 feet to a set iron rod on the southern right of way line of U.S. Highway 64; thence along said southern right of way line the following two courses: (1) North 82°54'26" East 265.68 feet to a set iron rod; and (2) North 82°53'08" East 305.02 feet to a set iron rod at the northwestern corner of Area "B" as shown and so designated on that certain plat entitled "Property of Blakely-Braswell Land Company, LLC" recorded in Book of Maps 1996, Page 634, Wake County Registry; thence along the western boundary of said Area "B", South 11°47'52" West 42.58 feet to a found iron pipe with cap at the northwestern corner of Tract 'A' as said lot is shown and so designated on that certain plat entitled "Property of Calvin E. Mills, Alta Belle P. Mills, Ted Mills & Randy Mills By William R. Hoke & Paul Stam, Jr., Co-trustees" recorded in Book of Maps 1984, Page 404, Wake County Registry; thence along the western and southern boundaries of said Mills plat the following five courses: (1) South 07°43'26" West 146.44 feet to a found iron pipe with cap; (2) South 03°03'23" East 318.20 feet to a found iron pipe with cap; (3) South 05°04'48" West 519.04 feet to a found iron pipe with cap; (4) South 15°45'44" West 60.82 feet to a found iron pipe with broken cap; and (5) South 89°57'43" East 359.26 feet to a found iron pipe with cap on the western boundary of Lot 73 of the previously mentioned Windsor at Abbington subdivision plat recorded in Book of Maps 1998, Page 203, Wake County Registry; thence along the western boundary of said Windsor at Abbington subdivision South 02°25'07" East 148.61 feet to the point of beginning.

Containing 48.2331 acres, more or less, and being all of Lot "B" as said lot is shown and so designated on that certain plat entitled "Subdivision, Property of Gaither Bryant Garner, Jr. and Gerald L. Hornick" recorded in Book of Maps 1984, Page 1516, Wake County Registry, TOGETHER WITH all of Tract 1 as said tract is shown and so designated on that certain plat entitled "Division for Gerald L. Hornick, et ux and G. Bryant Garner, et ux" recorded in Book of Maps 2003, Page 474, Wake County Registry, LESS AND EXCEPT the area dedicated as public right of way for Chanticlair Drive as recorded in Deed Book 11778, Page 1490, Wake County Registry.



Wake County Residential Development Notification

section of this form and

submit with your

application.

Please complete each

Town of Apex staff will

into the online WCPSS enter this information

Q	Developer Company <i>Information</i>
Company <i>Name</i>	Lennar Carolinas, LLC
Company Phone <i>Number</i>	c/o Matthew Carpenter, 919-835-4032
Developer Representative <i>Name</i>	
Developer Representative Phone Number	
Developer Representative <i>Email</i>	matthewcarpenter@parkerpoe.com

	Developer Company <i>Information</i>
ompany <i>Name</i>	Lennar Carolinas, LLC
ompany Phone <i>Number</i>	c/o Matthew Carpenter, 919-835-4032
eveloper Representative <i>Name</i>	
eveloper Representative Phone Number	
eveloper Representative <i>Email</i>	matthewcarpenter@parkerpoe.com

		form
New Residential Subdivision Information	sion Information	:
Date of Application for Subdivision	unknown, Rezoning submittal 3/1/2022	Please send any questions
City, Town or Wake County Jurisdiction	Town of Apex	about this form to:
Name of Subdivision	Yellowbridge	studentassignment-gis-
Address of Subdivision (if unknown enter nearest cross streets)	2813 & 2817 US 64 West	group@wcpss.net
REID(s)		
PIN(s)	100003T0070 Las 00704T0070	
	0/22/45/09 and 0/22/32304	
ā	Projected Dates <i>Information</i>	
ubdivision <i>Completion Date</i>	2026	
Subdivision Projected First Occupancy Date	2026	

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Lot by Lot Development <i>Information</i>	Square Foot Price Range Anticipated Completion Units & Dates	Max Low High Year #Units Year #Units Year #Units	unknown 2026	unknown 2026			
	Total # of Units Senior Living Studio 1 Bedroom 2 Bedroom		ily <u>37</u>			S:	
	Unit Type		Single Family	Townhomes	Condos	Apartments	Other

NOTICE OF ELECTRONIC NEIGHBORHOOD MEETING

This document	is a	public	record	under	the	North	Carolina	Public	Records	Act	and	may	be	published	on	the	Town's	website
or disclosed to	third	parties																

February 7, 202	22

Date

Dear Neighbor:

You are invited to an electronic neighborhood meeting to review and discuss the development proposal at 2813 and 2817 US 64 Hwy W

Address(es) PIN(s)

in accordance with the Town of Apex Electronic Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, you may contact the applicant before or after the meeting is held. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at www.apexnc.org. If at all feasible given emergency declarations, limits on in-person gatherings, and social distancing, an additional in-person Neighborhood Meeting may be scheduled and held prior to a public hearing or staff decision on the application.

An Electronic Neighborhood Meeting is required because this project includes (check all that apply):

App	olication Type	Approving Authority
O	Rezoning (including Planned Unit Development)	Town Council
O	Major Site Plan	Town Council (QJPH*)
0	Special Use Permit	Town Council (QJPH*)
O	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review
	Residential Master Subdivision Flan (excludes exempt subdivisions)	Committee (staff)

^{*}Quasi-Judicial Public Hearing: The Town Council cannot discuss the project prior to the public hearing.

The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)): The applicant is proposing to rezone the property to Planned Unit Development - Conditional Zoning District to

facilitate the development of single-family detached homes and townhomes. Additional information

will be provided at the meeting.

Estimated submittal date: March 1, 2022

MEETING INFORMATION:

Property Owner(s) name(s): Yellowbridge Capital, LLC

Applicant(s): Lennar Carolinas, LLC c/o Matthew Carpenter

Contact information (email/phone): matthewcarpenter@parkerpoe.com; (919) 835-4032

Electronic Meeting invitation/call in

info: See attached

Date of meeting**: February 23, 2022

Time of meeting**: 6:00 PM

MEETING AGENDA TIMES:

Welcome: 6:00 PM Project Presentation: between 6:00 - 8:00 PM Question & Answer: between 6:00 - 8:00 PM

- Page 452 - Instruction Packet & Affilearn or Economic Neighborhood Meetings

Last Updated: March 25, 2020

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^{**}Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180/Planning.

February 7, 2022

Re: Notice of Virtual Neighborhood Meeting

Neighboring Property Owners:

You are invited to attend a neighborhood meeting on February 23, 2022 from 6–8pm. The purpose of the meeting is to discuss an upcoming application to rezone two parcels of land located at 2813 US 64 Hwy W (PIN 0722743789) and 2817 US 64 Hwy W (PIN 0722752304) (collectively, the "Property"). The Property is currently zoned Rural Residential (RR), and is proposed to be rezoned to Planned Unit Development-Conditional Zoning (PUD-CZ).

The applicant is proposing a rezoning to Planned Unit Development Conditional Zoning (PUD-CZ) for the development of single-family detached homes and townhomes. During the meeting, the applicant will describe the nature of this rezoning request and field any questions from the public. Enclosed are: (1) a vicinity map outlining the location of the subject parcel; (2) a zoning map of the subject area; (3) a preliminary concept plan of the Planned Unit Development; (4) a project contact information sheet; and (5) a common construction issues & who to call information sheet.

The meeting will be held virtually. You can participate online via Zoom or by telephone. To participate in the Zoom online meeting:

Visit: https://zoom.us./join

Enter the following meeting ID: 889 8258 3077

Enter the following password: 057493

To participate by telephone:

Dial: 1 929 205 6099 Enter the following meeting ID: 889 8258 3077 #

Enter the Participant ID: #

Enter the Meeting password: 057493 #

If you have any questions about this rezoning, please contact me at (919) 835-4032 or via email at matthewcarpenter@parkerpoe.com.

Thank you,

Matthew Carpenter

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:	
Project Name: Yellowbridge	Zoning:
Location: 2813 and 2817 US 64 Hwy W	
Property PIN(s): 0722743789 and 0722752304 Ac	reage/Square Feet: 48.24 acres
Property Owner: Yellowbridge Capital, LLC	
Address: 301 Fayetteville Street, Suite 14	00
City: Raleigh	State: NC Zip: 27601
Phone: (919) 835-4032 Email:	matthewcarpenter@parkerpoe.com
Developer:	
Address: 113 Mill Point Road	
City: Kitty Hawk	tate: NC zip: 27949-4082
Phone: Fax: <u>n/a</u>	Email:
Engineer:	
Address: 1100 Perimeter Park Drive, Suite	e 112
City: Morrisville	State: NC Zip: 27560
Phone: (919) 835-4032 Fax: n/a	Email: tucker.ennis@lennar.com
Builder (if known): Same as Developer	
Address:	
City:	State: Zip:
Phone: Fax:	Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning Department Main Number	
(Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department	
Angela Reincke, Parks Planner	(919) 249-7468
Public Works - Transportation	
Russell Dalton, Senior Transportation Engineer	(919) 249-3358
Water Resources Department	
Jessica Bolin, Senior Engineer (Stormwater, Sedimentation & Erosion Control)	(919) 249-3537
Stan Fortier, Senior Engineer (Stormwater, Sedimentation & Erosion Control)	(919) 249-1166
James Gregg, Utility Engineer (Water & Sewer)	(919) 249-3324
Electric Utilities Division	
Rodney Smith, Electric Technical Services Manager	(919) 249-3342

Last Updated: March 25, 2020

ELECTRONIC NEIGHBORHOOD MEETING ATTENDANCE SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Please list Electronic Neighborhood Meeting Attendees who provided their name and/or contact information either during the meeting or via phone/email before or after the meeting.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
τi	See attached attendance list				
2.					
3.					
4					
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∞.					
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14.					
] :					

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Use additional sheets, if necessary.

Yellowbridge PUD Neighborhood Meeting Sign-In Sheet February 23, 2022

Walton Norman

Tommy and Cheryl Russell

Brant Gifford

Brian Carlson

Gerald Hornick

Rhonda Riley

Lisa Gerboth

Claire Johns

Jen Curtis-Maury

Suzanne Bailey

Steve Ritchie

Lauren Colvard

Steve Smith

David Risk

Mark Vermette

Teresa Messier

Sharon Hershkowitz

CJ Bottitta

Joe Logan

Debra Becker

Sharon Putney

Bob Zumwalt

Scott Fast

Jeremy Brewer

Kate Macdonnel

Chip Allen

Alex Richbourg

Lisa Nelson

Polly Petrino

Jason Hornick

Katherine Coutros

Matt Lauffer

Tom Colhoun

Sachin Sheth

Julie Robertson

Kari Hughes

Heather Galeotti

Jim Logsdon

Melanie Schuller

Kara Fleshman

Carolyn Bentley

Mike Hershk

Bob Gibbons

Kathryn Finnan

Matt Bond Jay Vora Adam Orentlicher Albert Paz Stephanie White Joe Schmidtke Michele Hemric Robert Kovarik Brett Fleshman Bob Atkinson

^{*}Contact information was received but has been redacted for filing

SUMMARY OF DISCUSSION FROM THE ELECTRONIC NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): Yellowbridge Capital, LLC	
Applicant(s): Lennar Carolinas	
Contact information (email/phone):	
Meeting Format: Online via zoom	
Date of meeting: February 23, 2022	Time of meeting: 6:00 PM

Please summarize the questions/comments and your response from the Electronic Neighborhood Meeting in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1: General questions/concerns about the ponds

Applicant's Response: The plan is to drain both of the ponds. The ponds are both old farm ponds and the dam of one of the ponds is unreliable due to tree growth. Although we do not think the ponds are jurisdictional, we are waiting on a final determination from the Army Corps of engineers as to whether the ponds are jurisdictional. If they are jurisdictional, we will have to reevaluate our

current plans.

Question/Concern #2: Several questions/concerns related to the single family detached homes facing Rothwood Way.

Could you move these homes to another area on the site? Could you increase the buffer between

the homes and the gas easement?

Applicant's Response: We are looking at the possibility of moving the homes slightly to the west to enlarge the buffer between the homes and the gas easement. The goal of placing larger lot single-family

homes in this location was to ensure compatibility with Abbington.

Question/Concern #3: Where will the neighborhood signs be located? Will there be a neighborhood entrance sign near

Rothwood Way?

Applicant's Response: Lennar typically has a monument sign at the entrance of the subdivision. Although the final location of signs will be determined at site plan, we anticipate there to only be one monument

sign located at the US-64 entrance to the development.

Question/Concern #4: General traffic concerns and other specific traffic questions. Concerns related to residents of the

proposed development cutting through Abbington to get to Beaver Creek

Applicant's Response: We anticipate that most residents will use the US-64 entrance/exit and expect it will also be a

benefit for Abbington residents. We are in the process of completing a Traffic Impact Analysis which will take into account existing traffic and new traffic from the proposed development,

Last Updated: March 25, 2020

and recommend road improvements if necessary.

- Page 458 - Instruction Packet & Affile Neighborhood Meetings

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Notice List for Neighborhood Meeting

	RALEIGH NC 27614-8837	RALEIGH NC 27603-1669																																													
	11010 RAVEN RIDGE RD APEX NC 27502-4308	APEX NC 27502-4318 727 W HARGETT ST STE 109	APEX NC 27502-4318 APEX NC 27502-9642	APEX NC 27502-4310	APEX NC 27502-4315	APEX NC 27502-9644 APEX NC 27502-4308	APEX NC 27502-4311	APEX NC 27502-9619 APEX NC 27502-4308	APEX NC 27502-4315	APEX NC 27502-9645 APEX NC 27502-4309	APEX NC 27502-9642	APEX NC 27502-4310	APEX NC 27502-9544 APEX NC 27502-9729	APEX NC 27502-4317	APEX NC 27502-3544 APEX NC 27502-4315		APEX NC 27502-4308 APEX NC 27502-4318	APEX NC 27502-4310	APEX NC 275024309 APEX NC 275024309	APEX NC 27502-4308	APEX NC 27502-9646 APEX NC 27502-9621	APEX NC 27502-9643	APEX NC 27523-7803 APEX NC 27502-4316	APEX NC 27502-4309	APEX NC 27523-7803 APEX NC 27502-4341	CARY NC 27519-8611	CARY NC 27519-8611	APEX NC 27502-4315 APEX NC 27502-9621	APEX NC 27502-4308	APEX NC 27502-4318 APEX NC 27502-9643	APEX NC 27502-4318	APEX NC 27502-4308	APEX NC 27502-4310 APEX NC 27502-4311	APEX NC 27502-4315	APEX NC 27502-4309 PALEIGH NC 27503-4408	CARY NC 27513-5616	APEX NC 27502-9621 CAPV NC 27513-8636	APEX NC 27502-4317	APEX NG 27502-4310	APEA NO 27302-1308 SILVER SPRING MD 20910-1265	SILVER SPRING MD 20910-1265 APEX NIC 27502 2325	APEX NC 27502-9642	KITTY HAWK NO 27949-4082	APEX NC 27502-4309 APEX NC 27502-0250	APEX NC 27502	APEX NC 27502 APEX NC 27502	APEX NC 27523
MAILING ADDRESS	PPM INC OF RALEIGH 1113 ROTHWOOD WAY	2617 BRYANT POND LN KATHIE L RUSSELL TRUSTEE	2605 BRYANT POND LN 101 TIMBERLEA CT	2599 BRYANT POND LN	2672 TIMKEN FOREST DR	503 LYNDENBURY DR 1119 ROTHWOOD WAY	2598 BRYANT POND LN	308 LYNDENBURY DR 1125 ROTHWOOD WAY	2666 TIMKEN FOREST DR	400 LYNDENBURY DR 1106 ROTHWOOD WAY	100 TIMBERLEA CT	2575 BRYANT POND LN	405 CHANTICLAIR DR	2628 BRYANT POND LN	2654 TIMKEN FOREST DR	1132 ROTHWOOD WAY	2611 BRYANT POND LN	2587 BRYANT POND LN	1120 ROTHWOOD WAY	1131 ROTHWOOD WAY	404 CHAN IICLAIN DR 112 LANGSHIRE CT	405 LYNDENBURY DR	1101 GOLIATH LN 2671 TIMKEN FOREST DR	1140 ROTHWOOD WAY	1105 GOLIATH LN 2502 BDYANT BOND I N	7231 CARPENTER FIRE STATION RD	7231 CARPENTER FIRE STATION RD	115 LANGSHIRE CT	1137 ROTHWOOD WAY	403 LYNDENBURY DR	2623 BRYANT POND LN	1101 ROTHWOOD WAY	2593 BRYANT POND LN 2584 BRYANT POND I N	2660 TIMKEN FOREST DR	1146 ROTHWOOD WAY	116 TURQUOISE CREEK DR	113 LANGSHIRE CT 15501 WESTON DKWY STE 100	2616 BRYANT POND LN	2581 BRYANT POND LN	2900 LINDEN LN STE 300	2900 LINDEN LN STE 300	102 TIMBERLEA CT	113 MILL POINT RD	PO BOX 250	504 Lyndenbury DR	2901 Us 64 HWY W	3001 Us 64 HWY W
OWNER		ALLEN, CHESTER W IV ALLEN, ELENI N ANS TRUST THE	BAILEY, JAMES EDWARD BAILEY, SUZANNE C BANKS, WAYNE BANKS, DEOGRATIAS A	BECKER, SHANNON V BECKER, DEBRA LYNN PICH COMM PAPERSON TELETIF COMM PAPERSON PICH FAMILY I MANO TELETIF	BISH JOHN EMERSON 1803 FE JOHN EMERSON BISH FAMILIT LIVING 1803 BREWER, DEREWER, JEREWAY JOE TRUSTEE	BRIDENBAUGH, DAVID N BRIDENBAUGH, CONNE L BIJRI ESON RYAN WI BIJRI ESON BETSY I	CARTWRIGHT, TIMOTHY J CARTWRIGHT, MELISSA S	CHIADO, DYLAN CHIADO, HALEY COOLING, KEVIN TRUSTEE COOLING, JOANNE TRUSTEE	CURTIS-MAURY, MATTHEW F CURTIS-MAURY, JENNIFER	DECOURCY, J RUSS DECOURCY, DONNA M	FAST, SCOTT H TRUSTEE FAST, MARY KATHERINE TRUSTEE	FLESHMAN, JAMES BRETT FLESHMAN, KARA N FOLLINES MICHAEL FOLLINES ELIZABETEUD	GANNON, TRAVIS GANNON, DANIELE	GARRETT, PATRICK JAMES GARRETT, MELISSA BETH	GREEN, BRYAN GREEN, ERIN	HARRIS, SHARITA A	HERSHROWLIZ, MICHAEL I HOWAS HERSHROWLIZ, SHARON MARIE HIBDON-ROBERTSON, JULIA LYNN	HOBART, BARRY /TR HOBART, DEBORAH LYNN /TR	JOHNS, ROBERT A JOHNS, CLAIRE A KISER, JEFFERSON B III KISER, DENISE C	LABER, PATRICK LABER, DIANE	LAMB, KIMBERLY S LAMB, JONATHAN E LAUFFER, MATTHEW S LAUFFER, LISA C	LOGSDON, JAMES M LOGSDON, KIMBERLY D	LOYD, FRANK ROYAL LOYD, AMY S MACDONELL JAMES T MACDONELL KATHARINE G	MACNAUGHTON, IAN R MACNAUGHTON, AMANDA M	MARY L WALKIEWICZ TRUST MATHEMS JAMES C MATHEMS HOLLY	MATTHEWS, JOSEPH T MATTHEWS, PHILOMINA	MATTHEWS, JOSEPH T MATTHEWS, PHILOMINA J	MILICHELL, JENNIFER D PARKER, WILLIAM P II PARKER, SUSAN R	PEPE, RICHARD L PEPE, CHRISTINE	PETERSON, THAREN WAYNE PETERSON, RACHEL LOVE	PETRINO, RAYMOND J PETRINO, POLLY M	RITCHIE, STEVEN H RITCHIE, CHRISTA VENO	ROZET, TIMOTHY DANIEL ROZET, KATHLEEN SCANDURA SAMBORSKI CHRISTOPHER VAILLIAM TRUSTEE SAMBORSKI KARELIVN 10 TRUSTEE	SCHMIDTRE, JOSEPH A SCHMIDTRE, VERONIKA	SIVON, AMIE CAROL SIVON, JASON MICHEAL SMITH I JEEPEY D SMITH AMY N	SWEETWATER PROPERTY OWNERS ASSOCIATION, INC	TASTET, LANCE J TASTET, SYLVIA B	VANZANTEN, JOHN HOLLIS JR VANZANTEN, HEIDI JILL RAFFK	VERMETTE, MARK E VERMETTE, ELIZABETH S	VORA, JAT VORA, ALTSSA N WESTFORD APARTMENTS WEH LP	WESTFORD COMMERCIAL WEH LP	WHITE, ALAN WHITE, STEPHANIE A	YELLOWBRIDGE CAPITAL LLC	ZUMWALI, ROBERI ZUMWALI, SUSAN TOWN OF APEX	Current Tenant	Current Tenant	Current Tenant
PIN NUM	0722731969 0722841609	0722649347 0722652622	0722741431 0722853496	0722742422	0722645333	0722842758	0722742283	0722855248	0722646334	0722854199	0722852274	0722746502	0722844846	0722649161	0722648203	0722747405	0722740440	0722744407	0722748601	0722749453	0722855042	0722852045	0722643165	0722746321	0722643056	0722850629	0722861231	0722852843	0722749305	0722852155	0722648353	0722841808	0722743414	0722647323	0722746202	0722644046	0722862012	0722740129	0722744590	0722667310	0722660502	0722852327	0722752304	0/22/40009			
SITE ADDRESS	0 BRYANT POND LN 1113 ROTHWOOD WAY	2617 BRYANT POND LN 0 US 64 HWY W	2605 BRYANT POND LN 101 TIMBERLEA CT	2599 BRYANT POND LN	2672 TIMBERLEA CI	503 LYNDENBURY DR 1119 ROTHWOOD WAY	2598 BRYANT POND LN	308 LYNDENBURY DR 1125 ROTHWOOD WAY	2666 TIMKEN FOREST DR	400 LYNDENBURY DR 1106 ROTHWOOD WAY	100 TIMBERLEA CT	2575 BRYANT POND LN	405 CHANTICLAIR DR	2628 BRYANT POND LN	2654 TIMKEN FOREST DR	1132 ROTHWOOD WAY	2611 BRYANT POND LN	2587 BRYANT POND LN	1128 ROTHWOOD WAY	1131 ROTHWOOD WAY	404 CHAN I CLAIK DK 112 LANGSHIRE CT	405 LYNDENBURY DR	1101 GOLIATH LN 2671 TIMKEN FOREST DR	1140 ROTHWOOD WAY	1105 GOLIATH LN 2502 BEVANT BOND I N	2809 US 64 HWY W	WY W GG TSGGG MAY		PWOOD WAY		NT GNOOL INE.		ANT POND LN	2660 TIMKEN FOREST DR	1146 ROTHWOOD WAY	0 BRYANT POND LN	113 LANGSHIRE CT 2812 LS 64 HWY W	2616 BRYANT POND LN	2581 BRYANT POND LN	0 ACTON ST	3300 US 64 HWY W	102 TIMBERLEA CT	2817 US 64 HWY W	THE ROLLINGOD WAY			

AFFIDAVIT OF CONDUCTING AN ELECTRONIC NEIGHBORHOOD MEETING AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

I, Matth	new J. Carpenter	, do hereby declare as follows:
	Print Name	
	I have conducted an Electronic Neighborh Residential Master Subdivision Plan, or Neighborhood Meeting.	ood Meeting for the proposed Rezoning, Major Site Plan, Special Use Permit in accordance with UDO Sec. 2.2.7
	feet of the subject property and any neigh	Apex Planning Department, all property owners within 300 borhood association that represents citizens in the area via ance of the Electronic Neighborhood Meeting.
3.	The meeting was conducted via Online vimeeting) on February 23, 2022 (date	
4.	I have included the mailing list, meeting zoning map/reduced plans with the applications.	invitation, attendance sheet issue/response summary, and tion.
5.	I have prepared these materials in good fai	th and to the best of my ability.
	Date OF NORTH CAROLINA TY OF WAKE	AND THE
Sworn a	and subscribed before me, Cinay h	a Notary Public for the above State and, 20
	SEAL	Cindy Wieland
	MINIMINION CONTRACTOR OF THE PROPERTY OF THE P	Notary Public Cinay Wieland Print Name
	WIELANDINI	Print Name
	PUBLIC 2.	My Commission Expires: 2-2-2-26
	THE COUNTINE	

- Page 460 -

NOTICE OF ELECTRONIC NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties. May 25, 2022 Date Dear Neighbor: You are invited to an electronic neighborhood meeting to review and discuss the development proposal at 2813 and 2817 US 64 Hwy W 0722743789 and 0722752304 PIN(s) Address(es) in accordance with the Town of Apex Electronic Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, you may contact the applicant before or after the meeting is held. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at www.apexnc.org. If at all feasible given emergency declarations, limits on in-person gatherings, and social distancing, an additional in-person Neighborhood Meeting may be scheduled and held prior to a public hearing or staff decision on the application. An Electronic Neighborhood Meeting is required because this project includes (check all that apply): **Application Type Approving Authority** Rezoning (including Planned Unit Development) **Town Council** O Major Site Plan Town Council (QJPH*) 0 **Special Use Permit** Town Council (QJPH*) 0 **Technical Review** Residential Master Subdivision Plan (excludes exempt subdivisions) Committee (staff) *Quasi-Judicial Public Hearing: The Town Council cannot discuss the project prior to the public hearing. The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)): The applicant is proposing to rezone the property to Planned Unit Development - Conditional Zoning District to facilitate the development of a mixed-use project with single-family detached homes, townhomes, and commercial uses. Additional information and updates since the first neighborhood meeting will provided during the meeting. Estimated submittal date: June 10, 2022 (resubmittal) **MEETING INFORMATION:** Yellowbridge Capital, LLC Property Owner(s) name(s): Lennar Carolinas, LLC c/o Matthew Carpenter Applicant(s): matthewcarpenter@parkerpoe.com; (919) 835-4032 Contact information (email/phone): Electronic Meeting invitation/call in See attached info: Date of meeting**: Time of meeting**: **MEETING AGENDA TIMES:** Project Presentation: between 6:00 - 8:00 PM Question & Answer: between 6:00 - 8:00 PM Welcome: 6:00 PM

**Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180/Planning.

Last Updated: March 25, 2020

May 25, 2022

Re: Notice of Second Virtual Neighborhood Meeting

Neighboring Property Owners:

You are invited to attend a second neighborhood meeting on June 8, 2022 from 6–8pm to discuss the rezoning of two parcels of land located at 2813 US 64 Hwy W (PIN 0722743789) and 2817 US 64 Hwy W (PIN 0722752304) (collectively, the "Property"). The Property is currently zoned Rural Residential (RR), and is proposed to be rezoned to Planned Unit Development-Conditional Zoning (PUD-CZ). The requested rezoning is to facilitate the development of a mixed-use project featuring single-family detached homes, townhomes, and commercial uses fronting US-64.

You may have attended the first neighborhood meeting for this case on February 23. Since the first meeting, we have filed the rezoning application and have made several changes to the plans. During the June 8 meeting, we will describe the nature of the rezoning request, provide updates since the first neighborhood meeting, and answer any questions. Enclosed are: (1) a vicinity map outlining the location of the subject parcel; (2) a zoning map of the subject area; (3) a revised preliminary concept plan of the Planned Unit Development; (4) a project contact information sheet; and (5) a common construction issues & who to call information sheet.

The meeting will be held virtually. You can participate online via Zoom or by telephone. To participate in the Zoom online meeting:

Visit: https://zoom.us./join

Enter the following meeting ID: 891 3054 5916

Enter the following password: 810545

To participate by telephone:

Dial: 1 929 205 6099 Enter the following meeting ID: 891 3054 5916 #

Enter the Participant ID: #

Enter the Meeting password: 810545 #

If you have any questions about this rezoning, please contact me at (919) 835-4032 or via email at matthewcarpenter@parkerpoe.com.

Thank you,

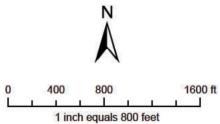
Matthew Carpenter



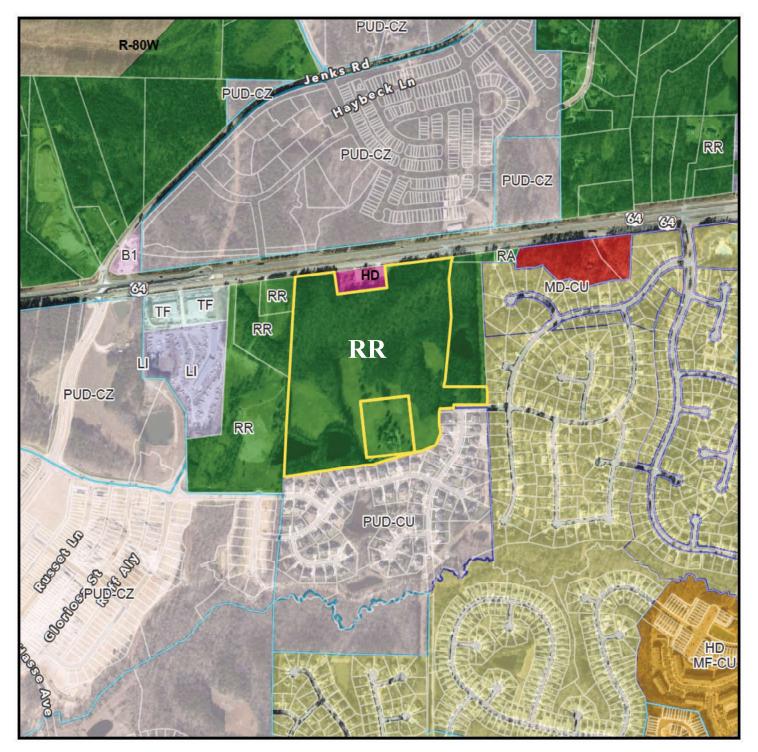
Rezoning of:

2813 and 2817 US 64 Hwy W

Vicinity Map



<u>Disclaimer</u> <u>iMaps makes every effort to produce and publish</u> the most current and accurate information possible. However, the maps are produced for information purposes, and are NOT surveys. No warranties, expressed or implied ,are provided for the data therein, its use,or its interpretation.

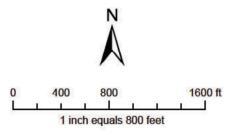


Rezoning of:

2813 and 2817 US 64 Hwy W

Zoning Map

Current Zoning: RR



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PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:
Project Name: Yellowbridge Zoning: Rural Residential (RR) ocation: 2813 and 2817 US 64 Hwy W
Property PIN(s): 0722743789 and 0722752304 Acreage/Square Feet: 48.43 acres
Property Owner: Yellowbridge Capital, LLC
Address: 113 Mill Point Road
City: Kitty Hawk State: NC zip: 27949-4082
Phone: n/a Email: n/a
Developer: Lennar Carolinas, LLC
Address: 1100 Perimeter Park Drive, Suite 112
City: Morrisville State: NC Zip: 27560
Phone: c/o Matthew Carpenter; 919-835-4032 Fax: n/a Email: matthewcarpenter@parkerpoe.com
ngineer: Peak Engineering & Design, PLLC; Attn. Jeff Roach
Address: 1125 Apex Peakway
City: Apex State: NC zip: 27502
Phone: 919-439-0100 Fax: n/a Email: jroach@peakengineering.com
Builder (if known): Same as Developer
Address:
City: State: Zip:
Phone: Fax: Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts	
Planning Department Main Number	
(Provide development name or location to be routed to correct planner)	(919) 249-3426
Parks, Recreation & Cultural Resources Department	
Angela Reincke, Parks Planner	(919) 249-7468
Public Works - Transportation	
Russell Dalton, Senior Transportation Engineer	(919) 249-3358
Water Resources Department	
Jessica Bolin, Senior Engineer (Stormwater, Sedimentation & Erosion Control)	(919) 249-3537
Stan Fortier, Senior Engineer (Stormwater, Sedimentation & Erosion Control)	(919) 249-1166
James Gregg, Utility Engineer (Water & Sewer)	(919) 249-3324
Electric Utilities Division	
Rodney Smith, Electric Technical Services Manager	(919) 249-3342

Last Updated: March 25, 2020

ELECTRONIC NEIGHBORHOOD MEETING ATTENDANCE SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Format: Offline via 200ff Date of meeting: June 8, 2022	Time of meeting: 6:00 PM
Property Owner(s) name(s): Yellowbridge Capital, LLC	
Applicant(s): Lennar Carolinas	

Please list Electronic Neighborhood Meeting Attendees who provided their name and/or contact information either during the meeting or via phone/email before or after the meeting.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	See attached attendance list				
2.					
3.					
4					
5.					
9.					
7.					
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9.					
10.					
11.					
12.					
13.					
14.					
] :	3, , , , , , , , , , , , , , , , , , ,				

- Page 467 -

Use additional sheets, if necessary.

Yellowbridge PUD Neighborhood Meeting Sign-In Sheet June 8, 2022

David Risk

Gerald Hornick

Bill Zerman

Kathy Coutros

Jen Curtis-Maury

Thomas Ainsley

Jay Vora

Steve Ritchie

Ed Knight

Alex Richbourg

Kari Hughes

Brant Gifford

Chip Allen

Jonathan Lamb

Polly Petrino

Cheryl Russell

Tommy Russell

Jim Logsdon

Brett Fleshman

Suzanne Bailey

Kari Hughes

M Bond

Rebecca Waite

Kate Macdonell

Scott Patrick

Paige Polito

Julie Robertson

Janarthan Kirupananthan

Penny Grieci

Sharon Hershkowitz

Joe Logan

Emily Dilday

Conne Bridenbaugh

Mary Kay Fast

Chris Sawyer

Conor Brockett

Heather Galeotti

Jonathan Polito

Veronika Schmidtke

^{*}Contact information was received but has been redacted for filing

SUMMARY OF DISCUSSION FROM THE ELECTRONIC NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

or disclosed to third parties.				
Property Owner(s) nan	ne(s): Yellowbridge Capita	I, LLC		
Applicant(s): Lennar C	Carolinas			
Contact information (e	mail/phone):			
Meeting Format: Onlin	ne via zoom			
Date of meeting: June	9 8, 2022	Time of meeting:	6:00 PM	
spaces below (attach a to any concerns. The re	dditional sheets, if necess esponse should not be "N	ary). Please state if/how the ploted" or "No Response". The	ctronic Neighborhood Meeting in the project has been modified in response ere has to be documentation of what change was deemed warranted.	
*Please see attach team	ed chat log for a full lis	t of questions. All question	ns were answered orally by the applica	ant
Question/Concern #1:	What is the plan for the the plan.	four homes on Chanticlair? \	We would like these homes removed fron	1
Applicant's Response:	ensure they will be mo we've agreed to exten Rothwood, akin to Str	ore compatible with the Abbind Rothwood Way so that the atford at Abbington homes.	om the project, we have taken steps to ngton neighborhood. In the PUD Text, se lots will take driveway access from We've also widened the buffer adjacent till be planting a 10-foot buffer along	o
Question/Concern #2:	Will you limit the types of	of allowed uses in the Commo	ercial District?	
Applicant's Respor	will be the only perm	itted uses in that area. We a	for the Commercial District. These uses re working with staff on appropriate uses nat would be permitted by the UDO.	
Question/Concern #3:	What is the overall reside	ential density of the project?		
Applicant's Respor	nse: The PUD limits maxim units/acre.	num residential density to 16	O units which equates to approximately 3	.5
Question/Concern #4:	What are the red stars o	n the Concept Plan?		

Applicant's Response: These represent conceptual open space and play lawn locations. Specific open space and play lawn locations will be finalized at the subdivision phase, following rezoning, so these locations could change.

Last Updated: March 25, 2020

Neighborhood Meeting Neighbor Notice List

	RALEIGH NC 27614-8837		RALEIGH NC 27603-1669																																																						
	11010 RAVEN RIDGE RD APEX NC 27502-4308	APEX NC 27502-4318	727 W HARGETT ST STE 109	APEX NC 27502-9642	APEX NC 27502-4310	APEX NC 27502-9642	APEX NC 27502-4315	APEX NC 27502-3044	APEX NC 27502-4308	APEX NC 27502-4311	APEX NC 27502-4308	APEX NC 27502-4315	APEX NC 27502-9645	APEX NC 27502-4309	APEX NC 27502-9642	APEX NC 27502-4310	APEX NC 27502-9644	APEX NC 27502-9729	APEX NC 27502-4317	APEX NC 27502-9644	APEX NC 2/302-43 13	APEX NC 27502-4308	APEX NC 27502-4318	APEX NC 27502-4310	APEX NC 27502-4309	APEX NC 27502-4309	APEX NC 27502-4308 APEX NC 27502-9646	APEX NC 27502-9621	APEX NC 27502-9643	APEX NC 27523-7803	APEX NC 27502-4316	APEX NC 27523-7803	APEX NC 27502-4311	CARY NC 27519-8611	CARY NC 27519-8611	APEX NC 2/502-4316 APEX NC 27502-9621	APEX NC 27502-4308	APEX NC 27502-4316	APEX NC 27502-9643	APEX NC 27502-43 18 APEX NC 27502-9645	APEX NC 27502-4308	APEX NC 27502-4310	APEX NC 27502-4311	APEX NC 27502-4319	RALEIGH NC 27603-1408	CARY NC 27513-5616	APEX NC 27502-9621	CARY NC 27513-8636	APEX NC 2/502-4317 APEX NC 27502-4310	APEX NC 27502-4309	SILVER SPRING MD 20910-1265	APEX NC 2/502-2325	ALEX INC 2/302-3042 KITTY HAWK NC 27949-4082	APEX NC 27502-4309	APEX NC 27502-0250	APEX NC 27502	APEX NC 27502
MAILING ADDRESS	PPM INC OF RALEIGH 1113 ROTHWOOD WAY	2617 BRYANT POND LN	KATHIE L RUSSELL TRUSTEE	101 TIMBERLEA CT	2599 BRYANT POND LN	103 TIMBERLEA CT	2672 TIMKEN FOREST DR	303 LTNDENBORT DR 1119 BOTHWOON WAY	N CNOC THE STORY	308 I YNDENBIRY DR	1125 ROTHWOOD WAY	2666 TIMKEN FOREST DR	400 I YNDENBIRY DR	1106 ROTHWOOD WAY	100 TIMBERLEA CT	2575 BRYANT POND LN	501 LYNDENBURY DR	405 CHANTICLAIR DR	2628 BRYANT POND LN	505 LYNDENBURY DR	2034 IIMKEN FOREST DR 4132 BOTHWOOD WAX	1107 ROTHWOOD WAY	2611 BRYANT POND LN	2587 BRYANT POND LN	1126 ROTHWOOD WAY	1120 ROTHWOOD WAY	1131 KO IHWOOD WAY 404 CHANTICI AIR DR	112 LANGSHIRE CT	405 LYNDENBURY DR	1101 GOLIATH LN	2671 TIMKEN FOREST DR	1105 GOLIATH LN	2592 BRYANT POND LN	7231 CARPENTER FIRE STATION RD	7231 CARPENTER FIRE STATION RD	2661 LIMKEN FOREST DR 1151 ANGSHIRE CT	1137 ROTHWOOD WAY	2651 TIMKEN FOREST DR	403 LYNDENBURY DR	2023 BRITANI POIND EN 402 I YNDFNRIIRY DR	1101 ROTHWOOD WAY	2593 BRYANT POND LN	2584 BRYANT POND LN	1146 ROTHWOOD WAY	621 W JONES ST	116 TURQUOISE CREEK DR	113 LANGSHIRE CT	15501 WESTON PKWY STE 100	2581 BRYANT POIND EN	1100 ROTHWOOD WAY	2900 LINDEN LN STE 300	50 HUNIEK SI SIE 110	113 MILL POINT RD	1114 ROTHWOOD WAY	PO BOX 250	504 Lyndenbury DR	 2813 Us 64 HWY W
OWNER	ABBINGTON COMMUNITY ASSN INC ABERNATHY, JOHN	ALLEN, CHESTER W IV ALLEN, ELENI N	ANS TRUST THE	BANKS. WAYNE BANKS, DEOGRATIAS A	BECKER, SHANNON V BECKER, DEBRA LYNN	BISI, JOHN EMERSON TRUSTEE JOHN EMERSON BISI FAMILY LIVING TRUST	BREWER, JEREMY JOE TRUSTEE BREWER, PAULA MARIE TRUSTEE	BRIDENBAUGH, DAVID N BRIDENBAUGH, CONNEL BIBI ESON BYAN WI BIBI ESON BETSY I	DOINTEGOLY, MINN WE BOINTEGOLY, BEIGHT	CHIADO DYI AN CHIADO HAI EY	COOLING TELESTER COOLING TO THE STEEL COOLING TO TH	CURTIS-MALIRY MATTHEW F CURTIS-MALIRY JENNIFER	DECOURCY JEISS DECOURCY DONNA M	ECKERSBERG JOHN II ECKERSBERG AMANDA J	FAST SCOTT HITRUSTEE FAST MARY KATHERINE TRUSTEE	FLESHMAN JAMES BRETT FLESHMAN KARA N		GANNON, TRAVIS GANNON, DANIELE	GARRETT, PATRICK JAMES GARRETT, MELISSA BETH	GARRY, ADAM T	GREEN, BRYAN GREEN, ERIN	HERSHKOWITZ, MICHAEL THOMAS HERSHKOWITZ, SHARON MARIE	HIBDON-ROBERTSON, JULIA LYNN	HOBART, BARRY /TR HOBART, DEBORAH LYNN /TR	JOHNS, ROBERT A JOHNS, CLAIRE A	KISER, JEFFERSON B III KISER, DENISE C	LABER, PATRICK LABER, DIANE TAMB, KIMBERTY STAMB, LONATHAN F	LAUFFER, MATTHEW S LAUFFER, LISA C	LOGSDON, JAMES M LOGSDON, KIMBERLY D	LOYD, FRANK ROYAL LOYD, AMY S	MACDONELL, JAMES T MACDONELL, KATHARINE G	MARY L WALKIEMICZ TRUST	MATHEWS, JAMES C MATHEWS, HOLLY	MATTHEWS, JOSEPH T MATTHEWS, PHILOMINA	MATTHEWS, JOSEPH T MATTHEWS, PHILOMINA J	MICHELL, JENNIFEK U PARKER MILIAM PILPARKER SLISAN R	PEPE, RICHARD L PEPE, CHRISTINE	PETERSON, KIRK PETERSON, CINDI	PETERSON, THAREN WAYNE PETERSON, RACHEL LOVE	POPKO BRIAN LI FVEDAKOLI EI ENI N	RITCHIE, STEVEN H RITCHIE, CHRISTA VENO	ROZET, TIMOTHY DANIEL ROZET, KATHLEEN SCANDURA	SAMBORSKI, CHRISTOPHER WILLIAM TRUSTEE SAMBORSKI, KARELYN JO TRUSTEE	SOUNDID RE, 300ETH & 30HMID I RE, VENOVINA SIVON, AMIE CAROL SIVON, JASON MICHEAL	SMITH, JEFFREY D SMITH, AMY N	SWEETWATER PROPERTY OWNERS ASSOCIATION, INC	TASTET, LANCE J TASTET, SYLVIA B	TAYLOR MORRISON OF CAROLINAS INC	VANZANTEN, JOHN HOLLIS JR VANZANTEN, HEIDI JILL RAFFR VERMETTE MARK E VERMETTE ELIZARETH S	VORA, JAY VORA, ALYSSA K	WESTFORD APARTMENTS WEH LP	WEGITORD MAGIER OWNERS AGGING	VIIII E, ALAN VIIII E, STEPTIANIE A YELLOWBRIDGE CAPITAL LLC	ZUMWALT, ROBERT ZUMWALT, SUSAN	TOWN OF APEX	Current Tenant	Current Tenant
PIN NUM	0722731969 0722841609	0722649347	0722652622	0722853496	0722742422	0722852554	0722645333	0722842738	0722740383	0722855248	0722840570	0722646334	0722854199	0722748778	0722852274	0722746502	0722842868	0722844846	0722649161	0722842679	0722747405	0722841709	0722740440	0722744407	0722747554	0722748601	0722749453	0722852790	0722852045	0722643165	0722645123	0722643056	0722743285	0722850629	0722861231	0722845134	0722749305	0722647017	0722852155	0722854046	0722841808	0722743414	0722744288	0722746202	0722844765	0722644046	0722862012	0722761436	0722744590	0722748868	0722667310	0722867508	0722752304	0722748669			
SITE ADDRESS	0 BRYANT POND LN 1113 ROTHWOOD WAY	2617 BRYANT POND LN	0 US 64 HWY W	101 TIMBERLEA CT	2599 BRYANT POND LN	103 TIMBERLEA CT	2672 TIMKEN FOREST DR	303 LINDENBORT DR	2598 BRYANT DONN IN	308 I YNDENBIRY DR	1125 ROTHWOOD WAY	2666 TIMKEN FOREST DR	400 I YNDENBIRY DR	1106 ROTHWOOD WAY	100 TIMBERLEA CT	2575 BRYANT POND LN	501 LYNDENBURY DR	405 CHANTICLAIR DR	2628 BRYANT POND LN	505 LYNDENBURY DR	2634 IIMKEN FORESI DR	1107 ROTHWOOD WAY	2611 BRYANT POND LN	2587 BRYANT POND LN	1126 ROTHWOOD WAY	1120 ROTHWOOD WAY	1131 KOTHWOOD WAY 404 CHANTICI AIR DR	112 LANGSHIRE CT	ENBURY DR		o CEN FOREST DR	Jew Cown			W YW .	115 I ANGSHIPE CT	1137 ROTHWOOD WAY	2651 TIMKEN FOREST DR	403 LYNDENBURY DR	2023 BRITAIN FOIND LIN 402 I YNDENBIJRY DR	1101 ROTHWOOD WAY	2593 BRYANT POND LN	2584 BRYANT POND LN	1146 ROTHWOOD WAY	504 LYNDENBURY DR	0 BRYANT POND LN	113 LANGSHIRE CT	2812 US 64 HWY W	2581 BRYANT POND LN 2581 BRYANT POND I N	1100 ROTHWOOD WAY	0 ACTON ST	2900 US 64 HWY W	102 I IMBERLES CI 2817 US 64 HWY W	1114 ROTHWOOD WAY			

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

1, _		Matthew J. Carpente	, do	hereby	declare as follows	:
		Print Name				
	1.	I have conducted a Neighborhood Master Subdivision Plan, or Speci Meeting.				
	2.	The meeting invitations were maile all property owners and tenants neighborhood association that repr of 14 days in advance of the Neighl	abutting ar resents citize	nd with ens in th	in 300 feet of th	e subject property and any
	3.	The meeting was conducted at	online	na	200m	(location/address)
		on June 8	_(date) from	6:0	O DM (start time) to <u>B ! 00 PM</u> (end time).
	4.	I have included the mailing list, me map/reduced plans with the applic	eeting invitat			
	5.	I have prepared these materials in	good faith ai	nd to th	e best of my ability	
_	6	127 /2022 Date	Ву:	P//	The Th	
		OF NORTH CAROLINA IY OF WAKE				
Sv	vorn	and subscribed before me, Cinc , on this the Dim day of Ju	ne Die	<u>lan</u> , 20]	, a Notary P	ublic for the above State and
		SEAL		the	lywicer	ad
			C	7 10 1	Notary	Public
		HIHIMOY WIELAND		1/4	Print	Name
		TARL OF TARL	N	1y Comr	mission Expires: 👤	-22-26
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		WWW.WWW.				

YELLOWBRIDGE NEIGHBORHOOD MEETING

June 8, 2022 Chat Box Questions/Comments

Contact information: Jeff Roach with Peak Engineering & Design (jroach@peakengineering.com)

From Penny Grieci to Everyone 06:13 PM

Do you have a drawing with the specific types of homes?

From polly petrino to Everyone 06:15 PM

when will you begin draining the ponds? can you notify us a few days in advance?

From Jay Vora to Everyone 06:15 PM

Do the red stars still represent "play areas" or open spaces?

From Chip Allen to Everyone 06:15 PM

What is the percentage of homes per usage acreage as much of the land is not buildable resulting in large number of homes in small space?

From Jen Curtis-Maury to Everyone 06:15 PM

Any what precautions do you take to prevent our adjacent lots from flooding during the draining and then potential natural refilling?

From Jim Logsdon to Everyone 06:15 PM

What's the game plan for the 4 homes on Chanticlair now

From Scott Fast to Everyone 06:16 PM

Now it appears the location closest to US 64 is now proposed as commercial - probably a good idea - but will you limit the TYPE of business (gas station yes/no, 24 hour stop & rob, medical only, etc.)?

From Brant Gifford to Everyone 06:16 PM

Does Lennar plan to develop the Commercial property themselves, or partner? Do you have example of Commercial development?

From polly petrino to Everyone 06:16 PM

how long will road construction take; what is that timeframe likely to be?

From David Risk to Everyone 06:16 PM

Matthew we saw a plan that takes out single family homes and replaces with townhomes behind the 4 homes closest to our neighborhood. Why that possible change? the orangish area on the east of the street to 64

From Thomas Ainsley to Everyone 06:16 PM

Can you please go into additional detail about the location, and quantity, and percentage of the overall project, of proposed townhomes within the development, understanding that your plans may not be final?

From Cheryl & Tommy Russell to Everyone 06:17 PM

the area in yellow off chanticlair, I'm assuming it's the 4 homes in plan. Please consider removing those as they don't fit and appear to be part of abbingtion. I know we've asked for them to be removed - any updates on those?

From Julie Robertson to Everyone 06:17 PM

Is there anything that can be done for the wildlife that life in the pond to relocate them to a new location?

From Chip Allen to Everyone 06:19 PM

Where will the pond water go? Will it be sucked up into and in your experience are snakes going into impacted adjacent land like our homes and pools an issue?

From PPAB Land Use to Everyone 06:20 PM

All meeting participants please enter your name, physical address, email address, and phone numbers in the chat.

From Jim Logsdon to Everyone 06:20 PM

If you turn the houses sideways will the 2 that back to the pipeline assume the pipeline for their backyards?

From Julie Robertson to Everyone 06:20 PM

Will the ponds be left open for a period of time to know if it is wetlands or not? How long is that period?

From Cheryl & Tommy Russell to Everyone 06:20 PM

to clarify our concern —The concern about the 4 homes is not about the way the face, it was about having those 4 homes there. They appear to be in abbington.

From Jim Logsdon to Everyone 06:21 PM

And if that's the case I won't get any 50 ft buffer, their backyard will touch my fence

From Julie Robertson to Everyone 06:21 PM

Julie Robertson

2611 Bryant Pond Lane



From polly petrino to Everyone 06:22 PM

12 months of our houses shaking from road construction

From Brant Gifford to Everyone 06:22 PM

If you're willing to partner for the commercial development, then why wouldn't Lennar partner with a custom builder for the 4 houses to better align to homes in Abbington?

From Cheryl & Tommy Russell to Everyone 06:23 PM

Chervl and Tommy Russell 323 Chanticlair Drive

From Scott Fast to Everyone 06:23 PM

ASK - Please, for the commercial, please consider professional / light 'commercial' use, not a gas station, not another bar / outdoor seating restaurant, there is just no need for that in Apex nor behind our community.

From Chip Allen to Everyone 06:23 PM

Eleni & Chip Allen, 2617 Bryant Pond Lane.

From Julie Robertson to Everyone 06:23 PM

Is there anything we can do to limit the construction on the weekends and have certain hours during the week so that we can still enjoy our yards?

From polly petrino to Everyone 06:24 PM

Polly & Ray Petrino, 2623 Bryant Pond Ln,

From Chip Allen to Everyone 06:24 PM

Will your neighborhood have a fence that runs along the Abbington side?

From Penny Grieci to Everyone 06:24 PM

If you are going to put townhomes to the east of the street then can you move the park area to next to the 4 homes on Chanticlair?

From Janarthan Kirupananthan to Everyone 06:24 PM

Janarthan Kirupananthan 2537 Bryant Pond Ln

From Jay Vora to Everyone 06:24 PM

Jay Vora - 1100 Rothwood Way;

From Emily Dilday to Everyone 06:24 PM

Mark and Emily Dilday 1167

From Scott Fast to Everyone 06:25 PM

Inquiry - Have you approached purchasing the land that is directly NORTH of the YELLOW single family homes nearest Abbington? the land with the pond DUE EAST of the three ponds you show in BLUE. Is Lennar interested in buying that land and developing???

Scott Fast, 100 Timberlea Court, Apex, NC 27502

From Mary Kay Fast to Everyone 06:25 PM

Mary Kay Fast, 100 Timberlea Court, Apex, NC 27502,

From Scott Patrick to Everyone 06:26 PM

Scott Patrick 202 Lyndenbury Drive

From Jen Curtis-Maury to Everyone 06:28 PM

what about the snakes part of Chips question. He asked about your experience with snakes invading our backyards after ponds are drained I think.

From Kate Macdonell to Everyone 06:28 PM

Can you talk about the buffer between the 4 houses and Chanticlair Drive?

From Janarthan Kirupananthan to Everyone 06:28 PM

Can the proposed location of the 4 homes be turned into another open/play space since Lennar has rejected removal of the houses.

From Jonathan Lamb to Everyone 06:28 PM

I agree with removing the 4 houses at the intersection of Rothwood and Chanticlair. I did not understand the reason given to keep those as part of the plan. Eric Lamb 404 Chanticlair Dr.

From Rebecca Waite to Everyone 06:28 PM

Agree with the concerns regarding the wildlife being displaced as well as the four homes along Chanticlair Dr. Having them turned will still look awkward, but having them there makes them look like they are in Abbington.

Rebecca Waite

Duncroft Ct. r

From Chip Allen to Everyone 06:30 PM

Please define the growing season as that was not answered and is very important for us to know. How does Lennar define this for your planning purposes for this project?

From Scott Fast to Everyone 06:31 PM

Thank you.

From Emily Dilday to Everyone 06:32 PM

We also agree with the concerns that the 4 homes on Chanticlair/Rothwood, regardless of which way they are facing, will look out of place.

From Scott Patrick to Everyone 06:32 PM

LeNelle & Scott Patrick, 202 Lyndenbury Dr. Apex, NC 27502

From Steve Ritchie to Everyone 06:32 PM

Steve & Christa Ritchie 1101 Rothwood Way

From Chip Allen to Everyone 06:33 PM

Why will Lennar not widen the lots adjacent to Abbington?

From Suzanne Bailey to Everyone 06:33 PM

Suzanne & Jim Bailey 2605 Bryant Pond Lane

From Steve Ritchie to Everyone 06:34 PM

After the extension of Rothwood Way, what will be the size of those 4 lots relative to the other Abbington homes on Rothwood Way?

From Paige Polito to Everyone 06:34 PM

On Goliath Ln the builder Exeter took just several lots to build on; most of the lots on that street were developed by Loyd Builders. It seems that a custom builder may consider building just a few homes on a street so this may be something Lennar could at least consider for Chanticlair.

From Jen Curtis-Maury to Everyone 06:34 PM

Jen Curtis-Maury 2666 Timken Forest Drive. I would like to officially request on the record again to remove the 4 Chanticlair homes and to further widen the lots adjacent to Abbington (beyond 60 ft., our lots are about 90 ft.). Also, I would like to be updated on any plan changes.

From Kari Hughes to Everyone 06:35 PM

Rob and Kari Hughes, 101 Duncroft Court, Apex, NC 27502, 9

From Kate Macdonell to Everyone 06:35 PM

Abbington lots are about 90 feet wide. Your plan shows the south lots as 60 feet wide. Can you please widen those single family detached lots?

From Scott Patrick to Everyone 06:36 PM

LeNelle & Scott Patrick, 202 Lyndenbury Dr. Apex, NC 27502

From Cheryl & Tommy Russell to Everyone 06:40 PM

Are there any proposed play / open areas in your plan? If so - can you consider putting the 4 homes there and make the 4 home proposal a play area. It would blend the two neighborhoods together vs. 4 homes in that area.

From Jim Logsdon to Everyone 06:40 PM

How large will those 4 lots be off Chanticlair now that you're turning them sideways and you have to extend Rothwood way and they will have a 20ft plus 50 ft pipeline easement

From Chip Allen to Everyone 06:41 PM

Chip and Eleni Allen 2617 Bryant Pond Ln. We are officially requesting on the record again to remove the 4 Chanticlair homes and to further widen the lots adjacent to Abbington (beyond 60 ft., our lots are about 90 ft.). We also express extreme concern about the ponds being drained as it will result in land erosion and wildlife destruction. The density of your proposed neighborhood is outrageous for the amount of usable land. The homes are not comparable to those in Abbington. Please ensure the commercial space is conducive to its residential location with no bars or late night openings and no large delivery trucks that will make loud noises. Also Chanticlair must be finished to meet up with Sweetwater. Very concerned about traffic going to schools and shops running on Bryant Pond. Please update us on all plan changes.

From Julie Robertson to Everyone 06:41 PM

I would like to go on record and voice my concerns about the 4 Chanticlair homes and I think they still need to be removed and that space used as green space. And I would like wider lots for those houses that are backing up to Abbington. I have concerns about the number of townhomes that are being added as part of the plan. I feel like we are not able to negotiate because of the price of land being purchased is so high and the buildable land is so poor. You have 80 ft lot plans why can we not go up to that lot size to help match the Abbington homes. I am also concerned about what these smaller lots and homes that will now back up to my home, the draining and clear cutting of the land behind my house will cause my home values to go down.

From Kate Macdonell to Everyone 06:42 PM

Since this is being recorded and submitted, I want to go on record saying I agree with removing the 4 houses on Chanticlair and widening the southern lots.

From Jen Curtis-Maury to Everyone 06:42 PM

The lots were 60 feet on your first submission. Less housing units means fewer neighbors bordering each yard. That is the exact point of widening the lots and is what we are asking for.

From Paige Polito to Everyone 06:44 PM

I am going on record concurring with other residents to agree with removing the 4 houses on Chanticlair and widening the southern lots.

From Chip Allen to Everyone 06:44 PM

Will AirBnB and other type of very short term rentals be permitted in the Leanna's HOA?

From Jen Curtis-Maury to Everyone 06:45 PM

Please read Cheryl

From Kate Macdonell to Everyone 06:45 PM

Can you explain what a type E buffer looks like? Landscape easement

From Jay Vora to Everyone 06:45 PM

As the homeowner right on the corner of Rothwood and Chanticlair, the 4 houses on chanticlair will probably impact my home more than most. I might be the only one in the neighborhood, but I think the turned lots will actually blend in well with Abbington and is a good decision. Even though they technically aren't in our neighborhood, I think continuity matters to the look and feel of our neighborhood.

From Cheryl & Tommy Russell to Everyone 06:46 PM

We would like to go on record and request the 4 homes are removed from Chanticlair Abbington connection and widening the lots directly behind Abbington.

From Scott Fast to Everyone 06:46 PM

On the Apex town interactive development map, the filing for Yellowbridge on 03/31 was noted as "non-residential" - is that the 'proposed use' or 'the current status' ????

From Suzanne Bailey to Everyone 06:46 PM

I would like to officially request on the record to remove the 4 Chanticlair homes and to further widen the lots adjacent to Abbington (beyond 60 ft., our lots are about 90 ft.).

From Janarthan Kirupananthan to Everyone 06:47 PM

Is there a dust mitigation plan during the many months of construction?

From Scott Fast to Everyone 06:48 PM

Okay, thank you.

From Kate Macdonell to Everyone 06:50 PM

The additional 5 ft landscape easement is within private property lines, right? So it's 10 feet, you can not count the 5 feet on someone's property. Just want to clarify that.

From Chip Allen to Everyone 06:51 PM

Because the ponds are being drained in June ish the spring growing season will be omitted. How is this being factored in? Decision by the army corps needs to take this into account.

From Bill Zerman to Everyone 06:52 PM

Can you describe what the traffic flow pattern from yellowbridg to 64

From Kate Macdonell to Everyone 06:52 PM

Can you tell us how you summarize this meeting for the Town Council? Do they see this chat or do you write it up for them?

From Julie Robertson to Everyone 06:53 PM

How will we receive further updates?

From Chip Allen to Everyone 06:53 PM

Please repeat the timelines are that was reviewed very quickly

From Jen Curtis-Maury to Everyone 06:54 PM

There is a graphic from the town's traffic department

From Cheryl & Tommy Russell to Everyone 06:54 PM

We have a difficult time leaving our neighborhood onto 64 now - what have the traffic studies shown?

From polly petrino to Everyone 06:55 PM

I agree with Julie Robertson's comments above, The density will cause home values to decline from their current status. Quality of life during construction is also being glossed over here. There will be significant noise pollution and we have already had to contend with Sweetwater for several years. In addition, this is just adding to our general infrastructure issues, particularly our enrollment capped schools in this area. There needs to be more proactive collaboration from builders on this point.

From Chip Allen to Everyone 06:55 PM

Please submit entire chat as the official transcript as we were not able to ask verbal questions

From Penny Grieci to Everyone 06:56 PM

Will you provide us with a copy of your notes that you submit to the town?

From Scott Fast to Everyone 07:00 PM

Can you share documented commentary or guidelines or mandates from the town of Apex, county of Wake, or state of NC about your submittals? Written communications, as to land use, density, US 64 access, changes and charges Lennar will incur for ANY changes to town roads (access, signage), county roads or state highway access? I would appreciate to read what they may be communicating, if open to the public...??

https://experience.arcgis.com/experience/41bf89a7c97d43a2934b0e823c8bfa45

https://www.apexnc.org/Search?searchPhrase=interactive

easier link...:)

The proposed 'unit' or dwelling capacity is what now? How many Detached, how many attached, I guess no villas or condos now? Then min of 2.3 to 3.2 persons per HH, that means how many total persons?

From Rebecca Waite to Everyone 07:01 PM

I am also concerned about the traffic. It is already very difficult to turn left (and even right at times) out of the Kellyridge entrance.

From Scott Patrick to Everyone 07:01 PM

I reiterate severely limiting what type of commercial development goes on Rt 64. Believe we could quickly come up with a quick list of absolute non-starters with a gas station being at the top of this list for me.

From Scott Fast to Everyone 07:01 PM

we agree w/Rebecca White ... just today was terrible

From Cheryl & Tommy Russell to Everyone 07:02 PM

Agreed, I couldn't turn right

From Scott Fast to Everyone 07:03 PM

The planner is whom? Loren? please write in chat:) Thx

From polly petrino to Everyone 07:04 PM

Lauren Staudenmaier lauren.staudenmaier@apexnc.org

From Kate Macdonell to Everyone 07:04 PM

Do you anticipate staff asking you to make further changes to the plan?

From Scott Fast to Everyone 07:04 PM

Max = 160 units, SFD, townhomes, rough count 120 + - today ... 120*3 = 360, 120*5=600... lots of cars, buses...

From Scott Patrick to Everyone 07:06 PM

40 detached is a very small number and I would consider this an absolute floor. should be higher than 40/120. when is this finalized and committed?

From Julie Robertson to Everyone 07:07 PM

Since you are adding in the commercial why does the count have to stay at 160?

From Scott Patrick to Everyone 07:08 PM

did the mix of attached / detached change then?

From Scott Fast to Everyone 07:10 PM

I recall we discussed stop signs on Chanticlair, whether at Rothwood or within Yellowbridge, it will be a mix of vehicle and foot traffic between those intersections... any thoughts?

From Chip Allen to Everyone 07:11 PM

Thank you for your time.

From Scott Fast to Everyone 07:11 PM

we will have a 3-way at Rothwood and then a 3-way inside Yellowbridge...Please show map again to address stop signs ... so all can see.

From Kate Macdonell to Everyone 07:11 PM

Will there be neighborhood signage delineating Abbington from Yellowbridge where the neighborhoods transition?

From Scott Fast to Everyone 07:12 PM

Yes! just west of Rothwood. yes.

From Cheryl & Tommy Russell to Everyone 07:14 PM

What are the red stars on this map?

From Jim Logsdon to Everyone 07:14 PM

Those 4 lots are going to be postage stamp size now that Rothwood will be extending and they will still have a 20ft and 50ft pipeline easement....I call BS

From Cheryl & Tommy Russell to Everyone 07:14 PM

ok, I had asked earlier - could the 4 homes be moved to one of those?

From Jim Logsdon to Everyone 07:14 PM

Sorry, bad message

From Julie Robertson to Everyone 07:15 PM

What about the land you need that Abbington owns?

From Kate Macdonell to Everyone 07:15 PM

A red star where those 4 houses on Chanticalire are right now would be great!:-)

From Chip Allen to Everyone 07:18 PM

Requires 2/3 vote for Abbigaton to sell that land

From Jonathan Polito to Everyone 07:18 PM

How is this proposal helping Apex or the neighboring properties in Abbington? It will NOT increase or help the values of the homes in Abbington and as we've seen recently with the Wake County tax increase vote DEVELOPMENT DOES NOT PAY FOR ITSELF! But rather taxes existing residents more.

From Scott Fast to Everyone 07:19 PM

Have to be honest...I am getting an itchy feeling that you MAY know more about the Matthew's intentions and status of action, not saying you DO, but if you do, can you please share? I live directly to the right of the pond on their property and don't want to look at a bank, gas station, townhomes or condos... If not you, can I speak to someone in Apex as to their intentions? Thank you.

From Chip Allen to Everyone 07:19 PM

Again entering into chat since not read. The sell of the Abbington land to Lennar requires a 2/3 vote from Abbington residents.

From Scott Fast to Everyone 07:20 PM

I have a doctor on speed dial and a cocktail... all good.

From Brant Gifford to Everyone 07:21 PM

Speaking of Chanticlair, we had heard the extension to Sweetwater through the Atkinson property was looked at, and not accepted to be extended at this time. Does Lennar or Jeff have any indication from the town how they propose to complete this collector, or a timeline for completion?

From Julie Robertson to Everyone 07:21 PM

When does that negotiation on the land needed happen? Does it happen when the zoning request goes in or when the subdivision plan is put together.

From Scott Fast to Everyone 07:21 PM

Joe Matthews... he owns that land above/north of the '4 yellow homes'. Towards US 64. FYI.

https://www.apexnc.org/Search?searchPhrase=interactive

From Kate Macdonell to Everyone 07:21 PM

Just FYI to all thinking about future development around us, buffers and lot sizes/widths matter and set precedents for the future.

From Jen Curtis-Maury to Everyone 07:24 PM

You said what the HOA Covenants say right now? What does that mean?

From Kate Macdonell to Everyone 07:26 PM

We definitely appreciate the 50ft buffer. Can you also widen the southern lots? So that precedent can be set when the next 2 parcels sell?

From Chip Allen to Everyone 07:26 PM

Goliath Lane are custom homes comparable to Abbington home. This should be noted for the record.

From Jen Curtis-Maury to Everyone 07:27 PM

Agree with Kate and Chip's comments

From Conne Bridenbaugh to Everyone 07:28 PM

Agree with removal of the four homes at the intersection of Rothwood and Chanticlair and widen the lots adjacent to Abbington. The developers of Sweetwater made it work with Abbington. Lennar can as well. Turning them is not the desired solution. David and Conne Bridenbaugh. 503 Lyndenbury Dr.

YELLOWBRIDGE

Planned Unit Development

Apex, North Carolina

Submittal Dates

First Submittal: March 1, 2022 Second Submittal: April 8, 2022 Third Submittal: May 13, 2022 Fourth Submittal: June 10, 2022 Fifth Submittal: June 28, 2022

Developer

Lennar Corporation Raleigh Division 1100 Perimeter Park Drive, Suite 112 Morrisville, NC 27560

Civil Engineer

Peak Engineering & Design 1125 Apex Peakway Apex, NC 27502

Land Use Attorneys

Parker Poe Adams & Bernstein LLP 301 Fayetteville Street, Suite 1400 Raleigh, NC 27602

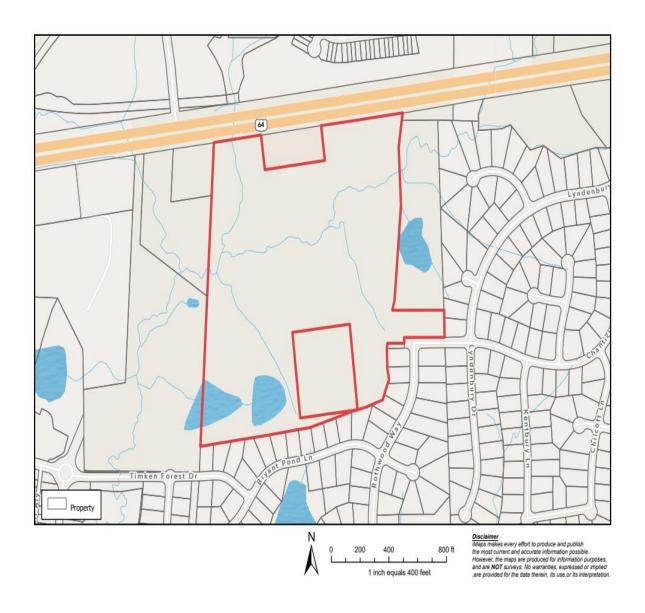




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VICINITY MAP



PROJECT DATA

Name of Project: Yellowbridge PUD **Property Owner:** Yellowbridge Capital, LLC 113 Mill Point Road Kitty Hawk, NC 27949 **Developer: Lennar Corporation** Raleigh Division 1100 Perimeter Park Drive, Suite 112 Morrisville, NC 27560 Prepared by: Parker Poe Adams & Bernstein LLP 301 Fayetteville Street, Suite 1400 Raleigh, NC 27601 Peak Engineering & Design 1125 Apex Peakway Apex, NC 27502 **Current Zoning:** Rural Residential (RR) **Proposed Zoning:** Planned Unit Development Conditional Zoning (PUD-CZ) **Current 2045 Land Use Map** Medium Density Residential **Designation: Proposed 2045 Land Use Map** Residential Area: Medium Density Residential Commercial Area: Commercial Services Designation **Site Address:** 2817 US 64 Highway W Apex NC 27523 2813 US 64 Highway W Apex NC 27523 **Property Identification Number:** 0722752304 0722743789 (the "Property") **Total Acreage:** 48.43 acres Area Designated as Mixed Use on LUM None

3.5 acres

Area Proposed as Non- Residential:

PURPOSE STATEMENT

This document and the accompanying exhibits submitted herewith (collectively, the "PUD") are provided pursuant to the Town of Apex Unified Development Ordinance ("UDO") Planned Unit Development provisions. This PUD addresses the development of approximately 48.43 acres along US 64 Highway W, less than one mile from the 540/US-64 interchange. The Property is undeveloped and within the Town's Extra Territorial Planning jurisdiction. Yellowbridge PUD will be a mixed-use community with two districts, the Residential District and the Commercial District.

Yellowbridge PUD will feature a mix of single-family detached homes, alley loaded townhouses, front loaded townhouses, and commercial uses with walking paths and open space (the "Development"). The mix of housing types will serve residents with varying budgets, backgrounds, and family needs. The community will be conveniently located to existing amenities and have easy access to highways. The neighborhood style commercial uses fronting US-64 Highway West will create a transition in development intensity from the highway south through the Development. The PUD is intended to create flexibility in design and land uses to deliver a high quality residential development that fits the context of existing development in the area. The Residential District is consistent with the Property's Medium Density Land Use Map ("LUM") designation; and generally, with the Apex Comprehensive Plan's ("Peak Plan") goal of accommodating a mix of housing types to serve the Town's growing and increasingly diverse population. Although the LUM does not specifically designate the Property for commercial uses, the portion of the Property fronting US-64 Highway West is appropriate for the neighborhood serving commercial uses permitted by this PUD. The Commercial District is located directly across US-64 Highway West from the Westford PUD which permits a variety of residential, office, and commercial uses along the road. Additionally, the Commercial District is located adjacent to the Local Bar and is separated from the Residential District by a stream and wetlands that will act as a natural buffer between future commercial uses and residential neighborhoods to the south.

CONSISTENCY WITH PLANNED UNIT DEVELOPMENT STANDARDS

(i) The uses proposed to be developed in the PD plan for PUD-CZ are those uses permitted in Sec. 4.2.2 Use Table

RESPONSE: The uses permitted within The Yellowbridge PUD are permitted within this designation in UDO Section 4.2.2 Use Table.

(ii) The uses proposed in the PD Plan for PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of non-residential land area is included in certain mixed use areas as specified on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown in the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.

RESPONSE: The Yellowbridge PUD is a mixed use community with a mix of housing types and commercial uses outlined in this PUD.

(iii) The dimensional standards in Sec. 5.1.3 Table of Intensity and Dimensional Standards, Planned Development Districts may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.

RESPONSE: This PUD specifies intensity and dimensional standards for the project. The PUD's standards are consistent with the UDO's vision for Planned Unit Developments – to provide site specific, high-quality neighborhoods that preserve natural features and exhibit compatibility with, and connectivity to, surrounding land uses. Except as specifically stated in this PUD, Yellowbridge will comply with all other requirements of the UDO and will comply with all applicable requirements of the North Carolina Building Code and the North Carolina Fire Code.

(iv) The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Advance Apex: The 2045 Transportation Plan and the Town of Apex Standard Specifications and Standard Details, and greenway improvements as required by the Town of Apex Parks, Recreation, Greenways, and Open Space Plan and the Advance Apex: The 2045 Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.

RESPONSE: Yellowbridge PUD will feature sidewalks throughout. Sidewalks will connect the project and the adjacent Abbington neighborhood, improving pedestrian connectivity. The PUD also commits to significant right of way dedication and roadway improvements called for by the Transportation Plan.

(v) The design of development in the PD Plan for PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient compact network of streets. Cul-de-sacs shall be avoided unless the design of the subdivision and the existing or proposed street system in the surrounding area indicate that a through street is not essential in the location of the proposed cul-de-sac, or where sensitive environmental areas such as streams, floodplains, and wetlands would be substantially disturbed by making road connections.

RESPONSE: The proposed street layout has been designed to enhance pedestrian and vehicular connectivity while protecting sensitive environmental features and being mindful of existing residential development. The development will facilitate the vision of the Transportation Plan by extending the existing Chanticlair Drive stub street across the site to the west. Additionally, the project will extend a public street to the north to US-64 Highway West which will increase connectivity and provide Abbington residents an additional route to US-64 Highway West.

(vi) The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.

RESPONSE: The proposed development is compatible with the character of the existing and planned uses in the surrounding area. This area of the Town's ETJ is at the intersection between growing sections of northwest Apex and historically rural, western Wake County. Adjacent properties are largely residential subdivisions with some commercial uses nearby. Nearby residential developments include the Villages at Westford Apartments, the Townes at Westford, the Stratford at Abbington, the Abbington Community, and the Sweetwater Community and Town Center. The Villages at Westford Apartments are directly across US 64 Highway West and consist of 296 apartments with a clubhouse and pool that were constructed in 2019 as part of the Westford PUD. The Stratford at Abbington and the Abbington Community are both single-family detached subdivisions. The Sweetwater Community and Town Center is a residential and commercial site with townhomes, single family homes and various commercial uses.

Yellowbridge PUD will provide a mix of housing types and neighborhood serving commercial uses that offer a transition between US 64 Highway West and the lower intensity Abbington community to the south. Density will transition from more dense townhomes to larger lot single-family detached homes as the site moves north to south. Additionally, this PUD contains buffer commitments and design standards that will ensure compatibility with neighboring uses.

(vii) The development proposed in the PD Plan for PUD-CZ has architectural and design standards that are exceptional and provide higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.

RESPONSE: Yellowbridge PUD will feature high quality and thoughtful design. Architectural standards, design controls, and conceptual elevations are included in this PUD.

CONSISTENCY WITH CONDITIONAL ZONING STANDARDS

Yellowbridge PUD is consistent with the conditional zoning standards set forth in UDO Section 2.3.3.F.1-10. Please see the accompanying PUD-CZ Application for the statements of consistency addressing each standard.

PERMITTED USES

The Property may be used for the uses listed below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply. Homeowners Association covenants shall not restrict the construction of accessory dwelling units.

RESIDENTIAL DISTRICT

The following uses shall be permitted in the Residential District:

Residential	
Single-family	Permitted
Townhouse	Permitted
Accessory apartment*	Permitted
Recreational Uses	
Park, active	Permitted
Greenway	Permitted
Park, passive	Permitted
Recreation facility, private	Permitted
Utility, minor	Permitted

^{*} Homeowners Association covenants shall not restrict the construction of accessory dwelling units.

COMMERCIAL DISTRICT

The following uses shall be permitted in the Commercial District:

Restaurant, general	Permitted
Restaurant, drive-through	Permitted
Medical or dental office or	Permitted
clinic	
Medical or dental laboratory	Permitted
Office, business or	Permitted
professional	
Publishing office	Permitted
Artisan Studio	Permitted
Barber and beauty shop	Permitted
Book store	Permitted
Convenience store	Permitted
Dry cleaners and laundry	Permitted
service	

Farmer's market	Permitted
Financial institution	Permitted
Floral shop	Permitted
Gas and fuel, retail	Permitted
Greenhouse or nursery, retail	Permitted
Grocery, general	Permitted
Grocery, specialty	Permitted
Health/fitness center or spa	Permitted
Kennel	Permitted
Newsstand or gift shop	Permitted
Personal service	Permitted
Pharmacy	Permitted
Printing and copying service	Permitted
Real estate sales	Permitted
Repair services, limited	Permitted
Retail sales, general	Permitted
Studio for art	Permitted
Tailor shop	Permitted
Upholstery shop	Permitted
Pet services	Permitted
Day care facility	Permitted
Veterinary clinic or hospital	Permitted
Utility, minor	Permitted

AFFORDABLE HOUSING

The Development shall include a minimum of two (2) residential restricted affordable housing townhouse or detached single-family median-income ownership units (the "Affordable Units"). The Affordable Units shall be constructed on-site and sold (includes unit price and lot price) at a mutually agreeable maximum affordable housing median-income ownership initial sales price (the "Initial Sales Price"). The Affordable Units shall be occupied by low or median-income households earning no more than one-hundred percent (100%) of the Raleigh NC Metropolitan Statistical Area (MSA), Area Median Income (AMI), adjusted for family size as most recently published by HUD (the "Income Limit")(. For purposes of calculating the Initial Sales Price for the Affordable Units, affordable shall mean a reasonable down payment and monthly housing costs expected during the first calendar year of occupancy, including utilities or utility allowances, mortgage loan principal and interest, mortgage insurance, property taxes, homeowner's insurance, homeowner's association dues, if any, and all other property assessments, dues and fees assessed as a condition of property ownership, which does not exceed thirty percent (30%) times (x's) one-hundred percent (100%) times (x's) the annual median-income limit (100% AMI Category), based on a family size that is equal to the actual number of bedrooms as the Affordable Units, applicable to the Raleigh, NC MSA as most recently published by the HUD. A restrictive covenant (i.e. resale deed restriction) with a minimum affordability period of fifteen (15) years (the "Affordability Period") shall be recorded in the Wake County Registry against each of the Affordable Units concurrently at the close of escrow upon the sale of the Affordable Units. A restrictive covenant (i.e. affordable housing agreement) between the Town and applicant shall be recorded in the Wake County Registry against each of the lots for the Affordable Units prior to the issuance of a building permit for such lots to memorialize the affordable housing terms and conditions of the approved zoning condition. The Affordable Units may be townhouses or single-family detached houses, at the discretion of the developer, and shall be designated on the Master Subdivision Final Plat, which may be amended from time to time. Final Affordable Housing Unit floor plan selection which includes the unit size and bedroom size will be at the discretion of the developer. The Affordable Units may be provided in multiple phases or in one single phase. Developer will work with the Town to identify qualifying buyers for the first sale of the Affordable Units (the "First Sale"). Following the First Sale of the Affordable Units, Developer shall not be responsible for managing the Affordable Units or performing marketing, applicant screening, and selection related to future sales of the Affordable Units. Town staff will assist with the administrative duties of the Affordable Units during the Affordable Period.

DESIGN CONTROLS

Development shall comply with the following minimum design controls.

UNIVERSAL DESIGN CONTROLS

Total Project Area	48.43 acres
Maximum Built-Upon Area	70% of gross site acreage

RESIDENTIAL DISTRICT DESIGN CONTROLS

Maximum Residential Density Proposed Land Area Pront Loaded Townhouses Minimum Lot Size Minimum Setbacks Front Side Maximum Building Height Minimum Buffer/RCA Setbacks Rear Loaded Townhouses Minimum Lot Size More Minimum Building Separation Minimum Buffer More Minimum Lot Size Minimum Buffer More Minimum Buffer More Minimum Buffer More Minimum Buffer More Minimum Setbacks Front Side Minimum Lot Size Mone Minimum Lot Width Minimum Setbacks Front Side Oft. (5 ft. for end units) Fit. for parking areas Rear Loaded Townhouses Minimum Lot Size Mone Minimum Lot Width Minimum Setbacks Front Side Oft. (5 ft. for end units) Rear Corner Side 8 ft. Maximum Building Height Minimum Building Separation Single-Family Detached Minimum Lot Size Mono square feet Minimum Lot Width* So ft. Minimum Setbacks Front So ft. Single-Family Detached Minimum Lot Width* Minimum Setbacks Front So ft. So ft. Minimum Setbacks Front So ft. So ft. Minimum Setbacks Front So ft. So ft. So ft.	Maximum Residential Density	160 units
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Minimum Setbacks Front 20 ft.	Minimum Lot Size	6,000 square feet
Front 20 ft.	Minimum Lot Width*	50 ft.
	Minimum Setbacks	
Side 6 ft.	Front	20 ft.
	Side	6 ft.

Rear	15 ft.
Corner Side	8 ft.
Maximum Building Height	3 stories; 45 ft.
Minimum Buffer/RCA Setbacks	10 ft. for buildings
	5 feet for parking areas
Minimum Resource Conservation	30% of gross site acreage
Area	

^{*}Single-family detached homes adjacent to the Property's southernmost property line adjacent to the Abbington neighborhood from the northwestern corner of PIN 0722645333 to the northeastern corner of PIN 0722748868 shall have a minimum lot width of 60 feet.

COMMERCIAL DISTRICT DESIGN CONTROLS

Proposed Land Area	3.5 acres
Maximum Building Square Footage	25,000 SF
Minimum Setbacks	
Front (US-64)	10 ft.
Side	10 ft.
Rear	10 ft.
Corner Side	10 ft.
Maximum Building Height	50 ft.
Minimum Buffer/RCA Setbacks	10 ft. for buildings
	5 ft. for parking areas
Minimum Resource Conservation Area	25% of gross site acreage

LANDSCAPING, BUFFERING, AND SCREENING

Perimeter buffers shall be built and planted to the following lot width and planting standards:

Along the Property's shared property line with PIN 0722762014	30 ft. Type A
Along the Property's US-64 Highway West frontage east of PIN 0722762014	50 ft. Type A*
Along the Property's US-64 Highway West frontage west of PIN 0722762014	100 ft. Type E

Along the Property's westernmost boundary	20 ft. Type B
, ,	
Along the north and south side of Chanticlair	10 ft. Type D
Drive west of the Single Family Detached	
homes to the north of Chanticlair Drive	
Along the north side of Chanticlair Drive	10 ft. Type D
adjacent to the Single Family Detached homes	
north of Chanticlair Drive	
Along the Property's easternmost boundary	10 ft. Type B
adjacent to PIN 0722850629	20.00.7/60.2
•	
Along the gas easement	10 ft. Type A
Along the Property's southern property line	50 ft. Type A** with a minimum 6 ft. tall
from the northwest corner of PIN 0722645333	opaque privacy fence along the north edge of
to the northeast corner of PIN 0722741431**	the buffer
Along the Property's southern property line	50 ft. Type A*** with a minimum 6 ft. tall
from the northeast corner of PIN 0722741431	opaque privacy fence along the north edge of
to the northwest corner of PIN	the buffer
0722748868***	

^{*} The Development shall meet requirements (i) through (iii) in UDO Section 8.2.6(B)(5)(f)(ii)(c) to reduce the buffer width along US-64 Highway West to 50 feet.

^{**} This portion of the perimeter buffer shall remain undisturbed and supplemented with Type A buffer plantings.

^{***} This portion of the perimeter buffer shall be cleared, graded, include a minimum 3-foot berm, and be replanted to a Type A buffer standard.

ARCHITECTURAL STANDARDS

Yellowbridge PUD offers the following architectural controls to ensure a consistency of character throughout the development, while allowing for enough variety to create interest and avoid monotony. Elevations included are conceptual examples. Final elevations must comply with these architectural standards but may vary from the conceptual elevations. Further details may be provided at the time of Residential Master Subdivision Plan submittal.

RESIDENTIAL DISTRICT DESIGN GUIDELINES

Single-Family Detached:

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. The roof shall be pitched at 5:12 or greater for 75% of the building designs.
- 3. Eaves shall project at least 12 inches from the wall of the structure.
- 4. Garage doors shall have windows, decorative details or carriage-style adornments on them.
- 5. The garage shall not protrude more than 1 foot out from the front façade and front porch.
- 6. Garages on the front façade of a home that faces the street shall not exceed 30% of the total width of the house and garage together.
- 7. The visible side of a home on a corner lot facing the public street shall contain at least 3 decorative elements such as, but not limited to, the following elements:
 - Windows
 - Bay window
 - Recessed window
 - Decorative window
 - Trim around the windows
 - Wrap around porch or side porch
 - Two or more building materials
 - Decorative brick/stone
 - Decorative trim

- Decorative shake
- Decorative air vents on gable
- Decorative gable
- Decorative cornice
- Column
- Portico
- Balcony
- Dormer
- 8. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 9. House entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
- 10. The rear and side elevations of the units that can be seen from the right-of-way shall have trim around the windows.
- 11. Front porches shall be a minimum of 5 feet deep.
- 12. No more than 25% of lots may be accessed with J-driveways. There shall be no more than 3 such homes in a row on any single block. Any lots eligible for a J-driveway home shall be identified on the Final Plat.

Townhouses (front and alley loaded):

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. The roofline cannot be a single mass; it must be broken up horizontally and vertically between every unit.
- 3. Garage doors must have windows, decorative details or carriage-style adornments on them.
- 4. House entrances for units with front-facing single-car garages shall have a covered porch/stoop area leading to the front door.
- 5. The garage cannot protrude more than 1 foot out from the front façade or front porch.
- 6. The visible side of a townhome on a corner lot facing the public street shall contain at least 3 decorative elements such as, but not limited to, the following elements:
 - Windows
 - Bay window
 - Recessed window
 - Decorative window
 - Trim around the windows
 - Wrap around porch or side porch
 - Two or more building materials
 - Decorative brick/stone
 - Decorative trim
 - Decorative shake
 - Decorative air vents on gable
 - Decorative gable
 - Decorative cornice
 - Column
 - Portico
 - Balcony
 - Dormer
- 7. Building facades shall have horizontal relief achieved by staggering the units.
- 8. A varied color palette shall be utilized on homes throughout the subdivision to include a minimum of three color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.
- 9. The rear and side elevations of the units with right-of-way frontage shall have trim around the windows.

CONCEPTUAL RESIDENTIAL DISTRICT BUILDING ELEVATIONS







YELLOWBRIDGE PLANNED UNIT DEVELOPMENT





COMMERCIAL DISTRICT DESIGN GUIDELINES

- 1. Architectural treatments such as varying roof forms, façade articulation, breaks in roof, walls with texture materials and ornamental details shall be incorporated to add visual interest.
- 2. Large expanses of blank walls greater than 25 feet in length or height shall be broken up with windows or other architectural features to reduce visual impacts.
- 3. Roof features may include flat roofs with parapet, hip roofs or awnings with metal or canvas material.

COMMERCIAL DISTRICT MATERIALS

Non-residential exteriors shall incorporate variation in materials. The front façade and other facades located along a public right-of-way may include:

- 1. Brick and/or stone masonry
- 2. Decorative concrete block (integral color or textured)
- 3. Stone accents
- 4. Aluminum storefronts with anodized or pre-finished colors
- 5. EIFS cornices, and parapet trim
- 6. EIFS or synthetic stucco shall not be used in the first four feet above grade and shall be limited to only 25% of each building façade
- 7. Precast concrete
- 8. Soffit and fascia materials to be considered include EIFS with crown trim elements
- 9. Cementitious siding

Rear elevations of non-residential buildings facing opaque landscape buffers or not visible from vehicular use areas or public rights-of-way may incorporate decorative concrete masonry, metal coping, or EIFS trim.

REPRESENTATIVE COMMERCIAL DISTRICT BUILDING ELEVATIONS





PARKING AND LOADING

Parking shall comply with minimum parking standards set forth in UDO Section 8.3.

SIGNAGE

Signage shall comply with UDO Section 8.7.

In addition, the project shall install at least one (1) sign per SCM discouraging the use of fertilizer and to reduce pet waster near SCM drainage areas. The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.

CONSTRUCTION TRAFFIC

All heavy duty construction traffic shall enter and exit the site via US-64 Highway West. Heavy duty construction traffic shall not use Chanticlair Drive, Rothwood Way, or Lyndenbury Drive. "No Construction Traffic" signage shall be posted along Chanticlair Drive and Rothwood Way.

NATURAL RESOURCES AND ENVIRONMENTAL DATA

RIVER BASINS AND WATERSHED PROTECTION OVERLAY DISTRICTS

The Property is within the Beaver Creek Basin, Jordan Lake Watershed, and Primary Watershed Protection Overlay District as shown on the Town of Apex Watershed Protection Overlay Map 2019. This PUD will comply with all built upon area, vegetated conveyances, structural SCMs and riparian stream buffer requirements of UDO Section 6.1.8.

Resource Conservation Areas (RCA)

The Development will meet or exceed the minimum Resource Conservation Area ("RCA") requirements in UDO Section 8.1.2 and 2.3.4. The Property is located west of 540 and is therefore required to preserve a minimum of 30% RCA for the Residential District and 25% RCA for the Commercial District. Designated RCA areas will be consistent with UDO Section 8.1.2(B). Preserved streams, wetlands, and associated riparian buffers provide the primary RCAs throughout the Property. Additional RCAs may include stormwater management areas, multiuse paths, and perimeter buffers.

Floodplain

The project site does not sit within a designated current or future 100-year floodplain as shown on the Town of Apex Watershed & FEMA Map dated April 2015. FIRM Panel 3720072200J dated May 2, 2006 does not include a floodplain within the property boundary.

Historic Structures

There are no known historic structures present on the Property.

Environmental Commitments Summary

The following environmental conditions shall apply to the Development:

- All dwelling units shall be pre-configured with conduit for a solar energy system.
- The project shall install at least one (1) sign per SCM discouraging the use of fertilizer and to reduce pet waste near SCM drainage areas. The sign(s) shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.
- The project shall install a minimum of two (2) pet waste stations.
- The project shall plant drought resistant warm season grasses throughout the development to minimize irrigation and chemical use.
- Stormwater control devices shall be designed and constructed so that post development peak runoff does not exceed pre-development peak runoff conditions for the 24-hour, 1 year, 10 year, and 25 year storm events.
- Landscaping shall include at least four (4) native hardwood tree species throughout the Development.
- No clearing or land disturbance shall be permitted within the riparian buffer, except the
 minimum necessary to install required road and utility infrastructure and SCM outlets. The
 SCM water storage and treatment shall not be permitted within the riparian buffer. Sewer
 infrastructure shall be designed to minimize impacts to riparian buffers.
- Any outdoor lighting installed in the commercial area and on private amenities, signs, landscaping, walls, or fences shall be full cutoff LED fixtures with a maximum color temperature of 3000k. This condition shall not apply to lighting on single-family homes, townhouses, accessory buildings, or street lighting.
- At least 75% of plants shall be native species. Landscaping will be coordinated with and approved by the Planning Department at site or subdivision review.

STORMWATER MANAGEMENT

Stormwater control devices shall be designed and constructed to exceed UDO standards so that post development peak runoff does not exceed pre-development peak runoff conditions for the 24-hour, 1 year, 10 year, and 25 year storm events. Otherwise, the Development shall meet all stormwater management requirements for quality and quantity treatment in accordance with Section 6.1 of the UDO.

Acceptable stormwater structures shall include detention ponds, constructed wetlands, bioretention areas, or other approved devices consistent with the NC DEQ Stormwater Design Manual and the Town of Apex UDO.

PARKS AND RECREATION

This project was reviewed by the Parks, Recreation, and Cultural Resources Advisory Commission on April 27, 2022 and a fee-in-lieu of dedication was recommended.

Single-family detached Units: $$3,753.89 \times 50 = $187,694.50$ Single-family attached Units: $$2,528.25 \times 110 = $278,107.50$ Total residential fee in lieu per current unit count: \$465,802

The final unit count and total fee-in-lieu will be calculated at Master Subdivision Plan and Construction Document review.

PUBLIC FACILITIES

The proposed PUD shall meet all Public Facilities requirements as set forth in UDO Section 2.3.4(F)(1)(f) and be designed to comply with the Town's Sewer and Water Master Plan and Standards and Specifications. Road and utility infrastructure shall be as follows:

GENERAL ROADWAY INFRASTRUCTURE

Except as set forth herein, all proposed roadway infrastructure and right-of-way dedications will be consistent with the Town of Apex Comprehensive Transportation Plan and Bicycle and Pedestrian System Plan in effect as of the submission date of this rezoning.

TRANSPORTATION IMPROVEMENTS

The following conditions regarding transportation improvements apply and shall be phased consistent with the Traffic Impact Analysis that has been performed for this rezoning, which is on file with the Town of Apex.

- All proposed driveway access and improvements on state-maintained roadways are subject to both Apex and NCDOT review and approval.
- A maximum of one (1) access point shall be proposed on US 64, to be constructed as a left-in/right-in/right-out public street access at the existing median break with a stop-controlled northbound approach with one lane of ingress and one lane of egress and an exclusive eastbound right turn lane with a minimum 100 feet of storage and appropriate deceleration length and taper on US Hwy 64. Improve the median break and construct physical separation between turn lanes to accommodate trucks and prevent both improper left turns and vehicular turning-movement conflicts.

- Construct an exclusive eastbound U-turn median break on US Hwy 64, approximately
 halfway between the site access at the existing median break and Kellyridge Drive
 including a U-turn lane with a minimum of 100 feet of storage and appropriate
 deceleration length and taper. If the eastbound U-turn lane is removed from the
 existing median break location to the west, extend the storage to 150 feet at this
 location.
- Consistent with the Transportation Plan Thoroughfare and Collector Street Map, Chanticlair Drive shall be extended westward as a Major Collector Street with a minimum 60-foot right-of-way, consistent with Town Standards.
- No residential driveways shall be permitted on existing or future Major Collector Street(s).
- Rothwood Way shall be extended north and stubbed to the southernmost property line of PIN 0722850629. Homes located on Rothwood Way shall take driveway access from Rothwood Way.
- The extension of Chanticlair Drive shall be constructed concurrently with the project but shall remain closed to traffic between Yellowbridge and Abbington subdivisions until such time that the 50th CO is approved for Yellowbridge. The form of closure shall be noted on the subdivision plan and subject to Town staff approval.
- Potential Access Points shown on the Conceptual Site Plan and Conceptual Utility Plan (C100) are not shown in exact locations but show required connections. Connections may only be removed from the subdivision connectivity requirements of the PUD if the developer shows to the satisfaction of the Planning Director, in consultation with the Technical Review Committee (TRC), that the construction of the connection would be impractical based on environmental conditions found in the field at the time of Master Subdivision Plan approval.

PEDESTRIAN AND BICYCLE IMPROVEMENTS

Per UDO requirements, sidewalks shall be provided along both sides of all streets.

WATER AND SANITARY SEWER

All lots within the Development will be served by Town of Apex water and sanitary sewer. The utility design will be finalized at the time of Master Subdivision Plan or Site Plan approval and be based on available facilities adjacent to the site at that time. The design will meet the current Town of Apex master plans for water and sewer. A conceptual utility plan is included in the PUD Concept Plan for reference.

OTHER UTILITIES

Electricity will be provided by Apex Electric. Phone, cable, and gas will be provided by the Developer and shall meet Town of Apex standards as outlined in the UDO.

PHASING

The Development will be completed in phases. Final locations of phases will be determined at the time of Master Subdivision Review and Approval.

CONSISTENCY WITH LAND USE PLAN

The proposed Development is generally consistent with Advance Apex 2045: The Apex Comprehensive Plan, adopted in February 2019. The Land Use Map designates the Property as Medium Density Residential which allows a PUD zoning district and contemplates the housing types and densities proposed in the Residential District. This PUD updates the LUM designation of the Commercial District to Commercial Services. Although the LUM does not specifically designate the Property for commercial uses, the portion of the Property fronting US-64 Highway West is appropriate for the neighborhood serving commercial uses permitted by this PUD. The Commercial District is located directly across US-64 Highway West from the Westford PUD which permits a variety of residential, office, and commercial uses along the road. Additionally, the Commercial District is located adjacent to the Local Bar and is separated from the Residential District by a stream and wetlands that will act as a natural buffer between future commercial uses and residential neighborhoods to the south.

COMPLIANCE WITH UDO

The development standards adopted for this PUD are in compliance with those set forth in the current version of the Town's Unified Development Ordinance (UDO). This PUD shall be the primary governing document for the development of Yellowbridge. All standards and regulations in this PUD shall control over general standards of the UDO. Provided, however, that if a specific regulation is not addressed in this PUD, UDO regulations shall control.

EXHIBIT A Legal Description The Property

PIN# 0722752304 & 0722743789

All that certain real property situated in White Oak Township, Wake County, North Carolina, described as follows:

Beginning at a set iron rod on the northern right of way line of Chanticlair Drive, said iron rod marking the southwestern corner of Lot 74 as said lot is shown and so designated on that certain subdivision plat entitled "Windsor at Abbington – Phase 1, Section A, Map 2, Lots 24-27 & 65-74" recorded in Book of Maps 1998, Page 203, Wake County Registry; thence along the northern right of way line of Chanticlair Drive, South 89°37'45" West 280.73 feet to a set iron rod; thence South 00°22'15" East 30.04 feet to a set iron rod at the centerline of the western terminus of Chanticlair Drive and the northeastern corner of the 0.08 acre Reserved Area depicted on that certain subdivision plat entitled "Stratford at Abbington, Phase 1: Lots 1-31, 65-75, Owner: Highway 64, LLC" recorded in Book of Maps 2006, Pages 2638 to 2640, Wake County Registry; thence along the northern and western boundary of said Reserved Area and continuing along the northwestern boundary of said Stratford at Abbington subdivision the following nine courses: (1) South 89°37'45" West 118.01 feet to a set iron rod; (2) South 05°29'21" West 40.93 feet to a set iron rod; (3) South 01°54'29" East 98.00 feet to a set iron rod; (4) South 11°29'28" East 62.80 feet to a set iron rod; (5) South 22°27'50" West 118.06 feet to a found iron pipe; (6) South 70°08'38" West 118.71 feet to a found iron pipe; (7) South 77°30'46" West 65.05 feet to a found iron pipe; (8) South 73°46'05" West 40.75 feet to a found iron pipe; and (9) South 73°28'08" West 311.49 feet to a found iron pipe at an angle point in the northern boundary of Lot 64 as said lot is shown and so designated on that certain subdivision plat entitled "Stratford at Abbington, Phase 2: Lots 32-64, Owner: Highway 64, LLC" recorded in Book of Maps 2008, Pages 33 and 34, Wake County Registry; thence along the northern boundary of said Stratford at Abbington Phase 2 subdivision South 82°16'49" West 758.57 feet to a found iron pipe with cap at the northwestern corner of Lot 56 of said Stratford at Abbington Phase 2 subdivision, said point also being on the eastern boundary of Lot 2 as said lot is shown and so designated on that certain plat entitled "Recombination Survey for Cecil V. Campfield and Wife Sharon K. Campfield" recorded in Book of Maps 1995, Page 334, Wake County Registry; thence along the eastern boundary of said Campfield plat the following two courses: (1) North 03°08'59" East 417.75 feet to a found bent iron pipe; and (2) North 03°12'21" East 406.54 feet to a found iron pipe with cap at the southeastern corner of Lot 'A' as said lot is shown and so designated on that certain plat entitled "Recombination for Joel V. Perry" recorded in Book of Maps 1985, Page 522, Wake County Registry; thence along the eastern boundary of said Perry plat North 03°11'42" East 841.95 feet to a found iron rod with cap on the southern right of way line of U.S. Highway 64; thence along said southern right of way line North 82°54'26" East 331.57 feet to a set iron rod at the northwestern corner of the parcel depicted on that certain plat entitled "Boundary Survey, Property of Calvin Mills, Prepared for David and Sharon Raymer" recorded in Book of Maps 2004, Page 698, Wake County Registry; thence along the western, southern and eastern boundary of said Mills plat the following three courses: (1) South 07°08'43" East 189.52 feet to a found iron pipe; (2) North 82°51'17" East 420.02 feet to a found iron pipe; and (3) North 07°08'43" West 189.14 feet to a set iron rod on the southern right of way line of

U.S. Highway 64; thence along said southern right of way line the following two courses: (1) North 82°54'26" East 265.68 feet to a set iron rod; and (2) North 82°53'08" East 305.02 feet to a set iron rod at the northwestern corner of Area "B" as shown and so designated on that certain plat entitled "Property of Blakely-Braswell Land Company, LLC" recorded in Book of Maps 1996, Page 634, Wake County Registry; thence along the western boundary of said Area "B", South 11°47'52" West 42.58 feet to a found iron pipe with cap at the northwestern corner of Tract 'A' as said lot is shown and so designated on that certain plat entitled "Property of Calvin E. Mills, Alta Belle P. Mills, Ted Mills & Randy Mills By William R. Hoke & Paul Stam, Jr., Co-trustees" recorded in Book of Maps 1984, Page 404, Wake County Registry; thence along the western and southern boundaries of said Mills plat the following five courses: (1) South 07°43'26" West 146.44 feet to a found iron pipe with cap; (2) South 03°03'23" East 318.20 feet to a found iron pipe with cap; (3) South 05°04'48" West 519.04 feet to a found iron pipe with cap; (4) South 15°45'44" West 60.82 feet to a found iron pipe with broken cap; and (5) South 89°57'43" East 359.26 feet to a found iron pipe with cap on the western boundary of Lot 73 of the previously mentioned Windsor at Abbington subdivision plat recorded in Book of Maps 1998, Page 203, Wake County Registry; thence along the western boundary of said Windsor at Abbington subdivision South 02°25'07" East 148.61 feet to the point of beginning.

Containing 48.2331 acres, more or less, and being all of Lot "B" as said lot is shown and so designated on that certain plat entitled "Subdivision, Property of Gaither Bryant Garner, Jr. and Gerald L. Hornick" recorded in Book of Maps 1984, Page 1516, Wake County Registry, TOGETHER WITH all of Tract 1 as said tract is shown and so designated on that certain plat entitled "Division for Gerald L. Hornick, et ux and G. Bryant Garner, et ux" recorded in Book of Maps 2003, Page 474, Wake County Registry, LESS AND EXCEPT the area dedicated as public right of way for Chanticlair Drive as recorded in Deed Book 11778, Page 1490, Wake County Registry.

<REZONING>

YELLOWBRIDGE PUD

2817 US 64 HWY W

APEX, NORTH CAROLINA 27502

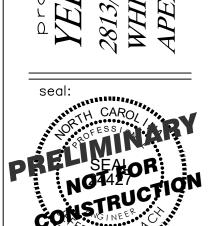
PROJECT NUMBER: 210701

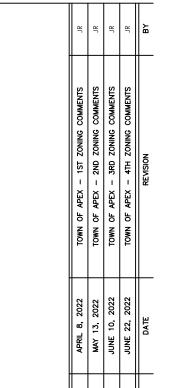
DATE March 1, 2022

RIPARIAN BUFFERS AND WETLANDS: RIPARIAN BUFFERS AND WETLANDS LOCATED ON SITE BY

S&EC TO BE CONFIRMED BY THE US ARMY CORPS OF ENGINEERS AND TOWN OF APEX.

NC License #P-0673





COVER **SHEET**

210701

MARCH 1, 2022 dwg by: chkd by:

FS

OWNER

YELLOWBRIDGE CAPITOL, LLC

113 MILL POND ROAD KITTY HAWK, NC 27949-4082 Contact: TOM COLHOUN COLHOUN REAL ESTATE P: (919) 267-6928

ENGINEER/LAND PLANNER

PEAK ENGINEERING & DESIGN, PLLC

JEFF ROACH, P.E. 5448 APEX PEAKWAY #368 APEX, NC 27502 P: (919) 439-0100 www.PeakEngineering.com

ENVIRONMENTAL CONSULTANT

SOIL & ENVIRONMENTAL CONSULTANTS, PA

STEVEN BALL, RF, PWS 8412 FALLS OF NEUSE ROAD, SUITE 104 RALEIGH, NC 27615 P: (919) 846-5900 www.SandEC.com

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LENNAR CORPORATION - RALEIGH DIVISION

STEPHEN DORN 1100 PERIMETER DRIVE SUITE 112 MORRISVILLE, NC 27560 P: (919) 224-9922 www.lennar.com

SURVEYOR

JMT (JOHNSON, MIRMIRAN & THOMPSON, INC.)

MIKE ZMUDA 1130 SITUS COURT SUITE 200 RALEIGH, NC 27606 P: (804) 267-1258 www.jmt.com

TRAFFIC ENGINEER

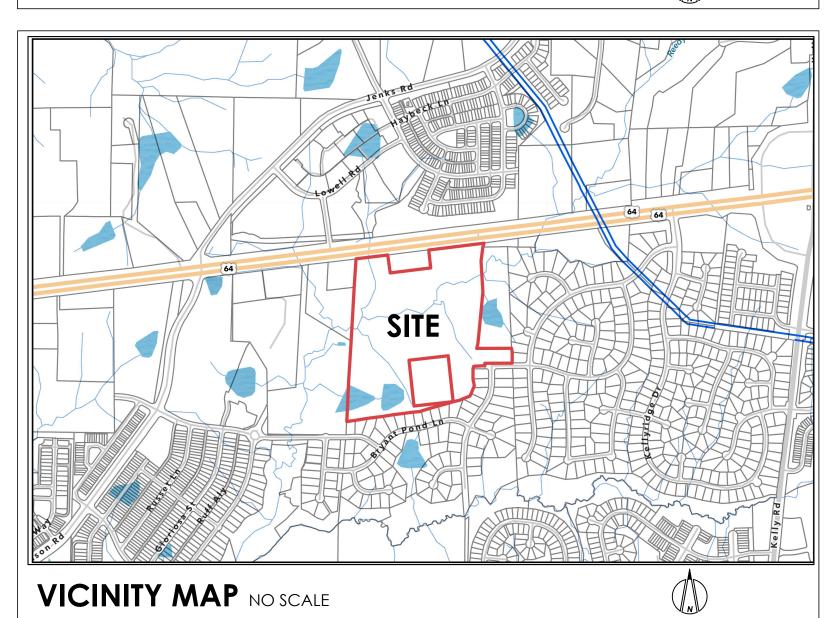
RYNAL STEPHENSON, P.E. 5805 FARINGDON PLACE, SUITE 100 RALEIGH, NC 27609 P: (919) 872-5115

RAMEY KEMP & ASSOCIATES, INC.

www.RameyKemp.com



AERIAL MAP NO SCALE



SITE INIECDAMATIONI.

	311	SHE INFORMATION.			
Property Owner	Property Address	<u>PIN</u>	REID	<u>Acreage</u>	Deed Book/Plat Book & Page
YELLOWBRIDGE CAPITAL, LLC 113 MILL POINT RD KITTY HAWK NC 27949-4082	2817 US 64 HWY W	0722-75-2304	0133648	43.90 acres	DB 013508 PG 01177 BM 2003 Pg474
YELLOWBRIDGE CAPITAL, LLC 113 MILL POINT RD KITTY HAWK NC 27949-4082	2813 US 64 HWY W	0722-74-3789	0138551	4.34 acres	DB 013508 PG 01181 BM 2003 Pg474
Total Deeded Acreage:				48.43 acres	

Flood Zone Information: Firm Panel 3720072200J dated May 2, 2006

White Oak

does not show the presence of flood zones on the property

Watershed Information: Primary Watershed Protection Overlay District, Beaver Creek Basin, Cape Fear River Basin

Per the NC SHPO, no historical structures are located within the project boundary Historical:

Annexation: Annexation required for utility services

Existing Zoning:

roposed Zoning: Planned Unit Development - Conditional Zoning (PUD-CZ) Medium Density Residential

2045 Land Use Map:

Existing Use: Single Family Residential and vacant property

Accessory apartment

Recreation facility, private Homeowners Association covenants shall not restrict the construction of accessory dwelling units

Commercial Restaurant, general Restaurant, drive-through

Medical or dental office or clinic Medical or dental laboratory Barber and beauty shop Office, business or professional Publishing office Artisan Studio

Book store Convenience store

Dry cleaners and laundry service Farmer's market Gas and fuel, retail Greenhouse or nursery, retail Health/fitness center or spa Pharmacy

Grocery, general Printing and copying service Studio for art

Newsstand or gift shop Real estate sales Tailor shop Veterinary clinic or hospital Utility, minor

Floral shop

Grocery, specialty

Repair services, limited

Personal service

Upholstery shop

Financial institution

Refer to PD Text for a list of uses and other zoning standards

160 dwelling units Maximum Number of Lots: 3.56 dwelling units/acre (< 6.0 units/acre for Medium Density Residential districts) Proposed Project Density:

Max Building Height Single-family detached 45 feet / 3 stories Single-family attached (townhouse) 45 feet / 3 stories

Day care facility

Parking Requirements:

Retail sales, general

Pet services

Township:

Single Family Detached: 2 spaces/dwelling unit required

2 spaces/dwelling unit + 0.25 guest spaces/dwelling unit Single Family Attached: Single Family parking provided by driveway and garage (min 2 spaces/lot)

Building Setbacks (minimum setbacks un	less otherwise noted):		
Residential:	Single-family	Townhouse (front loaded)	Townhouse (rear loaded)
Front:	20 feet	10 feet	5 feet
Rear:	15 feet	5 feet	5 feet
Side:	6 feet	0 feet (5' for end units)	0 feet (5' for end units)
Side (Corner Lot):	8 feet	8 feet	8 feet
Min. Building Separation		10 feet	10 feet

Non Residential Square Footage:

25,000 SF Maximum Building Height: 50 feet Front: (US Hwy 64) 10 feet 10 feet

From Buffer/RCA: 10' for Buildings/5' for Parking Areas Per UDO Section 8.3

Maximum Build Upon Area: 33.90 acres, 70% RCA Required: 14.53 aces + 0.68 acres (30% overall + 5% Mass Grading for single-family detached)

RCA to be Provided: 15.20 acres minimum % of total lots to be graded prior to first plat: 50% (limited by Apex UDO to a maximum acreage for mass grading)

maximum of 20 acres of clearing for single-family detached section % of the pre-development drainage areas that have been preserved within their natural basins:

- Page 509 -

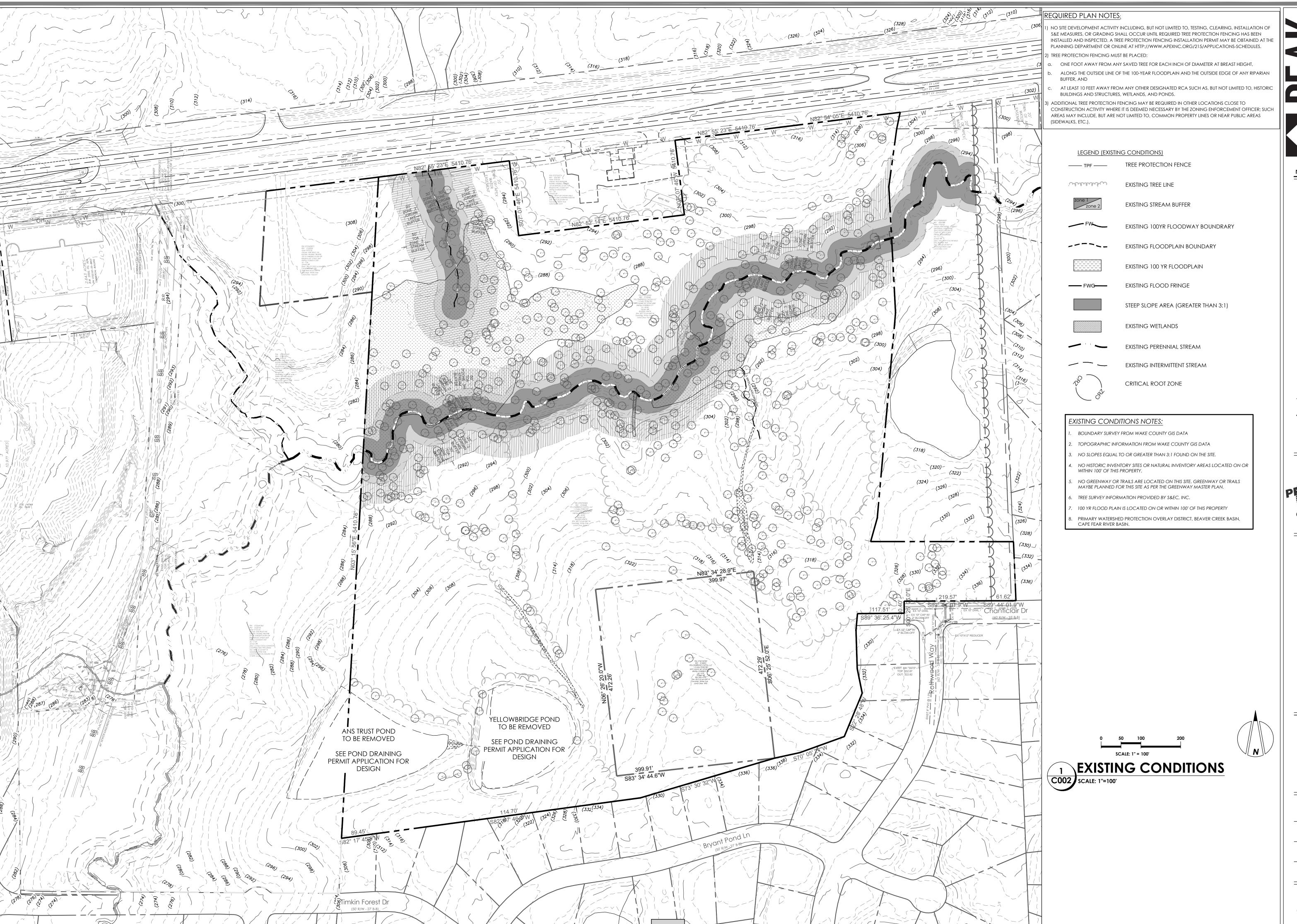
C000 COVER SHEET

INDEX OF DRAWINGS:

C002 EXISTING CONDITIONS

C100 CONCEPTUAL SITE PLAN/CONCEPTUAL UTILITY PLAN

REZONING CASE # 22CZ06 (SUBMITTED ON 3/1/2022)



NC License #P-0673

PRELISEA OR NOTATION CONSTRUCTION

TOWN OF APEX - 1ST ZONING COMMENTS

TOWN OF APEX - 2ND ZONING COMMENTS

TOWN OF APEX - 3RD ZONING COMMENTS

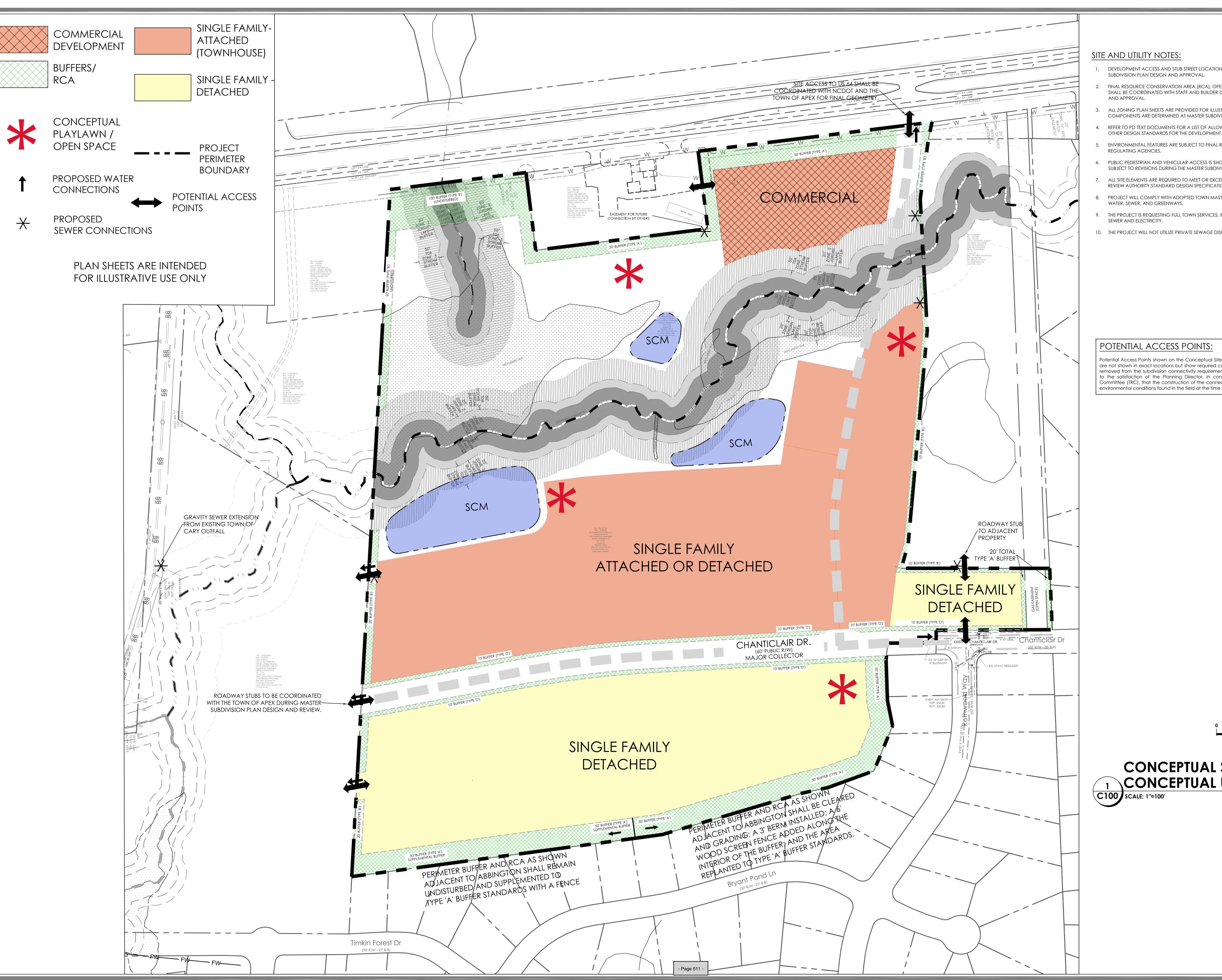
TOWN OF APEX - 4TH ZONING COMMENTS

CONDITIONS

EXISTING

210701

MARCH 1, 2022 dwg by: chkd by:



SITE AND UTILITY NOTES:

- DEVELOPMENT ACCESS AND STUB STREET LOCATIONS SHALL BE FINALIZED AT MASTER SUBDIVISION PLAN DESIGN AND APPROVAL.
- FINAL RESOURCE CONSERVATION AREA (RCA), OPEN SPACE, AND PLAY LAWN LOCATIONS SHALL BE COORDINATED WITH STAFF AND BUILDER DURING MASTER SUBDIVISION PLAN DESIGN
- ALL ZONING PLAN SHEETS ARE PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY. FINAL DESIGN COMPONENTS ARE DETERMINED AT MASTER SUBDIVISION PLAN.
- REFER TO PD TEXT DOCUMENTS FOR A LIST OF ALLOWABLE USES, ZONING CONDITIONS, AND
- 5. ENVIRONMENTAL FEATURES ARE SUBJECT TO FINAL REVIEW CONCURRENCE WITH VARIOUS
- PUBLIC PEDESTRIAN AND VEHICULAR ACCESS IS SHOWN FOR CONCEPTUAL PURPOSES AND ARE SUBJECT TO REVISIONS DURING THE MASTER SUBDIVISION PLAN DESIGN AND APPROVAL
- 7. ALL SITE ELEMENTS ARE REQUIRED TO MEET OR EXCEED TOWN OF APEX, NCDOT, OR OTHER
- REVIEW AUTHORITY STANDARD DESIGN SPECIFICATIONS. PROJECT WILL COMPLY WITH ADOPTED TOWN MASTER PLANS INCLUDING TRANSPORTATION,
- 9. THE PROJECT IS REQUESTING FULL TOWN SERVICES, INCLUDING BUT NOT LIMITED TO WATER,
- 10. THE PROJECT WILL NOT UTILIZE PRIVATE SEWAGE DISPOSAL.

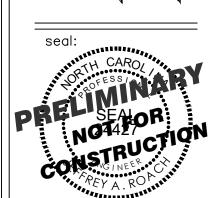
POTENTIAL ACCESS POINTS:

Potential Access Points shown on the Conceptual Site Plan / Conceptual Utility Plan (C100) are not shown in exact locations but show required connections. Connections can only be removed from the subdivision connectivity requirements of the PUD if the developer shows to the satisfaction of the Planning Director, in consultation with the Technical Review Committee (TRC), that the construction of the connection would be impractical based on environmental conditions found in the field at the time of Master Subdivision Plan approval.

SCALE: 1" = 100'

1 CONCEPTUAL UTILITY PLAN
C100 SCALE: 1"=100"

NC License #P-0673



TOWN OF APEX - 1ST ZONING COMMENTS

TOWN OF APEX - 2ND ZONING COMMENTS

TOWN OF APEX - 3RD ZONING COMMENTS

TOWN OF APEX - 4TH ZONING COMMENTS

CONCEPTUAL SITE PLAN/ CONCEPTUAL UTILITY PLAN

210701

MARCH 1, 2022 dwg by: chkd by:

RAMEY KEMP ASSOCIATES

TOGETHER WE ARE LIMITLESS







Yellow Bridge Residential **Traffic Impact Analysis Apex, North Carolina**



TRAFFIC IMPACT ANALYSIS

FOR

YELLOW BRIDGE RESIDENTIAL

LOCATED

IN

APEX, NORTH CAROLINA

Prepared For: Lennar Corporation – Raleigh Division 1100 Perimeter Park Drive, Suite 112 Morrisville, NC 27560

Prepared By: Ramey Kemp & Associates, Inc. 5808 Faringdon Place, Suite 100 Raleigh, NC 27609 License #C-0910

FEBRUARY 2022

Prepared By: \underline{TF}

Reviewed By: NB

RKA Project No. 22004

TRAFFIC IMPACT ANALYSIS YELLOW BRIDGE APEX, NORTH CAROLINA

EXECUTIVE SUMMARY

1. Development Overview

A Traffic Impact Analysis (TIA) was conducted for the proposed Yellow Bridge Residential development in accordance with the Town of Apex (Town) Unified Development Ordinance (UDO) and North Carolina Department of Transportation (NCDOT) capacity analysis guidelines. The proposed development is to be located south of US 64 and west of the Abbington subdivision in Apex, North Carolina. The proposed development is expected to consist of 59 single-family homes, 83 townhomes, and 25,000 square feet (sq. ft.) of retail space to be built out in 2026. Site access is proposed via one (1) left-over driveway along US 64 at the existing median break, and one (1) internal connection to Chanticlair Drive.

2. Existing Traffic Conditions

The study area for the TIA was determined through coordination with the Town and NCDOT and consists of the following existing intersections:

US 64 and Median Break

Existing peak hour traffic volumes were determined based on a combination of previously collected traffic counts at the intersection of US 64 and Jenks Road / Richardson Road, and new turning movement counts conducted at the existing median break. Previously conducted traffic counts at the intersection of US 64 and Jenks Road / Richardson Road were collected in October 2021 during typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods, while schools were in session for in person learning. These previously conducted counts were utilized to determine through volume traffic at the median break. Turning movement volumes at the median break were determined based on traffic counts conducted at the existing median break, in January 2022, during a typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods, while schools were in session for in person learning. Weekday AM and PM traffic volumes were balanced between study intersections, where appropriate.



3. Site Trip Generation

The proposed development is assumed to consist of a maximum of 59 single-family homes, 83 townhomes, and 25,000 square feet (sq. ft.) of retail space. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE Trip Generation Manual, 10th Edition. Table E-1 provides a summary of the trip generation potential for the site.

Table E-1: Site Trip Generation

Land Use (ITE Code)	Intensity	Daily tensity (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	59 DU	640	12	35	38	23
Multi-Family Homes (Low-Rise) (220)	83 DU	588	9	31	31	19
Shopping Center (820)	25 KSF	944	15	9	45	50
Total Trips 2,172			36	75	114	92
Internal Capture (2% AM & 1% PM)*			0	-2	-11	-12
Total External Trips			36	73	103	80
Pass-By Trips: Shopping Center (34% PM)			-	-	-14	-14
Total Primary Trips			36	73	89	66

^{*}Utilizing methodology contained in the NCHRP Report 684.

4. Future Traffic Conditions

Through coordination with the Town and NCDOT, it was determined that an annual growth rate of 3% would be used to generate 2026 projected weekday AM and PM peak hour traffic volumes. The following adjacent developments were identified to be considered under future conditions:

- Westford Residential (currently 75% built-out)
- Legacy PUD (US 64 Residential)
- Sweetwater Development



The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2022 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions

5. Capacity Analysis Summary

The analysis considered weekday AM and PM peak hour traffic for 2018 existing, 2022 no-build, and 2022 build conditions. Refer to Section 7 of the TIA for the capacity analysis summary performed at each study intersection.

6. Recommendations

Based on the findings of this study, specific geometric and traffic control improvements have been identified at study intersections. The improvements are summarized below and are illustrated in Figure E-1.

Recommended Improvements by Developer

US 64 and Median Break / Site Access

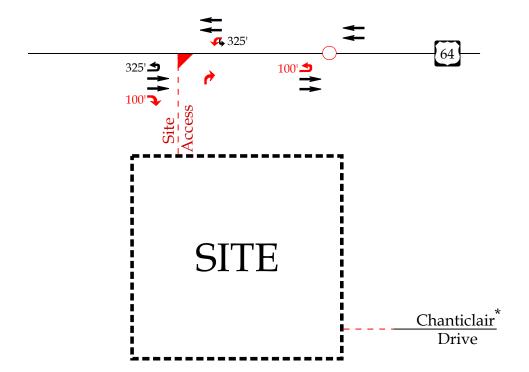
- Construct the northbound approach (Site Access) with one ingress and one egress lane striped as an exclusive right-turn lane.
- Provide stop-control for the northbound approach (Site Access). The proposed intersection will be configured as a left-over.
- Construct an exclusive eastbound (US 64) right-turn lane with a minimum of 100 feet of storage and appropriate decel and taper.
- Restripe the existing westbound (US 64) u-turn lane to provide for a westbound left-turn movement.

US 64 and Eastern U-Turn Location

Construct an exclusive eastbound (US 64) u-turn lane with a minimum of 100 feet
of storage and appropriate decel and taper to be located east of the existing
median break and proposed site driveway location.



- Unsignalized Intersection
- Signalized Intersection
- → Existing Lane
- X' Storage (In Feet)
- → Improvement by Developer



*Note: Roadway included for informational purposes only



Yellow Bridge Residential Apex, NC Recommended Lane Configurations

Scale: Not to Scale Figure E-1

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Appendix A: Scoping Documentation

Appendix B: Traffic Counts

Appendix C: Adjacent Development Information

Appendix D: Capacity Calculations – US 64 & Median Break

Appendix E: Capacity Calculations - US 64 & Future Eastern U-Turn

Location

Appendix F: SimTraffic Queueing & Performance Results

Appendix G: ITRE 95th Percentile Queue Length Calculations

Appendix H: Turn Lane Warrants

Appendix I: Trip Generation Comparison



TRAFFIC IMPACT ANALYSIS YELLOW BRIDGE RESIDENTIAL APEX, NORTH CAROLINA

1. INTRODUCTION

The contents of this report present the findings of the Traffic Impact Analysis (TIA) conducted for the proposed Yellow Bridge Residential development located south of US 64 and west of the Abbington subdivision in Apex, North Carolina. The purpose of this study is to determine the potential impacts to the surrounding transportation system created by traffic generated by the proposed development, as well as recommend improvements to mitigate the impacts.

The proposed development, anticipated to be completed in 2026, is assumed to consist of the following uses:

- 59 single-family homes
- 83 townhomes
- 25,000 square feet (sq. ft.) retail space

The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2022 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions

1.1. Site Location and Study Area

The proposed development is located south of US 64 and west of the Abbington subdivision in Apex, North Carolina. Refer to Figure 1 for the site location map.

The study area for the TIA was determined through coordination with the North Carolina Department of Transportation (NCDOT) and the Town of Apex (Town) and consists of the following existing intersections:



• US 64 and Median Break

Refer to Appendix A for the approved scoping documentation.

1.2. Proposed Land Use and Site Access

The site is located south of US 64 and west of the Abbington subdivision. The proposed development, anticipated to be completed in 2026, is assumed to consist of the following uses:

- 59 single-family homes
- 83 townhomes
- 25,000 square feet (sq. ft.) retail space

Site access is proposed via one (1) left-over driveway along US 64 at the existing median break, and one (1) internal connection to Chanticlair Drive. Refer to Figure 2 for a copy of the preliminary site plan.

1.3. Adjacent Land Uses

The proposed development is located in an area consisting primarily of commercial and residential development.

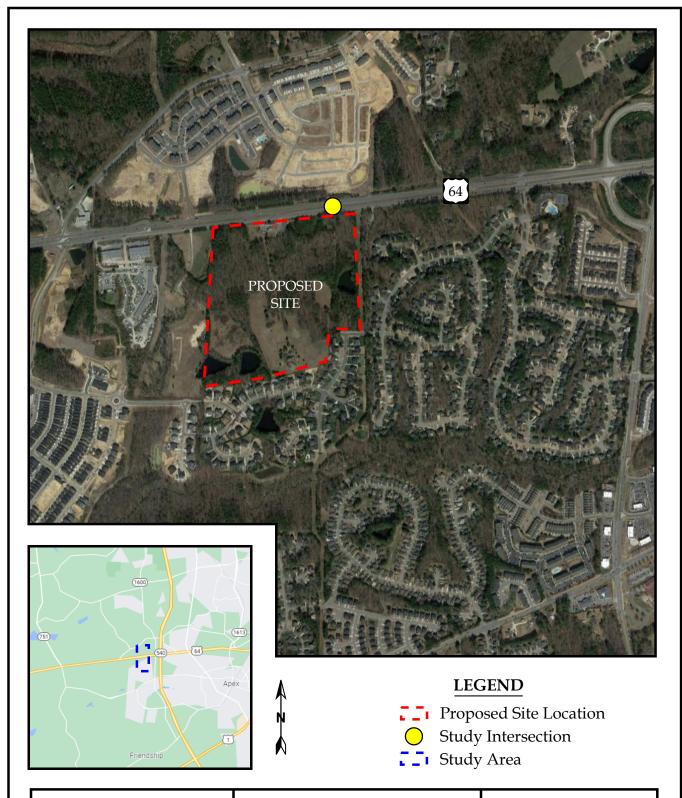
1.4. Existing Roadways

Existing lane configurations (number of traffic lanes on each intersection approach), lane widths, storage capacities, and other intersection and roadway information within the study area are shown in Figure 3. Table 1 provides a summary of this information, as well.

Table 1: Existing Roadway Inventory

Road Name	Route Number	Typical Cross Section	Speed Limit	peed Limit Maintained By	
US 64		4-lane divided	55 mph	NCDOT	27,000



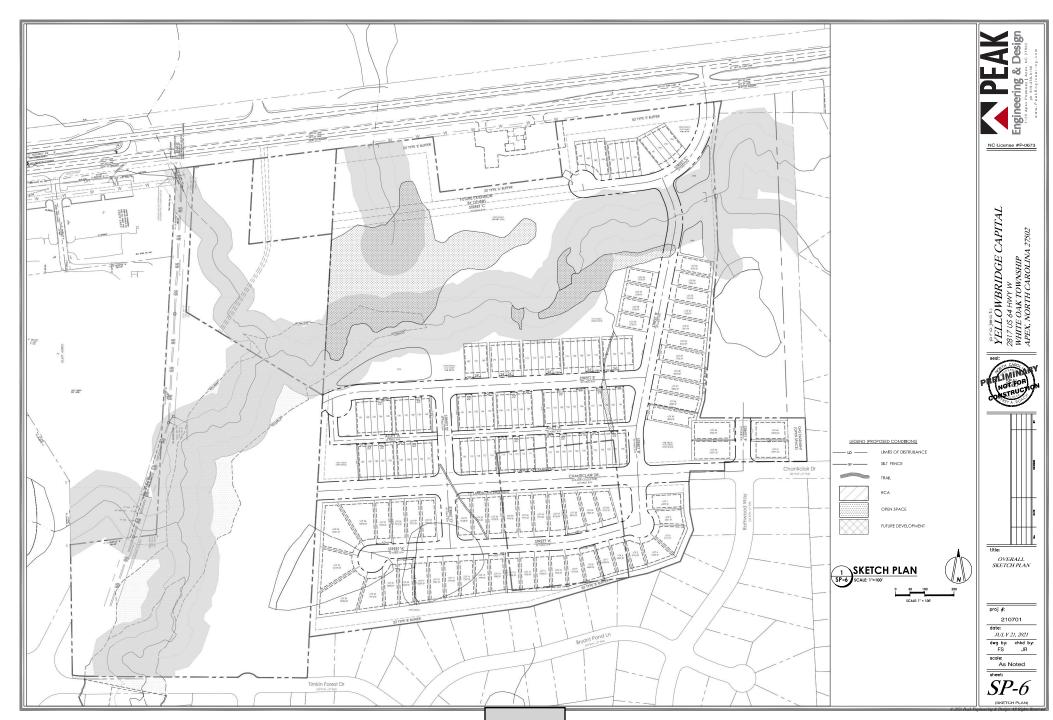




Yellow Bridge Residential Apex, NC

Site Location Map

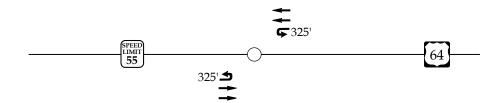
Scale: Not to Scale



- Unsignalized Intersection
- → Existing Lane
- x' Storage (In Feet)



Posted Speed Limit





Yellow Bridge Residential Apex, NC

2022 Existing Lane Configurations

Scale: Not to Scale

2. 2022 EXISTING PEAK HOUR CONDITIONS

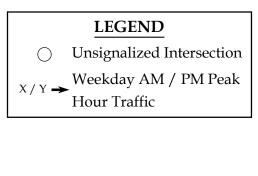
2.1. 2022 Existing Peak Hour Traffic Volumes

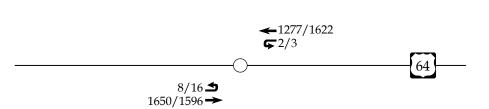
Existing peak hour traffic volumes were determined based on a combination of previously collected traffic counts at the intersection of US 64 and Jenks Road / Richardson Road, and new turning movement counts conducted at the existing median break. Previously conducted traffic counts at the intersection of US 64 and Jenks Road / Richardson Road were collected in October 2021 during typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods, while schools were in session for in person learning. These previously conducted counts were utilized to determine through volume traffic at the median break. Turning movement volumes at the median break were determined based on traffic counts conducted at the existing median break, in January 2022, during a typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak periods, while schools were in session for in person learning. Weekday AM and PM traffic volumes were balanced between study intersections, where appropriate. Refer to Figure 4 for 2022 existing weekday AM and PM peak hour traffic volumes. A copy of the count data is located in Appendix B of this report.

2.2. Analysis of 2022 Existing Peak Hour Traffic Conditions

The 2022 existing weekday AM and PM peak hour traffic volumes were analyzed to determine the current levels of service at the study intersections under existing roadway conditions. The results of the analysis are presented in Section 7 of this report.









Yellow Bridge Residential Apex, NC

2022 Existing Peak Hour Traffic

Scale: Not to Scale

3. 2026 NO-BUILD PEAK HOUR CONDITIONS

In order to account for growth of traffic and subsequent traffic conditions at a future year, no-build traffic projections are needed. No-build traffic is the component of traffic due to the growth of the community and surrounding area that is anticipated to occur regardless of whether or not the proposed development is constructed. No-build traffic is comprised of existing traffic growth within the study area and additional traffic created as a result of adjacent approved developments.

3.1. Ambient Traffic Growth

Through coordination with the Town and NCDOT, it was determined that an annual growth rate of 3% would be used to generate 2026 projected weekday AM and PM peak hour traffic volumes. Refer to Figure 5 for 2026 projected peak hour traffic.

3.2. Adjacent Development Traffic

Through coordination with the Town and NCDOT, the following adjacent developments were identified to be included as an approved adjacent development in this study:

- Westford Residential (currently 75% built-out)
- Legacy PUD (US 64 Residential)
- Sweetwater Development Commercial

Table 2, on the following page, provides a summary of the adjacent developments.



Development Name	Location	Build-Out Year	Land Use / Intensity	TIA Performed
Westford Residential	North of US 64 and east of Jenks Road	2019*	90 single-family homes 300 apartments 225 townhomes	December 2016 by Kimley-Horn
Legacy PUD (US 64 Residential)	South of US 64, west of the former Tee-to-Green site	2026	75 single-family homes 400 apartments 11,000 sq. ft. Day Care 3,500 sq. ft. FF Restaurant	July 2021 by Kimley-Horn (Phase 2 TIA Addendum)
Sweetwater Development	South of the US 64 and Jenks Road / Richardson Road intersection	2019**	375 single-family homes 60 condominiums 50,000 sq. ft. office space 200,000 sq. ft. retail space 7,000 sq. ft. HTSD 1,490 sq. ft. FF w/ DT 4-lane Drive-In Bank	December 2014 by RKA

Table 2: Adjacent Development Information

Based on coordination with the Town and NCDOT, it was assumed that the Westford Residential development is currently approximately 75% built-out at the time of scoping and therefore a portion of development site traffic is captured in the existing traffic counts. Similarly, it was assumed that the residential portion of the Sweetwater development was constructed at the time of data collection and therefore the associated trips were not considered in the calculation of adjacent development traffic.

It should be noted that the adjacent developments were approved, during scoping, by the Town and NCDOT. Adjacent development trips are shown in Figure 6. Adjacent development information can be found in Appendix C.

3.3. Future Roadway Improvements

Based on coordination with the NCDOT and the Town, it was determined there were no future roadway improvements to consider with this study.



^{*}Assumed currently 75% built-out.

^{**}Residential portion is assumed fully built-out.

3.4. 2026 No-Build Peak Hour Traffic Volumes

The 2026 no-build traffic volumes were determined by projecting the 2022 existing peak hour traffic to the year 2026, and adding the adjacent development trips. Refer to Figure 7 for an illustration of the 2026 no-build peak hour traffic volumes at the study intersections.

3.5. Analysis of 2026 No-Build Peak Hour Traffic Conditions

The 2026 no-build AM and PM peak hour traffic volumes at the study intersections were analyzed with future geometric roadway conditions and traffic control. The analysis results are presented in Section 7 of this report.



LEGEND Unsignalized Intersection Weekday AM / PM Peak Hour Traffic ←1480/1880 ←2/3

9/19**ૐ** 1913/1850**ૐ**

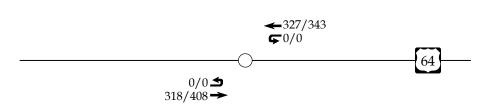


Yellow Bridge Residential Apex, NC

2026 Projected Peak Hour Traffic

Scale: Not to Scale

LEGEND Unsignalized Intersection Weekday AM / PM Peak Hour Adjacent Development Trips





Yellow Bridge Residential Apex, NC

Peak Hour Adjacent Development Trips

Scale: Not to Scale

LEGEND Unsignalized Intersection X/Y → Weekday AM / PM Peak Hour Traffic ←1807/2223 ←2/3

9/19**.≤** 2231/2258 **→**



Yellow Bridge Residential Apex, NC

2026 No-Build Peak Hour Traffic

Scale: Not to Scale

4. SITE TRIP GENERATION AND DISTRIBUTION

4.1. Trip Generation

The proposed development is assumed to consist of 59 single-family homes, 86 townhomes, and 25,000 sq. ft. of retail space. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE *Trip Generation Manual*, 10th Edition. Table 3 provides a summary of the trip generation potential for the site. It should be noted that several trip generation scenarios were considered and that the most conservative scenario was considered in the analysis. Refer to Appendix I for a summary of the proposed densities considered and a comparison of the expected trip generations.

Table 3: Trip Generation Summary

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weekday AM Peak Hour Trips (vph)		Weekday PM Peak Hour Trips (vph)	
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	59 DU	640	12	35	38	23
Multi-Family Homes (Low-Rise) (220)	83 DU	588	9	31	31	19
Shopping Center (820)	25 KSF	944	15	9	45	50
Total Trips 2,172			36	75	114	92
Internal Capture (2% AM & 1% PM)*			0	-2	-11	-12
Total External Trips			36	73	103	80
Pass-By Trips: Shopping Center (34% PM)			-	-	-14	-14
Total Primary Trips			36	73	89	66

^{*}Utilizing methodology contained in the NCHRP Report 684.

It is estimated that the proposed development will generate approximately 2,172 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 111 trips (36 entering and 75 exiting) will occur during the



weekday AM peak hour and 206 trips (114 entering and 92 exiting) will occur during the weekday PM peak hour.

Internal capture of trips between the residential and retail uses was considered in this study. Internal capture is the consideration for trips that will be made within the site between different land uses, so the vehicle technically never leaves the internal site but can still be considered as a trip to that specific land use. Internal capture typically only considers trips between residential, office, and retail/restaurant land uses. Based on NCHRP Report 684 methodology, a weekday AM peak hour internal capture of 2% and a weekday PM peak hour internal capture rate of 11% was applied to the total trips. The internal capture reductions are expected to account for approximately 2 trips (0 entering and 2 exiting) during the weekday AM peak hour and 23 trips (11 entering and 12 exiting) during the weekday PM peak hour.

Pass-by trips were also taken into consideration in this study. Pass-by trips are made by the traffic already using the adjacent roadway, entering the site as an intermediate stop on their way to another destination. Pass-by percentages are applied to site trips after adjustments for internal capture. Pass-by trips are expected to account for approximately 28 trips (14 entering and 14 exiting) during the weekday PM peak hour. It should be noted that the pass-by trips were balanced, as it is likely that these trips would enter and exit in the same hour.

The total primary site trips are the calculated site trips after the reduction for internal capture and pass-by trips. Primary site trips are expected to generate approximately 109 trips (33 entering and 73 exiting) during the weekday AM peak hour and 155 trips (89 entering and 66 exiting) during the weekday PM peak hour.

4.2. Site Trip Distribution and Assignment

Trip distribution percentages used in assigning site traffic for this development were estimated based on a combination of existing traffic patterns, population centers adjacent to the study area, and engineering judgment.



It is estimated that the residential site trips will be regionally distributed as follows:

- 75% to/from the east via US 64
- 20% to/from the west via US 64
- 5% to/from the east via Chanticlair Drive

It is estimated that the commercial site trips will be regionally distributed as follows:

- 65% to/from the east via US 64
- 30% to/from the west via US 64
- 5% to/from the east via Chanticlair Drive

The residential site trip distribution is shown in Figure 8A, the commercial site trip distribution is shown in Figure 8B. Refer to Figure 9A and Figure 9B for the residential and commercial site trip assignment, respectively.

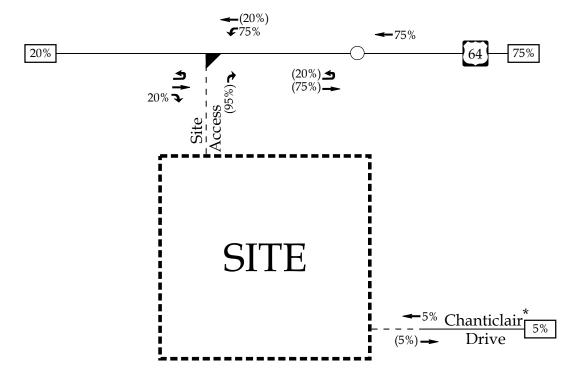
The pass-by site trips were distributed based on existing traffic patterns with consideration given to the proposed driveway access and site layout. Refer to Figure 10 for the pass-by site trip distribution. Pass-by site trips are shown in Figure 11.

The total site trips were determined by adding the primary site trips and the pass-by site trips. Refer to Figure 12 for the total peak hour site trips at the study intersections.



- Unsignalized Intersection
- Left-Over Intersection
- x_% → Entering Trip Distribution
- (Y%) \rightarrow Exiting Trip Distribution

Regional Trip Distribution



*Note: Roadway included for informational purposes only



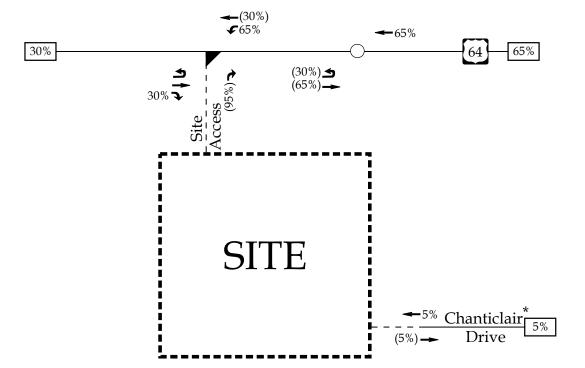
Yellow Bridge Residential Apex, NC

Residential Site Trip Distribution

Scale: Not to Scale Figure 8A

- Unsignalized Intersection
- Left-Over Intersection
- x% \rightarrow Entering Trip Distribution
- (Y%) \rightarrow Exiting Trip Distribution

XX% Regional Trip Distribution



*Note: Roadway included for informational purposes only



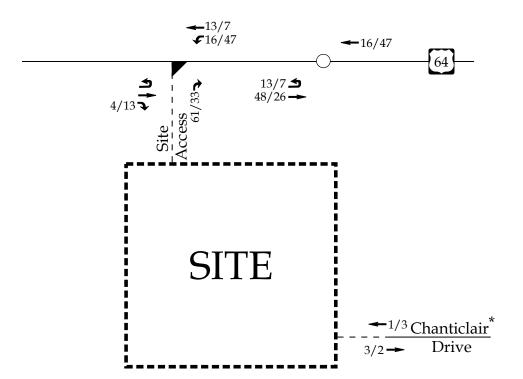
Yellow Bridge Residential Apex, NC Commercial Site Trip
Distribution

Scale: Not to Scale Figure 8B

- Unsignalized Intersection
- Left-Over Intersection

X/Y → Weekday AM / PM Peak Hour Site Trips





*Note: Roadway included for informational purposes only



Yellow Bridge Residential Apex, NC

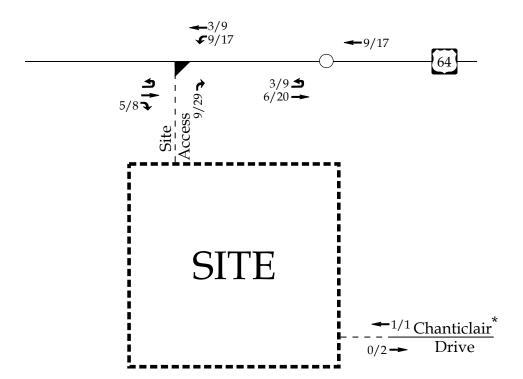
Residential Site Trip Assignment

Scale: Not to Scale Figure 9A

- Unsignalized Intersection
- Left-Over Intersection

X/Y → Weekday AM / PM Peak Hour Site Trips





*Note: Roadway included for informational purposes only



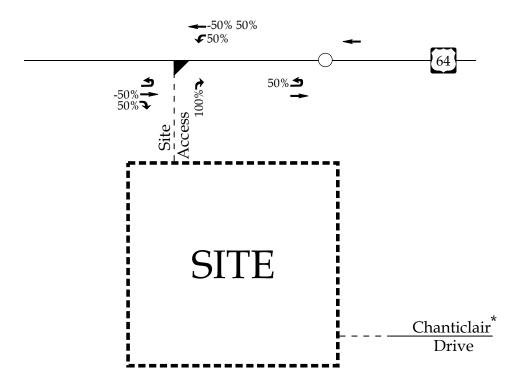
Yellow Bridge Residential Apex, NC

Commercial Site Trip Assignment

Scale: Not to Scale Figure 9B

- Unsignalized Intersection
- Left-Over Intersection
- X% \longrightarrow Weekday PM Pass-By Trip Distribution





*Note: Roadway included for informational purposes only



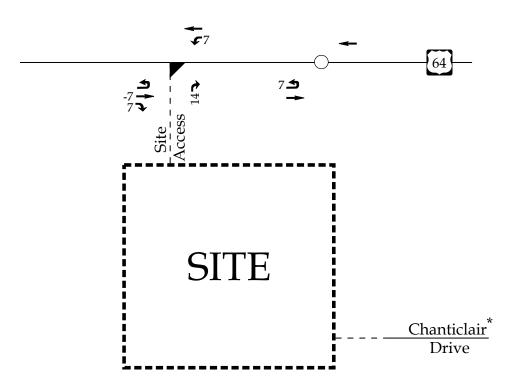
Yellow Bridge Residential Apex, NC

Pass-By Site Trip Distribution

Scale: Not to Scale

- Unsignalized Intersection
- Left-Over Intersection
- Weekday PM Peak Hour Pass-By Trips





*Note: Roadway included for informational purposes only



Yellow Bridge Residential Apex, NC

Pass-By Site Trip Assignment

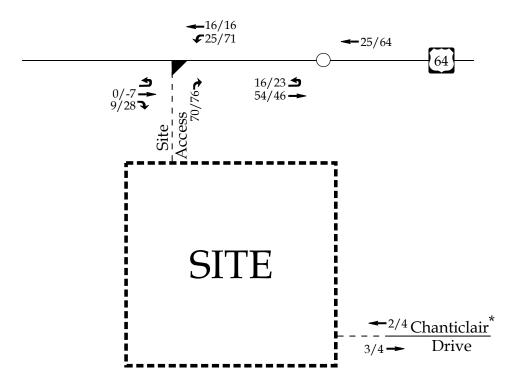
Scale: Not to Scale

LEGEND

- Unsignalized Intersection
- Left-Over Intersection

X/Y → Weekday AM / PM Peak Hour Site Trips





*Note: Roadway included for informational purposes only



Yellow Bridge Residential Apex, NC

Total Site Trip Assignment

Scale: Not to Scale Fi

Figure 12

5. 2026 BUILD TRAFFIC CONDITIONS

5.1. 2026 Build Peak Hour Traffic Volumes

To estimate traffic conditions with the site fully built-out, the total site trips were added to the 2026 no-build traffic volumes to determine the 2026 build traffic volumes. Refer to Figure 13 for an illustration of the 2026 build peak hour traffic volumes with the proposed site fully developed.

5.2. Analysis of 2026 Build Peak Hour Traffic Conditions

Study intersections were analyzed with the 2026 build traffic volumes using the same methodology previously discussed for existing and no-build traffic conditions. Intersections were analyzed with improvements necessary to accommodate future traffic volumes. The results of the capacity analysis for each intersection are presented in Section 7 of this report.

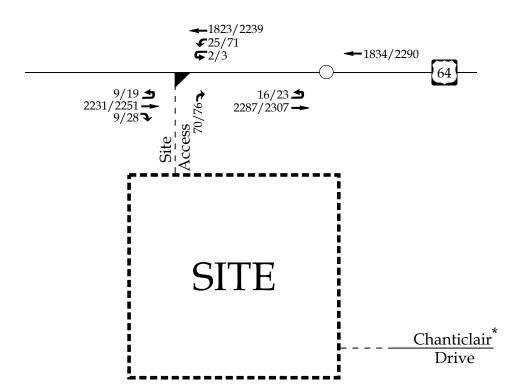


LEGEND

- Unsignalized Intersection
- Left-Over Intersection

X/Y → Weekday AM / PM Peak Hour Traffic





*Note: Roadway included for informational purposes only



Yellow Bridge Residential Apex, NC

2026 Build Peak Hour Traffic

Scale: Not to Scale

Figure 13

6. TRAFFIC ANALYSIS PROCEDURE

Study intersections were analyzed using the methodology outlined in the *Highway Capacity Manual* (HCM), 6th Edition published by the Transportation Research Board. Capacity and level of service are the design criteria for this traffic study. A computer software package, Synchro (Version 10.3), was used to complete the analyses for most of the study area intersections. Please note that the unsignalized capacity analysis does not provide an overall level of service for an intersection; only delay for an approach with a conflicting movement.

The HCM defines capacity as "the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions." Level of service (LOS) is a term used to represent different driving conditions, and is defined as a "qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers." Level of service varies from Level "A" representing free flow, to Level "F" where breakdown conditions are evident. Refer to Table 4 for HCM levels of service and related average control delay per vehicle for both signalized and unsignalized intersections. Control delay as defined by the HCM includes "initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay". An average control delay of 50 seconds at a signalized intersection results in LOS "D" operation at the intersection.

Table 4: Highway Capacity Manual - Levels-of-Service and Delay

UNSIGN	ALIZED INTERSECTION	SIGNALIZED INTERSECTION			
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)		
A	0-10	A	0-10		
В	10-15	В	10-20		
С	15-25	С	20-35		
D	25-35	D	35-55		
E	35-50	E	55-80		
F	>50	F	>80		



6.1. Adjustments to Analysis Guidelines

Capacity analysis at all study intersections was completed according to the NCDOT Congestion Management Guidelines.



7. CAPACITY ANALYSIS

7.1. US 64 and Median Break / Site Access

The existing unsignalized median break along US 64 was analyzed under 2022 existing, 2026 no-build, and 2026 build traffic conditions with the lane configurations and traffic control shown in Table 5. Refer to Table 5 for a summary of the analysis results. Refer to Appendix D for the Synchro capacity analysis reports. Copies of the SimTraffic Queueing and Performance Reports can be found in Appendix F.

Table 5: Analysis Summary of US 64 and Median Break / Site Access

A P P P ANALYSIS R		LANE	PEAK	DAY AM HOUR SERVICE	WEEKDAY PM PEAK HOUR LEVEL OF SERVICE		
SCENARIO	O A C H	CONFIGURATIONS	Approach	Overall (seconds)	Approach	Overall (seconds)	
2022 Existing	EB* WB**	1 UT, 2 TH 1 UT, 2 TH	C ¹ C ¹	N/A	C ¹ C ¹	N/A	
2026 No-Build	EB* WB**	1 UT, 2 TH 1 UT, 2 TH	C ¹ D ¹	N/A	$\begin{array}{c} D^1 \\ D^1 \end{array}$	N/A	
2026 Build	EB* WB** NB	1 UT, 2 TH, 1 RT 1 UT- LT , 2 TH 1 RT	C ¹ F ¹ E ²	N/A	D ¹ F ¹ E ²	N/A	

^{*}Synchro analyzed the EBU as NBL movements due to the nature of the median break and synchro limitations.

Capacity analysis of 2022 existing and 2026 no-build traffic conditions indicates that the major-street u-turn movements are expected to operate at LOS D or better during both the weekday AM and PM peak hours.

Upon buildout of the proposed development, the site driveway is proposed to connect as the 3rd leg at the existing median break. Under 2026 build traffic conditions the westbound major-street left-turn/u-turn movement is expected to operate at LOS F during both the weekday AM and PM peak hours. The eastbound u-turn movement is expected to operate at LOS D or better during the weekday AM and PM peak hours. The minor-street approach is expected to operate at LOS E during both the weekday AM and PM peak hours. These



^{**}Synchro analyzed the WBU as SBL movements due to the nature of the median break and synchro limitations. **Improvements to lane configurations by the developer shown in bold.**

^{1.} Level of service for major-street u-turn/left-turn movement.

^{2.} Level of service for minor-street approach.

levels of service are not uncommon for stop-controlled minor-street approaches (and major-street left-turn/u-turn movements) with heavy mainline traffic volumes. According to SimTraffic Performance Reports which report delays for each movement based on simulation modeling of the entire study network, the minor-street approach is expected to experience delays of less than 35 seconds during the weekday AM and PM peak hours under 2026 build traffic conditions.

Due to the poor levels-of-service expected at this intersection, a traffic signal was considered under 2026 build traffic conditions to achieve acceptable levels-of-service. Weekday AM and PM peak hour traffic volumes were utilized in evaluating the potential need for signalization based on the guidelines contained within the *Guidelines for Signalization of Intersections with Two or Three Approaches Final Report*, published by the Institute for Transportation Research and Education (ITRE). Based on a review of the expected queue lengths at this intersection it is reported that the minor-street approach is expected to exceed capacity during both the weekday AM and PM peak hours. However, due to the primarily residential nature of the site and the expected acceptable operation of the westbound left-turn movement into the site, a traffic signal is not recommended due to the additional delay that installation of a signal would add on the mainline corridor (US 64). Refer to Appendix G for the ITRE 95th percentile queue length calculations.

A right-turn lane was considered based on the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* (Driveway Manual) and an exclusive right-turn lane with 100 feet of storage is recommended on the eastbound approach (US 64). The existing storage for the westbound left-turn lane is expected to provide sufficient storage upon buildout of the development based on the NCDOT Driveway Manual and SimTraffic simulations under 2026 build traffic conditions. Refer to Appendix H for a copy of the turn-lane warrants.



7.2. US 64 and Future Eastern U-Turn Location

The proposed eastern u-turn location along US 64 was analyzed under 2026 build traffic conditions with the lane configurations and traffic control shown in Table 6. Refer to Table 6 for a summary of the analysis results. Refer to Appendix E for the Synchro capacity analysis reports. Copies of the SimTraffic Queueing and Performance Reports can be found in Appendix F.

Table 6: Analysis Summary of US 64 and Future Eastern U-Turn Location

ANALYSIS	A P P R	LANE	PEAK	DAY AM HOUR SERVICE	PEAK	DAY PM CHOUR F SERVICE
SCENARIO	O A C H	CONFIGURATIONS	Approach	Overall (seconds)	Approach	Overall (seconds)
2026 Build	EB* WB	1 UT , 2 TH 2 TH	C ¹	N/A	D¹ 	N/A

^{*}Synchro analyzed the EBU as NBL movements due to the nature of the median break and synchro limitations. Improvements to lane configurations by the developer shown in bold.

Upon buildout of the proposed development, a new u-turn location is expected to be constructed to facilitate site traffic exiting the development heading westbound on US 64. Capacity analysis of 2026 build traffic conditions indicates that the major-street u-turn movement is expected to operate at LOS D or better during the weekday AM and PM peak hours.

The eastbound u-turn movement was modeled with a combined storage of 200 feet in synchro due to limitations with superstreet modeling. Based on a review of SimTraffic simulations under 2026 build traffic conditions, queues for this movement are not expected to exceed 76 feet (approximately 3 vehicles) during the weekday AM and PM peak hours. Therefore, an eastbound (US 64) u-turn lane with 100 feet of storage is recommended at this location.



^{1.} Level of service for major-street u-turn movement.

8. CONCLUSIONS

This Traffic Impact Analysis was conducted to determine the potential traffic impacts of the proposed Yellow Bridge Residential development, located south of US 64 and west of the Abbington subdivision in Apex, North Carolina. The proposed development, anticipated to be completed in 2026, is expected to consist of 59 single-family homes, 83 townhomes, and 25,000 sq. ft. of retail space. Site access to the proposed development is expected to be provided via one (1) left-over driveway along US 64 at the existing median break, and one (1) internal connection to Chanticlair Drive.

The study analyzes traffic conditions during the weekday AM and PM peak hours for the following scenarios:

- 2022 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions

Trip Generation

It is estimated that the proposed development will generate approximately 109 primary trips (33 entering and 73 exiting) during the weekday AM peak hour and 155 primary trips (89 entering and 66 exiting) during the weekday PM peak hour.

Adjustments to Analysis Guidelines

Capacity analysis at all study intersections was completed according to NCDOT Congestion Management Guidelines. Refer to section 6.1 of this report for a detailed description of any adjustments to these guidelines made throughout the analysis.

Intersection Capacity Analysis Summary

All the study area intersections (including the proposed site driveways) are expected to operate at acceptable levels-of-service under existing and future year conditions with the exception of the intersections listed below. A summary of the study area intersections that are expected to need improvements are as follows:



US 64 and Median Break / Site Access 1

Under 2026 build traffic conditions the westbound major-street left-turn/u-turn movement is expected to operate at LOS F during both the weekday AM and PM peak hours. The minor-street approach is expected to operate at LOS E during both the weekday AM and PM peak hours. These levels of service are not uncommon for stop-controlled minor-street approaches (and major-street left-turn/u-turn movements) with heavy mainline traffic volumes. According to SimTraffic Performance Reports which report delays for each movement based on simulation modeling of the entire study network, the minor-street approach is expected to experience delays of less than 35 seconds during the weekday AM and PM peak hours under 2026 build traffic conditions.

Due to the poor levels-of-service expected at this intersection, a traffic signal was considered under 2026 build traffic conditions to achieve acceptable levels-of-service. Weekday AM and PM peak hour traffic volumes were utilized in evaluating the potential need for signalization based on the guidelines contained within the *Guidelines for Signalization of Intersections with Two or Three Approaches Final Report*, published by ITRE. Based on a review of the expected queue lengths at this intersection it is reported that the minor-street approach is expected to exceed capacity during both the weekday AM and PM peak hours. However, due to the primarily residential nature of the site and the expected acceptable operation of the westbound left-turn movement, a traffic signal is not recommended due to the additional delay that installation of a signal would add on the mainline corridor (US 64).

A right-turn lane was considered based on the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* (Driveway Manual) and an exclusive right-turn lane with 100 feet of storage is recommended on the eastbound approach (US 64). The existing storage for the westbound left-turn lane is expected to provide sufficient storage upon buildout of the development based on the NCDOT Driveway Manual and SimTraffic simulations under 2026 build traffic conditions.



9. **RECOMMENDATIONS**

Based on the findings of this study, specific geometric improvements have been identified and are recommended to accommodate future traffic conditions. See a more detailed description of the recommended improvements below. Refer to Figure 14 for an illustration of the recommended lane configuration for the proposed development.

Recommended Improvements by Developer

US 64 and Median Break / Site Access

- Construct the northbound approach (Site Access) with one ingress and one egress lane striped as an exclusive right-turn lane.
- Provide stop-control for the northbound approach (Site Access). The proposed intersection will be configured as a left-over.
- Construct an exclusive eastbound (US 64) right-turn lane with a minimum of 100 feet of storage and appropriate decel and taper.
- Restripe the existing westbound (US 64) u-turn lane to provide for a westbound left-turn movement.

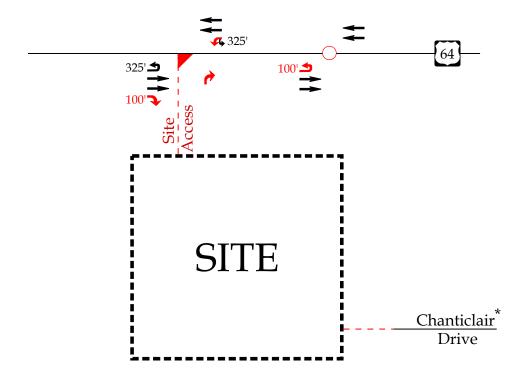
US 64 and Eastern U-Turn Location

 Construct an exclusive eastbound (US 64) u-turn lane with a minimum of 100 feet of storage and appropriate decel and taper to be located east of the existing median break and proposed site driveway location.



LEGEND

- Unsignalized Intersection
- Signalized Intersection
- **Existing Lane**
- Storage (In Feet) X'
- Improvement by Developer



*Note: Roadway included for informational purposes only



Yellow Bridge Residential Apex, NC

Recommended Lane Configurations

Scale: Not to Scale Figure 14

TECHNICAL APPENDIX

APPENDIX A

SCOPING DOCUMENTATION

RAMEY KEMP ASSOCIATES

TOGETHER WE ARE LIMITLESS



January 12, 2022

Russell Dalton, PE Town of Apex 73 Hunter Street Apex, NC 27502 P: 919-249-3358

E: russell.dalton@apexnc.org

[Sent via Email]

Reference: Yellow Bridge Residential

Apex, North Carolina

Subject: Memorandum of Understanding for TIA Report

Dear Mr. Dalton:

The following is a Memorandum of Understanding (MOU) outlining the proposed scope of work and assumptions related to the Traffic Impact Analysis (TIA) for the proposed Yellow Bridge Residential development in Apex, North Carolina. The proposed development is located south of US 64 and west of the Abbington subdivision. The development is expected to consist of 59 single-family homes, 83 townhomes, and 25,000 square feet (sq. ft.) of retail space. This MOU reflects the assumptions outlined during initial coordination between Ramey Kemp Associates (RKA), the Town of Apex (Town), and the North Carolina Department of Transportation (NCDOT). Refer to the attached site location map. Site access to the proposed development is expected to be provided via one (1) left-over driveway along US 64 at the existing median break, and one (1) internal connection to Chanticlair Drive.

The proposed development, anticipated to be completed in 2026, is expected to consist of the following land uses:

- 59 single-family homes
- 83 townhomes
- 25,000 sq. ft. retail space

Study Area

Based on a coordination with NCDOT and Town staff, the study area is proposed to consist of the following intersections:

- US 64 and Median Break (unsignalized)
- US 64 and Future Eastern U-Turn Location



Existing Traffic Volumes

Existing peak hour traffic volumes will be determined based on a combination of previously conducted traffic counts at the intersection US 64 and Jenks Road / Richardson Road, and new turning movement counts conducted at the existing median break. Previously conducted traffic counts at the intersection of US 64 and Jenks Road / Richardson Road were collected in October 2022 during typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 – 6:00 PM) peak periods, while schools were in session for in person learning. These previously conducted counts will be utilized to determine through volume traffic at the existing median break. Turning movement volumes will be determined based on traffic counts conducted at the existing median break, in January 2022 during a typical weekday AM (7:00 AM – 9:00 AM) and PM (4:00 – 6:00 PM) peak periods, while schools are in session for in person learning.

Background Traffic Volumes

Based on coordination with NCDOT and the Town, background traffic volumes will be determined by projecting 2022 existing traffic volumes to the year 2026 using a 3% annual growth rate. Additionally, it was determined that the following adjacent developments are to be included in this study:

- Westford (currently 75% build-out)
- Legacy PUD (US 64 Residential)

Future Roadway Improvements

Based on coordination with the Town and NCDOT, it was determined that there were no future roadway improvements to consider with this study.

Trip Generation

Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE *Trip Generation Manual*, 10th Edition. Refer to Table 1, on the following page, for a summary of the proposed site trip generation for full buildout of the proposed development.



Table 1: Trip Generation Summary

Land Use (ITE Code)	Intensity	Daily Traffic		Weekday eak Hour (vph)			Weekday eak Hour (vph)	·
		(vpd)	Enter	Exit	Total	Enter	Exit	Total
Single-Family Home (210)	59 DU	640	12	35	47	38	23	61
Multi-Family Home (Low-Rise) (220)	95 DU	588	9	31	40	31	19	50
Shopping Center (820)	25 KSF	944	15	9	24	45	50	95
Total Trips		2,172	36	75	111	114	92	206
Internal Capture (2% AN	Л, 11 %РМ)		0	-2	-2	-11	-12	-23
Total External Trips			36	73	109	103	80	183
Pass-By Trips (Shopping Center: 34% PM):			-	-	-	-14	-14	-28
Total Primary Trips			33	73	109	89	66	155

It is estimated that the proposed development will generate approximately 2,172 site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 109 primary trips (33 entering and 73 exiting) will occur during the weekday AM peak hour and 155 primary trips (89 entering and 66 exiting) will occur during the weekday PM peak hour.

Trip Distribution and Assignment

Site trips are distributed based on the locations of existing traffic patterns, population centers adjacent to the study area, and engineering judgment. A summary of the overall distributions is below.

Residential:

- 75% to/from the east via US 64
- 20 % to/from the west via US 64
- 5% to/from the east via Chanticlair Drive

Commercial:

- 65% to/from the east via US 64
- 30 % to/from the west via US 64
- 5% to/from the east via Chanticlair Drive

Refer to the attached site trip distribution figures.



Analysis Scenarios

All capacity analyses will be performed utilizing Synchro (Version 10.3). All study intersections will be analyzed during the weekday AM and PM peak hours under the following proposed traffic scenarios:

- 2022 Existing Traffic Conditions
- 2026 No-Build Traffic Conditions
- 2026 Build Traffic Conditions

Report

The TIA report will be prepared based on the Town and NCDOT requirements.

If you find this memorandum of understanding acceptable, please let me know so that we may include it in the TIA report. If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Ramey Kemp Associates,

Nate Bouquin P.E., PTOE

Traffic Engineering Project Manager

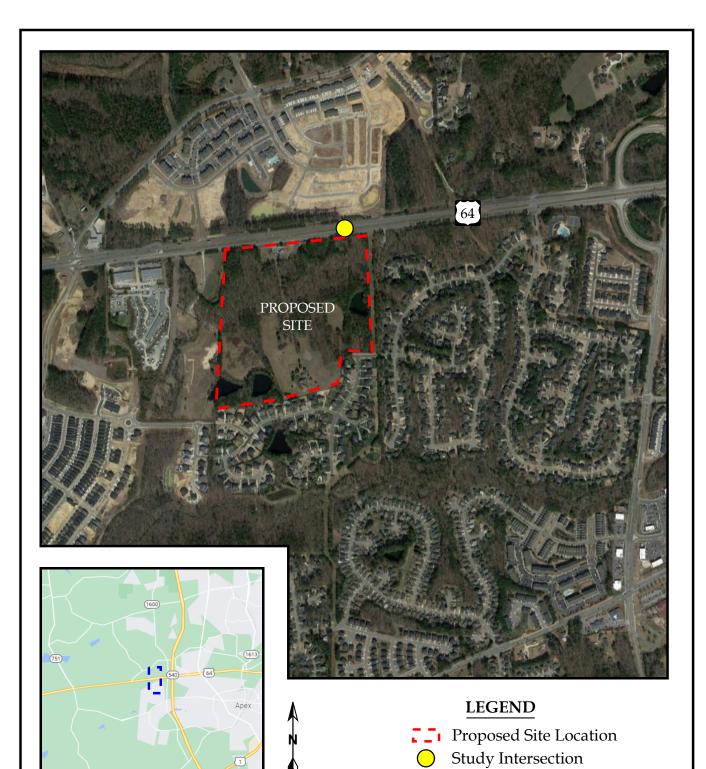
Attachments: Site Location Map

Site Plan

Proposed Site Trip Distribution Figures NCHRP Internal Capture Reports

Whil My







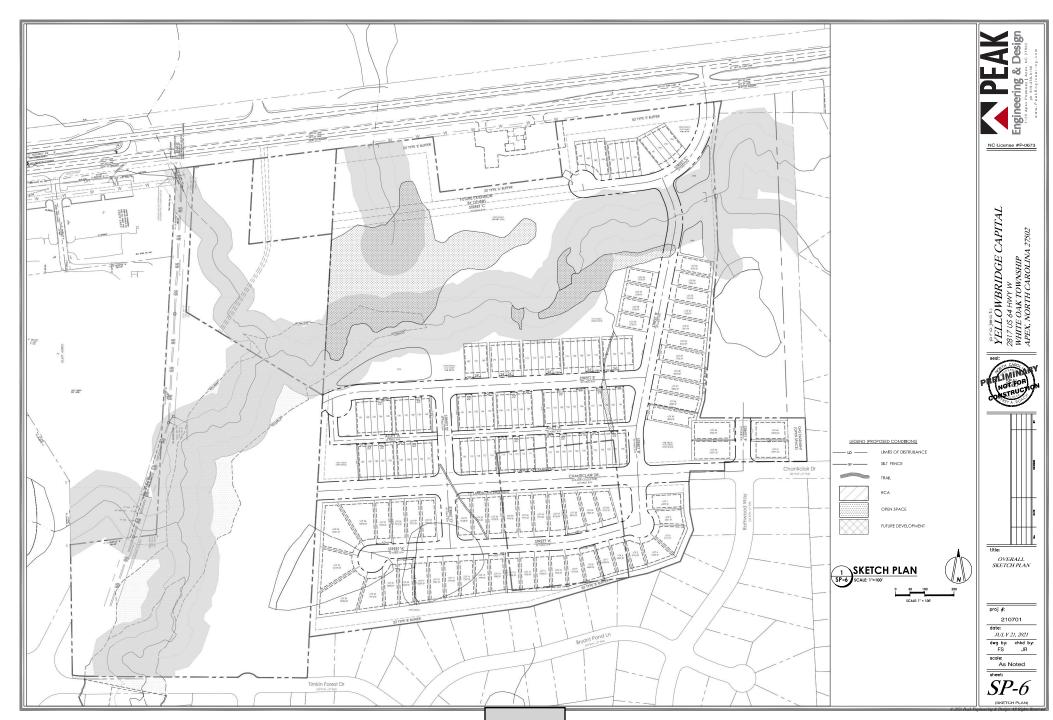
Friendship

Yellow Bridge Residential Apex, NC

Site Location Map

Scale: Not to Scale

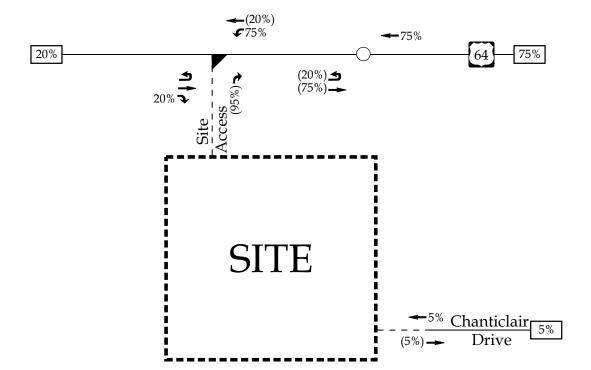
Study Area



LEGEND

- Unsignalized Intersection
- Left-Over Intersection
- x% \rightarrow Entering Trip Distribution
- (Y%) \rightarrow Exiting Trip Distribution

XX% Regional Trip Distribution





Yellow Bridge Residential Apex, NC

Proposed Residential Site Trip Distribution

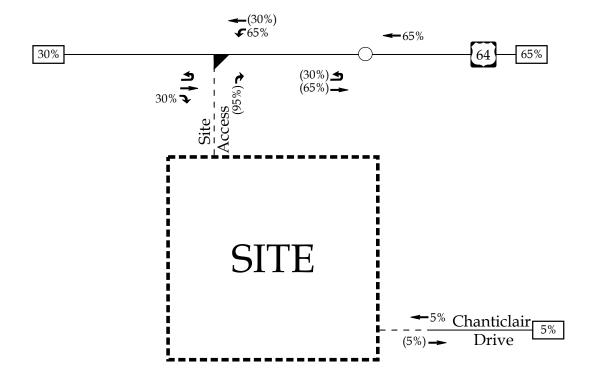
Scale: Not to Scale

LEGEND

- Unsignalized Intersection
- Left-Over Intersection
- x_% → Entering Trip Distribution
- (Y%) \rightarrow Exiting Trip Distribution

XX% R

Regional Trip Distribution





Yellow Bridge Residential Apex, NC

Proposed Commercial Site Trip Distribution

Scale: Not to Scale

	NCHRP 684 Internal Trip Capture Estimation Tool								
Project Name:	Yellow Bridge Residential		Organization:	RKA					
Project Location:	Apex, NC		Performed By:	TF					
Scenario Description:	Full-Build		Date:	1/12/2022					
Analysis Year:	2026	1	Checked By:						
Analysis Period:	AM Street Peak Hour	1	Date:						

Land Use	Developm	ent Data (<i>For Info</i>	ormation Only)			Estimated Vehicle-Trips ³	
Land Ose	ITE LUCs1	Quantity	Units		Total	Entering	Exiting
Office							
Retail	820	25	KSF	ΙГ		15	9
Restaurant							
Cinema/Entertainment				ΙГ			
Residential	210, 220	59, 83	DU	ΙГ		21	66
Hotel				ΙΓ			
All Other Land Uses ²				ΙГ			
					0	36	75

		Table 2-A:	Mode Split and Veh	icl	e Occupancy Estimates	i		
Land Use		Entering Trips		ing Trips Exitinç			ting Trips	
Land Use	Veh. Occ.4	% Transit	% Non-Motorized		Veh. Occ.4	% Transit	% Non-Motorized	
Office	1.10	0%	0%		1.10	0%	0%	
Retail	1.10	0%	0%		1.10	0%	0%	
Restaurant	1.10	0%	0%		1.10	0%	0%	
Cinema/Entertainment	1.10	0%	0%		1.10	0%	0%	
Residential	1.10	0%	0%		1.10	0%	0%	
Hotel	1.10	0%	0%		1.10	0%	0%	
All Other Land Uses ²	1.10	0%	0%		1.10	0%	0%	

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)									
Origin (From)									
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel			
Office									
Retail									
Restaurant									
Cinema/Entertainment									
Residential									
Hotel									

Table 4-A: Internal Person-Trip Origin-Destination Matrix*									
Origin (From)	Destination (To)								
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel			
Office		0	0	0	0	0			
Retail	0		0	0	0	0			
Restaurant	0	0		0	0	0			
Cinema/Entertainment	0	0	0		0	0			
Residential	0	1	0	0		0			
Hotel	0	0	0	0	0				

Table 5-A: Computations Summary								
	Total	Entering	Exiting					
All Person-Trips	123	40	83					
Internal Capture Percentage	2%	3%	1%					
External Vehicle-Trips ⁵	110	36	74					
External Transit-Trips ⁶	0	0	0					
External Non-Motorized Trips ⁶	0	0	0					

Table 6-A: Internal Trip Capture Percentages by Land Use								
Land Use	Entering Trips	Exiting Trips						
Office	N/A	N/A						
Retail	6%	0%						
Restaurant	N/A	N/A						
Cinema/Entertainment	N/A	N/A						
Residential	0%	1%						
Hotel	N/A	N/A						

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Yellow Bridge Residential
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends							
Land Use	Tab	ole 7-A (D): Enter	ing Trips			Table 7-A (O): Exiting Trips	
Land Use	Veh. Occ.	Vehicle-Trips	Person-Trips*	1 [Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.10	0	0	1 [1.10	0	0
Retail	1.10	15	17	1 [1.10	9	10
Restaurant	1.10	0	0	1 [1.10	0	0
Cinema/Entertainment	1.10	0	0	1 [1.10	0	0
Residential	1.10	21	23	1 [1.10	66	73
Hotel	1.10	0	0	1 [1.10	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)								
Origin (Fram)		Destination (To)						
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel		
Office		0	0	0	0	0		
Retail	3		1	0	1	0		
Restaurant	0	0		0	0	0		
Cinema/Entertainment	0	0	0		0	0		
Residential	1	1	15	0		0		
Hotel	0	0	0	0	0			

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)								
Origin (Fram)	Destination (To)							
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel		
Office		5	0	0	0	0		
Retail	0		0	0	0	0		
Restaurant	0	1		0	1	0		
Cinema/Entertainment	0	0	0		0	0		
Residential	0	3	0	0		0		
Hotel	0	1	0	0	0			

	Table 9-A (D): Internal and External Trips Summary (Entering Trips)								
Destination Land Use		Person-Trip Esti	mates			External Trips by Mode*			
Destination Land Ose	Internal	External	Total	1	Vehicles ¹	Transit ²	Non-Motorized ²		
Office	0	0	0		0	0	0		
Retail	1	16	17	1	15	0	0		
Restaurant	0	0	0]	0	0	0		
Cinema/Entertainment	0	0	0	1	0	0	0		
Residential	0	23	23]	21	0	0		
Hotel	0	0	0		0	0	0		
All Other Land Uses ³	0	0	0		0	0	0		

	Table 9-A (O): Internal and External Trips Summary (Exiting Trips)							
Origin Land Use		Person-Trip Esti	mates		External Trips by Mode*			
Origin Land Ose	Internal	External	Total		Vehicles ¹	Transit ²	Non-Motorized ²	
Office	0	0	0		0	0	0	
Retail	0	10	10		9	0	0	
Restaurant	0	0	0		0	0	0	
Cinema/Entertainment	0	0	0		0	0	0	
Residential	1	72	73		65	0	0	
Hotel	0	0	0		0	0	0	
All Other Land Uses ³	0	0	0		0	0	0	

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

	NCHRP 684 Internal Trip Capture Estimation Tool								
Project Name:	Yellow Bridge Residential		Organization:	RKA					
Project Location:	Apex, NC		Performed By:	TF					
Scenario Description:	Full-Build		Date:	1/12/2022					
Analysis Year:	2026		Checked By:						
Analysis Period:	PM Street Peak Hour		Date:						

	Table 1	-P: Base Vehic	le-Trip Generation	ı Es	timates (Single-Use S	ite Estimate)	
Land Use	Developm	Development Data (For Information Only)				Estimated Vehicle-Trips ³	
Land Ose	ITE LUCs1	Quantity	Units	1	Total	Entering	Exiting
Office							
Retail	820	25	KSF			45	50
Restaurant							
Cinema/Entertainment							
Residential	210, 220	59, 83	DU			69	42
Hotel							
All Other Land Uses ²							
					0	114	92

	Table 2-P: Mode Split and Vehicle Occupancy Estimates								
Land Use		Entering Trips				Exiting Trips			
Land Ose	Veh. Occ.4	% Transit	% Non-Motorized		Veh. Occ.4	% Transit	% Non-Motorized		
Office	1.10	0%	0%		1.10	0%	0%		
Retail	1.10	0%	0%		1.10	0%	0%		
Restaurant	1.10	0%	0%		1.10	0%	0%		
Cinema/Entertainment	1.10	0%	0%		1.10	0%	0%		
Residential	1.10	0%	0%		1.10	0%	0%		
Hotel	1.10	0%	0%		1.10	0%	0%		
All Other Land Uses ²	1.10	0%	0%		1.10	0%	0%		

	Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)				Destination (To)			
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel	
Office							
Retail					2500		
Restaurant							
Cinema/Entertainment							
Residential							
Hotel							

Table 4-P: Internal Person-Trip Origin-Destination Matrix*								
Origin (From)		Destination (To)						
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel		
Office		0	0	0	0	0		
Retail	0		0	0	7	0		
Restaurant	0	0		0	0	0		
Cinema/Entertainment	0	0	0		0	0		
Residential	0	5	0	0		0		
Hotel	0	0	0	0	0			

Table 5-F	: Computatio	ns Summary						
Total Entering Exiting								
All Person-Trips	227	126	101					
Internal Capture Percentage	11%	10%	12%					
External Vehicle-Trips ⁵	185	104	81					
External Transit-Trips ⁶	0	0	0					
External Non-Motorized Trips ⁶	0	0	0					

Table 6-P: Internal Trip Capture Percentages by Land Use								
Land Use	Entering Trips	Exiting Trips						
Office	N/A	N/A						
Retail	10%	13%						
Restaurant	N/A	N/A						
Cinema/Entertainment	N/A	N/A						
Residential	9%	11%						
Hotel	N/A	N/A						

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be ⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Yellow Bridge Residential
Analysis Period:	PM Street Peak Hour

	Та	ble 7-P: Conver	sion of Vehicle-Tr	ip E	nds to Person-Trip Er	ids						
Land Use	Table	7-P (D): Entering	Table 7-P (O): Exiting Trips									
Land USE	Veh. Occ.	Veh. Occ. Vehicle-Trips Person-Trips*			Veh. Occ.	Vehicle-Trips	Person-Trips*					
Office	1.10	0	0	1	1.10	0	0					
Retail	1.10	45	50	1	1.10	50	55					
Restaurant	1.10	0	0]	1.10	0	0					
Cinema/Entertainment	1.10	0	0]	1.10	0	0					
Residential	1.10	69		1.10	42	46						
Hotel	1.10	0		1.10	0	0						

	Table 8-P (0	D): Internal Pers	on-Trip Origin-De	stination Matrix (Computed	l at Origin)									
Origin (Fram.)				Destination (To)										
Origin (From)	Office Retail Restaurant Cinema/Entertainment Residential Hotel													
Office		0	0	0	0	0								
Retail	1		16	2	7	3								
Restaurant	0	0		0	0	0								
Cinema/Entertainment	0	0	0		0	0								
Residential	2	19	10	0		1								
Hotel 0 0 0 0 0 0														

	Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)													
Origin (From)				Destination (To)										
Oligili (Floili)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel								
Office		4	0	0	3	0								
Retail	0		0	0	35	0								
Restaurant	0	25		0	12	0								
Cinema/Entertainment	0	2	0		3	0								
Residential 0 5 0 0														
Hotel	0	1	0	0	0									

	Tab	le 9-P (D): Inter	nal and External T	rips	Summary (Entering Tr	ips)						
Destination Land Use	Pe	erson-Trip Estima	External Trips by Mode*									
Destination Land Use	Internal	External	Total	Ī	Vehicles ¹	Transit ²	Non-Motorized ²					
Office	0	0	0	1	0	0	0					
Retail	5	45	50	1	41	0	0					
Restaurant	0	0	0	1	0	0	0					
Cinema/Entertainment	0	0	0		0	0	0					
Residential	7	69	76	1	63	0	0					
Hotel	0	0	1	0	0	0						
All Other Land Uses ³	0	0	1	0	0	0						

	Та	ble 9-P (O): Inte	rnal and External 1	rip	s Summary (Exiting Tri	ps)						
Origin Land Llag	Pe	erson-Trip Estima	External Trips by Mode*									
Origin Land Use	Internal	External	Total		Vehicles ¹	Transit ²	Non-Motorized ²					
Office	0	0	0		0	0	0					
Retail	7	48	55		44	0	0					
Restaurant	0	0	0		0	0	0					
Cinema/Entertainment	0	0	0		0	0	0					
Residential	5	41	46		37	0	0					
Hotel	0	0	0		0	0	0					
All Other Land Uses ³	0	0	0		0	0	0					

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

²Person-Trips

³Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Tucker Fulle

From: Fenner, Edwin F <effenner@ncdot.gov>
Sent: Tuesday, January 18, 2022 5:45 PM

To:Nate Bouquin; Serge Grebenschikov; Russell Dalton; Brennan, Sean P **Cc:**Tucker Fulle; Bunting, Clarence B; Walker, Braden M; Ishak, Doumit Y

Subject: RE: [External] Yellow Bridge Apex - TIA Scope **Attachments:** MOU - Yellow Bridge Residential 01.12.22.pdf

Follow Up Flag: Flag for follow up

Flag Status: Flagged

Nate,

The attached MOU looks good to the District.

Edwin Fenner, PE

Assistant District Engineer
Division 5/District 1
Department of Transportation

919-733-3213 office 919-715-5778 fax effenner@ncdot.gov

4009 District Drive (Physical Address) Raleigh, NC 27607

1575 Mail Service Center (Mailing Address) Raleigh, NC 27699-1575

From: Nate Bouquin <nbouquin@rameykemp.com>

Sent: Thursday, January 13, 2022 12:06 AM

To: Serge Grebenschikov <Serge.Grebenschikov@apexnc.org>; Russell Dalton <Russell.Dalton@apexnc.org>; Brennan,

Sean P <spbrennan@ncdot.gov>; Fenner, Edwin F <effenner@ncdot.gov>

Cc: Tucker Fulle <tfulle@rameykemp.com>; Bunting, Clarence B <cbunting@ncdot.gov>; Walker, Braden M

<bmwalker1@ncdot.gov>; Ishak, Doumit Y <dishak@ncdot.gov>

Subject: [External] Yellow Bridge Apex - TIA Scope

CAUTION: External email. Do not click links or open attachments unless you verify. Send all suspicious email as an attachment to Report Spam.

All -

Attached is the MOU for the Yellow Bridge development in Apex. This MOU is based off of the scoping meetings we had with NCDOT and the Town back in late December.

One small note with this – you will notice the trip generation includes retail. The developer is considering non-residential at the northernmost section of the site, along US 64. This hasn't been solidified yet, but we wanted to go ahead and include it in the TIA as it would be more conservative versus assuming all residential.

Please let us know your thoughts on this MOU.

Thanks!

Nate Bouquin, PE, PTOE Traffic Engineering Project Manager D 919 987 1301 | M 919 961 4065 RAMEY KEMP ASSOCIATES TOGETHER WE ARE LIMITLESS

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

Tucker Fulle

From: Nate Bouquin

Sent: Thursday, January 13, 2022 10:37 AM

To: Serge Grebenschikov

Cc: Tucker Fulle

Subject: RE: Yellow Bridge Apex - TIA Scope

Attachments: Sweetwater TIA.pdf

Follow Up Flag: Flag for follow up

Flag Status: Flagged

Thanks serge, we will make sure and include these changes.

Nate Bouquin, PE, PTOE Traffic Engineering Project Manager

D 919 987 1301 | M 919 961 4065 rameykemp.com

From: Serge Grebenschikov < Serge. Grebenschikov@apexnc.org>

Sent: Thursday, January 13, 2022 10:01 AM
To: Nate Bouquin <nbouquin@rameykemp.com>
Subject: RE: Yellow Bridge Apex - TIA Scope

Hi Nate,

Looking over the MOU I realized that I did not ask you to include Sweetwater Commercial. I think it would be prudent to do so as they are contributing around 200 vph on US 64, and the commercial phases are in construction today. Apologies for that. I have attached the Sweetwater TIA for reference.

Please see my markups in the screenshot below for Background Development Traffic. These are the only comments that I have.

Background Traffic Volumes

Based on coordination with NCDOT and the Town, background traffic volumes will be determined by projecting 2022 existing traffic volumes to the year 2026 using a 3% annual growth rate. Additionally, it was determined that the following adjacent developments are to be included in this study:

Westford Residential

along US 64

Westford (currently 75% build-out)

Legacy PUD (US 64 Residential)

Future Roadway Improvements

Please add Sweetwater Commercial traffic

VP 564 434

Serge Grebenschikov, PE

Thanks

Traffic Engineer
Public Works & Transportation – Traffic
73 Hunter Street, 3rd Fl
PO Box 250

Apex, NC 27502 P: (919) 372-7448

E: Serge.Grebenschikov@apexnc.org

From: Nate Bouquin < nbouquin@rameykemp.com >

Sent: Thursday, January 13, 2022 12:06 AM

To: Serge Grebenschikov < Serge.Grebenschikov@apexnc.org >; Russell Dalton < Russell.Dalton@apexnc.org >; Brennan,

Sean P <spbrennan@ncdot.gov>; Fenner, Edwin F <effenner@ncdot.gov>

Cc: Tucker Fulle <ffulle@rameykemp.com>; Bunting, Clarence B <cbunting@ncdot.gov>; Walker, Braden M

<bmwalker1@ncdot.gov>; Ishak, Doumit Y <dishak@ncdot.gov>

Subject: Yellow Bridge Apex - TIA Scope

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Do not click links or open attachments unless you trust the sender, and can verify the content is safe.

All -

Attached is the MOU for the Yellow Bridge development in Apex. This MOU is based off of the scoping meetings we had with NCDOT and the Town back in late December.

One small note with this – you will notice the trip generation includes retail. The developer is considering non-residential at the northernmost section of the site, along US 64. This hasn't been solidified yet, but we wanted to go ahead and include it in the TIA as it would be more conservative versus assuming all residential.

Please let us know your thoughts on this MOU.

Thanks!

Nate Bouquin, PE, PTOE
Traffic Engineering Project Manager

D 919 987 1301 | M 919 961 4065



APPENDIX B

TRAFFIC COUNTS



File Name: Apex(US 64 and Jenks)AM Peak

Site Code:

Start Date : 10/28/2021

Page No : 1

Groups Printed- Cars + - Trucks

								Gro	ups P	rinted- (<u>+ ars</u>	 I rucł 	<u>(S</u>								
		Je	nks R	oad				US 64	4			Richa	ardson	Road				US 64	4		
		So	uthbo	und			W	<u>estbo</u>	und			No	rthbo	und			E	<u>astbou</u>	ınd		
Start Time	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Int. Total
07:00 AM	19	0	0	0	19	19	225	33	0	277	74	0	0	0	74	4	253	15	0	272	642
07:15 AM	29	0	0	0	29	21	218	30	0	269	98	0	0	0	98	6	307	26	0	339	735
07:30 AM	22	0	0	0	22	14	253	36	1	304	106	0	0	0	106	6	341	21	0	368	800
07:45 AM	24	0	0	0	24	21	239	46	0	306	84	0	0	0	84	8	289	26	0	323	737
Total	94	0	0	0	94	75	935	145	1	1156	362	0	0	0	362	24	1190	88	0	1302	2914
08:00 AM	27	0	0	0	27	26	290	53	0	369	80	0	0	0	80	11	304	18	0	333	809
08:15 AM	33	0	0	0	33	12	238	47	2	299	71	0	0	0	71	16	276	26	0	318	721
08:30 AM	30	0	0	0	30	18	246	49	0	313	96	0	0	0	96	8	285	20	0	313	752
08:45 AM	29	0	0	0	29	18	267	45	0	330	90	0	0	0	90	7	263	16	0	286	735
Total	119	0	0	0	119	74	1041	194	2	1311	337	0	0	0	337	42	1128	80	0	1250	3017
Grand Total	213	0	0	0	213	149	1976	339	3	2467	699	0	0	0	699	66	2318	168	0	2552	5931
Apprch %	100	0	0	0		6	80.1	13.7	0.1		100	0	0	0		2.6	90.8	6.6	0		
 Total %	3.6	0	0	0	3.6	2.5	33.3	5.7	0.1	41.6	11.8	0	0	0	11.8	1.1	39.1	2.8	0	43	
Cars +	211	0	0	0	211	137	1890	328	3	2358	697	0	0	0	697	66	2225	164	0	2455	5721
% Cars +	99.1	0	0	0	99.1	91.9	95.6	96.8	100	95.6	99.7	0	0	0	99.7	100	96	97.6	0	96.2	96.5
Trucks	2	0	0	0	2	12	86	11	0	109	2	0	0	0	2	0	93	4	0	97	210
% Trucks	0.9	0	0	0	0.9	8.1	4.4	3.2	0	4.4	0.3	0	0	0	0.3	0	4	2.4	0	3.8	3.5



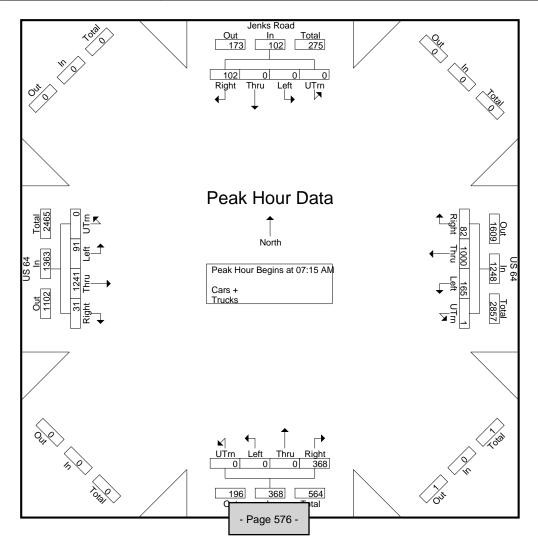
File Name: Apex(US 64 and Jenks)AM Peak

Site Code:

Start Date : 10/28/2021

Page No : 2

		Je	nks R	oad				US 6	4			Richa	ardsor	Road							
		Sc	outhbo	und			W	estbo	und		Northbound										
Start Time	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Int. Total
Peak Hour A	nalysi	s From	n 07:00	AM to	o 08:45	AM - I	Peak 1	of 1													
Peak Hour fo	or Entii	re Inte	rsectio	n Beg	ins at 0	7:15 A	.M														
07:15 AM	29	0	0	0	29	21	218	30	0	269	98	0	0	0	98	6	307	26	0	339	735
07:30 AM	22	0	0	0	22	14	253	36	1	304	106	0	0	0	106	6	341	21	0	368	800
07:45 AM	24	0	0	0	24	21	239	46	0	306	84	0	0	0	84	8	289	26	0	323	737
08:00 AM	27	0	0	0	27	26	290	53	0	369	80	0	0	0	80	11	304	18	0	333	809
Total Volume	102	0	0	0	102	82	1000	165	1	1248	368	0	0	0	368	31	1241	91	0	1363	3081
% App. Total	100	0	0	0		6.6	80.1	13.2	0.1		100	0	0	0		2.3	91	6.7	0		
PHF	.879	.000	.000	.000	.879	.788	.862	.778	.250	.846	.868	.000	.000	.000	.868	.705	.910	.875	.000	.926	.952





File Name: Apex(US 64 and Jenks)PM Peak

Site Code:

Start Date : 10/28/2021

Page No : 1

Groups Printed- Cars + - Trucks

								Gro	ups Pi	inted- (ars +	 Truck 	KS								
		Je	nks R	oad				US 64	4			Richa	ardson	n Road				US 64	4		
		So	uthbo	und			W	estbou	und			No	rthbo	und			E	<u>astbou</u>	und		
Start Time	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Int. Total
04:00 PM	35	0	0	0	35	12	302	56	0	370	50	0	0	0	50	6	237	18	0	261	716
04:15 PM	36	0	0	0	36	18	341	50	0	409	64	0	0	0	64	12	312	17	0	341	850
04:30 PM	35	0	0	0	35	14	318	62	0	394	75	0	0	0	75	11	292	19	0	322	826
04:45 PM	41	0	0	0	41	19	295	63	2	379	69	0	0	0	69	17	355	16	0	388	877
Total	147	0	0	0	147	63	1256	231	2	1552	258	0	0	0	258	46	1196	70	0	1312	3269
05:00 PM	40	0	0	0	40	19	315	58	1	393	90	0	0	0	90	4	316	17	0	337	860
05:15 PM	36	0	0	0	36	18	346	61	0	425	66	0	0	0	66	11	299	24	0	334	861
05:30 PM	25	0	0	0	25	20	293	61	2	376	57	0	0	0	57	12	271	15	0	298	756
05:45 PM	36	0	0	0	36	13	287	55	0	355	61	0	0	0	61	5	281	15	0	301	753
Total	137	0	0	0	137	70	1241	235	3	1549	274	0	0	0	274	32	1167	71	0	1270	3230
Grand Total	284	0	0	0	284	133	2497	466	5	3101	532	0	0	0	532	78	2363	141	0	2582	6499
Apprch %	100	0	0	0		4.3	80.5	15	0.2		100	0	0	0		3	91.5	5.5	0		
Total %	4.4	0	0	0	4.4	2	38.4	7.2	0.1	47.7	8.2	0	0	0	8.2	1.2	36.4	2.2	0	39.7	
Cars +	282	0	0	0	282	132	2456	465	5	3058	529	0	0	0	529	78	2309	141	0	2528	6397
% Cars +	99.3	0	0	0	99.3	99.2	98.4	99.8	100	98.6	99.4	0	0	0	99.4	100	97.7	100	0	97.9	98.4
Trucks	2	0	0	0	2	1	41	1	0	43	3	0	0	0	3	0	54	0	0	54	102
% Trucks	0.7	0	0	0	0.7	0.8	1.6	0.2	0	1.4	0.6	0	0	0	0.6	0	2.3	0	0	2.1	1.6



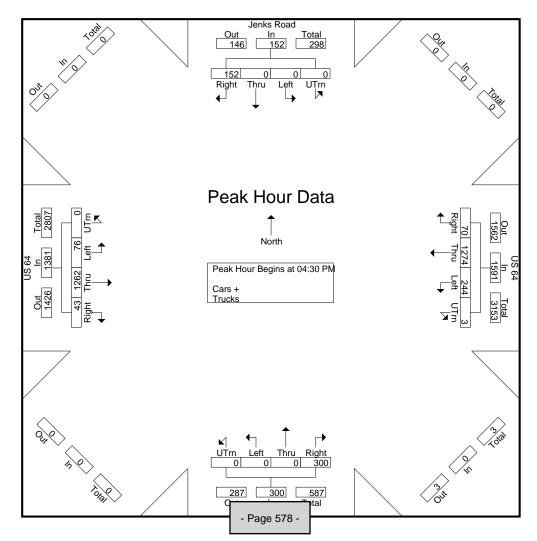
File Name: Apex(US 64 and Jenks)PM Peak

Site Code:

Start Date : 10/28/2021

Page No : 2

		Je	nks R	oad				US 6	4			Richa	ardsor	Road			US 64					
		Sc	outhbo	und			W	estbo	und		Northbound											
Start Time	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Int. Total	
Peak Hour A	nalysi	s From	n 04:00	OPM t	o 05:45	PM - I	Peak 1	of 1														
Peak Hour fo	or Enti	re Inte	rsectio	n Beg	ins at 0	4:30 P	M															
04:30 PM	35	0	0	0	35	14	318	62	0	394	75	0	0	0	75	11	292	19	0	322	826	
04:45 PM	41	0	0	0	41	19	295	63	2	379	69	0	0	0	69	17	355	16	0	388	877	
05:00 PM	40	0	0	0	40	19	315	58	1	393	90	0	0	0	90	4	316	17	0	337	860	
05:15 PM	36	0	0	0	36	18	346	61	0	425	66	0	0	0	66	11	299	24	0	334	861	
Total Volume	152	0	0	0	152	70	1274	244	3	1591	300	0	0	0	300	43	1262	76	0	1381	3424	
% App. Total	100	0	0	0		4.4	80.1	15.3	0.2		100	0	0	0		3.1	91.4	5.5	0			
PHF	.927	.000	.000	.000	.927	.921	.921	.968	.375	.936	.833	.000	.000	.000	.833	.632	.889	.792	.000	.890	.976	





File Name: US 64 and U-Turn Location

Site Code : 00000001 Start Date : 1/11/2022

										ed- Car	s - TR	KS - S	emis								
								US 64										US 64			
			om No					om E	ast				om Sc					om W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Tums	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	7	7	8
08:00 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	3
08:15 AM	0	Ö	0	0	0	0	Ö	0	0	0	0	Ö	0	0	0	Ö	Ö	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4
08:45 AM	0	Ö	0	0	Ō	0	Ö	0	Ō	0	0	Ö	0	0	0	Ö	Ö	Ō	1	1	1
Total	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	8	8	9
*** BREAK *	**																				
04:00 PM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	5	5	6
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	5
Total	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	11	11	15
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	5	5	6
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
05:45 PM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	3	3	5
Total	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	13	13	16
Grand Total	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	39	39	48
Apprch %	0	0	0	0		0	0	0	100		0	0	0	0		0	0	0	100		
Total %	0	0_	0	0	0	0	0	0	18.8	18.8	0	0	0	0	0	0	0	0_	81.2	81.2	
Cars	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	0	0	34	34	43
% Cars	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	87.2	87.2	89.6
TRKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
% TRKS	0	0_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.8	12.8	10.4
Semis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Semis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



File Name: US 64 and U-Turn Location

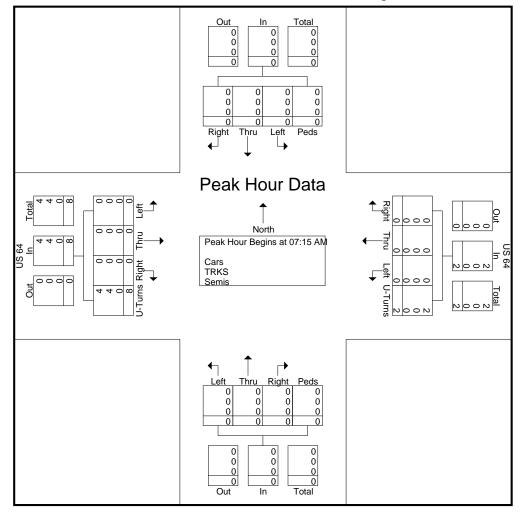
Site Code : 00000001 Start Date : 1/11/2022

								US 64	1									US 64	1		
		Fr	om No	orth			F	rom E				Fr	om Sc	outh			Fr	om W			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Tums	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour A	nalysi	s From	า 07:00	O AM to	11:45	AM - F	Peak 1	of 1													
Peak Hour fo	or Entii	re Inte	rsectio	n Beg	ins at 0	7:15 A	M														
07:15 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
MA 00:80	0	0	0	0	0	0	0	0	1_	1	0	0	0	0	0	0	0	0	2	2	3
Total Volume	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	8	8	10
% App. Total	0	0	0	0		0	0	0	100		0	0	0	0		0	0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.500	.000	.000	.000	.000	.000	.000	.000	.000	.400	.400	.500
Cars	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	4	6
% Cars	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	50.0	50.0	60.0
TRKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4
% TRKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50.0	50.0	40.0
Semis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Semis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



File Name: US 64 and U-Turn Location

Site Code : 00000001 Start Date : 1/11/2022

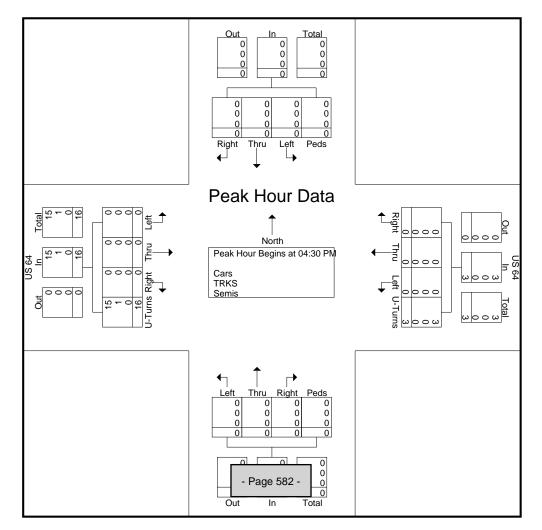




File Name: US 64 and U-Turn Location

Site Code : 00000001 Start Date : 1/11/2022

								US 64	1									US 64	1		
		Fr	om No	orth			F	rom E	ast			Fr	om Sc	uth			Fr	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Tums	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour A	nalysi	s From	n 12:00	PM to	05:45	PM - F	Peak 1	of 1													
Peak Hour fo	or Entii	e Inte	rsectio	n Begi	ins at 0	4:30 P	M														
04:30 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	5	5	6
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	5	5	6
Total Volume	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	16	16	19
% App. Total	0	0	0	0		0	0	0	100		0	0	0	0		0	0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.750	.750	.000	.000	.000	.000	.000	.000	.000	.000	.800	.800	.792
Cars	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	15	15	18
% Cars	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	93.8	93.8	94.7
TRKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% TRKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.3	6.3	5.3
Semis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Semis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



APPENDIX C

ADJACENT DEVELOPMENT INFORMATION

Traffic Impact Analysis
for
Westford
Apex, North Carolina

Prepared for:
The Halle Companies
Apex, North Carolina

Prepared by:
Kimley-Horn and Associates, Inc.
NC License #F-0102
421 Fayetteville Street Suite 600
Raleigh, NC 27601
(919) 677-2000

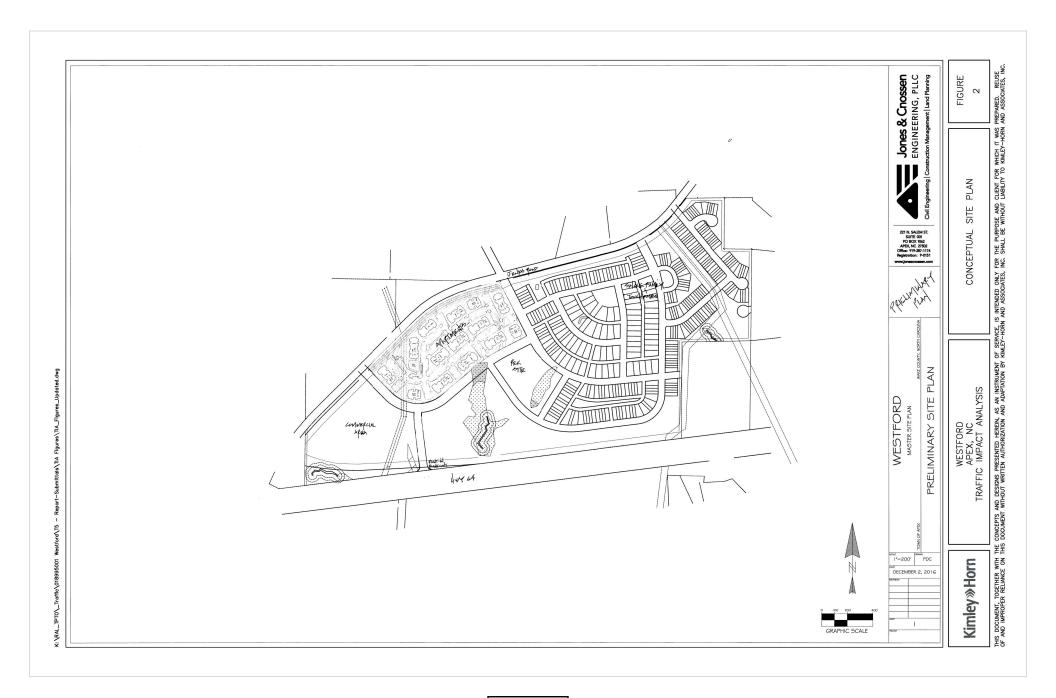
December 2016 018995001

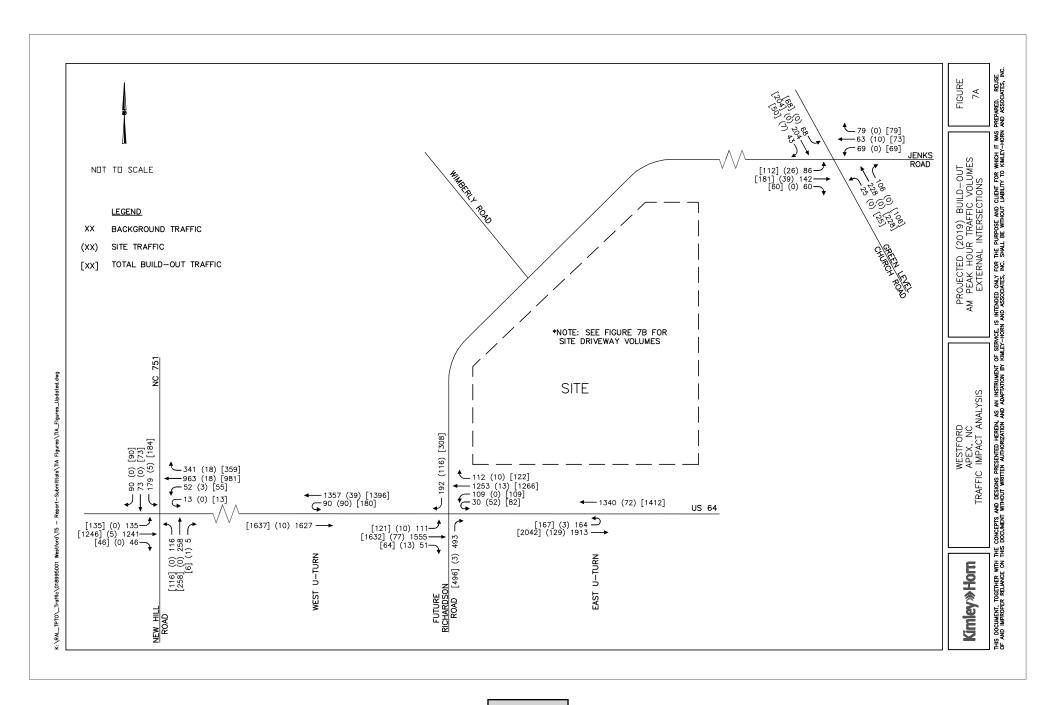
12/7/2016

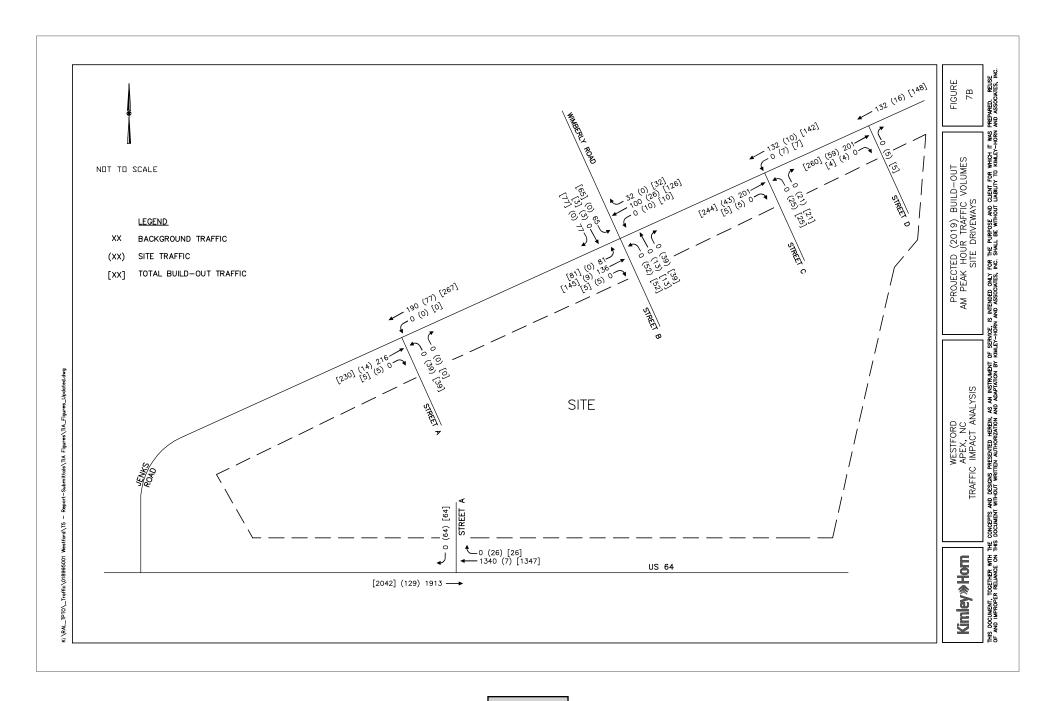
THIS DOCUMENT, TOGETHER WITH THE CONCEDTS AND DESCANS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. RELISE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WAITHEN AUTHORIZATION AND ADAPTATION BY KIMILEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LUBILITY TO KIMILEY-HORN AND ASSOCIATES, INC.

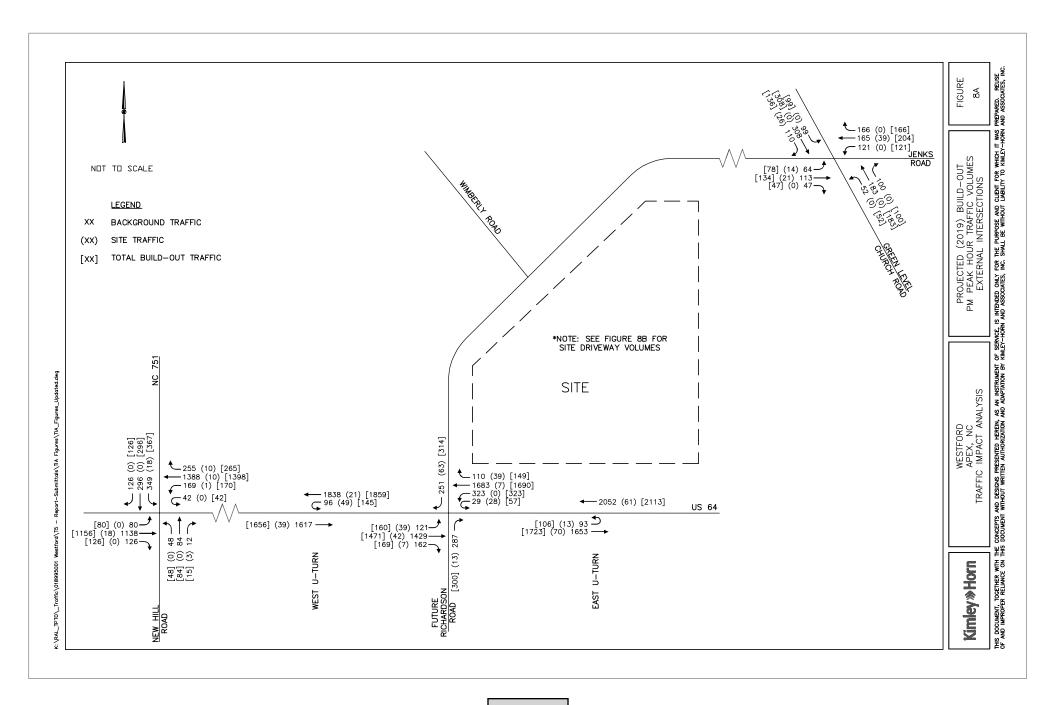
SITE LOCATION

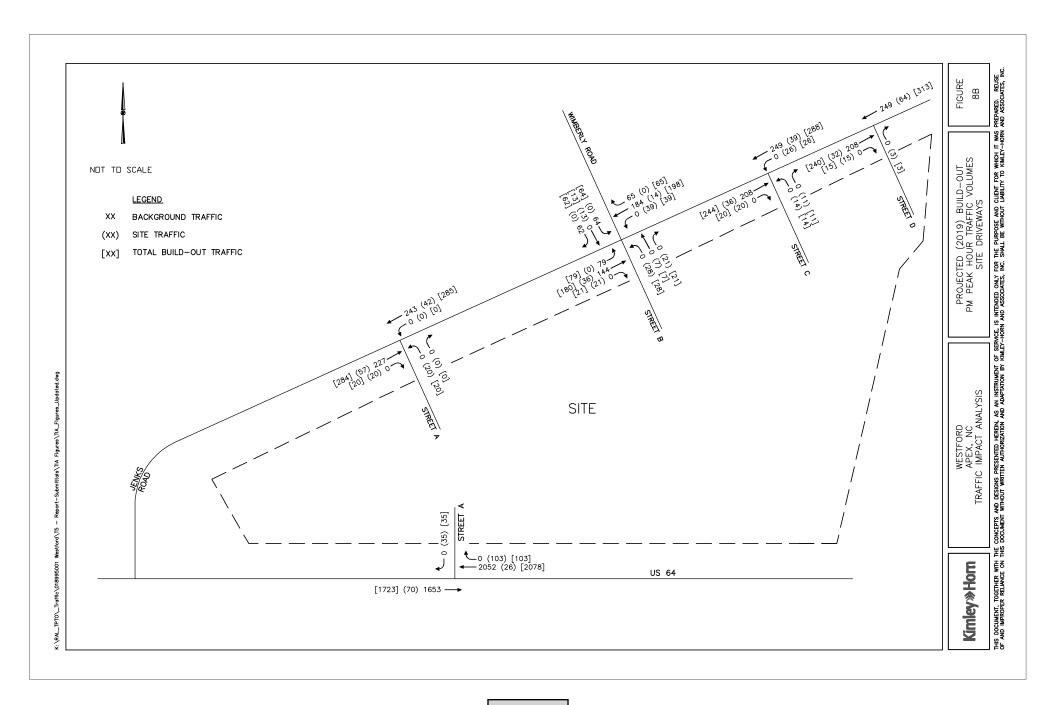
Kimley»Horn













7.0 Recommendations

The following roadway improvements are committed to be performed by other developments in the area:

US 64 at Jenks Road:

- Convert existing intersection to a superstreet configuration with left turn crossovers and downstream U-Turns (by Sweetwater Phase 1)
- Monitor crossovers for MUTCD traffic signal warrants and install a traffic signal if warrants are met (by Sweetwater Phase 1)
- Construct a single westbound left-turn lane with 300 feet of storage and a single right-turn lane with 100 feet of storage on US 64 (by Sweetwater Phase 1)
- Construct a single eastbound left-turn lane with 300 feet of storage and a single right-turn lane with 50 feet of storage on US 64 (by Sweetwater Phase 1)
- Extend the westbound left-turn lane on US 64 to provide 500 feet of storage (by Smith Farm prior to platting 300 units)
- Extend the eastbound right-turn lane on US 64 to provide 100 feet of storage (by Smith Farm prior to platting of 360 units)
- Construct an additional northbound right-turn lane on Richardson Road with 300 feet of storage (by Smith Farm prior to platting 360 units)

US 64 at West U-turn:

- Construct a single lane U-turn with 250 feet of storage (by Sweetwater Phase 1)
- Monitor for MUTCD traffic signal warrants and install a traffic signal if warrants are met (by Sweetwater Phase 1)

US 64 at East U-turn:

- Construct a single lane U-turn with 250 feet of storage on US 64 (by Sweetwater Phase 1)
- Monitor for MUTCD traffic signal warrants and install a traffic signal if warrants are met (by Sweetwater Phase 1)
- Extend eastbound U-turn lane on US 64 to provide 400 feet of storage (by Smith Farm Phase 1)

Green Level Church Road at Jenks Road:

• Monitor this intersection for MUTCD traffic signal warrants and install a traffic signal if warrants are met (by The Preserve at White Oak Creek)



The following roadway improvements are recommended to be performed to accommodate projected Westford site traffic based on the analysis presented herein:

US 64 at Jenks Road:

• If not already done by others, monitor this intersection for MUTCD traffic signal warrants for the eastbound left-turn, the westbound through and right-turn, and the southbound right-turn movements and install a traffic signal if warrants are met

US 64 at West U-Turn:

• If not already done by others, monitor this intersection for MUTCD traffic signal warrants and install a traffic signal if warrants are met

Jenks Road at Green Level Church Road:

• If not already done by others, monitor this intersection for MUTCD traffic signal warrants and install a traffic signal if warrants are met

Jenks Road at Wimberly Road / Street B:

- Construct an exclusive westbound left-turn lane with a minimum of 50 feet of storage on Jenks Road
- Construct an exclusive eastbound left-turn lane with a minimum of 50 feet of storage on Jenks Road

US 64 at Street A:

 Construct an exclusive westbound right-turn lane with a minimum of 75 feet of storage on US 64

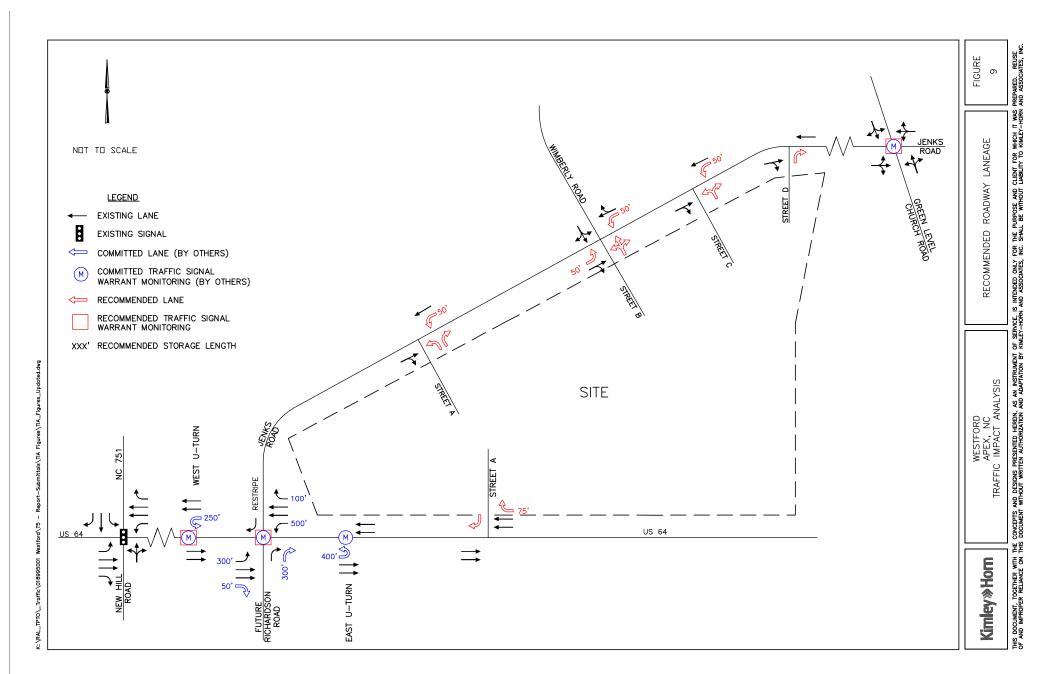
Jenks Road at Street A:

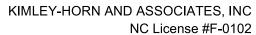
- Construct an exclusive westbound left-turn lane with a minimum of 50 feet of storage on Jenks Road
- Provide separate left- and right-turn lanes on the northbound approach of Street A

Jenks Road at Street C:

 Construct an exclusive westbound left-turn lane with a minimum of 50 feet of storage on Jenks Road

Analysis indicates that with the committed and recommended improvements in place, all of the study intersections are expected to operate at an acceptable level of service. The recommended lane geometry is shown on Figure 9.







MEMORANDUM

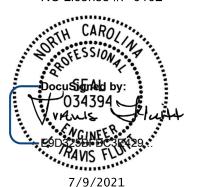
To: Mr. Serge Grebenschikov, P.E., Town of Apex

Mr. Russell Dalton, P.E., Town of Apex

From: Travis Fluitt, P.E., Kimley-Horn and Associates, Inc,

Date: July 9, 2021

Subject: US 64 Residential, Apex, NC – Phase 2 TIA Addendum



Kimley-Horn has prepared this addendum to the *US 64 Residential TIA* (Kimley-Horn, April 2021) to evaluate the traffic impact of Phase 2 of the proposed development. Per the original TIA, Phase 1 of the development was assumed to include 400 apartment units and to be built-out by 2024. For this analysis, Phase 2 of the development is assumed to include 75 single family homes, a 11,000 square foot (SF) day care center, and a 3,500 SF drive-thru fast-food restaurant. Phase 2 is assumed to be built-out by 2026.

This report presents trip generation, directional distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with build-out of Phase 2 of the proposed development in the 2026 study year.

Study Area

The study area intersections were obtained from the original TIA and were not modified as part of this analysis. Consistent with the original TIA, two site access scenarios were analyzed:

With RI/RO Driveway Scenario

- Proposed access road connection to US 64 opposite Flying Hawk Road
- Existing right-in/right-out (RI/RO) driveway on US 64

Without RI/RO Driveway Scenario

Proposed access road connection to US 64 opposite Flying Hawk Road

Background Traffic

The projected (2024) background traffic volumes from the original TIA were grown at a 3% annual rate up to the 2026 study year to calculate the projected (2026) background traffic volumes.

Trip Generation and Assignment

Consistent with the original TIA, the trip generation potential of the proposed development was determined using the traffic generation data published in the *ITE Trip Generation Handbook* (Institute of Transportation Engineers, Tenth Edition, 2017). The trip generation is summarized in <u>Table 1</u>.



	ITE Tra	Tab Iffic Gene		(Vehicle:	s)			
Land	Landllan	Inton	.14	Daily	AM Pea	ak Hour	PM Pe	ak Hour
Use Code	Land Use	Intens	sity	Total	ln	Out	ln	Out
210	Single Family Housing	75	d.u.	798	15	43	49	28
221	Multifamily Housing (Mid-Rise)	400	d.u.	2,178	35	98	102	66
565	Day Care Center	11,000	s.f.	524	64	57	57	65
934	Fast-Food Restaurant	3,500	s.f.	1,648	72	69	59	55
	Subtotal			5,148	186	267	267	214
	Internal Capture Reduction	n		462	17	17	18	18
	Pass-by Capture/Diverted Link	Trips		730	28	32	40	39
	Total Net New External Tri	ips		3,956	141	218	209	157

As shown in Table 1, the development is anticipated to generate approximately 3,956 new external trips on a typical weekday, with 359 new external trips during the AM peak hour and 366 new external trips during the PM peak hour.

Internally captured trips are trips that begin and end on the project site and do not access the external roadway network. ITE Methodology indicates that internal capture between the proposed land uses will represent approximately 7.5% of site trips in both peak hours.

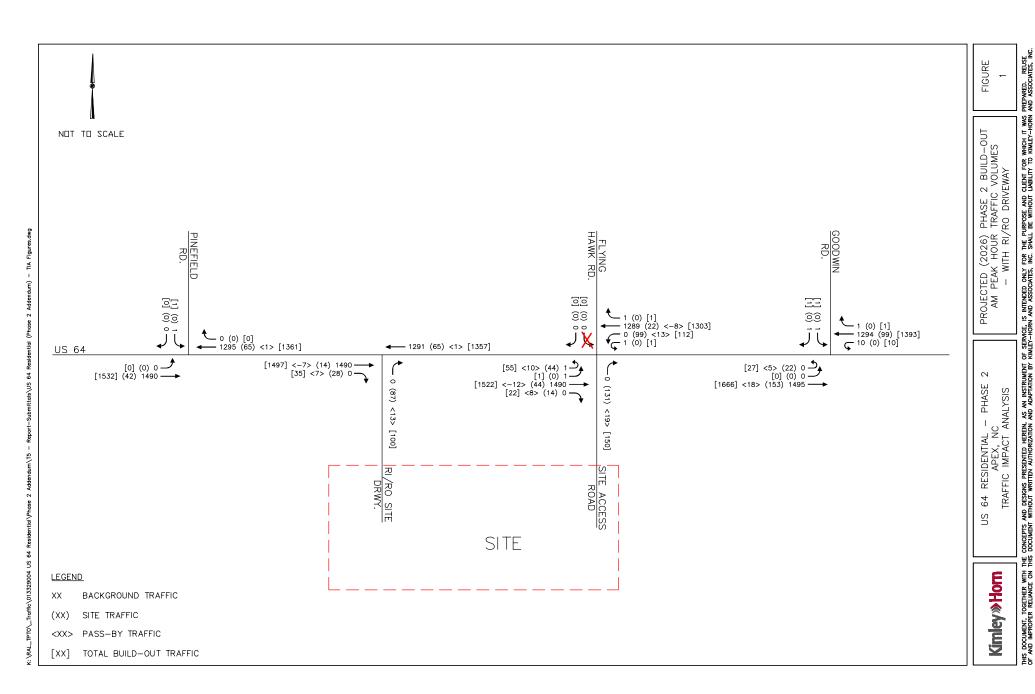
Pass-by trips are trips already on the network that will make a trip to the site as they pass by on the adjacent street. ITE Methodology indicates that approximately 49% of the AM peak hour trips and 50% of the PM peak hour trips associated with the fast-food restaurant will be pass-by trips. ITE Methodology also indicates that up to 50% of the day care trips in the PM peak hour may be diverted link trips. Consistent with previous studies performed in the Town, a diverted link trip percentage of 25% was applied to the PM peak hour day care trips to present a conservative analysis.

The proposed site-generated trips were assigned to the surrounding roadway network. Due to the addition of the commercial traffic, the following overall distribution was used for Phase 2:

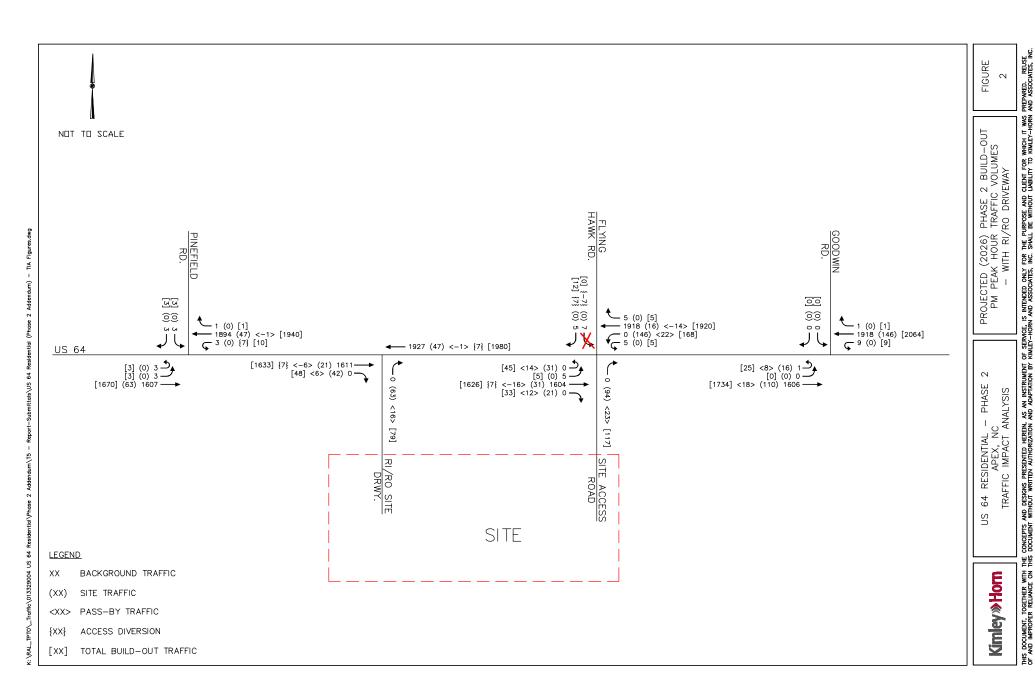
- 70% to/from the east on US 64
- 30% to/from the west on US 64

The proposed pass-by trips were assigned to the roadway network based on the directional distribution of background volumes along US 64.

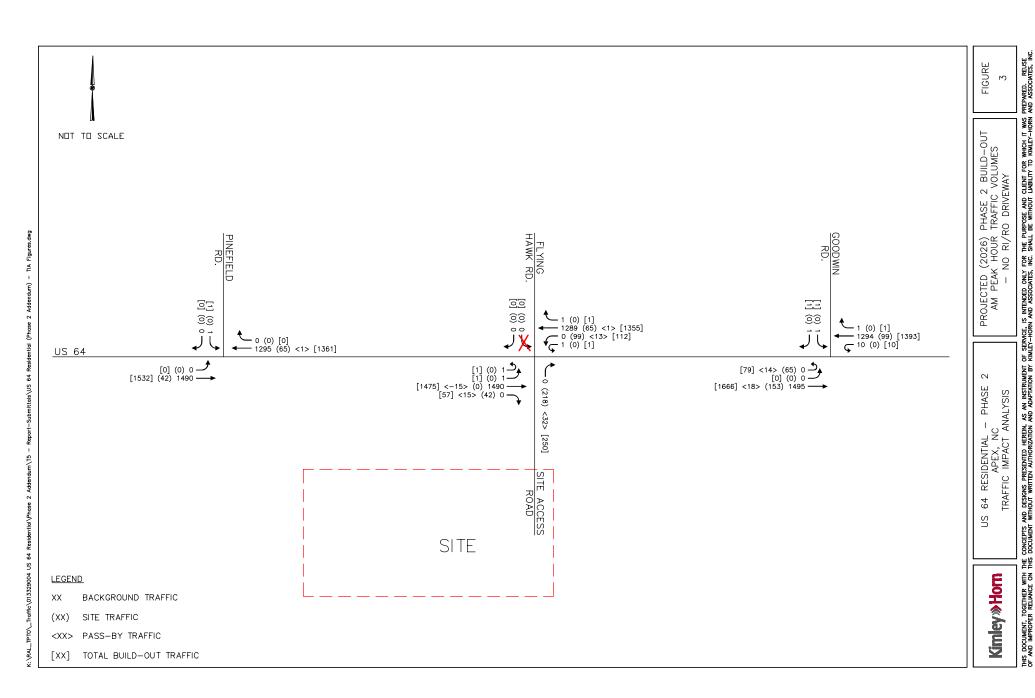
Full trip generation calculations, site-generated trip assignment, and pass-by trip assignment are shown on the intersection spreadsheets attached to this memorandum.



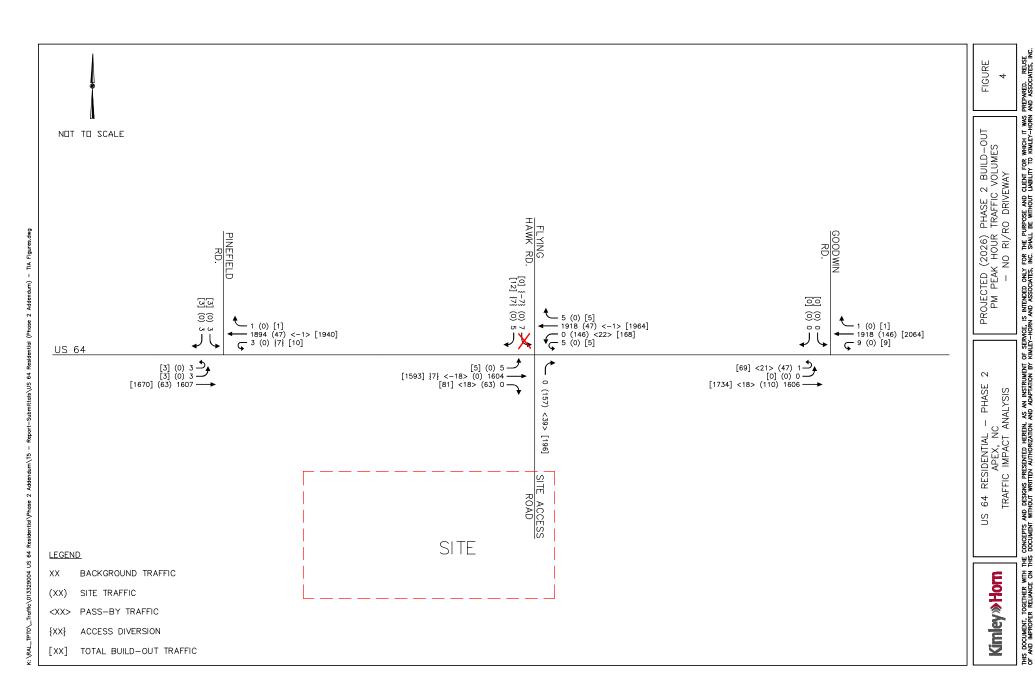
- Page 596 -



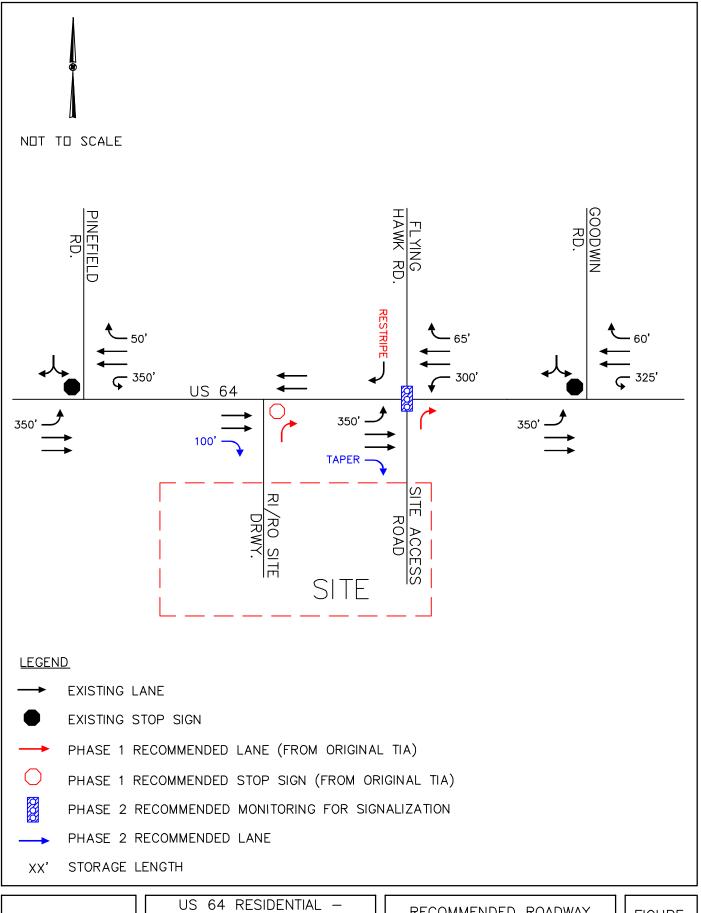
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- Page 598 -



- Page 599 -

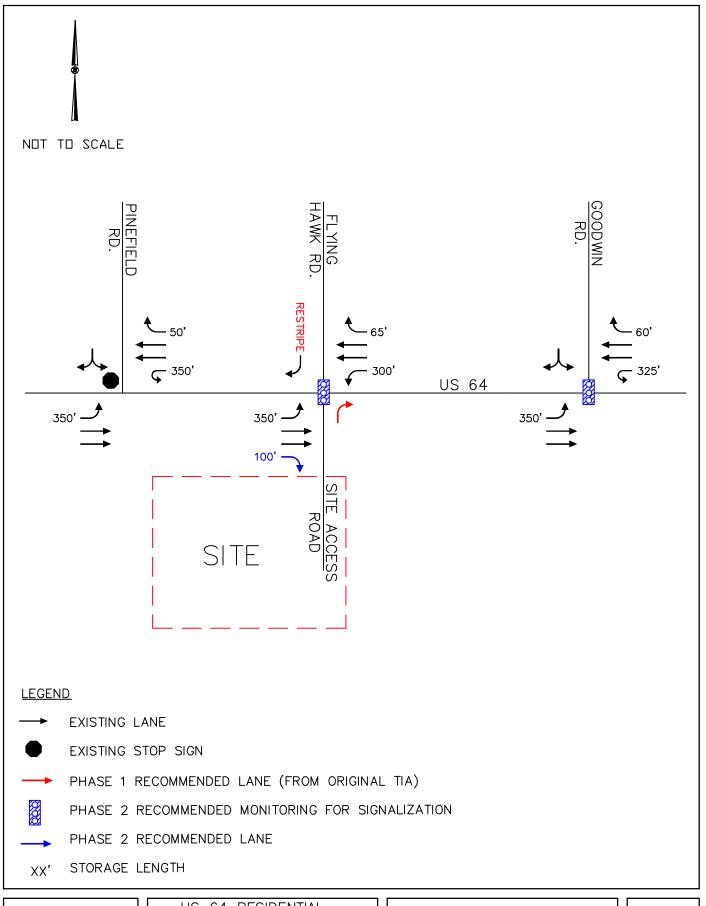




US 64 RESIDENTIAL —
PHASE 2
APEX, NC
TRAFFIC IMPACT A
DESIGNS PRESENTED HEREIN, AS AN INSTRUME - Page 600 -

RECOMMENDED ROADWAY LANEAGE — WITH RI/RO DRIVEWAY

FIGURE 5





US 64 RESIDENTIAL -PHASE 2 APEX, NC TRAFFIC IMPACT A - Page 601 -

RECOMMENDED ROADWAY LANEAGE - NO RI/RO **DRIVEWAY**

FIGURE 6

Traffic Impact Analysis

For

Sweetwater Development

Located in

Apex, North Carolina

Prepared For: ExperienceOne Homes, LLC, P.O. Box 5509 Cary, NC 27512

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Raleigh, NC 27609
NC Corporate License # C-0910

December 2014

SEAL D28928 SEAL STE

RKA Project #14260







LEGEND



Site Location

Existing Study Intersection

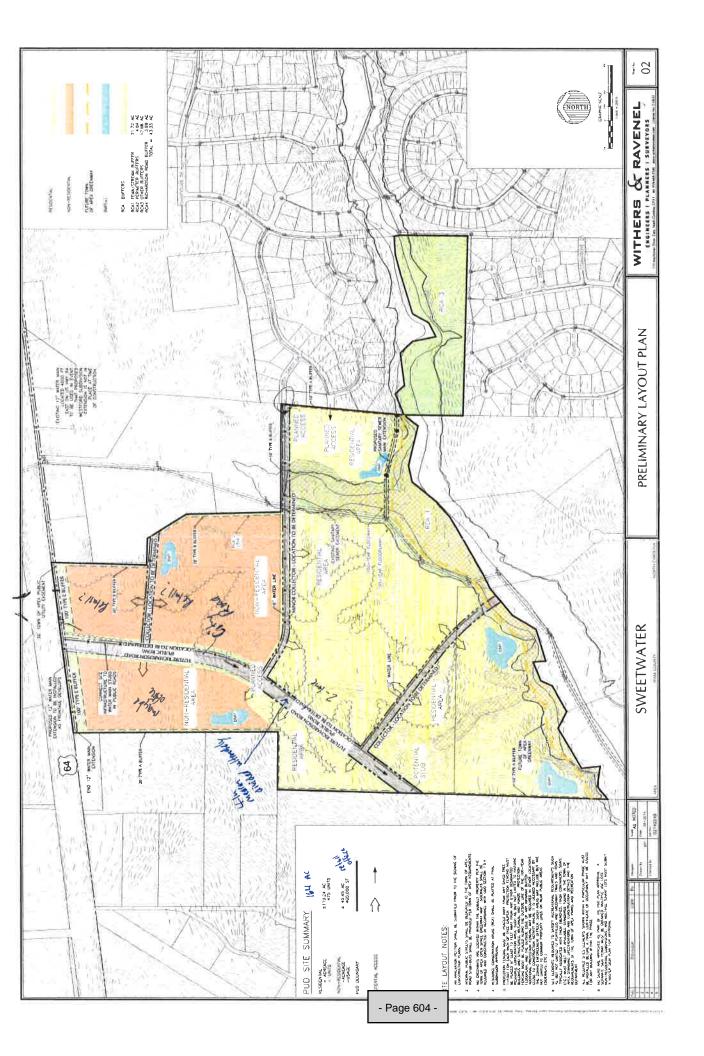


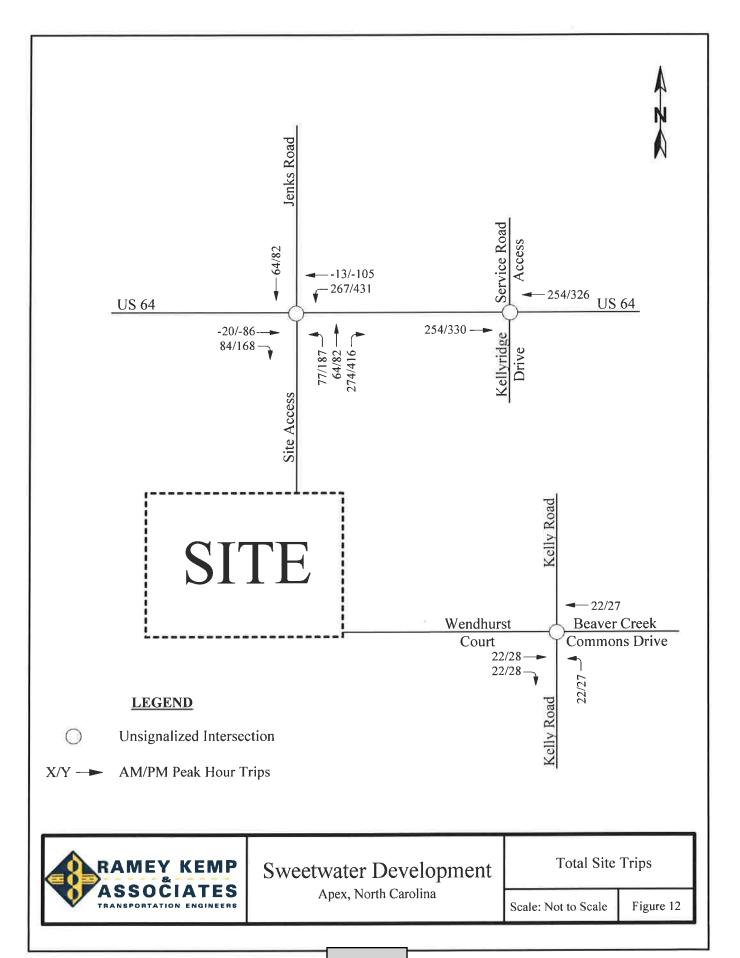
Jenks Road Development

Apex, North Carolina

Site Location Map

Figure 1





9. RECOMMENDATIONS

Based on the findings of this study, specific geometric improvements have been identified and are recommended to accommodate future traffic conditions. Improvements that are necessary and recommended to accommodate a residential phase and full site build out generated traffic are identified below. These are improvements recommended for the development. Refer to Figure 14 and Figure 14a for the recommended improvements.

Residential:

US 64 and Jenks Road/Site Access

- Convert the intersection to a superstreet design.
- Convert the southbound approach of Jenks Road to provide a single right turn lane and one inbound lane.
- Construct the Site Access (Jenks Road extension) with one outbound lane and one inbound lane. The outbound lane should be a single right turn lane.
- Install stop signs at the intersections.
- Construct a single westbound left turn lane at the Site Access intersection with a minimum of 275 feet of storage.
- A single eastbound left turn lane is currently provided at the Jenks Road intersection with 250 feet of storage which should be adequate for this phase.
- Construct a U-turn opening on US 64 approximately 800-1,000 feet east of the Site Access. Provide one u-turn lane with a minimum of 150 feet of storage plus appropriate taper.
- Construct a u-turn opening on US 64 approximately 800-1,000 feet west of Jenks Road. Provide one u-turn lane with a minimum of 250 feet of storage and appropriate taper.
- Install a stop sign at the u-turn locations.
- Consider modifying the potential interchange design to accommodate future traffic volumes and require less right-of-way.

Kelly Road and Wendhurst Court/Beaver Creek Commons Drive

• Provide through movement striping on the westbound leg.

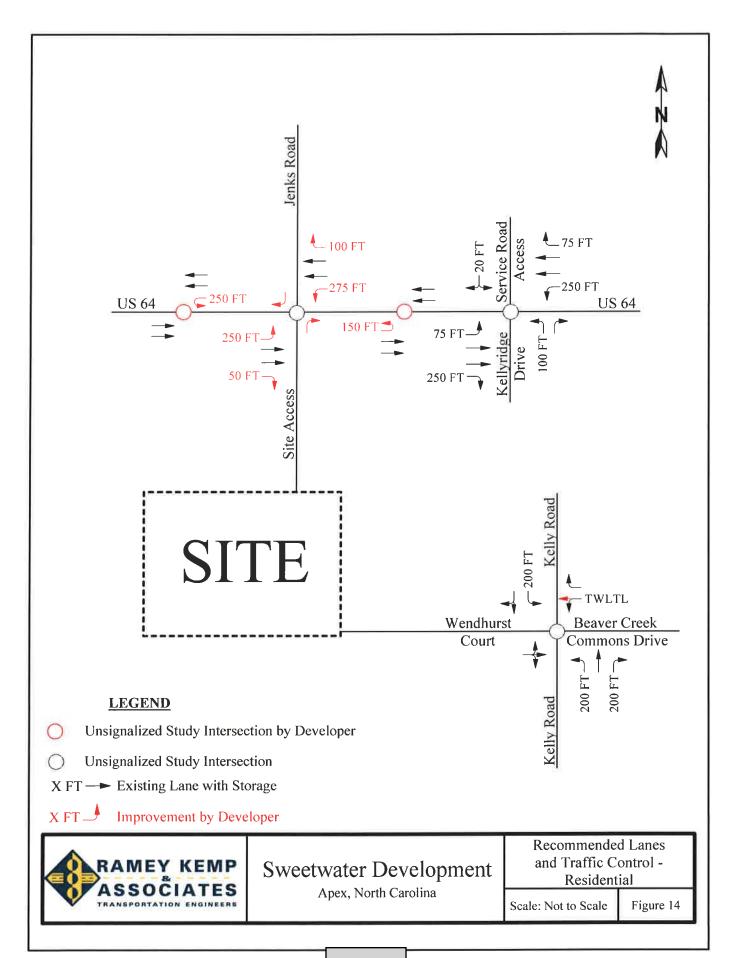


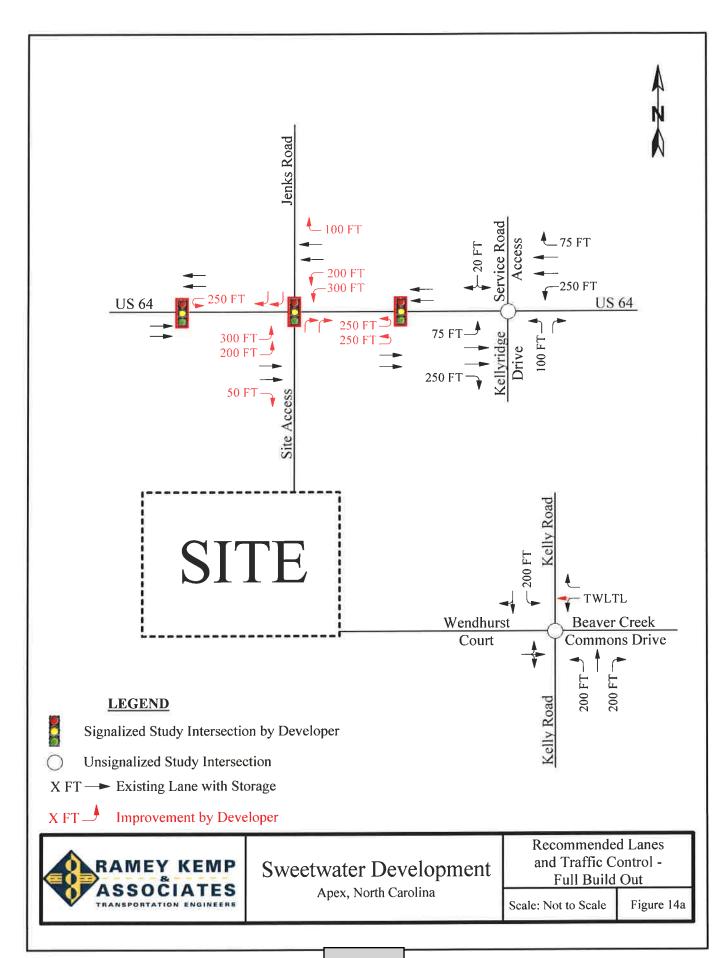
Full Build Out:

The following recommendations do not consider the residential phase and are intended to be considered independently.

US 64 and Jenks Road/Site Access

- Convert the intersection to a superstreet design. It is anticipated this will be required with the initial phase of the development
- Convert the southbound approach of Jenks Road to provide dual right turn lanes and one inbound lane.
- Construct the Site Access (Jenks Road extension) with a minimum of two outbound lanes and one inbound lane. The outbound lanes should be dual right turn lanes.
- Install traffic signals at the intersection when warranted
- Construct dual westbound left turn lanes at the Site Access signal with a minimum of 300 feet of storage.
- Construct dual eastbound left turn lanes at the Jenks Road signal with a minimum of 300 feet of storage.
- Construct a u-turn opening on US 64 approximately 800-1,000 feet east of the Site Access.
 Provide dual u-turn lanes with a minimum of 250 feet of full width storage plus appropriate taper.
- Construct a u-turn opening on US 64 approximately 800-1,000 feet west of Jenks Road. Provide one u-turn lane with a minimum of 250 feet of storage and appropriate taper.
- Install a traffic signal at the u-turn locations when warranted.
- Consider modifying the potential interchange design to accommodate future traffic volumes and require less right-of-way.





APPENDIX D

CAPACITY ANALYSIS CALCULATIONS US 64

&

MEDIAN BREAK

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LUL	^	1101	אוטוג	ሻ	אופט
Traffic Vol, veh/h	0	1650	0	0	4	0
Future Vol, veh/h	0	1650	0	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Stop	Stop	Stop	Stop
RT Channelized			-		-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage, #	# -		16983	_	0	_
Grade, %	-	0	0	_	0	_
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
					4	
Mvmt Flow	0	1833	0	0	4	0
Major/Minor Ma	ajor1			N	/linor2	
Conflicting Flow All	<i>-</i>	0			917	-
Stage 1	_	-			0	_
Stage 2	_	_			917	_
Critical Hdwy	_	_			6.84	_
Critical Hdwy Stg 1	_	_			- 0.01	_
Critical Hdwy Stg 2	_				5.84	_
Follow-up Hdwy	_	_			3.52	<u>-</u>
Pot Cap-1 Maneuver	0				271	0
	0				- 211	0
Stage 1		-				
Stage 2	0	-			350	0
Platoon blocked, %		-			074	
Mov Cap-1 Maneuver	-	-			271	-
Mov Cap-2 Maneuver	-	-			271	-
Stage 1	-	-			-	-
Stage 2	-	-			350	-
Approach	EB				SB	
HCM Control Delay, s	0				18.5	
HCM LOS					С	
Minor Lane/Major Mvmt		EBT S	SBLn1			
Capacity (veh/h)		-	271			
HCM Lane V/C Ratio			0.016			
HCM Control Delay (s)		_	18.5			
HCM Lane LOS		_	C			
HCM 95th %tile Q(veh)		_	0.1			
HOW JOHN JUNIO Q(VOII)			J. 1			

Intersection						
Int Delay, s/veh	0					
	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^			7	
Traffic Vol, veh/h	0	2231	0	0	4	0
Future Vol, veh/h	0	2231	0	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	# -	0	16983	-	0	-
Grade, %	_	0	0	-	0	_
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2479	0	0	4	0
WWW		2110		•	•	•
	ajor1			N	/linor2	
Conflicting Flow All	-	0			1240	-
Stage 1	-	-			0	-
Stage 2	-	-			1240	-
Critical Hdwy	-	-			6.84	-
Critical Hdwy Stg 1	-	-			_	-
Critical Hdwy Stg 2	-	_			5.84	_
Follow-up Hdwy	_	_			3.52	_
Pot Cap-1 Maneuver	0	_			167	0
Stage 1	0	_			-	0
Stage 2	0	_			236	0
Platoon blocked, %	U	_			200	U
Mov Cap-1 Maneuver	_				167	_
Mov Cap-1 Maneuver	-	-			167	_
Stage 1		-			107	
	-	-			226	-
Stage 2	-	-			236	-
Approach	EB				SB	
HCM Control Delay, s	0				27.1	
HCM LOS					D	
TIOM EGG						
Minor Lane/Major Mvmt		EBT S	SBLn1			
Capacity (veh/h)		-				
HCM Lane V/C Ratio		-	0.027			
HCM Control Delay (s)		-	27.1			
HCM Lane LOS		-	D			
HCM 95th %tile Q(veh)		-	0.1			

HCM 6th TWSC 2026 Build Timing Plan: AM Peak Hour

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		^	7						7		र्स	
Traffic Vol, veh/h	0	2231	9	0	0	0	0	0	70	4	25	0
Future Vol., veh/h	0	2231	9	0	0	0	0	0	70	4	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	_	-	0	_	_	-	-	_	0	-	-	_
Veh in Median Storage,	# -	0	_	_	16983	_	_	0	_	_	0	-
Grade, %	_	0	-	-	0	_	-	0	_	-	0	_
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2479	10	0	0	0	0	0	78	4	28	0
WWW.CT IOW		2170	10		U		•	J	70	· ·	20	
Major/Minor N	1ajor1					N	Minor1		N	Minor2		
Conflicting Flow All	<u>- 14joi 1</u>	0	0			·	-	_	1240	1240	2489	_
Stage 1		-	-					_	1240	0	0	_
Stage 2	_	_	_				-	-	-	1240	2489	_
Critical Hdwy	-		-				-	_	6.94	7.54	6.54	-
Critical Hdwy Stg 1	_	_	_				_	_	0.94	7.54	0.54	_
Critical Hdwy Stg 2										6.54	5.54	
	-	-	-				-	-	3.32	3.52	4.02	-
Follow-up Hdwy	-	-	-				-	-	167		4.02	-
Pot Cap-1 Maneuver	0	-	-				0	0		131		0
Stage 1	0	-	-				0	0	-	400	-	0
Stage 2	0	-	-				0	0	-	186	58	0
Platoon blocked, %		-	-						407	70	00	
Mov Cap-1 Maneuver	-	-	-				-	-	167	70	29	-
Mov Cap-2 Maneuver	-	-	-				-	-	-	70	29	-
Stage 1	-	-	-				-	-	-	-	-	-
Stage 2	-	-	-				-	-	-	99	58	-
Approach	EB						NB			SB		
HCM Control Delay, s	0						44.1		\$	344.8		
HCM LOS							Е			F		
Minor Lane/Major Mvmt	<u> </u>	NBLn1	EBT	EBR S	SBLn1							
Capacity (veh/h)		167	_	_	32							
HCM Lane V/C Ratio		0.466	_	-	1.007							
HCM Control Delay (s)		44.1	-		344.8							
HCM Lane LOS		Е	-	-	F							
HCM 95th %tile Q(veh)		2.2	_	_	3.5							
Notes	.,	Δ.			20			NI (F	C .			
~: Volume exceeds capa	acity	\$: De	elay exc	eeds 30	JUs -	+: Com	outation	Not De	etined	*: All	major v	olume i

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		^			ሻ	
Traffic Vol, veh/h	0	1596	0	0	4	0
Future Vol, veh/h	0	1596	0	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Stop	Stop	Stop	Stop
RT Channelized	-		-		-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,	# -	0	16983	_	0	_
Grade, %	_	0	0	_	0	_
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1773	0	0	4	0
IVIVIIIL I IOW	U	1773	U	U	4	U
Major/Minor M	lajor1			N	Minor2	
Conflicting Flow All	-	0			887	-
Stage 1	-	-			0	-
Stage 2	-	-			887	-
Critical Hdwy	_	-			6.84	-
Critical Hdwy Stg 1	-	-			-	_
Critical Hdwy Stg 2	_	_			5.84	_
Follow-up Hdwy	_	_			3.52	_
Pot Cap-1 Maneuver	0	_			284	0
Stage 1	0	_				0
Stage 2	0	_			363	0
Platoon blocked, %	U	_			000	U
Mov Cap-1 Maneuver	_	-			284	_
		-			284	
Mov Cap-2 Maneuver	-	-			204	-
Stage 1	-	-			202	-
Stage 2	-	-			363	-
Approach	EB				SB	
HCM Control Delay, s	0				17.9	
HCM LOS	U				C	
TIOM LOO					J	
Minor Lane/Major Mvmt		EBT S	SBLn1			
Capacity (veh/h)		-	284			
HCM Lane V/C Ratio		-	0.016			
HCM Control Delay (s)		-	17.9			
HCM Lane LOS		-	С			
HCM 95th %tile Q(veh)		-	0			

Movement	Intersection						
Movement		0					
Lane Configurations ↑↑ Traffic Vol, veh/h 0 2258 0 0 4 0 Future Vol, veh/h 0 2258 0 0 4 0 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Free Free Stop Stop Stop Stop RT Channelized - None - None - None - None Storage Length - - - 0 - 0 - None - - - -			FDT	14/5T	14/55	051	000
Traffic Vol, veh/h 0 2258 0 0 4 0 Future Vol, veh/h 0 2258 0 0 4 0 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Free Free Stop Stop Stop Stop RT Channelized - None - None - None Storage Length - - - 0 - 0 - Veh in Median Storage, # - 0 16983 - 0 - Grade, % - 0 0 - 0 - Peak Hour Factor 90		EBL		WBT	WBR	_	SBR
Future Vol, veh/h							
Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 Stop Stop Stop Stop Stop RT Channelized - None - O - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Sign Control Free Free Stop Stop Stop RT Channelized - None - None - None Storage Length - - - 0 - 0 - Veh in Median Storage, # - 0 16983 - 0 - Grade, % - 0 0 - 0 - Peak Hour Factor 90 90 90 90 90 90 90 Heavy Vehicles, % 2							
RT Channelized - None - None - None Storage Length 0 - 0 - 0 - 0 - 0 - 0 - 0 -							
Storage Length		Free		Stop		Stop	
Veh in Median Storage, # - 0 16983 - 0 90	RT Channelized	-	None	-	None	-	None
Grade, % - 0 0 - 0 - 0 - Peak Hour Factor 90 0 4 0 255 2 2 2 2 2 2 2 2 3 2 2 3 3 2 3 3 2 3 3					-	0	-
Grade, % - 0 0 - 0 - 0 - Peak Hour Factor 90 0 4 0 255 2 2 2 2 2 2 2 2 2 3 2 2 3 2 2 3 2 2 3		# -	0	16983	-	0	-
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2			0	0	-	0	-
Mvmt Flow 0 2509 0 0 4 0 Major/Minor Major1 Minor2 Conflicting Flow All - 0 1255 - Stage 1 - 0 - - 0 - Stage 2 - 1255 - Critical Hdwy - 6.84 - Critical Hdwy Stg 1 Critical Hdwy Stg 2 5.84 - Follow-up Hdwy 5.84 - Follow-up Hdwy 164 0 Stage 1 0 0 Stage 1 0 0 Stage 2 0 164 Mov Cap-1 Maneuver		90	90	90	90	90	90
Mvmt Flow 0 2509 0 0 4 0 Major/Minor Major1 Minor2 Conflicting Flow All - 0 1255 - Stage 1 - 0 - - 0 - Stage 2 - 1255 - Critical Hdwy 6.84 - Critical Hdwy Stg 1 Critical Hdwy Stg 2 5.84 - Follow-up Hdwy 5.84 - Follow-up Hdwy 164 0 Stage 1 0 0 3.52 - Pot Cap-1 Maneuver 0	Heavy Vehicles, %	2	2	2	2	2	2
Major/Minor Major1 Minor2 Conflicting Flow All - 0 1255 - Stage 1 - - 0 - Stage 2 - - 1255 - Critical Hdwy - - 6.84 - Critical Hdwy Stg 1 - - - - Critical Hdwy Stg 2 - - 5.84 - Follow-up Hdwy - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - - - Stage 1 - - - - Stage 2 - - 27.6 HCM Control Delay, s							
Conflicting Flow All - 0 1255 - Stage 1 - - 0 - Stage 2 - - 1255 - Critical Hdwy - - 6.84 - Critical Hdwy Stg 1 - - - - Critical Hdwy Stg 2 - - 5.84 - Follow-up Hdwy - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - 164 - Mov Cap-1 Maneuver - - 164 - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D		-				•	
Conflicting Flow All - 0 1255 - Stage 1 - - 0 - Stage 2 - - 1255 - Critical Hdwy - - 6.84 - Critical Hdwy Stg 1 - - - - Critical Hdwy Stg 2 - - 5.84 - Follow-up Hdwy - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - 164 - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - 164 - Stage 1 - - - - Stage 2 - - 232 - Approach EB Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164							
Stage 1 - - 0 - Stage 2 - - 1255 - Critical Hdwy - - - - - Critical Hdwy Stg 1 - - - - - Critical Hdwy Stg 2 - - - - - - Follow-up Hdwy - - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - 164 - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - - - Stage 1 - - - - Stage 2 - - - - Stage 1 - - - - Stage 2 - - - - - Stage 3 - -		ajor1			N		
Stage 2 - - 1255 - Critical Hdwy Stg 1 - - - - Critical Hdwy Stg 2 - - - - - Follow-up Hdwy - <td< td=""><td></td><td>-</td><td>0</td><td></td><td></td><td></td><td>-</td></td<>		-	0				-
Critical Hdwy - - 6.84 - Critical Hdwy Stg 1 - - - - Critical Hdwy Stg 2 - - 5.84 - Follow-up Hdwy - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - 164 - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - - - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s O Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164		-	-			0	-
Critical Hdwy - - 6.84 - Critical Hdwy Stg 1 - - - - Critical Hdwy Stg 2 - - 5.84 - Follow-up Hdwy - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - 164 - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - - - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s O Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164	Stage 2	-	-			1255	-
Critical Hdwy Stg 1 -	Critical Hdwy	-	_			6.84	-
Critical Hdwy Stg 2 - - 5.84 - Follow-up Hdwy - - 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - 164 - Mov Cap-1 Maneuver - - 164 - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164		-	-			-	-
Follow-up Hdwy 3.52 - Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 0 Stage 2 0 - 232 0 Platoon blocked, % - Mov Cap-1 Maneuver 164 - Mov Cap-2 Maneuver 164 - Stage 1 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164		-	-			5.84	-
Pot Cap-1 Maneuver 0 - 164 0 Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - <		_	-				_
Stage 1 0 - - 0 Stage 2 0 - 232 0 Platoon blocked, % - - - - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - 164 - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164		0	_				0
Stage 2 0 - 232 0 Platoon blocked, % - Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - 164 - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164			_				
Platoon blocked, % -							
Mov Cap-1 Maneuver - - 164 - Mov Cap-2 Maneuver - - 164 - Stage 1 - - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164		U	_			202	
Mov Cap-2 Maneuver - - 164 - Stage 1 - - - - Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 - HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164			-			16/	
Stage 1 - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Stage 2 - - 232 - Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164						104	
Approach EB SB HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164	· ·		-			222	-
HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164	Stage 2	-	-			232	-
HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164							
HCM Control Delay, s 0 27.6 HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164	Approach	EB				SB	
HCM LOS D Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164							
Minor Lane/Major Mvmt EBT SBLn1 Capacity (veh/h) - 164							
Capacity (veh/h) - 164							
Capacity (veh/h) - 164							
	Minor Lane/Major Mvmt		EBT S	SBLn1			
	Capacity (veh/h)		-	164			
HCM Lane V/C Ratio - 0.027			-	0.027			
HCM Control Delay (s) - 27.6	HCM Control Delay (s)		-	27.6			
HCM Lane LOS - D			-				
HCM 95th %tile Q(veh) - 0.1			-				

Int Delay, s/veh 38.1 Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations
Lane Configurations 👫 🏌
Traffic Vol, veh/h 0 2251 28 0 0 0 0 76 4 71 0
Future Vol, veh/h 0 2251 28 0 0 0 0 76 4 71 0
Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0
Sign Control Free Free Stop Stop Stop Stop Stop Stop Stop Stop
RT Channelized None None None
Storage Length 0 0
Veh in Median Storage, # - 0 16983 0 0 -
Grade, % - 0 0 0 0 -
Peak Hour Factor 90 90 90 90 90 90 90 90 90 90 90
Heavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Mvmt Flow 0 2501 31 0 0 0 0 84 4 79 0
Major/Minor Major1 Minor1 Minor2
Conflicting Flow All - 0 0 1251 1251 2532 -
Stage 1 0 0 0 0 -
V
<u> </u>
Critical Hdwy 6.94 7.54 6.54 -
Critical Hdwy Stg 1
Critical Hdwy Stg 2 6.54 5.54 -
Follow-up Hdwy 3.32 3.52 4.02 -
Pot Cap-1 Maneuver 0 0 0 164 129 ~ 27 0
Stage 1 0 0
Stage 2 0 0 0 - 183 ~ 55 0
Platoon blocked, %
Mov Cap-1 Maneuver 164 63 ~ 27 -
Mov Cap-2 Maneuver 63 ~ 27 -
Stage 1
Stage 2 89 ~ 55 -
Approach EB NB SB
HCM Control Delay, s 0 48.2 \$1186.4
HCM LOS E F
Minor Lane/Major Mvmt NBLn1 EBT EBR SBLn1
Capacity (veh/h) 164 28
HCM Lane V/C Ratio 0.515 2.976
HCM Control Delay (s) 48.2 - \$1186.4
HCM Lane LOS E F
HCM 95th %tile Q(veh) 2.5 10

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	וטם	בטול	TTDL	↑ ↑	٦	אפא
Traffic Vol, veh/h	0	0	0	1277	8	0
Future Vol, veh/h	0	0	0	1277	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-			None	- Olop	None
Storage Length	_	-	<u>-</u>	-	0	-
Veh in Median Storage,	# 0	_	_	0	0	_
Grade, %	0	<u>-</u>	_	0	0	<u> </u>
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	0	0	1419	9	0
IVIVIIIL FIOW	U	U	U	1419	9	U
Major/Minor		N	Major2	N	/linor1	
Conflicting Flow All			-	-	710	-
Stage 1			-	-	0	-
Stage 2			-	-	710	-
Critical Hdwy			-	-	6.84	-
Critical Hdwy Stg 1			-	-	-	-
Critical Hdwy Stg 2			-	-	5.84	-
Follow-up Hdwy			-	-	3.52	-
Pot Cap-1 Maneuver			0	-	368	0
Stage 1			0	-	-	0
Stage 2			0	-	448	0
Platoon blocked, %				-		
Mov Cap-1 Maneuver			_	_	368	_
Mov Cap-2 Maneuver			_	_	368	_
Stage 1			_	_	-	_
Stage 2					448	_
Olaye Z					770	
Approach			WB		NB	
HCM Control Delay, s			0		15	
HCM LOS					С	
Minor Lane/Major Mumb		NBLn1	WBT			
Minor Lane/Major Mvmt						
Capacity (veh/h)		368	-			
HCM Cantrol Dalay (a)		0.024	-			
HCM Control Delay (s)		15	-			
HCM Lane LOS		C	-			
HCM 95th %tile Q(veh)		0.1	-			

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				^	ሻ	
Traffic Vol, veh/h	0	0	0	1807	9	0
Future Vol, veh/h	0	0	0	1807	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,	# 0	_	_	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	0	0	2008	10	0
WIVIIIL FIOW	U	U	U	2000	10	U
Major/Minor		N	Major2	ľ	Minor1	
Conflicting Flow All			-	-	1004	-
Stage 1			-	-	0	_
Stage 2			-	-	1004	-
Critical Hdwy			-	-	6.84	_
Critical Hdwy Stg 1			-	-	-	-
Critical Hdwy Stg 2			_	-	5.84	-
Follow-up Hdwy			_	-	3.52	-
Pot Cap-1 Maneuver			0	-	238	0
Stage 1			0	_	-	0
Stage 2			0	_	315	0
Platoon blocked, %				_		
Mov Cap-1 Maneuver			_	_	238	_
Mov Cap-2 Maneuver			_	_	238	_
Stage 1			_	_	-	_
Stage 2				_	315	_
Stage 2			-		313	
Approach			WB		NB	
HCM Control Delay, s			0		20.8	
HCM LOS					С	
N. 4'		UDL 4	MOT			
Minor Lane/Major Mvmt	<u> </u>	NBLn1	WBT			
Capacity (veh/h)		238	-			
HCM Lane V/C Ratio		0.042	-			
HCM Control Delay (s)		20.8	-			
HCM Lane LOS		С	-			
HCM 95th %tile Q(veh)		0.1	-			

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
	וטו	LDN	VVDL			אטוז
Lane Configurations	0	0	. 0	^	ሻ	0
Traffic Vol, veh/h	0	0	0	1823	9	0
Future Vol, veh/h	0	0	0	1823	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	2026	10	0
I I I I I I I I I I I I I I I I I I I	U	- 0	U	2020	10	U
Major/Minor		N	Major2	<u> </u>	Minor1	
Conflicting Flow All			_	-	1013	-
Stage 1			-	-	0	-
Stage 2			_	_	1013	_
Critical Hdwy			_	_	6.84	_
Critical Hdwy Stg 1			_	_	- 0.0	_
Critical Hdwy Stg 2				_	5.84	_
Follow-up Hdwy			_	<u> </u>	3.52	-
Pot Cap-1 Maneuver			0	-	235	0
Stage 1			0	-	-	0
Stage 2			0	-	312	0
Platoon blocked, %				-		
Mov Cap-1 Maneuver			-	-	235	-
Mov Cap-2 Maneuver			-	-	235	-
Stage 1			-	-	-	-
Stage 2			_	_	312	-
- W.go _					<u> </u>	
Approach			WB		NB	
HCM Control Delay, s			0		21	
HCM LOS					С	
Minor Lane/Major Mvmt	1	NBLn1	WBT			
Capacity (veh/h)		235	-			
HCM Lane V/C Ratio		0.043	-			
HCM Control Delay (s)		21	-			
HCM Lane LOS		С	-			
HCM 95th %tile Q(veh)		0.1	-			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	LDI	LDIN	VVDL		NDL 1	NDIX
Traffic Vol, veh/h	0	0	0	↑↑ 1622	16	0
Future Vol, veh/h	0	0	0	1622	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control		Stop	Free	Free	Stop	Stop
RT Channelized	Stop -	None		None	Stop -	None
	-	None -	_		0	INOHE -
Storage Length	# 0	-		0	0	-
Veh in Median Storage,					0	
Grade, %	0	-	-	0		-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	1802	18	0
Major/Minor		N	Major2	N	/linor1	
Conflicting Flow All			_	_	901	-
Stage 1			_	_	0	-
Stage 2			_	_	901	_
Critical Hdwy			-	_	6.84	_
Critical Hdwy Stg 1			_	_	- 0.0	_
Critical Hdwy Stg 2			_	_	5.84	_
Follow-up Hdwy			_	_	3.52	_
Pot Cap-1 Maneuver			0	_	278	0
Stage 1			0		-	0
Stage 2			0	_	357	0
Platoon blocked, %			U	-	551	U
Mov Cap-1 Maneuver			_	-	278	_
					278	
Mov Cap-2 Maneuver			-	-	210	-
Stage 1			-	-	257	-
Stage 2			-	-	357	-
Approach			WB		NB	
HCM Control Delay, s			0		18.8	
HCM LOS			U		C	
HOW LOO					U	
Minor Lane/Major Mvmt	. 1	NBLn1	WBT			
Capacity (veh/h)		278	-			
HCM Lane V/C Ratio		0.064	-			
HCM Control Delay (s)		18.8	-			
HCM Lane LOS		С	-			
HCM 95th %tile Q(veh)		0.2	-			

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
	LD I	LDK	VVDL			NDK
Lane Configurations	^	^	^	^	ነ	0
Traffic Vol, veh/h	0	0	0	2223	19	0
Future Vol, veh/h	0	0	0	2223	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	2470	21	0
WWITH TOW	U	U	U	2410	21	U
Major/Minor		<u> </u>	Major2	<u> </u>	Minor1	
Conflicting Flow All			-	-	1235	-
Stage 1			-	-	0	-
Stage 2			_	-	1235	-
Critical Hdwy			_	_	6.84	_
Critical Hdwy Stg 1			_	_	-	_
Critical Hdwy Stg 2			_	_	5.84	_
Follow-up Hdwy			_	_	3.52	_
Pot Cap-1 Maneuver			0	_	169	0
•			0	_	109	0
Stage 1			0	-		0
Stage 2			U	-	238	U
Platoon blocked, %				-	400	
Mov Cap-1 Maneuver			-	-	169	-
Mov Cap-2 Maneuver			-	-	169	-
Stage 1			-	-	-	-
Stage 2			-	-	238	-
Annroach			///D		NID	
Approach			WB		NB	
HCM Control Delay, s			0		29.3	
HCM LOS					D	
Minor Lane/Major Mvmt		NBLn1	WBT			
Capacity (veh/h)	<u> </u>	169	-			
HCM Lane V/C Ratio		0.125				
			-			
HCM Lang LOS		29.3	-			
HCM Lane LOS		D	-			
HCM 95th %tile Q(veh)		0.4	-			

Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr	0.3 EBT 0 0	EBR 0	WBL	WBT	NBL	NBR
Movement E Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control S RT Channelized Storage Length Veh in Median Storage, #	0 0		WBL			NBR
Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control S RT Channelized Storage Length Veh in Median Storage, #	0		WBL			NRK
Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, #	0	0				
Future Vol, veh/h Conflicting Peds, #/hr Sign Control S RT Channelized Storage Length Veh in Median Storage, #	0	0	_ ^		<u>ች</u>	_
Conflicting Peds, #/hr Sign Control S RT Channelized Storage Length Veh in Median Storage, #		_	0	2239	19	0
Sign Control S RT Channelized Storage Length Veh in Median Storage, #	Λ	0	0	2239	19	0
RT Channelized Storage Length Veh in Median Storage, #	-	0	0	0	0	0
Storage Length Veh in Median Storage, #	Stop	Stop	Free	Free	Stop	Stop
Veh in Median Storage, #	-	None	-	None	-	None
	-	-	-	-	0	-
Grade, %	0	-	-	0	0	-
	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	2488	21	0
Major/Minor		A	Major?		linar1	
Major/Minor		ı N	Major2		/linor1	
Conflicting Flow All			-	-	1244	-
Stage 1			-	-	0	-
Stage 2			-	-	1244	-
Critical Hdwy			-	-	6.84	-
Critical Hdwy Stg 1			-	-	-	-
Critical Hdwy Stg 2			-	-	5.84	-
Follow-up Hdwy			-	-	3.52	-
Pot Cap-1 Maneuver			0	-	166	0
Stage 1			0	-	-	0
Stage 2			0	-	235	0
Platoon blocked, %				-		
Mov Cap-1 Maneuver			-	-	166	-
Mov Cap-2 Maneuver			-	-	166	_
Stage 1			-	-	-	_
Stage 2			_	_	235	_
Clayo Z					200	
Approach			WB		NB	
HCM Control Delay, s			0		29.8	
HCM LOS					D	
Minor Long/Marian Mari		JDI 4	WDT			
Minor Lane/Major Mvmt	N	NBLn1	WBT			
		166	-			
Capacity (veh/h)		0.127	-			
Capacity (veh/h) HCM Lane V/C Ratio						
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		29.8	-			
Capacity (veh/h) HCM Lane V/C Ratio						

APPENDIX E

CAPACITY ANALYSIS CALCULATIONS US 64

&

FUTURE EASTERN U-TURN LOCATION

Intersection

ovement Configurations Traffic Vol, veh/h	0.2					
ane Configurations						
ane Configurations	EBT	EBR	WBL	WBT	NBL	NBR
				**	ሻ	
701, 7011/11	0	0	0	1834	16	0
uture Vol, veh/h	0	0	0	1834	16	0
onflicting Peds, #/hr	0	0	0	0	0	0
ign Control	Stop	Stop	Free	Free	Stop	Stop
T Channelized	-		-		- Olop	None
torage Length		NOHE -	_	-	0	INOHE -
eh in Median Storage	, # 0		-	0	0	-
en in Median Storage rade, %	0		-	0	0	-
		-				
eak Hour Factor	90	90	90	90	90	90
eavy Vehicles, %	2	2	2	2	2	2
lvmt Flow	0	0	0	2038	18	0
lajor/Minor		N	Major2	N	Minor1	
onflicting Flow All				_	1019	_
Stage 1			_	_	0	_
Stage 2			_	_	1019	_
ritical Hdwy					6.84	_
ritical Hdwy Stg 1			_	-	0.04	-
ritical Hdwy Stg 2			-		5.84	-
ollow-up Hdwy			_	<u>-</u>	3.52	
			-			-
ot Cap-1 Maneuver			0	-	233	0
Stage 1			0	-	200	0
Stage 2			0	-	309	0
latoon blocked, %				-		
lov Cap-1 Maneuver			-	-	233	-
lov Cap-2 Maneuver			-	-	233	-
Stage 1			-	-	-	-
Stage 2			-	-	309	-
nnraach			WD		ND	
pproach			WB		NB	
CM Control Delay, s			0		21.7	
CM LOS					С	
	ıt 🔝	NBLn1	WBT			
inor Lane/Major Mym						
linor Lane/Major Mvm						
apacity (veh/h)						
apacity (veh/h) CM Lane V/C Ratio			-			
apacity (veh/h) CM Lane V/C Ratio CM Control Delay (s)						
apacity (veh/h) CM Lane V/C Ratio		C 0.2	-			
inor Lane/Major Mvm			233 0.076	233 -	233 - 0.076 -	233 - 0.076 -

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	וטו	LDIX	VVDL	†	NDL 7	וטוז
Traffic Vol, veh/h	0	0	0	2290	23	0
Future Vol, veh/h	0	0	0	2290	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-			None	-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage,		_	_	0	0	_
Grade, %	0	<u>-</u>	_	0	0	<u> </u>
Peak Hour Factor	90	90	90	90	90	90
	2	2	2	2	2	2
Heavy Vehicles, %						
Mvmt Flow	0	0	0	2544	26	0
Major/Minor		N	Major2	N	Minor1	
Conflicting Flow All				_	1272	-
Stage 1			-	_	0	_
Stage 2			-	_	1272	_
Critical Hdwy			_	_	6.84	_
Critical Hdwy Stg 1			_	_	-	_
Critical Hdwy Stg 2			_	_	5.84	_
Follow-up Hdwy			_	<u>-</u>	3.52	<u>-</u>
Pot Cap-1 Maneuver			0	_	159	0
Stage 1			0	<u> </u>	-	0
			0		227	0
Stage 2			U	-	221	U
Platoon blocked, %				-	450	
Mov Cap-1 Maneuver			-	-	159	-
Mov Cap-2 Maneuver			-	-	159	-
Stage 1			-	-	-	-
Stage 2			-	-	227	-
Approach			WB		NB	
HCM Control Delay, s			0		31.9	
HCM LOS			U		D	
TION LOS					U	
Minor Lane/Major Mvmt	<u> </u>	NBLn1	WBT			
Capacity (veh/h)		159	-			
HCM Lane V/C Ratio		0.161	_			
HCM Control Delay (s)		31.9	-			
HCM Lane LOS		D	-			
HCM 95th %tile Q(veh)		0.6	-			

APPENDIX F

SIMTRAFFIC QUEUEING & PERFORMANCE RESULTS

Movement	EBL	EBT	All
Denied Del/Veh (s)	1.6	0.3	0.3
Total Del/Veh (s)	2.6	8.0	8.0

5: US 64 EB & Median Break Performance by movement

Movement	EBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	18.4	0.1

6: Median Break & US 64 WB Performance by movement

Movement	WBL	WBT	All
Denied Del/Veh (s)	2.7	0.2	0.2
Total Del/Veh (s)	2.4	1.1	1.1

7: Median Break & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	9.6	0.1

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	2.3

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: US 64 EB & Median Break

Movement	SB	
Directions Served	L	
Maximum Queue (ft)	28	
Average Queue (ft)	4	
95th Queue (ft)	21	
Link Distance (ft)	59	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Median Break & US 64 WB

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Movement	NB	
Directions Served	L	
Maximum Queue (ft)	28	
Average Queue (ft)	6	
95th Queue (ft)	24	
Link Distance (ft)	59	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		
Network Summary		

Movement	EBL	EBT	All
Denied Del/Veh (s)	1.8	0.6	0.6
Total Del/Veh (s)	2.9	1.2	1.2

5: US 64 EB & Median Break Performance by movement

Movement	EBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	30.2	0.2

6: Median Break & US 64 WB Performance by movement

Movement	WBL	WBT	All
Denied Del/Veh (s)	2.1	0.4	0.4
Total Del/Veh (s)	3.2	1.5	1.5

7: Median Break & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	22.4	0.2

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	3.2

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: US 64 EB & Median Break

SB
L
28
5
21
59

Intersection: 6: Median Break & US 64 WB

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Movement	NB
Directions Served	L
Maximum Queue (ft)	43
Average Queue (ft)	8
95th Queue (ft)	31
Link Distance (ft)	59
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	
Notwork Summary	
Queuing Penalty (veh) Storage Bay Dist (ft) Storage Blk Time (%)	

Movement	EBL	EBT	All
Denied Del/Veh (s)	1.9	0.6	0.6
Total Del/Veh (s)	3.2	1.7	1.7

5: Site Access/Median Break & US 64 EB Performance by movement

Movement	EBT	EBR	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	1.6	0.0
Total Del/Veh (s)	0.2	0.0	28.5	59.0	43.3	1.7

6: Median Break & US 64 WB Performance by movement

Movement	WBL	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.3	1.1	1.1

7: Median Break & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	21.6	0.2

8: US 64 EB & Eastern U-Turn Location Performance by movement

Movement	EBL	EBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	3.9	1.6	1.6

9: Eastern U-Turn Location & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.3	0.0	0.3
Total Del/Veh (s)	1.1	20.0	1.2

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	5.2

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Site Access/Median Break & US 64 EB

Movement	EB	EB	NB	SB
Directions Served	T	T	R	LT
Maximum Queue (ft)	4	4	92	80
Average Queue (ft)	0	0	36	26
95th Queue (ft)	3	3	71	64
Link Distance (ft)	66	66	1062	60
Upstream Blk Time (%)				2
Queuing Penalty (veh)				1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Median Break & US 64 WB

Movement	WB
Directions Served	L
Maximum Queue (ft)	6
Average Queue (ft)	0
95th Queue (ft)	4
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	225
Storage Blk Time (%)	
Queuing Penalty (veh)	

Movement	NB
Directions Served	L
Maximum Queue (ft)	38
Average Queue (ft)	7
95th Queue (ft)	28
Link Distance (ft)	59
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: US 64 EB & Eastern U-Turn Location

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 9: Eastern U-Turn Location & US 64 WB

Movement	NB
Directions Served	L
Maximum Queue (ft)	48
Average Queue (ft)	13
95th Queue (ft)	38
Link Distance (ft)	60
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Movement	EBL	EBT	All
Denied Del/Veh (s)	2.1	0.3	0.3
Total Del/Veh (s)	2.7	8.0	0.9

5: US 64 EB & Median Break Performance by movement

Movement	EBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	12.0	0.1

6: Median Break & US 64 WB Performance by movement

Movement	WBL	WBT	All
Denied Del/Veh (s)	1.7	0.3	0.3
Total Del/Veh (s)	2.7	1.3	1.3

7: Median Break & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	17.4	0.3

Denied Del/Veh (s)	0.3	
Total Del/Veh (s)	2.5	

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: US 64 EB & Median Break

SB
L
28
4
20
59

Intersection: 6: Median Break & US 64 WB

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Movement	NB
Directions Served	L
Maximum Queue (ft)	50
Average Queue (ft)	14
95th Queue (ft)	39
Link Distance (ft)	59
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	
National Comme	
Network Summary	

Movement	EBL	EBT	All
Denied Del/Veh (s)	1.7	0.6	0.6
Total Del/Veh (s)	3.3	1.2	1.3

5: US 64 EB & Median Break Performance by movement

Movement	EBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	35.2	0.2

6: Median Break & US 64 WB Performance by movement

Movement	WBL	WBT	All
Denied Del/Veh (s)	1.6	0.5	0.5
Total Del/Veh (s)	4.1	1.9	1.9

7: Median Break & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.1	40.4	0.5

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	3.6

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: US 64 EB & Median Break

Movement	SB
Directions Served	L
Maximum Queue (ft)	32
Average Queue (ft)	5
95th Queue (ft)	21
Link Distance (ft)	59
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Median Break & US 64 WB

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Movement	NB			
Directions Served	L			
Maximum Queue (ft)	64			
Average Queue (ft)	17			
95th Queue (ft)	47			
Link Distance (ft)	59			
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				
Network Summary				

Movement	EBL	EBT	All
Denied Del/Veh (s)	1.8	0.6	0.6
Total Del/Veh (s)	3.6	2.0	2.1

5: Site Access/Median Break & US 64 EB Performance by movement

Movement	EBT	EBR	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.5	0.0
Total Del/Veh (s)	0.3	0.0	35.1	83.4	85.4	4.0

6: Median Break & US 64 WB Performance by movement

Movement	WBL	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	22.6	1.6	2.2

7: Median Break & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	0.2	35.9	0.4

8: US 64 EB & Eastern U-Turn Location Performance by movement

Movement	EBL	EBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.2	1.7	1.7

9: Eastern U-Turn Location & US 64 WB Performance by movement

Movement	WBT	NBL	All
Denied Del/Veh (s)	0.6	0.0	0.6
Total Del/Veh (s)	1.6	59.8	2.2

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	7.6

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Site Access/Median Break & US 64 EB

Movement	EB	NB	SB
Directions Served	R	R	LT
Maximum Queue (ft)	17	111	113
Average Queue (ft)	1	45	66
95th Queue (ft)	7	91	118
Link Distance (ft)	66	1062	60
Upstream Blk Time (%)			30
Queuing Penalty (veh)			22
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Median Break & US 64 WB

Movement	WB	WB
Directions Served	L	Т
Maximum Queue (ft)	77	44
Average Queue (ft)	15	3
95th Queue (ft)	80	43
Link Distance (ft)		990
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	225	
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Movement	NB
Directions Served	L
Maximum Queue (ft)	59
Average Queue (ft)	16
95th Queue (ft)	43
Link Distance (ft)	59
Upstream Blk Time (%)	1
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: US 64 EB & Eastern U-Turn Location

Movement

Directions Served

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 9: Eastern U-Turn Location & US 64 WB

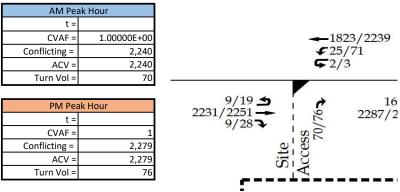
Movement	NB
Directions Served	L
Maximum Queue (ft)	76
Average Queue (ft)	24
95th Queue (ft)	57
Link Distance (ft)	60
Upstream Blk Time (%)	3
Queuing Penalty (veh)	1
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

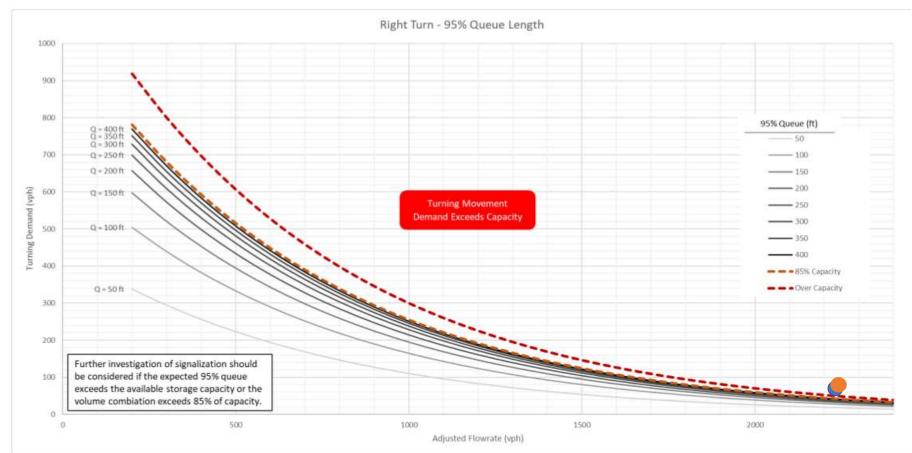
Network Summary

APPENDIX G

ITRE 95th PERCENTILE QUEUE LENGTH CALCULATIONS

Northbound Right-Turn Movement

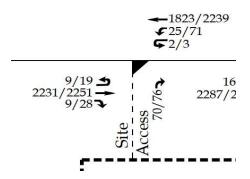


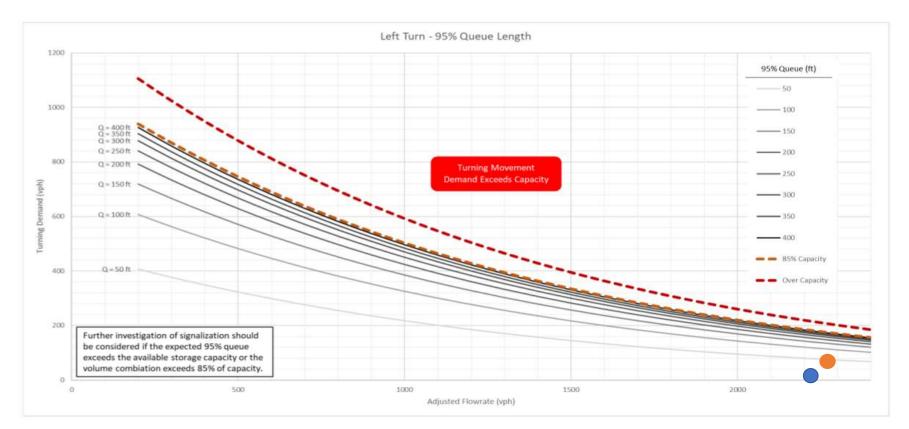


Westbound Left-Turn Movement

AM Peak Hour			
t =			
CVAF =	1		
Conflicting =	2240		
ACV =	2,240		
Turn Vol =	27		

PM Peak Hour				
t =				
CVAF =	1			
Conflicting =	2279			
ACV =	2,279			
Turn Vol =	74			





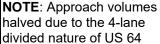
APPENDIX H

TURN LANE WARRANTS

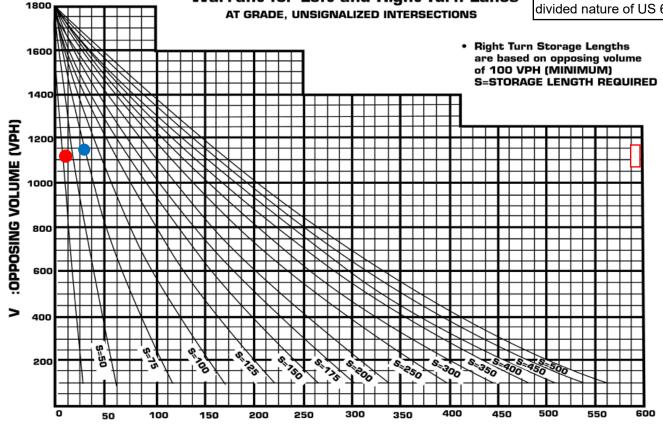
YELLOW BRIDGE RESIDENTIAL

TURN LANE STORAGE WARRANTS





Policy On Street And Driveway Access to North Carolina Highways



Note: Where adjacent signalization may provide opportunities for gaps in the traffic stream a reduction in the above storage values can be considered on a case by case basis.

INTERSECTION: US 64 & Median Break

V:LEFT TURNING VOLUME (VPH) VERIGHT TURNING VOLUME (VPH)

SCENARIO	Movement	Turn Lane	Turning Volume (V _R /V _L)	Approach / Opposing Volume (V _A /V ₀)	Symbol
AM Build	WBR	Right	9	1125	
PM Build	EBR	Right	28	1154	

APPENDIX I

TRIP GENERATION COMPARISON

Table 1: Trip Generation Summary - Scenario 1

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weel AM P Hour (vp	Peak Trips	Weel PM F Hour (vp	eak Trips
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	53 DU	580	11	32	35	20
Multi-Family Homes (Low-Rise) (220)	103 DU	741	11	38	38	23
Total Trips		1,321	22	70	73	43

Table 2: Trip Generation Summary - Scenario 2

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weel AM F Hour (vp	eak Trips	Wee PM F Hour (vp	Peak Trips
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	44 DU	489	9	27	29	17
Multi-Family Homes (Low-Rise) (220)	107 DU	768	12	39	39	23
Shopping Center (820)	25 KSF	944	15	9	45	50
Total Trips		2,201	36	75	113	90

Table 3: Trip Generation Summary - Scenario 3

Land Use (ITE Code)	Intensity	Daily Traffic (vpd)	Weel AM F Hour (vp	Peak Trips	Wee PM F Hour (vp	Peak Trips
			Enter	Exit	Enter	Exit
Single-Family Homes (210)	59 DU	640	12	35	38	23
Multi-Family Homes (Low-Rise) (220)	83 DU	587	9	31	31	19
Shopping Center (820)	25 KSF	944	15	9	45	50
Total Trips		2,171	36	75	114	92

Table 4: Trip Generation Summary Comparison

Scenario	Daily Traffic (vpd)	Weel AM F Hour (vp	eak Trips	Weel PM F Hour (vp	eak Trips
		Enter	Exit	Enter	Exit
Scenario 3 [Analyzed in the TIA]	2,171	36	75	114	92
Scenario 1 Difference (+/-) [Scenario 1 - Scenario 3]	-850	-14	-5	-41	-49
Scenario 2 Difference (+/-) [Scenario 2 - Scenario 3]	+30	0	0	-1	-2

Rezoning Case: 22CZ06 Yellowbridge PUD

Planning Board Meeting Date: July 11, 2022



Report Requirements:

Per NCGS §160D-604(b), all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Per NCGS §160D-604(d), the Planning Board shall advise and comment on whether the proposed action is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

	DJECT DESCRIPTION: eage:	48.24						
PIN		0722743789 & 0722752304						
Current Zoning:		Rural Residential (RR)						
Pro	posed Zoning:	Planned Unit Development-	Planned Unit Development-Conditional Zoning (PUD-CZ)					
Cur	Current 2045 Land Use Map: Medium Density Residential							
	ezoned as proposed, the 2	2045 Land Use Map Designat Commercial Services ETJ	tion will change to: Medium Density Residential ar	nd				
The I			nconsistent with the following officially adopted planem. Reason: If rezoned, the 2045 Land Use	ns,				
Мар			ty Residential and Commercial Services.					
V	Apex Transportation Plan Consistent	n Inconsistent	Reason:					
V	Parks, Recreation, Open ✓ Consistent	Space, and Greenways Plan Inconsistent	Reason:					
	-							

Rezoning Case: 22CZ06 Yellowbridge PUD

Planning Board Meeting Date: July 11, 2022



Legislative Considerations:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1.			irposes, goals, obje	g (CZ) District use's appropriateness ctives, and policies of the 2045 Land If rezoned, the 2045 Land Use
Mar	will automatically be amende	— ed to Medium Dens	sity Residential an	nd Commercial Services
IVIUD	win date matically se amena	ed to Mediani Bens	ncy nesidential an	a commercial cervices.
2.	Compatibility. The proposed location and compatibility with Consistent			
3.	Zoning district supplemental statement Stateme			oning (CZ) District use's compliance
		1		
4.	minimization of adverse effective	cts, including visual rse impacts on surro	impact of the pro unding lands regar	nditional Zoning (CZ) District use's posed use on adjacent lands; and ding trash, traffic, service delivery, a nuisance.
5.	•	rotection from signif	icant deterioration	oning District use's minimization of of water and air resources, wildlife

Rezoning Case: 22CZ06 Yellowbridge PUD

Planning Board Meeting Date: July 11, 2022



6.	Impact on public facilities. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities. Consistent Reason:
7.	Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ. Consistent Inconsistent Reason:
8.	Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties. Consistent Inconsistent Reason:
9.	Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use. Consistent Inconsistent Reason:
10.	Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics. Consistent Inconsistent Reason:

Rezoning Case: 22CZ06 Yellowbridge PUD

Planning Board Meeting Date: July 11, 2022



Planning Board Recommendation:

Motion: To recommend app	proval as presented with additional condition
Introduced by Planning Board member: Keith Braswell	
Seconded by Planning Board member: Ryan Akers	
Approval: the project is consistent with all applicable officions considerations listed above.	ally adopted plans and the applicable legislative
Approval with conditions: the project is not consistent with applicable legislative considerations as noted above, so th included in the project in order to make it fully consistent:	
As presented with additional condition:	
5' opaque privacy fence shall be installed by developer along	inside of the buffer along southern property
ine.	
Denial: the project is not consistent with all applicable legislative considerations as noted above.	officially adopted plans and/or the applicable
With <u>4</u> Planning	Board Member(s) voting "aye"
With <u>3</u> Planning	Board Member(s) voting "no"
Reasons for dissenting votes:	
Sarah Soh - 1) no clear community entry, 2) scale and pr	oportion is off, i3) insufficient space in
schools, 4) Chanticlair connection might be beltway (see	e attached). Mark Steele - agree with 1-3.
Tina Sherman - agree with 1-4; also, developer should c	ontnue to work with neighbors as was done
for Morris Tract, but neighbors need to come up with a	more cohesive ask.
This report reflects the recommendation of the Planning Board, tl	nis the <u>11th</u> day of <u>July</u> 2022.
Attest:	
Negel 195	Dianne Khin Digitally signed by Dianne Khin Date: 2022.07.11 18:49:22 -04'00'
Reggie Skinner, Planning Board Chair	Dianne Khin, Director of Planning and Community Development

- No clear community entry lexit design from 64.

 only Existing driveway to be used as construction access! which may not hold weight of construction trucks of equipment.

 Using this driveway goes over the stream as construction access will affect the environment with all the construction debris.
- 2. Scale and proportion of lot widths and sizes of homes are not gradual. There needs to be a transition: Sweetwater community to the west lots are tighter, to Abbington and Stratford community wider lots, bigger homes.
- 3. Insufficient space in elementary and high schools
- 4. chanticlair connection may become "beltway" with traffic holdup. from construction trucks in a out on 64.
- END Note: this is a work in progress from both sides of encourage the conversations with community and Lemnar to continue.



TOWN OF APEX

POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ06 Yellowbridge PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Lennar Carolinas, LLC./Matthew Carpenter, Parker Poe

Authorized Agent: Tucker Ennis, Lennar Carolinas, LLC. **Property Addresses:** 2813 & 2817 US 64 Highway

Acreage: ±48.24 acres

Property Identification Numbers (PINs): 0722743789 & 0722752304 Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium Density Residential &

Commercial Services

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: July 11, 2022 4:30 PM

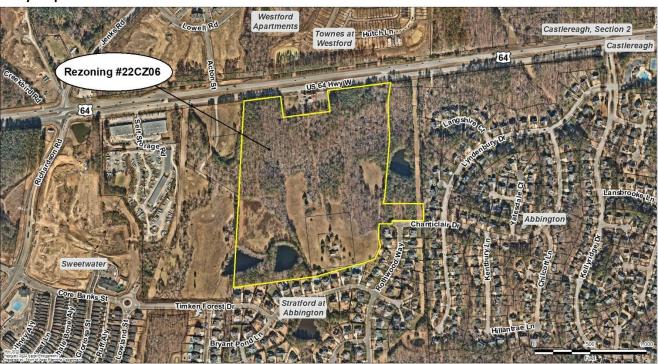
You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Planning Board meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

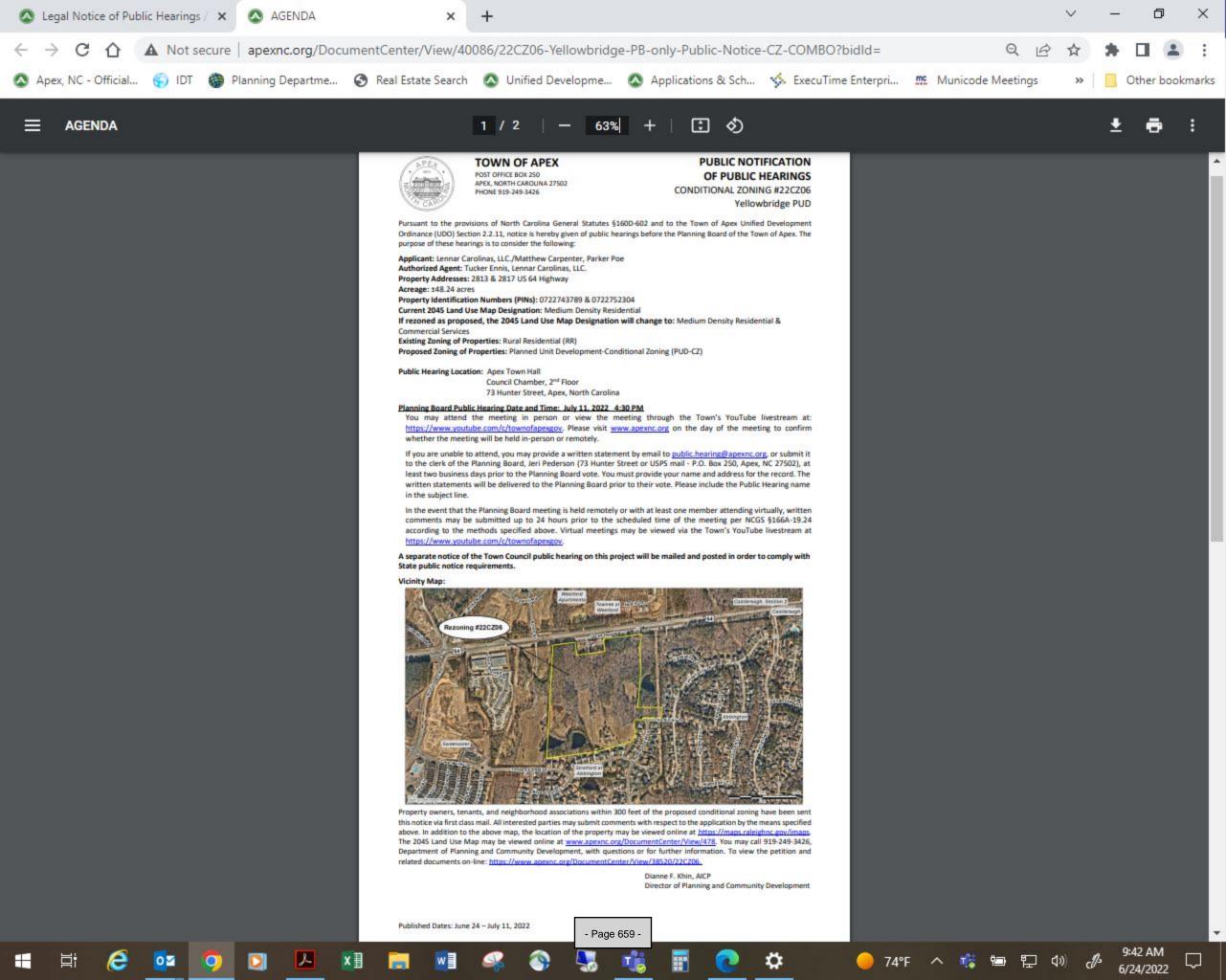
Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at https://www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/38520/22CZ06.

Dianne F. Khin, AICP
Director of Planning and Community Development

Published Dates: June 24 – July 11, 2022



NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ06 Yellowbridge PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: Lennar Carolinas, LLC./Matthew Carpenter, Parker Poe

Agente autorizado: Tucker Ennis, Lennar Carolinas, LLC. **Dirección de las propiedades:** 2813 & 2817 US 64 Highway

Superficie: ±48.24 acres

Números de identificación de las propiedades: 0722743789 & 0722752304

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:

Medium Density Residential & Commercial Services

Ordenamiento territorial existente de las propiedades: Residencial Rural (RR)

Ordenamiento territorial propuesto para las propiedades: Desarrollo de Unidad Planificada-Ordenamiento

Territorial Condicional (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio de 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

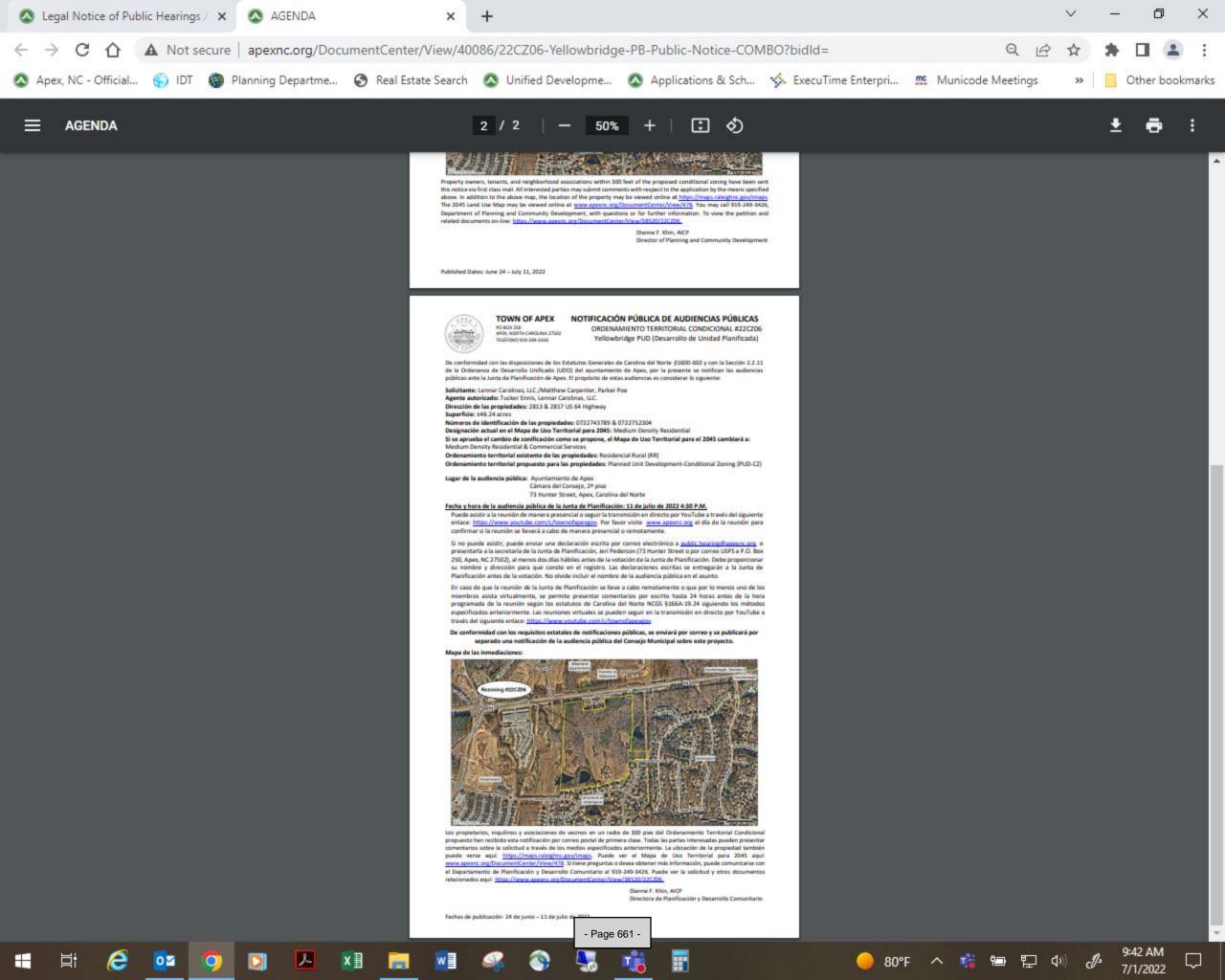
En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/38520/22CZ06.

Dianne F. Khin, AICP





TOWN OF APEX

POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification - Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ06

Yellowbridge PUD

Project Location:

2813 & 2817 US 64 Highway

Applicant or Authorized Agent:

Tucker Ennis

Firm:

Lennar Carolinas, LLC.

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on June 24, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on Wake County Tax Assessor information and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

6/27/2002

Director of Planning and Community Development

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me,

Jeri Chastain Pederson, a Notary Public for the above

State and County, this the

27 day of Jure, 2022.

Gen Chastain Pederson

Notary Public

JERI CHASTAIN PEDERSON Notary Public Wake County, North Carolina My Commission Expires March 10, 2024

My Commission Expires: 3 10 2024

TOWN OF APEX POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ06 Yellowbridge PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: Lennar Carolinas, LLC/Matthew Carpenter, Parker Poe

Authorized Agent: Tucker Ennis, Lennar Carolinas, LLC **Property Addresses:** 2813 & 2817 US 64 Highway

Acreage: ±48.24 acres

Property Identification Numbers (PINs): 0722743789 & 0722752304 **Current 2045 Land Use Map Designation:** Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: Medium Density Residential &

Commercial Services

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

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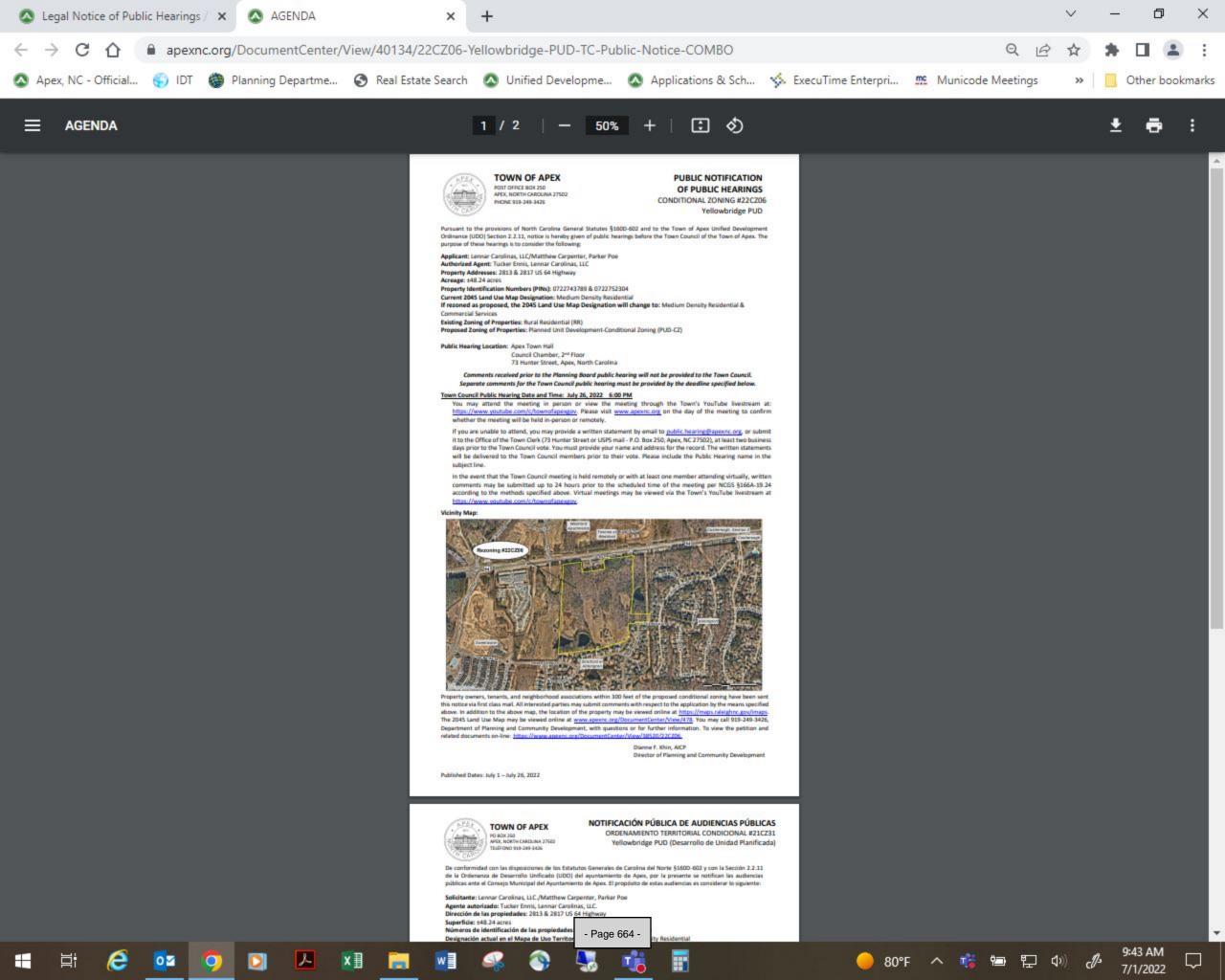
Vicinity Map:



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Dianne F. Khin, AICP
Director of Planning and Community Development

Published Dates: July 1 – July 26, 2022



NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

TOWN OF APEX
PO BOX 250
APEX, NORTH CAROLINA 27502
TELÉFONO 919-249-3426

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ06 Yellowbridge PUD (Desarrollo de Unidad Planificada)

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Agente autorizado: Tucker Ennis, Lennar Carolinas, LLC. **Dirección de las propiedades:** 2813 & 2817 US 64 Highway

Superficie: ±48.24 acres

Números de identificación de las propiedades: 0722743789 & 0722752304

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

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Ordenamiento territorial existente de las propiedades: Residencial Rural (RR)

Ordenamiento territorial propuesto para las propiedades: Desarrollo de Unidad Planificada-Ordenamiento

Territorial Condicional (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

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Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio de 2022 6:00 P.M.

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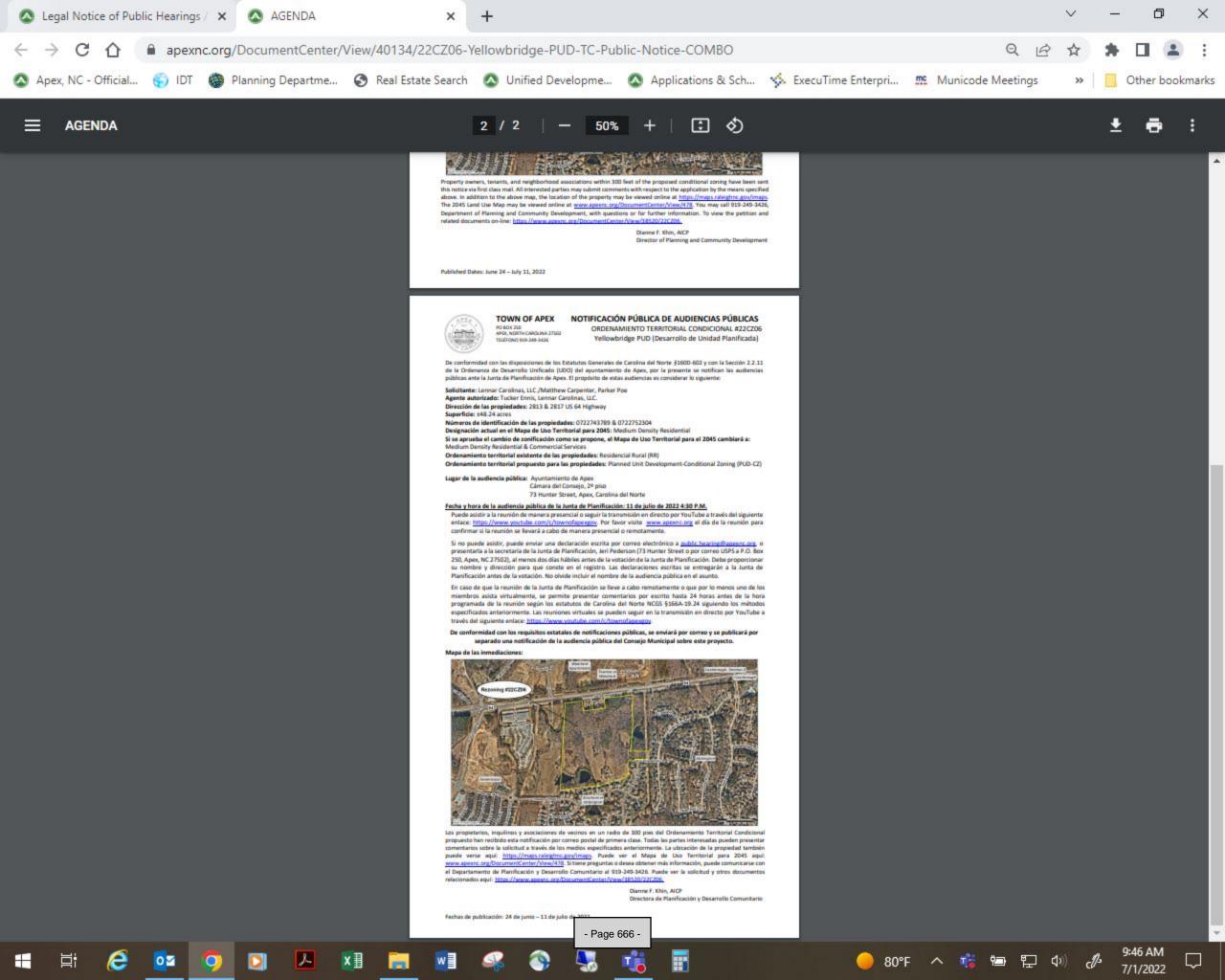
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Dianne F. Khin, AICP





TOWN OF APEX

POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ06

Yellowbridge PUD

Project Location:

2813 & 2817 US 64 Highway

Applicant or Authorized Agent:

Tucker Ennis

Firm:

Lennar Carolinas, LLC

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on July 1, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

7 7 2002

tor of Planning and Community Development

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me,

<u>Jeri Chastoin Pederson</u>, a Notary Public for the above day of <u>July</u>, 202 <u>2</u>.

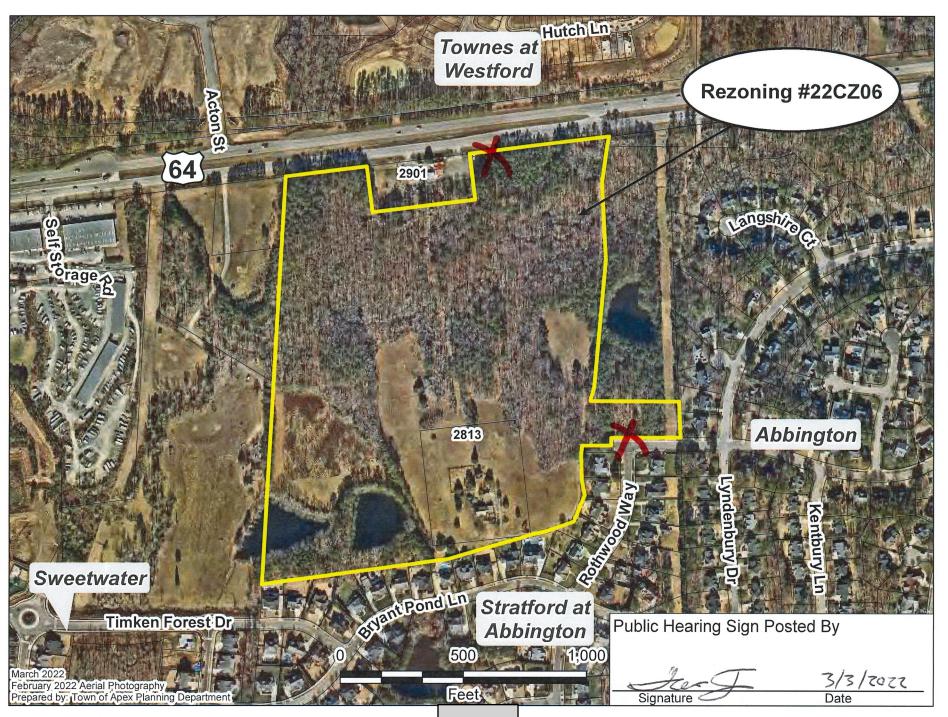
State and County, this the

Jew Chartan Pederson Notary Public

JERI CHASTAIN PEDERSON Notary Public Wake County, North Carolina My Commission Expires

March 10, 2024

My Commission Expires: 3 110 1 2024





Student Assignment

5625 Dillard Drive Cary, NC, 27518 Email: studentassignment@wcpss.net

April 13, 2022

Dianne Khin, AICP
Director, Department of Planning and Community Development
Town of Apex
Dianne.Khin@apexnc.org

Dear Dianne,

The Wake County Public School System (WCPSS) Office of School Assignment received information about a proposed rezoning/development within the Town of Apex planning area. We are providing this letter to share information about WCPSS's capacity related to the proposal. The following information about the proposed rezoning/development was provided through the Wake County Residential Development Notification database:

- Date of application: March 1, 2022
- Name of development: 22CZo6 Yellowbridge PUD
- Address of rezoning: 2813 & 2817 US 64 Hwy W
- Total number of proposed residential units: 170
- Type(s) of residential units proposed: 130 Townhomes, 40 Single-family detached

Based on the information received at the time of application, the Office of School Assignment is providing the following assessment of possible impacts to the Wake County Public School System:

	Schools at <u>all</u> grade levels within the current assignment area for the proposed rezoning/development are anticipated to have <u>sufficient</u> capacity for future students.					
Ø	Schools at <u>the following</u> grade levels within the current assignment area for the proposed rezoning/development are anticipated to have <u>insufficient</u> capacity for future students; transportation to schools outside of the current assignment area should be anticipated:					
	abla	Elementary		Middle	\checkmark	High
The fo	llowing	mitigation of capacity con	cerns d	ue to school construction or ex	pansior	is anticipated:
	Not ap	plicable – existing school c	apacity	is anticipated to be sufficient.		
	School	expansion or construction	within	the next five years is not antic	ipated t	o address concerns.
\square	School levels:	expansion or construction	within	the next five years may addres	ss conce	rns at these grade
	\square	Elementary		Middle	abla	High
Thank	you for	sharing this information w	vith the	Town of Apex Planning Board	and To	wn Council as they

Sincerely, Glenn Carrozza

consider the proposed rezoning/development.

www.wcpss.net

tel: (919) 431-7333

fax: (919) 694-7753

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: July 26, 2022

Item Details

Presenter(s): Shannon Cox, Long Range Planning Manager

Department(s): Planning and Community Development

Requested Motion

Public hearing and possible motion regarding amendments to the Transportation Plan for Chapel Ridge Road.

Approval Recommended?

Planning staff recommend adoption of the proposed amendments.

The Planning Board considered the proposed amendments at their July 11, 2022 meeting and recommended approval in a vote of 4 in favor and 2 against.

Item Details

The amendments to the Transportation Plan include: (1) Adding a future Minor Collector street extending from existing Chapel Ridge Road to Beaver Creek Commons Drive to the Thoroughfare and Collector Street Plan map and removing the Minor Collector street designation from Ackerman Hill Drive, (2) Adding a future local route designation along the extended Chapel Ridge Road to the Transit Plan map, and (3) adding a future side path designation to a portion of Chapel Ridge Road on the Bicycle and Pedestrian System Plan map.

Attachments

Staff report



Transportation Plan Amendments

July 26, 2022 Town Council Meeting



The Thoroughfare and Collector Street Plan map, Transit Plan map, and Bicycle and Pedestrian System Plan map collectively represent a network of current and future facilities that provide guidance on what is likely to be suitable for long term growth, connectivity, recreation, and multimodal travel. The Transportation Plan does not require a schedule for implementation nor does it set aside funding for improvements. The purpose of the public hearing is to consider proposed amendments to the Transportation Plan in the vicinity of Chapel Ridge Road in order to make a decision. The proposed amendments are associated with rezoning case 22CZ07 Chapel Ridge Apartments Planned Unit Development (PUD).

The proposed amendment to the Thoroughfare and Collector Street Plan map would show a future Minor Collector street extending from Chapel Ridge Road to Beaver Creek Commons Drive (see Figure 1). The amendment would also remove the Minor Collector street designation shown along Ackerman Hill Drive.

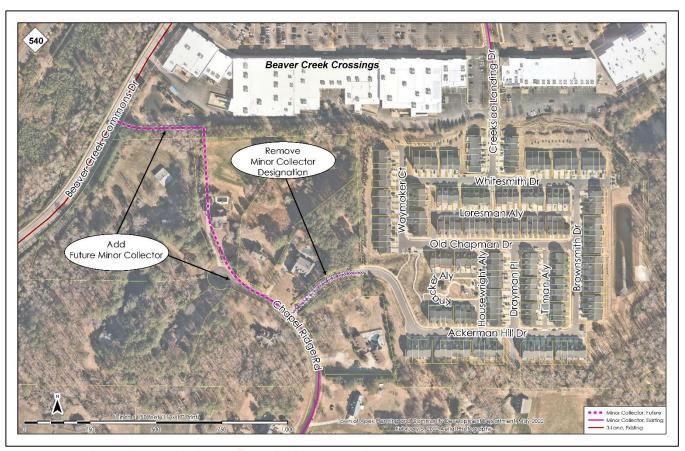


Figure 1. Proposed amendment to the Thoroughfare and Collector Street Plan map

The proposed amendment to the Bicycle and Pedestrian System Plan map would add future side path along the east side of Chapel Ridge Road from the northern boundary of the approved 21CZ32 Chapel Ridge Towns PUD (across from Clark Farm Road) to Beaver Creek Commons Drive (see Figure 2).



Figure 2. Proposed amendment to the Bicycle and Pedestrian System Plan map

The proposed amendment to the Transit System Plan map would show a future local route extending along Chapel Ridge Road to Beaver Creek Commons Drive (see Figure 3). In the future, it is anticipated that GoApex Route 1 would use this route instead of turning around on private property within Olive Chapel Professional Park.

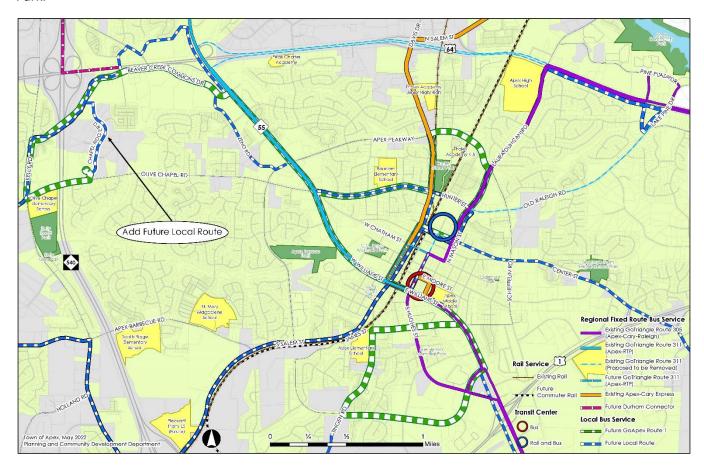


Figure 3. Proposed amendment to the Transit System Plan map

The proposed amendments are requested by Planning staff and are consistent with the proposed 22CZ07 Chapel Ridge Apartments PUD. These changes would improve connectivity of the roadway, bicycle and pedestrian, and transit network in this growing area. Connectivity shortens travel time and reduces impacts to thoroughfares and intersections. In addition, it would provide a route for GoApex Route 1 using public facilities and permanent public easements. The agreement to use Olive Chapel Professional Park will expire in five years.

Programmed Projects:

No municipal or state projects are programmed to complete the facilities addressed by these amendments. If approved, 22CZ07 Chapel Ridge Apartments PUD would construct a roadway connection with side path and a bus stop from Chapel Ridge Road to Beaver Creek Commons Drive. A portion of the connection would remain private with a public access and maintenance easement.

Staff Recommendation:

Planning staff recommend supporting the proposed amendments. Staff from Public Works and Transportation; Fire; Police; and Parks, Recreation, and Cultural Resources are also supportive of the proposed amendment.

Transit Advisory Committee Recommendation:

The Town of Apex Transit Advisory Committee considered the proposed amendment to the Transit Plan Map at their July 13, 2022 meeting and unanimously recommended approval.

Planning Board Recommendation:

The Planning Board considered the amendments at their July 11, 2022 meeting and recommended approval in a vote of four in favor and two opposed.

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: PUBLIC HEARING

Meeting Date: July 26, 2022

Item Details

Presenter(s): Shelly Mayo, Planner II

Department(s): Planning and Community Development

Requested Motion

Public Hearing and possible motion to approve Rezoning Application #22CZ07 Chapel Ridge North PUD. The applicant, Matthew Carpenter for High Street District Development, Inc., seeks to rezone approximately 20.62 acres from Rural Residential (RR) to Planned Unit Development-Conditional Zoning (PUD-CZ). The proposed rezoning is located at 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm Rd.

Approval Recommended?

The Planning and Community Development Department recommends approval.

The Planning Board held a Public Hearing on July 11, 2022 and, by a vote of 4 to 2, recommended approval of the rezoning with the conditions offered by the applicant.

Item Details

The properties to be rezoned are identified as PINs 0732340602, 0732347912, 0732343920, 0732354594, 0732352538, 0732249869, & 0732256180.

Attachments

- Staff Report
- Vicinity Map
- Application



Rezoning #22CZ07 Chapel Ridge North PUD

July 26, 2022 Town Council Meeting



All property owners, tenants, and neighborhood associations within 300 feet of this rezoning have been notified per UDO Sec. 2.2.11 *Public Notification*.

BACKGROUND INFORMATION:

Location: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm Rd

Applicant: High Street District Development, Inc.

Authorized Agent: Joshua Dix

Owners: Su Yueh Kao and Chi-Chang Ho; Michael P. and Catherine A. Mohan; Douglas

and Carrie Cox; Ronald L. and Katherine L. Stringari; Larry L. and Kathi E.

Carlson; Tigh M. and Dianne Cundieff; David D. and Ethel V. Sherry

PROJECT DESCRIPTION:

Acreage: +/- 20.62 acres

PINs: 0732340602, 0732347912, 0732343920, 0732354594, 0732352538,

0732249869, & 0732256180

Current Zoning: Rural Residential (RR)

Proposed Zoning: Planned Unit Development–Conditional Zoning (PUD-CZ)

Current 2045 Land Use Map: Medium Density Residential **If rezoned as proposed, the** High Density Residential

2045 Land Use Map

Designation will change to:

Town Limits: Inside the ETJ

ADJACENT ZONING & LAND USES:					
	Zoning	Land Use			
North:	Planned Unit Development-Conditional Zoning	Shopping Center			
i voi tii.	(PUD-CZ #06CU17)	(Beaver Creek Crossings)			
South:	Rural Residential (RR)	Single-family Residential			
Journ.	Kurai Kesideritiai (KK)	(Chapel Ridge Estates Subdivision)			
	Rural Residential (RR);	Single-family Residential			
East:	Planned Unit Development-Conditional Zoning	(Chapel Ridge Estates Subdivision);			
	(PUD-CZ #15CZ04)	Townhomes (Hempstead Subdivision)			
	Rural Residential (RR);	Jordan Luthoran Church			
West:	Planned Commercial-Conditional Zoning	Jordan Lutheran Church; Vacant			
	(PC-CZ #94CU20)	Vacalit			

EXISTING CONDITIONS:

The site consists of seven (7) parcels totaling +/- 20.62 acres. The Chapel Ridge North PUD is in the northcentral region of Apex, north of Olive Chapel Road, south of Beaver Creek Commons Drive, and east of NC 540 Hwy. Beaver Creek Crossings shopping center is north of the site and the Chapel Ridge Estates subdivision is south of the site. The future home of Jordan Lutheran Church abuts the site to the west. The subject properties contain single-family homes with large areas of woods, yards, streams, and a pond.

NEIGHBORHOOD MEETING:

The applicant conducted a neighborhood meeting on February 16, 2022. The meeting report is attached to the staff report.

WCPSS COORDINATION:

A Letter of Impact from Wake County Public School System (WCPSS) was received for this rezoning and is included

- Page 676 -

Rezoning #22CZ07 Chapel Ridge North PUD

July 26, 2022 Town Council Meeting



in the staff report packet. WCPSS indicates that elementary and high schools within the current assignment area for this rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated. School expansion or construction within the next five years may address concerns at both the elementary and high school levels.

2045 LAND USE MAP:

The 2045 Land Use Map (LUM) designates the site as Medium Density Residential. The Medium Density Residential designation supports up to 7 dwelling units per acre and does not support apartments. Chapel Ridge North PUD proposes 370 dwelling units on 20.62 acres, or approximately 17.94 dwelling units per acre. If the properties are rezoned as proposed, the 2045 LUM will automatically be amended to High Density Residential per NCGS 160D-605(a).

While the site is located with the Suburban Context Area, it is immediately adjacent to a Transit-Oriented Development (TOD) Context Area as adopted with Advance Apex. TOD development typically dictates transit-supportive densities, which is a minimum of seven (7) units per acre for a circulator bus service and a minimum 15 units per acre for fixed route bus service.

PLANNED UNIT DEVELOPMENT PLAN:

The applicant is proposing a Planned Unit Development with uses and development standards as follows:

Proposed Uses:

The Rezoned Lands may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations stated below. For convenience, some relevant sections of the UDO may be referenced; such references do not imply that other sections of the UDO do not apply.

- Multi-family or apartment
- Condominium
- Utility, minor
- Greenway

- Park, active
- Park, passive
- Recreation facility, private

Conditions:

- 1. No dumpster shall be located within 50 feet of the northern property line of Lot 12, Chapel Ridge Subdivision, as shown in Book of Maps 1986, Page 1627, Wake County Registry.
- 2. The project shall use full cutoff LED fixtures that have a maximum color temperature of 3500K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.
- 3. The project shall be designed to meet the requirements for one of the following green building certifications: LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard. Prior to the issuance of building permits, the developer shall hire a third-party consultant to evaluate the project and ensure the design conforms with green building certification requirements. Prior to the issuance of a certificate of occupancy for a building, the developer shall demonstrate to the Town that that building has been certified as a green building by providing a copy of the green building certification.
- 4. The project shall install at least three (3) pet waste stations across the development locations that are publicly accessible, such as adjacent to amenity centers, sidewalks, greenways, or side paths.
- 5. Affordable Housing: A minimum of three and a half percent (3.5%) of the total residential units (as shown on the first site plan submittal) shall be designated as restricted low-income affordable housing rental units (the "Affordable Units") for a minimum affordability period of ten (10) years starting from the date of issuance of the first residential Certificate of Occupancy (the "Affordable Restriction Period"). The

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Affordable Units shall be occupied by low-income households earning no more than sixty percent (60%) of the Raleigh, NC Metropolitan Statistical Area (MSA) Area Median Income (AMI), adjusted for family size, as most recently published by the U.S. Department of Housing and Urban Development (HUD). The Affordable Units shall be one-bedroom units and rented to low-income households during the Affordable Restriction Period at maximum rent limits per bedroom size, no greater than sixty percent (60%) of the Raleigh, NC MSA AMI as most recently published by the HUD and stipulated by the most recently published North Carolina Housing Finance Agency (NCHFA) Low-Income Housing Tax Credit (LIHTC) Multifamily Tax Subsidy Program (MTSP) income and rent limits for the Wake County Metropolitan Area. If the Affordable Units calculation results in a fraction between 0.00 and 0.49, the number of Affordable Units shall be rounded down to the nearest whole number. If the Affordable Units calculation results in a fraction between 0.50 and 0.99, the number of Affordable Units shall be rounded up to the nearest whole number. Prior to issuance of the first residential Certificate of Occupancy, a restrictive covenant between the Town and property owner shall be executed and recorded in the Wake County Registry to memorialize the affordable housing terms and conditions. During the Affordable Restriction Period, the property owner shall be responsible for performing all property management and administration duties to ensure compliance with this affordable housing condition and shall submit annual compliance reports to the Town verifying compliance with this affordable housing condition. Following expiration of the Affordable Restriction Period, this affordable housing condition shall expire, and the property owner shall be relieved of all obligations set forth in this affordable housing condition, and the Affordable Units may freely be marketed and leased at market-rate rents.

Architectural Conditions:

The proposed development offers the following architectural controls to ensure consistency of character throughout the development. Conceptual elevation examples are included in Section 19 of this PUD. Elevations included are limited examples of multiple style options being considered. Changes to the exterior materials, roof, windows, doors, process, trim, etc. are allowable with administrative approval at the staff level. Further details shall be provided at the time of Major Site Plan submittal. In an effort to reflect the unique nature of the existing neighborhood, the architectural style of the buildings shall be classic southern traditional architecture.

Additional features used as focal points or key terminus points shall be located within or around the development (i.e. a patio seating area, water feature, pedestrian plaza with benches, planters, public art, decorative bicycle parking, or focal feature) in order to meet the Community Amenities requirement of the UDO. Other features not mentioned may be considered with administrative staff approval.

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. Rear and side elevations of units that have right-of-way frontage shall have trim around the windows.
- 3. A minimum of four of the following decorative features shall be used on each building:
 - Decorative shake
 - Board and batten
 - Decorative porch railing/posts
 - Shutters
 - Decorative/functional air vents on roof or foundation
- Recessed windows
- Decorative windows
- Decorative brick/stone
- Decorative gables
- Decorative cornices
- Tin/metal roof
- 4. Garage doors must have windows, decorative details, or carriage-style adornments on them.
- 5. Siding materials shall be varied in type and/or color on 30% of each façade on each building.
- 6. Windows must vary in size and/or type.

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- 7. Windows that are not recessed must be trimmed.
- 8. Solar conduit shall be provided on all buildings to accommodate the future installation of solar panels.

Materials:

Proposed Residential Materials and Styles Proposed materials and styles will be of a similar palette to provide consistency of character along with visual interest. Exterior materials that may be incorporated into any of the building products include:

- Cementitious lap, board and batten, and/or shake and shingle siding
- Stone or synthetic stone
- Brick

Additional building materials may be included with administrative staff approval. Substitute materials shall be allowed by staff as long as they are determined by the Director of Planning and Development to be substantially similar.

Proposed Design Controls:

Maximum Residential Units:	370 apartments
Maximum Building Height:	55 ft & 5 stories*
Maximum Built-Upon Area:	70%

^{*}Building facades facing PINs 073243658, 0732340602, and 0732348711 shall be limited to a maximum of four stories.

Building Setbacks:	Multi-Family/ Apartments/Condominiums
Front:	10 Ft
Side:	20 Ft
Rear:	20 Ft
Corner:	20 Ft
Alley:	5 Ft
From Buffers/RCA:	
For buildings:	10 Ft

PARKING:

Parking calculations and dimensions for this PUD will comply with UDO Section 8.3 (Off-Street Parking and Loading) of the Town of Apex's Unified Development Ordinance, unless otherwise stated in this document.

Development shall provide the following minimum parking spaces per dwelling unit based on the number of bedrooms:

# of Bedrooms:	Proposed Minimum Parking Ratio:
1 & 2 Bedrooms	1.3 spaces per unit
3 bedrooms	1.8 spaces per unit

The following table is an estimate of the proposed parking vs the UDO requirement using the number of units listed in the Wake Co. Residential Development Notification sheet in the application.

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Parking Space Comparison					
Estimated # of	Per UDO Ratio	Per UDO Total	Per PUD Ratio	Per PUD	
Units	Min Required	Spaces	Min Required	Total Spaces	
1 & 2 bedrooms:	1.5 per unit	555	1.3 per unit	481	
370					
Total: 370		555		481	
PUD difference		0		-74	
from UDO					

Electric Vehicle Charging Spaces:

A minimum of 5% of the total parking spaces required by the UDO for the project shall be Electric Vehicle Charging spaces consistent with the standards of UDO Section 8.3.11. At least 6 bicycle parking spaces shall also be provided.

Proposed RCA, Buffers and Landscaping:

The PUD will provide a minimum of 20% of the gross project area as a Resource Conservation Area (RCA). Designated RCA areas will be consistent with the items listed in Section 8.1.2(B) of the Town's UDO. Preserved streams, wetlands, and associated riparian buffers provide the primary RCAs throughout the site. Additional RCA areas may include perimeter and streetfront buffers, stormwater management areas (as permitted by the UDO), and greenways.

Buffers:	UDO Requirement:	Proposed:
Chapel Ridge Road (Minor Collector):	10-foot Type A	10-foot Type A*
North boundary:	15-foot Type A	20-foot Type A
South boundary:	20-foot Type B	25-foot Type A
East boundary		
Adjacent to Single-family lots:	20-foot Type B	25-foot Type A
Adjacent to Townhomes:	15-foot Type A	15-foot Type A
West boundary		
Adjacent to Jordan Lutheran Church:	15-foot Type A	20-foot Type A
Adjacent to vacant PC-CZ parcel:	20-foot Type B	20-foot Type B

^{*}Only required along the public right-of-way fronting the Property. A buffer is not required along the public access easement. Developer shall only be responsible for providing the buffer on property adjacent to the public right-of-way which is within this rezoning.

- The project shall select and install tree, shrub and perennial species with special attention to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall.
- The project will increase biodiversity in perimeter buffers and open space areas by providing a variety of species for the canopy, understory, and shrub levels. Native and adaptive plant species shall be provided within these areas to minimize death from disease and to provide increased habitat and food sources for insects and animals. A minimum of 70% of the species provided shall be native or a nativar of North Carolina. No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type installed on a single development site.
- The project shall install a minimum of one sign for each Resource Conservation area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed.

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- Six-foot wide private walking trails may be located throughout the development, including RCA areas.
 Locations of trails are to be determined at site plan.
- Tree canopy areas in Chapel Ridge North are primarily concentrated around the wetland areas, stream features, and perimeter buffers.
- Existing trees greater than 18" in diameter that are removed by site development shall be replaced by planting a 1.5" caliper native tree from the Town of Apex Design and Development Manual either onsite or at an alternative location approved by Town Planning Staff, above and beyond standard UDO requirements.

Public Facilities:

The Chapel Ridge North PUD will be served by Town of Apex water, sanitary sewer, and electrical systems. The utility design will be finalized at Master Subdivision Plan review. A conceptual Utility Plan is included in the PUD Plan for reference. The ultimate design for the utilities shall meet the current Town of Apex Master Water and Sewer Plans for approval.

This PUD shall go above the stormwater management requirements for quality and quantity treatment outlined in Section 6.1.7 of the UDO such that:

- Post development peak runoff shall not exceed pre-development peak runoff conditions for the 1 year, 10-year, 25-year, and 24-hour storm events.
- Treatment for the first 1 inch of runoff will provide 85% removal of total suspended solids.

Acceptable stormwater structures shall include detention ponds, constructed wetlands, bio-retention areas, or other approved devices consistent with the NC DEQ Stormwater Design Manual and the Town of Apex UDO.

Apex Transportation Plan/Access and Circulation:

Pedestrian Facilities:

Per the proposed Apex Bicycle and Pedestrian System Plan Map amendment, future sidepath is shown being extended along the northern and eastern side of Chapel Ridge Road. The following facilities will be provided to contribute to a walkable community within and surrounding the Chapel Ridge North development:

- Five-foot wide public sidewalk along the western side of Chapel Ridge Road public right-of-way fronting the development.
- Ten-foot wide side path along the eastern and northern side of Chapel Ridge Rd adjacent to land that's a
 part of this rezoning application.
- Sidewalks along entry drives and parking areas will comply with the UDO.
- Five-foot wide sidewalk along the south side of Ackerman Drive fronting the project.
- A crosswalk will be provided from the future sidewalk on the south side of Ackerman Drive to the existing sidewalk on the north side of Ackerman Drive.
- Six-foot wide private walking trails throughout the development, locations to be determined at site plan.

Transit:

The Apex Transit Plan Map shows GoApex Route 1 turning around in Olive Chapel Professional Park. The Town was only able to negotiate a 5-year lease with the owners of the Professional Park. By connecting Chapel Ridge Road to Beaver Creek Commons Drive, the development will provide a natural turnaround for the Town's first transit line and provide natural access to the residents in the proposed apartments.

The developer shall design, construct and install a bus stop along the west side of Chapel Ridge Road in a location mutually agreed to by the developer and the Traffic Engineering Manager. The bus stop shall include an 8 x 30-

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foot pad, bench, and bike rack. Construction costs for the bus stop shall not exceed a maximum of \$25,000 (the "Cost Limit"). In the event construction costs exceed the Cost Limit, the developer may elect to either (a) pay a fee in lieu of \$25,000 for the bus stop, or (b) design and construct the bus stop despite construction costs exceeding the Cost Limit. The bus stop shall be shown on the overall site plan and designed, approved, and constructed concurrently with the project.

Road Improvements:

Per the proposed Apex Thoroughfare and Collector Street Plan map amendment, Chapel Ridge Road is designated as an existing 2-lane Minor Collector and is shown connecting to Beaver Creek Commons Drive just north of the Jordan Lutheran Church property. The developer will dedicate right-of-way along their property frontage on Chapel Ridge Road to meet the requirements shown in Advance Apex.

Roadway improvements are subject to modification and final approval by the Town of Apex and NCDOT as part of the Master Subdivision Plan review and approval process. A Traffic Impact Analysis has been performed as part of this PUD rezoning consistent with the Town's standards for the same. Based upon the Traffic Impact Analysis, the following traffic improvements are proposed for this development:

- All proposed driveway access and improvements on state-maintained roadways are subject to both Apex and NCDOT review and approval. This includes proposed access to Chapel Ridge Road and any modifications to Chapel Ridge Road.
- 2. Chapel Ridge Road shall be extended north to connect to Beaver Creek Commons Drive (the "Road Extension") in the approximate location shown on the Concept Plan. The Road Extension shall be constructed to Town of Apex standards and specifications. At the site plan stage, the portion of the Road Extension shown in pink on the Concept Plan and labeled "Public ROW" shall be dedicated to the Town as public right-of-way (the "Public ROW Section"). The portion of the Public ROW Section south of the shared property line with PIN 0732366134 shall have a minimum ROW width of 60 feet and be constructed to the Minor Collector Street standard. The portion of the Public ROW Section across PIN 0732258769 shall have a minimum ROW width of 50 feet. The portion of the Road Extension shown in orange on the Concept Plan and labeled "Private drive with minimum 45" public access easement" (the "Easement Section") shall be subject to a recorded public access and maintenance agreement with a minimum easement width of 45 feet. The public access and maintenance agreement shall be approved by the Planning Director as to form.
- 3. The center turn lane on Beaver Creek Commons Drive shall be restriped to provide 75 feet of southbound left turn storage and 75 feet of taper at the site driveway.

ENVIROMENTAL ADVISORY BOARD:

The Apex Environmental Advisory Board (EAB) held a pre-application meeting for this rezoning on February 17, 2022. The zoning conditions suggested by the EAB are listed below along with the applicant's response to each condition.

EAB Suggested Conditions	Applicant's Response
5% of all required motor vehicle spaces shall be electric vehicle charging spaces	Added
Locate the EV charging stations such that the charging cables do not cause a trip hazard across the sidewalks.	Added
A minimum of 3 pet waste stations shall be installed (at least one per building).	Added
Exterior lighting shall be shielded in a way that focuses lighting to the ground.	Added
Increase biodiversity.	Added
Plant pollinator-friendly flora.	Added

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EAB Suggested Conditions	Applicant's Response
Plant native flora (Refer to the Apex Design & Development Manual for approved	Added
native species).	
Implement green infrastructure.	Not added
Provide diverse and abundant pollinator and bird food sources (e.g. nectar, pollen,	Added
and berries from blooming plants) that bloom in succession from spring to fall.	
Add information signage or other marking at the boundary of lots when they are	Added
adjacent to a wooded or natural condition resource conservation area (RCA)	
indicating that the area beyond the sign is RCA and is not to be disturbed.	
If possible, increase the type A buffer width from 15 feet to 20 feet in order to	Added
increase the distance between site line and the adjacent church.	
Add 75-kW of solar PV in total over all three buildings on site.	Not added
Apply for green building certifications, such as LEED, Energy Star, BREEAM, Green	Added
Globes, NGBS Green, or GreenGuard.	

Parks, Recreation, and Cultural Resources Advisory Commission:

The Parks, Recreation, and Cultural Resources Advisory Commission reviewed the Chapel Ridge North Planned Unit Development at their April 17, 2022 meeting. The Advisory Commission unanimously recommended fee-in-lieu of dedication. The fee per unit will be \$2,226.05.

PLANNING STAFF RECOMMENDATION:

Planning staff recommends approval of Rezoning #22CZ07 Chapel Ridge North PUD as proposed by the applicant.

PLANNING BOARD RECOMMENDATION:

Planning Board held a Public Hearing on July 11, 2022 and voted 4 to 2 to recommend approval of the rezoning with the conditions offered by the applicant. The reasons provided for the dissenting votes were a lack of cohesion, lack of communication on the Town's part, insufficient space in schools, and incompatible architectural context and scale.

ANALYSIS STATEMENT OF THE REASONABLENESS OF THE PROPOSED REZONING:

This Statement will address consistency with the Town's comprehensive and other applicable plans, reasonableness, and effect on public interest:

The 2045 Land Use Map designates the site as Medium Density Residential. The Medium Density Residential designation permits up to 7 dwelling units per acre and does not permit apartments. Chapel Ridge North PUD proposes 370 dwelling units on 20.62 acres, or approximately 17.94 dwelling units per acre. If the properties are rezoned as proposed, the 2045 LUM will automatically be amended to High Density Residential per NCGS 160D-605(a). The proposed rezoning to Planned Unit Development—Conditional Zoning (PUD-CZ) will provide the flexibility to accommodate the growth in population, economy, and infrastructure consistent with that contemplated by the 2045 Land Use Map.

The proposed rezoning is reasonable and in the public interest because it will provide for infill redevelopment that serves as a transition from the large commercial development to the north while being compatible with the scale of the townhome development to the east. The rezoning will also require more energy efficient housing, improve local transit options, and offer affordable housing units. The proximity to large shopping centers, bus stops, and greenways will encourage residents to walk, bike, or take transit to local destinations and the proximity to regional highways provides easy access to that network, thus

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reducing the impacts of a similar amount of traffic on the local street network. The compact nature of the proposed development lowers the cost per capita of providing and maintaining public services and infrastructure while also ensuring the protection of open space.

PLANNED UNIT DEVELOPMENT DISTRICT AND CONDITIONAL ZONING STANDARDS:

Standards

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments.

- 1. Planned Unit Development (PUD-CZ) District
 In approving a Planned Development (PD) Zoning District designation for a PUD-CZ, the Town Council shall find the PUD-CZ district designation and PD Plan for PUD-CZ demonstrates compliance with the following standards:
 - a) Development parameters
 - (i) The uses proposed to be developed in the PD Plan for PUD-CZ are those uses permitted in Sec. 4.2.2 *Use Table*.
 - (ii) The uses proposed in the PD Plan for PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of non-residential land area is included in certain mixed use areas as specified on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown in the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.
 - (iii) The dimensional standards in Sec. 5.1.3 *Table of Intensity and Dimensional Standards, Planned Development Districts* may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
 - (iv) The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details*, and greenway improvements as required by the Town of Apex Parks, Recreation, Greenways, and Open Space Plan and the Apex Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.
 - (v) The design of development in the PD Plan for PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient compact network of streets. Cul-de-sacs shall be avoided unless the design of the subdivision and the existing or proposed street system in the surrounding area indicate that a through street is not essential in the location of the proposed cul-de-sac, or where sensitive environmental areas such as streams, floodplains, and wetlands would be substantially disturbed by making road connections.

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- (vi) The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.
- (vii) The development proposed in the PD Plan for PUD-CZ has architectural and design standards that are exceptional and provide higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.
- b) Off-street parking and loading. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.3 Off-Street Parking and Loading, except that variations from these standards may be permitted if a comprehensive parking and loading plan for the PUD-CZ is submitted as part of the PD Plan that is determined to be suitable for the PUD-CZ, and generally consistent with the intent and purpose of the off-street parking and loading standards.
- c) RCA. The PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.1.2 Resource Conservation Area, except that the percentage of RCA required under Sec. 8.1.2 may be reduced by the Town Council by no more than 10% provided that the PD Plan for PUD-CZ includes one or more of the following:
 - (i) A non-residential component; (ii) An overall density of 7 residential units per acre or more; or (iii) Environmental measures including but not limited to the following:
 - a. The installation of a solar photovoltaic (PV) system on a certain number or percentage of single-family or townhouse lots or on a certain number or percentage of multifamily, mixed-use, or nonresidential buildings. All required solar installation shall be completed or under construction prior to 90% of the building permits being issued for the approved number of lots or buildings. For single-family or townhouse installations, the lots on which these homes are located shall be identified on the Master Subdivision Plat, which may be amended;
 - b. The installation of a geothermal system for a certain number or percentage of units within the development; or
 - c. Energy efficiency standards that exceed minimum Building Code requirements (i.e. SEER rating for HVAC).
- d) Landscaping. The PD Plan for PUD-CZ shall demonstrate compliance with the standards of Sec. 8.2 Landscaping, Buffering and Screening, except that variations from these standards may be permitted where it is demonstrated that the proposed landscaping sufficiently buffers uses from each other, ensures compatibility with land uses on surrounding properties, creates attractive streetscapes and parking areas and is consistent with the character of the area. In no case shall a buffer be less than one half of the width required by Sec. 8.2 or 10 feet in width, whichever is greater.
- e) Signs. Signage in the PD Plan for PUD-CZ shall demonstrate compliance with Sec. 8.7 Signs, except that the standards can be varied if a master signage plan is submitted for review and approval concurrent with the PD plan and is determined by the Town Council to be suitable for the PUD-CZ and generally consistent with the intent and purpose of the sign standards of the UDO. The master signage plan shall have design standards that are exceptional and provide for higher quality signs than those in routine developments and shall comply with Sec. 8.7.2 Prohibited Signs.
- f) Public facilities. The improvements standards and guarantees applicable to the public facilities that will serve the site shall comply with Article 7: Subdivision and Article 14: Parks, Recreation, Greenways, and Open Space.
 - (i) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site transportation circulation system. The on-site transportation circulation system shall be integrated with the off-site transportation circulation system of the Town. The PD Plan for PUD-CZ shall be consistent

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- with the Apex Transportation Plan and the *Town of Apex Standard Specifications and Standard Details* and show required right-of-way widths and road sections. A Traffic Impact Analysis (TIA) shall be required per Sec. 13.19.
- (ii) The PD Plan for PUD-CZ demonstrates a safe and adequate on-site system of potable water and wastewater lines that can accommodate the proposed development, and are efficiently integrated into off-site potable water and wastewater public improvement plans. The PD Plan shall include a proposed water and wastewater plan.
- (iii) Adequate off-site facilities for potable water supply, sewage disposal, solid waste disposal, electrical supply, fire protection and roads shall be planned and programmed for the development proposed in the PD Plan for PUD-CZ, and the development is conveniently located in relation to schools and police protection services.
- (iv) The PD Plan shall demonstrate compliance with the parks and recreation requirements of Sec. Article 14: *Parks, Recreation, Greenways, and Open Space* and Sec. 7.3.1 *Privately-owned Play Lawns* if there is a residential component in the PUD-CZ.
- g) Natural resource and environmental protection. The PD Plan for PUD-CZ demonstrates compliance with the current regulatory standards of this Ordinance related to natural resource and environmental protection in Sec. 6.1 Watershed Protection Overlay District, Sec. 6.2 Flood Damage Prevention Overlay District, and Sec. 8.1 Resource Conservation.
- h) Storm water management. The PD Plan shall demonstrate that the post-development rate of onsite storm water discharge from the entire site shall not exceed pre-development levels in accordance with Sec. 6.1.7 of the UDO.
- i) Phasing. The PD Plan for PUD-CZ shall include a phasing plan for the development. If development of the PUD-CZ is proposed to occur in more than one phase, then guarantees shall be provided that project improvements and amenities that are necessary and desirable for residents of the project, or that are of benefit to the Town, are constructed with the first phase of the project, or, if this is not possible, then as early in the project as is technically feasible.
- j) Consistency with 2045 Land Use Map. The PD Plan for PUD-CZ demonstrates consistency with the goals and policies established in the Town's 2045 Land Use Map.
- k) Complies with the UDO. The PD Plan for PUD-CZ demonstrates compliance with all other relevant portions of the UDO.

Legislative Considerations

The Town Council shall find the Planned Unit Development-Conditional Zoning (PUD-CZ) designation demonstrates compliance with the following standards. 2.3.3.F:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

- 1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.
- 2) Compatibility. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.
- 3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 Supplemental Standards, if applicable.

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- 4) Design minimizes adverse impact. The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.
- 5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.
- 6) Impact on public facilities. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.
- 7) Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.
- 8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.
- 9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.
- 10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.



April 7, 2022

Kevin Dean Kimley-Horn & Associates, Inc. 300 S. Main Street, Suite 212 Holly Springs, NC 27540

Subject: Staff summary and comments for the Chapel Ridge Apartments TIA,

3/1/2022

Mr. Dean:

Please review the following summary of my comments and recommendations. You may schedule a meeting with me and your client to discuss at your convenience.

Study Area

The TIA studied access to the proposed development via five (5) intersections:

- Beaver Creek Commons Drive and Proposed Site Access
- Chapel Ridge Road and Proposed Site Access/North Site Driveway
- Chapel Ridge Road and Central Site Driveway
- Chapel Ridge Road and South Site Driveway
- Ackerman Hill Drive and Site Driveway

Additionally, the TIA studied the following four (4) intersections within the study area:

- Kelly Road and Wendhurst Court/Beaver Creek Commons Drive
- Olive Chapel Road and Chapel Ridge Road
- Chapel Ridge Road and Ackerman Hill Drive
- Beaver Creek Commons Drive and Creekside Landing Drive

Trip Generation

The proposed development is expected to consist of 350 apartment units. The development is projected to generate approximately 30 new trips entering and 87 new trips exiting the site during the weekday A.M. peak hour and 90 new trips entering and 57 new trips exiting the site during the weekday P.M. peak hour. The development is projected to add a total of 1,906 daily trips onto the adjacent roadway network.

Background traffic

Background traffic consists of 3% annual background traffic growth compounded to build out year 2025, and a portion of the Olive Chapel Professional Park (50% of build-out traffic). It should be noted that traffic from the adjacent Chapel Ridge Townhomes development was evaluated as a supplemental analysis but not included in the background traffic as the development had not yet been rezoned by Town Council at the time this TIA was prepared. It also happened to be below the trip threshold for requiring a TIA by itself and is providing additional direct full movement access on Olive Chapel Road, which will minimize potential traffic impacts to Chapel Ridge Road from that development plan.

Trip Distribution and Assignment

The trip distributions to and from the development are as follows:

- 40% to/from the north on Kelly Road (via Beaver Creek Commons Drive)
- 20% to/from the east on Beaver Creek Commons Drive
- 15% to/from the east on Olive Chapel Road
- 15% to/from the west on Olive Chapel Road
- 10% to/from the north on Creekside Landing Drive

Traffic Capacity Analysis and Recommendations

Level of Service (LOS) is a grade of A through F assigned to an intersection, approach, or movement to describe how well or how poorly it operates. LOS A through D is considered acceptable for peak hour operation. LOS E or F describes potentially unacceptable operation and developers may be required to mitigate their anticipated traffic impact to improve LOS based on the Apex Unified Development Ordinance (UDO). Tables 1 through 9 describe the levels of service (LOS) for the scenarios analyzed in the TIA. "NA" is shown when the scenario does not apply. The scenarios are as follows:

- Existing 2021 Existing year 2021 traffic counts.
- **No Build 2025** Projected year (2025) with background traffic growth and committed improvements by others, where applicable.
- **Build 2025** Projected year (2025) with background traffic, and site build-out including recommended improvements, where applicable.

Beaver Creek Commons Drive and Proposed Site Access

Table 1. A.M. / P.M. Unsignalized Peak Hour Levels of Service Beaver Creek Commons Drive and Proposed Site Access		
Build 2025		
<u>Overall</u>	<u>NA</u>	
Westbound (Site Access)	B/B^1	
Northbound (Beaver Creek Commons Drive) NA		
Southbound (Beaver Creek Commons Drive) A / A ²		

- 1. Level of service for stop-controlled minor street approaches.
- 2. Level of service for major street left turn.

TIA recommendations:

• The TIA recommends construction of Proposed Site Access approximately half-way between the proposed Jordan Lutheran Church (200 feet to the south) and the existing Beaver Creek Crossing mall alley (200 feet to the north). The TIA recommends the Site Access be constructed as a stop-controlled, privately maintained driveway with one lane of ingress and one lane of egress. Additionally, the TIA recommends restriping the two-way left turn lane of Beaver Creek Commons Drive to provide for a 100-foot left turn storage bay in the southbound direction of travel.

Apex staff recommendations:

- There's an existing driveway and gravel road that serves a sanitary sewer pump station, just a few feet north of the Proposed Site Access. Apex staff recommends that the Proposed Site Access driveway is constructed to serve both the apartment site and the existing pump station to reduce the number of driveways and potential turn movement conflicts through this short stretch of frontage along Beaver Creek Commons Drive. The Proposed Site Access should provide a public access easement up to its termination point with the Chapel Ridge Road extension. Apex staff also recommends the center turn lane on Beaver Creek Commons Drive be restriped to provide 75 feet of southbound left turn storage and 75 feet of taper at the Proposed Site Driveway.
- The intersection is projected to operate at LOS B or better for all movements.
 Additionally, Apex staff reviewed right turn warrants for this location. Based on the p.m. peak hour projected traffic volumes, a right turn taper is warranted per NCDOT guidelines. However, due to the context of this roadway facility (35 mph thoroughfare with many closely spaced commercial access points), a right turn lane is not recommended at this location.

Chapel Ridge Road and Proposed Site Access/North Site Driveway

Table 2. A.M. / P.M. Unsignalized Peak Hour Levels of Service Chapel Ridge Road and Proposed Site Access/North Site Driveway		
Build 2025		
<u>Overall</u>	<u>NA</u>	
Eastbound (Proposed Site Access)	NA	
Westbound (North Site Driveway) A / A ²		
Northbound (Chapel Ridge Road) A / A ¹		

- 1. Level of service for minor street stop-controlled approaches.
- 2. Level of service for major street left turn movements.

TIA recommendations:

• The TIA recommends realignment and extension of Chapel Ridge Road by approximately 550 feet to the north, from its existing terminus point at the cul-de-sac, to the Proposed Site Access. The TIA proposes that the Chapel Ridge Road extension is constructed as a two-lane, two-way, public roadway on 60 feet of right of way, with stop control at the intersection of the Proposed Site Access and North Site Driveway.

Apex staff recommendations:

- Apex staff concur with the realignment and extension of Chapel Ridge Road as a two-way, two lane road. Additionally, Apex staff recommends coordination with the Jordan Lutheran Church to connect their southern driveway to the realigned roadway, and to remove the existing asphalt driveway on their site that extends south to the existing Chapel Ridge Road cul-de-sac. The realignment of the road, as proposed, will cause an issue with the existing asphalt drive connection and should be addressed as part of this development plan.
- The proposed intersection of Chapel Ridge Road and the Proposed Site Access / North Site Driveway is projected to operate at LOS A for all intersection movements during both peak hours of the day.

4

Chapel Ridge Road and Central Site Driveway

Table 3. A.M. / P.M. Unsignalized Peak Hour Levels of Service Chapel Ridge Road and Central Site Driveway		
Build 2025		
<u>Overall</u>	<u>NA</u>	
Eastbound (Chapel Ridge Road)	A/A^2	
Westbound (Chapel Ridge Road)	A/A^2	
Northbound (Central Site Driveway)	A/A^1	
Southbound (Central Site Driveway)	A/A^1	

- 1. Level of service for minor street stop-controlled approaches.
- 2. Level of service for major street left turn movements.

TIA recommendations:

 The TIA recommends construction of the Central Site Driveway as a privately maintained two-lane, two-way roadway with stop-control on both minor street approaches at the intersection with Chapel Ridge Road.

Apex staff recommendations:

 Apex staff concur with the recommendation in the TIA. All movements are projected to operate at LOS A at this intersection during both peak hours of the day.

Chapel Ridge Road and South Site Driveway

Table 4. A.M. / P.M. Unsignalized Peak Hour Levels of Service Chapel Ridge Road and South Site Driveway		
Build 2025		
<u>Overall</u>	<u>NA</u>	
Eastbound (Chapel Ridge Road)	A/A^2	
Westbound (Chapel Ridge Road)	A/A^2	
Northbound (South Site Driveway)	A/A^1	
Southbound (South Site Driveway)	A/A^{1}	

- 1. Level of service for minor street stop-controlled approaches.
- 2. Level of service for major street left turn movements.

TIA recommendations:

 The TIA recommends construction of the South Site Driveway as a privately maintained two-lane, two-way roadway with stop-control on both minor street approaches at the intersection with Chapel Ridge Road.

Apex staff recommendations:

 Apex staff concur with the recommendation in the TIA. All movements are projected to operate at LOS A at this intersection during both peak hours of the day.

Ackerman Hill Drive and Site Driveway

Table 5. A.M. / P.M. Unsignalized Peak Hour Levels of Service Ackerman Hill Drive and Site Driveway		
Build 2025		
Overall	<u>NA</u>	
Eastbound (Ackerman Hill Drive)	NA	
Westbound (Ackerman Hill Drive)	A/A^2	
Northbound (Site Driveway)	A/A^{1}	

- 1. Level of service for minor street stop-controlled approaches.
- 2. Level of service for major street left turn movements.

TIA recommendations:

 The TIA recommends construction of Site Driveway as a privately maintained two-lane, two-way roadway with stop-control at the intersection with Ackerman Hill Drive.

Apex staff recommendations:

 Apex staff concur with the recommendation in the TIA. All movements are projected to operate at LOS A at this intersection during both peak hours of the day.

Kelly Road and Wendhurst Court/Beaver Creek Commons Drive

Table 6. A.M. / P.M. Signalized Peak Hour Levels of Service Kelly Road and Wendhurst Court/Beaver Creek Commons Drive			
	Existing 2021	No Build 2025	Build 2025
Overall	<u>B / C</u>	<u>B / C</u>	<u>B / C</u>
Eastbound (Wendhurst Court)	C/B	C/B	C/B
Westbound (Beaver Creek Commons Drive)	E/D	E/D	D/D
Northbound (Kelly Road)	A/B	A/B	A/B
Southbound (Kelly Road)	A/C	A/C	A/C

TIA recommendations:

The TIA recommends no improvements at this intersection. The TIA also notes that
development traffic is projected to account for approximately 3% of total intersection
traffic, and the overall level of service (LOS B and C in the AM and PM peak hours
respectively), is not projected to change with or without the development.

Apex staff recommendations:

 Apex staff concur with the recommendation in the TIA. All approaches are projected to operate at LOS D or better in the build scenario. As noted in the TIA, the westbound approach improves from LOS E to D in the AM peak hour from the No Build to the Build scenario. That improvement is negligible and due to the addition of site trips to movements already operating with adequate capacity and the associated weightedaverage methodology for delay calculations.

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Olive Chapel Road and Chapel Ridge Road

Table 7. A.M. / P.M. Unsignalized Peak Hour Levels of Service Olive Chapel Road and Chapel Ridge Road				
Existing No Build 2025 Build 2025				
<u>Overall</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	
Eastbound (Olive Chapel Road)	A/A^2	A/A^2	A/A^2	
Westbound (Olive Chapel Road)	NA	NA	NA	
Southbound (Chapel Ridge Road)	B/B¹	B/C¹	B/C¹	

- 1. Level of service for minor street stop-controlled approaches.
- 2. Level of service for major street left turn movements.

TIA recommendations:

• The TIA recommends no improvements at this intersection.

Apex staff recommendations:

 Apex staff concur with the recommendation in the TIA. All movements are projected to operate at LOS C or better in the build scenario during both peak hours. 95th percentile queues are not projected to exceed 25 feet on the stop-controlled southbound approach. An eastbound left turn lane on Olive Chapel Road already exist to store the major street left turn queues.

Chapel Ridge Road and Ackerman Hill Drive

Table 8. A.M. / P.M. Unsignalized Peak Hour Levels of Service Chapel Ridge Road and Ackerman Hill Drive			
Existing No Build 2025 Build 2025			
<u>Overall</u>	<u>NA</u>	NA	NA
Westbound (Ackerman Hill Drive)	A/A^1	A/A^1	A/A^1
Northbound (Chapel Ridge Road)	NA	NA	NA
Southbound (Chapel Ridge Road)	A/A^2	A/A^2	A/A^2

- 1. Level of service for minor street stop-controlled approaches.
- 2. Level of service for major street left turn movements.

TIA recommendations:

The TIA recommends no improvements at this intersection.

Apex staff recommendations:

 Apex staff concur with the recommendation in the TIA. All movements are projected to operate at LOS A in the build scenario during both peak hours.

Beaver Creek Commons Drive and Creekside Landing Drive (Roundabout)

Table 9. A.M. / P.M. Unsignalized Roundabout Peak Hour Levels of Service Beaver Creek Commons Drive and Creekside Landing Drive			
Existing No Build 2025 Build 2025			
Overall	<u>A / A</u>	<u>A / A</u>	<u>A / B</u>
Eastbound (Beaver Creek Commons Drive)	A/A	A/A	A/B
Westbound (Beaver Creek Commons Drive)	A/A	A/A	A/B
Northbound (Creekside Landing Drive)	A/A	A/B	A/B
Southbound (Creekside Landing Drive)	A/A	A/A	A/A

TIA recommendations:

• The TIA recommends no improvements at this intersection.

Apex staff recommendations:

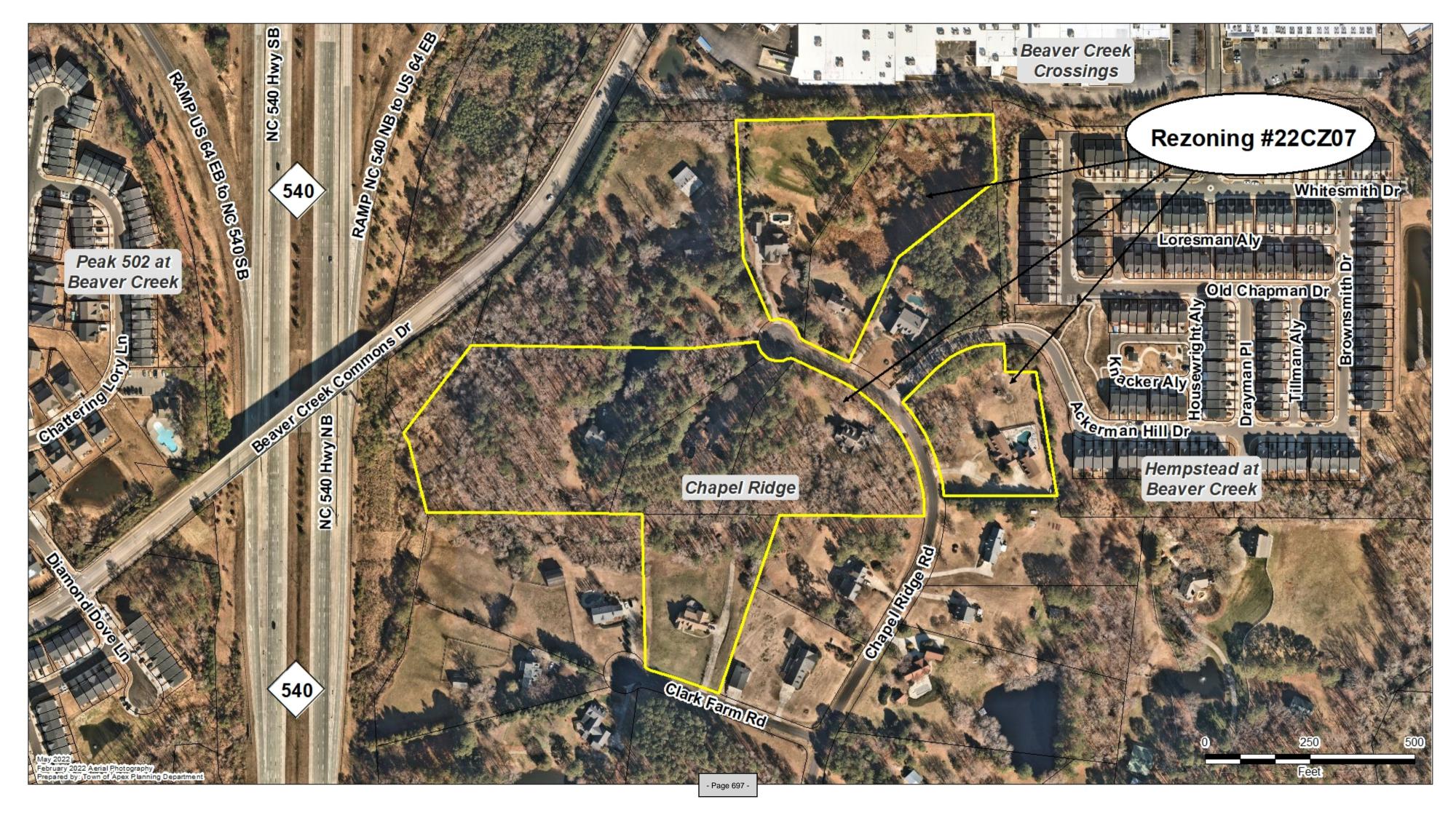
 Apex staff concur with the recommendation in the TIA. All approaches are projected to operate at LOS B or better in the build scenario during both peak hours. The roundabout is projected to have ample capacity to handle future traffic growth from this development.

Please coordinate with the NCDOT District Engineer's Office concerning recommended improvements. Town staff will be available for meetings with NCDOT staff to discuss improvements on state maintained roadways as needed. All recommendations are subject to review by Town Council prior to approval.

Sincerely,

Serge Grebenschikov

Traffic Engineer 919-372-7448



PLANNED UNIT DEVELOPMENT APPLICATION					
	t is a public record under the North Carolina P	ublic Records Act	and may be published or	n the Town's website	or disclosed to
third parties. Application	#:		Submittal Date:	March 1, 20	22
Fee Paid	\$		Check #		
DETITION T	O AMEND THE OFFICIAL ZONING DIST	TRICT MAD			
	Object of District	RICT WAP			
Project Nan	O 11 1 A 12 12 12	Evbibit A			
Address(es)					
PIN(s)	ee attached Application Exhibit	I A			
				Acreage: $\frac{20}{2}$	0.62 acres
Current Zor			seu zonnig.	Unit Development- Cond	itional Zoning (PUD-CZ)
Current 204	5 LUM Designation: Medium [Density Res	sidential		
Is the propo	osed rezoning consistent with the 2045 L	UM Classificat	ion(s)? Yes □	No	
If any porti	on of the project is shown as mixed use	(3 or more stri	pes on the 2045 Land	Use Map) provid	e the following:
Are	ea classified as mixed use:		Acreage:	N/A	
	ea proposed as non-residential developr	nent:	Acreage:	N/A	_
	rcent of mixed use area proposed as nor		Percent:	N/A	
	·				
Applicant II			/a Matthew Oass		
Name:	High Street District Developm		o Mattnew Carp	enter	
Address:	301 Fayetteville Street, Suite	1400			
City:	Raleigh	State:	NC	Zip:	27601
Phone:	(919) 835-4032	E-mail:	matthewcarpen	ter@parkerpo	oe.com
Owner Info	rmation				
Name:	See attached Exhibit A				
Address:					
		Ctator			
City:		State:		Zip:	
Phone:		E-mail:			
Agent Infor	mation				
Name:	Josh Dix, High Street District D	evelopmen)	t, Inc. a Trammel	I Crow Compa	any company
Address:	555 Fayetteville Street, Suite	300			
City:	Raleigh	State:	NC	Zip:	27601
Phone:	(919) 835-4032	E-mail:	JDix@trammell	crow.com	
Other conta	acts:				

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Exhibit A

To Chapel Ridge PUD-CZ Application Owner Information Addendum

Parcel 1

Site Address: 1200 Chapel Ridge Road

PIN: 0732256180

Deed Reference (book/page): 12343/2193

Acreage: 5.27

Owner: Su Yueh Kao and Chi Chang Ho

Owner Address: 1200 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 2

Site Address: 1204 Chapel Ridge Road

PIN: 0732249869

Deed Reference (book/page): 8218/1726

Acreage: 1.71

Owner: Michael P. Mohan and Catherine A. Mohan

Owner Address: 1204 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 3

Site Address: 1205 Chapel Ridge Road

PIN: 0732352538

Deed Reference (book/page): 12171/2059

Acreage: 2.48

Owner: Douglas Cox and Carrie Cox

Owner Address: 1205 Chapel Hill Road, Apex, NC 27502-8502

Parcel 4

Site Address: 1209 Chapel Ridge Road

PIN: 0732354594

Deed Reference (book/page): 6236/386

Acreage: 3.0

Owner: Ronald L. Stringari, and Katherine L. Stringari

Owner Address: 1209 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 5

Site Address: 1220 Chapel Ridge Road

PIN: 0732343920

Deed Reference (book/page): 4168/302

Acreage: 2.88

Owner: Larry L. Carlson and Kathi E. Carlson

Owner Address: 1220 Chapel Ridge Road, Apex, NC 27502-8502

PPAB 6867950v1

Parcel 6

Site Address: 1225 Chapel Ridge Road

PIN: 0732347912

Deed Reference (book/page): 9720/361

Acreage: 2.13

Owner: Tigh M. Dundieff and Diane Cundieff

Owner Address: 1225 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 7

Site Address: 1512 Clark Farm Road

PIN: 0732340602

Deed Reference (book/page): 5351/223

Acreage: 2.34

Owner: David D. Sherry and Ethel V. Sherry

Owner Address: 1512 Clark Farm Road, Apex, NC 27502-8500

PLANNED UNIT DEVELOPMENT APPLICATION

Application #:	Submittal Date:	March 1, 2022
Application #.	Judinitai Date.	,

PLANNED UNIT DEVELOPMENT DISTRICT STANDARDS:

In return for greater flexibility in site design requirements, Planned Development (PD) Districts are expected to deliver exceptional quality community designs that preserve critical environmental resources; provide high quality community amenities; incorporate creative design in the layout of buildings, Resource Conservation Area and circulation; ensure compatibility with surrounding land uses and neighborhood character; provide high quality architecture; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The Planned Development (PD) Districts shall not be used as a means of circumventing the Town's adopted land development regulations for routine developments. The PD text and plan should demonstrate how the standards of Sec. 2.3.4.F are met be the proposed rezoning.

LEGISLATIVE CONSIDERATIONS - CONDITIONAL ZONING

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest. Use additional pages as needed.

1) Consistency with 2045 Land Use Map. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and consistency with the purposes, goals, objectives, and policies of the 2045 Land Use Map.

Although the proposed development contemplates greater density than recommended by the property's Medium Density Residential Land Use Map ("LUM") designation, it is generally consistent with the purposes, goals, objectives, and policies of the Apex Comprehensive Plan (the "Comp Plan"). The proposed development will place additional housing density in close proximity to existing services, transit, restaurants, retail, and future transit; consistent with the Comp Plan goals of providing a variety of housing types, a variety of transportation options to enhance mobility, and walkable, mixed-use developments and pedestrian-oriented streets.

2) Compatibility. The proposed Conditional Zoning (CZ) District use's appropriateness for its proposed location and compatibility with the character of surrounding land uses.

The proposed development will place housing density in an appropriate location - directly adjacent to the Beaver Creek Shopping Center, within walking distance of a future transit stop, and in close proximity to 540 and US-64. It will offer a density/land use intensity transition from higher intensity commercial uses to the north to lower intensity townhomes and single-family detached homes to the south. Appropriate buffers and Resource Conservation Areas ("RCAs") will be located to mitigate negative effects on neighboring properties.

3) Zoning district supplemental standards. The proposed Conditional Zoning (CZ) District use's compliance with Sec 4.4 *Supplemental Standards*, if applicable.

The proposed PUD-CZ will comply with any applicable standards in UDO Section 4.4.

PETITION PROCESS INFORMATION

4) Design minimizes adverse impact. The design of the proposed Conditional Zoning (CZ) District use's minimization of adverse effects, including visual impact of the proposed use on adjacent lands; and avoidance of significant adverse impacts on surrounding lands regarding trash, traffic, service delivery, parking and loading, odors, noise, glare, and vibration and not create a nuisance.

Buffers and RCAs have been located to help minimize adverse effects on adjacent properties. Trash, parking and loading, and odors will be screened from adjacent uses as required by the UDO and as et forth in the PUD. The PUD text contains a condition that prevents dumpsters from being placed in close proximity to existing homes to the south. The extension of Chapel Ridge Road to the north will improve connectivity in the area and route traffic north to Beaver Creek Commons Drive rather than south past the existing single-family detached homes on Chapel Ridge. Additionally, the PUD text contains a condition that exterior lighting shall be focused towards the ground.

5) Design minimizes environmental impact. The proposed Conditional Zoning District use's minimization of environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, scenic resources, and other natural resources.

The property is not within a designated current or future 100 year floodplain but is located within the Beaver Creek Drainage Basin. Accordingly, the property is within the Primary Watershed Protection Overlay District as shown on the Town of Apex Watershed Protection Map. This PUD will comply with all built upon area, vegetated conveyances, structural SCMs and riparian stream buffer requirements of UDO Section 6.1.7. The PUD will include a minimum 20% RCA. Further, the PUD text contains additional environmental commitments including electric vehicle charging stations and installation of pet waste stations.

6) *Impact on public facilities*. The proposed Conditional Zoning (CZ) District use's avoidance of having adverse impacts on public facilities and services, including roads, potable water and wastewater facilities, parks, schools, police, fire and EMS facilities.

The proposed development will improve access to public facilities and services. The Chapel Ridge Road extension will improve traffic circulation in the area and the project will place additional housing in close proximity to a future transit stop. The project will also extend water and sewer infrastructure south along Chapel Ridge Road which may facilitate future connections to Town services.

7) Health, safety, and welfare. The proposed Conditional Zoning (CZ) District use's effect on the health, safety, or welfare of the residents of the Town or its ETJ.

The proposed multi-family community will have a positive effect on the health, safety, and welfare of Town residents by providing additional housing types in a well-connected location.

8) Detrimental to adjacent properties. Whether the proposed Conditional Zoning (CZ) District use is substantially detrimental to adjacent properties.

The proposed multi-family community will not be detrimental to adjacent properties. RCAs and buffers - together with other conditions contained in the PUD text - will help mitigate negative effects on adjacent properties.

PETITION PROCESS INFORMATION

9) Not constitute nuisance or hazard. Whether the proposed Conditional Zoning (CZ) District use constitutes a nuisance or hazard due to traffic impact or noise, or because of the number of persons who will be using the Conditional Zoning (CZ) District use.

The proposed development will not constitute a nuisance or hazard. Traffic impacts will be mitigated by the northern extension of Chapel Ridge Road. Buffers, RCAs, and conditions on lighting will help mitigate negative effects on adjacent properties.

10) Other relevant standards of this Ordinance. Whether the proposed Conditional Zoning (CZ) District use complies with all standards imposed on it by all other applicable provisions of this Ordinance for use, layout, and general development characteristics.

The PUD will be governed by the regulations contained in the attached PUD Text and Concept Plan. The PUD will comply with all other regulations of the UDO to the extent they do not conflict with the PUD regulations.

DEVELOPMENT NAME APPROVAL APPLICATION

Application #:	Submittal Date:
Fee for Initial Submittal: No Charge	Fee for Name Change after Approval: \$500*
Purnose	

To provide a consistent and clearly stated procedure for the naming of subdivisions and/or developments and entrance roadways (in conjunction with *Town of Apex Address Policy*) so as to allow developers to define and associate the theme or aesthetics of their project(s) while maintaining the Town's commitment to preserving the quality of life and safety for all residents of Apex proper and extraterritorial jurisdiction.

Guidelines

- ✓ The subdivision/development name shall not duplicate, resemble, or present confusion with an existing subdivision/development within Apex corporate limits or extraterritorial jurisdiction except for the extension of an existing subdivision/development of similar or same name that shares a continuous roadway.
- ✓ The subdivision/development name shall not resemble an existing street name within Apex corporate limits or extraterritorial jurisdiction unless the roadway is a part of the subdivision/development or provides access to the main entrance.
- ✓ The entrance roadway of a proposed subdivision/development shall contain the name of the subdivision/development where this name does not conflict with the Town of Apex Road Name Approval Application and Town of Apex Address Policy guidelines.
- ✓ The name "Apex" shall be excluded from any new subdivision/development name.
- ✓ Descriptive words that are commonly used by existing developments will be scrutinized more seriously in order to limit confusion and encourage distinctiveness. A list of commonly used descriptive words in Apex's jurisdiction is found below.
- ✓ The proposed subdivision/development name must be requested, reviewed and approved during preliminary review by the Town.
- ✓ A \$500.00 fee will be assessed to the developer if a subdivision/development name change is requested after official submittal of the project to the Town.*

*The imposed fee offsets the cost of administrative changes required to alleviate any confusion for the applicant, Planning staff, other Town departments, decision-making bodies, concerned utility companies and other interested parties. There is no charge for the initial name submittal.

Existing Development Titles, Recurring

	Residential	Non-Residential
10 or more	Creek, Farm(s), Village(s),	Center/Centre
6 to 9	Crossing(s), Park, Ridge, Wood(s)	Commons, Park
3 to 5	Acres, Estates, Glen(s), Green*, Hills	Crossing(s), Plaza, Station, Village(s)

^{*}excludes names with Green Level

DEVELOPMENT NAME APPROVAL APPLICATION

Application #:	Submittal Date:		
Proposed Subdivision/Development Inform	mation		
Description of location: 1200;1204;1205;	1209;1220; &1225 Chapel Ridge Road and 1512 Clark Farm Road		
Nearest intersecting roads: Chapel Ridge Road/Olive Chapel Road			
Wake County PIN(s): See attached Application Exhibit A			
Township: White Oak			
Contact Information (as appropriate)			
Contact person: High Street District Deve	elopment, Inc., c/o Matthew Carpenter		
Phone number: (919) 835-4032	Fax number: N/A		
Address: 301 Fayetteville Street, Suite 140	00, Raleigh, NC 27601		
E-mail address:matthewcarpenter@parkerpoe.com			
Owner: See attached Application Exhibit A			
Phone number:	Fax number:		
Address:			
E-mail address:			
Proposed Subdivision/Development Name			
1 st Choice: Chapel Ridge			
2 nd Choice (Optional):			
Town of Apex Staff Approval:			
Town of Apex Planning Department Staff	Date		

TOWN OF APEX UTILITIES OFFER AND AGREEMENT

Application #:	Submittal Date:	
73 I P.O. Box 2 91	own of Apex Hunter Street 250 Apex, NC 27502 L9-249-3400 LINA CUSTOMER SELECTION AGREEMENT	
1200;1204;1205;1209;1220; &12	225 Chapel Ridge Road	
and 1512 Clark Farm Road		
(th	e "Premises")	
you accept the Town's offer, please fill in the blanks on the the Town.	ectric utilities on the terms described in this Offer & Agreement. If his form and sign and we will have an Agreement once signed by ustomer ("Customer") hereby irrevocably chooses and selects the	
Town of Apex (the "Town") as the permanent electric suppreceded by temporary service if needed.	pplier for the Premises. Permanent service to the Premises will be	
The sale, delivery, and use of electric power by	Customer at the Premises shall be subject to, and in accordance regulations, policies, procedures and the Code of Ordinances of the	
	on this Agreement, will take action and expend funds to provide dersigned signifies that he or she has the authority to select the grary power, for the Premises identified above.	
Any additional terms and conditions to this Agre Agreement constitutes the entire agreement of the parti	eement are attached as Appendix 1. If no appendix is attached this ies.	
Acceptance of this Agreement by the Town con	stitutes a binding contract to purchase and sell electric power.	
Please note that under North Carolina General Supplier for the Premises.	Statute §160A-332, you may be entitled to choose another electric	
	of Apex Electric Utilities Division will be pleased to provide electric th you and the owner(s).	
ACCEPTED:		
CUSTOMER: High Street District Development, Inc.	TOWN OF APEX	
BY:	BY:	
Authorized Agent	Authorized Agent	

Zoning Application

AFFIDAVIT OF OWNERSHIP Submittal Date: Application #: The undersigned, Joshua Dix of High Street District Development, Inc. (the "Affiant") first being duly sworn, hereby swears or affirms as follows: Affiant is over eighteen (18) years of age and authorized to make this Affidavit. The Affiant is the authorized agent of all owners, of the property located described in Exhibit "A" attached hereto and incorporated herein (the "Property"). This Affidavit of Ownership is made for the purpose of filing an application for development approval with 2. the Town of Apex. Affiant possesses documentation indicating the agency relationship granting the Affiant the authority 3. to apply for development approval on behalf of the owner(s). To Affiant's knowledge, no claim or action has been brought against the owners of the property which 4. questions title or right to possession of the property, nor is any claim or action pending against Affiant or owenr(s) in court regarding possession of the property. 5. (seal) Joshua Dix STATE OF NORTH CAROLINA COUNTY OF __ Make I, the undersigned, a Notary Public in and for the County of _______, hereby certify Dix_____, Affiant, personally known to me or known to me by said Affiant's acknowledged the due and voluntary execution of the foregoing Affidavit.

Notary Public Wake County

Notary Public Mutthen 7.

State of North Carolina

My Commission Expires:

[NOTARY SEAL]

AGE	NT AUTHORIZATI	ON FORM			_	
Appli	cation #:			Submittal Date:		
Larry L	. Carlson and Ka	ithi E. Carlson	i	s the owner* of the property	for which the atta	ched
applic	ation is being sub	omitted:	_			
V	aı	or Conditional Zoning	s express conse	Development rezoning applicate to zoning conditions that a tion is approved.		ne
	Site Plan					
	Subdivision					
	Variance					
	Other:					
The pr	operty address is	s: 1220 Chape	el Ridge Road,	Apex, NC 27502-8502		
The ag	ent for this proje	ect is: Josh Dix				
	☐ I am the o	wner of the propert	ty and will be a	cting as my own agent		
Agent	Name:	Josh Dix				
Addre	ss:	555 Fayetteville S	treet, Suite 300	, Raleigh, NC 27601		
Teleph	none Number:	(919) 835-4032				
E-Mail	Address:	JDix@trammellcro	w.com			
		Signature(s) of Ov	wner(s)* DocuSigned by:	ald sala		
		Larry L. Carlson	AF7F6591C7A74	16	March 1, 2022	
			DocuSigned by: BE5DD374CDBC	Type or print name		Date
		Kathi E. Carlson	BESUD3/4CDBC	4EV	March 1, 2022	
				Type or print name		Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

AGENT	AUTHORIZATI	ON FORM		
Applica	tion #:	Submitta	al Date:	
Douglas	Cox and Carrie	Cox is the owner*	of the property for which the attac	ched
applicat	ion is being sub	omitted:		
V	aı	r Conditional Zoning and Planned Development othorization includes express consent to zoning	conditions that are agreed to by th	e
	Aş Site Plan	gent which will apply if the application is approv	/ed.	
	Subdivision			
	Variance			
	Other:			
The prop	perty address is	1205 Chapel Ridge Road, Apex, NC 275	502-8502	
The age	nt for this proje	ect is: Josh Dix		
	☐ I am the o	wner of the property and will be acting as my o	wn agent	
Agent N	ame:	Josh Dix		
Address	:	555 Fayetteville Street, Suite 300, Raleigh, NO	27601	
Telepho	ne Number:	(919) 835-4032		
E-Mail A	ddress:	JDix@trammellcrow.com		
		Signature(s) of Owner(s)* DocuSigned by:		
		Douglas Cox	March 1, 2022	
		Type Carrie Cox	or print name	Date
		Carrie Cox	March 1, 2022	
		Туре	or print name	Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Agei	NT AUTHORIZATI	ON FORM		_
Appli	cation #:		Submittal Date:	
Tigh M	. Cundieff and D	iane Cundieff	is the owner* of the property	for which the attached
applic	ation is being su	bmitted:		
V	Land Use An	nendment		
V	Rezoning: Fo	or Conditional Zoning and Planned	d Development rezoning applica	ations, this
		uthorization includes express con gent which will apply if the applic	_	are agreed to by the
	Site Plan	gent which will арру II the аррис	ation is approved.	
	Subdivision			
	Variance			
	Other:			
The pr	operty address i	s: 1225 Chapel Ridge Road	, Apex, NC 27502-8502	
The ag	gent for this proj	ect is: Josh Dix		
	☐ I am the o	owner of the property and will be	acting as my own agent	
Agent	Name:	Josh Dix		
Addre	ss:	555 Fayetteville Street, Suite 30	00, Raleigh, NC 27601	
Telepl	none Number:	(919) 835-4032		
E-Mai	l Address:	JDix@trammellcrow.com		
		Signature(s) of Owner(s)*		
		Tial. M. Chia die A		
		Tigh7M. Cuhdieff		February 28, 2022
		DocuSigned by:	Type or print name	Date
		Dianne Cundieff		
		Diane Cundieff		February 28, 2022
			Type or print name	Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

AGENT	AUTHORIZATI	ON FORM		_
Applica	tion #:		Submittal Date:	
Su Yueh	Kao and Chi-C	chang Ho is the	owner* of the property	for which the attached
applicat	ion is being sub	omitted:		
V	Land Use Am	nendment		
V	aı	r Conditional Zoning and Planned Deve uthorization includes express consent to gent which will apply if the application i	zoning conditions that a	
	Site Plan			
	Subdivision			
	Variance			
	Other:			
The prop	perty address is	1200 Chapel Ridge Road, Apex	, NC 27502-8502	
The age	nt for this proje	ect is: Josh Dix		
	☐ I am the o	wner of the property and will be acting	as my own agent	
Agent N	ame:	Josh Dix		
Address	:	555 Fayetteville Street, Suite 300, Ral	eigh, NC 27601	
Telepho	ne Number:	(919) 835-4032		
E-Mail A	ddress:	JDix@trammellcrow.com		
		Signature(s) of Owner(s)* Su Hu Lao		
		Su ⁴ Yutenckatoce		February 28, 2022
		DocuSigned by:	Type or print name	Date
		Chi-Chang Ho		
		Chi-Chang Ho		February 28, 2022
			Type or print name	Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

AGENT AUTHORIZATION FOR	М		
Application #:		Submittal Date:	
Michael P. Mohan and Catherin	ne A. Mohan	is the owner* of the property	for which the attached
application is being submitted	:	-	
 ✓ Land Use Amendment ✓ Rezoning: For Conditional Zoning and Planned Development rezoning applications, this authorization includes express consent to zoning conditions that are agreed to by the Agent which will apply if the application is approved. 			
☐ Site Plan			
☐ Subdivision			
□ Variance			
□ Other:			
The property address is:	1204 Chapel Ridge Road	I, Apex, NC 27502-8502	
The agent for this project is: Josh Dix			
☐ I am the owner of	f the property and will be	acting as my own agent	
Agent Name: Josh [Dix		
Address: 555 Fa	ayetteville Street, Suite 30	00, Raleigh, NC 27601	
Telephone Number: (919)	835-4032		
E-Mail Address: JDix@	trammellcrow.com		
Docu	ture(s) of Owner(s)* usigned by: usul Mohan ————		
9AE7	7E08C69234D1		February 28, 2022
Doct	uSigned by:	Type or print name	Date
katl	urine A. Molian		
	o1942099D408 erine A. Mohan		February 28, 2022
		Type or print name	Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

AGENT AUTHORIZATION	ON FORM		
Application #:		Submittal Date:	
David D. Sherry and Eth	nel V. Sherry	is the owner* of the property	for which the attached
application is being sub	omitted:		
∠ Land Use Am	endment		
	r Conditional Zoning and Planne		
	uthorization includes express cor gent which will apply if the appli	_	are agreed to by the
☐ Site Plan		adion is approved.	
☐ Subdivision			
□ Variance			
□ Other:			
The property address is	1512 Clark Farm Road, A	Apex, NC 27502-8500	
The agent for this proje	ect is: Josh Dix		
☐ I am the owner of the property and will be acting as my own agent			
Agent Name:	Josh Dix		
Address:	555 Fayetteville Street, Suite 3	00, Raleigh, NC 27601	
Telephone Number:	(919) 835-4032		
E-Mail Address:	JDix@trammellcrow.com		
	Signature(s) of Owner(s)*		
	David D. Sherry		
	Dallie D.1 Sherry		February 28, 2022
	DocuSigned by:	Type or print name	Date
	Elitel V. Slurry		
	Ethel V. Sherry		February 28, 2022
		Type or print name	Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

AGENT A	AUTHORIZAT	ION FORM	_
Applicati	on #:	Submittal Date:	
Katherine	L. Stringari	is the owner* of the property	for which the attached
applicatio	n is being su	bmitted:	
V	а	nendment or Conditional Zoning and Planned Development rezoning applicate uthorization includes express consent to zoning conditions that a segent which will apply if the application is approved.	
	Site Plan		
	Subdivision		
	Variance		
	Other:		
The prope	erty address	is: 1209 Chapel Ridge Road, Apex, NC 27502-8502	
The agent	for this proj	ect is: Josh Dix	
	☐ I am the	owner of the property and will be acting as my own agent	
Agent Na	me:	Josh Dix	
Address:		555 Fayetteville Street, Suite 300, Raleigh, NC 27601	
Telephon	e Number:	(919) 835-4032	
E-Mail Ad	dress:	JDix@trammellcrow.com	
		Signature(s) of Owner(s)* Docusigned by:	
		Katherine L. Stringari	March 10, 2022
		Type or print name	Date
		Type or print name	Date

^{*}Owner of record as shown on the latest equalized assessment rolls of Wake County. An option to purchase does not constitute ownership. If ownership has been recently transferred, a copy of the deed must accompany this authorization.

Exhibit A to Affidavit of Ownership Legal Description

Being all of lots 1, 2, 5, and 6 with no right-of-way taking as shown on book of maps 1987, page 556 in the Wake County Register of Deeds; all of lot 8 with no right-of-way taking as shown on book of maps 1987, page 1272 in the Wake County Register of Deeds; all of lot 10 with no right-of-way taking as shown on book of maps 1986, page 1627 in the Wake County Register of Deeds; and a portion of lot 3 as shown on book of maps 1987, page 556 with a right-of-way taking described in deed book 15527, page 772 in the Wake County Register of Deeds. Being more particularly described as follows.

Beginning at a point on the southern right-of-way line of Ackerman Hill Drive as shown on book of maps 2017, page 467, being the common corner of lands now or formally owned by MREC DT Beaver Creek LLC to the east as shown on book of maps 2006, page 1567; thence with the western line of MREC DT Beaver Creek LLC South 02°41'18" East a distance of 67.48 feet to an iron pipe, thence South 89°20'41" East a distance of 74.94 feet to an iron pipe, thence South 09°36'18" East a distance of 299.04 feet to an iron pipe, being the common corner of lands now or formally owned by MREC DT Beaver Creek LLC to the northeast and Daniel E. Corey, Et.Al. to the south as shown on book of maps 1987, page 1272; thence with the northern line of Daniel E. Corey, Et.Al. North 89°32'41" West a distance of 270.13 feet to an iron pipe, being the common corner on the eastern right-of-way line of Chapel Ridge Road as shown on book of maps 1987, page 1272; thence along the eastern right-of-way line of Chapel Ridge Road with a curve to the right a radius of 405.00 feet, an arc length of 50.19 feet, a chord bearing of South 03°10'24" East, a chord length of 50.16 feet to a point, thence North 89°32'50" West a distance of 50.00 feet to a point on the western right-of-way line of Chapel Ridge Road, being the common corner of land now or formally owned by James Patrick Serino and Melinda Busi to the south as shown on book of maps 1986, page 1627; thence leaving the right-of-way along the northern line of James Patrick Serino and Melinda Busi North 89°32'50" West a distance of 345.06 feet to an iron pipe, thence along the western line of the aforesaid land owners South 18°59'36" West a distance of 180.00 feet to a point, being the common corner of lands now or formally owned by James Patrick Serino and Melinda Busi to the northeast and Rita L. and Raymond V. Boykin Jr to the southeast as shown on book of maps 1986, page 1627; thence along the western line of Rita L. and Raymond V. Boykin Jr. South 18°59'39" West a distance of 269.66 feet to a point, being the common corner on the northern right-of-way line of Clark Farm Road as shown on book of maps 1986, page 1627; thence along the northern right-of-way line of Clark Farm Road with a curve to the left a radius of 2407.57 feet, an arc length of 172.19 feet, a chord bearing of North 71°16'12" West, a chord length of 172.15 feet to a point, thence with a curve to the right a radius of 25.00 feet, an arc length of 15.09 feet, a chord bearing of North 56°01'37" West, a chord length of 14.86 feet to a point, being the common corner of land now or formally owned by Christine and Frank A. Bria III to the west as shown on book of maps 1986, page 1627; thence leaving the northern right-of-way line with the eastern line of Christine and Frank A. Bria III North 01°00'50" West a distance of 364.22 feet to a point, thence along the northern line of the aforesaid land owners North 89°32'50" West a distance of 78.77 feet to a point, thence North 89°32'50" West a distance of 435.45 feet to a point, being the common corner of land now or formally owned by Christine and Frank A. Bria III to the south on the eastern right-of-way line of NC 540 HWY; thence along the eastern right-of-way line North 12°30'06" West a distance of 163.69 feet to a concrete monument; thence North 27°30'03" West a distance of 31.60 feet to a point, being the common corner of land now or formally owned by Shee Gopalprabhu LLC to the north, as described in deed book 18530, page 244, on the eastern right-ofway line of NC 540 HWY; thence leaving the right-of-way along the eastern line of Shee Gopalprabhu LLC

North 36°50'22" East a distance of 21.14 feet to a point, thence North 38°51'36" East a distance of 40.28 feet to a point, thence North 38°00'37" East a distance of 83.84 feet to a point, thence North 38°19'59" East a distance of 53.41 feet to a point, thence North 34°12'14" East a distance of 64.39 feet to a rebar, being the common corner of lands now or formally owned by Shee Gopalprabhu LLC to the west and Jordan Lutheran Church LLC to the northeast as shown on book of maps 1987, page 556; thence with the southern line of Jordan Lutheran Church LLC South 89°18'34" East a distance of 516.36 feet to an iron pipe, thence North 84°43'51" East a distance of 165.05 feet to an iron pipe, being the common corner on the southern right-of-way line of Chapel Ridge Road; thence along the right-of-way line with a curve to the right a radius of 50.00 feet, an arc length of 62.76 feet, a chord bearing of North 30°41'41" East, a chord length of 58.72 feet to a point, being the common corner of lands now or formally owned by Jordan Lutheran Church LLC to the west on the aforesaid right-of-way line; thence leaving the rightof-way along the eastern line of Jordan Lutheran Church LLC North 23°21'49" West a distance of 162.27 feet to an iron pipe, thence North 03°08'58" West a distance of 329.33 feet to an iron pipe, being the common corner of lands now or formally owned by Jordan Lutheran Church LLC to the southwest and CTO21 Apex LLC to the north as shown on book of maps 2021, page 1878; thence along the southern line of CTO21 Apex LLC North 88°45'08" East a distance of 388.91 feet to an iron pipe, thence North 88°45'08" East a distance of 47.28 feet to an iron pipe, thence North 88°42'10" East a distance of 177.95 feet to an iron pipe, being the common corner of lands now or formally owned by CTO21 Apex LLC to the northwest and MREC DT Beaver Creek LLC to the east; thence along the western line of MREC DT Beaver Creek LLC South 02°41'18" East a distance of 157.29 feet to a point, being the common corner of lands now or formally owned by MREC DT Beaver Creek LLC to the east and Michael J. Bishop to the south as shown on book of maps 1987, page 556; thence along the northern line of Michael J. Bishop South 51°53'36" West a distance of 297.36 feet to an iron pipe, thence along the western line of the aforesaid land owner South 25°27'10" West a distance of 274.97 feet to a point, being the common corner on the northern right-of-way line of Chapel Ridge Road; thence along the right-of-way line with a curve to the right a radius of 405.00 feet, an arc length of 118.06 feet, a chord bearing of South 56°11'36" East, a chord length of 117.64 feet to a point, thence with a curve to the right a radius of 405.00 feet, an arc length of 45.37 feet, a chord bearing of South 44°36'20" East, a chord length of 45.34 feet to a rebar, being the common corner on the southern right-of-way line of Ackerman Hill Drive and the northern right-of-way line of Chapel Ridge Road; thence leaving the Chapel Ridge Road right-of-way along the Ackerman Hill Drive right-of-way North 45°10'55" East a distance of 115.22 feet to a point, thence with a curve to the right a radius of 199.04 feet, an arc length of 145.84 feet, a chord bearing of North 66°19'50" East, a chord length of 142.60 feet to a point, thence North 87°15'57" East a distance of 28.56 feet to the point and place of beginning, containing an area of 898,352 square feet, 20.62 acres more or less.



Wake County Residential Development Notification

Developer Company Information		
Company Name	High Street District Development, Inc.	
Company Phone Number	202-295-3383	
Developer Representative Name Josh Dix		
Developer Representative <i>Phone Number</i> 202-295-3383		
Developer Representative Email JDix@trammellcrow.com		

New Residential Subdivision Information		
Date of Application for Subdivision	Unknown	
City, Town or Wake County Jurisdiction	Town of Apex	
Name of Subdivision	Chapel Ridge	
Address of Subdivision (if unknown enter nearest cross streets)	Chapel Ridge Road	
REID(s)		
PIN(s)	0732256180; 0732249869; 0732352538; 0732354594; 0732343920;	
	0732347912: 0732340602	

Please complete each section of this form and submit with your application.

Town of Apex staff will enter this information into the online WCPSS form.

Please send any questions about this form to:

studentassignment-gisgroup@wcpss.net

Projected Dates <i>Information</i>							
Subdivision Completion Date	unknown						
Subdivision Projected First Occupancy Date	Approx. 2026						

						Lot by L	ot Deve	opment <i>l</i>	nformatio	on							
Unit Type	Total # of Units	Senior Living	Studio	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	-	e Foot nge	Price	Range	,	Anticipate	ed Compl	etion Uni	ts & Date	es
								Min	Max	Low	High	Year	# Units	Year	# Units	Year	# Units
Single Family																	
Townhomes																	
Condos																	
Apartments	<u>370</u>			<u>222</u>	<u>148</u>					unk	<u>nown</u>	2026	370				
Other																	

NOTICE OF ELECTRONIC NEIGHBORHOOD MEETING

This document is a public record t	inder the North	Caronna	rubiic nec	orus Act	and may	be published	on the	10WII 3	WEDSILE
or disclosed to third parties.									
January 31, 2022									
Date									
Dear Neighbor									

Dear Neighbor

You are invited to an electronic neighborhood meeting to review and discuss the development proposal at

See attached Exhibit A See attached Exhibit A

Address(es) PIN(s)

in accordance with the Town of Apex Electronic Neighborhood Meeting procedures. This meeting is intended to be a way for the applicant to discuss the project and review the proposed plans with adjacent neighbors and neighborhood organizations before the submittal of an application to the Town. This provides neighbors an opportunity to raise questions and discuss any concerns about the impacts of the project before it is officially submitted. If you are unable to attend, you may contact the applicant before or after the meeting is held. Once an application has been submitted to the Town, it may be tracked using the Interactive Development Map or the Apex Development Report located on the Town of Apex website at www.apexnc.org. If at all feasible given emergency declarations, limits on in-person gatherings, and social distancing, an additional in-person Neighborhood Meeting may be scheduled and held prior to a public hearing or staff decision on the application.

An Electronic Neighborhood Meeting is required because this project includes (check all that apply):

App	lication Type	Approving Authority
O	Rezoning (including Planned Unit Development)	Town Council
O	Major Site Plan	Town Council (QJPH*)
0	Special Use Permit	Town Council (QJPH*)
Q	Residential Master Subdivision Plan (excludes exempt subdivisions)	Technical Review
	residential Master Subdivision Flan (excludes exempt subdivisions)	Committee (staff)

^{*}Quasi-Judicial Public Hearing: The Town Council cannot discuss the project prior to the public hearing.

The following is a description of the proposal (also see attached map(s) and/or plan sheet(s)):

The applicant is proposing to rezone the property to Planned Unit Development - Conditional Zoning District to facilitate the development of an amenitized multi-family community. Additional information will be provided at the meeting.

Estimated submittal date:	March 1 2022	

MEETING INFORMATION:

Property Owner(s) name(s): See attached Exhibit A

Applicant(s): Josh Dix, Trammell Crow Company c/o Matthew Carpenter

Contact information (email/phone): matthewcarpenter@parkerpoe.com; (919) 835-4032

Electronic Meeting invitation/call in

info: See accompanying letter with Zoom instructions

Date of meeting**: February 16, 2022
Time of meeting**: 6:00 PM - 8:00 PM

MEETING AGENDA TIMES:

Page 3 of 9

Welcome: 6:00 PM Project Presentation: between 6:00 - 8:00 PM Question & Answer: between 6:00 - 8:00 PM

- Page 718 - Instruction Packet & Affi

Last Updated: March 25, 2020

^{**}Meetings shall occur between 5:00 p.m.-9:00 p.m. on a Monday through Thursday (excluding Town recognized holidays). If you have questions about the general process for this application, please contact the Planning Department at 919-249-3426. You may also find information about the Apex Planning Department and on-going planning efforts at http://www.apexnc.org/180/Planning.

PROJECT CONTACT INFORMATION

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Development Contacts:		
Project Name: Chapel Ridge		Zoning: Rural Residential (RR)
Location: See attached Exhibit A		
Property PIN(s): See attached Exhibit A	Acreage/Square Feet	19.81 acres
Property Owner: See attached Exhibit A		
Address:		
City:	State:	Zip:
Phone: Email	l:	
Developer: Trammell Crow Company, c/o	Matthew Carpenter	
Address: 301 Fayetteville Street, Suite	1400	
City: Raleigh	State: NC	zip: 27601
Phone: 919-835-4032 Fax: n/	/a ı	Email: MatthewCarpenter@parkerpoe.com
Engineer: McAdams, attn. Kody Trowbridg	де	
Address: One Glenwood, Suite 201		
City: Raleigh	State: NC	Zip: 27603
Phone: 919-287-0841 Fax: n/	/a	mail: trowbridge@mcadamsco.com
Builder (if known): n/a		
Address:		
City:	State:	Zip:
Phone: Fax:		Email:

Please note that Town staff will not have complete information about a proposed development until the application is submitted for review. If you have a question about Town development standards and how they relate to the proposed development, please contact the appropriate staff person listed below.

Town of Apex Department Contacts						
Planning Department Main Number						
(Provide development name or location to be routed to correct planner)	(919) 249-3426					
Parks, Recreation & Cultural Resources Department						
Angela Reincke, Parks Planner	(919) 249-7468					
Public Works - Transportation						
Russell Dalton, Senior Transportation Engineer	(919) 249-3358					
Water Resources Department						
Jessica Bolin, Senior Engineer (Stormwater, Sedimentation & Erosion Control)	(919) 249-3537					
Stan Fortier, Senior Engineer (Stormwater, Sedimentation & Erosion Control)	(919) 249-1166					
James Gregg, Utility Engineer (Water & Sewer)	(919) 249-3324					
Electric Utilities Division						
Rodney Smith, Electric Technical Services Manager	(919) 249-3342					

Last Updated: March 25, 2020

January 31, 2022

Re: Notice of Virtual Neighborhood Meeting

Neighboring Property Owners:

You are invited to attend a neighborhood meeting on February 16, 2022 from 6–8pm. The purpose of the meeting is to discuss an upcoming application to rezone 7 parcels of land located at 1200 Chapel Ridge Road (PIN 0732256180), 1204 Chapel Ridge Road (PIN 0732249869), 1205 Chapel Ridge Road (PIN 0732352538), 1209 Chapel Ridge Road (PIN 0732354594), 1220 Chapel Ridge Road (PIN 0732343920), 1225 Chapel Ridge Road (PIN 0732347912), and 1512 Clark Farm Road (PIN 0732340602) (collectively, the "Property"). The Property is currently zoned Rural Residential (RR) and is proposed to be rezoned to Planned Unit Development-Conditional Zoning (PUD-CZ).

The applicant is proposing a rezoning to PUD-CZ to facilitate the development of an amenitized multi-family community. During the meeting, the applicant will describe the nature of this rezoning request and field any questions from the public. Enclosed are: (1) a vicinity map outlining the location of the subject parcel; (2) a zoning map of the subject area; (3) a preliminary concept plan; (4) a project contact information sheet; and (5) a common construction issues & who to call information sheet.

The meeting will be held virtually. You can participate online via Zoom or by telephone. To participate in the Zoom online meeting:

Visit: https://zoom.us./join

Enter the following meeting ID: 893 2645 9717

Enter the following password: 329414

To participate by telephone:

Dial: 1 929 205 6099 Enter the following meeting ID: 893 2645 9717 #

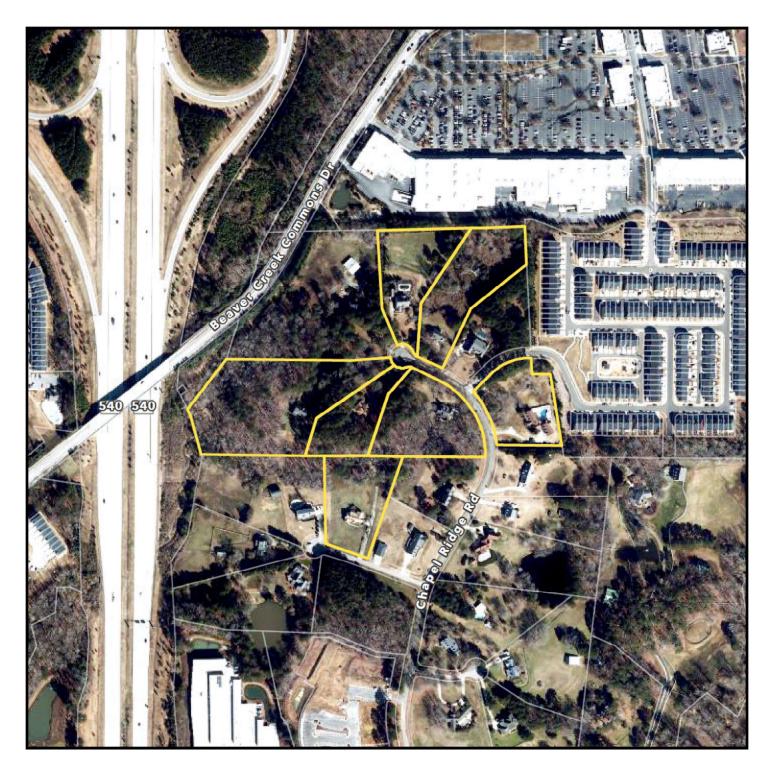
Enter the Participant ID: #

Enter the Meeting password: 329414 #

If you have any questions about this rezoning, please contact me at (919) 835-4032 or via email at matthewcarpenter@parkerpoe.com.

Thank you,

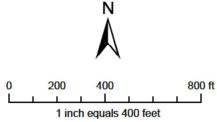
Matthew Carpenter



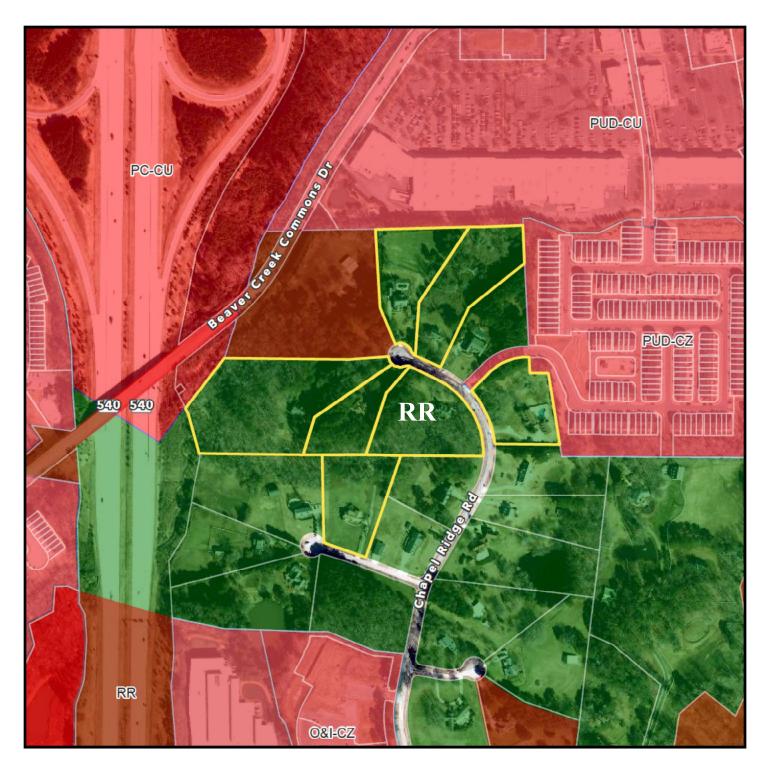
Rezoning of:

1220, 1204, 1205, 1209, 1220 and 1225 Chapel Ridge Road, & 1512 Clark Farm Road





<u>Disclaimer</u> <u>iMaps makes every effort to produce and publish</u> the most current and accurate information possible. However, the maps are produced for information purposes, and are NOT surveys. No warranties, expressed or implied ,are provided for the data therein, its use,or its interpretation.

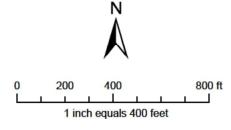


Rezoning of:

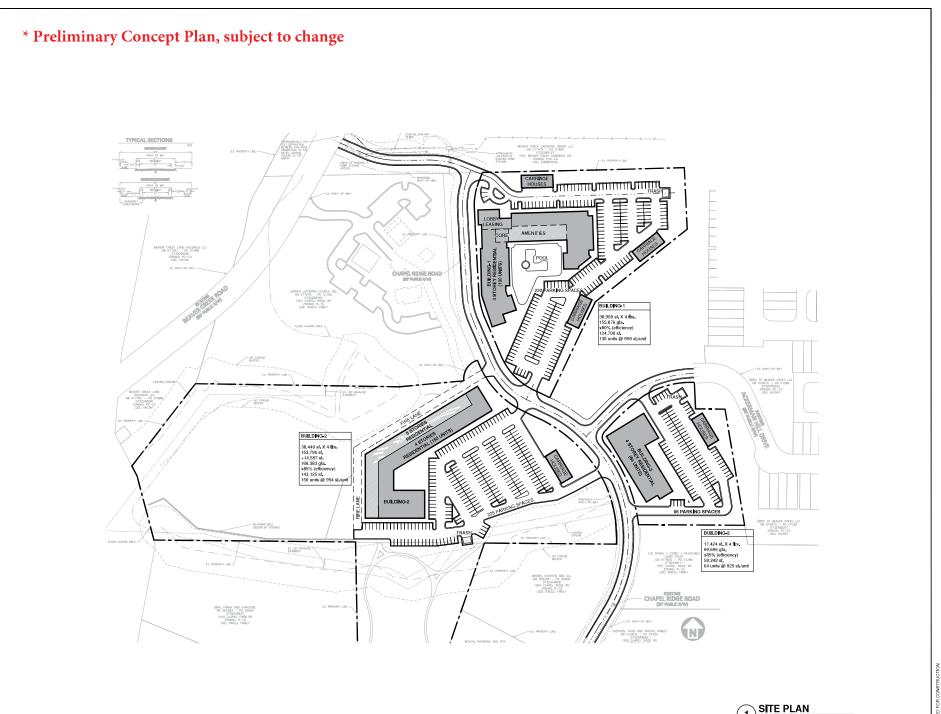
1200, 1204, 1205, 1209, 1220 and 1225 Chapel Ridge Road; & 1512 Clark Farm Road

Zoning Map

Current Zoning: RR



<u>Disclaimer</u> iMaps makes every effort to produce and publish the most current and accurate information possible. However, the maps are produced for information purposes, and are NOT surveys. No warranties, expressed or implied ,are provided for the data therein, its use,or its interpretation.



RULE JOYTRAMMELL RUBIO

CHAPEL RIDGE RESIDENTIAL PRELIMINARY SITE PLAN APEX, NORTH CAROLINA

A0-01

Exhibit A

Trammell Crow PUD-CZ Owner Information Addendum

Parcel 1

Site Address: 1200 Chapel Ridge Road

PIN: 0732256180

Deed Reference (book/page): 12343/2193

Acreage: 5.27

Owner: Su Yueh Kao and Chi Chang Ho

Owner Address: 1200 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 2

Site Address: 1204 Chapel Ridge Road

PIN: 0732249869

Deed Reference (book/page): 8218/1726

Acreage: 1.71

Owner: Michael P. Mohan and Catherine A. Mohan

Owner Address: 1204 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 3

Site Address: 1205 Chapel Ridge Road

PIN: 0732352538

Deed Reference (book/page): 12171/2059

Acreage: 2.48

Owner: Douglas Cox and Carrie Cox

Owner Address: 1205 Chapel Hill Road, Apex, NC 27502-8502

Parcel 4

Site Address: 1209 Chapel Ridge Road

PIN: 0732354594

Deed Reference (book/page): 6236/386

Acreage: 3.0

Owner: Ronald L. Stringari, and Katherine L. Stringari

Owner Address: 1209 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 5

Site Address: 1220 Chapel Ridge Road

PIN: 0732343920

Deed Reference (book/page): 4168/302

Acreage: 2.88

Owner: Larry L. Carlson and Kathi E. Carlson

Owner Address: 1220 Chapel Ridge Road, Apex, NC 27502-8502

PPAB 6867950v1

Parcel 6

Site Address: 1225 Chapel Ridge Road

PIN: 0732347912

Deed Reference (book/page): 9720/361

Acreage: 2.13

Owner: Tigh M. Dundieff and Diane Cundieff

Owner Address: 1225 Chapel Ridge Road, Apex, NC 27502-8502

Parcel 7

Site Address: 1512 Clark Farm Road

PIN: 0732340602

Deed Reference (book/page): 5351/223

Acreage: 2.34

Owner: David D. Sherry and Ethel V. Sherry

Owner Address: 1512 Clark Farm Road, Apex, NC 27502-8500

Providing Input to Town Council:

Each Town Council meeting agenda includes a Public Forum time when anyone is permitted to speak for three (3) minutes on any topic with the exception of items listed as Public Hearings for that meeting. The Town Council meets on the 1st and 3rd Tuesdays of each month at 6:00 p.m. (except for holidays, see schedule of meetings at http://www.apexnc.org/838/Agendas-Minutes). You may also contact Town Council by e-mail at AllCouncil@apexnc.org.

Private Agreements and Easement Negotiation:

The Town of Apex cannot enforce private agreements between developers and neighbors and is not a party to the easement and right-of-way negotiation that occurs between developers and neighboring property owners for easements or rights-of-way that are necessary to build the project.

It is recommended that all private agreements be made in writing and that if a property owner feels it necessary, they should obtain private legal counsel in order to protect their interests in both private agreements and during easement negotiations. The only conditions that the Town of Apex can enforce are those conditions that are made a part of the conditional zoning of the property by agreement of the developer and the Town.

As an example, if a developer offers to build a fence for a neighbor to mitigate some impact, the Town can only enforce the construction of the fence if the fence becomes a condition of the rezoning. This would occur by the developer offering the condition as part of their conditional zoning application package or at the Town Council public hearing on the conditional zoning and the Town accepting it as a condition. Private agreements regarding a fence being constructed will not be enforced by the Town.

To request that any agreement with a developer is made a part of the conditional zoning at the time of approval, you may ask at the Town Council public hearing if the agreement is included in the conditions. If it is not, you may request that the Town Council not approve the rezoning without the agreement being included in the conditions (note that it is up to Town Council whether to approve or deny the rezoning but they cannot impose conditions that the applicant does not agree to add). The developer's proposed conditions can be viewed any time after a rezoning is submitted on the Interactive Development Map at: http://apexnc.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=fa9ba2017b784030b15ef4d a27d9e795

Documentation:

Neighbors to a requested new development and/or rezoning are strongly encouraged to fully document (such as through dated photographs) the condition of their property before any work is initiated for the new development. Stormwater controls installed on developed property are not designed to and will likely not remove 100% of the soil particles transported by stormwater runoff. As a result, creeks and ponds could become cloudy for a period of time after rain events.

Last Updated: March 25, 2020

COMMON CONSTRUCTION ISSUES & WHO TO CALL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Noise & Hours of Construction:

Non-Emergency Police

Noise from tree removal, grading, excavating, paving, and building structures is a routine part of the construction process. The Town generally limits construction hours from 7:00 a.m. to 8:30 p.m. so that there are quiet times even during the construction process. Note that construction outside of these hours is allowed with special permission from the Town when it makes more sense to have the construction occur at night, often to avoid traffic issues. In addition, the Town limits hours of blasting rock to Monday through Friday from 8:00 a.m. to 5:00 p.m. Report violations of construction hours and other noise complaints to the Non-Emergency Police phone number at 919-362-8661.

Construction Traffic:

James Misciagno

Construction truck traffic will be heavy throughout the development process, including but not limited to removal of trees from site, loads of dirt coming in and/or out of the site, construction materials such as brick and wood brought to the site, asphalt and concrete trucks come in to pave, etc. The Town requires a construction entrance that is graveled to try to prevent as much dirt from leaving the site as possible. If dirt does get into the road, the Town can require they clean the street (see "Dirt in the Road" below).

Road Damage & Traffic Control:

Water Resources – Infrastructure Inspections

There can be issues with roadway damage, roadway improvements, and traffic control. Potholes, rutting, inadequate lanes/signing/striping, poor traffic control, blocked sidewalks/paths are all common issues that should be reported to Water Resources - Infrastructure Inspections at 919-249-3427. The Town will get NCDOT involved if needed.

Parking Violations:

Non-Emergency Police

Unless a neighbor gives permission, there should be no construction parking in neighbors' driveways or on their property. Note that parking in the right-of-way is allowed, but Town regulations prohibit parking within 15 feet of driveways so as not to block sight triangles. Trespassing and parking complaints should be reported to the Non-Emergency Police phone number at 919-362-8661.

Dirt in the Road:

James Misciagno

Sediment (dirt) and mud gets into the existing roads due to rain events and/or vehicle traffic. These incidents should be reported to James Misciagno. He will coordinate the cleaning of the roadways with the developer.

Dirt on Properties or in Streams:

James Misciagno

919-372-7470

Danny.Smith@ncdenr.gov **Danny Smith** Sediment (dirt) can leave the site and get onto adjacent properties or into streams and stream buffers; it is typically transported off-site by rain events. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the appropriate repairs with the developer. Impacts to the streams and stream buffers should also be reported to Danny Smith (danny.smith@ncdenr.gov) with the State.

James Misciagno

919-372-7470

During dry weather dust often becomes a problem blowing into existing neighborhoods or roadways. These incidents should be reported to James Misciagno at 919-372-7470 so that he can coordinate the use of water trucks onsite with the grading contractor to help control the dust.

James Misciagno

919-372-7470

Excessive garbage and construction debris can blow around on a site or even off of the site. These incidents should be reported to James Misciagno at 919-372-7470. He will coordinate the cleanup and trash collection with the developer/home builder.

Temporary Sediment Basins:

James Misciagno

919-372-7470

Temporary sediment basins during construction (prior to the conversion to the final stormwater pond) are often quite unattractive. Concerns should be reported to James Misciagno at 919-372-7470 so that he can coordinate the cleaning and/or mowing of the slopes and bottom of the pond with the developer.

Stormwater Control Measures:

Jessica Bolin

Post-construction concerns related to Stormwater Control Measures (typically a stormwater pond) such as conversion and long-term maintenance should be reported to Mike Deaton at 919-249-3413.

Electric Utility Installation:

Rodney Smith

Last Updated: March 25, 2020

Concerns with electric utility installation can be addressed by the Apex Electric Utilities Department. Contact Rodney Smith at 919-249-3342.

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Instruction Packet & Aff Neighborhood Meetings

NEIGHBORHOOD MEETING SIGN-IN SHEET

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Meeting Address:	Online via Zoom		
Date of meeting:	February 16, 2022	Time of meeting: $6:00$	
Property Owner(s	name(s): See exhibit A attached to neig	hbor notice letter	
Applicant(s): Josh Dix, Trammell Crow Company			

Please <u>print</u> your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.	See attached attendance list				
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					

Use additional sheets, if necessary.

Chapel Ridge PUD Neighborhood Meeting Sign-In Sheet February 16, 2022

Mike Bishop

Rita Boykin

Sara Grover

James Faulkner

Melinda Busi

Jim Serino

Nancy Corey

Prakash Patel

Mike Mohan

Michael Merker

Carrie Cox

Kathi Carlson

Jason Buehring

Scott Kipp

David Prestrud

Shree Gopalprabhu LLC

Russ Overton

Cat Mohan

Richard Biseli

Charles Pope

^{*}Contact information was received but has been redacted for filing

SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

Property Owner(s) name(s): See exhibit A attack	ned to neighbor notice letter	
Applicant(s): Josh Dix, Trammell Crow Com		
Contact information (email/phone):		
Meeting Address: Online via Zoom		
Date of meeting: February 16, 2022	Time of meeting: 6:00	

Please summarize the questions/comments and your responses from the Neighborhood Meeting or emails/phone calls received in the spaces below (attach additional sheets, if necessary). Please state if/how the project has been modified in response to any concerns. The response should not be "Noted" or "No Response". There has to be documentation of what consideration the neighbor's concern was given and justification for why no change was deemed warranted.

Question/Concern #1: How many units are planned for the project?

Applicant's Response: We expect around 357 apartment units spread across three separate buildings along Chapel Ridge Road, although the final density and acreage will be determined when we file the rezoning application and PUD documents.

Question/Concern #2: Can you look at moving the dumpster currently shown along the southern property line? As shown, the dumpster would be close to my home and I do not want to hear and see garbage trucks pulling in and out.

Applicant's Response: Final dumpster locations will be determined at the site plan stage, but we can look at adding a condition to the PUD text that there won't be a dumpster within x feet of your property line.

Question/Concern #3: Will the extension of Chapel Ridge Road be public right-of-way or a private road? If public right-of-way, will it be maintained by NCDOT or the Town of Apex?

Applicant's Response: The portion of the Chapel Ridge extension north of the existing cul-de-sac, all the way up to the shared property line with Beaver Creek will be public right-of-way. The portion across the Beaver Creek property will be a private road but will be subject to a public access easement. We have had preliminary discussions with Town transportation staff, but do not know definitively at this point whether the public right-of-way portion of Chapel Ridge will be maintained by the Town or NCDOT.

Question/Concern #4: General concerns about traffic, including cut through traffic from residents of the proposed development.

Applicant's Response: We expect the Chapel Ridge Road extension to improve traffic connectivity in the area. We are in the process of completing a Traffic Impact Analysis that examines existing and proposed traffic and will recommend any necessary road improvements. The TIA will be filed with our rezoning application.

Chapel Ridge North PUD Summary of Neighborhood Meeting Discussion February 16, 2022 6:00 PM via Zoom

Question 1. What is the expected density? Net and gross if you have it.

Response: We are currently planning approximately 350 units and an overall density between 17-20 units an acre depending on our final total acreage.

Question 2. Could you further explain the PUD designation? Maybe give more background? Why PUD. Obviously it's zoning adjacent to Beaver Creek. What real flexibility does that give you? Or what are Apex's from a PUD zoning as opposed to something more traditional? And a follow up, how does that fit into Apex's land use plans?

Response: Normally when you go for rezoning request, you're asking for a change from the base district, so you could be asking for a change from low density residential to high density residential. So those standards for those districts are outlined in the UDO and so what the PUD does, it allows you to draft your own ordinance for just this property and the idea is you can change certain standards like, provide larger sidewalks or reduce a setback. You can change a lot of different things to allow kind of a unique site design. So, part of the reason we went that route, was because it allows us flexibility as to where to locate buildings, driveways, RCA areas, which we will comply with, which won't be any deviation we don't think anyway. So what the Town looks for when you do a PUD, is in exchange for those separate standards, they look for a development that's higher quality. They look for things like architectural commitments, and conditions in that text that ensure that the Town and the neighbors will get a high quality development in that location. It also adds a lot of conditions and certainty at this stage that you don't see in a regular re-zoning request.

Question 3. I'm at 1213 Chapel Ridge Road, and I just want to make it clear that I don't want to be the "donut hole" in the center of the re-zoning, nor does the town want a donut hole where the property and the town knows So currently my property is for sale for current market value

Response: Reaching out in next week to better understand what your goals are.

Question 4: It's my understanding that the Toll brothers was denied a permit at the beginning of the neighborhood due to [not] enough resources for school and education purposes, so can you explain what you're doing to alleviate those concerns that the Town posed the Toll Brothers.

Response: We don't have a definitive answer on schools right now, but we are aware of the school capacity situation in Apex and we're in the process of doing some research as to what schools in the neighborhood are capped, what schools are under construction, are planned over the next several years, and how those future opening and districting will align with our project. We have had some early discussions as a team about that. We've reached out to Wake County Public Schools, and so it's an ongoing conversation.

Question 5: I assume as part of the traffic studies as well, for what you're proposing it may include a light at Chapel Ridge Road and Old Chapel Road but again I assume you're not quite far enough along to reach those discussion topics.

Response: We don't anticipate there will be a light required but we are in the process now of putting together the traffic impact analysis which will be finished by the time we file. So once we're done with that, we will submit it to the Town and the Town's traffic engineers... well first, when you file a TIA you meet with the Town's engineers and agree on the scoping of the study and what your development will look like which will trigger the traffic numbers in the study. So once we file the TIA the Town will review it and their traffic engineers will recommend mitigation efforts or improvements required based on the impact of the traffic impact analysis.

<u>Question 6</u>: Is the Church property going to connect to the proposed Northern access to your development or is it going to have a separate driveway?

Response: Right now the plan is for the church to have its own driveway. We have thought about it and have reviewed the plans. First, the Church is well ahead of our planning process and they're moving forward and the last thing we want to do is and the last thing they wanted us to do is derail their process. That became difficult. Second, as you all know there are very strict requirements for RCA areas and greenspace, and so we would struggle to fit a roadway anywhere on their site that would impact their greenspace requitement. In the end it made more sense to route the road to the North across the space that is being used as a pump station pull out drainage pond for the shopping center and that doesn't impact the church or their plans whatsoever.

Question 7: I have a couple of questions on the site plan/layout. The first Question: you have the color that runs over my property line. Could you explain a little about that?

Response: This color is actually my way of showing the steam buffer. Not a plan or anything, just trying to identify the buffers.

Question 8: have a concern about that because that site map that you're showing everybody, unless you can expand it, the site plan that was given to us, the Southwest of building 3, there is an existing stream on that property so if you develop that property what's going to happen to that stream in terms of pushing it on to people's property to the south?

Response: I can clarify a little on this one. Early on in this process we downloaded GIS data before we could get survey teams and environmental consultants out to the site. And so that line came from GIS data but we have since had natural resource consultants go out and evaluate the environmental features on this site and the stream buffer that has been determined kind of ends about in the middle of that southern parcel where that green line is going through and does not extend. So it's even further west than the ..and down of that far south parcel above that buffer and everything to the right of that has been determined non-jurisdictional. Which The town of Apex , the natural resource consultants are coordinating with them to confirm their initial determination but we do not plan to impact any stream buffers.

Question 9: that leads me into my second question. And thank you for answering that, is on the west side are you keeping that open, I think you called it a park area and all that, there is a large portion of that that is deemed wetlands, okay. I believe it's up and to the left. Are you planning on petitioning to convert any of those wetland at any point in the future. And secondly, no matter what, if you do building #3, are you planning on doing an environmental impact study?

Response: We do not plan to have any wetlands impacted by this project. I believe in the most recent determination we received they did not find any jurisdictional wetlands out in that area. And that will still go through coordination through the town and confirmation with Town staff. But the only environmental features determined on this site by our consultant are the stream along the far western property boundary kind of parallel to beaver creek road and then that portion of the southern stream up until about the middle of that southern parcel.

Follow up: ok did I hear that right? You checked and you said it wasn't wetlands?

Response: Yes, that's correct. We've had a professional environmental consultant evaluate that area.

Question 10: Russ Overton: Mike asked a question about the traffic study and the signal, but I was wondering about the, at the appropriate time, if it was possible to get a copy of the traffic study just to see what the assumptions are, how much traffic this is actually going to out on Chapel Ridge Road itself, not necessarily a question about a signal or not, just traffic in general.

Response: We will actually file that as part of our application. So it will be publicly available.

Question 11: Ok and number of units are one thing, do you have an idea of breakdown of units; if its 1 bedroom, 2 bedroom, 3 bedroom and potentially with that how many people that might end up bringing and also then how many parking spaces would then be required?

Response: Obviously Russ, it's a bit in flux as you could imagine, but we're looking at a pretty even mix, about 50/50 or 45/55 between 1's and 2-3s. that's the current plan. I just pulled it up real quick. It looks like we're 45/45/10. So 45% one bedroom, 45% 2, and 3 bedroom 10%. The average size for the units is under 1,000 square feet, 950 across the buildings. We are looking at all surface parking if you can see on this plan, nothing structured and a ratio that will be 1.5 maybe even under that. We will be refining the parking as we refine the bedroom count mix. We like to make sure generally in all developments we do that you have about one parking space per bedroom. So it works out somewhere about that 1.5 a little less.

Question 12: Are you going with the Apex standard parking or are you asking for any special reductions? Does the PUD allow for any reductions as a special condition or anything?

Response: The PUD does allow for it, but you know we went in to our initial meeting with the Town and what you see I believe meets the UDO standard, which I think is 1.5 if I remember correctly. But the Town did mention they have a lot of parking lot landscaping requirements that actually exceed what you see here, so that may reduce a couple of spaces. So we're going to be right around what's required maybe a couple spaces less, we don't know for sure yet.

Question 13: I was going to ask you about storm water. I know it's a preliminary concept plan, but is it under the parking? Have you contemplated that yet? How you might treat stormwater?

Response: We're planning on the majority of the treatment to be through surface treatment, through most likely a wet pond, essentially a bio retention area but more of your typical surface pond treatment as opposed to large underground vaults.

Question 14: There's like a curve line, it's in the middle, it's probably I'm guessing where the cul-de-sac is, yes right there, So it's a curve and it's a collector and Matthew I was asking you PPAB 7761823v1

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it's a collector by Apex standards coming out of Hempstead, so the rest of it's a DOT road, are you contemplating some abandonment by DOT, I'm guessing that might be an abandoned right of way that you'd be taking advantage of because you're re-aligning the road and then would that become a private street, an Apex street, how are you dealing with the DOT situation with the current status of the road?

Response: We talked to the Town transportation stuff about this and they are open to all of Chapel Ridge being a Town maintained road but we haven't settled on that yet. The majority of the extension would be public Right of way, whether that's DOT or that's the Town of Apex. Right here, you can see that line, shaded in the blue area here, north of that area shaded in blue is the Beaver Creek Commons Property. So what we're going to acquire from them is an easement over this portion and so for that reason that portion of the road is most likely going to eb a private drive. What that will look like practically we think, is that will execute a public access easement to the Town so that it will function just like a public right of way, but be maintained by the property owner.

This curve continues there so you can see think pink on the screen and the property line is actually more about right here and so this is intended to have that right of way go to the Town or to NC DOT, and regardless of how it ends up working out, it would be public right of way of some sort from that pink line I'm drawing back down to the existing right of way. So that swath would be right of way. And as Matthew said this (references blue portion) is a little more complicated and we're working with the Town in terms of the best way, the intention is that it's public access no matter what. But what form legally it takes, is still TBD.

Question 15: I have a very minute question that probably pertains alone to my property, but in the building 2 schematics you have there, is there room for negotiation as far as where you have that trash dumpster? I would really like to not go out on my back porch and be smelling trash.

Response: Absolutely we can talked about where that can be. Again, I wouldn't get too hung up on a lot of this but it's a valid point and we're happy to talk about that. The Architect and Kody are taking notes. We will take a look we're that can be. The locations of things like dumpsters, will actually be determined at the site plan and so that process happens after the zoning. So locations of things like this are normally sited at site plan, but there's some specific requests like the one you just raised, that we can make sure of that before we go to site plan. We can work on a condition that would limit how close dumpsters can be placed to your property line.

Question 16: Going back to that buffer area to the West of Chapel Ridge Road and the Church property, who would be responsible for whatever would be in that buffer zone as far as planting and that kind of thing. You drew those pink lines to the West...

Response: So the intent is that this would all be sidewalks and would be landscaped and would all be done by the development team, by us, and that we would maintain those buffer zones as we would the rest of the property. Commercially landscaped, commercially mowed, things like that.

Question 17: One other question, on the south side under the property line, there's a pond that runs through the property line, what is your consideration of that pond. We can talk offline about it if you would like, but if you have an answer?

Response: We currently don't have any plans to use the pond but can discuss this further.

Question 18: My personal feeling, and I'm only speaking for myself, I have always had a hard time with it being maintained by DOT, maintenance whatever, even though it looks great right now because they just repaved it, but just to get some consistency rather than it being segmented Dot owns that then back to Apex.

Response: We don't have strong preferences who maintains it. For example, if you want to have Apex maintain all of Chapel Ridge, we can definitely include you in those discussions, might make them more likely to take over the street

Question 19: What will be discussed at EAB tomorrow night? Can you give us details? Are you asking them for anything? Proposing something? What do they look for what do they do? Can you clue us into an EAB meeting in Apex?

Response: The EAB is the Environmental Advisory Board and it's kind of like, a sub-board for the a planning commission for the environment. What they'll do, we've submitted a request to them saying you know, we've filed this zoning request, here are our initial plans, and they will provide recommendations to us that will provide a certain number of electric vehicle charging stations. They request things like signs that demarcate wetlands, or buffers, solar power. So the initial meeting is going for them to provide recommendations to us as to what they think we should include in our re-zoning application. They're a little unique, they are the only jurisdiction that has this that I know of.

Question 20: Regardless of the traffic study, we're actually living here in this subdivision and have noticed a ridiculous amount of traffic that has come from that Hempstead community, so whether you take over the whole road, or just that small portion, I'd like to strongly encourage the use of speedbumps through there. People are unfortunately using it as a cut through to get to other areas of Apex. I normally take walks, and I'm constantly wondering if I'm going to be hit because people are not driving 25 mph through there. So I would like to strongly suggest your consideration of that.

Response: We can explore traffic calming measures but Town transportation staff and NCDOT are normally pretty strict when it comes to traffic calming measures.

Question 21: I have several things, but let me start of by saying (address given) and my husband and I along with our neighbors are opposed to this, strongly. I just want to go ahead and get that out front. I think everyone else probably knows that. First, I noticed at the beginning of the introduction, you showed the overview of everything and you pointed out Beaver Creek, you pointed out Hempstead, you pointed out these neighbors that want to sell and put apartments there, and noticed, I think you may have pointed out, 540, office park and you did the 100 townhomes that are supposed to be possibly developed here. You did not mention the homeowners who are single family homes, who want to stay here. I just thought that was sort of obvious. You talk about everyone else here in the neighborhood but those of us, some of us, living here for over 30 years.

Response: There was no nefarious intent there. You all live there

Question 22: I'm sure there wasn't but you talked about everyone else...but anyway.. I'm going to continue from there, okay? You were going to out forward to the Town of Apex, requesting a rezoning from rural residential, even though the 2045 plan says medium density, to the PUD. Apparently, you are not submitting your own land use map amendment to Apex, you are requesting a PUD – CZ. All that is, is just going around and changing that property from medium to high density. That's all it is. Instead of going in and being straight forward about it and trying to see if you can get it re-zoned ...anyway...you know what I'm talking about. It just doesn't seem quite right. I know that's the way things are done.

Response: We are not actually trying to get around anything, that's actually a change in the law recently. You know, before, I think it was last year, we you submitted a rezoning request that was different than the future land use map, you also submitted a future land use map amendment request. And so now, 160D, which is the new statute that governs development and municipalities, when you re-zone properties and the proposed use is different than the land use map, the land use map is automatically amended. So even if we filed a future land use map amendment, the Town wouldn't review it. You know, the Town did that in another case, and the said, you know it happens automatically now, we don't accept these with re-zonings.

Question 23: You have an area on Barnside lane and that area is approximately a little over 21 acres. And you're dealing with a little over 19. They have gone to the Town of Apex, and first of all I think they were request 116 townhomes. That did not pass by the Town council, because of schooling and I think a few other issues. You on the other hand, are looking at little over 19 acres and are proposing, now well was 344, now I think its 350 approximately on just about the same acreage. I mean that's going from 4 plus units an acre down her on the Barnside and you're proposing 17-19 units per acre. That's just the extreme. I mean what they're proposing at Chapel Ridge Townes is within the medium density, the lower part because medium density for residential is 3-7 units per acre. Why are you coming up with this many? Is it because you're having to pay that much more for the property than they have? I mean when you're talking about putting 4 story apartment buildings next to single story family homes, it's just...abhorrent. It's about the only word I can think of right now. ... I can't understand why one developer is working at 100 units and you're working at 350 on pretty much the same acreage. But, okay, after that, the other thing I want to talk is let's see.. you were talking about traffic. The road coming through here. Well, if you think this is such an ideal situation to the extend Chapel Ridge Road out behind a shopping center, coming in and out at the back of the shopping center then why don't you think about putting a cul de sac right there before your apartment buildings start. And that way you'll have that one entrance and exit. They can also use Hempstead, unless, because you want to put in 350 units you have to have 3 exits, is that why?

Response: No, it's not the density. The Town really dis-favors cul de sacs, you know they haven't said this, but my experience in the past they probably wouldn't approve a cul de sac here. They like connectivity and different access points to help with traffic circulation. But that's what this plan does. We differ in that I understand.

Question 24: I understand completely and it makes sense not to put one there, but I do not see 350 units/people or more, wanting to go in an and out of that back entrance from the back of the shopping center. They're going to come in off Chapel Ridge Road. I mean Olive Chapel and it's just going to add to that I mean we have what we have we're dealing with now Hempstead is 193 townhomes I believe. They now want to put 1 00 at the entrance. And you're talking 3 50 more individuals or families I mean that traffic situation is going to be again just a poor just abhorrent.

PPAB 7761823v1

Absolutely it's going to be a nightmare. We live here. And you don't. Ok you got all this green and it might not be wetlands, but it's wet back there which if you've had anyone traipsing back through there and we have seen surveyors going back there.

They know it's wet. That's an awful lot of land that's not cannot be used I mean you can say it's part of the RCA and you're going to use it for screen buffers and stuff like that and storm retention. That's a lot of acreage that's not being utilized and then you have a Sherry property which is right beside my property and also the Brea's and no You're going to jut out between three homes I mean that's just when you look at that it just makes no sense whatsoever.

Response: The Sherry property actually you know they're right now they're no buildings or developments proposed for that lot. So the site, that property is included in the site, but there are no buildings there so it won't jut out at all by your property. It will stop along the edge of the parking lot right there.

Question 25: but what should happen in 10 years? You own the property what's to say it's not going to be developed later on?

Response: If we include it as part of our plan, and show it as open space or RCA area, then it won't be. If we cut it off and sold it, it could be re-developed. But it's a small enough lot that it would be tough to support really a separate development on just that parcel because it's not its own space.

Question 26: why even have their why even have that lot in that home in with everything else? I know part of it because I know little bit of what's been going on we have a bunch of neighbors rather than sell their houses individually, decide to get together because they thought they could get more money for their property and the Sherry's said OK let's get in and join it and it just..... I don't know anyway that's not real please pleasant either. Then there's the issue with the lighting. You've got lighting at all on these apartments lights I'm sure on the buildings lights in the parking lot next to single-family homes that's not good. We've had issues with the office park down here. It took nine months to get that straight and it still an awful lot of lights with three more buildings to. So there's a concern. I mean we're talking concern with trash cans, lighting is another concern. Lighting is right next to those people and it's just....

It's a mess I mean you look at something you're going in and putting apartments. And I want to say 19 acres you're not even utilizing 19 acres and then they're just right next to single-family homes whether it's the Bishops whether for the Coreys itit just...It does not look like it's been well thought out and well planned .. um.... I'm trying to think there's anything else I wanted to ask because I've got notes here and there. It is not wanted. When you take a look at the chapel the Old Chapel Ridge land map, the original development, which was 22 lots and you look at that now and it wants to be chopped up into six different projects you might say it's not really projects, but you're talking flex 540, you're talking the office Park, you're talking a possible 100 and townhomes at the south end, you're talking about those people who have single-family homes who wish to stay here who do not wish to sell out to developers you have this, your group which wants to put 350 high-rise apartments right next to us.

Question 27: Can I follow up on her.... Rita sparked some questions and I want to get a couple of them to on the cul-de-sac issue and Matthew I know you said with Apex likes but I might would point to ... I think it's the village at Westford apartments. This was brought up

previously. The developer actually built a cul de sac in that and that it's kind of stubbed my opinion from a traffic engineer prospective, which I am one they should've connected through but they didn't for some reason so it's really hard to understand when Apex says things like that why one subdivision gets something in our subdivision get something different.

Response: That's fair. What I was referencing is there's language in the PUD section in the UDO that actually says that cul-de-sacs should be avoided. I think what people do, is reference the sentence after that that says, except for some extenuating circumstances and they probably cited those.

Question 28: I'm not trying to call you out with me in particular have pointed some of these inconsistencies out to Apex and we seem to always be at the... so I get Rita's frustration and a lot of frustration in the neighborhood, because we seem to get the deal and I think I mentioned it feels like a death by 1 000 cuts sometimes... well if I can qualify something you said on the Sherry property, you said that property could be included in the CRA? I wanted to... is it included as a CRA or not.

Response: Let me be more clear on what we're evaluating there, We're trying to decide whether we're going to include that lot in our re-zoning request in this development at all. And so if we include it, I think, and Kody can correct me if I'm wrong, most of it will be RCA and if we don't include it then it would stay a single-family home and it wouldn't be part of our re-zoning request.

Question 29: The medium density thing is hard to swallow ...a sub-committee of the Town Council invited us to a meeting. Some of the neighbors that wanted to sell, some that don't want to sell, it was a mixed bag from the neighborhood I guess, we all went they were asking us our opinion I guess. We all got to speak. Well, the ones that wanted to speak, because they were changing the plan at the time and ultimately they concluded through a no vote not to change the plan, so I think it's hard to understand you know where Apex is at regardless of what the law allows or doesn't allow it's like there's an open dialogue about keeping the Land use plan at medium density despite what some people may have wanted to change it and they kept it that way so I think that's that again something maybe for us talk to Apex about to get an understanding. For myself, I just want to understand what the neighborhood should or wants to become. And I'll make this my last comment; as I feel like Rita. I'm not supportive of this either.

Question 30: My wife and I are at 1313 Chapel Ridge Rd. which is next-door to Russ across the street from Rita and Melinda and I just wanted to say amen to everything to Rita said. I want it to be understood that she pretty much speaks for all of us who plan to stay here, in her concerns and her frustration with the way things have gone here in in particular what's being proposed here so just want to put that on the table thanks.

AFFIDAVIT OF CONDUCTING A NEIGHBORHOOD MEETING, SIGN-IN SHEET AND ISSUES/RESPONSES SUBMITTAL

This document is a public record under the North Carolina Public Records Act and may be published on the Town's website or disclosed to third parties.

, Ma	tthew J. Carpenter	, do hereby dec	lare as follows:	
	Print Name			
1.	I have conducted a Neighborho Master Subdivision Plan, or Sp <i>Meeting</i> .			
2.	The meeting invitations were ma all property owners and tenar neighborhood association that ro of 14 days in advance of the Neig	nts abutting and within 3 epresents citizens in the no	00 feet of the subject pr	operty and any
3.	The meeting was conducted at	online via zoom	(lo	ocation/address)
	on February 16, 2022	(date) from <u>6:00</u>	(start time) to $8:00$	(end time).
4.	I have included the mailing list, map/reduced plans with the app		sheet, issue/response sumr	nary, and zoning
5.	I have prepared these materials	in good faith and to the be	st of my ability.	
	Date OF NORTH CAROLINA TY OF WAKE	By:		
Sworn	and subscribed before me,	au Wielan	, a Notary Public for the a	above State and
Count	y, on this the $\frac{1}{2}$ day of $\frac{1}{2}$	atu , 2022	_·	
	SEAL WIELANDIMMINIMINIMINIMINIMINIMINIMINIMINIMINI	Cinay	Notary Public Wieland Print Name on Expires: 2-22-	26

acket & Affidavit

Notice List for Neighborhood Meeting

OWNER	MAILING ADDRESS	MAILING ADDRESS2	MAILING ADDRESS3
PEX TOWN OF	PO BOX 250	APEX NC 27502-0250	MAILING ADDITEGGG
SHOK, VIMAL DEV DEV, SANGITA VIMAL	1015 WAYMAKER CT	APEX NC 27502-4325	
SHRAFI, ZAHRA JOGHATAEI, MAJID	1013 WAYMAKER CT	APEX NC 27502-4325	
AVER CREEK CROSSINGS OWNER LLC	TYLER COVINGTON	1111 METROPOLITAN AVE STE 700	CHARLOTTE NC 28204-3424
AVER CREEK LAND HOLDINGS LLC	2574 CORLEY WOOD DR	RALEIGH NC 27606-4266	
CK, PATRICK A LIU, JANET F	8412 SECRETO DR	RALEIGH NC 27606-0030	
ATTA, HIMANSHU	1004 WAYMAKER CT	APEX NC 27502-4325	
SHOP, MICHAEL J	1213 CHAPEL RIDGE RD	APEX NC 27502-8502	
YKIN, V RAYMOND JR BOYKIN, RITA L	1500 CLARK FARM RD	APEX NC 27502-8500	
IA, FRANK A III BRIA, CHRISTINE	1516 CLARK FARM RD	APEX NC 27502-8500	
NN, KENNETH G. BUNN, ERICA CHRISTINE	1408 BARNSIDE LN	APEX NC 27502-8501	
WALDA, NATHAN BUWALDA, SUZANNE	1028 WAYMAKER CT	APEX NC 27502-4325	
RLSON, LARRY L CARLSON, KATHI E	1220 CHAPEL RIDGE RD	APEX NC 27502-8502	
RSON, DARREN DWAYNE SR CARSON, REGINA	2045 ACKERMAN HILL DR	APEX NC 27502-5109	
AGANTIPATI, RAJ KIRAN VEMURI, JYOTSNA	4016 SYKES ST	CARY NC 27519-7301	
IU. CHERIE	2065 ACKERMAN HILL DR	APEX NC 27502-5109	
G PROPERTIES LLC	1010 GOODWORTH DR	APEX NC 27539-3869	
OPER, DONNA L THE DONNA L COOPER TRUST	2047 OLD CHAPMAN DR	APEX NC 27502-4326	
REY, DANIEL E II THE DANIEL E COREY II REVOCABLE LIVING TRUST	1301 CHAPEL RIDGE RD	APEX NC 27502-4320 APEX NC 27502-8503	
X, DOUGLAS COX, CARRIE	1205 CHAPEL RIDGE RD	APEX NC 27502-8502	
D21 APEX LLC	1140 N WILLIAMSON BLVD STE 140	DAYTONA BEACH FL 32114-8112	
NDIEFF, TIGH M CUNDIEFF, DIANE	1225 CHAPEL RIDGE RD	APEX NC 27502-8502	
/E, GHANSHYAM	2055 ACKERMAN HILL DR	APEX NC 27502-5109	
ENEZER, CHARLES EBENEZER, JULIANA	1018 WAYMAKER CT	APEX NC 27502-4325	
GLISH, AMANDA ENGLISH, CORY	2046 ACKERMAN HILL DR	APEX NC 27502-5109	
IG, YUEHONG WANG, YU	105 BRIAR RIDGE CIR	WINSTON SALEM NC 27104-4482	
JLKNER, JAMES V JR FAULKNER, BARBARA B	1513 CLARK FARM RD	APEX NC 27502-8500	
DI, BIPIN PONNAPALLI, VANIPRIYA	2047 ACKERMAN HILL DR	APEX NC 27502-5109	
OVER, SARA W PRESTRUD, DAVID G	1313 CHAPEL RIDGE RD	APEX NC 27502-8503	
MPSTEAD AT BEAVER CREEK HOMEOWNERS ASSOCIATION,	CHARLESTON MANAGEMENT CORP	PO BOX 97243	RALEIGH NC 27624-7243
SLEY, MICHAEL HINSLEY, EMILLEE	2048 ACKERMAN HILL DR	APEX NC 27502-5109	
ECKBERG, ERIC HOECKBERG, ERIKA	2054 ACKERMAN HILL DR	APEX NC 27502-5109	
RIWALA, AJAY H JARIWALA, DIVYABEN S	1032 WAYMAKER CT	APEX NC 27502-4325	
RDAN LUTHERAN CHURCH INC	1031 PEMBERTON HILL RD STE 202	APEX NC 27502-4278	
DZIK, MARY	1008 WAYMAKER CT	APEX NC 27502-4325	
D, SU YUEH HO, CHI CHANG	1200 CHAPEL RIDGE RD	APEX NC 27502-8502	
RUMBAIAH, KAVERIAPPA MUDDIYADA RAMESH, NIVEDITA KAMBEYANDA	2056 ACKERMAN HILL DR	APEX NC 27502-5109	
IG, JAMES KING, JOANNE	2052 ACKERMAN HILL DR	APEX NC 27502-5109	
LLASSERY, GANGADHARAN SHELLY SHELLY, HEERA	329 HOLSTEN BANK WAY	CARY NC 27519-7574	
NDATI, VIJAY NUNI, MADHU	1034 WAYMAKER CT	APEX NC 27502-4325	
M, CHRISTOPHER HUANG, WEI	1024 WAYMAKER CT	APEX NC 27502-4325	
NAN	6708 MILLORY SPRINGS LN	CARY NC 27519-8500	
LIN	647 SEALINE DR	CARY NC 27519-2572	
NI, SURESH SURESH, NIVETHA	2049 OLD CHAPMAN DR	APEX NC 27502-4326	
RIN, MICHAEL	1021 WAYMAKER CT	APEX NC 27502-4325	
GRAW, BENJAMIN IV	2043 OLD CHAPMAN DR	APEX NC 27502-4326	
HAN, MICHAEL P MOHAN, CATHERINE A	1204 CHAPEL RIDGE RD	APEX NC 27502-8502	
HANASUNDARAM, RANJITH KUMAR TRUSTEE MUTHURAMAN, RAJALAKSHMI TRUSTEE	2051 OLD CHAPMAN DR	APEX NC 27502-4326	
NAHAN, RICHARD CHARLES TRUSTEE RICHARD C MONAHAN LIVING TRUST	4225 LOFTY RIDGE PL	MORRISVILLE NC 27560-9586	
EC DT BEAVER CREEK LLC	STE 130	13860 BALLANTYNE CORPORATE PL	CHARLOTTE NC 28277-3167
EC DT BEAVER CREEK LLC	11610 N COMMUNITY HOUSE RD STE 100	CHARLOTTE NC 28277-1894	
DELLA, VIDYADHAR PATIBANDLA, ANUSHA	1014 WAYMAKER CT	APEX NC 27502-4325	
ERTON, RUSS OVERTON, KRISTAL RAWLS	1305 CHAPEL RIDGE RD	APEX NC 27502-8503	
DIPALLI, NAVEEN	1010 WAYMAKER CT	APEX NC 27502-4325	
PE, CHARLES V POPE, IRIS ISLEY	1408 OLIVE CHAPEL RD	APEX NC 27502-8511	
F. SANDRA PUFF. JOHN	1020 WAYMAKER CT	APEX NC 27502-4325	
JJALA, TARUN KASHYAP YELLAPRAGADA, LAVANYA	1017 WAYMAKER CT	APEX NC 27502-4325	
, DANFENG JIANG, CHUANYAN	2655 BRYANT POND LN	APEX NC 27502-4318	
E, ROGER	623 HALCYON MEADOW DR	CARY NC 27519-7701	
COFORTE, JOHN A ROCCOFORTE, MARIE F	1517 CLARK FARM RD	APEX NC 27502-8500	
RINO, JAMES PATRICK BUSI, MELINDA	1304 CHAPEL RIDGE RD	APEX NC 27502-8500 APEX NC 27502-8503	
INO, JAMES PATRICK BUSI, MELINDA IK, MOHAMMED GHOUSE	2124 WHITESMITH DR	APEX NC 27502-8503 APEX NC 27502-4327	
IK, MOHAMMED GHOUSE IKYA, SUDEEP SHAKYA, NEENA			
	1023 WAYMAKER CT	APEX NC 27502-4325	
ERRY, DAVID D SHERRY, ETHEL V	1512 CLARK FARM RD	APEX NC 27502-8500	
REE GOPALPRABHU LLC	3716 LINVILLE GORGE WAY	CARY NC 27519-9619	
IPSON, SHERIKA S	1010 WOODLANDS CREEK WAY	APEX NC 27502-5250	
ITH, GINNY K SMITH, TIMOTHY J	1000 WAYMAKER CT	APEX NC 27502-4325	
TO, NOEL MANUEL JR	1025 WAYMAKER CT	APEX NC 27502-4325	
PROZHEVA, MARIA SPIRES, JACKSON P	2041 ACKERMAN HILL DR	APEX NC 27502-5109	
INGARI, RONALD L STRINGARI, KATHERINE L	1209 CHAPEL RIDGE RD	APEX NC 27502-8502	
TIGUNTA, SRINIVASA REDDY NARU, CHAITANYA BHARATHI	1027 WAYMAKER CT	APEX NC 27502-4325	
MA, ANAGH VERMA, SHWETA	2061 ACKERMAN HILL DR	APEX NC 27502-5109	
LANUEVA, BRIAN D VILLANUEVA, ERIKA L	2126 WHITESMITH DR - Page 740 -	APEX NC 27502-4327	
CANOL VA, DIVIAN D VILLANOL VA, LIVINA L			

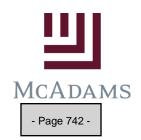
WILLIAMS, SUSAN L	2053 ACKERMAN HILL DR	APEX NC 27502-5109
YANG, LONGLONG GAN, YOUXIN	1002 WAYMAKER CT	APEX NC 27502-4325
YIN, XINHE	302 MINTON VALLEY LN	CARY NC 27519-9105
ZY&L LLC	351 GARTRELL WAY	CARY NC 27519-8942
CHAPEL RIDGE ESTATES HOA	1001-105 GOODWORTH DR	APEX NC 27539
Current Tenant	1561 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1571 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1575 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1583 Creekside Landing DR	APEX NC 27502
Current Tenant	1585 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1587 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1591 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1595 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1611 Beaver Creek DR	APEX NC 27502
Current Tenant	1615 Beaver Creek Commons DR	APEX NC 27502
Current Tenant	1200 Chapel Ridge	APEX NC 27502
Current Tenant	1201 Chapel Ridge	APEX NC 27502
Current Tenant	1204 Chapel Ridge	APEX NC 27502
Current Tenant	1205 Chapel Ridge	APEX NC 27502
Current Tenant	1209 Chapel Ridge	APEX NC 27502
Current Tenant	1213 Chapel Ridge	APEX NC 27502
Current Tenant	1220 Chapel Ridge	APEX NC 27502
Current Tenant	1225 Chapel Ridge	APEX NC 27502
Current Tenant	1301 Chapel Ridge	APEX NC 27502
Current Tenant	1304 Chapel Ridge	APEX NC 27502
Current Tenant	1305 Chapel Ridge	APEX NC 27502
Current Tenant	1313 Chapel Ridge	APEX NC 27502
Current Tenant	1500 Clark Farm	APEX NC 27502
Current Tenant	1505 Clark Farm	APEX NC 27502
Current Tenant	1512 Clark Farm	APEX NC 27502
Current Tenant	1513 Clark Farm	APEX NC 27502
Current Tenant	1516 Clark Farm	APEX NC 27502
Current Tenant	1517 Clark Farm	APEX NC 27502
Current Tenant	2000 Creekside Landing DR	APEX NC 27502
Current Tenant	2001 Creekside Landing DR	APEX NC 27502
Current Tenant	2004 Creekside Landing DR	APEX NC 27502
Current Tenant	2005 Creekside Landing DR	APEX NC 27502
Current Tenant	2008 Creekside Landing DR	APEX NC 27502
Current Tenant	2009 Creekside Landing DR	APEX NC 27502
Current Tenant	2012 Creekside Landing DR	APEX NC 27502
Current Tenant	2013 Creekside Landing DR	APEX NC 27502
Current Tenant	2016 Creekside Landing DR	APEX NC 27502
Current Tenant	2017 Creekside Landing DR	APEX NC 27502
Current Tenant	2021 Creekside Landing DR	APEX NC 27502
Current Tenant	2025 Creekside Landing DR	APEX NC 27502
Current Tenant	2026 Creekside Landing DR	APEX NC 27502
Current Tenant	2033 Creekside Landing DR	APEX NC 27502
Current Tenant	2034 Creekside Landing DR	APEX NC 27502
Current Tenant	2037 Creekside Landing DR	APEX NC 27502
Current Tenant	2038 Creekside Landing DR	APEX NC 27502
Current Tenant	2042 Creekside Landing DR	APEX NC 27502
Current Tenant	2045 Creekside Landing DR	APEX NC 27502
Current Tenant	2046 Creekside Landing DR	APEX NC 27502
Current Tenant	2050 Creekside Landing DR	APEX NC 27502
Current Tenant	2053 Old Chapman DR	APEX NC 27502
Current Tenant	1006 Waymaker CT	APEX NC 27502
Current Tenant	1026 Waymaker CT	APEX NC 27502
Current Tenant	1030 Waymaker CT	APEX NC 27502
Current Tenant	2122 Whitesmith DR	APEX NC 27502
Current Tenant	2128 Whitesmith DR	APEX NC 27502
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CHAPEL RIDGE NORTH PLANNED UNIT DEVELOPMENT

1225 CHAPEL RIDGE RD APEX, NORTH CAROLINA | PD PLAN

REZONING CASE #22CZ07







CHAPEL RIDGE NORTH

Planned Unit Development Prepared for Town of Apex, North Carolina

Submittal Dates

First Submittal: March 1, 2022
Second Submittal: April 8, 2022
Third Submittal: May 13, 2022
Fourth Submittal: June 10, 2022
Fifth Submittal: June 28, 2022
Sixth Submittal: July 6, 2022

Developer

High Street Residential 555 Fayetteville Street, Suite 300 Raleigh, NC 27601

Planner, Engineer, Landscape Architect, Surveyor

McAdams 2905 Meridian Parkway Durham NC 27113

Attorney

Parker Poe 301 Fayetteville St, Suite 1400 Raleigh, NC 27601



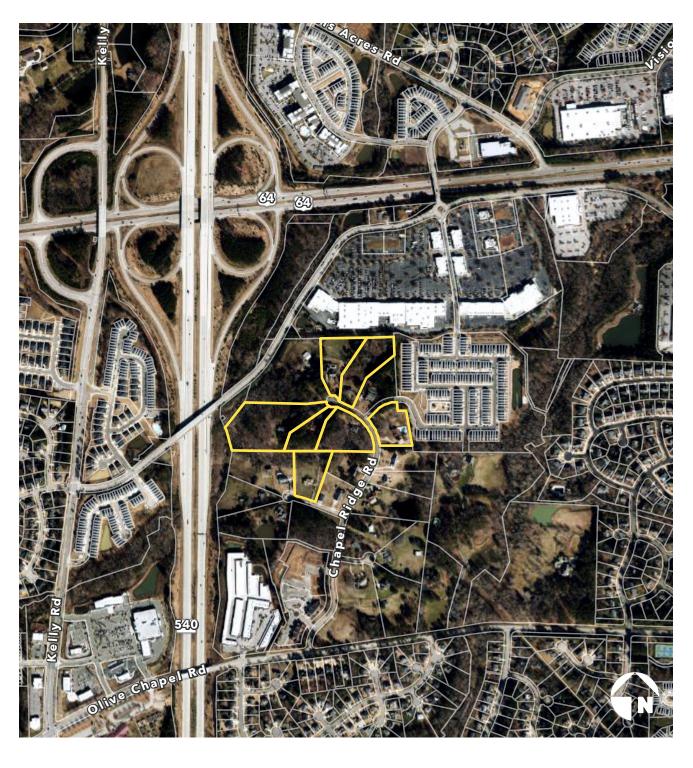


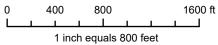


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- 9. SIGNAGE
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- 17. COMPLIANCE WITH UDO
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- 19. REPRESENTATIVE BUILDING ELEVATIONS

VICINITY MAP





PROJECT DATA

Name of Project: Chapel Ridge North Applicant/Developer: High Street Residential 555 Fayetteville Street, Suite 300 Raleigh, NC 27601 202-337-1025 Prepared By: McAdams 2905 Meridian Parkway Durham, NC 27713 919-361-5000 **Current Zoning Designation:** RR Proposed Zoning Designation: PUD-CZ Current 2045 Land Use Map Designation: Medium Density Residential Proposed 2045 Land Use Map Designation: High Density Residential Size of Project: Approximately 20.62 acres **Property Identification Numbers:** 0732352538, 0732343920, 0732249869, 0732354594, 0732347912, 0732256180, 0732340602 (the "Property")

PURPOSE STATEMENT

This document and the accompanying concept plan (the "Concept Plan") (collectively, the "PUD") are provided pursuant to the Town of Apex Unified Development Ordinance ("UDO") Planned Unit Development Provisions. Chapel Ridge North will be a fully amenitized apartment community with interior corridors, an elevator, fitness centers, walking paths, and natural areas; it will be conveniently located near future transit and existing employment centers, restaurants, and retail. The Concept Plan offers an efficient site layout, with significant open space preserved in a unified area and appropriate buffers between adjacent uses. Required Resource Conservation Areas are set aside throughout the 20.62-acre property. This PUD is consistent with the Town's goal to provide site-specific, high-quality neighborhoods that exhibit natural feature preservation and compatibility with surrounding land uses. This development will comply with the PUD Development Parameters outlined in UDO §2.3.4.F.1.a.i-vii. This PUD meets or exceeds the Development Parameters as follows:

- The uses to be developed in the PD Plan for the PUD-CZ are those uses permitted in Section 4.2.2. Use Table.
 - The uses permitted within the Chapel Ridge North PUD are permitted per §4.2.2 of the Town of Apex UDO.
- The uses proposed in the PD Plan for the PUD-CZ can be entirely residential, entirely non-residential, or a mix of residential and non-residential uses, provided a minimum percentage of the non-residential land area is included in certain mixed-use areas as specified on the 2045 Land Use Map. The location of uses proposed by the PUD-CZ must be shown on the PD Plan with a maximum density for each type of residential use and a maximum square footage for each type of non-residential use.
 - » Chapel Ridge North is an entirely residential development including a maximum of 370 multi-family units.
- The dimensional standards in §5.1.3 Table of Intensity and Dimensional Standards, Planned Development Districts, may be varied in the PD Plan for PUD-CZ. The PUD-CZ shall demonstrate compliance with all other dimensional standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
 - » Any deviations from underlying UDO standards are contained in this PUD. Otherwise, Chapel Ridge North will comply with the base standards of the UDO, North Carolina Building Code, and North Carolina Fire Code.
- The development proposed in the PD Plan for PUD-CZ encourages cluster and compact development to the greatest extent possible that is interrelated and linked by pedestrian ways, bikeways, and other transportation systems. At a minimum, the PD Plan must show sidewalk improvements as required by the Apex Transportation Plan and the Town of Apex Standard Specifications and Details, and greenway improvements as required by the Town of Apex Parks, Recreation, and Open Space Plan and the Apex Transportation Plan. In addition, sidewalks shall be provided on both sides of all streets for single-family detached homes.
 - Except the small northern portion of Chapel Ridge Road as shown on the Concept Plan, five-foot wide public sidewalks will be constructed along both sides of all internal streets per UDO standards. Pedestrian improvements along road frontages shall be consistent

with the Transportation and Bike Ped System Map Plan. See Walkability section for specific details of sidewalk and sidepath locations. To encourage a healthy lifestyle and establish a walkable community, pedestrian greenways will also be incorporated throughout the development connecting residential areas to open space amenities and RCA areas. In addition, the Property is located within a mile of connections to the Beaver Creek Greenway which may be accessed from the Pearson Farms neighborhood south of Chapel Ridge North.

- The design of development in the PD Plan for the PUD-CZ results in land use patterns that promote and expand opportunities for walkability, connectivity, public transportation, and an efficient network of streets. Cul-de-sacs shall be avoided unless the design of the subdivision and the existing proposed or proposed street system in the surrounding area indicated that a through street is not essential in the location of the proposed cul-de-sacs, or where sensitive environmental features such as streams, floodplains, or wetlands would be substantially disturbed by making road connections.
 - » Chapel Ridge North will create a walkable residential community connected by sidewalks, side paths, tree-lined streets, and greenways. Cul-de-sacs will be avoided to enhance the connectivity of the development. The northern extension of Chapel Ridge Road will allow residents to walk to the future transit stop on Beaver Creek Commons Drive identified in the Town of Apex Comprehensive Transportation Plan (the "Transportation Plan"). Additionally, residents will be able to walk and/or bike to existing shops, restaurants, and retail at the Beaver Creek Crossings shopping center.
- The development proposed in the PD Plan for PUD-CZ is compatible with the character of surrounding land uses and maintains and enhances the value of surrounding properties.
 - » The proposed development is compatible with the character of surrounding land uses and will enhance property values in the area. To the north of the Property is Beaver Creek Crossings, an existing shopping center with a mix of commercial uses. Adjacent to the east are the Hempstead Townhomes, a dense townhome community. The proposed apartment community will effectuate a transition down in intensity from the more intense commercial uses to the north to lower density single-family detached homes to the south. Appropriate buffering will be provided between Chapel Ridge North and existing single-family homes to the south.
- The development proposed in the PD Plan for the PUD-CZ has architectural and design standards that are exceptional and provide a higher quality than routine developments. All residential uses proposed in a PD Plan for PUD-CZ shall provide architectural elevations representative of the residential structures to be built to ensure the Standards of this Section are met.
 - » Multi-family buildings will be of high-quality construction. Architectural controls and sample elevations illustrating the high-quality appearance of buildings are included in this PUD.

All site-specific standards and conditions of this PUD shall be consistent with all Conditional Zoning (CZ) District standards set forth in the UDO Section 2.3.3, Conditional Zoning Districts.

PERMITTED USES

The Property may be used for, and only for, the uses listed immediately below. The permitted uses are subject to the limitations and regulations stated in the UDO and any additional limitations or regulations of this PUD.

Permitted uses include:

Residential	
Multi-family or apartment	
Condominiums	
Utilities	
Utility, minor	
Recreational Uses	
Greenway	
Park, Active	
Park, Passive	
Recreation Facility, private	

AFFORDABLE HOUSING

A minimum of three and a half percent (3.5%) of the total residential units (as shown on the first site plan submittal) shall be designated as restricted low-income affordable housing rental units (the "Affordable Units") for a minimum affordability period of ten (10) years starting from the date of issuance of the first residential Certificate of Occupancy (the "Affordable Restriction Period"). The Affordable Units shall be occupied by low-income households earning no more than sixty percent (60%) of the Raleigh, NC Metropolitan Statistical Area (MSA) Area Median Income (AMI), adjusted for family size, as most recently published by the U.S. Department of Housing and Urban Development (HUD). The Affordable Units shall be one-bedroom units and rented to low-income households during the Affordable Restriction Period at maximum rent limits per bedroom size, no greater than sixty percent (60%) of the Raleigh, NC Area Median Income ("AMI") as most recently published by HUD and stipulated by the most recently published North Carolina Housing Finance Agency (NCHFA) Low-Income Housing Tax Credit (LIHTC) Multifamily Tax Subsidy Program (MTSP) income and rent limits for the Wake County Metropolitan Area. If the Affordable Units calculation results in a fraction between 0.00 and 0.49, the number of Affordable Units shall be rounded down to the nearest whole number. If the Affordable Units calculation results in a fraction between 0.50 and 0.99, the number of Affordable Units shall be rounded up to the nearest whole number. Prior to issuance of the first residential Certificate of Occupancy, a restrictive covenant between the Town and property owner shall be executed and recorded in the Wake County Registry to memorialize the affordable housing terms and conditions. During the Affordable Restriction Period, the property owner shall be responsible for performing all property management and administration duties to ensure compliance with this affordable housing condition and shall submit annual compliance reports to the Town verifying compliance with this affordable housing condition. Following expiration of the Affordable Restriction Period, this affordable housing condition shall expire, and the property owner shall be relieved of all obligations set forth in this affordable housing condition, and the Affordable Units may freely be marketed and leased at market-rate rents.

DESIGN CONTROLS

Total Project Area: 20.62 acres

Maximum number of multi-family apartment units:

Multi-Family Design Controls

Maximum Building Height: 55 feet (5 stories)

» Building facades facing PINs 073243658, 0732340602, and 0732348711 shall be limited to a minimum of four stories.

Minimum Building Setbacks

» Front: 10 feet

» Rear: 20 feet

» Side: 20 feet

» Alley: 5 feet

» Corner: 20 feet

» From buffer or RCA: 10 feet

ARCHITECTURAL STANDARDS

The proposed development offers the following architectural controls to ensure consistency of character throughout the development. Conceptual elevation examples are included in Section 19 of this PUD. Elevations included are limited examples of multiple style options being considered. Changes to the exterior materials, roof, windows, doors, process, trim, etc. are allowable with administrative approval at the staff level. Further details shall be provided at the time of Major Site Plan submittal. In an effort to reflect the unique nature of the existing neighborhood, the architectural style of the buildings shall be classic southern traditional architecture.

Additional features used as focal points or key terminus points shall be located within or around the development (i.e. a patio seating area, water feature, pedestrian plaza with benches, planters, public art, decorative bicycle parking, or focal feature) in order to meet the Community Amenities requirement of the UDO. Other features not mentioned may be considered with administrative staff approval.

Design Guidelines:

- 1. The project shall use full cutoff LED fixtures that have a maximum color temperature of 3500K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.
- 2. The project shall be designed to meet the requirements for one of the following green building certifications: LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard. Prior to the issuance of building permits, the developer shall hire a third-party consultant to evaluate the project and ensure the design conforms with green building certification requirements. Prior to the issuance of a certificate of occupancy for a building, the developer shall demonstrate to the Town that that building has been certified as a green building by providing a copy of the green building certification.
- 3. The project shall install at least three (3) pet waste stations across the development locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.

Multi-family/Apartments/Condominiums:

- 1. Vinyl siding is not permitted; however, vinyl windows, decorative elements and trim are permitted.
- 2. Rear and side elevations of units that have right-of-way frontage shall have trim around the windows.
- 3. A minimum of four of the following decorative features shall be used on each building:
 - » Decorative shake
 - » Board and batten
 - » Decorative porch railing/posts
 - » Shutters
 - » Decorative/functional air vents on roof or foundation
 - » Recessed windows
 - » Decorative windows
 - » Decorative brick/stone
 - » Decorative gables
 - » Decorative cornices
 - » Tin/metal roof
- 4. Garage doors must have windows, decorative details, or carriage-style adornments on them.
- 5. Siding materials shall be varied in type and/or color on 30% of each façade on each building.
- 6. Windows must vary in size and/or type.
- 7. Windows that are not recessed must be trimmed.
- 8. Solar conduit shall be provided on all buildings to accommodate the future installation of solar panels.

Proposed Residential Materials and Styles

Proposed materials and styles will be of a similar palette to provide consistency of character along with visual interest. Exterior materials that may be incorporated into any of the building products include:

- · Cementitious lap, board and batten, and/or shake and shingle siding
- Stone or synthetic stone
- Brick

Additional building materials may be included with administrative staff approval. Substitute materials shall be allowed by staff as long as they are determined by the Director of Planning and Development to be substantially similar.

PARKING AND LOADING

Development shall provide the following minimum parking spaces per dwelling unit based on the number of bedrooms:

Bedrooms per unit	Minimum ratio	
1 or 2	1.3 spaces per dwelling unit	
3	1.8 spaces per dwelling unit	

A minimum of 5% of the total parking spaces required by the UDO for the project shall be Electric Vehicle Charging spaces consistent with the standards of UDO Section 8.3.11. At least 6 bicycle parking spaces shall also be provided.

SIGNAGE

All signage for this PUD shall comply with Section 8.7, Signs, of the Town of Apex UDO.

LANDSCAPING

Minimum perimeter and streetscape landscape buffers are as follows (see PUD Plan Sheet C2.00 for details):

- 15-ft Type A adjacent to townhomes
- 25-ft Type A adjacent to single-family lots
- 20-ft Type A adjacent to church*
- 20-ft Type A adjacent to retail
- 10-ft Type A adjacent to Chapel Ridge Road**
- 20-ft Type B adjacent to PIN 0732266081

- *A fire access lane shall be permitted to encroach into the first 150 feet of the buffer as measured from Chapel Ridge Road west along the shared property line with the church.
- **Only required along the public right-of-way fronting the Property. A buffer is not required along the public access easement. Developer shall only be responsible for providing the buffer on property adjacent to the public right-of-way which is within this rezoning.

The project shall select and install tree, shrub and perennial species with special attention to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall.

The project will increase biodiversity in perimeter buffers and open space areas by providing a variety of species for the canopy, understory, and shrub levels. Native and adaptive plant species shall be provided within these areas to minimize death from disease and to provide increased habitat and food sources for insects and animals. A minimum of 70% of the species provided shall be native or a nativar of North Carolina. No invasive species shall be permitted. No single species of tree or shrub shall constitute more than 20% of the plant material of its type installed on a single development site.

No dumpster shall be located within 50 feet of the northern property line of Lot 12, Chapel Ridge Subdivision, as shown in Book of Maps 1986, Page 1627, Wake County Registry.

NATURAL RESOURCES AND ENVIRONMENTAL DATA

River Basins and Watershed Protection Overlay Districts

This project is located within the Cape Fear River Basin. This project site is located within the Primary Watershed Protection Overlay District as shown on the Town of Apex Watershed Protection Map. Accordingly, this PUD will comply with all built upon area, vegetated conveyances, structural SCMs and riparian stream buffer requirements of Section 6.1.7.

Resource Conservation Areas (RCA) - Required and Provided

This PUD will be subject to, and meet the requirements of, Section 8.1.2 of the UDO, Resource Conservation Area and Section 2.3.4, Planned Development Districts.

The PUD will provide a minimum of 20% of the gross project area as a Resource Conservation Area (RCA). Designated RCA areas will be consistent with the items listed in Section 8.1.2(B) of the Town's UDO. Preserved streams, wetlands, and associated riparian buffers provide the primary RCAs throughout the site. Additional RCA areas may include perimeter and streetfront buffers, stormwater management areas (as permitted by the UDO), and greenways.

The project shall install a minimum of one sign for each Resource Conservation area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not disturbed. Signage shall be installed in locations that are publicly accessible, such as adjacent to, but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways, or side paths.

Six-foot wide private walking trails may be located throughout the development, including RCA areas. Locations of trails are to be determined at site plan.

Floodplain

The project site does not sit within a designated current or future 100-year floodplain as shown on the Town of Apex FEMA map and FIRM Panel 3720073200J, dated May 2, 2006.

Tree Canopy

Tree canopy areas in Chapel Ridge North are primarily concentrated around the wetland areas, stream features, and perimeter buffers.

Existing trees greater than 18" in diameter that are removed by site development shall be replaced by planting a 1.5" caliper native tree from the Town of Apex Design and Development Manual either onsite or at an alternative location approved by Town Planning Staff, above and beyond standard UDO requirements.

Historic Structures

As confirmed by the North Carolina State Historic Preservation Office there are no historic structures present within the project boundary.

Environmental Commitments Summary

The applicant team met with the Apex Environmental Advisory Board on February 17, 2022. Below is a summary of the environmental commitments for the Chapel Ridge North development:

- Increased stormwater quantity and quality control measures (see Stormwater Management section for details)
- The project shall install at least three (3) pet waste stations across the development in locations that are publicly accessible, but outside of public property and/or public easement(s), such as adjacent to amenity centers, sidewalks, greenways, or side paths.
- The project shall use full cutoff LED fixtures that have a maximum color temperature of 3500K for all exterior lighting, including, but not limited to, parking lot and building mounted fixtures.
- A minimum of 5% of the total parking spaces that the UDO would require for the project shall be Electric Vehicle Charging spaces. Final unit mix and amount of required parking shall be determined at site plan. The EV charging stations shall comply with the standards set forth in the UDO.
- The project shall select and install tree, shrub and perennial species with special attention to providing diverse and abundant pollinator and bird food sources, including plants that bloom in succession from spring to fall.
- The project will increase biodiversity in perimeter buffers and open space areas by providing a
 variety of species for the canopy, understory, and shrub levels. Native and adaptive plant species
 shall be provided within these areas to minimize death from disease and to provide increased
 habitat and food sources for insects and animals. A minimum of 70% of the species provided shall
 be native or a nativar of North Carolina. No invasive species shall be permitted. No single species
 of tree or shrub shall constitute more than 20% of the plant material of its type installed on a single

development site.

- The project shall install signage adjacent to wooded or natural condition Resource Conservation
 area. The signage shall indicate that the area is RCA and is to be preserved in perpetuity and not
 disturbed. Signage shall be installed in locations that are publically accessible, such as adjacent to,
 but outside of public property and/or public easement(s), amenity centers, sidewalks, greenways,
 or side paths.
- The project shall be designed to meet the requirements for one of the following green building certifications: LEED, Energy Star, BREEAM, Green Globes, NGBS Green, or GreenGuard. A third-party consultant shall be hired to evaluate the project and certify to the Town of Apex that the project meets the standards for the certification. The applicant shall forward a copy of the certification application to the Town of Apex Planning Department to verify that the application has been submitted.
- Solar conduit shall be provided on all multi-family and/or condominium buildings to accommodate the future installation of solar panels.

STORMWATER MANAGEMENT

This PUD shall go above the stormwater management requirements for quality and quantity treatment outlined in Section 6.1.7 of the UDO such that:

- Post development peak runoff shall not exceed pre-development peak runoff conditions for the 1 year, 10-year, 25-year, and 24-hour storm events.
- Treatment for the first 1 inch of runoff will provide 85% removal of total suspended solids.

Acceptable stormwater structures shall include detention ponds, constructed wetlands, bio-retention areas, or other approved devices consistent with the NC DEQ Stormwater Design Manual and the Town of Apex UDO.

PARKS AND RECREATION

This project was reviewed by the Parks, Recreation and Cultural Resources Advisory Commission on April 27, 2022 and fee-in-lieu of dedication was recommended.

Number of Units*	Housing Type	Fee Per Unit**	Total Fees
370	Multi-Family	\$2,226.05	\$823,638.50
Total	-	-	\$823,638.50

^{*}Final unit count will be determined at the time of Master Site Plan.

^{**}Fees are based upon approval date and runs with project with exception of the increase in total unit

PUBLIC FACILITIES

The proposed PUD shall meet all Public Facilities requirements as set forth in UDO Section 2.3.4(F)(1) (f) and be designed according to sound engineering standards. Road and utility infrastructure shall be as follows:

General Roadway Infrastructure

All proposed roadway infrastructure and right-of-way dedications will be consistent with the Town of Apex UDO and Transportation Plan, unless specifically set forth in the PUD Text.

Chapel Ridge Road shall be extended north to connect to Beaver Creek Commons Drive (the "Road Extension") in the approximate location shown on the Concept Plan. The Road Extension shall be constructed to Town of Apex standards and specifications. At the site plan stage, the portion of the Road Extension shown in pink on the Concept Plan and labeled "Public ROW" shall be dedicated to the Town as public right-of-way (the "Public ROW Section"). The portion of the Public ROW Section south of the shared property line with PIN 0732366134 shall have a minimum ROW width of 60 feet and be constructed to the Minor Collector Street standard. The portion of the Public ROW Section across PIN 0732258769 shall have a minimum ROW width of 50 feet. The portion of the Road Extension shown in orange on the Concept Plan and labeled "Private drive with minimum 45" public access easement" (the "Easement Section") shall be subject to a recorded public access and maintenance agreement with a minimum easement width of 45 feet. The public access and maintenance agreement shall be approved by the Planning Director as to form.

Water and Sanitary Sewer

Apartments within the project will be served by Town of Apex for water and sanitary sewer. The utility design will be finalized at the time of Construction Drawing and be based on available facilities adjacent to the site at that time. The design will meet the current Town of Apex master plans for water and sewer and standard specifications.

Water and sewer lines shall be extended for the length of the Property's frontage along Chapel Ridge Road, and they shall always be extended along any and all natural drainage courses/draws that are located within the property line boundaries of the proposed development. Sewer shall be extended to all adjacent upstream property lines. The portion of the Property fronting Clark Farm Road shall be served by the extension of water and sanitary sewer lines from the north, through the internal portion of the Property. At site plan, water and sewer line easements shall be dedicated to facilitate the extension.

Walkability

The following facilities will be provided to contribute to a walkable community within and surrounding the Chapel Ridge North development:

- Five-foot wide public sidewalk along the western side of Chapel Ridge Road public right-of-way fronting the development.
- Ten-foot wide side path along the eastern and northern side of Chapel Ridge Rd adjacent to land that's a part of this rezoning application (as shown on the Concept Plan).
- Five-foot wide sidewalk along the south side of Ackerman Drive fronting the project.
- A crosswalk will be provided from the future sidewalk on the south side of Ackerman Drive to the existing sidewalk on the north side of Ackerman Drive.
- Six-foot wide private walking trails throughout the development, locations to be determined at site plan.

Transit

The developer shall design, construct and install a bus stop along the west side of Chapel Ridge Road in a location mutually agreed to by the developer and the Traffic Engineering Manager. The bus stop shall include an 8 x 30-foot pad, bench, and bike rack. Construction costs for the bus stop shall not exceed a maximum of \$25,000 (the "Cost Limit"). In the event construction costs exceed the Cost Limit, the developer may elect to either (a) pay a fee in lieu of \$25,000 for the bus stop, or (b) design and construct the bus stop despite construction costs exceeding the Cost Limit. The bus stop shall be shown on the overall site plan and designed, approved, and constructed concurrently with the project.

Other Utilities and Facilities

Electricity will be provided by Apex Electric. Phone, cable, and gas will be provided by the developer and shall meet the Town of Apex standards as outlined in the UDO.

Streetscape features may be used to help with establishing a framework for the proposed development. These features may include street trees, benches, trash receptacles, and street and/or pedestrian lights compatible with their context.

PHASING PLAN

The development will be completed in multiple phases, which will be determined during site or subdivision plan review.

CONSISTENCY WITH LAND USE PLAN

The proposed development is consistent with Advance Apex 2045: The Apex Comprehensive Plan, adopted February 2019. The 2045 Land Use Map designates the Property as Medium Density Residential. Given the high intensity commercial uses to the north, and the existing high density townhome community to the east, higher density is appropriate in this location. Accordingly, this PUD updates the FLUM designation to High Density Residential.

COMPLIANCE WITH UDO

The development standards adopted for this PUD comply with those set forth in the current version of the Town's Unified Development Ordinance (UDO).

TRANSPORTATION IMPROVEMENTS

The following transportation improvements are proposed:

- All proposed driveway access and improvements on state-maintained roadways are subject to both Apex and NCDOT review and approval. This includes proposed access to Chapel Ridge Road and any modifications to Chapel Ridge Road.
- Chapel Ridge Road shall be extended north to connect to Beaver Creek Commons Drive (the "Road Extension") in the approximate location shown on the Concept Plan. The Road Extension shall be constructed to Town of Apex standards and specifications. At the site plan stage, the portion of the Road Extension shown in pink on the Concept Plan and labeled "Public ROW" shall be dedicated to the Town as public right-of-way (the "Public ROW Section"). The portion of the Public ROW Section south of the shared property line with PIN 0732366134 shall have a minimum ROW width of 60 feet and be constructed to the Minor Collector Street standard. The portion of the Public ROW Section across PIN 0732258769 shall have a minimum ROW width of 50 feet. The portion of the Road Extension shown in orange on the Concept Plan and labeled "Private drive with minimum 45" public access easement" (the "Easement Section") shall be subject to a recorded public access and maintenance agreement with a minimum easement width of 45 feet. The public access and maintenance agreement shall be approved by the Planning Director as to form.
- The center turn lane on Beaver Creek Commons Drive shall be restriped to provide 75 feet of southbound left turn storage and 75 feet of taper at the site driveway.

REPRESENTATIVE BUILDING ELEVATIONS





SOUTHERN TRADITIONAL CLASSIC STYLE



Elevations are conceptual in nature.

SOUTHERN / MODERN FARMHOUSE TRANSITIONAL STYLE





MODERN FARMHOUSE STYLE



Elevations are conceptual in nature.

CHAPEL RIDGE NORTH

CHAPEL RIDGE ROAD APEX, NORTH CAROLINA

PLANNED UNIT DEVELOPMENT PLAN FOR PUD-CZ

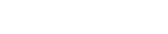
PROJECT NUMBER: 2021110513

DATE: MARCH 01, 2022 REVISED: APRIL 08, 2022 REVISED: MAY 13, 2022 **REVISED: JUNE 10, 2022 REVISED: JUNE 28, 2022** REVISED: JULY 06, 2022



VICINITY MAP & AERIAL IMAGE

1" = 500'



SHEET INDEX COVER

EXISTING CONDITIONS PRELIMINARY LAYOUT PLAN

SITE DATA

SITE DATA				
PARCEL IDENTIFICATION NUMBER (PIN)	0732343920, 0732340602, 0732249869, 0732256180, 0732347912, 0732354594, 0732352538			
EXISTING ZONING	RR			
PROPOSED ZONING	PUD-CZ			
CURRENT 2045 LAND USE MAP DESIGNATION	MEDIUM DENS	SITY RESIDENTIAL		
PROPOSED 2045 LAND USE MAP DESIGNATION	HIGH DENSITY	RESIDENTIAL		
SITE AREA	APPROX. 20.62	2 AC - GROSS		
	APPROX. 0.73	- INSIDE R/W		
	APPROX. 19.89	AC - NET		
EXISTING USE	SINGLE FAMIL	Y LOTS		
PROPOSED USE	HIGH DENSITY	RESIDENTIAL - APARTMENTS		
DENSITY	NSITY MAXIMUM 370 UNITS			
BUILDING HEIGHT	MAXIMUM	55' (5 STORIES) *4 STORY MAX FACING PINS 0732343658, 0732340602 AND 0732348711		
SETBACKS	FRONT	10'		
	SIDE	20'		
	REAR	20'		
	ALLEY	5'		
	CORNER	20'		
SETBACKS FROM REQUIRED B	UFFERS	10' (BUILDING) 5' (PARKING)		
PARKING	MINIMUM	1.3 SPACES / 1 OR 2 BEDROOM UNITS		
	MINIMUM	1.8 SPACES / 3 BEDROOM UNITS		
BUILT-UPON AREA	MAXIMUM	13.93 AC (70%)		
(IMPERVIOUS SURFACE)	PROPOSED	LESS THAN 13.93 AC (70%)		
RESOURCE CONSERVATION	MINIMUM	3.98 AC (20%)		
AREA	PROPOSED	MORE THAN 3.98 AC (20%)		
WATERSHED PROTECTION OVERLAY	PRIMARY WATERSHED PROTECTION OVERLAY DISTRICT			
FEMA FLOODPLAIN	NONE (FIRM P	ANEL 3720073200J, EFFECTIVE 05/02/2006)		
HISTORIC STRUCTURES NONE				



One Glenwood Avenue

Raleigh, NC 27603 phone 919. 823. 4300 fax 919. 361. 2269

www.mcadamsco.com

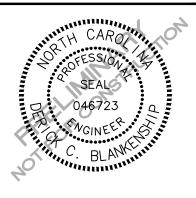
license number: C-0293, C-187

CONTACT

CLIENT

JESSIE HARDESTY hardesty@mcadamsco.com PHONE: 919. 287. 0824 DERICK BLANKENSHIP BLANKENSHIP@MCADAMSCO.COM PHONE: 919. 287. 0836

HIGH STREET DISTRICT DEVELOPMENT, INC. 555 FAYETTEVILLE STREET SUITE 300 RALEIGH, NC 27601 CONTACT: JOSH DIX



REVISIONS

1 04. 08. 2022 PER TOWN OF APEX COMMENTS

2 05. 13. 2022 PER TOWN OF APEX COMMENTS 3 06. 10. 2022 PER TOWN OF APEX COMMENTS 4 06. 28. 2022 PER TOWN OF APEX COMMENTS 5 07. 06. 2022 PER TOWN OF APEX COMMENTS

PLANNED UNIT DEVELOPMENT PLAN FOR:

CHAPEL RIDGE APARTMENTS APEX, NC 27502 **PROJECT NUMBER: 2021110513**





McAdam

The John R. McAdams Company, Inc.
One Glenwood Avenue
Suite 201
Raleigh, NC 27603

phone 919. 823. 4300 fax 919. 361. 2269 license number: C-0293, C-187

www.mcadamsco.com

CLIENT

HIGH STREET DISTRICT DEVELOPMENT, INC. 555 FAYETTEVILLE STREET SUITE 300 RALEIGH, NC 27601 CONTACT: JOSH DIX

CHAFEL KIDGE NOKITE PLANNED UNIT DVELOPMENT PLAN APEX NORTH CAROLINA

REVISIONS

 NO.
 DATE

 1
 04. 08. 2022
 PER TOWN OF APEX COMMENTS

 2
 05. 13. 2022
 PER TOWN OF APEX COMMENTS

 3
 06. 10. 2022
 PER TOWN OF APEX COMMENTS

 4
 06. 28. 2022
 PER TOWN OF APEX COMMENTS

 5
 07. 06. 2022
 PER TOWN OF APEX COMMENTS

PLAN INFORMATION

PROJECT NO. 2021110513

FILENAME 2021110513-PUD-XC1

CHECKED BY DCB

DRAWN BY KST

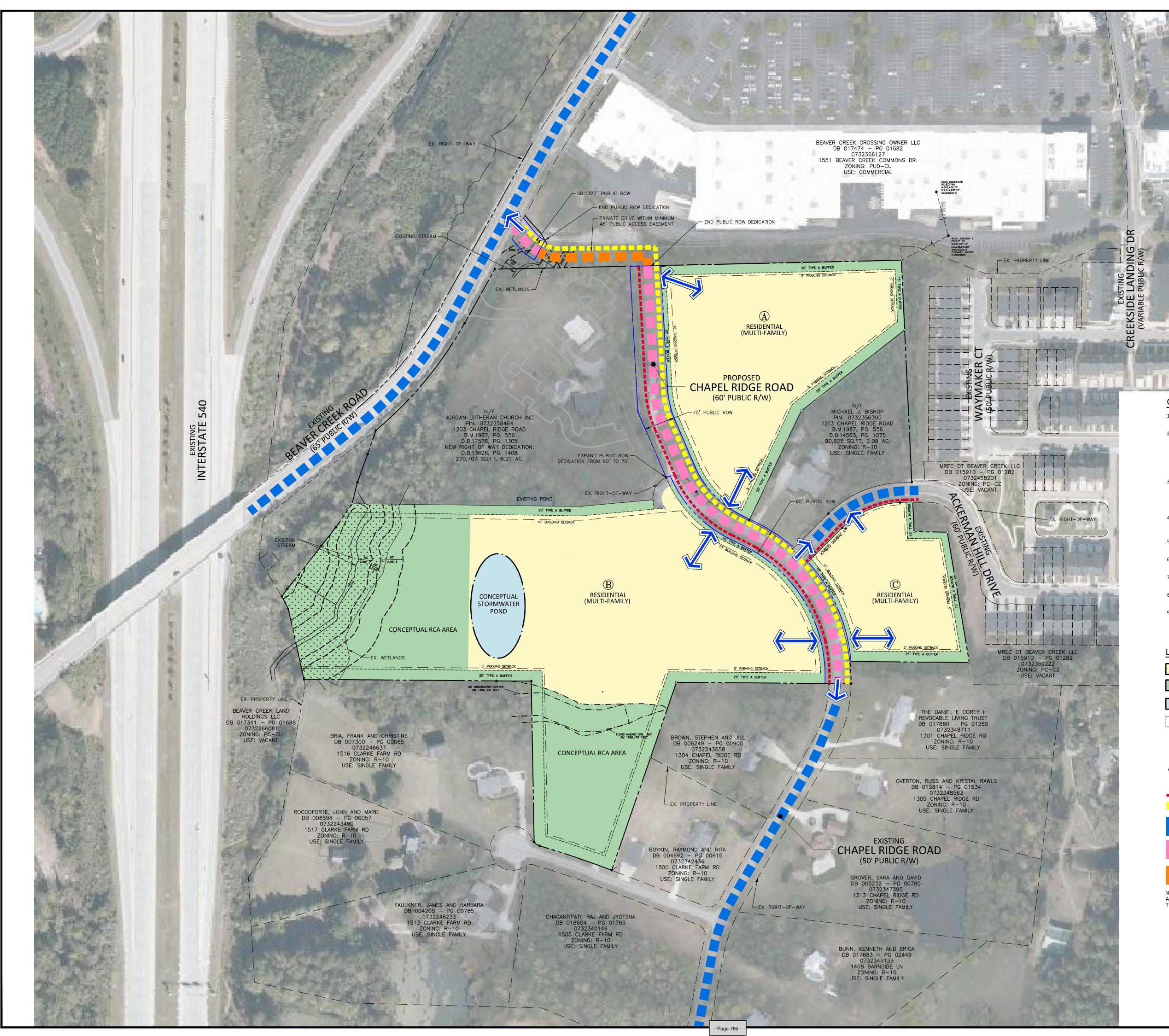
SCALE 1"=100'

DATE 03. 01. 2022

DATE
SHEET

EXISTING CONDITIONS

C1.00





The John R. McAdams Company, Inc. One Glenwood Avenue Suite 201 Raleigh, NC 27603

phone 919. 823. 4300 fax 919. 361. 2269

license number: C-0293, C-187

www.mcadamsco.com

CLIENT

HIGH STREET DISTRICT DEVELOPMENT, INC. 555 FAYETTEVILLE STREET SUITE 300 RALEIGH, NC 27601 CONTACT: JOSH DIX

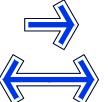
GENERAL NOTES

- 1. REFER TO PUD DOCUMENT FOR COMPLETE LIST OF ALLOWABLE USES FOR EACH TRACT OR DEVELOPMENT AREA.
- 2. SITE ELEMENTS REQUIRED TO SATISFY RECREATIONAL REQUIREMENTS SUCH AS, BUT NOT LIMITED TO, PLAY FIELDS AND GREENWAY TRAILS AND ITEMS TYPICALLY ASSOCIATED WITH THEM (BENCHES, TRASH CONTAINERS, SIGNS, ETC.) MUST MEET ANY APPLICABLE STANDARDS FOUND IN THE TOWN OF APEX STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS AND THE REQUIREMENTS OF THE TOWN OF APEX PARKS AND RECREATION DEPARTMENT.
- 3. SITE ITEMS SUCH AS BUT NOT LIMITED TO, LIGHTING, LANDSCAPING (INCLUDING MULCH), SCREENING (i.e.: DUMPSTERS/TRASH, MECHANICAL/HVAC. ETC.), SITE STABILIZATION (SEEDING), AND PARING AND PAVEMENT MARKING MUST BE COMPLETED PRIOR TO SCHEDULING A FINAL SITE INSPECTION.
- 4. NO SIGNS ARE APPROVED AS PART OF THE PUD-CZ PLAN APPROVAL. A SEPARATE SIGN PERMIT MUST BE OBTAINED. SIGNAGE WILL COMPLY
- . EXACT ACCESS AND STUB LOCATIONS TO BE FINALIZED AT MAJOR SITE PLAN PHASE.
- 6. EXACT LOCATION OF RESOURCE CONSERVATION AREA TO BE FINALIZED AT MAJOR SITE PLAN PHASE.
- 7. THE PORTION OF THE INTERNAL STREET DESIGNATED AS A PUBLIC STREETS SHALL BE DEDICATED TO THE TOWN OF APEX.
- 8. ALL PARKING STANDARDS WITHIN THE PUD WILL COMPLY WITH THE TOWN OF APEX'S UDO.
- 9. PLAN SHEETS ARE INTENDED FOR ILLUSTRATIVE USE ONLY.



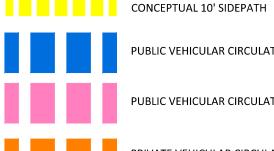


CONCEPTUAL DEVELOPMENT ENVELOPE



CONCEPTUAL PUBLIC VEHICULAR ACCESS





PUBLIC VEHICULAR CIRCULATION (EXTERIOR)

PUBLIC VEHICULAR CIRCULATION (INTERIOR) PRIVATE VEHICULAR CIRCULATION (INTERIOR ALONG PUBLIC ACCESS EASEMENT)

NOTE: LOCATIONS OF VEHICULAR AND PEDESTRIAN CIRCULATION ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED AT THE TIME OF SITE PLAN OR MASTER SUBDIVISION PLAN APPROVAL.

PRELIMINARY DRAWING - NOT RELEASED FOR CONSTRUCTION



SHEET

REVISIONS

1 04. 08. 2022

2 05. 13. 2022

3 06. 10. 2022

4 06. 28. 2022

FILENAME

DRAWN BY

SCALE

DATE

CHECKED BY

NO. DATE

PRELIMINARY LAYOUT PLAN

C2.00

PER TOWN OF APEX COMMENTS

PER TOWN OF APEX COMMENTS PER TOWN OF APEX COMMENTS

PER TOWN OF APEX COMMENTS

2021110513-PUD-OAS1

5 07. 06. 2022 PER TOWN OF APEX COMMENTS

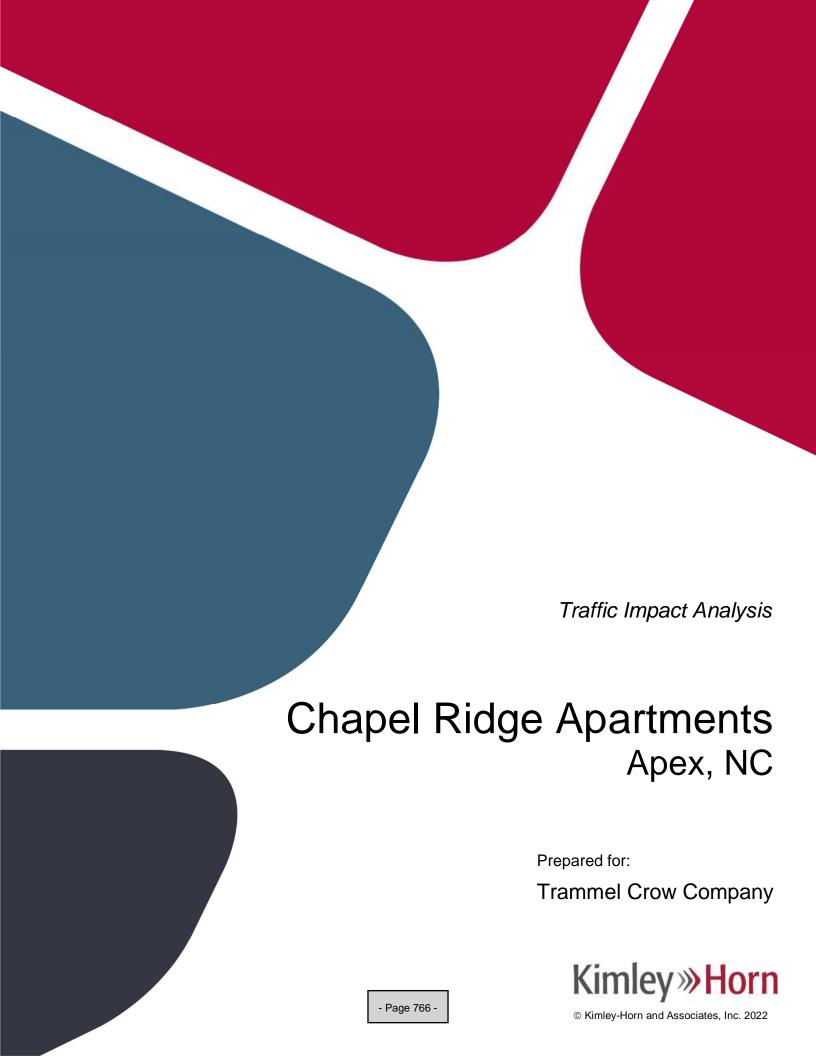
PLAN INFORMATION

PROJECT NO. 2021110513

KST

1"=100'

03. 01. 2022



Traffic Impact Analysis for

Chapel Ridge Apartments

Apex, North Carolina

Prepared for:

Trammell Crow Company Raleigh, NC

Prepared by:

Kimley-Horn and Associates, Inc. NC License #F-0102 300 S. Main Street, Suite 212 Holly Springs, NC 27540 (919) 677-2000

EVILLA SEAL DEA

February 2022 011270040





Executive Summary

Kimley-Horn has completed a Traffic Impact Analysis (TIA) for the proposed Chapel Ridge Apartments development located along Chapel Ridge Road at Ackerman Hill Drive in Apex, North Carolina. The site is currently occupied by several single-family homes and as currently envisioned will include approximately 350 apartments. Full build-out of the development was assumed in 2025 for this analysis.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with the development. The traffic conditions studied include the existing (2021) traffic condition as well as the projected (2025) background and build-out traffic conditions.

As shown in <u>Table ES-1</u>, the proposed development has the potential to generate 117 new trips during the AM peak hour and 147 new trips during the PM peak hour on a typical weekday.

Table ES-1 ITE Traffic Generation (Vehicles)							
Land Use				AM Peak Hour		PM Peak Hour	
Code	Land Use	Intensity		ln	Out	ln	Out
221	Multifamily Housing (Mid-Rise)	350	d.u.	30	87	90	57

Capacity analyses were performed using Synchro Version 10 and Sidra Intersection 9 software. <u>Table ES-2</u> summarizes the operation of the study intersections for the AM and PM peak hour traffic conditions.

Table ES-2 Level-of-Service Summary				
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)		
Kelly Road at Wendhurst Court/Beaver Creek Commons Drive (Signalized)				
Existing (2021) Traffic	B (11.7)	C (24.5)		
Background (2025) Traffic	B (12.3)	C (28.7)		
Build-Out (2025) Traffic	B (12.3)	C (28.4)		



Table ES-2 (cont.) Level-of-Service Summary			
Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)	
Olive Chapel Road at Chapel	Ridge Road (Unsignaliz	red)	
Existing (2021) Traffic	SB – B (12.7) EBL – A (8.3)	SB – B (13.6) EBL – A (8.7)	
Background (2025) Traffic	SB – B (13.9) EBL – A (8.8)	SB – C (15.8) EBL – A (9.0)	
Build-Out (2025) Traffic	SB – B (14.7) EBL – A (8.8)	SB – C (16.6) EBL – A (9.1)	
Chapel Ridge Road at Ackerm	an Hill Drive (Unsignali	zed)	
Existing (2021) Traffic	WB – A (8.6) SBL – A (7.3)	WB – A (8.7) SBL – A (7.3)	
Background (2025) Traffic	WB – A (8.7) SBL – A (7.3)	WB – A (8.7) SBL – A (7.3)	
Build-Out (2025) Traffic	WB – A (8.9) SBL – A (7.3)	WB – A (9.2) SBL – A (7.4)	
Beaver Creek Commons Drive at Creek	kside Landing Drive (Re	oundabout)^	
Existing (2021) Traffic	A (4.2) $v/c = 0.16$	A (8.5) $v/c = 0.47$	
Background (2025) Traffic	A (4.5) $v/c = 0.18$	A (9.6) $v/c = 0.52$	
Build-Out (2025) Traffic	A (4.7) $v/c = 0.21$	B (10.3) $v/c = 0.55$	
Beaver Creek Commons Drive at Pr	oposed Site Access (Uns	ignalized)	
Build-Out (2025) Traffic	WB – B (11.4) SBL – A (7.8)	WB – B (14.5) SBL – A (8.6)	
Chapel Ridge Road at Proposed Site Acce	ess/North Site Driveway	(Unsignalized)	
Build-Out (2025) Traffic	NB – A (9.2) WBL – A (7.3)	NB – A (9.3) WBL – A (7.5)	
Chapel Ridge Road at Central S	Site Driveway (Unsignal		
Build-Out (2025) Traffic	NB – A (9.4) SB – A (9.4) EBL – A (7.4) WBL – A (7.3)	NB – A (9.6) SB – A (9.5) EBL – A (7.3) WBL – A (7.4)	
Chapel Ridge Road at South S	ite Driveway (Unsignali	zed)	
Build-Out (2025) Traffic	EB – A (9.0) WB – A (9.1) NBL – A (7.3) SBL – A (7.3)	EB – A (9.2) WB – B (9.4) NBL – A (7.3) SBL – A (7.4)	
Ackerman Hill Drive at Site Driveway (Unsignalized)			
Build-Out (2025) Traffic	NB – A (8.9) WBL – A (7.3)	NB – A (9.0) WBL – A (7.4)	

^Note: Results reported from SIDRA software.



The following roadway improvements are recommended to be performed as part of this project:

Chapel Ridge Road Extension/Proposed Site Access:

Realign and extend Chapel Ridge Road/Proposed Site Access to Beaver Creek Commons
Drive as a two-lane undivided roadway

Beaver Creek Commons Drive at Proposed Site Access:

- Construct the Proposed Site Access with one ingress lane and one egress lane
- Restripe Beaver Creek Commons Drive to provide a southbound left-turn lane with 100 feet of storage

Chapel Ridge Road at Proposed Site Access/North Site Driveway:

Construct the North Site Driveway with one ingress lane and one egress lane

Chapel Ridge Road at Central Site Driveway:

 Construct the Central Site Driveway with one ingress lane and one egress lane on both minor street approaches

Chapel Ridge Road at South Site Driveway:

 Construct the South Site Driveway with one ingress lane and one egress lane on both minor street approaches

Ackerman Hill Drive at Site Driveway:

• Construct the Site Driveway with one ingress lane and one egress lane

These recommended improvements are shown on **Figure ES-1**.

Analyses indicate that with the recommended improvements in place, all of the study intersections will operate at acceptable LOS at project build-out. Only minor increases in intersection delays are anticipated between the background and build-out conditions, and no queuing issues are anticipated in the build-out traffic condition.

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1.0 Introduction

Kimley-Horn has completed a Traffic Impact Analysis (TIA) for the proposed Chapel Ridge Apartments development located along Chapel Ridge Road at Ackerman Hill Drive in Apex, North Carolina. The site is currently occupied by several single-family homes and as currently envisioned will include approximately 350 apartments. Full build-out of the development was assumed in 2025 for this analysis.

This report presents trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with the development. The traffic conditions studied include the existing (2021) traffic condition as well as the projected (2025) background and build-out traffic conditions.

North Carolina Department of Transportation (NCDOT) and Town of Apex staff provided background data and were consulted regarding the elements to be covered in this analysis. The approved Memorandum of Understanding is included in the Appendix of this report.



2.0 Inventory

2.1 Study Area

The study area for this development includes the following intersections:

- Kelly Road at Wendhurst Court/Beaver Creek Commons Drive
- Olive Chapel Road at Chapel Ridge Road
- Chapel Ridge Road at Ackerman Hill Drive
- Beaver Creek Commons Drive at Creekside Landing Drive
- Beaver Creek Commons Drive at Proposed Site Access
- Chapel Ridge Road at Proposed Site Access/North Site Driveway
- Chapel Ridge Road at Central Site Driveway
- Chapel Ridge Road at South Site Driveway
- Ackerman Hill Drive at Site Driveway

Figure 2.1 shows the site location, and Figure 2.2 shows the preliminary layout plan.

2.2 Existing Conditions

The proposed Chapel Ridge Apartments development is located along Chapel Ridge Road at Ackerman Hill Drive in Apex, North Carolina. Roadways in the study area include Kelly Road, Olive Chapel Road, Beaver Creek Commons Drive, Creekside Landing Drive, Wendhurst Court, Chapel Ridge Road, and Ackerman Hill Drive. The existing roadway laneage is shown in **Figure 2.3**.

Kelly Road is generally a multi-lane undivided roadway in the vicinity of Beaver Creek Commons Drive with a posted speed limit of 45 mph. NCDOT reported a 2017 average daily traffic (ADT) volume of 14,000 vehicles per day (vpd) south of Beaver Creek Commons Drive.

Olive Chapel Road is generally a 2-lane undivided roadway with a posted speed limit of 45 mph in the vicinity of Chapel Ridge Road. NCDOT reported a 2019 average daily traffic (ADT) volume of 9,700 vehicles per day (vpd) east of Chapel Ridge Road.

Beaver Creek Commons Drive is generally a 3-lane undivided roadway with a posted speed limit of 35 mph. Based on December 2021 traffic count data, the ADT volume on Beaver Creek Commons Drive is approximately 7,000 vpd southwest of the Kohl's driveway.

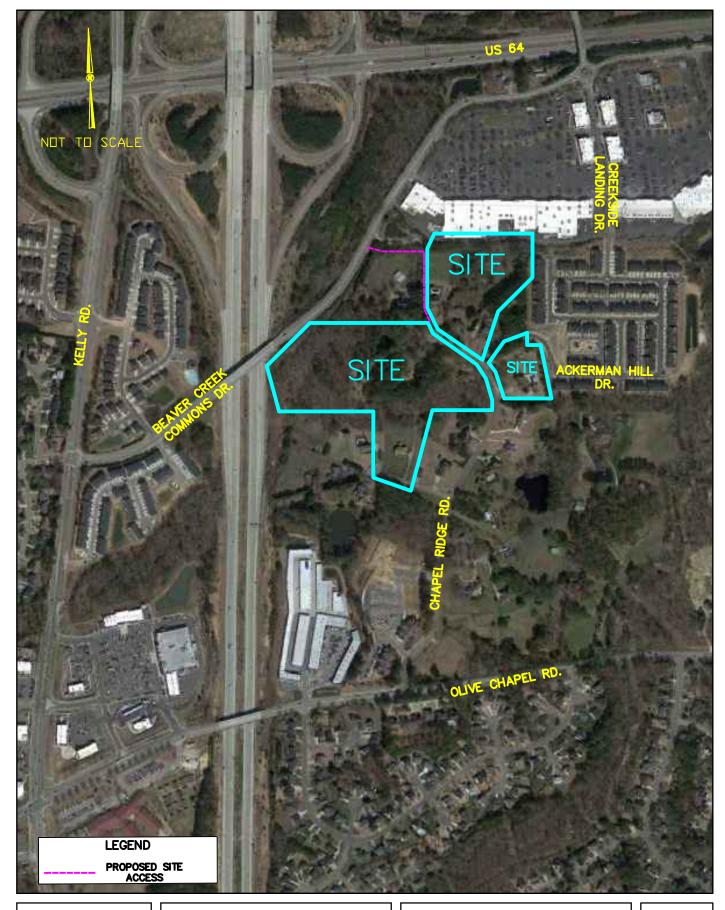
Creekside Landing Drive is generally a 2-lane undivided roadway with a posted speed limit of 25 mph. Based on December 2021 traffic count data, the ADT volume is approximately 5,200 vpd north of Beaver Creek Commons Drive.

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Wendhurst Court is generally a 2-lane undivided roadway with a posted speed limit of 25 mph and an estimated 2021 ADT volume of less than 1,000 vpd.

Chapel Ridge Road is generally a 2-lane undivided roadway with a posted speed limit of 25 mph. Based on December 2021 traffic count data, the ADT volume is estimated to less than 1,000 vpd.

Ackerman Hill Drive is generally a 2-lane undivided roadway with a posted speed limit of 25 mph. Based on December 2021 traffic count data, the ADT volume on Ackerman Hill Drive is less than 1,000 vpd in the vicinity of Chapel Ridge Road.





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SITE LOCATION

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FIGURE 2.2

PLAN

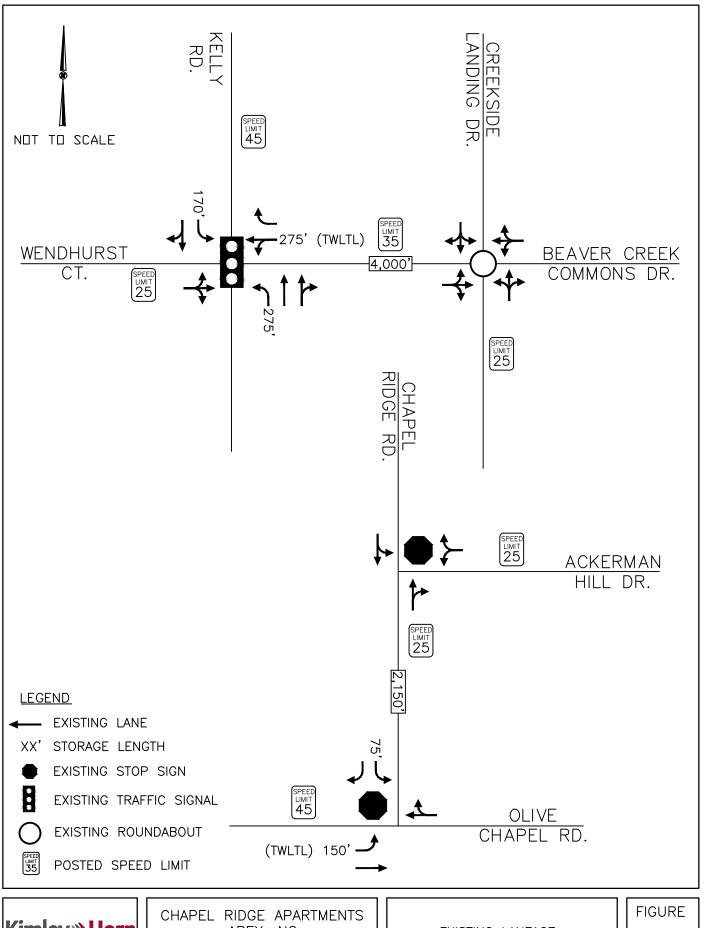
PRELIMINARY LAYOUT

CHAPEL RIDGE APARTMENTS APEX, NC TRAFFIC IMPACT ANALYSIS

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EXISTING LANEAGE

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3.0 Traffic Generation

The traffic generation potential of the proposed development was determined using the traffic generation data published in *ITE Trip Generation* (Institute of Transportation Engineers, Tenth Edition, 2017). The site is currently occupied by several single-family homes and as currently envisioned will include approximately 350 apartments.

The trip generation potential of the site is shown below in <u>Table 3.1</u>.

Table 3.1 ITE Traffic Generation (Vehicles)							
Land Use	Awitcakiloui			PM Pe	PM Peak Hour		
Code	Land USE	Intensity		ln	Out	ln	Out
221	Multifamily Housing (Mid-Rise)	350	d.u.	30	87	90	57

As shown in Table 3.1, the proposed development has the potential to generate 117 new trips during the AM peak hour and 147 new trips during the PM peak hour on a typical weekday. Detailed trip generation calculations are included in the Appendix.

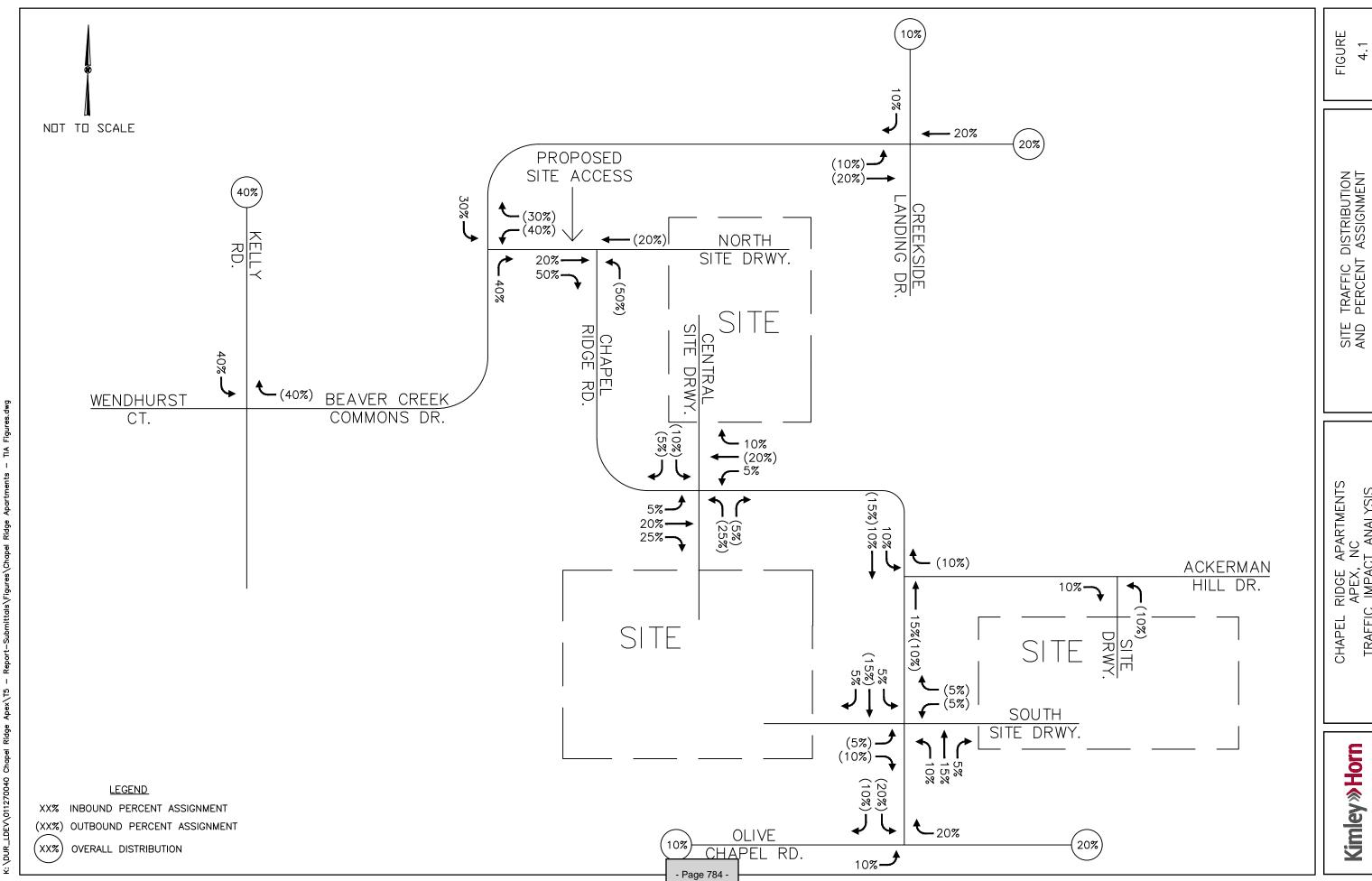


4.0 Site Traffic Distribution

The proposed generated trips were assigned to the surrounding roadway network. The directional distribution and assignment are based on land uses in the area and existing travel patterns and confirmed as part of the TIA scoping discussions with the Town and NCDOT. Site trips were assigned to the network based on the following distribution:

- 40% to/from the north on Kelly Road (via Beaver Creek Commons Drive)
- 20% to/from the east on Beaver Creek Commons Drive
- 15% to/from the east on Olive Chapel Road
- 15% to/from the west on Olive Chapel Road
- 10% to/from the north on Creekside Landing Drive

The site traffic distribution and percent assignment are shown on **Figure 4.1**.



CHAPEL RIDGE APARTMENTS APEX, NC TRAFFIC IMPACT ANALYSIS

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5.0 Projected Traffic Volumes

5.1 Existing Traffic

AM peak hour (7:00 to 9:00 AM) and PM peak hour (4:00 to 6:00 PM) turning movement counts were performed at the following intersections:

•	Kelly Road at Wendhurst Court/Beaver Creek Commons Drive	November 16, 2021
•	Olive Chapel Road at Chapel Ridge Road	November 16, 2021
•	Chapel Ridge Road at Ackerman Hill Drive	November 16, 2021
•	Beaver Creek Commons Drive at Creekside Landing Drive	November 16, 2021

Traffic counts were performed while Wake County Public Schools were in session. The existing AM and PM peak hour traffic volumes are shown on **Figures 5.1** and **5.2** respectively, and the traffic count data are included in the Appendix.

5.2 Historic Growth Traffic

Historic growth traffic is the increase in traffic due to non-specific growth throughout the area. Based on discussions with Town staff, an annual growth rate of 3% was applied to the intersections in the study area up to the build-out year 2025. No growth was applied to volumes onto/off of Wendhurst Court, Chapel Ridge Road, and the southern leg of Creekside Landing Drive as development along those roadways is either built-out or otherwise accounted for in approved development traffic.

5.3 Approved Development Traffic

Approved development traffic is generated by approved, but not yet constructed, projects in the vicinity of the proposed project. For this analysis, site trips from the Olive Chapel Professional Park development were included.

Per the *Olive Chapel Professional Park TIA* (Ramey-Kemp, October 2016), the Olive Chapel Professional Park development is anticipated to include up to approximately 80,000 square feet (SF) of general office space. This project was approximately 50% occupied at the time of this study, so only the remaining 50% of site traffic from this project was included in this analysis as background traffic.

It was also noted that while the Jordan Lutheran Church has been approved on an adjacent parcel along Beaver Creek Commons Drive, that project is expected to have a minimal impact on traffic volumes during the AM and PM peak hours on a typical weekday and as such was not included in this analysis.



5.4 Total Background Traffic

Total AM and PM peak hour traffic volumes, which include existing, historic growth, and approved development traffic, are shown on **Figures 5.1** and **5.2**, respectively.

5.5 Site Traffic

The proposed site traffic was generated and assigned to the adjacent roadway network according to the distribution discussed previously in *Section 4.0*. The site traffic volumes for the AM and PM peak hours are shown in **Figures 5.3** and **5.4**, respectively.

5.6 Beaver Creek Commons Drive Connection Traffic Impacts

As noted, this project will be required to construct a proposed site access that extends Chapel Ridge Road to connect with Beaver Creek Commons Drive and it is anticipated that this new connection will not be restricted to site traffic-use only.

In the existing condition, development traffic from the Hempstead at Beaver Creek Townhomes community has access to Beaver Creek Commons Drive via Creekside Landing Drive in addition to cross-access near the retail stores. However, the proposed connection to Beaver Creek Commons Drive constructed as part of this development is expected to be more direct and, while somewhat longer in terms of travel distance, may include fewer traffic calming measures than the Creekside Landing Drive route. It was conservatively estimated that 55% of traffic from the Hempstead development would use the proposed connection to Beaver Creek Commons Drive in the future, so site trips were generated and assigned to the network generally consistent with the distribution discussed in *Section 4.0*.

Traffic diversions were also assumed for the Olive Chapel Professional Park project, and while that project is currently 50% built-out, this analysis assumed that all of the site trips assigned to/from the north in the *Olive Chapel Professional Park TIA* would use the new connection to Beaver Creek Commons Drive as opposed to the existing travel path along Creekside Landing Drive through the Hempstead development.

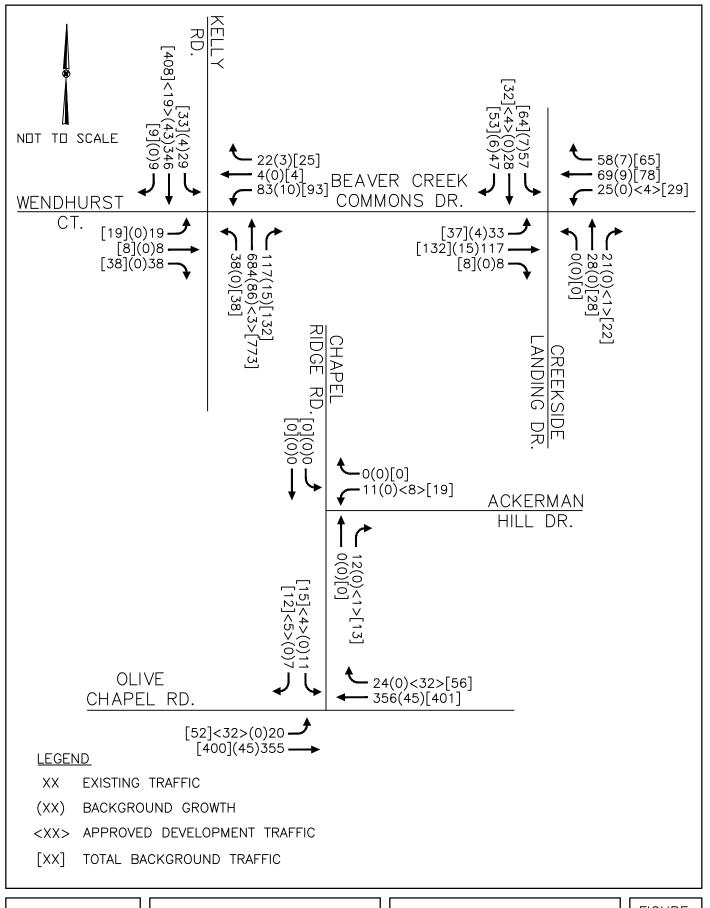
The anticipated traffic diversions associated with the proposed site access construction are shown in **Figures 5.3** and **5.4** for the AM and PM peak hours, respectively.

It should be noted that no trip reductions were applied to existing or approved development volumes. The diversions discussed above for the Hempstead and Olive Chapel Professional Park projects were added to projected traffic volumes, which will result in a significant volume of double-counted trips and present very conservative results.



5.7 Build-Out Traffic

To obtain the projected (2025) build-out traffic volumes, the projected site traffic and Beaver Creek Commons Drive connection diversion trips were added to the projected (2025) background traffic. Traffic volume calculations are detailed in intersection spreadsheets in the Appendix of this report. **Figures 5.3** and **5.4** show the projected (2025) AM and PM peak hour build-out traffic volumes, respectively.

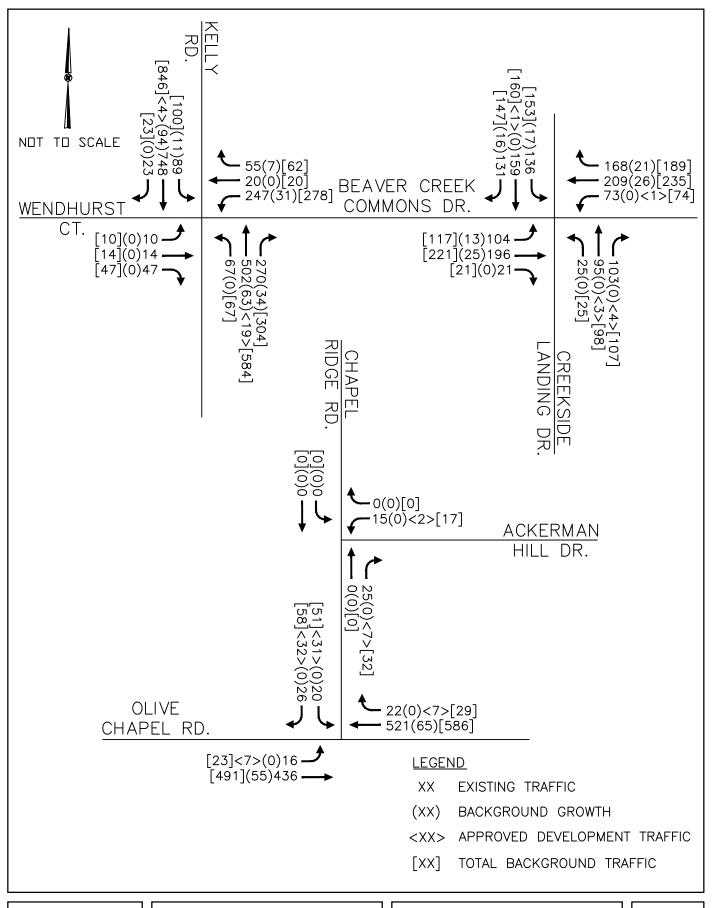




CHAPEL RIDGE APARTMENTS APEX, NC TRAFFIC IMPACT A

EXISTING AND PROJECTED (2025) BACKGROUND AM PEAK HOÚR TRAFFIC VOLUMES **FIGURE**

5.1



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EXISTING AND PROJECTED (2025) BACKGROUND PM PEAK HOUR TRAFFIC VOLUMES FIGURE 5.2

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6.0 Capacity Analysis

Highway Capacity Manual LOS Thresholds

Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a set time duration. Capacity is combined with Level-of-Service (LOS) to describe the operating characteristics of a road segment or intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A representing the shortest average delays and F representing the longest average delays. LOS D is the typically accepted standard for signalized intersections in urbanized areas. For signalized intersections, LOS is defined for the overall intersection.

For unsignalized intersections, only the movements that must yield right-of-way experience control delay. Therefore, LOS criteria for the overall intersection is not reported by Synchro or SimTraffic or computable using methodology published in the *Highway Capacity Manual*. It is typical for stop sign controlled side streets and driveways intersecting major streets to experience long delays during peak hours, while the majority of the traffic moving through the intersection on the major street experiences little or no delay. <u>Table 6.0</u> lists the LOS control delay thresholds published in the *Highway Capacity Manual* for signalized and unsignalized intersections.

Table 6.0 Level-of-Service Control Delay Thresholds				
Level-of- Service Signalized Intersections – Control Delay Per Vehicle [sec/veh] Unsignalized Intersections – Average Control Delay [sec/veh] & Qualitative Operational Description				
A	≤ 10	≤ 10		
В	> 10 - 20	> 10 – 15	Short Delays	
С	> 20 - 35	> 15 – 25		
D	> 35 – 55	> 25 – 35	Madagata Dalaya	
Е	> 55 - 80	> 35 – 50	Moderate Delays	
F	> 80	> 50	Long Delays	

Right-turns on red were allowed as currently permitted in the field. As there is no expectation that right-turns on red would be prohibited due to the addition of background or site traffic, field conditions were maintained for consistency. Additionally, existing peak hour factors (PHF) were used at existing intersections, while a 0.90 PHF was used at new intersections. As actual PHF were confirmed from field-collected data, and since it is typical for PHF to at least be maintained or increased with study area build-out, the use of actual PHF was determined to be appropriate.

Capacity analyses were performed for the AM and PM peak hours using Synchro/SimTraffic Version 10 and Sidra Intersection 9 software to determine the operating characteristics of the adjacent road network and the impacts of the proposed project. Those analyses are included in the Appendix and are briefly summarized in the following sub-sections.



6.1 Kelly Road at Wendhurst Court/Beaver Creek Commons Drive

Analyses indicate that the signalized intersection of Kelly Road at Wendhurst Court/Beaver Creek Commons Drive currently operates at LOS B in the AM peak hour and LOS C in the PM peak hour. The intersection is expected to continue operating at LOS B in the AM peak hour and LOS C in the PM peak hour in the study year 2025 with or without the proposed project in place. As only minor increases in delays are anticipated with the project in place, and since site traffic is anticipated to account for less than 3% of total intersection traffic at project build-out, no improvements are recommended to be performed at this intersection to accommodate site traffic. Note that the minor decrease in delay between the background and build-out conditions in the PM peak hour is likely due to the addition of site trips to movements already operating at acceptable levels of service and the associated weighted-average methodology for delay calculations. Such decreases are negligible and are not uncommon.

<u>Table 6.1</u> summarizes operations at the intersection of Kelly Road at Wendhurst Court/Beaver Creek Commons Drive for the existing (2021) and projected (2025) background and build-out traffic conditions.

Table 6.1 Level-of-Service Kelly Road at Wendhurst Court/Beaver Creek Commons Drive (Signalized)				
Condition AM Peak Hour PM Peak Hour LOS (Delay) LOS (Delay)				
Existing (2021) Traffic	B (11.7)	C (24.5)		
Background (2025) Traffic	B (12.3)	C (28.7)		
Build-Out (2025) Traffic	B (12.3)	C (28.4)		



6.2 Olive Chapel Road at Chapel Ridge Road

Analyses indicate that the unsignalized intersection of Olive Chapel Road at Chapel Ridge Road currently operates with short delays on the minor street approach (Chapel Ridge Road) in both peak hours. In the 2025 study year the intersection is expected to continue operating with short delays on the minor street approaches in both peak hours with or without the proposed project in place.

For reference, a signal warrant analysis was also performed at this intersection to determine if projected (2025) build-out traffic volumes met volume warrants in the Manual for Uniform Traffic Control Devices (MUTCD). Based on this analysis, projected (2025) build-out traffic volumes are not expected to meet peak, 4-hour, or 8-hour volume warrants. Traffic signal warrant data is included in the Appendix of this report.

Since only minor increases in delays and queues are anticipated with the addition of site traffic, no improvements are recommended to be performed at this intersection to accommodate site traffic.

<u>Table 6.2</u> summarizes operations at the intersection of Olive Chapel Road at Chapel Ridge Road for the existing (2021) and projected (2025) background and build-out traffic conditions.

Table 6.2 Level-of-Service Olive Chapel Road at Chapel Ridge Road (Unsignalized)				
Condition AM Peak Hour PM Peak H LOS (Delay) LOS (Delay				
Existing (2021) Traffic	SB – B (12.7) EBL – A (8.3)	SB – B (13.6) EBL – A (8.7)		
Background (2025) Traffic	SB – B (13.9) EBL – A (8.8)	SB – C (15.8) EBL – A (9.0)		
Build-Out (2025) Traffic	SB – B (14.7) EBL – A (8.8)	SB – C (16.6) EBL – A (9.1)		



6.3 Chapel Ridge Road at Ackerman Hill Drive

Analyses indicate that the unsignalized intersection of Chapel Ridge Road at Ackerman Hill Drive currently operates with short delays on the minor street approach (Ackerman Hill Drive) in both peak hours. In the 2025 study year, the intersection is expected to continue operating with short delays on the minor street approaches in both peak hours with or without the proposed project in place. Since only minor increases in delays and queues are anticipated with the addition of site traffic, no improvements are recommended to be performed at this intersection to accommodate site traffic.

<u>Table 6.3</u> summarizes operations at the intersection of Chapel Ridge Road at Ackerman Hill Drive for the existing (2021) and projected (2025) background and build-out traffic conditions.

Table 6.3 Level-of-Service Chapel Ridge Road at Ackerman Hill Drive (Unsignalized)						
Condition AM Peak Hour LOS (Delay) LOS (Delay)						
Existing (2021) Traffic	WB – A (8.6) SBL – A (7.3)	WB – A (8.7) SBL – A (7.3)				
Background (2025) Traffic	WB – A (8.7) SBL – A (7.3)	WB – A (8.7) SBL – A (7.3)				
Build-Out (2025) Traffic	WB – A (8.9) SBL – A (7.3)	WB – A (9.2) SBL – A (7.4)				



6.4 Beaver Creek Commons Drive at Creekside Landing Drive

Analyses indicate that the roundabout intersection of Beaver Creek Commons Drive at Creekside Landing Drive currently operates at LOS A and low volume to capacity ratios in both peak hours. In the 2025 study year, the intersection is expected to continue operating at acceptable overall LOS and low volume to capacity ratios with or without the proposed project in place. No queueing issues are expected at this intersection. Therefore, no improvements are recommended to be performed to accommodate site traffic at this intersection.

<u>Table 6.4</u> summarizes operations at the intersection of Beaver Creek Commons Drive at Creekside Landing Drive for the existing (2021) and projected (2025) background and build-out traffic conditions.

Table 6.4 Level-of-Service Beaver Creek Commons Drive at Creekside Landing Drive^						
Condition AM Peak Hour LOS (Delay) LOS (Delay)						
Existing (2021) Traffic	A (4.2) $v/c = 0.16$	A (8.5) $v/c = 0.47$				
Background (2025) Traffic	A (4.5) $v/c = 0.18$	A (9.6) $v/c = 0.52$				
Build-Out (2025) Traffic	A (4.7) $v/c = 0.21$	B (10.3) v/c = 0.55				

^Note: Results reported from SIDRA software.



6.5 Beaver Creek Commons Drive at Proposed Site Access

As required by the Town, site access is proposed along Beaver Creek Commons Drive. This connection is proposed as a full-movement site driveway approximately 1,800 feet southwest of Creekside Landing Drive, and it was assumed that Beaver Creek Commons Drive would be restriped to provide a left-turn lane into the Site Access. Analyses indicate that this intersection is expected to operate with short delays and queues on the minor street approach (Proposed Site Access) at project build-out.

<u>Table 6.5</u> summarizes operations at the intersection of Beaver Creek Commons Drive at Proposed Site Access for the build-out (2025) traffic condition.

Table 6.5 Level-of-Service Beaver Creek Commons Drive at Proposed Site Access (Unsignalized)					
Condition AM Peak Hour PM Peak I LOS (Delay) LOS (Del					
Build-Out (2025) Traffic	WB – B (11.4) SBL – A (7.8)	WB – B (14.5) SBL – A (8.6)			



6.6 Chapel Ridge Road at Proposed Site Access/North Site Driveway

A full-movement site driveway with one ingress lane and one egress lane is proposed to be constructed on Chapel Ridge Road approximately 350 feet east of Beaver Creek Commons Drive and align with the Site Access connection to Beaver Creek Commons Driveway. This driveway is proposed to be constructed with one ingress and one egress lane, and analyses indicate that this intersection is expected to operate with short delays and queues on the minor street approach (Chapel Ridge Road) at project build-out.

<u>Table 6.6</u> summarizes operations at the intersection of Chapel Ridge Road at Proposed Site Access/North Site Driveway for the projected (2025) build-out traffic condition.

Table 6.6 Level-of-Service Chapel Ridge Road at Proposed Site Access/North Site Driveway (Unsignalized)					
Condition AM Peak Hour PM Peak LOS (Delay) LOS (De					
Build-Out (2025) Traffic	NB – A (9.2) WBL – A (7.3)	NB – A (9.3) WBL – A (7.5)			



6.7 Chapel Ridge Road at Central Site Driveway

A full-movement site driveway with one ingress lane and one egress lane is proposed to be constructed on Chapel Ridge Road approximately 175 feet west of Ackerman Hill Drive. This intersection is proposed to be constructed with one ingress and one egress lane, and analyses indicate that this intersection is expected to operate with short delays and queues on the minor street approach (Central Site Driveway) at project build-out.

<u>Table 6.7</u> summarizes operations at the intersection of Chapel Ridge Road at Central Site Driveway for the projected (2025) build-out traffic condition.

Table 6.7 Level-of-Service Chapel Ridge Road at Central Site Driveway (Unsignalized)					
Condition AM Peak Hour PM Peak Hour LOS (Delay) LOS (Delay)					
Build-Out (2025) Traffic	NB – A (9.4) SB – A (9.4) EBL – A (7.4) WBL – A (7.3)	NB – A (9.6) SB – A (9.5) EBL – A (7.3) WBL – A (7.4)			



6.8 Chapel Ridge Road at South Site Driveway

A full-movement site driveway with one ingress lane and one egress lane is proposed to be constructed on Chapel Ridge Road approximately 250 feet south of Ackerman Hill Drive. Analyses indicate that this intersection is expected to operate with short delays and queues on the minor street approach (South Site Driveway) at project build-out.

<u>Table 6.8</u> summarizes operations at the intersection of Chapel Ridge Road at South Site Driveway for the projected (2025) build-out traffic condition.

Table 6.8 Level-of-Service Chapel Ridge Road at South Site Driveway (Unsignalized)					
Condition AM Peak Hour LOS (Delay) LOS (Delay)					
Build-Out (2025) Traffic	EB – A (9.0) WB – A (9.1) NBL – A (7.3) SBL – A (7.3)	EB – A (9.2) WB – B (9.4) NBL – A (7.3) SBL – A (7.4)			



6.9 Ackerman Hill Drive at Site Driveway

A full-movement site driveway with one ingress lane and one egress lane is proposed to be constructed on Ackerman Hill Drive approximately 175 feet east of Chapel Ridge Road. This intersection is proposed to be constructed with one ingress and one egress lane, and analyses indicate that this intersection is expected to operate with short delays and queues on the minor street approach (Site Driveway) at project build-out.

<u>Table 6.9</u> summarizes operations at the intersection of Ackerman Hill Drive at Site Driveway for the projected (2025) build-out traffic condition.

Table 6.9 Level-of-Service Ackerman Hill Drive at Site Driveway (Unsignalized)					
Condition AM Peak Hour PM Peak Hour LOS (Delay) LOS (Delay) LOS (Delay)					
Build-Out (2025) Traffic	NB – A (8.9) WBL – A (7.3)	NB – A (9.0) WBL – A (7.4)			



7.0 Supplemental Analysis – With Chapel Ridge Townes

The Chapel Ridge Townes project, which envisioned the construction of 116 townhomes, was previously proposed for construction in the northeast corner of the intersection of the Olive Chapel Road at Chapel Ridge Road. While that proposed rezoning was denied through the public hearing process and therefore would not have any impacts on the network, Town staff indicated that supplemental analyses considering the potential impact of such a project on the network would provide helpful context with this study. It should be noted that the intent of this supplemental analysis was for information purposes only and not to identify additional improvements required of the Chapel Ridge Apartments project since the additional trip impact discussed in this section is associated with a project that was not approved.

7.1 Background Volume Development

No changes were made to existing AM and PM peak hour traffic volumes or historic growth traffic as discussed in *Section 5*. For this supplemental analysis, the trip generation for the Chapel Ridge Townes project was obtained from the "Chapel Ridge Tracts Residential Development Trip Generation Letter" (Exult Engineering, March 2021) and is shown below in <u>Table 7.1</u>.

Table 7.1 ITE Traffic Generation (Vehicles)							
Land Use	Land Use	AM Peak Hour PM Peak H			ak Hour		
Code	Land USE	Intensity		In	Out	In	Out
220	Multifamily Housing (Low-Rise)	116	d.u.	13	42	43	25

The proposed generated trips were assigned to the surrounding roadway network. The directional distribution and assignment are based on land uses in the area and existing travel patterns generally consistent with the Chapel Ridge Apartments project. Site trips were assigned to the network based on the following distribution:

- 50% to/from the west on Olive Chapel Road
- 40% to/from the east on Olive Chapel Road
- 5% to/from the east on Beaver Creek Commons Drive
- 5% to/from the north on Creekside Landing Drive

Total background traffic volumes for this supplemental analysis included existing traffic and historic growth traffic volumes as well as approved development traffic volumes, which included the build-out of the Olive Chapel Professional Park project as well as the Chapel Ridge Townes project. These calculations are detailed on intersection spreadsheets in the Appendix of this report.



7.2 Beaver Creek Commons Drive Traffic Impacts

Similar to the Olive Chapel Professional Park diversion discussed in *Section 5*, it is anticipated that the proposed connection to Beaver Creek Commons Drive would also result in traffic diversion from this previously-proposed project. Chapel Ridge Townes site trips to/from the north on Ackerman Hill Drive included as approved development trips in the background condition were diverted to the new connection in the build-out condition of this supplemental analysis.

No changes to Chapel Ridge Apartments site traffic were made for this supplemental analysis.

To obtain the projected build-out traffic volumes for this supplemental analysis, the projected site traffic and Beaver Creek Commons Drive connection diversion trips were added to the projected background traffic noted in *Section 7.1*. Traffic volume calculations are detailed in intersection spreadsheets in the Appendix of this report.

7.3 Capacity Analysis

Capacity analyses were performed for the AM and PM peak hours using Synchro/SimTraffic Version 10 and Sidra Intersection 9 software to determine the operating characteristics of the adjacent road network and the impacts of the proposed project. As no changes were made to the existing traffic condition analyses summarized previously in this report, only results for the supplemental background and build-out conditions are reported below in Table 7.2.

Table 7.2 Level-of-Service Summary – Supplemental Analysis							
Condition AM Peak Hour LOS (Delay) LOS (Delay							
Kelly Road at Wendhurst Court/Beaver	Kelly Road at Wendhurst Court/Beaver Creek Commons Drive (Signalized)						
Background (2025) Traffic	B (12.3)	C (28.7)					
Build-Out (2025) Traffic	B (12.3)	C (28.4)					
Olive Chapel Road at Chapel	Ridge Road (Unsignaliz	ed)					
Background (2025) Traffic	SB – B (13.9) EBL – A (8.8)	SB – C (15.8) EBL – A (9.0)					
Build-Out (2025) Traffic	SB – B (14.7) EBL – A (8.8)	SB – C (16.6) EBL – A (9.1)					
Chapel Ridge Road at Ackerman Hill Drive (Unsignalized)							
Background (2025) Traffic	WB – A (8.7) SBL – A (7.3)	WB – A (8.8) SBL – A (7.3)					
Build-Out (2025) Traffic	WB – A (8.9) SBL – A (7.3)	WB – A (9.2) SBL – A (7.4)					



Table 7.2 (cont.) Level-of-Service Summary						
Condition	AM Peak Hour PM Peak H LOS (Delay) LOS (Del					
Beaver Creek Commons Drive at Cree	kside Landing Drive (R	oundabout)				
Background (2025) Traffic	A (4.5) $v/c = 0.19$	A (9.7) v/c = 0.53				
Build-Out (2025) Traffic	A (4.7) $v/c = 0.22$	B (10.3) v/c = 0.55				
Beaver Creek Commons Drive at Pro	oposed Site Access (Uns	ignalized)				
Build-Out (2025) Traffic	WB – B (11.4) SBL – A (7.8)	WB – B (14.5) SBL – A (8.6)				
Chapel Ridge Road at Proposed Site Acce	ss/North Site Driveway	(Unsignalized)				
Build-Out (2025) Traffic	NB – A (9.3) WBL – A (7.3)	NB – A (9.3) WBL – A (7.5)				
Chapel Ridge Road at Central S	Site Driveway (Unsignal	ized)				
Build-Out (2025) Traffic	NB – A (9.5) SB – A (9.4) EBL – A (7.4) WBL – A (7.3)	NB – A (9.7) SB – A (9.5) EBL – A (7.3) WBL – A (7.4)				
Chapel Ridge Road at South Si	te Driveway (Unsignali	zed)				
Build-Out (2025) Traffic	EB – A (9.0) WB – A (9.1) NBL – A (7.3) SBL – A (7.3) SBL – A (7.3) EB – A (9. WB – B (9. NBL – A (7.3) SBL – A (7.3)					
Ackerman Hill Drive at Site Driveway (Unsignalized)						
Build-Out (2025) Traffic	WB – A (8.9) SBL – A (7.3)	WB – A (9.1) SBL – A (7.4)				



8.0 Recommendations

The following roadway improvements are recommended to be performed as part of this project:

Chapel Ridge Road Extension/Proposed Site Access:

Realign and extend Chapel Ridge Road/Proposed Site Access to Beaver Creek Commons
Drive as a two-lane undivided roadway

Beaver Creek Commons Drive at Proposed Site Access:

- Construct the Proposed Site Access with one ingress lane and one egress lane
- Restripe Beaver Creek Commons Drive to provide a southbound left-turn lane with 100 feet of storage

Chapel Ridge Road at Proposed Site Access/North Site Driveway:

- Construct the North Site Driveway with one ingress lane and one egress lane
- Extend Chapel Ridge Road approximately 600 feet with one ingress lane and one egress lane

Chapel Ridge Road at Central Site Driveway:

• Construct the Central Site Driveway with one ingress lane and one egress lane

Chapel Ridge Road at South Site Driveway:

• Construct the South Site Driveway with one ingress lane and one egress lane

Ackerman Hill Drive at Site Driveway:

• Construct the Site Driveway with one ingress lane and one egress lane

These recommended improvements are also shown on **Figure 8.1**.

Analyses indicate that with the recommended improvements in place, all of the study intersections will operate at acceptable LOS at project build-out. Only minor increases in intersection delays are anticipated between the background and build-out conditions, and no queuing issues are anticipated in the build-out traffic condition.

THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC NC. CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, HIS DOCUMENT, TOGETHER WITH THE JF AND IMPROPER RELIANCE ON THIS

Appendix

Appendix A: Approved TIA Assumptions Memo

Preliminary Assumptions Chapel Ridge Apartments - Traffic Impact Analysis Apex, North Carolina

KHA will perform an analysis for the proposed Chapel Ridge Apartments project, which is proposed to be located along Chapel Ridge Road at Ackerman Hill Drive in Apex, North Carolina. The site is currently occupied by several single-family parcels and as currently envisioned will include approximately 350 apartments. Build-out is anticipated in the year 2025. The following assumptions will be used in the analysis based on a TIA scoping meeting conducted with the Town of Apex on November 29, 2021.

Study Scenarios

The study scenarios will consist of:

- Existing (2021)
- Background (2025)
- Build-out (2025)
- Supplemental Background (2025): with Chapel Ridge Tracts Residential
- Supplemental Build-out (2025): with Chapel Ridge Tracts Residential

Study Intersections

The study area will consist of the following intersections:

- Kelly Road at Beaver Creek Commons Drive/Wendhurst Court
- Beaver Creek Commons Drive at Creekside Landing Drive
- Olive Chapel Road at Chapel Ridge Road
- Beaver Creek Commons at Proposed Site Access

Existing Volume Development

Existing traffic counts will be collected in 15-minute intervals for the AM peak hour (7:00 to 9:00 AM) and PM peak hour (4:00 to 6:00 PM) at each of the existing study intersections while Wake County Public Schools are in session. No volume adjustments will be applied to existing traffic counts.

Background Volume Development

A 3% annual growth rate will be applied to existing traffic volumes up to the study year 2025 except for trips onto/off of Wendhurst Court, Chapel Ridge Road, and the southern leg of Creekside Landing Drive as development along those roadways is either built-out or otherwise accounted for in approved development traffic (discussed below).

Two developments were identified for inclusion in this analysis as background.

The Olive Chapel Professional Park, located generally northwest of the Olive Chapel Road – Chapel Ridge Road intersection, is currently partially built-out. It is assumed that this project will reach full build-out by the study year 2025, so the remaining site traffic will be included in this analysis as background traffic.

Per the "Chapel Ridge Tracts Residential Development Trip Generation Letter", that project proposed the construction of 116 townhomes generally northeast of the Olive Chapel Road – Chapel Ridge Road intersection. While that rezoning was not approved, site traffic from that project will be included in this analysis to account for potential development on that parcel. As a formal TIA was not required for that project, site trip generation will be obtained from the Trip

Generation and assigned to the Olive Chapel Road – Chapel Ridge Road intersection based on an assigned site traffic assignment.

Based on discussions with Town staff, no development or roadway projects in the area are anticipated to result in traffic diversions that would impact any of the study intersections.

Trip Generation

Trip generation for this project will be performed using data from the 10th Edition of the ITE Trip Generation Manual. Trip generation calculations are attached. To be conservative, no reduction will be applied to account for trips generated by the existing single-family residences that will be replaced as part of this project.

Site Traffic Distribution

The following distribution will be used for project site traffic as shown on the attached sketch:

- 40% to/from the north on Kelly Road (via Beaver Creek Commons Drive)
- 20% to/from the east on Beaver Creek Commons Drive
- 15% to/from the east on Olive Chapel Road
- 15% to/from the west on Olive Chapel Road
- 10% to/from the north on Creekside Landing Drive

Other Study Assumptions

- Existing peak hour factors (PHF's) will be used at existing intersections, while a PHF of 0.90 will be used at new intersections.
- Right-turns on red (RTOR) will be included in the analysis where currently permitted in the field.
- Existing signal timings will be used in the existing condition, though timings may be optimized in the future traffic conditions.
- Analyses will be performed using Synchro/SimTraffic version 10.

Chapel Ridge Apartments Table 1 - Trip Generation

Land Use	Intensity -		Daily	AI	/I Peak Ho	our	PN	/I Peak Ho	ur
Land OSE	inte	isity	Total	Total	In	Out	Total	In	Out
221 Multifamily Housing (Mid-Rise)	350	d.u.	1,906	117	30	87	147	90	57
Total Net New External Trips		-	1,906	117	30	87	147	90	57

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TECHNICAL MEMORANDUM

Date:

Friday, March 26, 2021

To:

Russell Dalton, P.E.

Town of Apex

Senior Transportation Engineer

From:

Lisa Lundeen, P.E. Traffic Engineer Exult Engineering

Subject:

Proposed Chapel Ridge Tracts Residential Development

Trip Generation Letter

BACKGROUND

Exult Engineering has been contracted by Toll Brothers, Inc. to perform traffic engineering services for the proposed Chapel Ridge Tracts Residential Development located in Apex, North Carolina. The proposed site is located in the northeast quadrant of Olive Chapel Road and Chapel Ridge Road and consists of 116 residential townhomes. The site is currently zoned as Rural Residential and does require PUD rezoning. The access for the proposed site consists of two full movement driveways on Chapel Ridge Road and one full movement driveway on Olive Chapel Road. The purpose of this letter, as requested by Town Engineering staff, is to discuss the trip generation, proposed access for the site, and roadway improvement requirements.

TRIP GENERATION

The proposed development is to consist of 116 residential townhomes. The trip generation was based on rates and equations published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. NCDOT Congestion Management Rates vs. Equations spreadsheet was used for guidance. As shown in Table 1, the proposed development is expected to generate 838 daily trips, 55 AM peak hour trips (13 entering, 42 exiting), and 68 PM peak hour trips (43 entering, 25 exiting).

Table 1: Trip Generation

Land Us	е		Daily	A٨	A Peak Ho	our	PM Peak Hour			
	. 838	Total	Enter	Exit	Total	Enter	Exit 25			
220: Multifamily Housing (Low-Rise)		55	13	42	68	43				
Total	838	55	13	42	68	43	25			

References: Trip Generation Manual, 10th Edition, Institute of Transportation Engineers, September 2017

According to the NCDOT Policy on Street and Driveway Access to North Carolina Highways, the threshold for a Traffic Impact Analysis (TIA) to be required by NCDOT is 3,000 new vehicles per day. According to the Town of Apex Unified Development Ordinance, the Town's threshold for a TIA is 1,000 new vehicle trips

per day or 100 peak hour trips. Based on the low trip generation and discussions with NCDOT and the Town, a TIA will not be required for the proposed Chapel Ridge Tracts Residential Development.

ACCESS AND ROADWAY REQUIREMENTS

As shown on the conceptual plan for the proposed Chapel Ridge Tracts Residential Development, the proposed access for the site consists of two full movement driveways on Chapel Ridge Road and one full movement driveway on Olive Chapel Road. The southern driveway along Chapel Ridge Road is located approximately 380 feet north of the intersection with Olive Chapel Road, and the northern driveway is located approximately 400 feet north of the southern driveway. The driveway along Olive Chapel Road aligns with Ashley Downs Drive and is located approximately 1,000 feet east of the intersection with Chapel Ridge Road.

Based on discussions with NCDOT and the Town, the requirements for this development are as follows:

- An exclusive right turn lane on Olive Chapel Road with 50 feet of storage with appropriate deceleration length and taper at the site driveway
- A requirement to reinforce the pavement structure on Chapel Ridge Road from Olive Chapel Road to the northern site driveway.

26/2021

Provide adequate sight distance at the project driveways.

Please let me know if you have any questions or comments.

Sincerely,

Lisa Lundeen, P.E. Exult Engineering

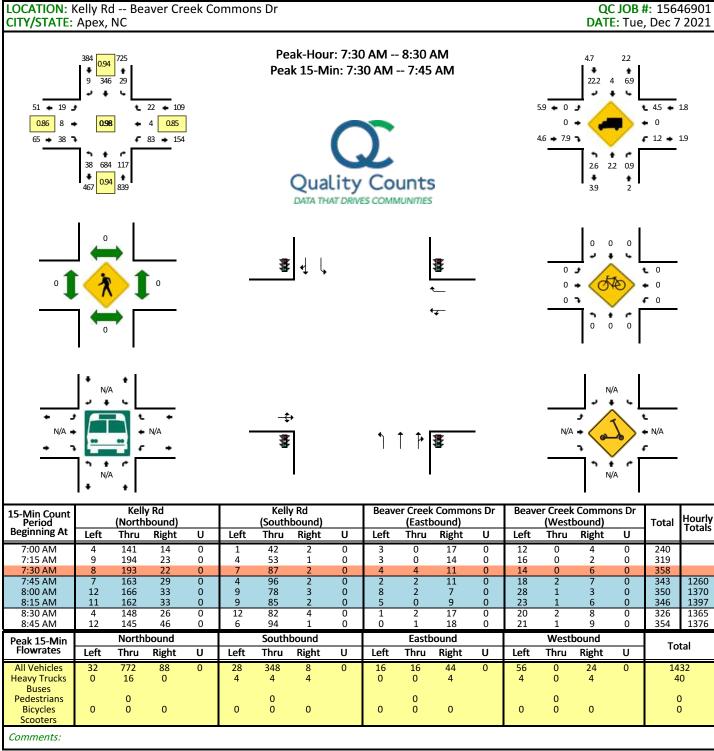
cc: Sean Brennan, NCDOT

Jeff Westmoreland, Toll Brothers Brendie Vega, WithersRavenel

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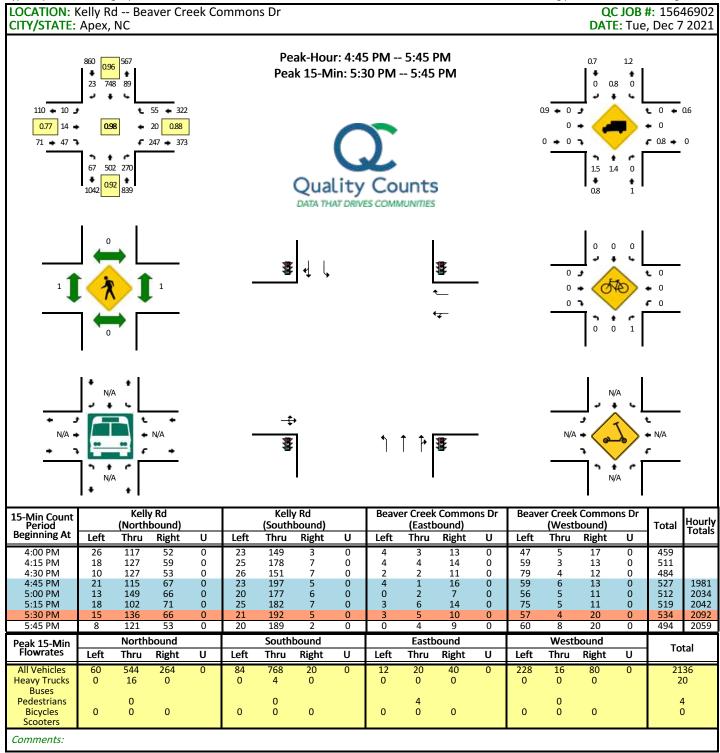
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Appendix B: Traffic Count Data



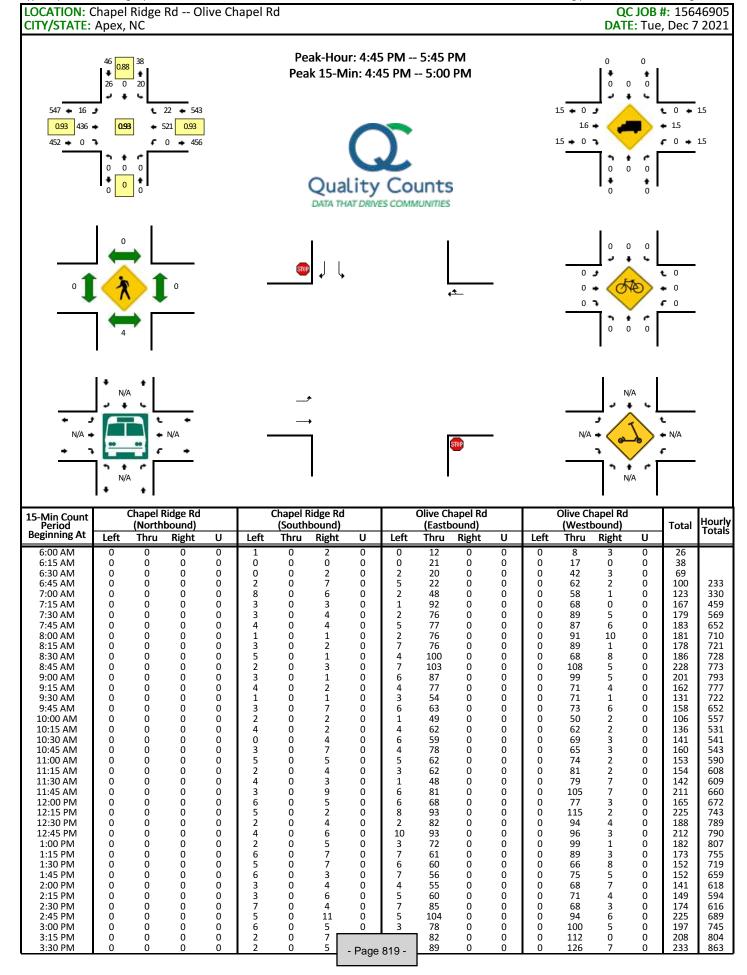
Report generated on 12/13/2021 8:15 AM

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Report generated on 12/13/2021 8:15 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212



15-Min Count Period	(Northbound)			Chapel Ridge Rd (Southbound)			Olive Chapel Rd (Eastbound)			Olive Chapel Rd (Westbound)			Total	Hourly Totals				
Beginning At	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		Totals
3:45 PM 4:00 PM 4:15 PM 4:30 PM 4:45 PM 5:00 PM	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	1 3 3 5 4	0 0 0 0 0	4 3 7 11 8	0 0 0 0	7 5 7 3 1	90 112 95 100 121 103	0 0 0 0	0 0 0 0	0 0 0 0	128 127 126 101 138 117	3 6 6 13 8 4 3	0 0 0 0	233 256 244 233 280 242	871 930 966 966 1013 999
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5:45 PM 6:00 PM 6:15 PM 6:30 PM 6:45 PM	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	6 3 7 5 6	0 0 0 0	11 2 5 4 11	0 0 0 0	4 5 3 1 3	90 74 79 90 58	0 0 0 0	0 0 0 0	0 0 0 0	116 107 122 75 104	5 4 7 5 3	0 0 0 0	232 195 223 180 185	993 946 895 830 783
Peak 15-Min Flowrates	Left	North Thru	bound Right	U	Left	South Thru	bound Right	U	Left	Eastb Thru	ound Right	U	Left	Westl Thru	bound Right	U	То	tal
All Vehicles Heavy Trucks Buses Pedestrians Bicycles Scooters	0 0	0 0 12 0	0 0 0	0	16 0	0 0 0	32 0	0	4 0 0	484 8 0 0	0 0 0	0	0 0	552 12 0 0	32 0	0	2	20 0 2
Comments:																		

Report generated on 12/13/2021 8:15 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

LOCATION: Ackerman Hill Dr btwn Chapel Ridge Rd and Drayman Pl

SPECIFIC LOCATION:

CITY/STATE: Apex, NC

QC JOB #: 15646906 DIRECTION: NB, SB DATE: Dec 7 2021 - Dec 7 2021

Start Time	Mon	Tue 7 Dec 21	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
06:00 AM		3				3			3	
06:15 AM		0				0			0	
06:30 AM		3				3			3	
06:45 AM		6				6			6	
07:00 AM		5				5			5	
07:15 AM		2				2			2	
07:30 AM		8				8			8	
07:45 AM		3			15	3	1		3	
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08:30 AM		7				7			7	
08:45 AM		10			V. A.	10			10	
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09:15 AM		4				4			4	
09:30 AM		2				2	-		2	
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11:00 AM		7				7			7	
11:15 AM		3			LIATI)R/\/1 S C(70.40.4	SIKIIT	3	
11:30 AM		1					DIVITAL	JIVII	1 1	
11:45 AM		13				13			13	
Day Total										
% Weekday										
Average										
% Week										
Average										
AM Peak										
15-min Vol										
PM Peak										
15-min Vol										
Comments:										

Report generated on 12/10/2021 5:01 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

LOCATION: Ackerman Hill Dr btwn Chapel Ridge Rd and Drayman Pl

SPECIFIC LOCATION:

CITY/STATE: Apex. NC

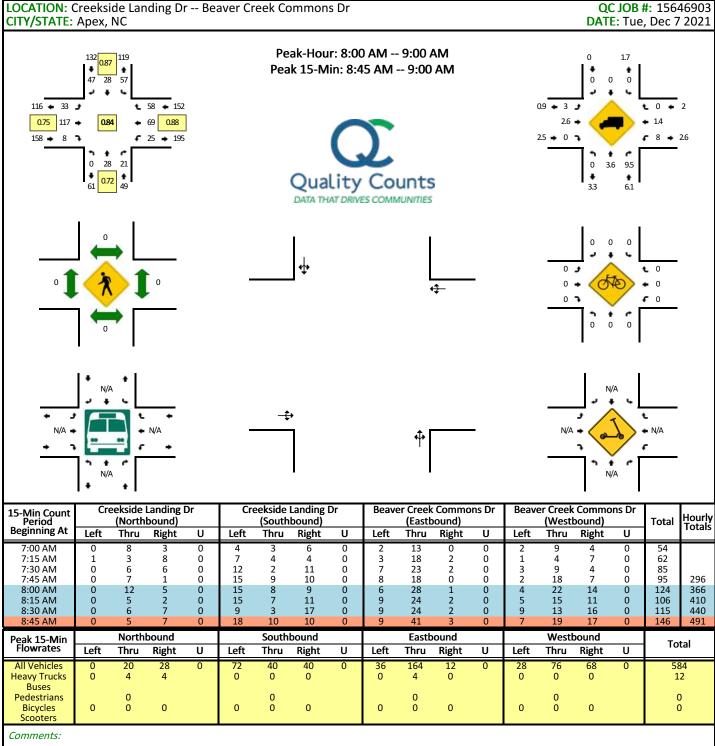
QC JOB #: 15646906 DIRECTION: NB, SB

DATE: Dec 7 2021 - Dec 7 2021

Start Time	Mon	Tue 7 Dec 21	Wed	Thu	Fri	Average Weekday 15-min Traffic	Sat	Sun	Average Week 15-min Traffic	Average Week Profile
12:00 PM		4				4			4	
12:15 PM		3				3			3	
12:30 PM		5				5			5	
12:45 PM		6				6			6	
01:00 PM		4				4			4	
01:15 PM		10				10			10	
01:30 PM		12				12			12	
01:45 PM		7				7			7	
02:00 PM		5				5			5	
02:15 PM		5				5			5	
02:30 PM		8				8			8	
02:45 PM		6				6			6	
03:00 PM		4				4			4	
03:15 PM		3				3			3	
03:30 PM		6				6			6	
03:45 PM		6				6			6	
04:00 PM		8				8			8	
04:15 PM		7				7			7	
04:30 PM		12				12			12	
04:45 PM		10				10			10	
05:00 PM		11				11			11	
05:15 PM		6				6 8	C 2 1 1 1		6	
05:30 PM		8				8	DIVIIVI		8	
05:45 PM		8				8			8	
Day Total										
% Weekday										
Average										
% Week										
Average										
AM Peak										
15-min Vol										
PM Peak										
15-min Vol										
Comments:									_	

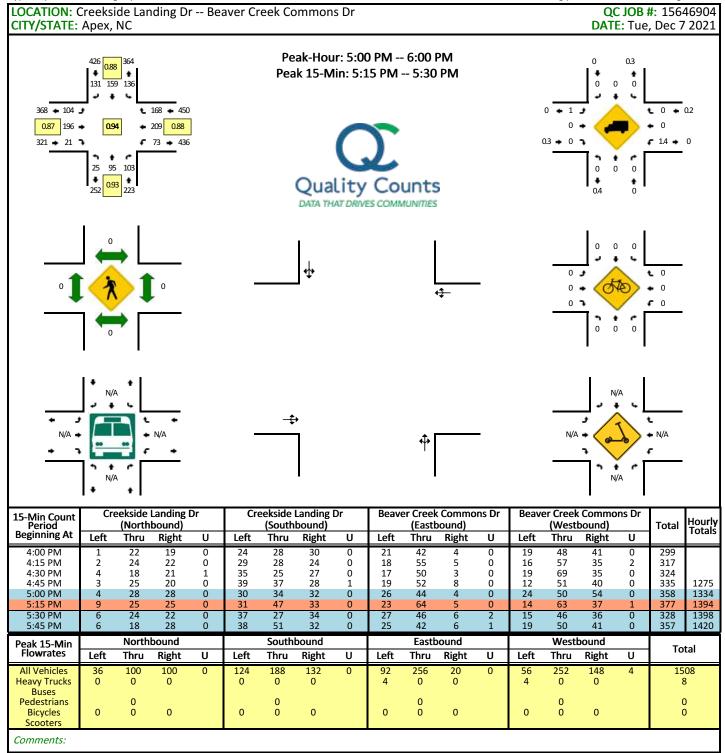
Report generated on 12/10/2021 5:01 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)



Report generated on 12/13/2021 8:15 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212



Report generated on 12/13/2021 8:15 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C: Approved Development Data – Olive Chapel Professional Park

TRAFFIC IMPACT ANALYSIS

FOR

OLIVE CHAPEL PROFESSIONAL PARK

LOCATED

IN

APEX, NORTH CAROLINA

Prepared For: Olive Chapel Professional Park, LLC 1121 Pemberton Hill Road Apex, NC

> Prepared By: Ramey Kemp & Associates, Inc. 5808 Faringdon Place, Suite 100 Raleigh, NC 27609 License #C-0910

> > October 2016

Prepared By: DL

Reviewed By: JR

RKA Project No. 16246

4. SITE TRIP GENERATION AND DISTRIBUTION

4.1. Trip Generation

The proposed development is assumed to consist of approximately 80,000 sq. ft. of general office space. Average weekday daily, AM peak hour, and PM peak hour trips for the proposed development were estimated using methodology contained within the ITE *Trip Generation Manual*, 9th Edition. Table 1 provides a summary of the trip generation potential for the site.

AM Peak Hour PM Peak Hour **Daily Land Use** Traffic Trips (vph) Trips (vph) **Intensity** (ITE Code) (vpd) Enter **Exit** Enter Exit General Office Building 80,000 1,110 141 19 29 139 (710)sq. ft.

Table 1: Trip Generation Summary

It is estimated that the proposed development will generate approximately 1,110 total site trips on the roadway network during a typical 24-hour weekday period. Of the daily traffic volume, it is anticipated that 160 trips (141 entering and 19 exiting) will occur during the AM peak hour and 168 (29 entering and 139 exiting) will occur during the PM peak hour.

4.2. Site Trip Distribution and Assignment

Trip distribution percentages used in assigning site traffic for this development were estimated based on a combination of existing traffic patterns, population centers adjacent to the study area, and engineering judgment. It is estimated that trips will be distributed as follows:

- 45% to/from the west via Olive Chapel Road
- 45% to/from the east via Olive Chapel Road
- 10% to/from the north via Chapel Ridge Road (utilizing the proposed connection to the Beaver Creek Crossing Shopping Center, which is being constructed as part of the Hempstead at Beaver Creek development).

The site trip distribution, which has been reviewed and approved by the Town, is shown in Figure 9. Refer to Figure 10 for the site trip assignment.

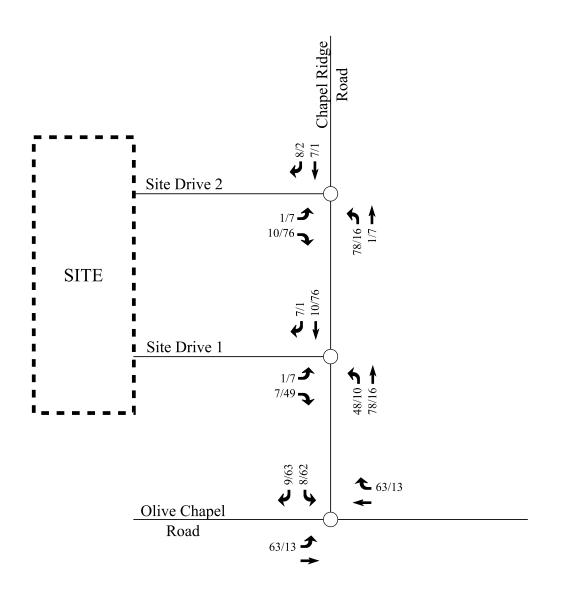


LEGEND

Unsignalized Intersection

X/Y→ AM / PM Peak Hour Site Trips



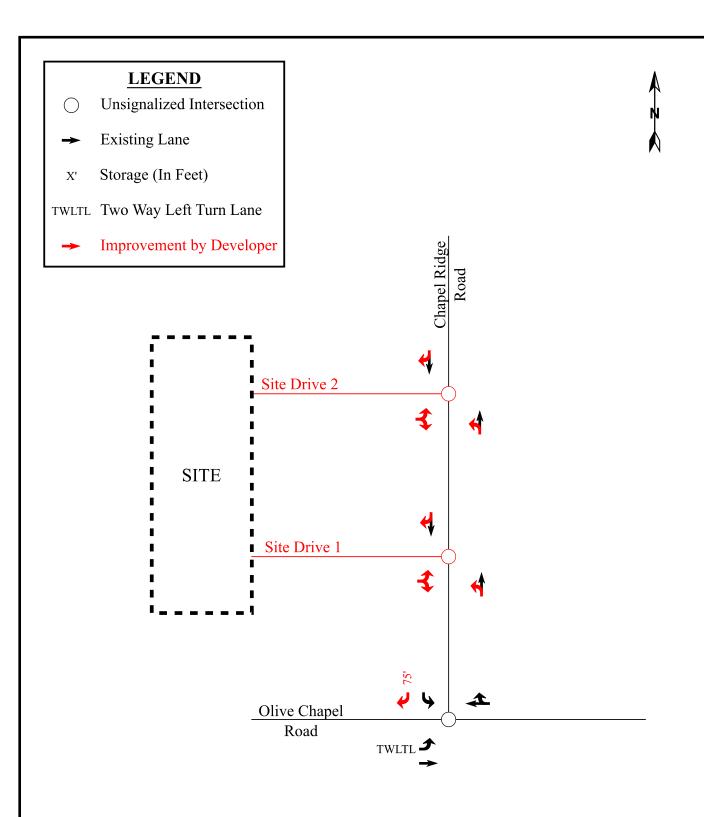




Olive Chapel Office Park Apex, NC Site Trip Assignment

Scale: Not to Scale

Figure 10





Olive Chapel Office Park Apex, NC Recommended Lane Configurations

Scale: Not to Scale

Figure 12

Appendix D: Trip Generation

Chapel Ridge Apartments Table 1 - Trip Generation

Land Use	Inte	neity	Daily	AI	M Peak Ho	our	PN	/I Peak Ho	ur
Land OSE	inter	isity	Total	Total	In	Out	Total	In	Out
221 Multifamily Housing (Mid-Rise)	350	d.u.	1,906	117	30	87	147	90	57
Total Net New External Trips		-	1,906	117	30	87	147	90	57

Appendix E: Intersection Spreadsheets

Project: Chapel Ridge Apartments

Location: Apex, NC
Scenario: Without Chapel Ridge Townhomes

Ct. Date
12/7/2021
N/S Street: Kelly Road
E/W Street: Wendhurst Ct/Beaver Creek Commons Dr

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.98

	1	Wendhurst Cou	rt	Beaver	Creek Commo	ns Drive		Kelly Road			Kelly Road	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
		_										_
2021 Traffic Count	19	8	38	83	4	22	38	684	117	29	346	9
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	19	8	38	83	4	22	38	684	117	29	346	9
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.126	0.000	0.126	0.000	0.126	0.126	0.126	0.126	0.000
2025 Background Growth	0	0	0	10	0	3	0	86	15	4	43	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	3	0	0	19	0
Total Committed Traffic	0	0	0	0	0	0	0	3	0	0	19	0
2025 Background Traffic	19	8	38	93	4	25	38	773	132	33	408	9
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	12	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	35	0	0	0	0	0	0
Total External Site Traffic	0	0	0	0	0	35	0	0	0	12	0	0
Total Project Traffic	0	0	0	0	0	35	0	0	0	12	0	0
Hempstead Traffic Diversion	0	0	0	0	0	28	0	0	0	8	0	0
2025 Buildout Total	19	8	38	93	4	88	38	773	132	53	408	9
Percent Impact (Approach)		0.0%			18.9%			0.0%			2.6%	
Overell Persont Impost	2.8%											

Overall Percent Impact 2.8%

PM PEAK HOUR PM PHF = 0.98

	,	Wendhurst Cou Eastbound	rt	Beaver	Creek Commo	ns Drive		Kelly Road Northbound			Kelly Road Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	10	14	47	247	20	55	67	502	270	89	748	23
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	10	14	47	247	20	55	67	502	270	89	748	23
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.126	0.000	0.126	0.000	0.126	0.126	0.126	0.126	0.000
2025 Background Growth	0	0	0	31	0	7	0	63	34	11	94	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	19	0	0	4	0
Total Committed Traffic	0	0	0	0	0	0	0	19	0	0	4	0
2025 Background Traffic	10	14	47	278	20	62	67	584	304	100	846	23
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	36	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	23	0	0	0	0	0	0
Total External Site Traffic	0	0	0	0	0	23	0	0	0	36	0	0
Total Project Traffic	0	0	0	0	0	23	0	0	0	36	0	0
Hempstead Traffic Diversion	0	0	0	0	0	16	0	0	0	28	0	0
2025 Buildout Total	10	14	47	278	20	101	67	584	304	164	846	23
Percent Impact (Approach)		0.0%			5.8%			0.0%	•		3.5%	

Overall Percent Impact 2.4%

Project: Chapel Ridge Apartments

Location: Apex, NC

Scenario: Without Chapel Ridge Townhomes

Ct. Date
N/S Street: Chapel Ridge Road

E/W Street: Olive Chapel Road

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.85

	0	live Chapel Ro	ad	0	live Chapel Ro	ad				C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	20	355	0	0	356	24	0	0	0	11	0	7
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	20	355	0	0	356	24	0	0	0	11	0	7
Cth Ft (0.02)	0.000	0.126	0.000	0.000	0.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Growth Factor (0.03 per year) 2025 Background Growth	0.000	45	0.000	0.000	45	0.000			0.000	0.000	0.000	0.000
2025 Background Growth	0	45	0	0	45	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	32	0	0	0	0	32	0	0	0	4	0	5
Total Committed Traffic	32	0	0	0	0	32	0	0	0	4	0	5
2025 Background Traffic	52	400	0	0	401	56	0	0	0	15	0	12
Project Traffic												
Percent Assignment Inbound	10%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	3	0	0	0	0	6	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	10%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	17	0	9
Total External Site Traffic	3	0	0	0	0	6	0	0	0	17	0	9
Total Project Traffic	3	0	0	0	0	6	0	0	0	17	0	9
2025 Buildout Total	55	400	0	0	401	62	0	0	0	32	0	21
Percent Impact (Approach)		0.7%			1.3%			-			49.1%	

Overall Percent Impact 3.

PM PEAK HOUR PM PHF = 0.93

	0	live Chapel Ro	ad	0	live Chapel Ro	ad				Cl	napel Ridge Ro	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	16	436	0	0	521	22	0	0	0	20	0	26
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	16	436	0	0	521	22	0	0	0	20	0	26
2021 Existing Frame	10	430	U	U	321	22	U	U	U	20	U	20
Growth Factor (0.03 per year)	0.000	0.126	0.000	0.000	0.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	55	0	0	65	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	7	0	0	0	0	7	0	0	0	31	0	32
Total Committed Traffic	7	0	0	0	0	7	0	0	0	31	0	32
2025 Background Traffic	23	491	0	0	586	29	0	0	0	51	0	58
Project Traffic												
Percent Assignment Inbound	10%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	9	0	0	0	0	18	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	10%
Outbound Project Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	11	0%	6
Outbound Project Traine	U	U	U	U	0	U	U	U	U	11	U	0
Total External Site Traffic	9	0	0	0	0	18	0	0	0	11	0	6
Total Project Traffic	9	0	0	0	0	18	0	0	0	11	0	6
2025 Buildout Total	32	491	0	0	586	47	0	0	0	62	0	64
Percent Impact (Approach)		1.7%			2.8%			-			13.5%	

Overall Percent Impact 3.49

2/9/22

Project: Chapel Ridge Apartments
Location: Apex, NC
Scenario: Without Chapel Ridge Townhomes
Ct. Date 12/7/2021
N/S Street: Chapel Ridge Road

E/W Street: Ackerman Hill Drive

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

					$\mathbf{M} \mathbf{P} \mathbf{\Pi} \mathbf{r} = 0.$							
				Ac	kerman Hill Di	rive	Cl	napel Ridge Ro	ad	Cl	napel Ridge Ro	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	11	0	0	0	0	12	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	11	0	0	0	0	12	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	8	0	0	0	0	1	0	0	0
Total Committed Traffic	0	0	0	8	0	0	0	0	1	0	0	0
Total Committee Traine	-											
2025 Background Traffic	0	0	0	19	0	0	0	0	13	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	10%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	5	0	3	3	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	10%	0%	10%	0%	0%	15%	0%
Outbound Project Traffic	0	0	0	0	0	9	0	9	0	0	13	0
Total External Site Traffic	0	0	0	0	0	9	0	14	0	3	16	0
Total Project Traffic	0	0	0	0	0	9	0	14	0	3	16	0
Hempstead Traffic Diversion	0	0	0	0	0	39	0	0	0	12	0	0
OliveChapProfPark Reassign	0	0	0	0	0	0	0	2	0	0	16	0
2025 Buildout Total	0	0	0	19	0	48	0	16	13	15	32	0
Percent Impact (Approach)		-			13.4%			48.3%			40.4%	
Overall Persont Impost	29.4%							•				

Overall Percent Impact 29.4

PM PEAK HOUR PM PHF = 0.90

Count Balancing													
Description Left Through Right Right Left Through Right				Ac	kerman Hill Di	rive	Cl	hapel Ridge Ro	ad	C	hapel Ridge Ro	oad	
Count Balancing			Eastbound			Westbound			Northbound			Southbound	
Count Balancing Count Bala	Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Count Balancing Count Bala		_				_	_	_	_		_	_	
Existing Traffic													
Crowth Factor (0.03 per year) 0.0000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00	C												
Committed Projects Committed Projects Committed Projects Committed Projects Committed Professional Park O	2021 Existing Traffic	0	0	0	15	0	0	0	0	25	0	0	0
Committed Projects Dive Chapel Professional Park O O O O O O O O O O O O O O O O O O O	Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dive Chapel Professional Park 0 0 0 2 0 0 0 0 7 0 0 0 0 0	2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Dive Chapel Professional Park 0 0 0 2 0 0 0 0 7 0 0 0 0 0	Committed Projects												
Project Traffic 0		0	0	0	2	0	0	0	0	7	0	0	0
2025 Background Traffic 0 0 17 0 0 0 32 0 0 0 Project Traffic Omegan of the bound project Traffic project Traffic Omegan of the bound project Traffic project Traffic Omegan of the bound project Traffic project Traffic project Traffic Omegan of the bound project Traffic project project project Traffic project Traffic project Traffic project Traffic project Traffic project Traffic project Traffic project Traffic project Traffic project proje													
Project Traffic Percent Assignment Inbound Inbound Project Traffic Percent Assignment Outbound Ow Ow Ow Ow Ow Ow Ow Ow Ow Ow Ow Ow Ow O													
Percent Assignment Inbound inbound Project Traffic	2025 Background Traffic	0	0	0	17	0	0	0	0	32	0	0	0
Percent Assignment Inbound inbound Project Traffic	Project Traffic												
inbound Project Traffic	Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	10%	10%	0%
Dutbound Project Traffic 0 0 0 0 0 6 0 6 0 9 0 Fotal External Site Traffic 0 0 0 0 6 0 20 0 9 18 0 Fotal Project Traffic 0 0 0 0 6 0 20 0 9 18 0 Hempstead Traffic Diversion 0 0 0 0 22 0 0 0 38 0 0 DiiveChapProfPark Reassign 0 0 0 0 0 14 0 0 4 0 2025 Buildout Total 0 0 17 0 28 0 34 32 47 22 0	Inbound Project Traffic												
Dutbound Project Traffic 0 0 0 0 0 6 0 6 0 9 0 Fotal External Site Traffic 0 0 0 0 6 0 20 0 9 18 0 Fotal Project Traffic 0 0 0 0 6 0 20 0 9 18 0 Hempstead Traffic Diversion 0 0 0 0 22 0 0 0 38 0 0 DiiveChapProfPark Reassign 0 0 0 0 0 14 0 0 4 0 2025 Buildout Total 0 0 17 0 28 0 34 32 47 22 0	Percent Assignment Outbound	0%	0%	0%	0%	0%	10%	0%	10%	0%	0%	15%	0%
Fotal Project Traffic 0 0 0 0 6 0 20 0 9 18 0 Hempstead Traffic Diversion 0 0 0 0 22 0 0 0 38 0 0 DiveChapProfPark Reassign 0 0 0 0 0 14 0 0 4 0 2025 Buildout Total 0 0 17 0 28 0 34 32 47 22 0	Outbound Project Traffic		0	0	0		6	0	6	0	0	9	0
Hempstead Traffic Diversion	Total External Site Traffic	0	0	0	0	0	6	0	20	0	9	18	0
OliveChapProfPark Reassign 0 0 0 0 0 14 0 0 4 0 2025 Buildout Total 0 0 17 0 28 0 34 32 47 22 0	Total Project Traffic	0	0	0	0	0	6	0	20	0	9	18	0
2025 Buildout Total 0 0 0 17 0 28 0 34 32 47 22 0	Hempstead Traffic Diversion	0	0	0	0	0	22	0	0	0	38	0	0
	OliveChapProfPark Reassign	0	0	0	0	0	0	0	14	0	0	4	0
	2025 Buildout Total	0	0	0	17	0	28	0	34	32	47	22	0
	Percent Impact (Approach)					13.3%			30,3%			39.1%	

Overall Percent Impact 29.4%

Project: Chapel Ridge Apartments

Location: Apex, NC

Scenario: Without Chapel Ridge Townhomes

12/7/2021

N/S Street: Creekside Landing Drive

E/W Street: Beaver Creek Commons Drive

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.84

	Beaver	Creek Commo	ns Drive	Beaver	Creek Commo	ns Drive	Cree	kside Landing	Drive	Cree	kside Landing	Drive
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	33	117	8	25	69	58	0	28	21	57	28	47
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	33	117	8	25	69	58	0	28	21	57	28	47
Growth Factor (0.03 per year)	0.126	0.126	0.000	0.000	0.126	0.126	0.000	0.000	0.000	0.126	0.000	0.126
2025 Background Growth	4	15	0	0	9	7	0	0	0	7	0	6
Committed Projects												
Olive Chapel Professional Park	0	0	0	4	0	0	0	0	1	0	4	0
Total Committed Traffic	0	0	0	4	0	0	0	0	1	0	4	0
2025 Background Traffic	37	132	8	29	78	65	0	28	22	64	32	53
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	6	0	0	0	0	0	0	3
Percent Assignment Outbound	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	9	17	0	0	0	0	0	0	0	0	0	0
Total External Site Traffic	9	17	0	0	6	0	0	0	0	0	0	3
Total Project Traffic	9	17	0	0	6	0	0	0	0	0	0	3
OliveChapProfPark Reassign	0	2	0	0	8	0	0	0	0	0	0	8
2025 Buildout Total	46	151	8	29	92	65	0	28	22	64	32	64
Percent Impact (Approach)		12.7%			3.2%			0.0%			1.9%	
Oronall Paraant Impact	5 804											

Overall Percent Impact 5.8%

PM PEAK HOUR PM PHF = 0.94

				r	$\mathbf{M} \ \mathbf{PHF} = 0.$	94						
	Beaver	Creek Commo Eastbound	ns Drive	Beaver	Creek Commo	ns Drive	Cree	kside Landing Northbound	Drive	Cree	kside Landing Southbound	Drive
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	104	196	21	73	209	168	25	95	103	136	159	131
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	104	196	21	73	209	168	25	95	103	136	159	131
Growth Factor (0.03 per year)	0.126	0.126	0.000	0.000	0.126	0.126	0.000	0.000	0.000	0.126	0.000	0.126
2025 Background Growth	13	25	0	0	26	21	0	0	0	17	0	16
Committed Projects												
Olive Chapel Professional Park	0	0	0	1	0	0	0	3	4	0	1	0
Total Committed Traffic	0	0	0	1	0	0	0	3	4	0	1	0
2025 Background Traffic	117	221	21	74	235	189	25	98	107	153	160	147
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	18	0	0	0	0	0	0	9
Percent Assignment Outbound	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	6	11	0	0	0	0	0	0	0	0	0	0
Total External Site Traffic	6	11	0	0	18	0	0	0	0	0	0	9
Total Project Traffic	6	11	0	0	18	0	0	0	0	0	0	9
OliveChapProfPark Reassign	6	8	0	0	2	0	0	0	0	0	0	2
2025 Buildout Total	129	240	21	74	255	189	25	98	107	153	160	158
Percent Impact (Approach)		4.4%			3.5%			0.0%			1.9%	

Overall Percent Impact 2.79

Project: Chapel Ridge Apartments Location: Apex, NC Scenario: Without Chapel Ridge Townhomes Ct. Date 12/7/2021 Beaver Creek Commons Drive N/S Street: E/W Street: Proposed Site Access

AM In AM Out PM In PM Out Net New Trips: 30 87 90

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR $\mathbf{AM}\ \mathbf{PHF} = \mathbf{0.90}$

					$\mathbf{W} \mathbf{P} \mathbf{\Pi} \mathbf{r} = 0$							
				Pro	posed Site Ac	cess	Beaver	Creek Commo		Beaver	Creek Commo	ns Drive
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	187	0	0	111	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	187	0	0	111	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.126	0.000	0.000	0.126	0.000
2025 Background Growth	0	0	0	0	0	0	0	23	0	0	14	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	210	0	0	125	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	40%	30%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	12	9	0	0
Percent Assignment Outbound	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	35	0	26	0	0	0	0	0	0
Total External Site Traffic	0	0	0	35	0	26	0	0	12	9	0	0
Total Project Traffic	0	0	0	35	0	26	0	0	12	9	0	0
Hempstead Traffic Diversion	0	0	0	28	0	11	0	0	8	3	0	0
OliveChapProfPark Reassign	0	0	0	0	0	2	0	0	0	16	0	0
2025 Buildout Total	0	0	0	63	0	39	0	210	20	28	125	0
Percent Impact (Approach)		-			59.8%			5.2%			5.9%	

16.9% Overall Percent Impact

PM PEAK HOUR PM PHF = 0.90

				1.	WIFHF - U.	.,,,						
				Pro	posed Site Ac	cess	Beaver	Creek Commo	ns Drive	Beaver	Creek Commo	ns Drive
		Eastbound			Westbound			Northbound			Southbound	-
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	355	0	0	335	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	355	0	0	335	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.126	0.000	0.000	0.126	0.000
2025 Background Growth	0	0	0	0	0	0	0	45	0	0	42	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0		0	0		400	0	0	377	0
2025 Background Traffic	0	0	0	0	0	0	0	400	0	0	3//	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	40%	30%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	36	27	0	0
Percent Assignment Outbound	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	23	0	17	0	0	0	0	0	0
Total External Site Traffic	0	0	0	23	0	17	0	0	36	27	0	0
Total Project Traffic	0	0	0	23	0	17	0	0	36	27	0	0
Hempstead Traffic Diversion	0	0	0	16	0	6	0	0	28	10	0	0
OliveChapProfPark Reassign	o	0	0	0	0	14	0	0	0	4	0	0
2025 Buildout Total	0	0	0	39	0	37	0	400	64	41	377	0
Percent Impact (Approach)	0	-		37	52.6%	51		7.8%		*1	6.5%	
r creem impact (ripprodem)												

Overall Percent Impact 10.8%

Chapel Ridge Apartments Project: Net New Trips: Location: Apex, NC Scenario: Without Chapel Ridge Townhomes Ct. Date N/S Street: Chapel Ridge Road

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

30

AM In AM Out PM In PM Out

87 90

AM PEAK HOUR $\mathbf{AM}\ \mathbf{PHF} = \mathbf{0.90}$

					$\mathbf{M} \mathbf{P} \mathbf{\Pi} \mathbf{r} = 0.$							
	Pro	posed Site Acc	cess	No	orth Site Drivey	vay	Cl	apel Ridge Ro	ad			
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	20%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	6	15	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	50%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	17	0	44	0	0	0	0	0
Total External Site Traffic	0	6	15	0	17	0	44	0	0	0	0	0
Total Project Traffic	0	6	15	0	17	0	44	0	0	0	0	0
Hempstead Traffic Diversion	0	0	12	0	0	0	39	0	0	0	0	0
OliveChapProfPark Reassign	0	0	16	0	0	0	2	0	0	0	0	0
2025 Buildout Total	0	6	43	0	17	0	85	0	0	0	0	0
Percent Impact (Approach)		42.9%			100.0%			51.8%			-	
Overall Persont Impact	54 3%											

Overall Percent Impact

E/W Street: Proposed Site Access/North Site Driveway

PM PEAK HOUR PM PHF = 0.90

2021 Traffic Count					r.	$\mathbf{M} \ \mathbf{PHF} = 0.$	90						
Description Left Through Right Righ		Pro	oposed Site Ac	cess	No	orth Site Drivey	vay	Cl	napel Ridge Ro	ad			
2021 Traffic Count 0		ĺ	Eastbound			Westbound			Northbound			Southbound	
Count Balancing	escription	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Count Balancing O		1 _	_	_		_	_	_		_	_	_	
2021 Existing Traffic 0										-	-	-	0
Growth Factor (0.03 per year) 2025 Background Growth 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2												0
2025 Background Growth 0	021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects Olive Chapel Professional Park O	rowth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Olive Chapel Professional Park O	D25 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Olive Chapel Professional Park O	ammitted Projects	ł											
Total Committed Traffic 0		0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic 0% 0%													0
Project Traffic 0% 20% 50% 0%	otal Committee Transc	ľ	· ·	Ü		•	Ü		Ü	Ü	Ů	Ü	
Percent Assignment Inbound 0% 20% 50% <	025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Inbound 0% 20% 50% <	roject Traffic	ł											
Inbound Project Traffic 0 18 45 0 <td></td> <td>0%</td> <td>20%</td> <td>50%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td>		0%	20%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic 0 0 0 0 11 0 29 0 0 0 Total External Site Traffic 0 18 45 0 11 0 29 0 0 0 0 Total Project Traffic 0 18 45 0 11 0 29 0 0 0 0													0
Outbound Project Traffic 0 0 0 0 11 0 29 0 0 0 Total External Site Traffic 0 18 45 0 11 0 29 0 0 0 0 Total Project Traffic 0 18 45 0 11 0 29 0 0 0 0	ercent Assignment Outhound	0%	0%	0%	0%	20%	0%	50%	0%	0%	0%	0%	0%
Total External Site Traffic 0 18 45 0 11 0 29 0 0 0 0 Total Project Traffic 0 18 45 0 11 0 29 0 0 0 0													0
Total Project Traffic 0 18 45 0 11 0 29 0 0 0	anouna Project Traine	ľ	· ·	Ü		••	Ü		Ü	Ü	Ů	Ü	
	otal External Site Traffic	0	18	45	0	11	0	29	0	0	0	0	0
	ALD CONTROL OF		10	45			0	20	0	0		0	0
Hempstead Traffic Diversion 0 0 38 0 0 0 22 0 0 0 0	otai Project Trainc	0	18	43	U	11	U	29	U	U	0	U	0
	empstead Traffic Diversion	0	0	38	0	0	0	22	0	0	0	0	0
OliveChapProfPark Reassign 0 0 4 0 0 0 14 0 0 0	liveChapProfPark Reassign	0	0	4	0	0	0	14	0	0	0	0	0
2025 Buildout Total 0 18 87 0 11 0 65 0 0 0 0	025 Buildout Total	0	18	87	0	11	0	65	0	0	0	0	0
Percent Impact (Approach) 60.0% 100.0% 44.6% -	ercent Impact (Approach)		60.0%			100.0%			44.6%				

Overall Percent Impact 56.9%

Chapel Ridge Apartments Project: Net New Trips: Location: Apex, NC Without Chapel Ridge Townhomes Scenario: Ct. Date Central Site Driveway N/S Street:

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

30

AM In AM Out PM In PM Out

87 90

AM PEAK HOUR $\mathbf{AM}\ \mathbf{PHF} = \mathbf{0.90}$

	C	napel Ridge Ro	ad	Cl	apel Ridge Ro	ad	Cer	ntral Site Drive	wav	Cer	tral Site Drive	wav
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	5%	20%	25%	5%	0%	10%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	2	6	8	2	0	3	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	25%	0%	5%	10%	0%	5%
Outbound Project Traffic	0	0	0	0	17	0	22	0	4	9	0	4
Total External Site Traffic	2	6	8	2	17	3	22	0	4	9	0	4
Total Project Traffic	2	6	8	2	17	3	22	0	4	9	0	4
Hempstead Traffic Diversion	0	12	0	0	39	0	0	0	0	0	0	0
OliveChapProfPark Reassign	0	16	0	0	2	0	0	0	0	0	0	0
2025 Buildout Total	2	34	8	2	58	3	22	0	4	9	0	4
Percent Impact (Approach)		36.4%			34.9%	-		100.0%			100.0%	
Overall Percent Impact	52.7%											

E/W Street: Chapel Ridge Road

PM PEAK HOUR PM PHF = 0.90

					WIFIT - U.	70						
	Cl	napel Ridge Ro	oad	Cl	hapel Ridge Ro	ad	Cer	ntral Site Drive	way	Cer	ntral Site Drive	way
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	5%	20%	25%	5%	0%	10%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	5	18	23	5	0	9	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	25%	0%	5%	10%	0%	5%
Outbound Project Traffic	0	0	0	0	11	0	14	0	3	6	0	3
Total External Site Traffic	5	18	23	5	11	9	14	0	3	6	0	3
Total Project Traffic	5	18	23	5	11	9	14	0	3	6	0	3
Hempstead Traffic Diversion	0	38	0	0	22	0	0	0	0	0	0	0
OliveChapProfPark Reassign	0	4	0	0	14	0	0	0	0	0	0	0
2025 Buildout Total	5	60	23	5	47	9	14	0	3	6	0	3
Percent Impact (Approach)		52.3%			41.0%			100.0%			100.0%	

Overall Percent Impact 55.4%

Project: Chapel Ridge Apartments

Location: Apex, NC

Scenario: Without Chapel Ridge Townhomes

Ct. Date
N/S Street: Chapel Ridge Road

E/W Street: South Site Driveway

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

				A	$\mathbf{M} \ \mathbf{PHF} = 0.$	90						
	So	uth Site Drivey	way	So	uth Site Drivey	vay	C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	12	0	0	11	0
2021 Existing Traffic	0	0	0	0	0	0	0	12	0	0	11	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	1	0	0	8	0
Total Committed Traffic	0	0	0	0	0	0	0	1	0	0	8	0
2025 Background Traffic	0	0	0	0	0	0	0	13	0	0	19	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	15%	5%	5%	0%	5%
Inbound Project Traffic	0	0	0	0	0	0	3	5	2	2	0	2
Percent Assignment Outbound	5%	0%	10%	5%	0%	5%	0%	0%	0%	0%	15%	0%
Outbound Project Traffic	4	0	9	4	0	4	0	0	0	0	13	0
Total External Site Traffic	4	0	9	4	0	4	3	5	2	2	13	2
Total Project Traffic	4	0	9	4	0	4	3	5	2	2	13	2
OliveChapProfPark Reassign	0	0	0	0	0	0	0	2	0	0	16	0
2025 Buildout Total	4	0	9	4	0	4	3	20	2	2	48	2
Percent Impact (Approach)		100.0%			100.0%			40.0%			32.7%	

Overall Percent Impact 49.0%

PM PEAK HOUR PM PHF = 0.90

				r.	$\mathbf{M} \mathbf{P} \mathbf{\Pi} \mathbf{r} = 0.$	90						
	So	uth Site Drivey	way	So	uth Site Drivey	vay	Cl	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	25	0	0	15	0
2021 Existing Traffic	0	0	0	0	0	0	0	25	0	0	15	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	7	0	0	2	0
Total Committed Traffic	0	0	0	0	0	0	0	7	0	0	2	0
2025 Background Traffic	0	0	0	0	0	0	0	32	0	0	17	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	15%	5%	5%	0%	5%
Inbound Project Traffic	0	0	0	0	0	0	9	14	5	5	0	5
Percent Assignment Outbound	5%	0%	10%	5%	0%	5%	0%	0%	0%	0%	15%	0%
Outbound Project Traffic	3	0	6	3	0	3	0	0	0	0	9	0
Total External Site Traffic	3	0	6	3	0	3	9	14	5	5	9	5
Total Project Traffic	3	0	6	3	0	3	9	14	5	5	9	5
OliveChapProfPark Reassign	0	0	0	0	0	0	0	14	0	0	4	0
2025 Buildout Total	3	0	6	3	0	3	9	60	5	5	30	5
Percent Impact (Approach)		100.0%			100.0%			37.8%			47.5%	

Overall Percent Impact 48.1%

Chapel Ridge Apartments Project: Location: Apex, NC Without Chapel Ridge Townhomes Balanced with Ackerman Hill Scenario: Ct. Date N/S Street: Site Driveway E/W Street: Ackerman Hill Drive

	AM In	AM Out	PM In	PM Out
Net New Trips:	30	87	90	57

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR $\mathbf{AM}\ \mathbf{PHF} = \mathbf{0.90}$

					WI I III - U.							
	Ac	kerman Hill D	rive	Ac	kerman Hill Di	rive		Site Driveway				
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	12	0	0	11	0	0	0	0	0	0	0
2021 Existing Traffic	0	12	0	0	11	0	0	0	0	0	0	0
C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Growth Factor (0.03 per year) 2025 Background Growth	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	U	0	0	0	0	0	U
Committed Projects												
Olive Chapel Professional Park	0	1	0	0	8	0	0	0	0	0	0	0
Total Committed Traffic	0	1	0	0	8	0	0	0	0	0	0	0
2025 Background Traffic	0	13	0	0	19	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	3	0	0	0	0	0	0	0	0	0
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Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	9	0	0	0	0	0
Total External Site Traffic	0	0	3	0	0	0	9	0	0	0	0	0
Total Project Traffic	0	0	3	0	0	0	9	0	0	0	0	0
•												
Hempstead Traffic Diversion	0	12	0	0	39	0	0	0	0	0	0	0
		0	0		0	0		0	0	0	0	0
OliveChapProfPark Reassign	0	0	0	0	0	0	0	0	0	0	0	0
2025 Buildout Total	0	25	3	0	58	0	9	0	0	0	0	0
Percent Impact (Approach)		10.7%			0.0%			100.0%			-	
Overall Percent Impact	12.6%											
O . C. a.i. 2 C. C. a.i. Impact					DE 4 17 1101							

PM PEAK HOUR PM PHF = 0.90

	Ac	kerman Hill Dr	rive	Ac	kerman Hill Dı	rive	1	Site Driveway				
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	25	0	0	15	0	0	0	0	0	0	0
2021 Existing Traffic	0	25	0	0	15	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	7	0	0	2	0	0	0	0	0	0	0
Total Committed Traffic	0	7	0	0	2	0	0	0	0	0	0	0
Total Committee Traffic	U	,	U	U	2	U	U	U	U	U	U	U
2025 Background Traffic	0	32	0	0	17	0	0	0	0	0	0	0
Project Traffic	001		100/	001	001	001	001	00/	001	00/	00/	001
Percent Assignment Inbound	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	9	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	6	0	0	0	0	0
Total External Site Traffic		0	9		0	0	_	0	0	0	0	0
Total External Site Traffic	0	0	9	0	0	0	6	0	0	0	0	0
Total Project Traffic	0	0	9	0	0	0	6	0	0	0	0	0
, and the second												
Hempstead Traffic Diversion	0	38	0	0	22	0	0	0	0	0	0	0
		0	0		0	0		0	0	0	0	0
OliveChapProfPark Reassign	0	0	0	0	0	0	0	0	0	0	0	0
2025 Buildout Total	0	70	9	0	39	0	6	0	0	0	0	0
Percent Impact (Approach)		11.4%	•		0.0%			100.0%	-		-	

Overall Percent Impact 12.1%

Appendix F: Synchro & SIDRA Output: Existing (2021)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	19	8	38	83	4	22	38	684	117	29	346	9	
Future Volume (vph)	19	8	38	83	4	22	38	684	117	29	346	9	
	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Ideal Flow (vphpl)	1900		1900	1900					1900		1900		
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12		12	
Grade (%)	0	0%	0	075	1%		075	3%	0	170	-4%	0	
Storage Length (ft)	0		0	275		0	275		0	170		0	
Storage Lanes	0		0	1		1	1		0	1		0	
Taper Length (ft)	25			50			125			170			
Satd. Flow (prot)	0	1641	0	0	1768	1575	1743	3409	0	1753	1838	0	
Flt Permitted		0.887			0.699		0.524			0.320			
Satd. Flow (perm)	0	1477	0	0	1296	1575	961	3409	0	591	1838	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		39				32		25			2		
Link Speed (mph)		25			35			45			45		
Link Distance (ft)		513			641			1004			905		
Travel Time (s)		14.0			12.5			15.2			13.7		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	100%	5%	5%	100%	100%	100%	100%	2%	2%	100%	100%	5%	
Heavy Vehicles (%)													
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)		001						001			001		
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	66	0	0	89	22	39	817	0	30	362	0	
Turn Type	Perm	NA		pm+pt	NA	pm+ov	D.P+P	NA		D.P+P	NA		
Protected Phases		4		3	8	1	5	2		1	6		
Permitted Phases	4			8		8	6			2			
Detector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase													
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Minimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
Total Split (s)	20.0	20.0		15.0	35.0	15.0	15.0	70.0		15.0	70.0		
Total Split (%)	16.7%	16.7%		12.5%	29.2%	12.5%	12.5%	58.3%		12.5%	58.3%		
Yellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
All-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
Lost Time Adjust (s)	2.0	-0.8		2.0	-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
, , ,		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
Total Lost Time (s)	الديد ا			1	5.0								
Lead/Lag	Lead	Lead		Lag		Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes		Yes	B .	Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
Act Effct Green (s)		13.3			13.3	26.1	93.7	86.4		92.7	89.2		
Actuated g/C Ratio		0.11			0.11	0.22	0.78	0.72		0.77	0.74		
v/c Ratio		0.33			0.62	0.06	0.05	0.33		0.06	0.26		
Control Delay		27.6			68.5	7.4	3.2	7.3		3.3	6.8		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay		27.6			68.5	7.4	3.2	7.3		3.3	6.8		
LOS		С			Е	Α	Α	А		Α	А		
Approach Delay		27.6			56.4			7.1			6.5		
Approach LOS		C			E			Α			A		
Queue Length 50th (ft)		19			67	0	5	113		4	92		
Queue Length 95th (ft)		60			118	15	15	173		12	160		
Internal Link Dist (ft)		433			561	13	13	924		12	825		
		433			100		275	724		170	020		
Turn Bay Length (ft)		220			224	207		24/2		170	12/7		
Base Capacity (vph)		230			324	396	827	2462		561	1367		
Starvation Cap Reductn		0			0	0	0	0		0	0		
Spillback Cap Reductn		0			0	0	0	0		0	0		
Storage Cap Reductn		0			0	0	0	0		0	0		
Reduced v/c Ratio		0.29			0.27	0.06	0.05	0.33		0.05	0.26		

Intersection Summary

Other

Area Type: Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green Natural Cycle: 90 Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62 Intersection Signal Delay: 11.7 Intersection Capacity Utilization 51.4%

Intersection LOS: B
ICU Level of Service A

Analysis Period (min) 15 Description: Signal No. 052254

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	355	356	24	11	7
Future Volume (vph)	20	355	356	24	11	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1736	1827	1812	0	1703	1524
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	1827	1812	0	1703	1524
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	418	447	0	13	8
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utiliza	tion 30.2%			IC	U Level of	f Service A
Analysis Period (min) 15						
-						

-								
Intersection								
Int Delay, s/veh	0.5							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	LDL	LDI	WDI	WDI	JUL	וטכ		
Traffic Vol., veh/h	20	355	356	24	11	7		
Future Vol, veh/h	20	355	356	24	11	7		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	- -	None		
Storage Length	150	-	-	-	75	0		
Veh in Median Storage, #	-	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	85	85	85	85	85	85		
Heavy Vehicles, %	4	4	4	4	6	6		
Mvmt Flow	24	418	419	28	13	8		
Major/Minor	Major1		Major2		Minor2			
Conflicting Flow All	447	0	IVIAJUI Z	0	899	433		
Stage 1	447	-	-	-	433	433		
Stage 2		-	-	-	466	-		
Critical Hdwy	4.14	-	-	-	6.46	6.26		
Critical Hdwy Stg 1		-	_	-	5.46	-		
Critical Hdwy Stg 2	_	_	_	-	5.46			
Follow-up Hdwy	2.236	-	-	-	3.554	3.354		
Pot Cap-1 Maneuver	1103	-		-	304	614		
Stage 1	-	-		-	646	-		
Stage 2	_	-	-	-	623	-		
Platoon blocked, %		-	-	-				
Mov Cap-1 Maneuver	1103	-	-	-	297	614		
Mov Cap-2 Maneuver	-	-	-	-	422	-		
Stage 1	-	-	-	-	632	-		
Stage 2	-	-	-	-	623	-		
Approach	EB		WB		SB			
HCM Control Delay, s	0.4		0		12.7			
HCM LOS	0.1		Ū		В			
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)		1103	EDI	WDI	WDK	422	614	
HCM Lane V/C Ratio		0.021	-			0.031	0.013	
HCM Control Delay (s)		8.3	-	-	-	13.8	10.9	
HCM Lane LOS		8.3 A	-	-	-	13.8 B	10.9 B	
HCM 95th %tile Q(veh)		0.1	-	-	-	0.1	0	
HOW FOUT MADE Q(VEH)		0.1	-		-	U. I	U	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	4	4	12	4	4
Future Volume (vph)	11	4	4	12	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1735	0	1671	0	0	1818
Flt Permitted	0.964					0.976
Satd. Flow (perm)	1735	0	1671	0	0	1818
Link Speed (mph)	25		25			25
Link Distance (ft)	289		696			330
Travel Time (s)	7.9		19.0			9.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	17	0	0	8
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					

Control Type: Unsignalized Intersection Capacity Utilization 13.8% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	1100	TT DIC	ND1	NOA	ODL	OD I
Traffic Vol, veh/h	11	4	4	12	4	4
Future Vol, veh/h	11	4	4	12	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	12	4	4	13	4	4
IVIVIIIL FIUW	12	4	4	13	4	4
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	23	11	0	0	17	0
Stage 1	11	-	-	-	-	-
Stage 2	12	-	-	-	-	-
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	993	1070	_	-	1600	-
Stage 1	1012	_	-	_	-	-
Stage 2	1011	-	_	_		-
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	990	1070	_	_	1600	-
Mov Cap-2 Maneuver	990	-	_		-	_
Stage 1	1012	_	_	_	_	_
Stage 2	1008	_	_	_		_
Stugo Z	1000					
Approach	WB		NB		SB	
HCM Control Delay, s	8.6		0		3.6	
HCM LOS	Α					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		INDI	NDIX	1010	1600	301
		-	-			
HCM Control Dolay (c)		-	-	0.017 8.6	0.003 7.3	0
HCM Control Delay (s)		-	-			
HCM Lane LOS		-	-	Α 0.1	A	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

MOVEMENT SUMMARY

₩ Site: 4 [Existing AM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive

Site Category: Chapel Ridge Apartments

Roundabout

Vehi	cle Mc	vement	Perfor	mance_										
Mov ID	Turn	INP VOLU		DEM/ FLO		Deg. Satn		Level of Service	95% B <i>A</i> QUE	ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] ft		Rate	Cycles	mph
Sout	h: Cree	kside Lar	nding Dri	ve										
3	L2	4	6.0	5	6.0	0.063	4.1	LOS A	0.3	6.6	0.38	0.24	0.38	21.2
8	T1	28	6.0	33	6.0	0.063	4.1	LOS A	0.3	6.6	0.38	0.24	0.38	19.6
18	R2	21	6.0	25	6.0	0.063	4.1	LOS A	0.3	6.6	0.38	0.24	0.38	18.0
Appr	oach	53	6.0	63	6.0	0.063	4.1	LOSA	0.3	6.6	0.38	0.24	0.38	19.1
East	Beave	r Creek C	Common	s Drive										
1	L2	25	2.0	30	2.0	0.145	4.1	LOS A	0.7	17.3	0.22	0.10	0.22	16.6
6	T1	69	2.0	82	2.0	0.145	4.1	LOS A	0.7	17.3	0.22	0.10	0.22	21.3
16	R2	58	2.0	69	2.0	0.145	4.1	LOS A	0.7	17.3	0.22	0.10	0.22	18.8
Appr	oach	152	2.0	181	2.0	0.145	4.1	LOSA	0.7	17.3	0.22	0.10	0.22	19.7
North	n: Creel	kside Lan	ding Driv	ve										
7	L2	57	2.0	68	2.0	0.131	4.1	LOS A	0.6	15.2	0.27	0.14	0.27	19.8
4	T1	28	2.0	33	2.0	0.131	4.1	LOS A	0.6	15.2	0.27	0.14	0.27	16.3
14	R2	47	2.0	56	2.0	0.131	4.1	LOS A	0.6	15.2	0.27	0.14	0.27	19.2
Appr	oach	132	2.0	157	2.0	0.131	4.1	LOS A	0.6	15.2	0.27	0.14	0.27	18.9
West	:: Beave	er Creek (Commor	s Drive										
5	L2	33	3.0	39	3.0	0.161	4.5	LOS A	0.7	19.0	0.30	0.16	0.30	21.1
2	T1	117	3.0	139	3.0	0.161	4.5	LOS A	0.7	19.0	0.30	0.16	0.30	21.0
12	R2	8	3.0	10	3.0	0.161	4.5	LOS A	0.7	19.0	0.30	0.16	0.30	18.9
Appr	oach	158	3.0	188	3.0	0.161	4.5	LOS A	0.7	19.0	0.30	0.16	0.30	20.9
All V	ehicles	495	2.7	589	2.7	0.161	4.2	LOS A	0.7	19.0	0.28	0.15	0.28	19.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Sidra\BC Commons @ Creekside Landing.sip9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	10	14	47	247	20	55	67	502	270	89	748	23	
Future Volume (vph)	10	14	47	247	20	55	67	502	270	89	748	23	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			1%			3%			-4%		
Storage Length (ft)	0		0	275		0	275		0	170		0	
Storage Lanes	0		0	1		1	1		0	1		0	
Taper Length (ft)	25			50			125			170			
Satd. Flow (prot)	0	1683	0	0	1772	1575	1743	3275	0	1805	1891	0	
It Permitted		0.945			0.709		0.174			0.293			
Satd. Flow (perm)	0	1602	0	0	1314	1575	319	3275	0	556	1891	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		48				56		102			2		
Link Speed (mph)		25			35			45			45		
Link Distance (ft)		513			641			1004			905		
ravel Time (s)		14.0			12.5			15.2			13.7		
Confl. Peds. (#/hr)		17.0			12.0		1	10.2	1	1	13.7	1	
Confl. Bikes (#/hr)							-		-	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	2%	270	2%	0	0	0	0	0	0	0	
Parking (#/hr)	U	U	U	U	U	U	U	U	U	U	U	U	
Mid-Block Traffic (%)		0%			0%			0%			0%		
		076			076			076			076		
Shared Lane Traffic (%)	0	72	0	0	272	56	68	788	0	91	786	0	
Lane Group Flow (vph)			U						U			U	
Furn Type	Perm	NA		pm+pt	NA	pm+ov	D.P+P	NA		D.P+P	NA		
Protected Phases	4	4		3	8	1	5	2		1	6		
Permitted Phases	4	4		8	0	8	6	^		2	,		
Detector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase	7.0	7.0		7.0	7.0	7.0	7.0	10.0		7.0	400		
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Minimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
Total Split (s)	25.0	25.0		20.0	45.0	20.0	15.0	55.0		20.0	60.0		
Total Split (%)	20.8%	20.8%		16.7%	37.5%	16.7%	12.5%	45.8%		16.7%	50.0%		
Yellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
All-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
Lost Time Adjust (s)		-0.8			-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
_ead/Lag	Lead	Lead		Lag		Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
Act Effct Green (s)		30.7			30.7	44.0	75.3	66.0		74.3	69.1		
Actuated g/C Ratio		0.26			0.26	0.37	0.63	0.55		0.62	0.58		
//c Ratio		0.16			0.81	0.09	0.23	0.43		0.21	0.72		
Control Delay		13.7			59.7	5.4	11.0	15.6		10.1	26.3		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay		13.7			59.7	5.4	11.0	15.6		10.1	26.3		
_OS		В			Е	Α	В	В		В	С		
Approach Delay		13.7			50.5			15.3			24.6		
Approach LOS		В			D			В			С		
Queue Length 50th (ft)		14			197	0	17	155		23	444		
Queue Length 95th (ft)		46			274	23	42	249		53	#797		
nternal Link Dist (ft)		433			561			924			825		
Furn Bay Length (ft)		100			301		275	747		170	323		
Base Capacity (vph)		445			438	697	323	1846		523	1089		
Starvation Cap Reductn		0			0	097	0	0		0	0		
		0			0	0	0	0		0	0		
Spillback Cap Reductn					0	0	0	0		0	0		
Storage Can Daduate													
Storage Cap Reductn Reduced v/c Ratio		0 0.16			0.62	0.08	0.21	0.43		0.17	0.72		

Intersection Summary

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120 Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 24.5

Intersection Capacity Utilization 80.5%

ICU Level of Service D

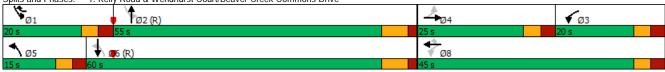
Analysis Period (min) 15

Description: Signal No. 052254

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	16	436	521	22	20	26
Future Volume (vph)	16	436	521	22	20	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1770	1863	1852	0	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1852	0	1770	1583
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	17	469	584	0	22	28
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					

Control Type: Unsignalized Intersection Capacity Utilization 38.8% Analysis Period (min) 15

								-
Intersection								
Int Delay, s/veh	0.7							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	LUL	LUI	WDI	WUI	JUL	JUIN		
Traffic Vol, veh/h	16	436	521	22	20	26		
Future Vol, veh/h	16	436	521	22	20	26		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	150	-	-	-	75	0		
Veh in Median Storage, #	-	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	93	93	93	93	93	93		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	17	469	560	24	22	28		
Major/Minor	Major1		Major2		Minor2			
Conflicting Flow All	584	0	iviajoi z	0	1075	572		
Stage 1	-	-	_	-	572	-		
Stage 2	_	-	-	-	503	-		
Critical Hdwy	4.12	-	-	_	6.42	6.22		
Critical Hdwy Stg 1	-	-	-		5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	2.218	-	-	-	3.518	3.318		
Pot Cap-1 Maneuver	991	-	-	-	243	520		
Stage 1	-	-	-	-	565	-		
Stage 2	-	-	-	-	607	-		
Platoon blocked, %		-	-	-				
Mov Cap-1 Maneuver	991	-	-	-	239	520		
Mov Cap-2 Maneuver	-	-	-	-	373	-		
Stage 1	-	-	-	-	555	-		
Stage 2	-	-	-	-	607	-		
Approach	EB		WB		SB			
HCM Control Delay, s	0.3		0		13.6			
HCM LOS					В			
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)		991	-		-	373	520	
HCM Lane V/C Ratio		0.017		-	-	0.058	0.054	
HCM Control Delay (s)		8.7	-	_	-	15.2	12.3	
HCM Lane LOS		Α.,	-	-	-	C	В	
HCM 95th %tile Q(veh)		0.1	-	-	-	0.2	0.2	
, 2(10/1)		<u> </u>				V.2	U.E	

Lane Group WBL WBR NBT NBR SBL SBT Lane Configurations Traffic Volume (vph) 15 4 4 25 4 4 Future Volume (vph) 15 4 4 25 4 4 Ideal Flow (vphpl) 1900 0
Traffic Volume (vph) 15 4 4 25 4 4 Future Volume (vph) 15 4 4 25 4 4 Ideal Flow (vphpl) 1900 090 090 10 10
Traffic Volume (vph) 15 4 4 25 4 4 Future Volume (vph) 15 4 4 25 4 4 Ideal Flow (vphpl) 1900 090 10 10 0 0 0 10 0 10 10
Future Volume (vph) 15 4 4 25 4 4 Ideal Flow (vphpl) 1900 0 1818 8 0 0 1818 18 18 18 18 18 18 18
Ideal Flow (vphpl) 1900 1800 1818
Lane Width (ft) 12
Storage Length (ft) 0 0 0 0 Storage Lanes 1 0 0 0 Taper Length (ft) 25 25 Satd. Flow (prot) 1744 0 1643 0 0 1818 Flt Permitted 0.961 0.976
Storage Lanes 1 0 0 0 Taper Length (ft) 25 25 Satd. Flow (prot) 1744 0 1643 0 0 1818 Fit Permitted 0.961 0.976
Storage Lanes 1 0 0 0 Taper Length (ft) 25 25 Satd. Flow (prot) 1744 0 1643 0 0 1818 Fit Permitted 0.961 0.976
Satd. Flow (prot) 1744 0 1643 0 0 1818 Flt Permitted 0.961 0.976 Satd. Flow (perm) 1744 0 1643 0 0 1818 Link Speed (mph) 25 25 25 25 Link Distance (ft) 289 696 330 Travel Time (s) 7.9 19.0 9.0 Confl. Peds. (#/hr) 0.90 0.90 0.90 0.90 0.90 Confl. Bikes (#/hr) 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% 100% 100% 100% 100% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Fit Permitted 0.961 0.976 Satd. Flow (perm) 1744 0 1643 0 0 1818 Link Speed (mph) 25 25 25 Link Distance (ft) 289 696 330 Travel Time (s) 7.9 19.0 9.0 Confl. Peds. (#/hr) 5 5 5 Confl. Bikes (#/hr) 5 5 696 330 Peak Hour Factor 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2% 2%
Satd. Flow (perm) 1744 0 1643 0 0 1818 Link Speed (mph) 25 25 25 Link Distance (ft) 289 696 330 Travel Time (s) 7.9 19.0 9.0 Confl. Peds. (#/hr) 5 5 5 Confl. Bikes (#/hr) 6 6 6 6 Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100%
Link Speed (mph) 25 25 25 Link Distance (ft) 289 696 330 Travel Time (s) 7.9 19.0 9.0 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2%
Link Distance (ft) 289 696 330 Travel Time (s) 7.9 19.0 9.0 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2% 2%
Travel Time (s) 7.9 19.0 9.0 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2% 2%
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2% 2%
Confl. Bikes (#/hr) 0.90 </td
Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 Growth Factor 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2%
Growth Factor 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2%
Heavy Vehicles (%) 2% 2% 2% 2% 2% 2%
Rus Blockages (#lhr) 0 0 0 0 0
Parking (#/hr)
Mid-Block Traffic (%) 0% 0%
Shared Lane Traffic (%)
Lane Group Flow (vph) 21 0 32 0 0 8
Sign Control Stop Free Free
Intersection Summary
Area Type: Other

Control Type: Unsignalized Intersection Capacity Utilization 13.8% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	3.5					
	WBL	WBR	NDT	NDD	SBL	CDT
Movement	WRL	WBK	NBT	NBR	SRF	SBT
Lane Configurations	15	4	A	25	,	,
Traffic Vol, veh/h Future Vol, veh/h	15 15	4	4	25 25	4	4
	0			25		0
Conflicting Peds, #/hr	-	O Cton	0		0 Free	Free
Sign Control RT Channelized	Stop	Stop None	Free -	Free None	Free -	None
	0		-		-	none -
Storage Length	0	-	0	-		0
Veh in Median Storage, #		-		-	-	
Grade, %	0 90	-	0	90	-	0
Peak Hour Factor		90	90		90	90 2
Heavy Vehicles, %	2 17	2	2	2	2	
Mvmt Flow	17	4	4	28	4	4
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	30	18	0	0	32	0
Stage 1	18	-	-	-	-	-
Stage 2	12			-	-	-
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	984	1061	-	-	1580	-
Stage 1	1005	_		-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %				-		-
Mov Cap-1 Maneuver	981	1061	_	_	1580	-
Mov Cap-2 Maneuver	981	-	_	_	-	_
Stage 1	1005	_	_	_	-	_
Stage 2	1008	-	-	-	-	_
olugo 2	1000					
Approach	WB		NB		SB	
HCM Control Delay, s	8.7		0		3.6	
HCM LOS	A					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		IVDI	IVDIC	997	1580	-
HCM Lane V/C Ratio			-	0.021	0.003	-
HCM Control Delay (s)			_	8.7	7.3	0
HCM Lane LOS		-	-	Α.7	7.3 A	A
HCM 95th %tile Q(veh)		-	-	0.1	0	A
HOW FOUT FOUR CI(VEII)		-		U. I	U	

MOVEMENT SUMMARY

🦁 Site: 4 [Existing PM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive

Site Category: Chapel Ridge Apartments

Roundabout

			الفروون	mance										
-	Turn	INP		DEMA		Deg.		Level of	95% BA			Effective	Aver.	Aver.
ID		VOLU		FLO ¹		Satn	Delay	Service	QUE		Que	Stop		Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] ft		Rate	Cycles	mph
South:	Creel	kside Lan												
3	L2	25	2.0	27	2.0	0.284	7.4	LOS A	1.3	33.3	0.59	0.55	0.59	23.2
8	T1	95	2.0	101	2.0	0.284	7.4	LOS A	1.3	33.3	0.59	0.55	0.59	23.1
18	R2	103	2.0	110	2.0	0.284	7.4	LOS A	1.3	33.3	0.59	0.55	0.59	22.7
Approa	ach	223	2.0	237	2.0	0.284	7.4	LOS A	1.3	33.3	0.59	0.55	0.59	22.9
East: E	Beaver	Creek C	ommons	s Drive										
1	L2	73	2.0	78	2.0	0.453	8.5	LOS A	2.8	69.9	0.54	0.42	0.54	22.9
6	T1	209	2.0	222	2.0	0.453	8.5	LOS A	2.8	69.9	0.54	0.42	0.54	22.8
16	R2	168	2.0	179	2.0	0.453	8.5	LOS A	2.8	69.9	0.54	0.42	0.54	22.4
Approa	ach	450	2.0	479	2.0	0.453	8.5	LOSA	2.8	69.9	0.54	0.42	0.54	22.7
North:	Creek	side Lan	ding Driv	/e										
7	L2	136	2.0	145	2.0	0.471	9.4	LOS A	2.9	74.4	0.62	0.56	0.66	22.6
4	T1	159	2.0	169	2.0	0.471	9.4	LOS A	2.9	74.4	0.62	0.56	0.66	22.5
14	R2	131	2.0	139	2.0	0.471	9.4	LOS A	2.9	74.4	0.62	0.56	0.66	22.1
Approa	ach	426	2.0	453	2.0	0.471	9.4	LOSA	2.9	74.4	0.62	0.56	0.66	22.4
West:	Beave	r Creek (Common	s Drive										
5	L2	104	2.0	111	2.0	0.379	8.3	LOS A	2.0	49.5	0.60	0.54	0.60	22.9
2	T1	196	2.0	209	2.0	0.379	8.3	LOS A	2.0	49.5	0.60	0.54	0.60	22.8
12	R2	21	2.0	22	2.0	0.379	8.3	LOS A	2.0	49.5	0.60	0.54	0.60	22.3
Approa	ach	321	2.0	341	2.0	0.379	8.3	LOS A	2.0	49.5	0.60	0.54	0.60	22.8
All Veh	nicles	1420	2.0	1511	2.0	0.471	8.5	LOSA	2.9	74.4	0.59	0.51	0.60	22.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Sidra\BC Commons @ Creekside Landing.sip9

Appendix G: Synchro & SIDRA Output: Background (2025)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	19	8	38	93	4	25	38	773	132	33	408	9	
Future Volume (vph)	19	8	38	93	4	25	38	773	132	33	408	9	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			1%			3%			-4%		
Storage Length (ft)	0		0	275		0	275		0	170		0	
Storage Lanes	0		0	1		1	1		0	1		0	
Taper Length (ft)	25			50			125			170			
Satd. Flow (prot)	0	1641	0	0	1768	1575	1743	3409	0	1753	1840	0	
FIt Permitted	0	0.888	0	0	0.700	1575	0.481	2400	0	0.279	1040	0	
Satd. Flow (perm)	0	1478	0	0	1297	1575	883	3409	0	515	1840	0	
Right Turn on Red		39	Yes			Yes 32		25	Yes		1	Yes	
Satd. Flow (RTOR) Link Speed (mph)		25			35	32		45			45		
Link Distance (ft)		513			641			1004			905		
Travel Time (s)		14.0			12.5			15.2			13.7		
Confl. Peds. (#/hr)		14.0			12.3			13.4			13.7		
Confl. Bikes (#/hr)													
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	5%	5%	5%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	66	0	0	99	26	39	924	0	34	425	0	
Turn Type	Perm	NA		pm+pt	NA	pm+ov	D.P+P	NA		D.P+P	NA		
Protected Phases		4		3	8	1	5	2		1	6		
Permitted Phases	4			8		8	6			2			
Detector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase													
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Minimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
Total Split (s)	20.0	20.0		15.0	35.0	15.0	15.0	70.0		15.0	70.0		
Total Split (%)	16.7%	16.7%		12.5%	29.2%	12.5%	12.5% 3.0	58.3% 4.9		12.5%	58.3% 4.9		
Yellow Time (s) All-Red Time (s)	3.2 2.6	3.2 2.6		3.0 2.8	3.1 2.7	3.0 2.8	2.4	1.6		3.0 2.8	1.6		
Lost Time Adjust (s)	2.0	-0.8		2.0	-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
Lead/Lag	Lead	Lead		Lag	5.0	Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
Act Effct Green (s)	110.10	14.4		110110	14.4	27.2	92.6	85.3		91.6	88.1		
Actuated g/C Ratio		0.12			0.12	0.23	0.77	0.71		0.76	0.73		
v/c Ratio		0.31			0.64	0.07	0.05	0.38		0.07	0.31		
Control Delay		26.2			67.5	9.3	3.6	8.2		3.8	7.7		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay		26.2			67.5	9.3	3.6	8.2		3.8	7.7		
LOS		С			Е	Α	Α	Α		Α	Α		
Approach Delay		26.2			55.4			8.0			7.4		
Approach LOS		С			Е			Α			Α		
Queue Length 50th (ft)		19			74	0	5	140		4	118		
Queue Length 95th (ft)		59			126	19	16	212		14	204		
Internal Link Dist (ft)		433			561			924			825		
Turn Bay Length (ft)							275	0.01		170	40=1		
Base Capacity (vph)		238			324	410	764	2431		503	1351		
Starvation Cap Reductn		0			0	0	0	0		0	0		
Spillback Cap Reductn		0			0	0	0	0		0	0		
Storage Cap Reductn		0 20			0 21	0	0.05	0		0 07	0 21		
Reduced v/c Ratio		0.28			0.31	0.06	0.05	0.38		0.07	0.31		
Intersection Summary													

Intersection Summary

Other

Area Type: Cycle Length: 120 Actuated Cycle Length: 120

Description: Signal No. 052254

Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 12.3 Intersection LOS: B
Intersection Capacity Utilization 51.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	52	400	401	56	15	12
Future Volume (vph)	52	400	401	56	15	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1736	1827	1796	0	1703	1524
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	1827	1796	0	1703	1524
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	61	471	538	0	18	14
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilizat	tion 41.2%			IC	U Level of	f Service A
Analysis Period (min) 15						

Intersection
Int Delay, s/veh 0.9
Movement EBL EBT WBT WBR SBL SBR
Lane Configurations
Traffic Vol, veh/h 52 400 401 56 15 12
Future Vol, veh/h 52 400 401 56 15 12
Conflicting Peds, #/hr 0 0 0 0 0 0
Sign Control Free Free Free Stop Stop
RT Channelized - None - None - None
Storage Length 150 75 0
Veh in Median Storage, # - 0 0 - 0 -
Grade, % - 0 0 - 0 -
Peak Hour Factor 85 85 85 85 85
Heavy Vehicles, % 4 4 4 6 6
Mvmt Flow 61 471 472 66 18 14
Major/Minor Major1 Major2 Minor2
Conflicting Flow All 538 0 - 0 1098 505
Stage 1 505 -
Stage 2 593 -
Critical Hdwy 4.14 6.46 6.26
Critical Hdwy Stg 1 5.46 -
Critical Hdwy Stg 2 5.46 -
Follow-up Hdwy 2.236 3.554 3.354
Pot Cap-1 Maneuver 1020 231 559
Stage 1 598 -
Stage 2 544 -
Platoon blocked, %
Mov Cap-1 Maneuver 1020 217 559
Mov Cap-2 Maneuver 351 -
Stage 1 562 -
Stage 2 544 -
Approach EB WB SB
HCM Control Delay, s 1 0 13.9
HCM LOS B
Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1 SBLn2
Capacity (veh/h) 1020 351 559
HCM Lane V/C Ratio 0.06 0.05 0.025
HCM Control Delay (s) 8.8 15.8 11.6
HCM Lane LOS A C B
HCM 95th %tile Q(veh) 0.2 0.2 0.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	4	4	13	4	4
Future Volume (vph)	19	4	4	13	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1749	0	1667	0	0	1818
Flt Permitted	0.960					0.976
Satd. Flow (perm)	1749	0	1667	0	0	1818
Link Speed (mph)	25		25			25
Link Distance (ft)	289		696			330
Travel Time (s)	7.9		19.0			9.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	0	18	0	0	8
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilizati	ion 13.8%			IC	U Level o	f Service A

Novement Novement Novement Novement Novement Novement Novement							
International Property International Prope	Intersection						
Novement WBL WBR NBT NBR SBL SBT	Int Delay, s/veh	4.8					
are Configurations raffic Vol, veh/h	Movement	WBI	WBR	NBT	NBR	SBL	SBT
raffic Vol, veh/h		1100	TT DIC	HUI	HDI	ODL	- 001
uture Vol, veh/h 19 4 4 13 4 4 onflicting Peds, #hr 0		19	Δ	4	13	4	4
conflicting Peds, #hr 0 0 0 0 0 0 0 ign Control Stop Stop Free Bate Descay P							
Stop Stop Free Free Free Free Free Tree							
T Channelized		•		-	-	-	•
torage Length 0							
eh in Median Storage, # 0 - 0 - 0 - 0 0 0 0 0 0 0 0							
Grade, % 0 - 0 - 0 - 0 0 0 0 0							
eak Hour Factor 90 90 90 90 90 90 90 eavy Vehicles, % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2							
Peavy Vehicles, % 2 2 2 2 2 2 2 2 2							
Internation Internation							
Najor Major Major Major Major							
Stage 1	IVIVITIT FIOW	21	4	4	14	4	4
Stage 1							
Stage 1	Major/Minor	Minor1		Major1		Major2	
Stage 1	Conflicting Flow All		11		0		0
Stage 2							-
ritical Hdwy Stg 1 5.42 4.12 - ritical Hdwy Stg 1 5.42			-	-	-	-	-
ritical Hdwy Stg 1 5.42	Critical Hdwy		6.22	_	_	4.12	-
ritical Hdwy Stg 2 5.42				-			-
ollow-up Hdwy 3.518 3.318 - - 2.218 - ot Cap-1 Maneuver 993 1070 - - 1599 - Stage 1 1012 - - - - - Stage 2 1011 - - - - - latoon blocked, % - <td></td> <td></td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>			_	_	_	_	_
ot Cap-1 Maneuver 993 1070 - - 1599 - Stage 1 1012 - - - - Stage 2 1011 - - - - latoon blocked, % - - - - - lov Cap-1 Maneuver 990 1070 - 1599 - lov Cap-2 Maneuver 990 - - - - - Stage 1 1012 -	Follow-up Hdwy			-	-	2.218	-
Stage 1 1012 -							-
Stage 2							_
Internal Control Delay Section							-
Iov Cap-1 Maneuver 990 1070 - - 1599 - Iov Cap-2 Maneuver 990 - - - - - Stage 1 1012 - - - - - Stage 2 1008 - - - - - pproach WB NB SB SB CM Control Delay, s 8.7 0 3.6 CM LOS A SB SBT Inior Lane/Major Mvmt NBT NBR WBLn1 SBL SBT apacity (veh/h) - - 1003 1599 - CM Lane V/C Ratio - - 0.025 0.003 - CM Control Delay (s) - - 8.7 7.3 0 CM Lane LOS - - A A A		1011		_	_		_
Stage 1		990	1070			1599	
Stage 1 1012 -	•						-
Stage 2 1008 - - - - - - - - -			-	_	_	-	_
Description			-	-	-		-
CM Control Delay, s 8.7 0 3.6 CM LOS A A A Ilinor Lane/Major Mvmt NBT NBR WBLn1 SBL SBT apacity (veh/h) - - 1003 1599 - CM Lane V/C Ratio - - 0.025 0.003 - CM Control Delay (s) - - 8.7 7.3 0 CM Lane LOS - - A A A	Staye 2	1008	-	-	-	-	-
CM Control Delay, s 8.7 0 3.6 CM LOS A A A Ilinor Lane/Major Mvmt NBT NBR WBLn1 SBL SBT apacity (veh/h) - - 1003 1599 - CM Lane V/C Ratio - - 0.025 0.003 - CM Control Delay (s) - - 8.7 7.3 0 CM Lane LOS - - A A A							
CM LOS A Ilinor Lane/Major Mvmt NBT NBR WBLn1 SBL SBT apacity (veh/h) - - 1003 1599 - CM Lane V/C Ratio - - 0.025 0.003 - CM Control Delay (s) - - 8.7 7.3 0 CM Lane LOS - - A A A	Approach	WB		NB		SB	
CM LOS	HCM Control Delay, s	8.7		0		3.6	
Ilinor Lane/Major Mvmt	HCM LOS	A					
apacity (veh/h)							
apacity (veh/h)	Minor Lang/Major Mumt		NDT	NIDD	W/DI n1	CDI	CDT
CM Lane V/C Ratio - - 0.025 0.003 - CM Control Delay (s) - - 8.7 7.3 0 CM Lane LOS - - A A A							
CM Control Delay (s) - - 8.7 7.3 0 CM Lane LOS - - A A A							
CM Lane LOS A A A			-				
			-				
CM 95th %tile Q(veh) 0.1 0 -			-				
	HUM 95th %tile Q(veh)		-	-	0.1	Ü	-

MOVEMENT SUMMARY

🦁 Site: 4 [Background AM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive

Site Category: Chapel Ridge Apartments

Roundabout

Vehicle Movement Performance														
	Turn	INPUT DEMAN			Deg.		Level of	95% BACK OF		Prop. Que	Effective	Aver.	Aver.	
ID		VOLUMES FLOWS		Satn	Delay Service			QUEUE		Stop		Speed		
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] ft		Rate	Cycles	mph
South: Creekside Landing Drive														
3	L2	4	6.0	5	6.0	0.066	4.3	LOS A	0.3	6.9	0.40	0.27	0.40	24.0
8	T1	28	6.0	33	6.0	0.066	4.3	LOS A	0.3	6.9	0.40	0.27	0.40	23.9
18	R2	22	6.0	26	6.0	0.066	4.3	LOS A	0.3	6.9	0.40	0.27	0.40	23.5
Appro	ach	54	6.0	64	6.0	0.066	4.3	LOS A	0.3	6.9	0.40	0.27	0.40	23.7
East: Beaver Creek Commons Drive														
1	L2	29	2.0	35	2.0	0.165	4.3	LOS A	0.8	20.0	0.24	0.11	0.24	24.0
6	T1	78	2.0	93	2.0	0.165	4.3	LOS A	0.8	20.0	0.24	0.11	0.24	23.8
16	R2	65	2.0	77	2.0	0.165	4.3	LOS A	8.0	20.0	0.24	0.11	0.24	23.4
Appro	ach	172	2.0	205	2.0	0.165	4.3	LOS A	0.8	20.0	0.24	0.11	0.24	23.7
North: Creekside Landing Drive														
7	L2	64	2.0	76	2.0	0.150	4.3	LOS A	0.7	17.7	0.30	0.16	0.30	23.7
4	T1	32	2.0	38	2.0	0.150	4.3	LOS A	0.7	17.7	0.30	0.16	0.30	23.6
14	R2	53	2.0	63	2.0	0.150	4.3	LOS A	0.7	17.7	0.30	0.16	0.30	23.1
Appro	ach	149	2.0	177	2.0	0.150	4.3	LOS A	0.7	17.7	0.30	0.16	0.30	23.5
West: Beaver Creek Commons Drive														
5	L2	37	3.0	44	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.8
2	T1	132	3.0	157	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.7
12	R2	8	3.0	10	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.3
Appro	ach	177	3.0	211	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.7
All Ve	hicles	552	2.7	657	2.7	0.184	4.5	LOSA	0.9	22.1	0.30	0.17	0.30	23.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Sidra\BC Commons @ Creekside Landing.sip9

ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
ane Configurations													
raffic Volume (vph)	10	14	47	278	20	62	67	584	304	100	846	23	
uture Volume (vph)	10	14	47	278	20	62	67	584	304	100	846	23	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
ane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			1%			3%			-4%		
torage Length (ft)	0		0	275		0	275		0	170		0	
torage Lanes	0		0	1		1	1		0	1		0	
aper Length (ft)	25			50			125			170			
atd. Flow (prot)	0	1683	0	0	1770	1575	1743	3283	0	1805	1891	0	
It Permitted		0.943			0.710		0.087			0.237			
atd. Flow (perm)	0	1598	0	0	1316	1575	160	3283	0	450	1891	0	
ight Turn on Red			Yes			Yes			Yes			Yes	
atd. Flow (RTOR)		48				63		95			1		
ink Speed (mph)		25			35			45			45		
nk Distance (ft)		513			641			1004			905		
ravel Time (s)		14.0			12.5			15.2			13.7		
onfl. Peds. (#/hr)							1		1	1		1	
onfl. Bikes (#/hr)													
eak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Frowth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
eavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
us Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
arking (#/hr)		<u> </u>	J	U	J	U	J	<u> </u>	U	J	U	J	
lid-Block Traffic (%)		0%			0%			0%			0%		
hared Lane Traffic (%)		070			070			070			070		
ane Group Flow (vph)	0	72	0	0	304	63	68	906	0	102	886	0	
urn Type	Perm	NA	U	pm+pt	NA	pm+ov	D.P+P	NA	U	D.P+P	NA	U	
rotected Phases	Feiiii	4		9111+pt	8	piii+0v 1	D.F+F	2		D.F+F	6		
ermitted Phases	4	4		8	0	8	6	2		2	U		
etector Phase	4	4		3	8	1	5	2		1	6		
witch Phase	4	4		J	0	ı	J	2		<u>'</u>	U		
linimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
linimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
	25.0	25.0		20.0	45.0	20.0	15.0	55.0		20.0	60.0		
otal Split (s)													
otal Split (%)	20.8%	20.8%		16.7%	37.5%	16.7%	12.5%	45.8%		16.7%	50.0%		
ellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
II-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
ost Time Adjust (s)		-0.8			-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
otal Lost Time (s)	, .	5.0			5.0	5.0	5.0	5.0		5.0	5.0		
ead/Lag	Lead	Lead		Lag		Lead	Lead	Lag		Lead	Lag		
ead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
ct Effct Green (s)		33.0			33.0	46.6	73.0	63.4		72.0	66.7		
ctuated g/C Ratio		0.28			0.28	0.39	0.61	0.53		0.60	0.56		
/c Ratio		0.15			0.84	0.10	0.34	0.51		0.28	0.84		
Control Delay		13.1			60.9	4.9	14.5	18.5		11.6	34.0		
lueue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
otal Delay		13.1			60.9	4.9	14.5	18.5		11.6	34.0		
OS		В			Е	Α	В	В		В	С		
pproach Delay		13.1			51.3			18.2			31.7		
pproach LOS		В			D			В			С		
ueue Length 50th (ft)		14			219	0	19	206		29	586		
ueue Length 95th (ft)		46			312	25	42	307		59	#968		
iternal Link Dist (ft)		433			561			924			825		
urn Bay Length (ft)							275			170			
ase Capacity (vph)		473			438	730	231	1778		457	1051		
tarvation Cap Reductn		0			0	0	0	0		0	0		
Spillback Cap Reductn		0			0	0	0	0		0	0		
Storage Cap Reductn		0			0	0	0	0		0	0		
Reduced v/c Ratio		0.15			0.69	0.09	0.29	0.51		0.22	0.84		
LUUUUUU VIU INUIIU		U. I J			0.07	0.07	U.Z.7	U.J I		U.ZZ	0.04		

Intersection Summary

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120 Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 28.7

Intersection LOS: C

Intersection Capacity Utilization 87.4%

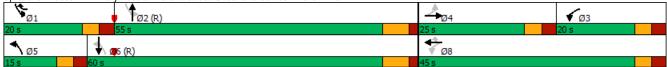
Intersection Signal Delay: 28.7

Analysis Period (min) 15 Description: Signal No. 052254

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	23	491	586	29	51	58
Future Volume (vph)	23	491	586	29	51	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1770	1863	1852	0	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1852	0	1770	1583
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	528	661	0	55	62
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utiliza	ition 42.9%			IC	U Level o	f Service A
Analysis Period (min) 15						

Intersection							
Int Delay, s/veh	1.6						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	LUL	LUI	WDI	WIDI	JDL	JDIC	
Traffic Vol, veh/h	23	491	586	29	51	58	
Future Vol, veh/h	23	491	586	29	51	58	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-		-	75	0	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	93	93	93	93	93	93	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	25	528	630	31	55	62	
Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	661	0	iviajui z	0	1224	646	
Stage 1	-	-	-	-	646	040	
Stage 2		_	_	_	578	-	
Critical Hdwy	4.12			_	6.42	6.22	
Critical Hdwy Stg 1	-	-	-		5.42	-	
Critical Hdwy Stg 2	-	-	-	_	5.42	-	
Follow-up Hdwy	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	927	-	-	-	198	472	
Stage 1	-	-	-	-	522	-	
Stage 2	-	-	-	-	561	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	927	-	-	-	193	472	
Mov Cap-2 Maneuver	-	-	-	-	331	-	
Stage 1	-	-	-	-	508	-	
Stage 2	-	-	-	-	561	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.4		0		15.8		
HCM LOS					С		
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		927	-	-	WDIX	331	472
HCM Lane V/C Ratio		0.027		-	-	0.166	0.132
HCM Control Delay (s)		9	-			18	13.8
HCM Lane LOS		Á	-		-	C	13.0 B
HCM 95th %tile Q(veh)		0.1				0.6	0.5
TOW 75th 75th 20th Q(VCH)		0.1				0.0	0.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	4	4	32	4	4
Future Volume (vph)	17	4	4	32	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1747	0	1635	0	0	1818
Flt Permitted	0.960					0.976
Satd. Flow (perm)	1747	0	1635	0	0	1818
Link Speed (mph)	25		25			25
Link Distance (ft)	289		696			330
Travel Time (s)	7.9		19.0			9.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	40	0	0	8
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					

Control Type: Unsignalized Intersection Capacity Utilization 13.8% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	3.3					
	WBL	WBR	NBT	NBR	SBL	SBT
Movement Configurations	WBL	WBR	INDI	NBK	SBL	SBT
Lane Configurations Traffic Vol., veh/h	17	4	4	32	4	4
Future Vol, veh/h	17	4	4	32	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	310p -	None	-	None	-	None
Storage Length	0	None -	-	None -	-	None -
Veh in Median Storage, #	0		0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	90 2	2	2	2	2	90 2
Mymt Flow	19	4	4	36	4	4
IVIVIIIL FIUW	19	4	4	30	4	4
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	34	22	0	0	40	0
Stage 1	22	-	-	-	-	-
Stage 2	12	-	-	-	-	-
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	979	1055	-	-	1570	-
Stage 1	1001	-	-	-	_	
Stage 2	1011	_	_	_	_	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	976	1055	_	_	1570	_
Mov Cap-2 Maneuver	976	-	-	_	-	-
Stage 1	1001	_	_	_	_	_
Stage 2	1008	-				
Stage 2	1000					
Approach	WB		NB		SB	
HCM Control Delay, s	8.7		0		3.6	
HCM LOS	А					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		NDI	NDIX	990	1570	301
HCM Lane V/C Ratio		-	-	0.024	0.003	-
HCM Control Delay (s)		-	-	8.7	7.3	0
HCM Lane LOS		-		8.7 A	7.3 A	A
HCM 25th %tile Q(veh)		-	-	0.1	0 0	А
HOW 9501 7600 Q(Ven)				0.1	U	-

MOVEMENT SUMMARY

🦁 Site: 4 [Background PM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive

Site Category: Chapel Ridge Apartments

Roundabout

Vehi	cle Mc	vemen	t Perfori	mance										
Mov	Turn	INF		DEM		Deg.		Level of		CK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU [Total	JMES HV 1	FLO [Total	WS HV]	Satn	Delay	Service	QUE [Veh.	EUE Dist 1	Que	Stop Rate	No. Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	ft		Nate	Cycles	mph
South	n: Cree	kside Laı	nding Dri	ve										
3	L2	25	2.0	27	2.0	0.311	8.2	LOS A	1.4	36.4	0.62	0.61	0.62	23.0
8	T1	98	2.0	104	2.0	0.311	8.2	LOS A	1.4	36.4	0.62	0.61	0.62	22.9
18	R2	107	2.0	114	2.0	0.311	8.2	LOS A	1.4	36.4	0.62	0.61	0.62	22.5
Appro	oach	230	2.0	245	2.0	0.311	8.2	LOS A	1.4	36.4	0.62	0.61	0.62	22.7
East:	Beave	r Creek (Commons	s Drive										
1	L2	74	2.0	79	2.0	0.511	9.6	LOS A	3.3	83.3	0.60	0.47	0.60	22.7
6	T1	235	2.0	250	2.0	0.511	9.6	LOS A	3.3	83.3	0.60	0.47	0.60	22.6
16	R2	189	2.0	201	2.0	0.511	9.6	LOS A	3.3	83.3	0.60	0.47	0.60	22.2
Appro	oach	498	2.0	530	2.0	0.511	9.6	LOS A	3.3	83.3	0.60	0.47	0.60	22.4
North	: Creek	kside Lar	nding Driv	/e										
7	L2	153	2.0	163	2.0	0.523	10.6	LOS B	4.1	104.7	0.67	0.72	0.85	22.3
4	T1	160	2.0	170	2.0	0.523	10.6	LOS B	4.1	104.7	0.67	0.72	0.85	22.2
14	R2	147	2.0	156	2.0	0.523	10.6	LOS B	4.1	104.7	0.67	0.72	0.85	21.8
Appro	oach	460	2.0	489	2.0	0.523	10.6	LOS B	4.1	104.7	0.67	0.72	0.85	22.1
West	: Beave	er Creek	Common	s Drive										
5	L2	117	2.0	124	2.0	0.433	9.3	LOS A	2.5	64.4	0.64	0.63	0.71	22.6
2	T1	221	2.0	235	2.0	0.433	9.3	LOS A	2.5	64.4	0.64	0.63	0.71	22.5
12	R2	21	2.0	22	2.0	0.433	9.3	LOS A	2.5	64.4	0.64	0.63	0.71	22.1
Appro	oach	359	2.0	382	2.0	0.433	9.3	LOS A	2.5	64.4	0.64	0.63	0.71	22.5
All Ve	ehicles	1547	2.0	1646	2.0	0.523	9.6	LOSA	4.1	104.7	0.63	0.60	0.70	22.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Sidra\BC Commons @ Creekside Landing.sip9

Appendix H: Synchro & SIDRA Output: Build-Out (2025)

Timifte Volume (uph) 19 8 38 93 4 88 38 773 132 53 408 9 Perfuture Volume (uph) 190 1900 1900 1900 1900 1900 1900 1900	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Future Volume Volphi) 190 8 83 93 4 88 33 773 132 53 408 9 100 1900 1900 1900 1900 1900 1900 19	Lane Configurations													
Fulure Volume (oph) 1900 190		19	8	38	93	4	88	38	773	132	53	408	9	
Ideal Flow (polphi) 1900	() /	19	8	38	93	4	88	38	773	132	53	408	9	
Lane Width (ff)														
Starge Length (ft)														
Storage Langth (ft)														
Strate Lanes 0	· ,	٥	070	٥	275	170	٥	275	370	٥	170	-470	0	
Taper Length (ft)														
Said. Flow (grony)				U	-					U			U	
File Permitted			17.41	٥		17/0	1575		2400	٥		1040	0	
Said Flow (perm)		U		U	U		13/3		3409	U		1840	U	
Right Tum on Red		•		0	^		4575		0.400	0		1010	^	
Said Flow (RTOR)		0	14/8		0	1297		883	3409		509	1840		
Link Spead (mph)				Yes						Yes			Yes	
Link Distance (m)							90							
Travel Time (s)														
Conff. Bitics (#hr)												905		
Confl. Rikes (#hr) Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98			14.0			12.5			15.2			13.7		
Confl. Rikes (#hr) Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98	Confl. Peds. (#/hr)													
Peak Hour Factor 0.98 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>														
Crowth Factor 100%	· '	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Hearry Vehicles (%)	Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Bus Blockages (#fhr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0														
Parking (#hr) Mid-Block Traffic (%) No	J ,													
Mid-Block Traffic (%)		U	U	U	U	U	U	U	U	U	J	U	U	
Shared Lane Traffic (%) Lane Group Flow (vph) 0 66 0 0 99 90 39 924 0 54 425 0			Ω9/.			Λ9/.			Λ0/.			Ω9/.		
Lane Group Flow (vph)	· ,		070			0 /0			0 /0			0 /0		
Turn Type Perm NA pm+pt NA pm+ov D.P+P NA D.P+P NA Protected Phases 4 3 8 1 5 2 1 6 Detector Phase 4 4 3 8 1 5 2 1 6 Switch Phase 4 4 3 8 1 5 2 1 6 Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 12.0 7.0 12.0 Minimum Initial (s) 3.0 30.0 30.0 14.0 30.0 14.0 25.0 7.0 12.0 Minimum Initial (s) 2.0 20.0 15.0 35.0 15.0 70.0 15.0 70.0 12.0 7.0 70.0 12.0 7.0 12.0 7.0 12.0 7.0 12.0 7.0 12.0 7.0 12.0 7.0 12.0 7.0 12.0 25.0 15.0		0		0	0	00	00	20	024	0	E 4	425	0	
Protected Phases				U						U			U	
Permitted Phases	31	Perm												
Detector Phase 4			4			8			2			6		
Switch Phase Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 12.0 7.0 12.0 Minimum Initial (s) 7.0 7.0 7.0 12.0 7.0 12.0 Minimum Spit (s) 30.0 30.0 14.0 30.0 14.0 30.0 14.0 25.0 Total Spit (%) 16.7% 16.7% 16.7% 12.5% 29.2% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0<						_			_					
Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 12.0 7.0 12.0 Minimum Split (s) 30.0 30.0 14.0 30.0 14.0 14.0 20.0 15.0 25.0 Total Split (s) 16.7% 16.7% 12.5% 29.2% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.5 Total Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0<		4	4		3	8	1	5	2		1	6		
Minimum Spiit (s) 30.0 30.0 14.0 30.0 14.0 30.0 14.0 25.0 Total Spiit (s) 20.0 20.0 15.0 35.0 15.0 70.0 15.0 70.0 Total Spiit (%) 16.7% 16.7% 12.5% 29.2% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.0 3.1 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead														
Total Split (s) 20.0 20.0 15.0 35.0 15.0 70.0 15.0 70.0 Total Split (%) 16.7% 16.7% 12.5% 29.2% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.5 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0														
Total Split (%) 16.7% 16.7% 12.5% 29.2% 12.5% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead Lead Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes Yes Recall Mode None None None None None None None None None C-Max Act Leffct Green (s) 14.4 14.4 27.2 92.6 82.8 90.6 88.1 Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.69 0.76 0.73 v/c Ratio 0.31 0.64 0.21 0.05 0.39 0.12 0.31 Control Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Lost Time (s) 1.4	Minimum Split (s)		30.0											
Yellow Time (s) 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead L	Total Split (s)	20.0	20.0		15.0	35.0	15.0	15.0	70.0		15.0	70.0		
All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead Lad Lag Lead Lead Lag Lead Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Total Split (%)	16.7%	16.7%		12.5%	29.2%	12.5%	12.5%	58.3%		12.5%	58.3%		
Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead Lead Lag Lead Lead Lag Lead Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Recall Mode None None None None None None C-Max None C-Max Act Effet Green (s) 14.4 14.4 27.2 92.6 82.8 90.6 88.1 Actuated g/C Ratio 0.12 0.12 0.12 0.23 0.77 0.69 0.76 0.73 Vic Ratio 0.31 0.64 0.21 0.05 0.39 0.12 0.31 Control Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 Cueue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 LOS C E A A A A A Approach Delay 26.2 39.2 8.5 7.3 Approach Delay 26.2 39.2 8.5 7.3 Approach LoS C D A A Approach LoS C D A A Augure Length 50th (ft) 19 74 0 5	Yellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead Lead Lag Lead Lead Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes Yes Yes Recall Mode None None None None None None C-Max None C-Max Act Effet Green (s) 14.4 14.4 27.2 92.6 82.8 90.6 88.1 Actuated g/C Ratio 0.12 0.12 0.12 0.23 0.77 0.69 0.76 0.73 Vic Ratio 0.31 0.64 0.21 0.05 0.39 0.12 0.31 Control Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 Cueue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 LOS C E A A A A A Approach Delay 26.2 39.2 8.5 7.3 Approach Delay 26.2 39.2 8.5 7.3 Approach LOS C D A A Augurea Length 50th (ft) 19 74 0 5 140 7 118 Queue Length 95th (ft) 59 126 40 16 212 20 204 Internal Link Dist (ft) 433 561 924 825 Turn Bay Length (ft) 238 324 454 764 2359 497 1351 Starvation Cap Reductn 0 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0 Total Delay 0.0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0	All-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
Total Lost Time (s)			-0.8				-0.8				-0.8			
Lead/Lag Lead Lead Lag La							5.0	5.0						
Lead-Lag Optimize? Yes		Lead			Lan	0.0								
Recall Mode None None None None C-Max None C-Max Act Effct Green (s) 14.4 14.4 27.2 92.6 82.8 90.6 88.1 Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.69 0.76 0.73 V/c Ratio 0.31 0.64 0.21 0.05 0.39 0.12 0.31 Control Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 Queue Delay 0.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>														
Act Effct Green (s) 14.4 14.4 27.2 92.6 82.8 90.6 88.1 Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.69 0.76 0.73 v/c Ratio 0.31 0.64 0.21 0.05 0.39 0.12 0.31 Control Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 LOS C E A A A A A Approach Delay 26.2 39.2 8.5 7.3 A Approach LOS C D A A A A A Queue Length 50th (ft) 19 74 0 5 140 7 118 2 20 204 204 20 204 204 204 204 204 204 204 204	0 1					None								
Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.69 0.76 0.73 v/c Ratio 0.31 0.64 0.21 0.05 0.39 0.12 0.31 Control Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 26.2 67.5 8.0 3.6 8.8 4.0 7.7 LOS C E A A A A A Approach Delay 26.2 39.2 8.5 7.3 Approach LOS C D A A A Queue Length 50th (ft) 19 74 0 5 140 7 118 Queue Length 95th (ft) 59 126 40 16 212 20 204 Internal Link Dist (ft) 433 561 924 825 Turn Bay Length (ft) 238 324 454 764 2359 497 1351 <t< td=""><td></td><td>INUITE</td><td></td><td></td><td>NOHE</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		INUITE			NOHE									
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Queue Length 95th (ft) 59 126 40 16 212 20 204 Internal Link Dist (ft) 433 561 924 825 Turn Bay Length (ft) 275 170 Base Capacity (vph) 238 324 454 764 2359 497 1351 Starvation Cap Reductn 0 0 0 0 0 0 Spillback Cap Reductn 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0														
Queue Length 95th (ft) 59 126 40 16 212 20 204 Internal Link Dist (ft) 433 561 924 825 Turn Bay Length (ft) 275 170 Base Capacity (vph) 238 324 454 764 2359 497 1351 Starvation Cap Reductn 0 0 0 0 0 0 Spillback Cap Reductn 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0						74	0	5	140		7	118		
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Starvation Cap Reductn 0 0 0 0 0 0 Spillback Cap Reductn 0 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0 0			238			324	454		2359			1351		
Spillback Cap Reductn 0 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0 0														
Storage Cap Reductn 0 0 0 0 0 0														
Deduced v/e Detic 0.20 0.21 0.20 0.05 0.21 0.20 0.21 0.20														
Reduced v/c Ratio 0.28 0.31 0.20 0.05 0.39 0.11 0.31	Reduced WC Rall0		υ.28			0.31	0.20	0.05	0.39		U. I I	0.31		

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120 Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64
Intersection Signal Delay: 12.3
Intersection Capacity Utilization 55.9%
ICU Level of Service B

Analysis Period (min) 15 Description: Signal No. 052254

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	400	401	62	32	21
Future Volume (vph)	55	400	401	62	32	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1736	1827	1794	0	1703	1524
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	1827	1794	0	1703	1524
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	471	545	0	38	25
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utiliza	ition 41.5%			IC	U Level o	f Service A
Analysis Period (min) 15						
, , ,						

								-
Intersection								
Int Delay, s/veh	1.3							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	LUL	LDI	WDI	WDI	JUL	JUIN		
Traffic Vol, veh/h	55	400	401	62	32	21		
Future Vol, veh/h	55	400	401	62	32	21		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	150	-	-	-	75	0		
Veh in Median Storage, #	-	0	0	_	0	-		
Grade, %	-	0	0		0	-		
Peak Hour Factor	85	85	85	85	85	85		
Heavy Vehicles, %	4	4	4	4	6	6		
Mymt Flow	65	471	472	73	38	25		
			.,_					
Major/Minor	Major1		Major?		Minor			
Major/Minor	Major1		Major2		Minor2	F00		
Conflicting Flow All	545	0	-	0	1110 509	509		
Stage 1		-	-	-				
Stage 2	4.14	-	-	-	601	6.26		
Critical Hdwy Critical Hdwy Stg 1	4.14	-	-	-	6.46 5.46			
	-	-	-	-		-		
Critical Hdwy Stg 2 Follow-up Hdwy	2.236	-	-	-	5.46 3.554	3.354		
Pot Cap-1 Maneuver	2.236	-	-	-	3.554	3.354 556		
Stage 1		-		-	595	556		
Stage 1 Stage 2	-	-	-	-	540	-		
Platoon blocked, %	-	-	-		340	-		
Mov Cap-1 Maneuver	1014	-	-	-	212	556		
Mov Cap-1 Maneuver	1014	-	-	-	347	330		
Stage 1	<u>-</u>	-	-		557	-		
Stage 2	_	-	-	-	540	-		
Jιαy€ 2		-	-	_	340	_		
A	- FP		WP		0.0			
Approach Delever	EB		WB		SB			
HCM Control Delay, s	1.1		0		14.7			
HCM LOS					В			
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)		1014	-	-	-	347	556	
HCM Lane V/C Ratio		0.064	-	-	-	0.108	0.044	
HCM Control Delay (s)		8.8	-	-	-	16.6	11.8	
HCM Lane LOS		А	-	-	-	С	В	
HCM 95th %tile Q(veh)		0.2	-	-	-	0.4	0.1	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WDL	DIX			JDL	351
Traffic Volume (vph)	19	48	16	13	15	32
Future Volume (vph)	19	48	16	13	15	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1659	0	1753	0	0	1833
Flt Permitted	0.986					0.984
Satd. Flow (perm)	1659	0	1753	0	0	1833
Link Speed (mph)	25		25			25
Link Distance (ft)	292		213			210
Travel Time (s)	8.0		5.8			5.7
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	0	32	0	0	53
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
0 1 17 11 1 " '						

Control Type: Unsignalized Intersection Capacity Utilization 19.9% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	4.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	WBL	WBK	NDI	NBK	SBL	SBI
Lane Configurations Traffic Vol., veh/h	19	48	16	13	15	32
Future Vol, veh/h	19	48	16	13	15	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- Stop	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	90 2
Mymt Flow	21	53	18	14	17	36
IVIVIIIL FIUW	21	03	10	14	17	30
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	95	25	0	0	32	0
Stage 1	25	-	-	-	-	-
Stage 2	70	-	-	-	-	-
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	905	1051	-	-	1580	-
Stage 1	998	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	895	1051	-	-	1580	-
Mov Cap-2 Maneuver	895	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.9		0		2.3	
HCM LOS	8.9 A		U		2.3	
TICIVI LUS	A					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		-	-	1001	1580	-
HCM Lane V/C Ratio		-	-	0.074	0.011	-
HCM Control Delay (s)		-	-	8.9	7.3	0
HCM Lane LOS		-	-	Α	Α	Α
HCM 95th %tile Q(veh)		-	-	0.2	0	-
. ,						

MOVEMENT SUMMARY

🦁 Site: 4 [Build-Out AM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive

Site Category: Chapel Ridge Apartments

Roundabout

Veh	icle Mc	ovemen	t Perfor	mance										
Mov ID	Turn		PUT JMES	DEM/ FLO		Deg. Satn		Level of Service		ACK OF EUE	Prop. Que	Effective Stop	Aver. No.	Aver. Speed
טו		[Total	HV]	[Total	HV]	Salli	Delay	Service	[Veh.	Dist]	Que	Rate	Cycles	Speeu
		veh/h	%	veh/h	%	v/c	sec		veh	ft				mph
Sout	h: Cree	kside Laı	nding Dri	ve										
3	L2	4	6.0	5	6.0	0.068	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	24.0
8	T1	28	6.0	33	6.0	0.068	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	23.9
18	R2	22	6.0	26	6.0	0.068	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	23.4
Appr	oach	54	6.0	64	6.0	0.068	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	23.7
East	: Beave	r Creek (Commons	s Drive										
1	L2	29	2.0	35	2.0	0.181	4.5	LOS A	0.9	22.2	0.26	0.13	0.26	23.9
6	T1	92	2.0	110	2.0	0.181	4.5	LOS A	0.9	22.2	0.26	0.13	0.26	23.8
16	R2	65	2.0	77	2.0	0.181	4.5	LOS A	0.9	22.2	0.26	0.13	0.26	23.4
Appr	oach	186	2.0	221	2.0	0.181	4.5	LOSA	0.9	22.2	0.26	0.13	0.26	23.7
Nort	n: Creel	kside Lar	nding Driv	/e										
7	L2	64	2.0	76	2.0	0.164	4.5	LOS A	0.8	19.5	0.32	0.19	0.32	23.7
4	T1	32	2.0	38	2.0	0.164	4.5	LOS A	8.0	19.5	0.32	0.19	0.32	23.6
14	R2	64	2.0	76	2.0	0.164	4.5	LOS A	0.8	19.5	0.32	0.19	0.32	23.1
Appr	oach	160	2.0	190	2.0	0.164	4.5	LOS A	0.8	19.5	0.32	0.19	0.32	23.4
Wes	t: Beave	er Creek	Common	s Drive										
5	L2	46	3.0	55	3.0	0.213	5.0	LOS A	1.0	26.3	0.34	0.20	0.34	23.7
2	T1	151	3.0	180	3.0	0.213	5.0	LOS A	1.0	26.3	0.34	0.20	0.34	23.6
12	R2	8	3.0	10	3.0	0.213	5.0	LOS A	1.0	26.3	0.34	0.20	0.34	23.2
Appr	oach	205	3.0	244	3.0	0.213	5.0	LOS A	1.0	26.3	0.34	0.20	0.34	23.6
All V	ehicles	605	2.7	720	2.7	0.213	4.7	LOSA	1.0	26.3	0.32	0.18	0.32	23.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Sidra\BC Commons @ Creekside Landing.sip9

	14.5		NDT.		251	057
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	63	39	210	20	28	125
Future Volume (vph)	63	39	210	20	28	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				100	
Satd. Flow (prot)	1715	0	1840	0	1770	1863
Flt Permitted	0.970				0.950	
Satd. Flow (perm)	1715	0	1840	0	1770	1863
Link Speed (mph)	25		35			35
Link Distance (ft)	432		357			558
Travel Time (s)	11.8		7.0			10.9
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	113	0	255	0	31	139
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
	0101					

Control Type: Unsignalized Intersection Capacity Utilization 31.5% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	2.8					
		WDD	NDT	NDD	CDI	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			645			40=
Traffic Vol, veh/h	63	39	210	20	28	125
Future Vol, veh/h	63	39	210	20	28	125
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	43	233	22	31	139
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	445	244	0	0	255	0
Stage 1	244	-	-	-	-	-
Stage 2	201	-	-	-	-	-
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	571	795	-	-	1310	-
Stage 1	797	-	_	_	-	_
Stage 2	833	_	_	_	_	_
Platoon blocked. %	- 000		_	-		_
Mov Cap-1 Maneuver	557	795			1310	
Mov Cap-1 Maneuver	621	173	_	-	1310	-
Stage 1	797	-	-	-	-	-
	813	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	11.4		0		1.4	
HCM LOS	В					
200						
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		-	-	678	1310	-
HCM Lane V/C Ratio		-	-	0.167	0.024	-
HCM Control Delay (s)		-	-	11.4	7.8	-
HCM Lane LOS		-	-	В	Α	-
HCM 95th %tile Q(veh)		-	-	0.6	0.1	-
, 2(10/1)				0.0	U. 1	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (vph)	6	43	4	17	85	4	
Future Volume (vph)	6	43	4	17	85	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1643	0	0	1846	1766	0	
Flt Permitted				0.991	0.954		
Satd. Flow (perm)	1643	0	0	1846	1766	0	
Link Speed (mph)	25			25	25		
Link Distance (ft)	432			273	553		
Travel Time (s)	11.8			7.4	15.1		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)							
Lane Group Flow (vph)	55	0	0	23	98	0	
Sign Control	Free			Free	Stop		
Intersection Summary							
Area Type:	Other						

Control Type: Unsignalized Intersection Capacity Utilization 16.0% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	5.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	EDI	LDK	WDL	WDI	NDL	NDK
Traffic Vol., veh/h	6	43	4	17	85	4
Future Vol, veh/h	6	43	4	17	85	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	- -	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage, #	0	_	_	0	0	_
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	7	48	4	19	94	4
WWW. TIOW		- 70		- 17	7-1	
Majau/Minau	Mainu ⁴		Malano		Min out	
Major/Minor	Major1		Major2		Minor1	0.4
Conflicting Flow All	0	0	55	0	58	31
Stage 1	-	-	-	-	31	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1550	-	949	1043
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1550	-	946	1043
Mov Cap-2 Maneuver	-	-	-	-	946	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	993	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.4		9.2	
HCM LOS					A	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		950	LDI	LDI	1550	WDI
HCM Lane V/C Ratio		0.104	-	-	0.003	
HCM Control Delay (s)		9.2	-	-	7.3	0
HCM Lane LOS		9.2 A		-	7.3 A	A
HCM 95th %tile Q(veh)		0.3	-	-	0	А
HOW FOUT MILE Q(VeII)		0.3	-	-	U	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	4	34	8	4	58	4	22	4	4	9	4	4	
Future Volume (vph)	4	34	8	4	58	4	22	4	4	9	4	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1811	0	0	1842	0	0	1765	0	0	1758	0	
Flt Permitted		0.996			0.997			0.964			0.973		
Satd. Flow (perm)	0	1811	0	0	1842	0	0	1765	0	0	1758	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		553			210			358			340		
Travel Time (s)		15.1			5.7			9.8			9.3		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	51	0	0	72	0	0	32	0	0	18	0	
Sign Control		Free			Free			Stop			Stop		

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 14.3% Analysis Period (min) 15

Intersection													
Int Delay, s/veh	3.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	4	34	8	4	58	4	22	4	4	9	4	4	
Future Vol, veh/h	4	34	8	4	58	4	22	4	4	9	4	4	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	4	38	9	4	64	4	24	4	4	10	4	4	
				-		1	21	•	T-				
Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	68	0	0	47	0	0	129	127	43	129	129	66	
Stage 1	-	-	-	- 47	-	-	51	51	-	74	74	-	
Stage 2		-	-	-	-	-	78	76	-	55	55	-	
Critical Hdwy	4.12		-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	4.12	-	-	4.12	-	-	6.12	5.52	0.22	6.12	5.52	0.22	
	-	-	-	-	-	-	6.12	5.52		6.12	5.52	-	
Critical Hdwy Stg 2	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Follow-up Hdwy					-	-							
Pot Cap-1 Maneuver	1533	-	-	1560			844	764	1027	844	762	998	
Stage 1	-	-	-	-	-	-	962	852	-	935	833	-	
Stage 2	-	-	-	-	-	-	931	832	-	957	849	-	
Platoon blocked, %	4500	-	-	4510	-	-		750	4007	000			
Mov Cap-1 Maneuver	1533	-	-	1560	-	-	833	759	1027	833	757	998	
Mov Cap-2 Maneuver	-	-	-	-	-	-	833	759	-	833	757	-	
Stage 1	-	-	-	-	-	-	959	849	-	932	831	-	
Stage 2	-	-	-	-	-	-	919	830	-	945	846	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0.6			0.4			9.4			9.4			
HCM LOS							A			Α			
Mala and Laura (Mala and Mala		NDId	EDI	EDT	EDD	MDI	WDT	WDD	CDId				
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)		843	1533	-	-	1560	-	-	846				
HCM Lane V/C Ratio		0.04	0.003	-	-	0.003	-	-	0.022				
HCM Control Delay (s)		9.4	7.4	0	-	7.3	0	-	9.4				
HCM Lane LOS		Α	Α	Α	-	Α	Α	-	Α				
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.1				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	4	4	9	4	4	4	4	20	4	4	48	4	
Future Volume (vph)	4	4	9	4	4	4	4	20	4	4	48	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1704	0	0	1750	0	0	1816	0	0	1840	0	
Flt Permitted		0.989			0.984			0.993			0.997		
Satd. Flow (perm)	0	1704	0	0	1750	0	0	1816	0	0	1840	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		248			378			405			213		
Travel Time (s)		6.8			10.3			11.0			5.8		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	18	0	0	12	0	0	30	0	0	61	0	
Sign Control		Stop			Stop			Free			Free		

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 13.4% Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LUL	LDI	LDIN	WDL	WDI	WDIX	NDL	INDI	NDIX	JDL	301	JUK
Traffic Vol, veh/h	4	4	9	4	4	4	4	20	4	4	48	4
Future Vol. veh/h	4	4	9	4	4	4	4	20	4	4	48	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-		None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	10	4	4	4	4	22	4	4	53	4
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	99	97	55	102	97	24	57	0	0	26	0	0
Stage 1	63	63	-	32	32	-	-	-	-	-	-	-
Stage 2	36	34	-	70	65	_	_	-	-	-	-	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	_	4.12	_	_
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	883	793	1012	879	793	1052	1547	-	-	1588	-	-
Stage 1	948	842	-	984	868	-	-	-	-	-	-	-
Stage 2	980	867	-	940	841	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	872	788	1012	862	788	1052	1547	-	-	1588	-	-
Mov Cap-2 Maneuver	872	788	-	862	788	-	-	-	-	-	-	-
Stage 1	945	839	-	981	865	-	-	-	-	-	-	-
Stage 2	968	864	-	923	838	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9			9.1			1			0.5		
HCM LOS	А			Α								
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1547	-		916	888	1588					
HCM Lane V/C Ratio		0.003	-	-	0.021	0.015	0.003		-			
HCM Control Delay (s)		7.3	0	-	9	9.1	7.3	0	-			
HCM Lane LOS		Α	A	-	A	Α	Α	A	-			
HCM 95th %tile Q(veh)		0	-	-	0.1	0	0	-	-			
. , ,												

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (vph)	25	4	4	58	9	4	
Future Volume (vph)	25	4	4	58	9	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1831	0	0	1857	1729	0	
Flt Permitted				0.997	0.966		
Satd. Flow (perm)	1831	0	0	1857	1729	0	
Link Speed (mph)	25			25	25		
Link Distance (ft)	292			367	225		
Travel Time (s)	8.0			10.0	6.1		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)							
Lane Group Flow (vph)	32	0	0	68	14	0	
Sign Control	Free			Free	Stop		
Intersection Summary							

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 16.3%
Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	LUI	LDIN	WDL	WDI	NDL	NDIX
Traffic Vol, veh/h	25	4	4	58	9	4
Future Vol, veh/h	25	4	4	58	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	_	-		-	0	-
Veh in Median Storage, #	0	-	-	0	0	_
Grade, %	0	-	-	0	0	_
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	28	4	4	64	10	4
WINTER TOWN		7	-т	- 01	10	
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	32	0	102	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	72	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1580	-	896	1044
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	951	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1580	-	893	1044
Mov Cap-2 Maneuver	-	-	-	-	893	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	948	-
J						
Approach	EB		WB		NB	
Approach HCM Control Delay, s	0		0.5		8.9	
	U		0.5			
HCM LOS					Α	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		935	-	-	1580	-
HCM Lane V/C Ratio		0.015	-	-	0.003	-
HCM Control Delay (s)		8.9	-	-	7.3	0
HCM Lane LOS		Α			A	A
HCM 95th %tile Q(veh)		0	-	-	0	-

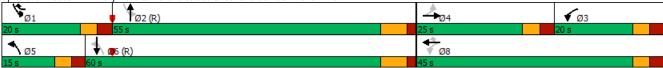
ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
ane Configurations													
raffic Volume (vph)	10	14	47	278	20	101	67	584	304	164	846	23	
uture Volume (vph)	10	14	47	278	20	101	67	584	304	164	846	23	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
ane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			1%			3%			-4%		
Storage Length (ft)	0		0	275		0	275		0	170		0	
Storage Lanes	0		0	1		1	1		0	1		0	
aper Length (ft)	25			50			125			170			
Satd. Flow (prot)	0	1683	0	0	1770	1575	1743	3283	0	1805	1891	0	
It Permitted		0.943			0.710		0.087			0.232			
atd. Flow (perm)	0	1598	0	0	1316	1575	160	3283	0	441	1891	0	
ight Turn on Red			Yes			Yes			Yes			Yes	
atd. Flow (RTOR)		48				103		95			1		
ink Speed (mph)		25			35			45			45		
ink Distance (ft)		513			641			1004			905		
ravel Time (s)		14.0			12.5			15.2			13.7		
onfl. Peds. (#/hr)							1		1	1		1	
onfl. Bikes (#/hr)													
eak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Frowth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
leavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
us Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
lid-Block Traffic (%)		0%			0%			0%			0%		
hared Lane Traffic (%)													
ane Group Flow (vph)	0	72	0	0	304	103	68	906	0	167	886	0	
urn Type	Perm	NA		pm+pt	NA	pm+ov	D.P+P	NA		D.P+P	NA		
rotected Phases		4		3	8	1	5	2		1	6		
ermitted Phases	4			8		8	6			2			
Vetector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase		•						_		·			
linimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
linimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
otal Split (s)	25.0	25.0		20.0	45.0	20.0	15.0	55.0		20.0	60.0		
otal Split (%)	20.8%	20.8%		16.7%	37.5%	16.7%	12.5%	45.8%		16.7%	50.0%		
'ellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
II-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
ost Time Adjust (s)	2.0	-0.8		2.0	-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
otal Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
ead/Lag	Lead	Lead		Lag	5.0	Lead	Lead	Lag		Lead	Lag		
ead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes		
ead-Lag Optimize:	None	None		None	None	None	None	C-Max		None	C-Max		
act Effct Green (s)	INOTIC	33.0		INOTIC	33.0	48.2	73.0	61.8		72.0	66.7		
ctuated g/C Ratio		0.28			0.28	0.40	0.61	0.52		0.60	0.56		
/c Ratio		0.26			0.20	0.40	0.01	0.52		0.00	0.36		
Control Delay		13.1			60.9	3.7	14.5	19.8		13.6	34.0		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
otal Delay		13.1			60.9	3.7	14.5	19.8		13.6	34.0		
OS		13.1 B			60.9 E	3.7 A	14.5 B	19.8 B		13.0 B	34.0 C		
						A	D			D			
pproach Delay pproach LOS		13.1 B			46.4 D			19.4 B			30.8 C		
l l						0	10			40			
ueue Length 50th (ft)		14			219	0	19	214		49	586 #049		
ueue Length 95th (ft)		46			312	29	42	322		91	#968		
nternal Link Dist (ft)		433			561		075	924		470	825		
urn Bay Length (ft)		4			400	750	275	4707		170	4051		
		473			438	752	231	1737		449	1051		
					0	0	0	0		0	0		
tarvation Cap Reductn		0								_	_		
Base Capacity (vph) Starvation Cap Reductn Spillback Cap Reductn		0			0	0	0	0		0	0		
tarvation Cap Reductn										0 0 0.37	0 0 0.84		

Other

Area Type: Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 28.4 Intersection LOS: C
Intersection Capacity Utilization 87.4% ICU Level of Service E
Analysis Period (min) 15
Description: Signal No. 052254
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	491	586	47	62	64
Future Volume (vph)	32	491	586	47	62	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1770	1863	1844	0	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1844	0	1770	1583
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	528	681	0	67	69
Sign Control		Free	Free		Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utiliza	tion 44.3%			IC	CU Level o	f Service A
Analysis Period (min) 15						
• • •						

Intersection							
Int Delay, s/veh	1.9						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	LDL	LUI	WUI	WDI	JUL	JUIN	
Traffic Vol, veh/h	32	491	586	47	62	64	
Future Vol, veh/h	32	491	586	47	62	64	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	- -	None	
Storage Length	150	-		- INOIIC	75	0	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	93	93	93	93	93	93	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	34	528	630	51	67	69	
IVIVIIIL FIUW	54	326	030	31	07	09	
Major/Minor	Major1		Major2		Minor2		
Conflicting Flow All	681	0	-	0	1252	656	
Stage 1	-	-	-	-	656	-	
Stage 2	-	-	-	-	596	-	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	-	-	-	-	5.42	-	
Follow-up Hdwy	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	912	-	-	-	190	465	
Stage 1	-	-	-	-	516	-	
Stage 2	-	-	-	-	550	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	912	-	-	-	183	465	
Mov Cap-2 Maneuver	-	-	-	-	322	-	
Stage 1	_	-	-	-	497	_	
Stage 2	-	-	-	-	550	-	
					500		
					0.5		
Approach	EB		WB		SB		
HCM Control Delay, s	0.6		0		16.6		
HCM LOS					С		
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		912	LDI	7701	WDIX	322	465
HCM Lane V/C Ratio		0.038	-	-	-	0.207	0.148
HCM Control Delay (s)		9.1	-	-	-	19.1	14.1
J \ /				-			14.1 B
HCM DEth (Vtile O(veh)		A 0.1	-	-	-	0.8	0.5
HCM 95th %tile Q(veh)		U. I	-	-	-	0.8	0.5

WBL	WBR	NBT	NBR	SBL	SBT
17	28	34	32	47	22
17	28	34	32	47	22
1900	1900	1900	1900	1900	1900
12	12	12	12	12	12
0%		0%			0%
0	0		0	0	
1	0		0	0	
25				25	
1674	0	1740	0	0	1801
0.981					0.967
1674	0	1740	0	0	1801
25		25			25
292		213			210
8.0		5.8			5.7
0.90	0.90	0.90	0.90	0.90	0.90
100%	100%	100%	100%	100%	100%
2%	2%	2%	2%	2%	2%
0	0	0	0	0	0
0%		0%			0%
50	0	74	0	0	76
Stop		Free			Free
Other					
ion 20.4%			IC	U Level o	f Service A
	17 17 1900 12 0% 0 1 25 1674 0.981 1674 25 292 8.0 0.90 100% 2% 0 0% 50 Stop	17 28 17 28 1900 1900 12 12 0% 0 0 1 0 25 1674 0 0.981 1674 0 25 292 8.0 0.90 0.90 100% 100% 2% 2% 0 0 0% 50 0 Stop	17 28 34 17 28 34 1900 1900 1900 12 12 12 12 0% 0% 0 0 1 0 25 1674 0 1740 0.981 1674 0 1740 25 25 292 213 8.0 5.8 0.90 0.90 0.90 100% 100% 100% 2% 2% 2% 0 0 0 0% 50 0 74 Stop Free	17 28 34 32 17 28 34 32 1900 1900 1900 1900 12 12 12 12 12 0% 0% 0% 0 0 0 0 1 0 0 25 1674 0 1740 0 0.981 1674 0 1740 0 25 25 292 213 8.0 5.8 0.90 0.90 0.90 0.90 100% 100% 100% 2% 2% 2% 2% 0 0 0 0 0 0% 50 0 74 0 Stop Free	17 28 34 32 47 17 28 34 32 47 1900 1900 1900 1900 1900 12 12 12 12 12 12 0% 0% 0

Intersection						
Int Delay, s/veh	4.3					
	WBL	WBR	NDT	NDD	SBL	CDT
Movement	WRL	WBK	NBT	NBR	SRF	SBT
Lane Configurations	17	20	2.4	20	47	22
Traffic Vol, veh/h Future Vol, veh/h	17 17	28 28	34 34	32 32	47 47	22 22
	0	0	0	0	0	0
Conflicting Peds, #/hr			Free		Free	Free
Sign Control RT Channelized	Stop	Stop None	riee -	Free None	riee -	None
	0	None -	-	None -	-	None -
Storage Length Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0		0	-		0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	19	31	38	36	52	24
IVIVITIL FIOW	19	31	38	36	52	24
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	184	56	0	0	74	0
Stage 1	56	-	-	-	-	-
Stage 2	128	-	-	-	-	-
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	805	1011	-	-	1526	-
Stage 1	967	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	777	1011	-	-	1526	-
Mov Cap-2 Maneuver	777	-	_	-	-	-
Stage 1	967	-	_		-	
Stage 2	867	-	-	-	-	-
	W.D.		ND		0.0	
Approach	WB		NB		SB	
HCM Control Delay, s	9.2		0		5.1	
HCM LOS	A					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)				908	1526	
HCM Lane V/C Ratio		_	-	0.055	0.034	-
HCM Control Delay (s)		_	_	9.2	7.4	0
HCM Lane LOS		_	_	Α.Δ	Α	A
HCM 95th %tile Q(veh)		_	_	0.2	0.1	- '
70111 701110 (2(1011)				0.2	0.1	

MOVEMENT SUMMARY

🦁 Site: 4 [Build-Out PM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive

Site Category: Chapel Ridge Apartments

Roundabout

Vehic	cle Mo	vement	Perfori	mance										
	Turn	INP		DEM		Deg.		Level of		ACK OF		Effective	Aver.	Aver.
ID		VOLU		FLO'		Satn	Delay	Service		EUE	Que	Stop		Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec		[Veh. veh	Dist] ft		Rate	Cycles	mph
South	: Creel		nding Dri											
3	L2	25	2.0	27	2.0	0.322	8.6	LOS A	1.5	37.5	0.64	0.64	0.64	22.9
8	T1	98	2.0	104	2.0	0.322	8.6	LOS A	1.5	37.5	0.64	0.64	0.64	22.8
18	R2	107	2.0	114	2.0	0.322	8.6	LOS A	1.5	37.5	0.64	0.64	0.64	22.4
Appro	ach	230	2.0	245	2.0	0.322	8.6	LOSA	1.5	37.5	0.64	0.64	0.64	22.7
East:	Beave	r Creek C	Commons	s Drive										
1	L2	74	2.0	79	2.0	0.538	10.2	LOS B	4.1	104.5	0.63	0.56	0.70	22.5
6	T1	255	2.0	271	2.0	0.538	10.2	LOS B	4.1	104.5	0.63	0.56	0.70	22.4
16	R2	189	2.0	201	2.0	0.538	10.2	LOS B	4.1	104.5	0.63	0.56	0.70	22.0
Appro	ach	518	2.0	551	2.0	0.538	10.2	LOS B	4.1	104.5	0.63	0.56	0.70	22.3
North	: Creek	side Lan	ding Driv	/e										
7	L2	153	2.0	163	2.0	0.548	11.3	LOS B	4.7	118.9	0.70	0.80	0.96	22.2
4	T1	160	2.0	170	2.0	0.548	11.3	LOS B	4.7	118.9	0.70	0.80	0.96	22.1
14	R2	158	2.0	168	2.0	0.548	11.3	LOS B	4.7	118.9	0.70	0.80	0.96	21.7
Appro	ach	471	2.0	501	2.0	0.548	11.3	LOS B	4.7	118.9	0.70	0.80	0.96	22.0
West	Beave	r Creek (Common	s Drive										
5	L2	129	2.0	137	2.0	0.471	10.0	LOS B	3.1	79.3	0.66	0.70	0.80	22.5
2	T1	240	2.0	255	2.0	0.471	10.0	LOS B	3.1	79.3	0.66	0.70	0.80	22.4
12	R2	21	2.0	22	2.0	0.471	10.0	LOS B	3.1	79.3	0.66	0.70	0.80	22.0
Appro	ach	390	2.0	415	2.0	0.471	10.0	LOS B	3.1	79.3	0.66	0.70	0.80	22.4
All Ve	hicles	1609	2.0	1712	2.0	0.548	10.3	LOS B	4.7	118.9	0.66	0.68	0.79	22.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Sidra\BC Commons @ Creekside Landing.sip9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	39	37	400	64	41	377
Future Volume (vph)	39	37	400	64	41	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				100	
Satd. Flow (prot)	1696	0	1827	0	0	1853
Flt Permitted	0.975					0.995
Satd. Flow (perm)	1696	0	1827	0	0	1853
Link Speed (mph)	25		35			35
Link Distance (ft)	432		357			558
Travel Time (s)	11.8		7.0			10.9
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	84	0	515	0	0	465
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilizat	tion 61.5%			IC	U Level of	f Service E
Analysis Period (min) 15						
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	WBL	WBK	INDI	NBK	SBL	SBI
Lane Configurations Traffic Vol., veh/h	39	37	400	64	41	377
Future Vol, veh/h	39	37	400	64	41	377
Conflicting Peds, #/hr	0	0	400	04	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	310p -	None	riee -	None	riee -	None
	0	None -	-	None -	-	None -
Storage Length Veh in Median Storage, #	0	-	0			0
				-	-	
Grade, %	0	- 00	0	- 00	- 00	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	41	444	71	46	419
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	991	480	0	0	515	0
Stage 1	480	-	-	-	-	-
Stage 2	511	-	_	-	-	-
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	273	586	_	_	1051	_
Stage 1	622	-	_	-	-	-
Stage 2	602	_	_	_	-	-
Platoon blocked, %	- 552			_		_
Mov Cap-1 Maneuver	257	586	_	-	1051	_
Mov Cap-2 Maneuver	388	-	_	_	-	-
Stage 1	622	_			_	
Stage 2	568	-		-	-	
Jugo 2	300					-
Approach	WB		NB		SB	
HCM Control Delay, s	14.5		0		0.8	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		IVDI	IVDIC	464	1051	-
HCM Lane V/C Ratio		-	-	0.182	0.043	-
HCM Control Delay (s)				14.5	8.6	0
HCM Lane LOS			-	14.3 B	0.0 A	A
HCM 95th %tile Q(veh)		-	_	0.7	0.1	А
HOW FULL FORME CE(VEIL)		-	-	0.7	U. I	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	18	87	4	11	65	4
Future Volume (vph)	18	87	4	11	65	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	0
Storage Lanes		0	0		1	0
Taper Length (ft)			25		25	
Satd. Flow (prot)	1654	0	0	1840	1766	0
Flt Permitted				0.988	0.955	
Satd. Flow (perm)	1654	0	0	1840	1766	0
Link Speed (mph)	25			25	25	
Link Distance (ft)	432			273	553	
Travel Time (s)	11.8			7.4	15.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	0	16	76	0
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilizati	ion 16.8%			IC	U Level of	Service A
Analysis Period (min) 15						

Intersection						
Int Delay, s/veh	3.6					
		EDE	MDI	MDT	NDI	NDE
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	18	87	4	11	65	4
Future Vol, veh/h	18	87	4	11	65	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	97	4	12	72	4
			•			•
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	117	0	89	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	_	_	1471	_	912	994
Stage 1		_			954	-
Stage 2	-	_	-	_	1003	_
Platoon blocked, %	_	-		-	1000	
Mov Cap-1 Maneuver			1471		909	994
Mov Cap-1 Maneuver	-	-	- 1471	_	909	774
Stage 1	-	-	-		909	
	-	-	-	-	1000	-
Stage 2	-	-	-	-	1000	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2		9.3	
HCM LOS					A	
					,,	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		914	-	-	1471	-
HCM Lane V/C Ratio		0.084	-	-	0.003	-
HCM Control Delay (s)		9.3	-	-	7.5	0
HCM Lane LOS		Α	-	-	Α	Α
HCM 95th %tile Q(veh)		0.3	-	-	0	-
		2.3				

Lane Group EBL EBT EBR WBL WBR NBL NBT NBR SBL SBR SBR Lane Configurations Traffic Volume (vph) 5 60 23 5 47 9 14 4 4 6 4 4 Future Volume (vph) 5 60 23 5 47 9 14 4 4 6 4 4 Ideal Flow (vphpl) 1900
Traffic Volume (vph) 5 60 23 5 47 9 14 4 4 6 4 4 Future Volume (vph) 5 60 23 5 47 9 14 4 4 6 4 4 Ideal Flow (vphpl) 1900 19
Future Volume (vph) 5 60 23 5 47 9 14 4 4 6 4 4 Ideal Flow (vphpl) 1900<
Ideal Flow (vphpl) 1900
Lane Width (ft) 12
Grade (%) 0% 0% 0% Storage Length (ft) 0 0 0 0 0 0 0 0 Storage Lanes 0 0 0 0 0 0 0 0 0 0 Taper Length (ft) 25
Storage Length (ft) 0 0 0 0 0 0 0 Storage Lanes 0 0 0 0 0 0 0 0 Taper Length (ft) 25 25 25 25 25
Storage Lanes 0 0 0 0 0 0 0 Taper Length (ft) 25 25 25 25
Taper Length (ft) 25 25 25 25
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Satd Flow (prot) 0 1792 0 0 1818 0 0 1762 0 0 1754 0
Sala. Flow (prot) 0 1772 0 0 1010 0 0 1702 0 0 1734 0
Flt Permitted 0.997 0.996 0.968 0.977
Satd. Flow (perm) 0 1792 0 0 1818 0 0 1762 0 0 1754 0
Link Speed (mph) 25 25 25 25
Link Distance (ft) 553 210 358 340
Travel Time (s) 15.1 5.7 9.8 9.3
Confl. Peds. (#/hr)
Confl. Bikes (#/hr)
Peak Hour Factor 0.90
Growth Factor 100% 100% 100% 100% 100% 100% 100% 100
Heavy Vehicles (%) 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2%
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0
Parking (#/hr)
Mid-Block Traffic (%) 0% 0%
Shared Lane Traffic (%)
Lane Group Flow (vph) 0 99 0 0 68 0 0 24 0 0 15 0
Sign Control Free Free Stop Stop

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 15.8% Analysis Period (min) 15

Delay, s/veh Dela
Second S
ne Configurations affic Vol, veh/h 5 60 23 5 47 9 14 4 4 6 4 ture Vol, veh/h 5 60 23 5 47 9 14 4 4 6 4 inflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 0 gn Control Free Free Free Free Free Free Free Stop Stop Stop Stop Stop Stop Channelized None None None orage Length 0 0 0 0 ade, % - 0 0 0 0 ade, % - 0 90 90 90 90 90 90 90 90 90 90 90 90 9
ne Configurations affic Vol, veh/h 5 60 23 5 47 9 14 4 4 6 4 ture Vol, veh/h 5 60 23 5 47 9 14 4 4 6 4 inflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 0 gn Control Free Free Free Free Free Free Free Stop Stop Stop Stop Stop Stop Channelized None None None orage Length 0 0 0 0 ade, % - 0 0 0 0 ade, % - 0 90 90 90 90 90 90 90 90 90 90 90 90 9
affic Vol, veh/h 5 60 23 5 47 9 14 4 4 6 4 ture Vol, veh/h 5 60 23 5 47 9 14 4 4 6 6 4 unflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 0 gn Control Free Free Free Free Free Free Free Stop Stop Stop Stop Stop Stop Stop Channelized None None None orage Length 0 0 0 0 ade, % - 0 0 0 0 ade, % - 0 90 90 90 90 90 90 90 90 90 90 90 90 9
Inflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Inflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
gn Control Free Free Free Free Free Free Free Stop Stop Stop Stop Stop Stop Stop Stop
Channelized - None - - None - - None - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 - - 0 -
bringe Length -
h in Median Storage, # - 0 0 0 0 ade, % - 0 0 0 ade, % - 0 90 90 90 90 90 90 90 90 90 90 90 90 9
ade, % - 0 0 0 0 ak Hour Factor 90 90 90 90 90 90 90 90 90 90 90 90 avy Vehicles, % 2 2 2 2 2 2 2 2 2 2
eavy Vehicles, % 2 2 2 2 2 2 2 2 2 2
eavy Vehicles, % 2 2 2 2 2 2 2 2 2 2
ajor/Minor Major1 Major2 Minor1 Minor2
onflicting Flow All 62 0 0 93 0 0 165 166 80 165 174 5
Stage 1 92 92 - 69 69
Stage 2 73 74 - 96 105
itical Hdwy 4.12 4.12 7.12 6.52 6.22 7.12 6.52 6.2
itical Hdwy Stg 1 6.12 5.52 - 6.12 5.52
itical Hdwy Stg 2 6.12 5.52 - 6.12 5.52
llow-up Hdwy 2.218 2.218 3.518 4.018 3.318 3.518 4.018 3.31
t Cap-1 Maneuver 1541 1501 800 727 980 800 719 100
Stage 1 915 819 - 941 837
Stage 2 937 833 - 911 808
atoon blocked. %
ov Cap-1 Maneuver 1541 1501 788 721 980 788 713 100
ov Cap-2 Maneuver 788 721 - 788 713
Stage 1 911 816 - 937 834
Stage 2 924 830 - 898 805
proach EB WB NB SB
CM Control Delay, s 0.4 0.6 9.6 9.5
CM LOS A A
nor Lane/Major Mvmt NBLn1 EBL EBT EBR WBL WBT WBR SBLn1
pacity (veh/h) 803 1541 1501 814
CM Lane V/C Ratio 0.03 0.004 0.004 0.019
CM Control Delay (s) 9.6 7.3 0 - 7.4 0 - 9.5
CM Lane LOS A A A - A A - A
M 95th %tile Q(veh) 0.1 0 0 0.1

Other

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	4	4	6	4	4	4	9	60	5	5	30	5	
Future Volume (vph)	4	4	6	4	4	4	9	60	5	5	30	5	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1723	0	0	1750	0	0	1833	0	0	1816	0	
Flt Permitted		0.987			0.984			0.994			0.993		
Satd. Flow (perm)	0	1723	0	0	1750	0	0	1833	0	0	1816	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		248			378			405			213		
Travel Time (s)		6.8			10.3			11.0			5.8		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	15	0	0	12	0	0	83	0	0	45	0	
Sign Control		Stop			Stop			Free			Free		
Intersection Summary													

ICU Level of Service A

Control Type: Unsignalized Intersection Capacity Utilization 15.2% Analysis Period (min) 15

Area Type:

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			LDIT	****	****	· · · ·	1102		,,,,,,	002	05.	ODIT
Traffic Vol., veh/h	4	4	6	4	4	4	9	60	5	5	30	5
Future Vol., veh/h	4	4	6	4	4	4	9	60	5	5	30	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	_	-	None
Storage Length	-		-	-	-	-	-	-	-		-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	7	4	4	4	10	67	6	6	33	6
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	141	36	144	141	70	39	0	0	73	0	0
Stage 1	48	48	-	90	90	-	-	-	-	-	-	-
Stage 2	94	93	-	54	51	-	-	-	-	_	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52		-	-	-	_	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	828	750	1037	825	750	993	1571	-	-	1527	-	-
Stage 1	965	855	-	917	820	-	-	-	-	-	-	-
Stage 2	913	818	-	958	852	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	814	742	1037	809	742	993	1571	-	-	1527	-	-
Mov Cap-2 Maneuver	814	742	-	809	742	-	-	-	-	-	-	-
Stage 1	958	852	-	911	814	-	-	-	-	-	-	-
Stage 2	898	812	-	943	849	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.2			9.4			0.9			0.9		
HCM LOS	А			Α								
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1571	-	-	870	835	1527	-	-			
HCM Lane V/C Ratio		0.006	-	-	0.018	0.016	0.004		-			
HCM Control Delay (s)		7.3	0	-	9.2	9.4	7.4	0	-			
HCM Lane LOS												
HOW Lane LOS		Α	Α	-	Α	Α	Α	Α	-			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations									
Traffic Volume (vph)	70	9	4	39	6	4			
Future Volume (vph)	70	9	4	39	6	4			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Width (ft)	12	12	12	12	12	12			
Grade (%)	0%			0%	0%				
Storage Length (ft)		0	0		0	0			
Storage Lanes		0	0		1	0			
Taper Length (ft)			25		25				
Satd. Flow (prot)	1835	0	0	1855	1717	0			
Flt Permitted				0.996	0.969				
Satd. Flow (perm)	1835	0	0	1855	1717	0			
Link Speed (mph)	25			25	25				
Link Distance (ft)	292			367	225				
Travel Time (s)	8.0			10.0	6.1				
Confl. Peds. (#/hr)									
Confl. Bikes (#/hr)									
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90			
Growth Factor	100%	100%	100%	100%	100%	100%			
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%			
Bus Blockages (#/hr)	0	0	0	0	0	0			
Parking (#/hr)									
Mid-Block Traffic (%)	0%			0%	0%				
Shared Lane Traffic (%)									
Lane Group Flow (vph)	88	0	0	47	11	0			
Sign Control	Free			Free	Stop				
Intersection Summary								ı	
Area Type:	Other								

ICU Level of Service A

Control Type: Unsignalized Intersection Capacity Utilization 15.4% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	LUI	LDIN	WDL	WDI	NDL	NDIX
Traffic Vol, veh/h	70	9	4	39	6	4
Future Vol, veh/h	70	9	4	39	6	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	_	-	_	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	10	4	43	7	4
Majay/Minay	Malari		MalauC		Minora	
Major/Minor	Major1		Major2		Minor1	0.0
Conflicting Flow All	0	0	88	0	134	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1508	-	860	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1508	-	857	976
Mov Cap-2 Maneuver	-	-	-	-	857	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	968	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.7		9	
HCM LOS	•		017		Á	
110111 200					,,	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		901	-	-	1508	-
HCM Lane V/C Ratio		0.012	-	-	0.003	-
HCM Control Delay (s)		9	-	-	7.4	0
HCM Lane LOS		Α	-	-	Α	Α
HCM 95th %tile Q(veh)		0	-	-	0	-

Appendix I: Supplemental Analysis:

Chapel Ridge Townes Development Data

Appendix I:

Traffic Signal Warrant Analysis: Olive Chapel Road at Chapel Ridge Road

Raw Count	Volumes	(15-minute	intervals)

			С	hapel Ridge R	oad	0	live Chapel Ro	ad	Ol	ive Chapel Ro	ad
				SB			EB			WB	
Start		End	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	то	06:15 AM	1	0	2	0	12	0	0	8	3
06:15 AM	то	06:30 AM	0	0	0	0	21	0	0	17	0
06:30 AM	то	06:45 AM	0	0	2	2	20	0	0	42	3
06:45 AM	то	07:00 AM	2	0	7	5	22	0	0	62	2
07:00 AM	то	07:15 AM	8	0	6	2	48	0	0	58	1
07:15 AM	то	07:30 AM	3	0	3	1	92	0	0	68	0
07:30 AM	то	07:45 AM	3	0	4	2	76	0	0	89	5
07:45 AM	то	08:00 AM	4	0	4	5	77	0	0	87	6
MA 00:80	то	08:15 AM	1	0	1	2	76	0	0	91	10
08:15 AM	то	08:30 AM	3	0	2	7	76	0	0	89	1
08:30 AM	TO	08:45 AM	5	0	1	4	100	0	0	68	8
08:45 AM	TO	09:00 AM	2	0	3	7	103	0	0	108	5
09:00 AM	то	09:15 AM	3	0	1	6	87	0	0	99	5
09:15 AM	TO	09:30 AM	4	0	2	4	77	0	0	71	4
09:30 AM	TO	09:45 AM	1	0	1	3	54	0	0	71	1
09:45 AM	TO	10:00 AM	3	0	7	6	63	0	0	73	6
10:00 AM	ТО	10:15 AM	2	0	2	1	49	0	0	50	2
10:15 AM	TO	10:30 AM	4	0	2	4	62	0	0	62	2
10:30 AM	ТО	10:45 AM	0	0	4	6	59	0	0	69	3
10:45 AM	то	11:00 AM	3	0	7	4	78	0	0	65	3
11:00 AM	то	11:15 AM	5	0	5	5	62	0	0	74	2
11:15 AM	то	11:30 AM	2	0	4	3	62	0	0	81	2
11:30 AM	TO	11:45 AM	4	0	3	1	48	0	0	79	7
11:45 AM	то	12:00 PM	3	0	9	6	81	0	0	105	7
12:00 PM	TO	12:15 PM	6	0	5	6	68	0	0	77	3
12:15 PM	TO	12:30 PM	5	0	2	8	93	0	0	115	2
12:30 PM	TO	12:45 PM	2	0	4	2	82	0	0	94	4
12:45 PM	TO	01:00 PM	4	0	6	10	93	0	0	96	3
01:00 PM	то	01:15 PM	2	0	5	3	72	0	0	99	1
01:15 PM	то	01:30 PM	6	0	7	7	61	0	0	89	3
01:30 PM	TO	01:45 PM	5	0	7	6	60	0	0	66	8
01:45 PM	то	02:00 PM	6	0	3	7	56	0	0	75	5
02:00 PM	то	02:15 PM	3	0	4	4	55	0	0	68	7
02:15 PM	то	02:30 PM	3	0	6	5	60	0	0	71	4
02:30 PM	то	02:45 PM	7	0	4	7	85	0	0	68	3
02:45 PM	TO	03:00 PM	5	0	11	5	104	0	0	94	6
03:00 PM	TO	03:15 PM	6	0	5	3	78	0	0	100	5
03:15 PM	то	03:30 PM	2	0	7	5	82	0	0	112	0
03:30 PM	то	03:45 PM	2	0	5	4	89	0	0	126	7
03:45 PM	то	04:00 PM	1	0	4	7	90	0	0	128	3
04:00 PM	ТО	04:15 PM	3	0	3	5	112	0	0	127	6
04:15 PM	TO	04:30 PM	3	0	7	7	95	0	0	126	6
04:30 PM	TO	04:45 PM	5	0	11	3	100	0	0	101	13
04:45 PM	TO	05:00 PM	4	0	8	1	121	0	0	138	8
05:00 PM	TO	05:15 PM	6	0	6	6	103	0	0	117	4
05:15 PM	то	05:30 PM	5	0	8	4	114	0	0	140	3
05:30 PM	то	05:45 PM	5	0	4	5	98	0	0	126	7
05:45 PM	TO	06:00 PM	6	0	11	4	90	0	0	116	5
06:00 PM	TO	06:15 PM	3	0	2	5	74	0	0	107	4
06:15 PM	TO	06:30 PM	7	0	5	3	79	0	0	122	7
06:30 PM	TO	06:45 PM	5	0	4	1	90	0	0	75	5
06:45 PM	TO	07:00 PM	6	0	11	3	58	0	0	104	3

Hourly Count Volumes

			C	hapel Ridge R	oad	0	live Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			EB			WB	
Start Time		End Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	то	07:00 AM	3	0	11	7	75	0	0	129	8
07:00 AM	то	08:00 AM	18	0	17	10	293	0	0	302	12
08:00 AM	TO	09:00 AM	11	0	7	20	355	0	0	356	24
09:00 AM	TO	10:00 AM	11	0	11	19	281	0	0	314	16
10:00 AM	TO	11:00 AM	9	0	15	15	248	0	0	246	10
11:00 AM	TO	12:00 PM	14	0	21	15	253	0	0	339	18
12:00 PM	TO	01:00 PM	17	0	17	26	336	0	0	382	12
01:00 PM	то	02:00 PM	19	0	22	23	249	0	0	329	17
02:00 PM	то	03:00 PM	18	0	25	21	304	0	0	301	20
03:00 PM	то	04:00 PM	11	0	21	19	339	0	0	466	15
04:00 PM	то	05:00 PM	15	0	29	16	428	0	0	492	33
05:00 PM	то	06:00 PM	22	0	29	19	405	0	0	499	19
06:00 PM	TO	07:00 PM	21	0	22	12	301	0	0	408	19

Existing Volumes

			С	hapel Ridge R	load	0	live Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	ТО	07:00 AM	3	0	11	7	75	0	0	129	8
07:00 AM	ТО	MA 00:80	18	0	17	10	293	0	0	302	12
08:00 AM	ТО	09:00 AM	11	0	7	20	355	0	0	356	24
09:00 AM	ТО	10:00 AM	11	0	11	19	281	0	0	314	16
10:00 AM	ТО	11:00 AM	9	0	15	15	248	0	0	246	10
11:00 AM	ТО	12:00 PM	14	0	21	15	253	0	0	339	18
12:00 PM	ТО	01:00 PM	17	0	17	26	336	0	0	382	12
01:00 PM	ТО	02:00 PM	19	0	22	23	249	0	0	329	17
02:00 PM	ТО	03:00 PM	18	0	25	21	304	0	0	301	20
03:00 PM	ТО	04:00 PM	11	0	21	19	339	0	0	466	15
04:00 PM	ТО	05:00 PM	15	0	29	16	428	0	0	492	33
05:00 PM	ТО	06:00 PM	22	0	29	19	405	0	0	499	19
06:00 PM	ТО	07:00 PM	21	0	22	12	301	0	0	408	19

Existing Right-turn Volumes Adjusted

			С	hapel Ridge R	oad	0	live Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	ТО	07:00 AM	3	0	0	7	75	0	0	129	8
07:00 AM	ТО	08:00 AM	18	0	0	10	293	0	0	302	12
08:00 AM	ТО	09:00 AM	11	0	0	20	355	0	0	356	24
09:00 AM	ТО	10:00 AM	11	0	0	19	281	0	0	314	16
10:00 AM	ТО	11:00 AM	9	0	0	15	248	0	0	246	10
11:00 AM	ТО	12:00 PM	14	0	0	15	253	0	0	339	18
12:00 PM	ТО	01:00 PM	17	0	0	26	336	0	0	382	12
01:00 PM	TO	02:00 PM	19	0	0	23	249	0	0	329	17
02:00 PM	TO	03:00 PM	18	0	0	21	304	0	0	301	20
03:00 PM	TO	04:00 PM	11	0	0	19	339	0	0	466	15
04:00 PM	ТО	05:00 PM	15	0	0	16	428	0	0	492	33
05:00 PM	ТО	06:00 PM	22	0	0	19	405	0	0	499	19
06:00 PM	ТО	07:00 PM	21	0	0	12	301	0	0	408	19

Chapel Ridge Apartments TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Olive Chapel Road at Chapel Ridge COUNT DATE: 1-Jan-10

INTERSECTION CONDITION: Existing

MAJOR STREET: Olive Chapel Road # OF APPROACH LANES:

MINOR STREET: Chapel Ridge Road/Chapel Ridge Road # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

Y

				HIGHEST HOUR	WARRA	NT 1, Cond	lition A	WARRA	ANT 1, Cond	lition B		WARR	RANT 1, Co	ombination W	arrant			
			MAJOR ST	MINOR ST							С	ONDITION .	A	C	ONDITION E	3	WARRANT 2	WARRANT 3
			BOTH APPROACHES	HIGHEST APPROACH	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOL	D VALU	es —		—	350	105		525	53		280	84		420	42			
06:00 AM	TO	07:00 AM	219	3														
07:00 AM	TO	08:00 AM	617	18	Υ			Υ			Υ			Υ				
08:00 AM	TO	09:00 AM	755	11	Υ			Υ			Υ			Υ				
09:00 AM	TO	10:00 AM	630	11	Υ			Υ			Υ			Υ				
10:00 AM	TO	11:00 AM	519	9	Υ						Υ			Υ				
11:00 AM	TO	12:00 PM	625	14	Υ			Υ			Υ			Υ				
12:00 PM	TO	01:00 PM	756	17	Υ			Υ			Υ			Υ				
01:00 PM	TO	02:00 PM	618	19	Υ			Υ			Υ			Υ				
02:00 PM	TO	03:00 PM	646	18	Υ			Υ			Υ			Υ				
03:00 PM	TO	04:00 PM	839	11	Υ			Υ			Υ			Υ				
04:00 PM	TO	05:00 PM	969	15	Υ			Υ			Υ			Υ				
05:00 PM	TO	06:00 PM	942	22	Υ			Υ			Υ			Υ				
06:00 PM	TO	07:00 PM	740	21	Υ			Υ			Υ			Υ				
			8,875	189			0			0			0			0	0	0
					8 HC	URS NEED	ED	8 HC	URS NEED	ED	8 HO	URS OF BC	TH COND	. A AND CO	ND. B NEEI	DED	4 HRS NEEDED	1 HR NEEDED
					NO.	T SATISFIE	ED	NO.	T SATISFII	ED	NOT SATISFIED				NOT SATISFIED	NOT SATISFIED		

WARRANT 1 -- Eight-Hour Vehicular Volume Warrant

Condition A: Minimum Vehicular Volume Condition B: Interruption of Continuous Traffic

Combination: Combination of Condition A and Condition B

WARRANT 2 -- Four-Hour Vehicular Volume Warrant

WARRANT 3 -- Peak Hour Warrant

 $K:\DUR_LDEV\011270040\ Chapel\ Ridge\ Apex\14-Analysis\Prelim\ Signal\ Warrants\\\IQOliveChapel\ QChapel\ Ridge-BaseScenario.xls\\\ JExisting\ Warrants\\\ Analysis\Prelim\ Signal\ Warrants\\\ Analysis\Prelim\ Warrants\\\ Analysis\Prelim\ Warrants\\\ Analysis\Prelim\ Warrants\\\ Analysis\Prelim\ Warrants\\\ Analysis\Prelim\ Warrants\\\ Analysis\Prelim\ Warrant$

2/9/2022 21:18

Chapel Ridge Apartments

Table 1 - Trip Generation (Approved Development #1)

Land Use	Inten	eitv		Daily		AN	/I Peak Ho	our	PM Peak Hour		
Land OSE	inten	Sity	Total	In	Out	Total	In	Out	Total	In	Out
710 General Office Building ³	80,000	s.f.	1,110	555	555	160	141	19	168	29	139
Total Net New External Trips (50% occupied)			555	278	278	80	71	10	84	15	70

K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Prelim Signal Warrants\[OliveChapel@ChapelRidge-BaseScenario.xls]Trip Gen (AD #1)

		Approve	ed Develo	pment Volun	nes: Remaiı	ning Build-o	ut of Olive C	hapel Profes	sional Park		
			C	hapel Ridge R	oad	0	live Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	TO	07:00 AM	1	0	0	6	0	0	0	0	6
07:00 AM	TO	MA 00:80	4	0	0	32	0	0	0	0	32
08:00 AM	TO	09:00 AM	4	0	0	18	0	0	0	0	18
09:00 AM	TO	10:00 AM	5	0	0	8	0	0	0	0	8
10:00 AM	TO	11:00 AM	7	0	0	7	0	0	0	0	7
11:00 AM	TO	12:00 PM	13	0	0	8	0	0	0	0	8
12:00 PM	TO	01:00 PM	13	0	0	13	0	0	0	0	13
01:00 PM	TO	02:00 PM	8	0	0	11	0	0	0	0	11
02:00 PM	TO	03:00 PM	8	0	0	10	0	0	0	0	10
03:00 PM	TO	04:00 PM	11	0	0	9	0	0	0	0	9
04:00 PM	TO	05:00 PM	19	0	0	7	0	0	0	0	7
05:00 PM	TO	06:00 PM	31	0	0	7	0	0	0	0	7
06:00 PM	ТО	07:00 PM	4	0	0	2	0	0	0	0	2

			С	hapel Ridge R	oad	0	live Chapel Ro	ad	Oli	ive Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	TO	07:00 AM	1	0	0	6	0	0	0	0	6
07:00 AM	ТО	08:00 AM	4	0	0	32	0	0	0	0	32
08:00 AM	TO	09:00 AM	4	0	0	18	0	0	0	0	18
09:00 AM	TO	10:00 AM	5	0	0	8	0	0	0	0	8
10:00 AM	TO	11:00 AM	7	0	0	7	0	0	0	0	7
11:00 AM	TO	12:00 PM	13	0	0	8	0	0	0	0	8
12:00 PM	TO	01:00 PM	13	0	0	13	0	0	0	0	13
01:00 PM	TO	02:00 PM	8	0	0	11	0	0	0	0	11
02:00 PM	TO	03:00 PM	8	0	0	10	0	0	0	0	10
03:00 PM	ТО	04:00 PM	11	0	0	9	0	0	0	0	9
04:00 PM	TO	05:00 PM	19	0	0	7	0	0	0	0	7
05:00 PM	TO	06:00 PM	31	0	0	7	0	0	0	0	7
06:00 PM	ТО	07:00 PM	4	0	0	2	0	0	0	0	2

No-Build Traffic Volumes (Existing + Growth + Approved Developments)

			CI	Chapel Ridge Road			apel Ridge Ro	ad	O	ive Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			NB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	то	07:00 AM	4	0	11	0	0	0	13	84	0	0	145	14
07:00 AM	то	08:00 AM	22	0	17	0	0	0	42	330	0	0	340	44
08:00 AM	то	09:00 AM	15	0	7	0	0	0	38	400	0	0	401	42
09:00 AM	то	10:00 AM	16	0	11	0	0	0	27	316	0	0	353	24
10:00 AM	то	11:00 AM	16	0	15	0	0	0	22	279	0	0	277	17
11:00 AM	то	12:00 PM	27	0	21	0	0	0	23	285	0	0	382	26
12:00 PM	то	01:00 PM	30	0	17	0	0	0	39	378	0	0	430	25
01:00 PM	то	02:00 PM	27	0	22	0	0	0	34	280	0	0	370	28
02:00 PM	то	03:00 PM	26	0	25	0	0	0	31	342	0	0	339	30
03:00 PM	то	04:00 PM	22	0	21	0	0	0	28	382	0	0	524	24
04:00 PM	TO	05:00 PM	34	0	29	0	0	0	23	482	0	0	554	40
05:00 PM	то	06:00 PM	53	0	29	0	0	0	26	456	0	0	562	26
06:00 PM	TO	07:00 PM	25	0	22	0	0	0	14	339	0	0	459	21

No-Build Right-Turn Volumes Adjusted

			CI	hapel Ridge R	oad	Ch	apel Ridge Ro	ad	0	live Chapel Ro	ad	Ol	ive Chapel Ro	ad
				SB			NB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	ТО	07:00 AM	4	0	0	0	0	0	13	84	0	0	145	14
07:00 AM	ТО	MA 00:80	22	0	0	0	0	0	42	330	0	0	340	44
MA 00:80	ТО	09:00 AM	15	0	0	0	0	0	38	400	0	0	401	42
09:00 AM	ТО	10:00 AM	16	0	0	0	0	0	27	316	0	0	353	24
10:00 AM	ТО	11:00 AM	16	0	0	0	0	0	22	279	0	0	277	17
11:00 AM	ТО	12:00 PM	27	0	0	0	0	0	23	285	0	0	382	26
12:00 PM	ТО	01:00 PM	30	0	0	0	0	0	39	378	0	0	430	25
01:00 PM	то	02:00 PM	27	0	0	0	0	0	34	280	0	0	370	28
02:00 PM	ТО	03:00 PM	26	0	0	0	0	0	31	342	0	0	339	30
03:00 PM	то	04:00 PM	22	0	0	0	0	0	28	382	0	0	524	24
04:00 PM	ТО	05:00 PM	34	0	0	0	0	0	23	482	0	0	554	40
05:00 PM	ТО	06:00 PM	53	0	0	0	0	0	26	456	0	0	562	26
06:00 PM	TO	07:00 PM	25	0	0	0	0	0	14	339	0	0	459	21

Chapel Ridge Apartments TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Olive Chapel Road at Chapel Ridge COUNT DATE: 1-Jan-10

INTERSECTION CONDITION: No-Build

MAJOR STREET: Olive Chapel Road # 0F APPROACH LANES:

MINOR STREET: Chapel Ridge Road/Chapel Ridge Road # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

Y

				HIGHEST HOUR	WARRA	ANT 1, Cond	lition A	WARRA	ANT 1, Cond	lition B		WARR	RANT 1, Co	ombination W	/arrant			
			MAJOR ST	MINOR ST							С	ONDITION	A	С	ONDITION E	3	WARRANT 2	WARRANT 3
			BOTH APPROACHES	HIGHEST APPROACH	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOL	D VALU	ES —		→	350	105		525	53		280	84		420	42			
06:00 AM	TO	07:00 AM	256	4														
07:00 AM	TO	08:00 AM	756	22	Υ			Υ			Υ			Y				
08:00 AM	TO	09:00 AM	881	15	Υ			Υ			Υ			Υ				
09:00 AM	TO	10:00 AM	720	16	Υ			Υ			Υ			Υ				
10:00 AM	TO	11:00 AM	595	16	Υ			Υ			Υ			Υ				
11:00 AM	TO	12:00 PM	716	27	Υ			Υ			Υ			Υ				
12:00 PM	TO	01:00 PM	872	30	Υ			Υ			Υ			Υ				
01:00 PM	TO	02:00 PM	712	27	Υ			Υ			Υ			Υ				
02:00 PM	TO	03:00 PM	742	26	Υ			Υ			Υ			Υ				
03:00 PM	TO	04:00 PM	958	22	Υ			Υ			Υ			Υ				
04:00 PM	TO	05:00 PM	1,099	34	Υ			Υ			Υ			Υ				
05:00 PM	ТО	06:00 PM	1,070	53	Υ			Υ	Υ	Υ	Υ			Y	Y	Υ		
06:00 PM	ТО	07:00 PM	833	25	Υ			Υ			Υ			Y				
	10,216 324						0			1			0			1	0	0
						OURS NEED			OURS NEED		8 HO	URS OF BC). A AND CC	ND. B NEE	DED	4 HRS NEEDED	1 HR NEEDED
					NO.	T SATISFII	ED	NO.	T SATISFIE	ED	NOT SATISFIED				NOT SATISFIED	NOT SATISFIED		

WARRANT 1 -- Eight-Hour Vehicular Volume Warrant

Condition A: Minimum Vehicular Volume Condition B: Interruption of Continuous Traffic

Combination: Combination of Condition A and Condition B

WARRANT 2 -- Four-Hour Vehicular Volume Warrant

WARRANT 3 -- Peak Hour Warrant

K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Prelim Signal Warrants\[OliveChapel@ChapelRidge-BaseScenario.xls]Full No-Build Warrants

2/9/2022 21:18

Chapel	Ridge	Apartments

Table 1 - Trip Generation

Land Use	Inter	nsity		Daily		Al	/I Peak Ho	ur	PN	/I Peak Ho	our
Land 036	inter	ISILY	Total	ln	Out	Total	In	Out	Total	In	Out
221 Multifamily Housing (Mid-Rise)	350	d.u.	1,906	953	953	117	30	87	147	90	57
Total Net New External Trips			1,906	953	953	117	30	87	147	90	57

K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Prelim Signal Warrants\[OliveChapel@ChapelRidge-BaseScenario.xls]Trip Gen (Site)

Site Volumes											
			С	hapel Ridge R	oad	0	live Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	TO	07:00 AM	12	0	0	1	0	0	0	0	3
07:00 AM	TO	MA 00:80	17	0	0	3	0	0	0	0	6
08:00 AM	TO	09:00 AM	17	0	0	3	0	0	0	0	7
09:00 AM	TO	10:00 AM	11	0	0	3	0	0	0	0	5
10:00 AM	TO	11:00 AM	9	0	0	3	0	0	0	0	5
11:00 AM	ТО	12:00 PM	9	0	0	4	0	0	0	0	9
12:00 PM	TO	01:00 PM	9	0	0	5	0	0	0	0	9
01:00 PM	TO	02:00 PM	9	0	0	4	0	0	0	0	8
02:00 PM	TO	03:00 PM	10	0	0	6	0	0	0	0	11
03:00 PM	TO	04:00 PM	9	0	0	6	0	0	0	0	13
04:00 PM	ТО	05:00 PM	12	0	0	10	0	0	0	0	20
05:00 PM	ТО	06:00 PM	11	0	0	9	0	0	0	0	18
06:00 PM	TO	07:00 PM	13	0	0	9	0	0	0	0	18

				Site Vo	olumes Righ	t-turn Volun	nes Adjusted				
			С	hapel Ridge R	oad	0	live Chapel Ro	ad	OI	ive Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	TO	07:00 AM	12	0	0	1	0	0	0	0	3
07:00 AM	TO	08:00 AM	17	0	0	3	0	0	0	0	6
08:00 AM	ТО	09:00 AM	17	0	0	3	0	0	0	0	7
09:00 AM	ТО	10:00 AM	11	0	0	3	0	0	0	0	5
10:00 AM	ТО	11:00 AM	9	0	0	3	0	0	0	0	5
11:00 AM	ТО	12:00 PM	9	0	0	4	0	0	0	0	9
12:00 PM	ТО	01:00 PM	9	0	0	5	0	0	0	0	9
01:00 PM	ТО	02:00 PM	9	0	0	4	0	0	0	0	8
02:00 PM	ТО	03:00 PM	10	0	0	6	0	0	0	0	11
03:00 PM	ТО	04:00 PM	9	0	0	6	0	0	0	0	13
04:00 PM	ТО	05:00 PM	12	0	0	10	0	0	0	0	20
05:00 PM	ТО	06:00 PM	11	0	0	9	0	0	0	0	18
06:00 PM	ТО	07:00 PM	13	0	0	9	0	0	0	0	18

Build Traffic Volumes (Existing + Growth + Approved Developments + Project Site)

			С	Chapel Ridge Road			live Chapel Ro	ad	0	live Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	TO	07:00 AM	16	0	11	14	84	0	0	145	17
07:00 AM	TO	MA 00:80	39	0	17	45	330	0	0	340	50
MA 00:80	TO	09:00 AM	32	0	7	41	400	0	0	401	49
09:00 AM	TO	10:00 AM	27	0	11	30	316	0	0	353	29
10:00 AM	TO	11:00 AM	25	0	15	25	279	0	0	277	22
11:00 AM	TO	12:00 PM	36	0	21	27	285	0	0	382	35
12:00 PM	TO	01:00 PM	39	0	17	44	378	0	0	430	34
01:00 PM	TO	02:00 PM	36	0	22	38	280	0	0	370	36
02:00 PM	TO	03:00 PM	36	0	25	37	342	0	0	339	41
03:00 PM	TO	04:00 PM	31	0	21	34	382	0	0	524	37
04:00 PM	TO	05:00 PM	46	0	29	33	482	0	0	554	60
05:00 PM	TO	06:00 PM	64	0	29	35	456	0	0	562	44
06:00 PM	ТО	07:00 PM	38	0	22	23	339	0	0	459	39

Build Right-Turn Volumes Adjusted

			С	hapel Ridge R	oad	0	live Chapel Ro	ad	0	live Chapel Ro	ad
				SB			EB			WB	
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
06:00 AM	ТО	07:00 AM	16	0	0	14	84	0	0	145	17
07:00 AM	ТО	08:00 AM	39	0	0	45	330	0	0	340	50
08:00 AM	ТО	09:00 AM	32	0	0	41	400	0	0	401	49
09:00 AM	ТО	10:00 AM	27	0	0	30	316	0	0	353	29
10:00 AM	ТО	11:00 AM	25	0	0	25	279	0	0	277	22
11:00 AM	ТО	12:00 PM	36	0	0	27	285	0	0	382	35
12:00 PM	ТО	01:00 PM	39	0	0	44	378	0	0	430	34
01:00 PM	ТО	02:00 PM	36	0	0	38	280	0	0	370	36
02:00 PM	ТО	03:00 PM	36	0	0	37	342	0	0	339	41
03:00 PM	ТО	04:00 PM	31	0	0	34	382	0	0	524	37
04:00 PM	ТО	05:00 PM	46	0	0	33	482	0	0	554	60
05:00 PM	ТО	06:00 PM	64	0	0	35	456	0	0	562	44
06:00 PM	ТО	07:00 PM	38	0	0	23	339	0	0	459	39

Chapel Ridge Apartments TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

INTERSECTION NAME: Olive Chapel Road at Chapel Ridge COUNT DATE: 1-Jan-10

INTERSECTION CONDITION: Build

MAJOR STREET: Olive Chapel Road # 0F APPROACH LANES:

MINOR STREET: Chapel Ridge Road/Chapel Ridge Road # OF APPROACH LANES: 1

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

Y

				HIGHEST HOUR	WARRA	ANT 1, Cond	lition A	WARRA	NT 1, Cond	lition B		WARR	RANT 1, Co	mbination W	/arrant			
			MAJOR ST	MINOR ST							С	ONDITION	A	С	ONDITION E	3	WARRANT 2	WARRANT 3
			BOTH APPROACHES	HIGHEST APPROACH	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET	MAJOR STREET	MINOR STREET	BOTH MET		
THRESHOLI	D VALU	JES —			350	105		525	53		280	84		420	42			
06:00 AM	TO	07:00 AM	260	16														
07:00 AM	TO	08:00 AM	765	39	Υ			Υ			Υ			Υ				
08:00 AM	TO	09:00 AM	891	32	Υ			Υ			Υ			Υ				
09:00 AM	TO	10:00 AM	728	27	Υ			Υ			Υ			Υ				
10:00 AM	TO	11:00 AM	603	25	Υ			Υ			Υ			Υ				
11:00 AM	TO	12:00 PM	729	36	Υ			Υ			Υ			Y				
12:00 PM	TO	01:00 PM	886	39	Υ			Υ			Υ			Y				
01:00 PM	TO	02:00 PM	724	36	Υ			Υ			Υ			Υ				
02:00 PM	TO	03:00 PM	759	36	Υ			Υ			Υ			Y				
03:00 PM	TO	04:00 PM	977	31	Υ			Υ			Υ			Y				
04:00 PM	TO	05:00 PM	1,129	46	Υ			Υ			Υ			Y	Y	Υ		
05:00 PM	TO	06:00 PM	1,097	64	Υ			Υ	Υ	Υ	Υ			Υ	Y	Y	Υ	
06:00 PM	TO	07:00 PM	860	38	Υ			Υ			Υ			Υ				
			10,472	491			0			1			0			2	1	0
					8 HC	OURS NEED	ED	8 HC	OURS NEED	ED	8 HOURS OF BOTH COND. A AND COND. B NEEDED			DED	4 HRS NEEDED	1 HR NEEDED		
					NO.	T SATISFII	ED	NO.	T SATISFII	ED	NOT SATISFIED				NOT SATISFIED	NOT SATISFIED		

WARRANT 1 -- Eight-Hour Vehicular Volume Warrant

Condition A: Minimum Vehicular Volume Condition B: Interruption of Continuous Traffic

Combination: Combination of Condition A and Condition B

WARRANT 2 -- Four-Hour Vehicular Volume Warrant

WARRANT 3 -- Peak Hour Warrant

K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Prelim Signal Warrants\[OliveChapel@ChapelRidge-BaseScenario.xls]Build Warrant

2/9/2022 21:18

Appendix J: Supplemental Analysis: Chapel Ridge Townes Development Data

Kimley» Horn	JOB CHAPEL PSDG	Subject APP DEN TREP	Sheet No of Job No
Expect More. Experience Better.	Designed By	DateChecked By	Date
APP DEN TRAP DEST		(si.)	
401)		5 65	(s 7.)
Lew Lew Lew Lew Lew Lew Lew Lew Lew Lew		107	(3)
no E	CREPE	(65)	637
Cio		\	,
* Assume 40% 10/From		\\	
Nozilt on Celly 25 Accesses the 5110	Z. J.		0
VIA Octor Chapte By.	8	Aceses	
		510	
		(00)	
		\- \- \- \- \-	
401.		(30) (15) 2 15 (20) (23), C 25	
101. =>	Sol. Octob	30 - 20 -	-(401.)
101		70 -> (ii)->	
* Assumes I FM Consissated of Pr	Deur on Dea	VE CHAPEL 20 ; 2 on	CHAPSE ROSCIE
Note: DHALE THAS	REZONANG WAS J	DEHSED, TEXPS WILL BE TENTIAL IMPACIS.	Asserbed As
>HOWH HAONE		Page 921 -	
	One of FORTUNE's 100) Best Companies to Work For	

Project: Supp. Analysis-Chapel Ridge Townes Trips Net New Trips: Location: Apex, NC Scenario: Chapel Ridge Townhomes Trip Calcs Ct. Date 12/7/2021 Kelly Road N/S Street:

E/W Street: Wendhurst Ct/Beaver Creek Commons Dr

Existing Year: Annual Growth Rate: 3.0% 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

13

AM In AM Out PM In PM Out

42 43

AM PEAK HOUR AM PHF = 0.98

_				73	WI I III - U.	<i>7</i> 0						
	,	Wendhurst Cou	rt	Beaver	Creek Commo	ns Drive		Kelly Road			Kelly Road	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	5	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	17	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	17	0	0	5	0

PM PEAK HOUR PM PHF = 0.98

	,	Wendhurst Court			Creek Commo	ns Drive		Kelly Road			Kelly Road	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic Percent Assignment Inbound Inbound Project Traffic	0%	0% 0	0% 0	0% 0	0%	0%	0%	0% 0	0% 0	0%	40% 17	0% 0
Percent Assignment Outbound Outbound Project Traffic	0%	0%	0%	0%	0%	0%	0%	40% 10	0%	0% 0	0%	0%
Total Project Traffic	0	0	0	0	0	0	0	10	0	0	17	0

AM In AM Out PM In PM Out Project: Supp. Analysis-Chapel Ridge Townes Trips Net New Trips: 13 42 43 Location: Apex, NC Scenario: Chapel Ridge Townhomes Trip Calcs Ct. Date
N/S Street:
Ct. Date
Chapel Ridge Road

Annual Growth Rate: 3.0% Existing Year: 2021 E/W Street: Olive Chapel Road Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR AM PHF = 0.85

	ANT III = VOD														
	(Olive Chapel Ro	ad	C	live Chapel Ro	ad				C	hapel Ridge Ro	ad			
		Eastbound			Westbound			Northbound			Southbound				
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right			
Project Traffic															
Percent Assignment Inbound	30%	20%	0%	0%	0%	15%	0%	0%	0%	0%	0%	0%			
Inbound Project Traffic	4	3	0	0	0	2	0	0	0	0	0	0			
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	0%	0%	0%	15%	0%	30%			
Outbound Project Traffic	0	0	0	0	8	0	0	0	0	6	0	13			
Total Project Traffic	4	3	0	0	8	2	0	0	0	6	0	13			

PM PEAK HOUR PM PHF = 0.93

	C	Olive Chapel Road <u>Eastbound</u>			Olive Chapel Ro Westbound	ad		Northbound		C	hapel Ridge Ro Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic Percent Assignment Inbound Inbound Project Traffic	30%	20% 9	0%	0%	0%	15%	0%	0%	0%	0%	0%	0% 0
Percent Assignment Outbound Outbound Project Traffic	0%	0%	0%	0%	20% 5	0%	0%	0%	0%	15% 4	0%	30% 7
Total Project Traffic	13	9	0	0	5	6	0	0	0	4	0	7

AM In AM Out PM In PM Out Project: Supp. Analysis-Chapel Ridge Townes Trips Net New Trips: 42 43 13 Location: Apex, NC Scenario: Chapel Ridge Townhomes Trip Calcs Ct. Date
N/S Street:
Ct. Date
Chapel Ridge Road Annual Growth Rate: 3.0% Existing Year:

E/W Street: Ackerman Hill Drive

AM PEAK HOUR

Growth Factor: 0.125509

AM F HF = 0.70														
				Ac	kerman Hill Dr	ive	C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad		
		<u>Eastbound</u>			Westbound			Northbound			Southbound			
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right		
Project Traffic														
Percent Assignment Inbound	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%		
Inbound Project Traffic	0	0	0	1	0	0	0	0	0	0	0	0		
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%		
Outbound Project Traffic	0	0	0	0	0	0	0	0	4	0	0	0		
Total Project Traffic	0	0	0	1	0	0	0	0	4	0	0	0		

PM PEAK HOUR PM PHF = 0.90

				Ackerman Hill Drive		C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad	
		<u>Eastbound</u>			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	4	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	2	0	0	0
Total Project Traffic	0	0	0	4	0	0	0	0	2	0	0	0

2/9/22

2021

2025

Buildout Year:

AM In AM Out PM In PM Out Project: Supp. Analysis-Chapel Ridge Townes Trips Net New Trips: 13 Location: Apex, NC Scenario: Chapel Ridge Townhomes Trip Calcs Ct. Date 12/7/2021 Creekside Landing Drive N/S Street:

E/W Street: Beaver Creek Commons Drive

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

42 43

AM PEAK HOUR AM PHF = 0.84

	Beaver	Beaver Creek Commons Drive			Creek Commo	ns Drive	Cree	kside Landing	Drive	Cree	kside Landing	Drive
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	5%	0%
Inbound Project Traffic	0	0	0	1	0	0	0	0	0	0	1	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	2	2	0	0	0
Total Project Traffic	0	0	0	1	0	0	0	2	2	0	1	0

PM PEAK HOUR PM PHF = 0.94

	Beaver	Creek Commo	ns Drive	Beaver	Creek Commo	ns Drive	Cree	kside Landing	Drive	Cree	kside Landing	Drive
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic Percent Assignment Inbound Inbound Project Traffic	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	5%	0%
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	1	1	0	0	0
Total Project Traffic	0	0	0	2	0	0	0	1	1	0	2	U

Project: Supp. Analysis-Chapel Ridge Townes Trips
Location: Apex, NC
Scenario: Chapel Ridge Townhomes Trip Calcs
Ct. Date 12/7/2021
N/S Street: Beaver Creek Commons Drive

Annual Growth Rate: 3.0%

AMIn AM Out PM In PM Out PM

E/W Street: Proposed Site Access

S Drive Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

	ANT HE - 0,70														
				Pr	oposed Site Aco	cess	Beaver	Creek Commo	ns Drive	Beaver	Creek Commo	ns Drive			
		Eastbound			Westbound			Northbound			Southbound				
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right			
Project Traffic															
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0			
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0			
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0			

PM PEAK HOUR PM PHF = 0.90

		<u>Eastbound</u>			oposed Site Acc Westbound	cess	Beaver	Creek Commo Northbound		Beaver	Creek Commo Southbound	ns Drive
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic Percent Assignment Inbound Inbound Project Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0
Percent Assignment Outbound Outbound Project Traffic	0%	0%	0%	0% 0	0%	0%	0%	0%	0%	0%	0%	0%
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0

		SECTION ANALISIS SHEET				
		_	AM In	AM Out	PM In	PM Out
Project:	Supp. Analysis-Chapel Ridge Townes Trips	Net New Trips:	13	42	43	25
Location:	Apex, NC					
Scenario:	Chapel Ridge Townhomes Trip Calcs					
Ct. Date	-					
N/S Street:	Chapel Ridge Road	Annual Growth Rate:	3.0%	Exis	ting Year:	2021
E/W Street:	Proposed Site Access/North Site Driveway	Growth Factor:	0.125509	Build	lout Year:	2025

AM PEAK HOUR AM PHF = 0.90

	Pro	Proposed Site Access			orth Site Drivey	vay	C	hapel Ridge Ro	ad			
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0

PM PEAK HOUR PM PHF = 0.90

	Pr	oposed Site Acc	cess	N	orth Site Drivey	vay	C	hapel Ridge Ro	oad			
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0

2/9/22

AM In AM Out PM In PM Out Project: Supp. Analysis-Chapel Ridge Townes Trips Net New Trips: 42 43 13 Location: Apex, NC Scenario: Chapel Ridge Townhomes Trip Calcs Ct. Date Central Site Driveway N/S Street: Annual Growth Rate: 3.0% Existing Year:

E/W Street: Chapel Ridge Road

AM PEAK HOUR $\mathbf{AM}\ \mathbf{PHF} = \mathbf{0.90}$

Growth Factor: 0.125509

					111 1 111 - 01							
	C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad	Cei	ntral Site Drive	way	Ce	ntral Site Drive	way
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Left Through Right			Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0

PM PEAK HOUR PM PHF = 0.90

	C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad	Ce	ntral Site Drive	way	Ce	ntral Site Drive	way
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Left Through Right I			Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	0	0	0	0	0

2/9/22

2021

2025

Buildout Year:

Project: Supp. Analysis-Chapel Ridge Townes Trips
Location: Apex, NC
Scenario: Chapel Ridge Townhomes Trip Calcs
Ct. Date Balanced with Ackerman Hill
N/S Street: Chapel Ridge Road Annual Growth Rate:

E/W Street: South Site Driveway

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 Buildout Year: 2025

13

AM In AM Out PM In PM Out

42 43

AM PEAK HOUR AM PHF = 0.90

_						- 0						
	So	outh Site Drive	way	Sc	outh Site Drivey	vay	C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	0	1	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	0	4	0	0	0	0
Total Project Traffic	0	0	0	0	0	0	0	4	0	0	1	0

PM PEAK HOUR PM PHF = 0.90

	Sc	outh Site Drivey	vay	So	uth Site Drivey	vay	C	hapel Ridge Ro	ad	C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	eft Through Right I			Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic Percent Assignment Inbound Inbound Project Traffic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Project Traffic Total Project Traffic	0	0	0	0	0	0	0	2	0	0	4	0

Project: Supp. Analysis-Chapel Ridge Townes Trips
Location: Apex, NC
Scenario: Ct. Date
Balanced with Ackerman Hill

AM In AM Out PM In PM Out
Net New Trips: 13 42 43 25

Los 43 25

Los 45 45 45

Los 45 45 45 45

Ret New Trips: 13 42 43 45

Ret New Trips: 13 42 43 45

Ret New Trips: 13 42 43 45

Ret New Trips: 13 42 43 45

Ret New Trips: 13 42 43 45

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Ret New Trips: 14 44 44

Ret New Trip

N/S Street: Site Driveway

E/W Street: Ackerman Hill Drive

Annual Growth Rate: 3.0% Existing Year: 2021

Growth Factor: 0.125509

Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

				73	– 0.	,,,,						
	A	ckerman Hill D	rive	A	ckerman Hill Di	rive		Site Driveway	,			
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Left Through Right			Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	0	0	1	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	4	0	0	0	0	0	0	0	0	0	0
Total Project Traffic	0	4	0	0	1	0	0	0	0	0	0	0

PM PEAK HOUR PM PHF = 0.90

	A	kerman Hill Dı	rive	Ac	kerman Hill Dr	ive		Site Driveway	,			
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Project Traffic Percent Assignment Inbound Inbound Project Traffic	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
Percent Assignment Outbound Outbound Project Traffic	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total Project Traffic	0	2	0	0	4	0	0	0	0	0	0	0

Appendix K: Supplemental Analysis: Intersection Spreadsheets

Project: Chapel Ridge Apartments Location: Apex, NC Supp. Analysis: With Chapel Ridge Townes Scenario: Ct. Date 12/7/2021 N/S Street: Kelly Road E/W Street: Wendhurst Ct/Beaver Creek Commons Dr

AM In AM Out PM In PM Out Net New Trips: 30 87 90 57

Annual Growth Rate: 3.0% **Existing Year:** 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR AM PHF = 0.98

					WI I III' - 0							
		Vendhurst Cou	rt	Beaver	Creek Commo	ns Drive		Kelly Road			Kelly Road	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	19	8	38	83	4	22	38	684	117	29	346	9
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	19	8	38	83	4	22	38	684	117	29	346	9
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.126	0.000	0.126	0.000	0.126	0.126	0.126	0.126	0.000
2025 Background Growth	0	0	0	10	0	3	0	86	15	4	43	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	3	0	0	19	0
Chapel Ridge Townes	0	0	0	0	0	0	0	17	0	0	5	0
Total Committed Traffic	0	0	0	0	0	0	0	20	0	0	24	0
2025 Background Traffic	19	8	38	93	4	25	38	790	132	33	413	9
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	12	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	35	0	0	0	0	0	0
Total Project Traffic	0	0	0	0	0	35	0	0	0	12	0	0
Hempstead Traffic Diversion	0	0	0	0	0	28	0	0	0	8	0	0
2025 Buildout Total	19	8	38	93	4	88	38	790	132	53	413	9
Percent Impact (Approach)		0.0%			18.9%			0.0%			2.5%	
Overall Percent Impact	2.8%	•						_				

PM PEAK HOUR PM PHF = 0.98

	7	Wendhurst Cou	rt	Beaver	Creek Commo	ns Drive		Kelly Road			Kelly Road	
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	10	14	47	247	20	55	67	502	270	89	748	23
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	10	14	47	247	20	55	67	502	270	89	748	23
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.126	0.000	0.126	0.000	0.126	0.126	0.126	0.126	0.000
2025 Background Growth	0	0	0	31	0	7	0	63	34	11	94	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	19	0	0	4	0
Chapel Ridge Townes	0	0	0	0	0	0	0	10	0	0	17	0
Total Committed Traffic	0	0	0	0	0	0	0	29	0	0	21	0
2025 Background Traffic	10	14	47	278	20	62	67	594	304	100	863	23
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	0	36	0	0
	001	004	001	0%	001	100/	00/	001	00/	001	001	00/
Percent Assignment Outbound	0%	0%	0%		0%	40%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	23	0	0	0	0	0	0
T-4-1 Di4 T66-	0	0	0	0	0	23	0	0	0	36	0	0
Total Project Traffic	0	U	U	0	Ü	23	0	U	U	30	Ü	U
Hempstead Traffic Diversion	0	0	0	0	0	16	0	0	0	28	0	0
riempsteau Traine Diversion	U	U	U	0	U	10	U	U	U	28	U	U
2025 Buildout Total	10	14	47	278	20	101	67	594	304	164	863	23
Percent Impact (Approach)	10	0.0%	.,	270	5.8%	.01	37	0.0%	554	104	3.4%	23
r creent impact (ripproach)		0.070			5.070			0.070			J. T/0	

Overall Percent Impact

 $k: \forall dur_ldev | 011270040\ chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's upplemental\ analysis's\ with\ chapel\ ridge\ townes' | [addend-chapel\ ridge\ apex | 4-analysis's\ upplemental\ up$

Project: Chapel Ridge Apartments

Location: Apex, NC

Scenario: Supp. Analysis: With Chapel Ridge Townes

Ct. Date 12/7/2021

N/S Street: Chapel Ridge Road

E/W Street: Olive Chapel Road

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.85

	C	live Chapel Ro	ad	0	live Chapel Ro	ad				C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	20	355	0	0	356	24	0	0	0	11	0	7
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	20	355	0	0	356	24	0	0	0	11	0	7
Growth Factor (0.03 per year)	0.000	0.126	0.000	0.000	0.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	45	0	0	45	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	32	0	0	0	0	32	0	0	0	4	0	5
Chapel Ridge Townes	4	3	0	0	8	2	0	0	0	6	0	13
Total Committed Traffic	36	3	0	0	8	34	0	0	0	10	0	18
2025 Background Traffic	56	403	0	0	409	58	0	0	0	21	0	25
Project Traffic												
Percent Assignment Inbound	10%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	3	0	0	0	0	6	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	10%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	17	0	9
Total Project Traffic	3	0	0	0	0	6	0	0	0	17	0	9
2025 Buildout Total	59	403	0	0	409	64	0	0	0	38	0	34
Percent Impact (Approach)		0.6%			1.3%			-			36.1%	

Overall Percent Impact 3.5%

PM PEAK HOUR PM PHF = 0.93

				•	0.	,,,						
	0	live Chapel Ro	ad	O	live Chapel Ro	ad				C	hapel Ridge Ro	ad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	16	436	0	0	521	22	0	0	0	20	0	26
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	16	436	0	0	521	22	0	0	0	20	0	26
Growth Factor (0.03 per year)	0.000	0.126	0.000	0.000	0.126	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	55	0	0	65	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	7	0	0	0	0	7	0	0	0	31	0	32
Chapel Ridge Townes	13	9	0	0	5	6	0	0	0	4	0	7
Total Committed Traffic	20	9	0	0	5	13	0	0	0	35	0	39
2025 Background Traffic	36	500	0	0	591	35	0	0	0	55	0	65
Project Traffic												
Percent Assignment Inbound	10%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	9	0	0	0	0	18	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	10%
Outbound Project Traffic	0	0	0	0	0	0	0	0	0	11	0	6
Total Project Traffic	9	0	0	0	0	18	0	0	0	11	0	6
2025 Buildout Total	45	500	0	0	591	53	0	0	0	66	0	71
Percent Impact (Approach)		1.7%			2.8%			-			12.4%	

Overall Percent Impact 3.3%

Project: Chapel Ridge Apartments Location: Apex, NC Supp. Analysis: With Chapel Ridge Townes Scenario: Ct. Date 12/7/2021 Chapel Ridge Road N/S Street: E/W Street: Ackerman Hill Drive

AM In AM Out PM In PM Out Net New Trips: 30 87 90 57

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR AM PHF = 0.90

				Λ.	kerman Hill Di	ino	CI	napel Ridge Ro	and .	C	hapel Ridge Ro	ad
		F		Ac		ive	CI			C.		au
		Eastbound		_	Westbound			Northbound		_	Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	11	0	0	0	0	12	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	11	0	0	0	0	12	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	8	0	0	0	0	1	0	0	0
Chapel Ridge Townes	0	0	0	1	0	0	0	0	4	0	0	0
Total Committed Traffic	0	0	0	9	0	0	0	0	5	0	0	0
2025 Background Traffic	0	0	0	20	0	0	0	0	17	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	10%	10%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	5	0	3	3	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	10%	0%	10%	0%	0%	15%	0%
Outbound Project Traffic	0	0	0	0	0	9	0	9	0	0	13	0
Total Project Traffic	0	0	0	0	0	9	0	14	0	3	16	0
Hempstead Traffic Diversion	0	0	0	0	0	39	0	0	0	12	0	0
OliveChapProfPark Reassign	o	0	0	0	0	0	0	2	0	0	16	0
ChapelRidgeTownes Divers.	0	0	0	-1	0	0	0	4	-4	0	1	0
2025 Buildout Total	0	0	0	19	0	48	0	20	13	15	33	0
Percent Impact (Approach)		-			13.4%			42.4%	•		39.6%	
Overall Percent Impac	t 28.4%	· · · · · · · · · · · · · · · · · · ·										

Overall Percent Impact

PM PEAK HOUR PM PHF = 0.90

				Ac	kerman Hill Dı	ive	Cl	napel Ridge Ro	ad	Chapel Ridge Road			
		Eastbound			Westbound			Northbound			Southbound		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
L									2.5				
2021 Traffic Count	0	0	0	15	0	0	0	0	25	0	0	0	
Count Balancing 2021 Existing Traffic	0	0	0	0 15	0	0	0	0	25	0	0	0	
2021 Existing Frame	0	U	U	13	U	U	0	U	23	0	U	U	
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0	
Committed Projects													
Olive Chapel Professional Park	0	0	0	2	0	0	0	0	7	0	0	0	
Chapel Ridge Townes	0	0	0	4	0	0	0	0	2	0	0	0	
Total Committed Traffic	0	0	0	6	0	0	0	0	9	0	0	0	
2025 Background Traffic	0	0	0	21	0	0	0	0	34	0	0	0	
Project Traffic													
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	15%	0%	10%	10%	0%	
Inbound Project Traffic	0	0	0	0	0	0	0	14	0	9	9	0	
Percent Assignment Outbound	0%	0%	0%	0%	0%	10%	0%	10%	0%	0%	15%	0%	
Outbound Project Traffic	0	0	0	0	0	6	0	6	0	0	9	0	
Total Project Traffic	0	0	0	0	0	6	0	20	0	9	18	0	
Hempstead Traffic Diversion	0	0	0	0	0	22	0	0	0	38	0	0	
OliveChapProfPark Reassign	0	0	0	0	0	0	0	14	0	0	4	0	
ChapelRidgeTownes Divers.	0	0	0	-4	0	0	0	2	-2	0	4	0	
2025 Buildout Total	0	0	0	17	0	28	0	36	32	47	26	0	
Percent Impact (Approach)		-			13.3%			29.4%		.,	37.0%		

Overall Percent Impact 28.5%

Project: Chapel Ridge Apartments
Location: Apex, NC
Scenario: Supp. Analysis: With Chapel Ridge Townes
12/7/2021
Creekside Landing Drive
E/W Street: Beaver Creek Commons Drive

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.84

	D	Creek Commo	D.i	Daire	Creekside Landing Drive							
	Beaver		ns Drive	ьeaver	Creek Commo	ns Drive	Creei	kside Landing	Drive	Cree		Drive
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	33	117	8	25	69	58	0	28	21	57	28	47
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	33	117	8	25	69	58	0	28	21	57	28	47
Growth Factor (0.03 per year)	0.126	0.126	0.000	0.000	0.126	0.126	0.000	0.000	0.000	0.126	0.000	0.126
		15		0.000		7		0.000		7	0.000	
2025 Background Growth	4	15	0	0	9	/	0	0	0	/	0	6
Committed Projects												
Olive Chapel Professional Park	0	0	0	4	0	0	0	0	1	0	4	0
Chapel Ridge Townes	0	0	0	7	0	0	0	2	2	0	7	0
Total Committed Traffic	0	0	0	5	0	0	0	2	3	0	5	0
Total Committed Traffic	0	0	U	3	0	U	0	2	3	0	5	Ü
2025 Background Traffic	37	132	8	30	78	65	0	30	24	64	33	53
Project Traffic												
	00/	00/	00/	00/	200/	00/	00/	00/	00/	00/	00/	100/
Percent Assignment Inbound	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	6	0	0	0	0	0	0	3
Percent Assignment Outbound	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	9	17	0	0	0	0	0	0	0	0	0	0
												2
Total Project Traffic	9	17	0	0	6	0	0	0	0	0	0	3
OliveChapProfPark Reassign	0	2	0	0	8	0	0	0	0	0	0	8
ChapelRidgeTownes Divers.	2	2	0	-1	1	0	0	-2	-2	0	-1	1
ChaperKiuge Fownes Divers.	2	2	U	-1	1	U	0	-2	-2	0	-1	1
2025 Buildout Total	48	153	8	29	93	65	0	28	22	64	32	65
Percent Impact (Approach)		12.4%			3.2%			0.0%			1.9%	
Percent Impact (Approach)	5 90/	12.4%			3.2%			0.0%			1.9%	

Overall Percent Impact 5.8

PM PEAK HOUR PM PHF = 0.94

					WI I III' - U.							
	Beaver	Creek Commo	ns Drive	Beaver	Creek Commo	ns Drive	Cree	kside Landing	Drive	Cree	kside Landing	Drive
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	104	196	21	73	209	168	25	95	103	136	159	131
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	104	196	21	73	209	168	25	95	103	136	159	131
Growth Factor (0.03 per year)	0.126	0.126	0.000	0.000	0.126	0.126	0.000	0.000	0.000	0.126	0.000	0.126
2025 Background Growth	13	25	0	0	26	21	0	0	0	17	0	16
Committed Projects		_						_		_		_
Olive Chapel Professional Park	0	0	0	1	0	0	0	3	4	0	1	0
Chapel Ridge Townes	0	0	0	2	0	0	0	1	1	0	2	0
Total Committed Traffic	0	0	0	3	0	0	0	4	5	0	3	0
2025 Background Traffic	117	221	21	76	235	189	25	99	108	153	162	147
2023 Background Traine	117	221	21	70	233	10)	23		100	133	102	147
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	10%
Inbound Project Traffic	0	0	0	0	18	0	0	0	0	0	0	9
Percent Assignment Outbound	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	6	11	0	0	0	0	0	0	0	0	0	0
Total Project Traffic	6	11	0	0	18	0	0	0	0	0	0	9
OliveChapProfPark Reassign	6	8	0	0	2	0	0	0	0	0	0	2
Cl. In I T. D.	Ι.		0	2	2	0		1			0	2
ChapelRidgeTownes Divers.	1	1	0	-2	2	0	0	-1	-1	0	-2	2
2025 Buildout Total	130	241	21	74	257	189	25	98	107	153	160	160
Percent Impact (Approach)	150	4.3%	41	/+	3.5%	107	23	0.0%	107	133	1.9%	100
r creent impact (Approach)		7.5/0		l	J.J/0		L	0.070			1.7/0	

Overall Percent Impact 2.7%

 $k: \forall dur_ldev | 011270040\ chapel\ ridge\ apex | 14-analysis's upplemental\ analysis' - with\ chapel\ ridge\ townes \\ \ | faddend-chapel\ ridge\ apex | supplemental\ analysis' - with\ chapel\ ridge\ townes \\ \ | faddend-chapel\ ridge\ apex | supplemental\ analysis' - with\ chapel\ ridge\ townes \\ \ | faddend-chapel\ ridge\ apex | supplemental\ analysis' - with\ chapel\ ridge\ townes \\ \ | faddend-chapel\ ridge\ apex | supplemental\ analysis' - with\ chapel\ ridge\ townes \\ \ | faddend-chapel\ ridge\ apex | supplemental\ analysis' - with\ chapel\ ridge\ townes \\ \ | faddend-chapel\ ridge\ apex | supplemental\ analysis' - with\ chapel\

Project: Chapel Ridge Apartments
Location: Apex, NC
Scenario: Supp. Analysis: With Chapel Ridge Townes
12/7/2021
Beaver Creek Commons Drive
E/W Street: Proposed Site Access

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

				Pro	posed Site Acc	cess	Beaver	Creek Common	ns Drive	Beaver Creek Commons Drive Southbound			
Description		Eastbound	D. 1.		Westbound	D. 1.		Northbound	201.1			D. 1.	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
2021 Traffic Count	0	0	0	0	0	0	0	187	0	0	111	0	
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	
2021 Existing Traffic	0	0	0	0	0	0	0	187	0	0	111	0	
2021 Existing Turne	· ·	Ü	Ü		· ·	o		107	Ü	Ů	111	o	
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.126	0.000	0.000	0.126	0.000	
2025 Background Growth	0	0	0	0	0	0	0	23	0	0	14	0	
Committed Projects													
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0	
Chapel Ridge Townes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	
2025 Background Traffic	0	0	0	0	0	0	0	210	0	0	125	0	
Project Traffic													
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	40%	30%	0%	0%	
Inbound Project Traffic	0	0	0	0	0	0	0	0	12	9	0	0	
Percent Assignment Outbound	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	0%	
Outbound Project Traffic	0	0	0	35	0	26	0	0	0	0	0	0	
Total Project Traffic	0	0	0	35	0	26	0	0	12	9	0	0	
Hempstead Traffic Diversion	0	0	0	28	0	11	0	0	8	3	0	0	
Time Diversion		· ·	,	20	•	••		•	3	,	•	3	
OliveChapProfPark Reassign	0	0	0	0	0	2	0	0	0	16	0	0	
ChapelRidgeTownes Divers.	0	0	0	0	0	4	0	0	0	2	0	0	
2025 Buildout Total	0	0	0	63	0	43	0	210	20	30	125	0	
Percent Impact (Approach)	16.7%	-			57.5%			5.2%			5.8%		

Overall Percent Impact 16.7%

PM PEAK HOUR PM PHF = 0.90

		Eastbound		Pro	posed Site Acc	cess	Beaver	Creek Commo	ns Drive	Beaver Creek Commons Drive Southbound		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	355	0	0	335	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	355	0	0	335	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.126	0.000	0.000	0.126	0.000
2025 Background Growth	0	0	0	0	0	0	0	45	0	0	42	0
Committed Projects												ļ
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Chapel Ridge Townes	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	400	0	0	377	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	0%	0%	40%	30%	0%	0%
Inbound Project Traffic	0	0	0	0	0	0	0	0	36	27	0	0
Percent Assignment Outbound	0%	0%	0%	40%	0%	30%	0%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	23	0	17	0	0	0	0	0	0
Total Project Traffic	0	0	0	23	0	17	0	0	36	27	0	0
Hempstead Traffic Diversion	0	0	0	16	0	6	0	0	28	10	0	0
OliveChapProfPark Reassign	0	0	0	0	0	14	0	0	0	4	0	0
ChapelRidgeTownes Divers.	0	0	0	0	0	2	0	0	0	4	0	0
2025 Buildout Total	0	0	0	39	0	39	0	400	64	45	377	0
Percent Impact (Approach)		-			51.3%			7.8%			6.4%	

Overall Percent Impact 10.79

Project: Chapel Ridge Apartments Location: Apex, NC Supp. Analysis: With Chapel Ridge Townes Scenario: Ct. Date N/S Street: Chapel Ridge Road E/W Street: Proposed Site Access/North Site Driveway

AM In AM Out PM In PM Out Net New Trips: 30 87 90 57

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR $\mathbf{AM}\ \mathbf{PHF} = \mathbf{0.90}$

				Α.	$\mathbf{M} \mathbf{P} \mathbf{\Pi} \mathbf{r} = 0$.90						
	Pro	posed Site Aco	cess	No	orth Site Drivey	way	Cl	napel Ridge Ro	ad		·	
İ		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Chapel Ridge Townes	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	20%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	6	15	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	50%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	17	0	44	0	0	0	0	0
Total Project Traffic	0	6	15	0	17	0	44	0	0	0	0	0
Hempstead Traffic Diversion	0	0	12	0	0	0	39	0	0	0	0	0
OliveChapProfPark Reassign	0	0	16	0	0	0	2	0	0	0	0	0
ChapelRidgeTownes Divers.	0	0	2	0	0	0	4	0	0	0	0	0
2025 Buildout Total	0	6	45	0	17	0	89	0	0	0	0	0
Percent Impact (Approach)		41.2%			100.0%			49.4%			-	
Overall Percent Impact	52.2%											

Overall Percent Impact 52.2%

PM PEAK HOUR PM PHF = 0.90

	Pro	posed Site Acc	ess	No	rth Site Drivev	vav	C	napel Ridge Ro	ad			
		Eastbound			Westbound)	-	Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Chapel Ridge Townes	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	20%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	18	45	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	50%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	11	0	29	0	0	0	0	0
Total Project Traffic	0	18	45	0	11	0	29	0	0	0	0	0
Hempstead Traffic Diversion	0	0	38	0	0	0	22	0	0	0	0	0
OliveChapProfPark Reassign	0	0	4	0	0	0	14	0	0	0	0	0
ChapelRidgeTownes Divers.	0	0	4	0	0	0	2	0	0	0	0	0
2025 Buildout Total	0	18	91	0	11	0	67	0	0	0	0	0
Percent Impact (Approach)		57.8%			100.0%			43.3%	-		-	

Overall Percent Impact 55.1%

Project: Chapel Ridge Apartments
Location: Apex, NC
Scenario: Supp. Analysis: With Chapel Ridge Townes
Ct. Date
N/S Street: Central Site Driveway
E/W Street: Chapel Ridge Road

 AM In
 AM Out
 PM In
 PM Out

 Net New Trips:
 30
 87
 90
 57

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

					apel Ridge Ro	ad	Cer	tral Site Drive	way	Central Site Driveway			
		Eastbound			Westbound			Northbound			Southbound		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0	
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0	
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0	
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0	
Committed Projects													
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0	
Chapel Ridge Townes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0	
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0	
Project Traffic													
Percent Assignment Inbound	5%	20%	25%	5%	0%	10%	0%	0%	0%	0%	0%	0%	
Inbound Project Traffic	2	6	8	2	0	3	0	0	0	0	0	0	
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	25%	0%	5%	10%	0%	5%	
Outbound Project Traffic	0	0	0	0	17	0	22	0	4	9	0	4	
Total Project Traffic	2	6	8	2	17	3	22	0	4	9	0	4	
Hempstead Traffic Diversion	0	12	0	0	39	0	0	0	0	0	0	0	
OliveChapProfPark Reassign	0	16	0	0	2	0	0	0	0	0	0	0	
ChapelRidgeTownes Divers.	0	2	0	0	4	0	0	0	0	0	0	0	
2025 Buildout Total	2	36	8	2	62	3	22	0	4	9	0	4	
Percent Impact (Approach)		34.8%			32.8%			100.0%			100.0%		

Overall Percent Impact 50.7%

PM PEAK HOUR PM PHF = 0.90

				P	$\mathbf{M} \ \mathbf{PHF} = 0.$.90						
	CI	hapel Ridge Ro Eastbound	oad	CI	hapel Ridge Ro Westbound	oad	Cei	ntral Site Drive Northbound	way	Cen	ntral Site Drive Southbound	way
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	0	0	0	0	0
2021 Existing Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	0	0	0	0	0
Chapel Ridge Townes	0	0	0	0	0	0	0	0	0	0	0	0
Total Committed Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	5%	20%	25%	5%	0%	10%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	5	18	23	5	0	9	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	20%	0%	25%	0%	5%	10%	0%	5%
Outbound Project Traffic	0	0	0	0	11	0	14	0	3	6	0	3
Total Project Traffic	5	18	23	5	11	9	14	0	3	6	0	3
Hempstead Traffic Diversion	0	38	0	0	22	0	0	0	0	0	0	0
OliveChapProfPark Reassign	0	4	0	0	14	0	0	0	0	0	0	0
ChapelRidgeTownes Divers.	0	4	0	0	2	0	0	0	0	0	0	0
2025 Buildout Total	5	64	23	5	49	9	14	0	3	6	0	3
Percent Impact (Approach)		50.0%			39.7%			100.0%			100.0%	

Overall Percent Impact 53.6%

INTERSECTION ANALYSIS SHEET

Project: Chapel Ridge Apartments

Location: Apex, NC

Scenario: Supp. Analysis: With Chapel Ridge Townes

Ct. Date Balanced with Ackerman Hill

N/S Street: Chapel Ridge Road

E/W Street: South Site Driveway

	AM In	AM Out	PM In	PM Out	
Net New Trips:	30	87	90	57	ı

Annual Growth Rate: 3.0% Existing Year: 2021
Growth Factor: 0.125509 Buildout Year: 2025

AM PEAK HOUR AM PHF = 0.90

		So	uth Site Drivey	vay	So	uth Site Drivey	vay	Cl	napel Ridge Ro	ad	Cl	napel Ridge Ro	
			Eastbound			Westbound			Northbound			Southbound	
Descrip	tion	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021	Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
	alancing	0	0	0	0	0	0	0	12	0	0	11	0
2021	Existing Traffic	0	0	0	0	0	0	0	12	0	0	11	0
Growth	Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Commi	tted Projects												
	hapel Professional Park	0	0	0	0	0	0	0	5	0	0	9	0
Chapel I	Ridge Townes	0	0	0	0	0	0	0	4	0	0	1	0
Total C	ommitted Traffic	0	0	0	0	0	0	0	9	0	0	10	0
2025	Background Traffic	0	0	0	0	0	0	0	21	0	0	21	0
Project	Traffic												
Percent	Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	15%	5%	5%	0%	5%
	Project Traffic	0	0	0	0	0	0	3	5	2	2	0	2
Percent	Assignment Outbound	5%	0%	10%	5%	0%	5%	0%	0%	0%	0%	15%	0%
Outbour	nd Project Traffic	4	0	9	4	0	4	0	0	0	0	13	0
Total P	roject Traffic	4	0	9	4	0	4	3	5	2	2	13	2
OliveCl	hapProfPark Reassign	0	0	0	0	0	0	0	2	0	0	16	0
2025	Buildout Total	4	0	9	4	0	4	3	28	2	2	50	2
Percent	Impact (Approach)		100.0%			100.0%			30.3%			31.5%	

Overall Percent Impact 44.4%

PM PEAK HOUR PM PHF = 0.90

				P	$\mathbf{M} \ \mathbf{PHF} = 0.$.90						
	Sc	outh Site Drive	way	So	uth Site Drive	way	C	hapel Ridge Ro	ad	Cl	hapel Ridge Ro	oad
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	0	0	0	0	0	0	25	0	0	15	0
2021 Existing Traffic	0	0	0	0	0	0	0	25	0	0	15	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	0	0	0	0	0	0	9	0	0	6	0
Chapel Ridge Townes	0	0	0	0	0	0	0	2	0	0	4	0
Total Committed Traffic	0	0	0	0	0	0	0	11	0	0	10	0
2025 Background Traffic	0	0	0	0	0	0	0	36	0	0	25	0
Project Traffic												
Percent Assignment Inbound	0%	0%	0%	0%	0%	0%	10%	15%	5%	5%	0%	5%
Inbound Project Traffic	0	0	0	0	0	0	9	14	5	5	0	5
Percent Assignment Outbound	5%	0%	10%	5%	0%	5%	0%	0%	0%	0%	15%	0%
Outbound Project Traffic	3	0	6	3	0	3	0	0	0	0	9	0
Total Project Traffic	3	0	6	3	0	3	9	14	5	5	9	5
OliveChapProfPark Reassign	0	0	0	0	0	0	0	14	0	0	4	0
2025 Buildout Total	3	0	6	3	0	3	9	64	5	5	38	5
Percent Impact (Approach)		100.0%			100.0%	•		35.9%			39.6%	

Percent Impact (Approach)

Overall Percent Impact 44.0%

INTERSECTION ANALYSIS SHEET

Project: Chapel Ridge Apartments Location: Apex, NC Supp. Analysis: With Chapel Ridge Townes Balanced with Ackerman Hill Scenario: Ct. Date N/S Street: Site Driveway E/W Street: Ackerman Hill Drive

AM In AM Out PM In PM Out Net New Trips: 30 87 90 57

Annual Growth Rate: 3.0% Existing Year: 2021 Growth Factor: 0.125509 **Buildout Year:** 2025

AM PEAK HOUR AM PHF = 0.90

	Ac	kerman Hill D	rive	Ac	kerman Hill Di	rive		Site Driveway				
		Eastbound		l	Westbound		l	Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	12	0	0	11	0	0	0	0	0	0	0
2021 Existing Traffic	0	12	0	0	11	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
Committed Projects												
Olive Chapel Professional Park	0	5	0	0	9	0	0	0	0	0	0	0
Chapel Ridge Townes	0	4	0	0	1	0	0	0	0	0	0	0
Total Committed Traffic	0	9	0	0	10	0	0	0	0	0	0	0
Total Committee Trank	0	,	U	0	10	U	U	O	U	U	U	U
2025 Background Traffic	0	21	0	0	21	0	0	0	0	0	0	0
Project Traffic												
Percent Assignment Inbound	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	3	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	9	0	0	0	0	0
Total Project Traffic	0	0	3	0	0	0	9	0	0	0	0	0
Total Project Trailic	0	U	3	0	U	U	9	U	U	U	U	U
Hempstead Traffic Diversion	0	12	0	0	39	0	0	0	0	0	0	0
Timpseud Tunic Diversion			3		37	3			3	· ·	,	,
OliveChapProfPark Reassign	0	0	0	0	0	0	0	0	0	0	0	0
· · · · · · · · · · · · · · · · · · ·												
ChapelRidgeTownes Divers.	0	-4	0	0	-1	0	0	0	0	0	0	0
2025 Buildout Total	0	29	3	0	59	0	9	0	0	0	0	0
Percent Impact (Approach)		9.4%			0.0%			100.0%			-	
Overall Percent Impac	t 12.0%											

Overall Percent Impact 12.0%

PM PEAK HOUR PM PHF = 0.90

					WI I III - U.							
	Ac	kerman Hill D	rive	Ac	kerman Hill Di	rive		Site Driveway	•			
		Eastbound			Westbound			Northbound			Southbound	
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2021 Traffic Count	0	0	0	0	0	0	0	0	0	0	0	0
Count Balancing	0	25	0	0	15	0	0	0	0	0	0	0
2021 Existing Traffic	0	25	0	0	15	0	0	0	0	0	0	0
Growth Factor (0.03 per year)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025 Background Growth	0	0	0	0	0	0	0	0	0	0	0	0
							-					
Committed Projects												
Olive Chapel Professional Park	0	9	0	0	6	0	0	0	0	0	0	0
Chapel Ridge Townes	0	2	0	0	4	0	0	0	0	0	0	0
Total Committed Traffic	0	11	0	0	10	0	0	0	0	0	0	0
2025 Background Traffic	0	36	0	0	25	0	0	0	0	0	0	0
_												
Project Traffic												
Percent Assignment Inbound	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Project Traffic	0	0	9	0	0	0	0	0	0	0	0	0
Percent Assignment Outbound	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%
Outbound Project Traffic	0	0	0	0	0	0	6	0	0	0	0	0
Total Project Traffic	0	0	9	0	0	0	6	0	0	0	0	0
Hempstead Traffic Diversion	0	38	0	0	22	0	0	0	0	0	0	0
OliveChapProfPark Reassign	0	0	0	0	0	0	0	0	0	0	0	0
1												
ChapelRidgeTownes Divers.	0	-2	0	0	-4	0	0	0	0	0	0	0
2025 Buildout Total	0	72	9	0	43	0	6	0	0	0	0	0
Percent Impact (Approach)		11.1%			0.0%			100.0%			-	
O II D 4 T	11.50/											

Overall Percent Impact 11.5%

Appendix L: Supplemental Analysis: Synchro & SIDRA Output: Background (2025)

	12/	nn	1/2	122
- 1	1//	119	" /	1//

Seale Confuge Fall Fall Fall Fall Fall Well Wils Wils Nal Nal Nal Nal Seal Sal														
Traffic Volume (psh) 19 8 38 93 4 25 38 790 132 33 413 9 Perfuture Volume (psh) 190 1900 1900 1900 1900 1900 1900 1900	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Future Vight) 190 8 38 9 3 4 55 38 790 132 33 413 9 Indicated Flow (phight) 1900 1900 1900 1900 1900 1900 1900 190	Lane Configurations													
Islace Flow (rephin) 1900 190	Traffic Volume (vph)	19	8	38	93	4	25	38	790	132	33	413	9	
Lane Width (ft)	Future Volume (vph)	19	8	38	93	4	25	38	790	132	33	413	9	
Grade (Rg)	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Storage Length (ft)	Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Storage Lanes 0	Grade (%)		0%			1%			3%			-4%		
Taper Length (1)	Storage Length (ft)	0		0	275		0	275		0	170		0	
Said, Flow (prod) 1 de41	Storage Lanes	0		0	1		1	1		0	1		0	
File Permitted	Taper Length (ft)	25			50			125			170			
Salid. Flow (perm) Refly Turn on Red Refly Turn on Refly Tur	Satd. Flow (prot)	0	1641	0	0	1768	1575	1743	3409	0	1753	1840	0	
Right I un on Red	Flt Permitted		0.888			0.700		0.478			0.273			
Said. Flow (RTOR)	Satd. Flow (perm)	0	1478	0	0	1297	1575	877	3409	0	504	1840	0	
Link Speader (mph 95	Right Turn on Red			Yes			Yes			Yes			Yes	
Link Distance (ft)	Satd. Flow (RTOR)		39				32		25			1		
Link Distance (ft) 513	Link Speed (mph)		25			35			45			45		
Confl. Bikes (Phr) Confl. Bikes (Phr) Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98			513			641			1004			905		
Conf. Bikes (#hr) Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98			14.0			12.5			15.2			13.7		
Conf. Bikes (#hr) Peak Hour Factor 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98														
Peak Hour Factor														
Growth Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Heavy Vehicles (%) 5% 5% 5% 5% 2% 2% 2% 2%		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100%	
Bus Blockages (#hry) Parking (#hr) Mild-Block Traffic (%) Lane Group Flow (ph) Lane Group Flow (ph) O 66 O 0 O 99 26 39 941 O 34 430 O Turn Type Perm NA pm-pt NA pm-pt NA pm-pt NA D-P+P NA D-P+P NA Protected Phases 4 3 8 1 5 2 1 6 Permitted Phases 4 8 8 8 6 6 2 Detector Phase Walth Name NA NA NA NA														
Parking (s/fir) Mid-Block Traffic (%)	` '													
Mid-Block Traffic (%)														
Shared Lane Traffic (%) Lane Group Flow (prin) 0 66 0 0 0 99 26 39 941 0 34 430 0			0%			0%			0%			0%		
Lane Group Flow (vph)														
Turn Type Perm NA pm+pt NA pm+ov D.P+P NA D.P+P NA Protected Phases 4 3 8 1 5 2 1 6 Perector Phase 4 4 3 8 1 5 2 1 6 Switch Phase 4 4 4 3 8 1 5 2 1 6 Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 12.0 7.0 12.0 Minimum Split (s) 30.0 30.0 30.0 14.0 30.0 14.0 30.0 14.0 25.0 Total Split (s) 20.0 20.0 15.0 35.0 15.0 70.0 15.0 70.0 15.0 70.0 Total Split (s) 16.7% 12.5% 29.2% 12.5% 12.5% 38.3% 12.5% 83.3% 12.5% 48.3% 12.5% 48.3% 12.6 2.8		0	66	0	0	99	26	39	941	0	34	430	0	
Protected Phases				-						-			-	
Permitted Phases		1 01111												
Detector Phase 4		4	•						_			-		
Switch Phase Minimum Initial (s) 7.0			4			8			2			6		
Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 12.0 7.0 12.0 Minimum Spiit (s) 30.0 30.0 14.0 30.0 14.0 30.0 14.0 25.0 Total Spiit (s) 20.0 20.0 15.0 35.0 15.0 15.0 70.0 Total Spiit (%) 16.7% 16.7% 12.5% 29.2% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.5 Total Lost Time (s) 5.0		·	•				•		_		•			
Minimum Split (s) 30.0 30.0 14.0 30.0 14.0 30.0 14.0 25.0 Total Split (s) 20.0 20.0 15.0 35.0 15.0 70.0 15.0 70.0 Total Split (%) 16.7% 16.7% 12.5% 29.2% 12.5% 58.3% 12.5% 58.3% Yellow Time (s) 3.2 3.2 3.0 3.1 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead		7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Total Split (s)														
Total Split (%)														
Yellow Time (s) 3.2 3.2 3.2 3.0 3.1 3.0 3.0 4.9 3.0 4.9 All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 8.1 4.2 2.2 8.3 3.8														
All-Red Time (s) 2.6 2.6 2.8 2.7 2.8 2.4 1.6 2.8 1.6 Lost Time Adjust (s) -0.8 -0.8 -0.8 -0.8 -0.4 -1.5 -0.8 -1.5 Total Lost Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 Lead/Lag Lead Lead Lag Lead Lag Lead Lag Lead Lag Lead Lag Lead-Lag Optimize? Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes														
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Lead/Lag Lead Lead Lag Lag Lead Lag														
Lead-Lag Optimize? Yes		Lead			Lag									
Recall Mode None None None None C-Max None C-Max Act Effct Green (s) 14.4 14.4 27.2 92.6 85.3 91.6 88.1 Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.71 0.76 0.73 v/c Ratio 0.31 0.64 0.07 0.05 0.39 0.07 0.32 Control Delay 26.2 67.5 9.3 3.6 8.3 3.8 7.8 Queue Delay 0.0 <td>Lead-Lag Optimize?</td> <td></td>	Lead-Lag Optimize?													
Act Effct Green (s) 14.4 14.4 27.2 92.6 85.3 91.6 88.1 Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.71 0.76 0.73 v/c Ratio 0.31 0.64 0.07 0.05 0.39 0.07 0.32 Control Delay 26.2 67.5 9.3 3.6 8.3 3.8 7.8 Queue Delay 0.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>None</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>						None								
Actuated g/C Ratio 0.12 0.12 0.23 0.77 0.71 0.76 0.73 v/c Ratio 0.31 0.64 0.07 0.05 0.39 0.07 0.32 Control Delay 26.2 67.5 9.3 3.6 8.3 3.8 7.8 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 26.2 67.5 9.3 3.6 8.3 3.8 7.8 LOS C E A A A A Approach Delay 26.2 55.4 8.1 7.5 Approach LOS C E A A A Queue Length 50th (ft) 19 74 0 5 143 4 120 Queue Length 95th (ft) 59 126 19 16 217 14 206 Internal Link Dist (ft) 433 561 924 825 Turn Bay Length (ft) 238 324 410 760 2431 496 1351		. 10110												
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Queue Delay 0.0 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>														
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Starvation Cap Reductn 0 0 0 0 0 0 Spillback Cap Reductn 0 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0 0			228			32/	/110		2/121			1351		
Spillback Cap Reductn 0 0 0 0 0 0 0 Storage Cap Reductn 0 0 0 0 0 0 0														
Storage Cap Reductn 0 0 0 0 0 0														
5 1														
Neuduced Wic Natio 0.20 0.51 0.00 0.00 0.59 0.07 0.32														
	Reduced N/C Kallo		υ.Ζŏ			U.31	0.00	0.05	0.39		0.07	U.3Z		

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Supplemental Analysis - with Chapel Ridge Townes\Synchro\3 - Background AM.syn Kimley-Horn

1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive

Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

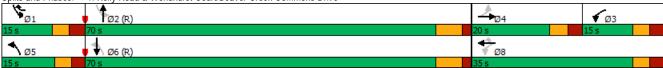
Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.3

Intersection Capacity Utilization 51.9%

Analysis Period (min) 15

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	56	403	409	58	21	25
Future Volume (vph)	56	403	409	58	21	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1736	1827	1796	0	1703	1524
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1736	1827	1796	0	1703	1524
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	6%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	66	474	549	0	25	29
Sign Control		Free	Free		Stop	

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 41.7% Analysis Period (min) 15

-								
Intersection								
Int Delay, s/veh	1.2							
	EBL	EBT	\\/DT	WDD	CDI	CDD		
Movement	EBL	EBI	WBT	WBR	SBL	SBR		
Lane Configurations	Γ/	400	400	Ε0.	21	٦٢		
Traffic Vol., veh/h	56	403	409	58	21	25		
Future Vol, veh/h	56	403	409	58	21	25		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	- 150	None	-	None	-	None		
Storage Length	150	-	-	-	75	0		
Veh in Median Storage, #	-	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	85	85	85	85	85	85		
Heavy Vehicles, %	4	4	4	4	6	6		
Mvmt Flow	66	474	481	68	25	29		
Major/Minor	Major1		Major2		Minor2			
Conflicting Flow All	549	0	- Wajorz	0	1121	515		
Stage 1	347	-	-	-	515	515		
Stage 2	-	-	-	-	606	-		
Critical Hdwy	4.14	-	-	-	6.46	6.26		
Critical Hdwy Stg 1	4.14	-	-	-	5.46	0.20		
Critical Hdwy Stg 2	-	-	-		5.46	-		
Follow-up Hdwy	2.236	-	-	-	3.554	3.354		
Pot Cap-1 Maneuver	2.236	-	-		3.554	3.354 552		
		-		-				
Stage 1	-	-	-	-	592	-		
Stage 2	-	-	-	-	537	-		
Platoon blocked, %	1011	-	-	-	200	FF2		
Mov Cap-1 Maneuver	1011	-	-	-	209	552		
Mov Cap-2 Maneuver	-	-	-	-	344	-		
Stage 1	-	-	-	-	554	-		
Stage 2	-	-	-	-	537	-		
Approach	EB		WB		SB			
HCM Control Delay, s	1.1		0		13.9			
HCM LOS	1.1		U		В			
TIGIVI LOS					D			
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)		1011	-	-	-	344	552	
HCM Lane V/C Ratio		0.065	-	-	-	0.072	0.053	
HCM Control Delay (s)		8.8	-	-	-	16.3	11.9	
HCM Lane LOS		Α	-	-	-	С	В	
HCM 95th %tile Q(veh)		0.2	-	-	-	0.2	0.2	

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT					
Lane Configurations											
Traffic Volume (vph)	20	4	4	17	4	4					
Future Volume (vph)	20	4	4	17	4	4					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900					
Lane Width (ft)	12	12	12	12	12	12					
Grade (%)	0%		0%			0%					
Storage Length (ft)	0	0		0	0						
Storage Lanes	1	0		0	0						
Taper Length (ft)	25				25						
Satd. Flow (prot)	1749	0	1654	0	0	1818					
Flt Permitted	0.959					0.976					
Satd. Flow (perm)	1749	0	1654	0	0	1818					
Link Speed (mph)	25		25			25					
Link Distance (ft)	289		696			330					
Travel Time (s)	7.9		19.0			9.0					
Confl. Peds. (#/hr)											
Confl. Bikes (#/hr)											
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90					
Growth Factor	100%	100%	100%	100%	100%	100%					
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%					
Bus Blockages (#/hr)	0	0	0	0	0	0					
Parking (#/hr)											
Mid-Block Traffic (%)	0%		0%			0%					
Shared Lane Traffic (%)											
Lane Group Flow (vph)	26	0	23	0	0	8					
Sign Control	Stop		Free			Free					

Area Type: Other

Control Type: Unsignalized Intersection Capacity Utilization 13.8% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	4.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	- TIDE	TT DIC	HUI	HDI	ODE	- OD I
Traffic Vol, veh/h	20	4	4	17	4	4
Future Vol, veh/h	20	4	4	17	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	4	4	19	4	4
Major/Minor	Minor1		Mojor1		Majora	
Major/Minor	Minor1	4.	Major1		Major2	
Conflicting Flow All	26	14	0	0	23	0
Stage 1	14	-	-	-	-	-
Stage 2	12	-	-	-	- 4.40	-
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	989	1066	-	-	1592	-
Stage 1	1009	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	986	1066	-	-	1592	-
Mov Cap-2 Maneuver	986	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.7		0		3.6	
HCM LOS	0.7 A		U		3.0	
HCW LUS	A					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		-	-	998	1592	-
HCM Lane V/C Ratio		-	-	0.027	0.003	-
HCM Control Delay (s)		-	-	8.7	7.3	0
HCM Lane LOS		-	-	А	Α	Α
HCM 95th %tile Q(veh)		-	-	0.1	0	-

MOVEMENT SUMMARY

🦁 Site: 4 [Background AM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive Site Category: Supp. Analysis - With Chapel Ridge Townhomes Roundabout

Vehi	cle Mo	ovemen	t Perfori	mance										
Mov	Turn		PUT	DEM.		Deg.		Level of		ACK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU [Total	JMES HV 1	FLO [Total	WS HV]	Satn	Delay	Service	QUI [Veh.	EUE Dist 1	Que	Stop Rate	No. Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	ft		Male	Cycles	mph
South	n: Cree	kside La	nding Dri	ve										
3	L2	4	6.0	5	6.0	0.071	4.3	LOS A	0.3	7.4	0.40	0.27	0.40	24.0
8	T1	30	6.0	36	6.0	0.071	4.3	LOS A	0.3	7.4	0.40	0.27	0.40	23.9
18	R2	24	6.0	29	6.0	0.071	4.3	LOS A	0.3	7.4	0.40	0.27	0.40	23.5
Appro	oach	58	6.0	69	6.0	0.071	4.3	LOS A	0.3	7.4	0.40	0.27	0.40	23.7
East:	Beave	r Creek (Commons	s Drive										
1	L2	30	2.0	36	2.0	0.167	4.3	LOS A	0.8	20.2	0.24	0.11	0.24	23.9
6	T1	78	2.0	93	2.0	0.167	4.3	LOS A	0.8	20.2	0.24	0.11	0.24	23.8
16	R2	65	2.0	77	2.0	0.167	4.3	LOS A	0.8	20.2	0.24	0.11	0.24	23.4
Appro	oach	173	2.0	206	2.0	0.167	4.3	LOS A	0.8	20.2	0.24	0.11	0.24	23.7
North	: Creel	kside Lar	nding Driv	/e										
7	L2	64	2.0	76	2.0	0.152	4.4	LOS A	0.7	17.8	0.30	0.17	0.30	23.7
4	T1	33	2.0	39	2.0	0.152	4.4	LOS A	0.7	17.8	0.30	0.17	0.30	23.6
14	R2	53	2.0	63	2.0	0.152	4.4	LOS A	0.7	17.8	0.30	0.17	0.30	23.1
Appro	oach	150	2.0	179	2.0	0.152	4.4	LOS A	0.7	17.8	0.30	0.17	0.30	23.5
West	: Beave	er Creek	Common	s Drive										
5	L2	37	3.0	44	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.8
2	T1	132	3.0	157	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.7
12	R2	8	3.0	10	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.3
Appro	oach	177	3.0	211	3.0	0.184	4.8	LOS A	0.9	22.1	0.33	0.19	0.33	23.7
All Ve	hicles	558	2.7	664	2.7	0.184	4.5	LOSA	0.9	22.1	0.30	0.17	0.30	23.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KIMLEY-HORN & ASSOCIATES INC | Licence: NETWORK / Enterprise | Processed: Wednesday, February 9, 2022 2:20:12 PM Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Supplemental Analysis - with Chapel Ridge Townes\Sidra\BC Commons @ Creekside Landing.sip9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
_ane Configurations	LDL	LUI	LDIX	VVDL	WDI	WDIX	NDL	INDI	NDIX	JDL	301	JUIN	
	10	1.1	47	278	20	62	67	594	304	100	863	23	
Traffic Volume (vph)	10	14			20					100			
Future Volume (vph)	10	14	47	278	20	62	67	594	304	100	863	23	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
_ane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)	_	0%	_		1%	_		3%	_		-4%	_	
Storage Length (ft)	0		0	275		0	275		0	170		0	
Storage Lanes	0		0	1		1	1		0	1		0	
Taper Length (ft)	25			50			125			170			
Satd. Flow (prot)	0	1683	0	0	1770	1575	1743	3283	0	1805	1891	0	
It Permitted		0.943			0.710		0.075			0.233			
Satd. Flow (perm)	0	1598	0	0	1316	1575	138	3283	0	443	1891	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		48				63		93			1		
ink Speed (mph)		25			35			45			45		
ink Distance (ft)		513			641			1004			905		
Fravel Time (s)		14.0			12.5			15.2			13.7		
Confl. Peds. (#/hr)		17.0			12.0		1	10.2	1	1	10.7	1	
Confl. Bikes (#/hr)													
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
ane Group Flow (vph)	0	72	0	0	304	63	68	916	0	102	904	0	
Turn Type	Perm	NA		pm+pt	NA	pm+ov	D.P+P	NA		D.P+P	NA		
Protected Phases		4		3	8	1	5	2		1	6		
Permitted Phases	4			8		8	6			2			
Detector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase													
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Minimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
Total Split (s)	25.0	25.0		20.0	45.0	20.0	15.0	55.0		20.0	60.0		
Total Split (%)	20.8%	20.8%		16.7%	37.5%	16.7%	12.5%	45.8%		16.7%	50.0%		
Yellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
All-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
Lost Time Adjust (s)	2.0	-0.8		2.0	-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
Total Lost Time (s)	اممط			Loa	5.0								
Lead/Lag	Lead	Lead		Lag		Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes		Yes	N.	Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
Act Effct Green (s)		33.0			33.0	46.6	73.0	63.4		72.0	66.7		
Actuated g/C Ratio		0.28			0.28	0.39	0.61	0.53		0.60	0.56		
v/c Ratio		0.15			0.84	0.10	0.36	0.52		0.28	0.86		
Control Delay		13.1			60.9	4.9	15.6	18.7		11.7	35.4		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay		13.1			60.9	4.9	15.6	18.7		11.7	35.4		
_OS		В			Е	Α	В	В		В	D		
Approach Delay		13.1			51.3			18.5			33.0		
Approach LOS		В			D			В			С		
Queue Length 50th (ft)		14			219	0	19	210		29	608		
Queue Length 95th (ft)		46			312	25	43	312		59	#999		
nternal Link Dist (ft)		433			561			924			825		
Furn Bay Length (ft)		-100			301		275	/47		170	020		
Base Capacity (vph)		473			438	730	219	1778		454	1051		
		0			430	730	0	0		434	0		
Starvation Cap Reductn													
		0			0	0	0	0		0	0		
Spillback Cap Reductn		^			^	^	^	^		^	^		
Storage Cap Reductn Reduced v/c Ratio		0 0.15			0.69	0.09	0.31	0 0.52		0.22	0.86		

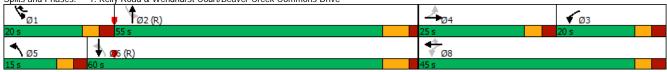
Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive

Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 29.3 Intersection LOS: C
Intersection Capacity Utilization 88.3% ICU Level of Service E
Analysis Period (min) 15
Description: Signal No. 052254
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LUL	LUI	1101	WOR	ODE	ODIT
Traffic Volume (vph)	36	500	591	35	55	65
Future Volume (vph)	36	500	591	35	55	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	·-	0%	0%	·-	0%	·-
Storage Length (ft)	150			0	75	0
Storage Lanes	1			0	1	1
Taper Length (ft)	300				25	
Satd. Flow (prot)	1770	1863	1848	0	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1848	0	1770	1583
Link Speed (mph)		45	45		25	
Link Distance (ft)		797	812		509	
Travel Time (s)		12.1	12.3		13.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	538	673	0	59	70
Sign Control		Free	Free		Stop	

Area Type: Other

Control Type: Unsignalized Intersection Capacity Utilization 43.9%

ICU Level of Service A

Analysis Period (min) 15

								_
Intersection								
Int Delay, s/veh	1.8							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	LUL	LUI	1101	WDI	JUL	JUIN		
Traffic Vol, veh/h	36	500	591	35	55	65		
Future Vol, veh/h	36	500	591	35	55	65		
Conflicting Peds, #/hr	0	0	0	0	0	00		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	Free -				Stop -	None		
		None	-	None				
Storage Length	150		-	-	75	0		
Veh in Median Storage, #	-	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	93	93	93	93	93	93		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	39	538	635	38	59	70		
Major/Minor	Major1		Major2		Minor2			
Conflicting Flow All	673	0	- Iviajoiz	0	1270	654		
Stage 1	0/3	-	-	-	654	034		
Stage 2	-	-	-	-	616	-		
Critical Hdwy	4.12	-	-	-	6.42	6.22		
Critical Hdwy Stg 1	4.12	-	-		5.42	0.22		
Critical Hdwy Stg 2	-	_	-	-	5.42	-		
Follow-up Hdwy	2.218	-			3.518	3.318		
	2.218 918	-	-	-				
Pot Cap-1 Maneuver				-	186	467		
Stage 1	-	-	-	-	517	-		
Stage 2	-	-	-	-	539	-		
Platoon blocked, %	010	-	-	-	170	4/7		
Mov Cap-1 Maneuver	918	-	-	-	178	467		
Mov Cap-2 Maneuver	-	-	-	-	317	-		
Stage 1	-	-	-	-	495	-		
Stage 2	-	-	-	-	539	-		
Approach	EB		WB		SB			
HCM Control Delay, s	0.6		0		16.3			
HCM LOS	0.0				C			
110111 200								
Minor Long/Mcian Maria		EDI	EDT	WOT	WDD	CDI1	CDI 2	
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)		918	-	-	-	317	467	
HCM Lane V/C Ratio		0.042	-	-	-	0.187	0.15	
HCM Control Delay (s)		9.1	-	-	-	18.9	14.1	
HCM Lane LOS		Α	-	-	-	С	В	
HCM 95th %tile Q(veh)		0.1	-	-	-	0.7	0.5	

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	21	4	4	34	4	4
Future Volume (vph)	21	4	4	34	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1751	0	1635	0	0	1818
Flt Permitted	0.959					0.976
Satd. Flow (perm)	1751	0	1635	0	0	1818
Link Speed (mph)	25		25			25
Link Distance (ft)	289		696			330
Travel Time (s)	7.9		19.0			9.0
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	27	0	42	0	0	8
Sign Control	Stop		Free			Free

Area Type: Other

Control Type: Unsignalized Intersection Capacity Utilization 13.8% Analysis Period (min) 15

	02/09/2022

Intersection						
Int Delay, s/veh	3.5					
-		WDD	NDT	NDE	ODI	ODT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	4	4	34	4	4
Future Vol, veh/h	21	4	4	34	4	4
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	4	4	38	4	4
NA -1 IN Alice	Museuf		Maland		M-1C	
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	35	23	0	0	42	0
Stage 1	23	-	-	-	-	-
Stage 2	12	-	-	-	-	-
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	978	1054	-	-	1567	-
Stage 1	1000	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	975	1054	-	-	1567	-
Mov Cap-2 Maneuver	975	-	-	-	-	-
Stage 1	1000	_	_	_		_
Stage 2	1008	_	_	_		_
Grage 2						
Approach	WB		NB		SB	
HCM Control Delay, s	8.8		0		3.7	
HCM LOS	Α					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
		NDT	NDK			301
Capacity (veh/h)		-	-	987	1567	-
HCM Careta Delay (a)		-	-	0.028	0.003	-
HCM Control Delay (s)		-	-	8.8	7.3	0
HCM Lane LOS HCM 95th %tile Q(veh)		-	-	A 0.1	A 0	Α -

MOVEMENT SUMMARY

🦁 Site: 4 [Background PM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive Site Category: Supp. Analysis - With Chapel Ridge Townhomes Roundabout

Vehi	cle Mc	vemen	t Perfori	mance										
Mov	Turn		PUT	DEM.		Deg.		Level of		CK OF	Prop.	Effective	Aver.	Aver.
ID		VOLU Total	JMES HV 1	FLO [Total	WS HV1	Satn	Delay	Service	QUE [Veh.	EUE Dist 1	Que	Stop Rate	No. Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	ft		Nate	Cycles	mph
South	n: Cree	kside La	nding Dri	ve										
3	L2	25	2.0	27	2.0	0.314	8.2	LOS A	1.4	36.8	0.63	0.61	0.63	23.0
8	T1	99	2.0	105	2.0	0.314	8.2	LOS A	1.4	36.8	0.63	0.61	0.63	22.9
18	R2	108	2.0	115	2.0	0.314	8.2	LOS A	1.4	36.8	0.63	0.61	0.63	22.5
Appr	oach	232	2.0	247	2.0	0.314	8.2	LOS A	1.4	36.8	0.63	0.61	0.63	22.7
East:	Beave	r Creek (Commons	s Drive										
1	L2	76	2.0	81	2.0	0.513	9.6	LOS A	3.3	83.9	0.60	0.48	0.60	22.7
6	T1	235	2.0	250	2.0	0.513	9.6	LOS A	3.3	83.9	0.60	0.48	0.60	22.6
16	R2	189	2.0	201	2.0	0.513	9.6	LOS A	3.3	83.9	0.60	0.48	0.60	22.2
Appr	oach	500	2.0	532	2.0	0.513	9.6	LOS A	3.3	83.9	0.60	0.48	0.60	22.4
North	n: Creek	side Lar	nding Driv	⁄e										
7	L2	153	2.0	163	2.0	0.527	10.7	LOS B	4.2	106.7	0.67	0.73	0.87	22.3
4	T1	162	2.0	172	2.0	0.527	10.7	LOS B	4.2	106.7	0.67	0.73	0.87	22.2
14	R2	147	2.0	156	2.0	0.527	10.7	LOS B	4.2	106.7	0.67	0.73	0.87	21.8
Appr	oach	462	2.0	491	2.0	0.527	10.7	LOS B	4.2	106.7	0.67	0.73	0.87	22.1
West	: Beave	er Creek	Common	s Drive										
5	L2	117	2.0	124	2.0	0.435	9.4	LOS A	2.6	65.2	0.64	0.64	0.72	22.6
2	T1	221	2.0	235	2.0	0.435	9.4	LOS A	2.6	65.2	0.64	0.64	0.72	22.5
12	R2	21	2.0	22	2.0	0.435	9.4	LOS A	2.6	65.2	0.64	0.64	0.72	22.1
Appr	oach	359	2.0	382	2.0	0.435	9.4	LOS A	2.6	65.2	0.64	0.64	0.72	22.5
All Ve	ehicles	1553	2.0	1652	2.0	0.527	9.7	LOSA	4.2	106.7	0.64	0.61	0.71	22.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KIMLEY-HORN & ASSOCIATES INC | Licence: NETWORK / Enterprise | Processed: Wednesday, February 9, 2022 2:20:10 PM Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Supplemental Analysis - with Chapel Ridge Townes\Sidra\BC Commons @ Creekside Landing.sip9

Appendix M: Supplemental Analysis: Synchro & SIDRA Output: Build-out (2025)

02/09/2022

ane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
ane Configurations													
raffic Volume (vph)	19	8	38	93	4	88	38	790	132	53	413	9	
uture Volume (vph)	19	8	38	93	4	88	38	790	132	53	413	9	
deal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
ane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)	12	0%	12		1%			3%	- '-	- '-	-4%	12	
Storage Length (ft)	0	070	0	275	170	0	275	370	0	170	- 470	0	
Storage Lanes	0		0	1		1	1		0	1/0		0	
aper Length (ft)	25		U	50		- 1	125		U	170		U	
	0	1//1	0		17/0	1676	1743	2400	0	1753	1040	٥	
Satd. Flow (prot)	U	1641	U	0	1768	1575		3409	0		1840	0	
It Permitted	0	0.888	0	0	0.700	1575	0.478	2400	0	0.270	1040	0	
Satd. Flow (perm)	0	1478	0	0	1297	1575	877	3409	0	498	1840	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		39				90		25			1		
ink Speed (mph)		25			35			45			45		
ink Distance (ft)		513			641			1004			905		
ravel Time (s)		14.0			12.5			15.2			13.7		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	5%	5%	5%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Aid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)		070			070			070			070		
ane Group Flow (vph)	0	66	0	0	99	90	39	941	0	54	430	0	
urn Type	Perm	NA	U	pm+pt	NA	pm+ov	D.P+P	NA	U	D.P+P	NA	U	
Protected Phases	i eiiii	4		рит+рt 3	NA 8	piii+0v 1	D.P+P	2		D.P+P	1NA 6		
Permitted Phases	4	4		8	0	8	6	Z		2	O		
	4	4			0			2			,		
Detector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase													
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Minimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
otal Split (s)	20.0	20.0		15.0	35.0	15.0	15.0	70.0		15.0	70.0		
otal Split (%)	16.7%	16.7%		12.5%	29.2%	12.5%	12.5%	58.3%		12.5%	58.3%		
ellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
All-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
ost Time Adjust (s)		-0.8			-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
otal Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
.ead/Lag	Lead	Lead		Lag		Lead	Lead	Lag		Lead	Lag		
.ead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
Act Effct Green (s)		14.4			14.4	27.2	92.6	82.8		90.6	88.1		
Actuated g/C Ratio		0.12			0.12	0.23	0.77	0.69		0.76	0.73		
/c Ratio		0.31			0.64	0.21	0.05	0.40		0.12	0.32		
Control Delay		26.2			67.5	8.0	3.6	8.8		4.0	7.8		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
otal Delay		26.2			67.5	8.0	3.6	8.8		4.0	7.8		
.OS		20.2 C				6.0 A	3.0 A	0.0 A		4.0 A			
					20.2	А	А			А	A 7.4		
Approach Delay		26.2			39.2			8.6			7.4		
approach LOS		C			D	_	_	A		_	A		
Queue Length 50th (ft)		19			74	0	5	143		7	120		
Queue Length 95th (ft)		59			126	40	16	217		20	206		
nternal Link Dist (ft)		433			561			924			825		
							275			170			
		238			324	454	760	2359		489	1351		
Base Capacity (vph)								^			_		
Furn Bay Length (ft) Base Capacity (vph) Starvation Cap Reductn		0			0	0	0	0		0	0		
Base Capacity (vph)					0	0	0	0		0	0		
Base Capacity (vph) Starvation Cap Reductn		0											

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120 Offset: 0 (0%), Referenced to phase 2:NBSB and 6:NBSB, Start of Green Natural Cycle: 90

Control Type: Actuated-Coordinated Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.3 Intersection LOS: B
Intersection Capacity Utilization 56.4% ICU Level of Service B

Analysis Period (min) 15 Description: Signal No. 052254

Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (vph)	59	403	409	64	38	34		
Future Volume (vph)	59	403	409	64	38	34		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)		0%	0%		0%			
Storage Length (ft)	150			0	75	0		
Storage Lanes	1			0	1	1		
Taper Length (ft)	300				25			
Satd. Flow (prot)	1736	1827	1794	0	1703	1524		
Flt Permitted	0.950				0.950			
Satd. Flow (perm)	1736	1827	1794	0	1703	1524		
Link Speed (mph)		45	45		25			
Link Distance (ft)		797	812		509			
Travel Time (s)		12.1	12.3		13.9			
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	4%	4%	4%	4%	6%	6%		
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								
Mid-Block Traffic (%)		0%	0%		0%			
Shared Lane Traffic (%)								
Lane Group Flow (vph)	69	474	556	0	45	40		
Sign Control		Free	Free		Stop			

Area Type: Other

Control Type: Unsignalized Intersection Capacity Utilization 42.1%

ICU Level of Service A

Analysis Period (min) 15

Intersection									
Int Delay, s/veh	1.6							Ī	
	EBL	EDT	\\/DT	WDD	ÇDI	CDD			
Movement	FRL	EBT	WBT	WBR	SBL	SBR			
Lane Configurations	Ε0.	400	400		20	2.4			
Traffic Vol, veh/h Future Vol, veh/h	59 59	403	409	64	38 38	34 34			
		403	409	64					
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	- 150	None	-	None	-	None			
Storage Length	150	-	-	-	75	0			
Veh in Median Storage, #	-	0	0	-	0	-			
Grade, %	-	0	0	-	0	-			
Peak Hour Factor	85	85	85	85	85	85			
Heavy Vehicles, %	4	4	4	4	6	6			
Mvmt Flow	69	474	481	75	45	40			
Major/Minor	Major1		Major2		Minor2				
Conflicting Flow All	556	0	- Widjoi2	0	1131	519			
Stage 1	-	-	_	-	519	-			
Stage 2	-	-	-	-	612	-			
Critical Hdwy	4.14				6.46	6.26			
Critical Hdwy Stg 1	7.17	-		-	5.46	0.20			
Critical Hdwy Stg 2	_		_	_	5.46	_			
Follow-up Hdwy	2.236	-	-	-	3.554	3.354			
Pot Cap-1 Maneuver	1005			-	221	549			
Stage 1	1003	-	-	-	589	J47 -			
Stage 2		-	-		533				
Platoon blocked, %		-	-		333	-			
Mov Cap-1 Maneuver	1005	-	-	-	206	549			
Mov Cap-1 Maneuver	1003	-	-	-	341	349			
Stage 1	-	-	-	-	548	-			
Stage 1 Stage 2	-	-	-	-	548	-			
Staye 2	-	-	-	-	ეაპ	-			
Approach	EB		WB		SB				
HCM Control Delay, s	1.1		0		14.7				
HCM LOS					В				
Million Laure (Marley May)		EDI	EDT	WDT	WDD	CDI d	CDIC		
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)		1005	-	-	-	341	549		
HCM Lane V/C Ratio		0.069	-	-	-	0.131	0.073		
HCM Control Delay (s)		8.8	-	-	-	17.1	12.1		
HCM Lane LOS		Α	-	-	-	С	В		
HCM 95th %tile Q(veh)		0.2	-	-	-	0.4	0.2		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	48	20	13	15	33
Future Volume (vph)	19	48	20	13	15	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1659	0	1764	0	0	1835
FIt Permitted	0.986					0.985
Satd. Flow (perm)	1659	0	1764	0	0	1835
Link Speed (mph)	25		25			25
Link Distance (ft)	292		213			210
Travel Time (s)	8.0		5.8			5.7
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	74	0	36	0	0	54
Sign Control	Stop		Free			Free

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 19.9% Analysis Period (min) 15

-						
Intersection						
Int Delay, s/veh	4.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WDL	WDI	NUI	NDI	JDL	301
Traffic Vol, veh/h	19	48	20	13	15	33
Future Vol, veh/h	19	48	20	13	15	33
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	53	22	14	17	37
						- 0,
Maiau/Minau	Minard		Malaut		Malana	
Major/Minor	Minor1	0.0	Major1		Major2	
Conflicting Flow All	100	29	0	0	36	0
Stage 1	29	-	-	-	-	-
Stage 2	71	-	-	-	-	-
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	899	1046	-	-	1575	-
Stage 1	994	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	889	1046	-	-	1575	-
Mov Cap-2 Maneuver	889	-	-	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.9		0		2.3	
HCM LOS	0.9 A		U		2.3	
TIGIVI LUS	A					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		-	-	996	1575	-
HCM Lane V/C Ratio		-	-	0.075	0.011	-
HCM Control Delay (s)		-	-	8.9	7.3	0
HCM Lane LOS		-	-	Α	Α	Α
HCM 95th %tile Q(veh)		-	-	0.2	0	-
, ,						

MOVEMENT SUMMARY

₩ Site: 4 [Build-Out AM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive Site Category: Supp. Analysis - With Chapel Ridge Townhomes Roundabout

Vehi	cle Mc	vement	Perfor	mance										
Mov ID	Turn	INP VOLU		DEM. FLO		Deg. Satn		Level of Service	95% B <i>A</i> QUE	CK OF	Prop. Que	Effective Stop	Aver. No	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %	v/c	sec	0011100	[Veh. veh	Dist] ft	Quo	Rate	Cycles	mph
Sout	h: Cree	kside Lar	nding Dri											
3	L2	4	6.0	5	6.0	0.069	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	24.0
8	T1	28	6.0	33	6.0	0.069	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	23.9
18	R2	22	6.0	26	6.0	0.069	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	23.4
Appr	oach	54	6.0	64	6.0	0.069	4.5	LOS A	0.3	7.1	0.43	0.30	0.43	23.7
East:	Beave	r Creek C	Commons	s Drive										
1	L2	29	2.0	35	2.0	0.182	4.5	LOS A	0.9	22.4	0.26	0.13	0.26	23.9
6	T1	93	2.0	111	2.0	0.182	4.5	LOS A	0.9	22.4	0.26	0.13	0.26	23.8
16	R2	65	2.0	77	2.0	0.182	4.5	LOS A	0.9	22.4	0.26	0.13	0.26	23.3
Appr	oach	187	2.0	223	2.0	0.182	4.5	LOS A	0.9	22.4	0.26	0.13	0.26	23.7
North	n: Creek	kside Lan	ding Driv	ve										
7	L2	64	2.0	76	2.0	0.166	4.6	LOS A	0.8	19.6	0.32	0.19	0.32	23.7
4	T1	32	2.0	38	2.0	0.166	4.6	LOS A	8.0	19.6	0.32	0.19	0.32	23.6
14	R2	65	2.0	77	2.0	0.166	4.6	LOS A	0.8	19.6	0.32	0.19	0.32	23.1
Appr	oach	161	2.0	192	2.0	0.166	4.6	LOS A	0.8	19.6	0.32	0.19	0.32	23.4
West	:: Beave	er Creek (Common	s Drive										
5	L2	48	3.0	57	3.0	0.217	5.1	LOS A	1.1	27.0	0.34	0.20	0.34	23.7
2	T1	153	3.0	182	3.0	0.217	5.1	LOS A	1.1	27.0	0.34	0.20	0.34	23.6
12	R2	8	3.0	10	3.0	0.217	5.1	LOS A	1.1	27.0	0.34	0.20	0.34	23.2
Appr	oach	209	3.0	249	3.0	0.217	5.1	LOS A	1.1	27.0	0.34	0.20	0.34	23.6
All Ve	ehicles	611	2.7	727	2.7	0.217	4.7	LOSA	1.1	27.0	0.32	0.19	0.32	23.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	63	43	210	20	30	125
Future Volume (vph)	63	43	210	20	30	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	1	
Taper Length (ft)	25				100	
Satd. Flow (prot)	1709	0	1840	0	1770	1863
Flt Permitted	0.971				0.950	
Satd. Flow (perm)	1709	0	1840	0	1770	1863
Link Speed (mph)	25		35			35
Link Distance (ft)	432		357			558
Travel Time (s)	11.8		7.0			10.9
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	118	0	255	0	33	139
Sign Control	Stop		Free			Free

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 31.7% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	2.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	WBL	WBK	INDI	NBK	SBL	SBT
Lane Configurations	/2	42	210	20	20	105
Traffic Vol. veh/h	63	43	210	20	30	125
Future Vol, veh/h	63	43	210	20	30	125
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	48	233	22	33	139
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	449	244	0	0	255	0
Stage 1	244	244	-	-	200	-
Stage 2	205	-	-	-	-	-
	6.42	6.22	-	-	4.12	-
Critical Hdwy Critical Hdwy Stg 1	5.42	6.22		-	4.12	-
						-
Critical Hdwy Stg 2	5.42	3.318	-		2.218	-
Follow-up Hdwy	3.518		-			-
Pot Cap-1 Maneuver	568	795	-	-	1310	-
Stage 1	797	-	-	-	-	-
Stage 2	829	-	-	-	-	-
Platoon blocked, %	FF.1	705	-	-	4046	-
Mov Cap-1 Maneuver	554	795	-	-	1310	-
Mov Cap-2 Maneuver	619	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	11.4		0		1.5	
HCM LOS	11.4 B		U		1.0	
HOW LUS	D					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		-	-	680	1310	-
HCM Lane V/C Ratio		-	-	0.173	0.025	-
HCM Control Delay (s)		-	-	11.4	7.8	-
HCM Lane LOS		-	-	В	A	-
HCM 95th %tile Q(veh)		-	-	0.6	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (vph)	6	45	4	17	89	4	
Future Volume (vph)	6	45	4	17	89	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1643	0	0	1846	1768	0	
Flt Permitted				0.991	0.954		
Satd. Flow (perm)	1643	0	0	1846	1768	0	
Link Speed (mph)	25			25	25		
Link Distance (ft)	432			273	553		
Travel Time (s)	11.8			7.4	15.1		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)							
Lane Group Flow (vph)	57	0	0	23	103	0	
Sign Control	Free			Free	Stop		
Intersection Summary							

ICU Level of Service A

Control Type: Unsignalized Intersection Capacity Utilization 16.2% Analysis Period (min) 15

Other

Area Type:

Intersection						
Int Delay, s/veh	5.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	LUI	LDI	VVDL	WEI	NDL	NUN
Traffic Vol, veh/h	6	45	4	17	89	4
Future Vol, veh/h	6	45	4	17	89	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	- -	None
Storage Length		INOTIC -		-	0	-
Veh in Median Storage, #	0		-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	50	4	19	99	4
IVIVIIIL I-IOW	7	30	4	19	77	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	57	0	59	32
Stage 1		-	-	-	32	-
Stage 2		-	-	-	27	-
Critical Hdwy	_	_	4.12	_	6.42	6.22
Critical Hdwy Stg 1	_	-	-	-	5.42	-
Critical Hdwy Stg 2	_	_	_	_	5.42	_
Follow-up Hdwy	_	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	_	_	1547	_	948	1042
Stage 1		_	-	_	991	-
Stage 2			_	_	996	_
Platoon blocked, %		-		_	//0	
Mov Cap-1 Maneuver			1547	-	945	1042
Mov Cap-1 Maneuver	-	-	1347	_	945	1042
Stage 1	-	-	-		991	-
Stage 2	-	-	-	-	993	-
Staye 2	-	-	-	-	773	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.4		9.3	
HCM LOS					Α	
N. C		NDI C	EDT	EDD	MDI	WDT
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		949	-	-	1547	-
HCM Lane V/C Ratio		0.109	-	-	0.003	-
HCM Control Delay (s)		9.3	-	-	7.3	0
HCM Lane LOS		Α	-	-	Α	Α
HCM 95th %tile Q(veh)		0.4			0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	4	36	8	4	62	4	22	4	4	9	4	4	
Future Volume (vph)	4	36	8	4	62	4	22	4	4	9	4	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1813	0	0	1844	0	0	1765	0	0	1758	0	
Flt Permitted		0.996			0.997			0.964			0.973		
Satd. Flow (perm)	0	1813	0	0	1844	0	0	1765	0	0	1758	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		553			210			358			340		
Travel Time (s)		15.1			5.7			9.8			9.3		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	53	0	0	77	0	0	32	0	0	18	0	
Sign Control		Free			Free			Stop			Stop		

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 14.5% Analysis Period (min) 15

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	202	201	LDIT	****		· · · ·	1102	1101	· · · ·	002	051	OBIT
Traffic Vol. veh/h	4	36	8	4	62	4	22	4	4	9	4	4
Future Vol, veh/h	4	36	8	4	62	4	22	4	4	9	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	40	9	4	69	4	24	4	4	10	4	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	49	0	0	136	134	45	136	136	71
Stage 1	-	-	-	-	-	-	53	53	-	79	79	-
Stage 2	-	-	-	-	-	-	83	81	-	57	57	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1527	-	-	1558	-	-	835	757	1025	835	755	991
Stage 1	-	-	-	-	-	-	960	851	-	930	829	-
Stage 2	-	-	-	-	-	-	925	828	-	955	847	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1527	-	-	1558	-	-	823	752	1025	824	750	991
Mov Cap-2 Maneuver	-	-	-	-	-	-	823	752	-	824	750	-
Stage 1	-	-	-	-	-	-	957	848	-	927	827	-
Stage 2	-	-	-	-	-	-	913	826	-	943	844	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.4			9.5			9.4		
HCM LOS							A			A		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		834	1527		-	1558	-	WDIX	838			
HCM Lane V/C Ratio		0.04	0.003	-	-	0.003	-	-	0.023			
HCM Control Delay (s)		9.5	7.4	0		7.3	0	-	9.4			
HCM Lane LOS		7.5 A	7.4 A	A	-	7.5 A	A	-	7.4 A			
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.1			
70th 70th (ce(voil)		0.1	- 0			- 0			0.1			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	4	4	9	4	4	4	4	28	4	4	50	4	
Future Volume (vph)	4	4	9	4	4	4	4	28	4	4	50	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1704	0	0	1750	0	0	1827	0	0	1842	0	
FIt Permitted		0.989			0.984			0.995			0.997		
Satd. Flow (perm)	0	1704	0	0	1750	0	0	1827	0	0	1842	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		248			378			405			213		
Travel Time (s)		6.8			10.3			11.0			5.8		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	18	0	0	12	0	0	39	0	0	64	0	
Sign Control		Stop			Stop			Free			Free		

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 13.7% Analysis Period (min) 15

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	4	9	4	4	4	4	28	4	4	50	4
Future Vol., veh/h	4	4	9	4	4	4	4	28	4	4	50	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	10	4	4	4	4	31	4	4	56	4
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	111	109	58	114	109	33	60	0	0	35	0	0
Stage 1	66	66	-	41	41	-	-	-	-	-	-	-
Stage 2	45	43	-	73	68	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	_	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-		-		-
Critical Hdwy Stg 2	6.12	5.52	_	6.12	5.52	-	-	_	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	867	781	1008	863	781	1041	1544	-	-	1576	-	-
Stage 1	945	840	-	974	861	-	-	-	-	-	-	-
Stage 2	969	859	-	937	838	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	856	776	1008	847	776	1041	1544	-	-	1576	-	-
Mov Cap-2 Maneuver	856	776	-	847	776	-	-	-	-	-	-	-
Stage 1	942	837	-	971	858	-	-	-	-	-	-	-
Stage 2	957	856	-	920	835	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.1			9.2			0.8			0.5		
HCM LOS	А			Α								
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1544	-	-	906	875	1576	-	-			
HCM Lane V/C Ratio		0.003	-	-	0.021	0.015	0.003	-	-			
HCM Control Delay (s)		7.3	0	-	9.1	9.2	7.3	0	-			
HCM Lane LOS		Α	Α	-	Α	Α	Α	Α	-			
HCM 95th %tile Q(veh)		0	-	-	0.1	0	0	-	-			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (vph)	29	4	4	59	9	4	
Future Volume (vph)	29	4	4	59	9	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1835	0	0	1857	1729	0	
Flt Permitted				0.997	0.966		
Satd. Flow (perm)	1835	0	0	1857	1729	0	
Link Speed (mph)	25			25	25		
Link Distance (ft)	292			367	225		
Travel Time (s)	8.0			10.0	6.1		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)	0.1			76			
Lane Group Flow (vph)	36	0	0	70	14	0	
Sign Control	Free			Free	Stop		
Intersection Summary							
Area Type:	Other						

ICU Level of Service A

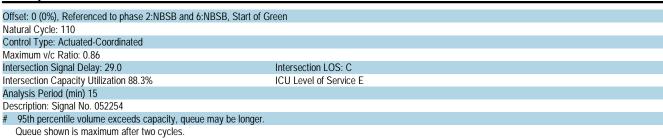
Control Type: Unsignalized Intersection Capacity Utilization 16.4% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations		LDI		.,,,,	.,,,,,	
Traffic Vol, veh/h	29	4	4	59	9	4
Future Vol, veh/h	29	4	4	59	9	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	_	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	_	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	32	4	4	66	10	4
	- 02				- 10	
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	108	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1575	-	889	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1575	-	886	1039
Mov Cap-2 Maneuver	-	-	-	-	886	-
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	946	-
g						
A	F.D.		MD		MD	
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.5		8.9	
HCM LOS					Α	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		928	-	-	1575	-
HCM Lane V/C Ratio		0.016	-	_	0.003	-
HCM Control Delay (s)		8.9	-	-	7.3	0
HCM Lane LOS		Α	-	-	7.5 A	A
LICINI LAHE LUJ		Α.	-	-	Α.	Α.
HCM 95th %tile Q(veh)		0	_	_	0	_

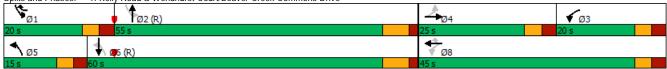
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	10	14	47	278	20	101	67	594	304	164	863	23	
Future Volume (vph)	10	14	47	278	20	101	67	594	304	164	863	23	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			1%			3%			-4%		
Storage Length (ft)	0		0	275		0	275		0	170		0	
Storage Lanes	0		0	1		1	1		0	1		0	
Taper Length (ft)	25			50			125			170			
Satd. Flow (prot)	0	1683	0	0	1770	1575	1743	3283	0	1805	1891	0	
Flt Permitted		0.943			0.710		0.075			0.228			
Satd. Flow (perm)	0	1598	0	0	1316	1575	138	3283	0	433	1891	0	
Right Turn on Red	_		Yes	-		Yes			Yes			Yes	
Satd. Flow (RTOR)		48				103		93			1		
Link Speed (mph)		25			35	.00		45			45		
Link Distance (ft)		513			641			1004			905		
Travel Time (s)		14.0			12.5			15.2			13.7		
Confl. Peds. (#/hr)		17.0			12.0		1	10.2	1	1	15.7	1	
Confl. Bikes (#/hr)									- 1				
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	2%	270	0	0	
Parking (#/hr)	U	U	U	U	U	U	U	U	U	U	U	U	
Mid-Block Traffic (%)		0%			0%			0%			0%		
		076			076			076			U70		
Shared Lane Traffic (%)	0	72	0	0	304	102	40	916	0	167	904	0	
Lane Group Flow (vph)	0		U			103	68		U			U	
Turn Type	Perm	NA 4		pm+pt	NA	pm+ov	D.P+P	NA		D.P+P	NA		
Protected Phases		4		3	8	1	5	2		1	6		
Permitted Phases	4			8	0	8	6	2		2	,		
Detector Phase	4	4		3	8	1	5	2		1	6		
Switch Phase								40.0					
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0		7.0	12.0		
Minimum Split (s)	30.0	30.0		14.0	30.0	14.0	14.0	30.0		14.0	25.0		
Total Split (s)	25.0	25.0		20.0	45.0	20.0	15.0	55.0		20.0	60.0		
Total Split (%)	20.8%	20.8%		16.7%	37.5%	16.7%	12.5%	45.8%		16.7%	50.0%		
Yellow Time (s)	3.2	3.2		3.0	3.1	3.0	3.0	4.9		3.0	4.9		
All-Red Time (s)	2.6	2.6		2.8	2.7	2.8	2.4	1.6		2.8	1.6		
Lost Time Adjust (s)		-0.8			-0.8	-0.8	-0.4	-1.5		-0.8	-1.5		
Total Lost Time (s)		5.0			5.0	5.0	5.0	5.0		5.0	5.0		
Lead/Lag	Lead	Lead		Lag		Lead	Lead	Lag		Lead	Lag		
Lead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes		
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max		
Act Effct Green (s)		33.0			33.0	48.2	73.0	61.8		72.0	66.7		
Actuated g/C Ratio		0.28			0.28	0.40	0.61	0.52		0.60	0.56		
v/c Ratio		0.15			0.84	0.15	0.36	0.53		0.44	0.86		
Control Delay		13.1			60.9	3.7	15.6	20.0		13.7	35.4		
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0		
Total Delay		13.1			60.9	3.7	15.6	20.0		13.7	35.4		
LOS		В			Е	А	В	В		В	D		
Approach Delay		13.1			46.4			19.7			32.0		
Approach LOS		В			D			В			С		
Queue Length 50th (ft)		14			219	0	19	218		49	608		
Queue Length 95th (ft)		46			312	29	43	328		91	#999		
Internal Link Dist (ft)		433			561			924			825		
Turn Bay Length (ft)							275			170			
Base Capacity (vph)		473			438	752	219	1737		445	1051		
Starvation Cap Reductn		0			0	0	0	0		0	0		
Spillback Cap Reductn		0			0	0	0	0		0	0		
Storage Cap Reductn		0			0	0	0	0		0	0		
		0.15			0.69	0.14	0.31	0.53		0.38	0.86		
Reduced v/c Ratio		() (5			[I AU								

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120



Splits and Phases: 1: Kelly Road & Wendhurst Court/Beaver Creek Commons Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR					
Lane Configurations							_			-	·
Traffic Volume (vph)	45	500	591	53	66	71					
Future Volume (vph)	45	500	591	53	66	71					
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900					
Lane Width (ft)	12	12	12	12	12	12					
Grade (%)		0%	0%		0%						
Storage Length (ft)	150			0	75	0					
Storage Lanes	1			0	1	1					
Taper Length (ft)	300				25						
Satd. Flow (prot)	1770	1863	1842	0	1770	1583					
Flt Permitted	0.950				0.950						
Satd. Flow (perm)	1770	1863	1842	0	1770	1583					
Link Speed (mph)		45	45		25						
Link Distance (ft)		797	812		509						
Travel Time (s)		12.1	12.3		13.9						
Confl. Peds. (#/hr)											
Confl. Bikes (#/hr)											
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93					
Growth Factor	100%	100%	100%	100%	100%	100%					
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%					
Bus Blockages (#/hr)	0	0	0	0	0	0					
Parking (#/hr)											
Mid-Block Traffic (%)		0%	0%		0%						
Shared Lane Traffic (%)											
Lane Group Flow (vph)	48	538	692	0	71	76					
Sign Control		Free	Free		Stop						

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 47.7% Analysis Period (min) 15

ICU Level of Service A

Intersection							
Int Delay, s/veh	2.1						
		EST	MOT	MDD	651	000	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		_					
Traffic Vol, veh/h	45	500	591	53	66	71	
Future Vol, veh/h	45	500	591	53	66	71	
Conflicting Peds, #/hr	0	0	_ 0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-	-	-	75	0	
Veh in Median Storage, #	-	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	93	93	93	93	93	93	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	48	538	635	57	71	76	
Major/Minor	Major1		Major2		Minor2		
		0		0		// *	
Conflicting Flow All	692	0	-	0	1298	664	
Stage 1	-	-	-	-	664	-	
Stage 2	- 4.10	-	-	-	634	- (22	
Critical Hdwy	4.12	-	-	-	6.42	6.22	
Critical Hdwy Stg 1	-	-	-	-	5.42	-	
Critical Hdwy Stg 2	- 0.010	-	-	-	5.42	- 2.210	
Follow-up Hdwy	2.218	-	-	-	3.518	3.318	
Pot Cap-1 Maneuver	903	-	-	-	178	461	
Stage 1	-	-	-	-	512	-	
Stage 2	-	-	-	-	529	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	903	-	-	-	169	461	
Mov Cap-2 Maneuver	-	-	-	-	308	-	
Stage 1	-	-	-	-	485	-	
Stage 2	-	-	-	-	529	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.8		0		17.2		
HCM LOS	0.8		U		17.2 C		
HCIVI LUS					C		
Minor Lane/Major Mvmt		EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)		903	_			308	461
HCM Lane V/C Ratio		0.054	-	-	-	0.23	0.166
HCM Control Delay (s)		9.2	-	-	-	20.2	14.4
HCM Lane LOS		Α.	_	_	_	C	В
HCM 95th %tile Q(veh)		0.2	-	_	_	0.9	0.6
2 (10.1)		- 0.2				3.7	0.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	28	36	32	47	26
Future Volume (vph)	17	28	36	32	47	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1674	0	1744	0	0	1805
Flt Permitted	0.981					0.969
Satd. Flow (perm)	1674	0	1744	0	0	1805
Link Speed (mph)	25		25			25
Link Distance (ft)	292		213			210
Travel Time (s)	8.0		5.8			5.7
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	50	0	76	0	0	81
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utiliza	ition 20.6%			IC	U Level of	f Service A
Analysis Period (min) 15						

-						
Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
	WDL	WDK	INDI	NDK	SDL	SDI
Lane Configurations Traffic Vol, veh/h	17	28	36	32	47	26
Future Vol, ven/h	17 17	28	36	32	47	26 26
	0	28	36	32	0	26
Conflicting Peds, #/hr		_	_			-
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	31	40	36	52	29
Major/Minor	Minor1		Major1		Major2	
		EC	1VIAJUI I 0	0	76	0
Conflicting Flow All	191 58	58	- 0	0	76	0
Stage 1						-
Stage 2	133	- (22	-	-	- 4.10	-
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	798	1008	-	-	1523	-
Stage 1	965	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	770	1008	-	-	1523	-
Mov Cap-2 Maneuver	770	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Annroach	WB		MD		SB	
Approach Delegation			NB			
HCM Control Delay, s	9.2		0		4.8	
HCM LOS	Α					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)		-	-	903	1523	-
HCM Lane V/C Ratio			-	0.055	0.034	-
HCM Control Delay (s)		-		9.2	7.4	0
HCM Lane LOS		-	-	9.2 A	7.4 A	A
HCM 95th %tile Q(veh)		-		0.2	0.1	A
HOW FOUT MILE Q(VEII)		-	-	0.2	0.1	

MOVEMENT SUMMARY

🦁 Site: 4 [Build-Out PM (Site Folder: General)]

Beaver Creek Commons Drive at Creekside Landing Drive Site Category: Supp. Analysis - With Chapel Ridge Townhomes Roundabout

Vehi	icle Mo	vement	Perfor	mance										
Mov ID	Turn	INP VOLU [Total veh/h		DEM/ FLO [Total veh/h		Deg. Satn v/c		Level of Service		ACK OF EUE Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
Sout	h: Creel		nding Dri		70	• • • • • • • • • • • • • • • • • • •	300		VO11	- ' '				ШЭП
3	L2	25	2.0	27	2.0	0.323	8.6	LOS A	1.5	37.6	0.64	0.64	0.64	22.9
8	T1	98	2.0	104	2.0	0.323	8.6	LOS A	1.5	37.6	0.64	0.64	0.64	22.8
18	R2	107	2.0	114	2.0	0.323	8.6	LOS A	1.5	37.6	0.64	0.64	0.64	22.4
Appr	oach	230	2.0	245	2.0	0.323	8.6	LOSA	1.5	37.6	0.64	0.64	0.64	22.6
East	Beave	r Creek C	Commons	s Drive										
1	L2	74	2.0	79	2.0	0.541	10.3	LOS B	4.2	106.7	0.63	0.57	0.71	22.5
6	T1	257	2.0	273	2.0	0.541	10.3	LOS B	4.2	106.7	0.63	0.57	0.71	22.4
16	R2	189	2.0	201	2.0	0.541	10.3	LOS B	4.2	106.7	0.63	0.57	0.71	22.0
Appr	oach	520	2.0	553	2.0	0.541	10.3	LOS B	4.2	106.7	0.63	0.57	0.71	22.3
North	n: Creek	side Lan	ding Driv	/e										
7	L2	153	2.0	163	2.0	0.552	11.4	LOS B	4.8	121.0	0.70	0.81	0.97	22.1
4	T1	160	2.0	170	2.0	0.552	11.4	LOS B	4.8	121.0	0.70	0.81	0.97	22.0
14	R2	160	2.0	170	2.0	0.552	11.4	LOS B	4.8	121.0	0.70	0.81	0.97	21.6
Appr	oach	473	2.0	503	2.0	0.552	11.4	LOS B	4.8	121.0	0.70	0.81	0.97	21.9
Wes	t: Beave	r Creek	Common	s Drive										
5	L2	130	2.0	138	2.0	0.473	10.1	LOS B	3.2	80.3	0.66	0.71	0.81	22.5
2	T1	241	2.0	256	2.0	0.473	10.1	LOS B	3.2	80.3	0.66	0.71	0.81	22.4
12	R2	21	2.0	22	2.0	0.473	10.1	LOS B	3.2	80.3	0.66	0.71	0.81	22.0
Appr	oach	392	2.0	417	2.0	0.473	10.1	LOS B	3.2	80.3	0.66	0.71	0.81	22.4
All V	ehicles	1615	2.0	1718	2.0	0.552	10.3	LOS B	4.8	121.0	0.66	0.68	0.80	22.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula. Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: KIMLEY-HORN & ASSOCIATES INC | Licence: NETWORK / Enterprise | Processed: Wednesday, February 9, 2022 2:20:11 PM Project: K:\DUR_LDEV\011270040 Chapel Ridge Apex\T4 - Analysis\Supplemental Analysis - with Chapel Ridge Townes\Sidra\BC Commons @ Creekside Landing.sip9

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	39	39	400	64	45	377
Future Volume (vph)	39	39	400	64	45	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	100	
Storage Lanes	1	0		0	0	
Taper Length (ft)	25				100	
Satd. Flow (prot)	1694	0	1827	0	0	1853
Flt Permitted	0.976					0.995
Satd. Flow (perm)	1694	0	1827	0	0	1853
Link Speed (mph)	25		35			35
Link Distance (ft)	432		357			558
Travel Time (s)	11.8		7.0			10.9
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	0	515	0	0	469
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized	d					
Intersection Conneity Litilia				IC	III aval a	f Condoo D

ICU Level of Service B

Intersection Capacity Utilization 61.8% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	1.6					
		MADD	NOT	NDD	651	CDT
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	0.5	0.5				
Traffic Vol, veh/h	39	39	400	64	45	377
Future Vol, veh/h	39	39	400	64	45	377
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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	43	444	71	50	419
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	999	480	0	0	515	0
Stage 1	480	-	-	-	-	-
Stage 2	519	-	-	_	-	_
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	270	586	_	_	1051	
Stage 1	622	-	-	-	1031	
Stage 2	597	-				-
Platoon blocked, %	371		-	-		-
Mov Cap-1 Maneuver	253	586	-	-	1051	-
	384					-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	622	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	14.5		0		0.9	
HCM LOS	В					
Minor Lane/Major Mvmt		NBT	NBR	WBLn1	SBL	SBT
		INDI	INDIX	464	1051	<u> </u>
Capacity (veh/h)						
		-	-	0.187 14.5	0.048 8.6	-
HCM Control Polov (c)					Χħ	0
HCM Control Delay (s)		-	-			
		-	-	B 0.7	A 0.1	A

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (vph)	18	91	4	11	67	4	
Future Volume (vph)	18	91	4	11	67	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1652	0	0	1840	1766	0	
Flt Permitted				0.988	0.955		
Satd. Flow (perm)	1652	0	0	1840	1766	0	
Link Speed (mph)	25			25	25		
Link Distance (ft)	432			273	553		
Travel Time (s)	11.8			7.4	15.1		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)							
Lane Group Flow (vph)	121	0	0	16	78	0	
Sign Control	Free			Free	Stop		
Intersection Cumment							

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 17.2% Analysis Period (min) 15

ICU Level of Service A

•						
Intersection						
Int Delay, s/veh	3.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	LUI	LDI	WDL	וטייי	NDL	NDIX
Traffic Vol, veh/h	18	91	4	11	67	4
Future Vol, veh/h	18	91	4	11	67	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	_	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-		0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	20	101	4	12	74	4
						•
Major/Minor	Major ¹		Majora		Minor1	
Major/Minor	Major1		Major2		Minor1	71
Conflicting Flow All	0	0	121	0	91	71
Stage 1	-	-	-	-	71	-
Stage 2	-	-	- 4.10	-	20	- (22
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	- 0.010	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1467	-	909	991
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	1003	-
Platoon blocked, %	-	-	4	-	667	601
Mov Cap-1 Maneuver	-	-	1467	-	906	991
Mov Cap-2 Maneuver	-	-	-	-	906	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	1000	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2		9.3	
HCM LOS					A	
Minor Lane/Major Mvmt		NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)		910	LDI	LDK -	1467	WDI
HCM Lane V/C Ratio		0.087	-		0.003	-
HCM Control Delay (s)		9.3	-	-	7.5	0
HCM Lane LOS		9.3 A	-		7.5 A	A
HCM 95th %tile Q(veh)		0.3	-	-	0	A -
HOW /JULY JULIE Q(VEIL)		0.5			U	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	5	64	23	5	49	9	14	4	4	6	4	4	
Future Volume (vph)	5	64	23	5	49	9	14	4	4	6	4	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1794	0	0	1820	0	0	1762	0	0	1754	0	
Flt Permitted		0.997			0.996			0.968			0.977		
Satd. Flow (perm)	0	1794	0	0	1820	0	0	1762	0	0	1754	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		553			210			358			340		
Travel Time (s)		15.1			5.7			9.8			9.3		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	103	0	0	70	0	0	24	0	0	15	0	
Sign Control		Free			Free			Stop			Stop		

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 16.1% Analysis Period (min) 15

ICU Level of Service A

-												
Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	64	23	5	49	9	14	4	4	6	4	4
Future Vol, veh/h	5	64	23	5	49	9	14	4	4	6	4	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	71	26	6	54	10	16	4	4	7	4	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	64	0	0	97	0	0	171	172	84	171	180	59
Stage 1	-	-	-	-	-	-	96	96	-	71	71	-
Stage 2		_	_	-	_	_	75	76	-	100	109	_
Critical Hdwy	4.12	_	-	4.12	_	_	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-			-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1538	-	-	1496	-	-	792	721	975	792	714	1007
Stage 1	-	-	-	-	-	-	911	815	-	939	836	-
Stage 2	-	-	-	-	-	-	934	832	-	906	805	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1496	-	-	780	715	975	780	708	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	780	715	-	780	708	-
Stage 1	-	-	-	-	-	-	907	812	-	935	833	-
Stage 2	-	-	-	-	-	-	921	829	-	893	802	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0.6			9.7			9.5		
HCM LOS							A			A		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		796	1538	_	-	1496	_	_	809			
HCM Lane V/C Ratio		0.031	0.004	_	-	0.004	-	-	0.019			
HCM Control Delay (s)		9.7	7.3	0	-	7.4	0		9.5			
HCM Lane LOS		A	A	A	-	Α	A	-	A			
HCM 95th %tile Q(veh)		0.1	0	-	-	0	-	-	0.1			
						_						

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	4	4	6	4	4	4	9	64	5	5	38	5	
Future Volume (vph)	4	4	6	4	4	4	9	64	5	5	38	5	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		0	0		0	0		0	
Storage Lanes	0		0	0		0	0		0	0		0	
Taper Length (ft)	25			25			25			25			
Satd. Flow (prot)	0	1723	0	0	1750	0	0	1835	0	0	1824	0	
Flt Permitted		0.987			0.984			0.994			0.994		
Satd. Flow (perm)	0	1723	0	0	1750	0	0	1835	0	0	1824	0	
Link Speed (mph)		25			25			25			25		
Link Distance (ft)		248			378			405			213		
Travel Time (s)		6.8			10.3			11.0			5.8		
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Shared Lane Traffic (%)													
Lane Group Flow (vph)	0	15	0	0	12	0	0	87	0	0	54	0	
Sign Control		Stop			Stop			Free			Free		

Other Area Type:

Control Type: Unsignalized Intersection Capacity Utilization 15.7% Analysis Period (min) 15 ICU Level of Service A

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	4	6	4	4	4	9	64	5	5	38	5
Future Vol., veh/h	4	4	6	4	4	4	9	64	5	5	38	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-		None	-	-	None	-	-	None
Storage Length		-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	4	7	4	4	4	10	71	6	6	42	6
									-			
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	155	154	45	157	154	74	48	0	0	77	0	0
Stage 1	57	57	-	94	94	-	-	-	-	-	-	-
Stage 2	98	97	-	63	60			-	_		_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	_	_	4.12	_	_
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	_	-	_	_
Critical Hdwy Stg 2	6.12	5.52	_	6.12	5.52	-	_	_	_	_	_	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	_	2.218	_	_
Pot Cap-1 Maneuver	812	738	1025	809	738	988	1559	_	_	1522	_	_
Stage 1	955	847	-	913	817	-	-	_	-	-		
Stage 2	908	815	-	948	845	_	_	_	-	_	_	_
Platoon blocked, %	700	010		710	010			_				
Mov Cap-1 Maneuver	798	730	1025	794	730	988	1559	_	_	1522	_	-
Mov Cap-2 Maneuver	798	730	1025	794	730	-	-			-	_	-
Stage 1	948	844	-	907	811	_	_		-	-	_	-
Stage 2	893	809	-	933	842	-	-	-	-	-	-	-
	070	307		,,,,	012							
Approach	EB			WB			NB			SB		
HCM Control Delay, s	9.3			9.4			0.8			0.8		
HCM LOS	Α			A			- 0.0			- 0.0		
	Λ			,,								
Minor Lane/Major Mvmt		NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1559	-	-	856	824	1522	-	-			
HCM Lane V/C Ratio		0.006	-	-	0.018	0.016	0.004	-	-			
HCM Control Delay (s)		7.3	0	-	9.3	9.4	7.4	0	-			
HCM Lane LOS		A	A	-	A	Α	Α	A	-			
HCM 95th %tile Q(veh)		0		_	0.1	0	0	-	_			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations							
Traffic Volume (vph)	72	9	4	43	6	4	
Future Volume (vph)	72	9	4	43	6	4	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	
Grade (%)	0%			0%	0%		
Storage Length (ft)		0	0		0	0	
Storage Lanes		0	0		1	0	
Taper Length (ft)			25		25		
Satd. Flow (prot)	1835	0	0	1855	1717	0	
Flt Permitted				0.996	0.969		
Satd. Flow (perm)	1835	0	0	1855	1717	0	
Link Speed (mph)	25			25	25		
Link Distance (ft)	292			367	225		
Travel Time (s)	8.0			10.0	6.1		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%	0%		
Shared Lane Traffic (%)							
Lane Group Flow (vph)	90	0	0	52	11	0	
Sign Control	Free			Free	Stop		
Intersection Summary							
Area Type:	Other						

ICU Level of Service A

Control Type: Unsignalized Intersection Capacity Utilization 15.6% Analysis Period (min) 15

Intersection						
Int Delay, s/veh	0.9					
		EDD	WDI	WDT	NDL	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	70			40	,	
Traffic Vol, veh/h	72	9	4	43	6	4
Future Vol, veh/h	72	9	4	43	6	4
Conflicting Peds, #/hr	0	_ 0	_ 0	_ 0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	10	4	48	7	4
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	90	0	141	85
Stage 1	-	Ū	90	-	85	00
Stage 2	-	-	-	-	56	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
		-				
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1505	-	852	974
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1505	-	849	974
Mov Cap-2 Maneuver	-	-	-	-	849	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	964	-
, and the second						
Annroach	ED		WP		NIP	
Approach	EB		WB		NB	
HCM Control Delay, s	EB 0		WB 0.6		9.1	
HCM Control Delay, s					9.1	
HCM Control Delay, s HCM LOS		NBLn1		EBR	9.1	WBT
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt			0.6	EBR -	9.1 A WBL	WBT -
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h)		895	0.6 EBT	-	9.1 A WBL 1505	-
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio		895 0.012	0.6 EBT	-	9.1 A WBL 1505 0.003	-
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		895 0.012 9.1	0.6 EBT - -	- -	9.1 A WBL 1505 0.003 7.4	- - 0
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio		895 0.012	0.6 EBT	-	9.1 A WBL 1505 0.003	-

Appendix N: Traffic Signal Plans

E C&G

LEGEND

Signal Pole with Guy

Signal Pole with Sidewalk Guy

Traffic Signal Head

Pedestrian Signal Head With Push Button & Sign Optical Detector

Sign

Inductive Loop Detector

Controller & Cabinet

Junction Box

Curb Ramo

2-in Underground Conduit

Right of Way

Directional Arrow

Type I Signal Pedestal

Type II Signal Pedestal

6 Phase Fully Actuated SR 1163 (Kelly Road) CLS

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012 and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: http://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- 3. Omit phase 3 during phase 4 on.
- 4. Phase 1 and/or phase 5 may be lagged.
- 5. Set all detector units to presence mode.
- 6. Locate new cabinet so as not to obstruct sight distance of vehicles turning
- 7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 8. Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
- Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
- 10. This intersection features a GPS preemption system. Equipment shall be installed per the manufacturer's recommendations.
- 11. Preemption channel 1 calls EVP 3.

45 MPH -4% Grade

SR 1163 (Kelly Rd) Shared Use Path

- 12. Contractor to locate buried fiber optic cable on west side of SR 1163 (Kelly Rd) and field adjust signal poles as necessary.
- 13. The Division (Town) Traffic Engineer will determine the hours of use for each phasing plan.

PROPOSED

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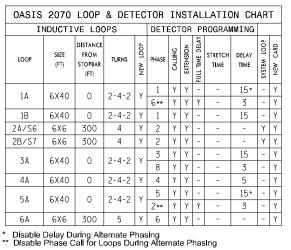
 \dashv

 \boxtimes

1

 \circ

- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 15. Closed loop system data: Controller Asset #:2254.



 \prod_{ll}

(MEDIUM PRIORITY)

DEFAULT

EV PREEMPT PHASES

(MEDIUM PRIORITY)

ALTERNATE

EV PREEMPT PHASES

EVP 3 (Ø2+5)

ALTERNATE PHASING DIAGRAM

Ø3+8

04+8

Ø2+6

02+5

01+6

01+5

12

6.0

90

4.9

1.6

10

2.5

34

15

30

3.0

YELLOW

ON

MIN RECALL

7

2.0

15

3.1

2.7

16

ON

ON

PHASING DIAGRAM DETECTION LEGEND DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT $<\!\!\!<\!\!\!--\!\!\!>$ PEDESTRIAN MOVEMENT

DEFAULT PHASING TABLE OF OPERATION									
	PHASE								
SIGNAL FACE	Ø 1 + 5	Ø 1 + 6	Ø2+5	Ø 2 + 6	Ø 3 + 8	Ø 4 + 8	ы>₽ %	FLAST	
11	-	-	Ŧ	÷	-R	#	₹	- ¥	
21, 22	R	R	G	G	R	R	G	Υ	
41, 42	R	R	R	R	R	G	R	R	
51	-	÷	-	Ę	₹R	₩	-	- ¥	
61, 62	R	G	R	G	R	R	R	Υ	
81	R	R	R	R	76	G	R	R	
82	<u>R</u>	<u>R</u>	R	R	G	G	R	R	
P21, P22	D₩	D₩	W	W	D₩	D₩	D₩	DRK	
P41, P42	D₩	D₩	D₩	D₩	D₩	W	D₩	DRK	
P61, P62	D₩	W	D₩	W	D₩	D₩	D-W	DRK	
P81, P82	D₩	D₩	D₩	D₩	W	W	D₩	DRK	

FEATURE

Min Green 1 *

Max Green 1 *

Red Clearance

Red Revert

Don't Walk 1

Seconds Per Actuation

Max Variable Initial*

Time To Reduce

Minimum Gap

Vehicle Call Memory

Simultaneous Gan

Recall Mode

Dual Entry

Time Before Reduction

Walk 1 *

Yellow Clearance

Extension 1

01+5

DEFAULT PHASING DIAGRAM

Ø3+8

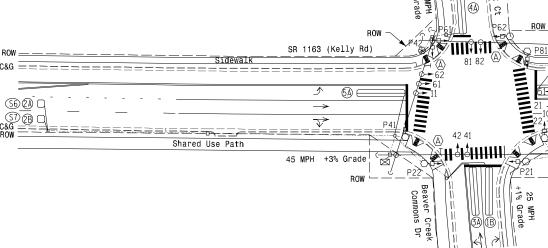
04 + 8

Ø2+6

02+5

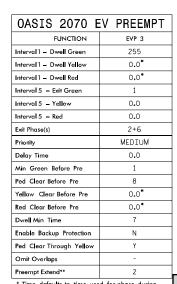
01+6

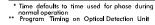
ALTERNATE	PHAS	ING	TAE	BLE	OF (OPEF	RATI	ON	
		PHASE							
SIGNAL FACE	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3 + 8	Ø 4 + 8	E>P	エのひて1	
11	-	-	-R	-R	-R	-R	-R	- ¥	
21, 22	R	R	G	G	R	R	G	Υ	
41, 42	R	R	R	R	R	G	R	Я	
51	-	₹R	-	₹R	-R	₹R	•	*	
61, 62	R	G	R	G	R	R	R	Υ	
81	R	R	R	R	70	G	R	R	
82	R/	<u>R</u>	R	R	G	G	R	R	
P21, P22	D₩	D₩	W	W	D₩	D₩	D₩	DRK	
P41, P42	D₩	D₩	D₩	D₩	D₩	W	D₩	DRK	
P61, P62	D₩	W	D₩	W	D₩	D₩	D₩	DRK	
P81, P82	D₩	D₩	D₩	D₩	W	W	D₩	DRK	

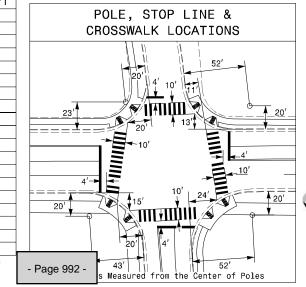


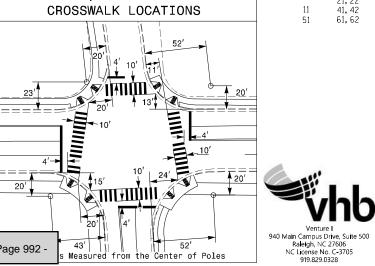
	F SR 1163 (Kelly Rd	ROW - AZZ		
ROW	Sit 1100 (Relly lid		81 82	Q P81
C&G ====================================		====	/	
	<u></u>	61		<u> </u>
® <u>@</u> □	\rightarrow	/I/ ≦		21
(S) (B) CaG	>	P41/ 3		22
ROW Shared Use Path			42 41 •• •• •• •• •• •• ••	
	45 MPH +3% Grade		• • • • • • • • • • • • •	-96
	ROW	P22	& \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	P21 — -
		Beaver	ii	25
			I:: \W\W!:\\	MPH Grade
		Creek 1s Dr		ade T
		r ex		<u> </u>
		1	, c	RO

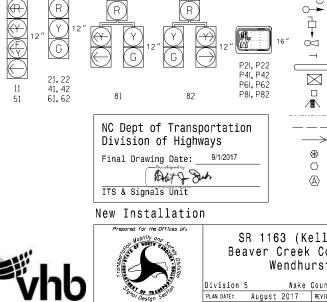
			RUW	\sim \sim	07/0	\ \
ROW	Sidewalk	SR 1163	(Kelly Rd)	P42	81 82 2	A P81
<u> </u>		<u></u>	€A <u> </u>		l	
C&G ROW	hared Use Path		>	P41	42 41	-10 22
-		45 MPH	+3% Grade	P22		P21
				Beaver Creek Commons Dr		25 MPH +1% Grade
						C&G











SIGNAL FACE I.D.

All Heads L.E.D.



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL CARA SEAL 033108 Apex Jianxin Ma 14:23:36 -04'00' INIT. DATE

SIG. INVENTORY NO. 05-2254

EXISTING

•

/

•

(A)

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than ${\it 4}$ seconds

ON

OASIS 2070 TIMING CHART

2.0

25

3.0

2.8

12

6.0

90

4.9

1.6

15

1.8

34

15

30

3.0

MIN RECALL

YELLOW

ON

2.0

15

3.0

2.8

PHASE

2.0

15

3.2

2.6

16

ON

ON

2.0

3.0

2.4

ON

Rezoning Case: 22CZ07 Chapel Ridge North PUD

Planning Board Meeting Date: July 11, 2022



Report Requirements:

Per NCGS §160D-604(b), all proposed amendments to the zoning ordinance or zoning map shall be submitted to the Planning Board for review and comment. If no written report is received from the Planning Board within 30 days of referral of the amendment to the Planning Board, the Town Council may act on the amendment without the Planning Board report. The Town Council is not bound by the recommendations, if any, of the Planning Board.

Per NCGS §160D-604(d), the Planning Board shall advise and comment on whether the proposed action is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

PROJECT DESCRIPTION:		
Acreage:	+/- 20.62	
PIN(s):	0732340602, 0732347912, 0732	2343920, 0732354594, 0732352538,
	0732249869, & 0732256180	
Current Zoning:	RR	
Proposed Zoning:	PUD-CZ	
Current 2045 Land Use Map:	Medium Density Residential	
If rezoned as proposed, the 2	045 Land Use Map Designation v	will change to: High Density Residential
Town Limits:	Inside the ETJ	
		sistent with the following officially adopted plans, Reason: If rezoned, the 2045 Land Use
Man will automatically be an	anded to High Density Poside	ontial .
iviap wili automatically be an	nended to High Density Reside	ential.
Apex Transportation Plan Consistent	n Inconsistent	Reason: Planning Board recommended
approval of the associated Tr	ansportation Plan amendmen	nt.
Parks, Recreation, Open Consistent	Space, and Greenways Plan Inconsistent	Reason:

Rezoning Case: 22CZ07 Chapel Ridge North PUD

Planning Board Meeting Date: July 11, 2022



Legislative Considerations:

The applicant shall propose site-specific standards and conditions that take into account the following considerations, which are considerations that are relevant to the legislative determination of whether or not the proposed conditional zoning district rezoning request is in the public interest. These considerations do not exclude the legislative consideration of any other factor that is relevant to the public interest.

1.	•		ditional Zoning (CZ) District use's appropriateness ses, goals, objectives, and policies of the 2045 Land
	✓ Consistent	Inconsistent	Reason: If rezoned, the 2045 Land Use
Map	will automatically be amend	ed to High Density Resi	dential.
2.	Compatibility. The proposed location and compatibility wit Consistent		District use's appropriateness for its proposed nding land uses. Reason:
3.	Zoning district supplemental statemental	Conditional Zoning (CZ) District use's compliance Reason:	
4.	minimization of adverse effe	ects, including visual imports imports on surroundi	proposed Conditional Zoning (CZ) District use's act of the proposed use on adjacent lands; and ng lands regarding trash, traffic, service delivery, nd not create a nuisance. Reason:
	_	_	
5.	_	rotection from significant	Conditional Zoning District use's minimization of deterioration of water and air resources, wildlife Reason:

Rezoning Case: 22CZ07 Chapel Ridge North PUD

Planning Board Meeting Date: July 11, 2022



О.	impact on public facilities. The proposed conditions impacts on public facilities and services, inclusions, police, fire and EMS facilities. Consistent Inconsistent	uding roads, potable w	_
	_		
7.	. Health, safety, and welfare. The proposed safety, or welfare of the residents of the Tow ✓ Consistent □ Inconsis	n or its ETJ.	i) District use's effect on the health,:
8.	. Detrimental to adjacent properties. Whet substantially detrimental to adjacent propert ✓ Consistent ☐ Inconsis	ies.	
9.	Not constitute nuisance or hazard. Whether to a nuisance or hazard due to traffic impact or the Conditional Zoning (CZ) District use. ✓ Consistent □ Inconsis	noise, or because of the	<u> </u>
10.	 Other relevant standards of this Ordinance. complies with all standards imposed on it be layout, and general development characteriss ✓ Consistent	y all other applicable tics.	
			-

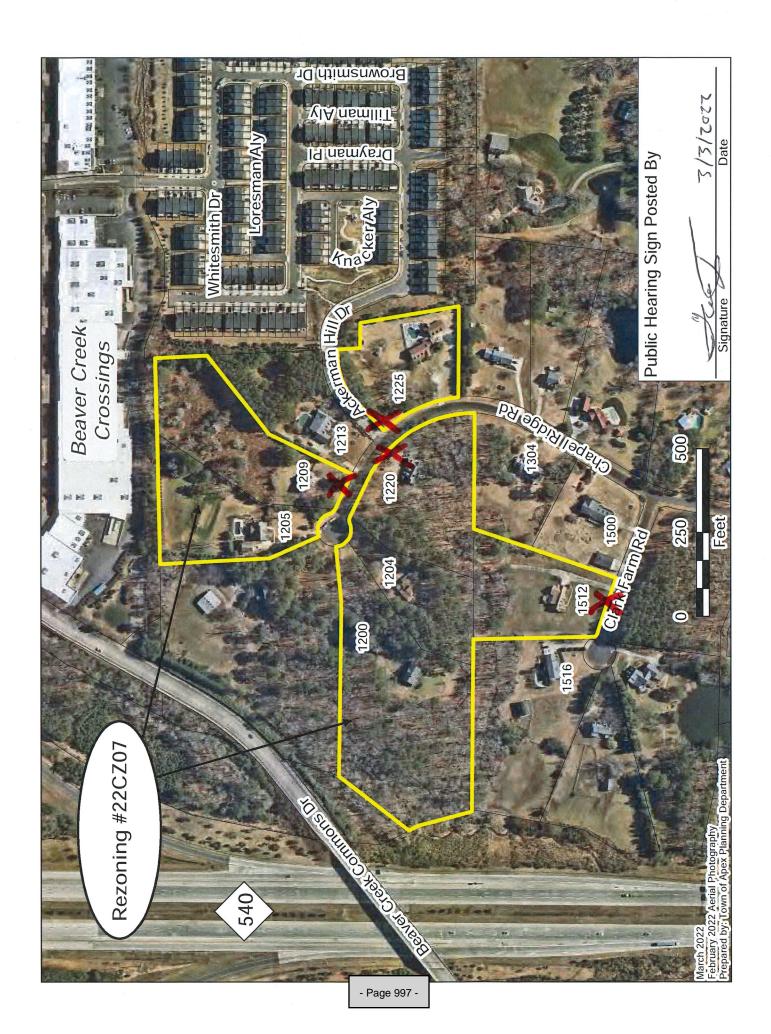
Rezoning Case: 22CZ07 Chapel Ridge North PUD

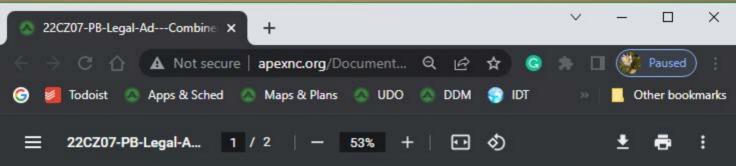
Planning Board Meeting Date: July 11, 2022



Planning Board Recommendation:

Motion: To recommend approval with conditions as presented.								
Introduced by Planning Board member: <u>Keith Braswell</u>								
S	seconded by Planning Board member:	Mark Steele						
_	Approval: the project is consistent with all applicable officially adopted plans and the applicable legislative considerations listed above.							
	Approval with conditions: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above, so the following conditions are recommended to be included in the project in order to make it fully consistent:							
Conditions as presented.								
_	Denial: the project is not consistent with all applicable officially adopted plans and/or the applicable legislative considerations as noted above.							
	With _4 _ Planning Board Member(s) voting "aye"							
	With 2 Planning Board Member(s) voting "no"							
	vvitil _2_ Flatilling board ivietiber(s) voting the							
F	Reasons for dissenting votes:							
Sa	Tina Sherman - lack of cohesion and lack of communication on the Town's part. Sarah Soh - agree with Tina, plus insufficient space in schools and incompatible architectural context and scale.							
This report reflects the recommendation of the Planning Board, this the 11th day of July 2022.								
Attest:								
1	Megul 19		Dianne Khin Digitally signed by Dianne Khin Date: 2022.07.11 20:44:09					
Reginald Skinner, Planning Board Chair		Dianne Khin, Director of Planning and Community Development						







POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ07 Chapel Ridge North PUD

Pursuant to the provisions of North Carolina General Statutes \$1600-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: High Street District Development, Inc.

Authorized Agent: Joshua Dix

Property Addresses: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm Rd

Acreage: ±20.62 acres

Property Identification Numbers (PINs): 0732340602, 0732347912, 0732343920, 0732354594, 0732352538, 0732249869, & 0732256180.

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: High Density Residential

Existing Zoning of Properties: Rural Residential

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2rd Floor

73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: July 11, 2022 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.youtube.com/c/townofapexgov. It is not supplied to the property of the supplied of the property o

If you are unable to attend, you may provide a written statement by email to <u>public hearing@apexnc.org</u>, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Planning Board meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCSS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube Resetteam at https://www.youtube.com/c/townofapessory.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



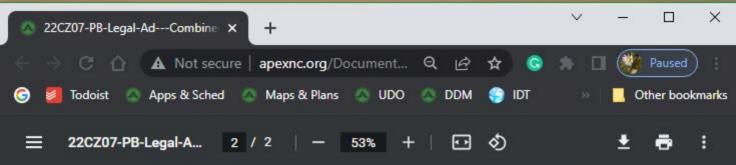
Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.releighte.com/maps.
The 2045 Land Use Map may be viewed online at https://maps.releighte.com/maps.com/DocumentCenterAdew/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: <a href="https://maps.gov/pnc/maps.com/pnc/map

Dianne F. Khin, AICP

tor of Planning and Community Development

- Page 998 -







PO BOX 250 APEX, NORTH CAROLINA 27500 TELÉFOND 919-349-3406

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ07 Chapel Ridge North PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §1600-602 y con la Sección 2.2.11 de la Ordenana de Descripción (UDO) del ayuntamiento de Apax, por la presente se notifican las audiencias públicas ante la junta de Planificación de Apax. El propósito de estas sudiencias es considerar lo siguiente:

Solicitante: High Street District Development, Inc.

Agente autorizado: Joshua Dix

Dirección de las propiedades: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd, and 1512 Clark Farm Rd Superficie: ±20.62 acres

Números de identificación de las propiedades: 0732340602, 0732347912, 0732343920, 0732354594, 0732352538, 0732249869, & 0732356180.

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a: High Density Residential

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Câmara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 11 de julio de 2022 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofagexggy. Por favor visite www.agewnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a <u>public.hearing@apennc.org</u>, o presentaria a la secretaria de la junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos dias hábiles antes de la votación de la junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la junta de Planificación antes de la votación. No obide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión de la Junta de Planificación se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estátutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniónes virtuales se pueden según en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/bownet/apexagou.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propiesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios osbre la solicituda stravés de los medios especificados anterioriemente. La ubicación de la propiedad también puede verse aquí: https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso Territorial para 2045 aquí: www.apoenc.org/Document/center/Nices/178. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3425. Puede ver la solicitud y otros documentos relacionados aquí: https://mare.apoenc.org/DocumentCenter/Nices/18523.

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de Planificación y Desarrollo Comunitario

9)

cido: 24 de junio - 45 de julio de 3



POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ07 Chapel Ridge North PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Planning Board of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: High Street District Development, Inc.

Authorized Agent: Joshua Dix

Property Addresses: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm Rd

Acreage: ±20.62 acres

Property Identification Numbers (PINs): 0732340602, 0732347912, 0732343920, 0732354594, 0732352538,

0732249869, & 0732256180.

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: High Density Residential

Existing Zoning of Properties: Rural Residential

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Planning Board Public Hearing Date and Time: July 11, 2022 4:30 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the clerk of the Planning Board, Jeri Pederson (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Planning Board vote. You must provide your name and address for the record. The written statements will be delivered to the Planning Board prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Planning Board meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

A separate notice of the Town Council public hearing on this project will be mailed and posted in order to comply with State public notice requirements.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at https://www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/38521

Dianne F. Khin, AICP
Director of Planning and Community Development

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APEX, NORTH CAROLINA 27502 TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ07 Chapel Ridge North PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante la Junta de Planificación de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: High Street District Development, Inc.

Agente autorizado: Joshua Dix

Dirección de las propiedades: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd, and 1512 Clark Farm Rd

Superficie: ±20.62 acres

Números de identificación de las propiedades: 0732340602, 0732347912, 0732343920, 0732354594, 0732352538,

0732249869, & 0732256180.

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:

High Density Residential

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Fecha y hora de la audiencia pública de la Junta de Planificación: 11 de julio de 2022 4:30 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la secretaría de la Junta de Planificación, Jeri Pederson (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación de la Junta de Planificación. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán a la Junta de Planificación antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión de la Junta de Planificación se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

De conformidad con los requisitos estatales de notificaciones públicas, se enviará por correo y se publicará por separado una notificación de la audiencia pública del Consejo Municipal sobre este proyecto.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede Puede ver el https://maps.raleighnc.gov/imaps. Mapa de Uso Territorial aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/38521

Dianne F. Khin, AICP

Directora de Planificación y Desarrollo Comunitario

Fechas de publicación: 24 de junio - 11 de julio de 2022



POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ07

Chapel Ridge North PUD

Project Location:

1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm

Rd

Applicant or Authorized Agent:

Joshua Dix

Firm:

High Street District Development, Inc.

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on June 24, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

6/27/2022

Director of Planning and Community Development

STATE OF NORTH CAROLINA **COUNTY OF WAKE**

Sworn and subscribed before me, $\frac{\textit{Jeri Chastain Pederson}}{\textit{County, this the}}$, a Notary Public for the above $\frac{\textit{27}}{\textit{day of }}$ day of $\frac{\textit{202 2}}{\textit{202 2}}$.

JERI CHASTAIN PEDERSON Notary Public Wake County, North Carolina My Commission Expires March 10, 2024

My Commission Expires: 3 / 10 / 2024





A UDO







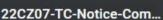






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TOWN OF APEX

BOST OFFICE BOY 350 APEX NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22C707 Chapel Ridge North PUD

Pursuant to the provisions of North Carolina General Statutes \$1600-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: High Street District Development, Inc.

Authorized Agent: Joshua Dix

Property Addresses: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm Rd

Acreage: ±20.62 acres

Property Identification Numbers (PINs): 0732340602, 0732347912, 0732343920, 0732354594, 0732352538, 0732249869, & 0732256180.

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: High Density Residential

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Town Council meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.voutube.com/c/townofapexgov.

Vicinity Man



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps The 2045 Land Use Map may be viewed online at www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.or

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Planning and Community Development





PO BOX 250 APEX, NORTH CAROLINA 27502 TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ07 Chapel Ridge North PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §1600-602 y con la Sección 2.2.11 de la Ordenanza de Desarriollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: High Street District Development, Inc.

Agente autorizado: Joshua Dix

Dirección de las propiedades: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd, and 1512 Clark Farm Rd Superficie: ±20.62 acres

Números de identificación de las propiedades: 0732340602, 0732347912, 0732343920, 0732354594, 0732352538, 0732249869, & 0732256180.

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a: High Density Residential

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-CZ)

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la hunta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio de 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofaspegov. Por favor visite www.apenc.org dia de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a <u>public hearing@apexnc.org</u>, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS \$166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniónes virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/YouMogaesegov.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede verse aquí: https://maps.noleipine.gov/maps.

Puede ver el Mapa de Uso Territorial para 2045 aquí: yeava.apenc.org/focumentEcnter/levelAZS. Si tene preguntas o desse abotener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.acoenc.org/focumentos

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, AICP fanificación y Desarrollo Comunitario

TOWN OF APEX POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

PUBLIC NOTIFICATION OF PUBLIC HEARINGS

CONDITIONAL ZONING #22CZ07
Chapel Ridge North PUD

Pursuant to the provisions of North Carolina General Statutes §160D-602 and to the Town of Apex Unified Development Ordinance (UDO) Section 2.2.11, notice is hereby given of public hearings before the Town Council of the Town of Apex. The purpose of these hearings is to consider the following:

Applicant: High Street District Development, Inc.

Authorized Agent: Joshua Dix

Property Addresses: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm Rd

Acreage: ±20.62 acres

Property Identification Numbers (PINs): 0732340602, 0732347912, 0732343920, 0732354594, 0732352538,

0732249869, & 0732256180.

Current 2045 Land Use Map Designation: Medium Density Residential

If rezoned as proposed, the 2045 Land Use Map Designation will change to: High Density Residential

Existing Zoning of Properties: Rural Residential (RR)

Proposed Zoning of Properties: Planned Unit Development-Conditional Zoning (PUD-CZ)

Public Hearing Location: Apex Town Hall

Council Chamber, 2nd Floor

73 Hunter Street, Apex, North Carolina

Comments received prior to the Planning Board public hearing will not be provided to the Town Council. Separate comments for the Town Council public hearing must be provided by the deadline specified below.

Town Council Public Hearing Date and Time: July 26, 2022 6:00 PM

You may attend the meeting in person or view the meeting through the Town's YouTube livestream at: https://www.youtube.com/c/townofapexgov. Please visit www.apexnc.org on the day of the meeting to confirm whether the meeting will be held in-person or remotely.

If you are unable to attend, you may provide a written statement by email to public.hearing@apexnc.org, or submit it to the Office of the Town Clerk (73 Hunter Street or USPS mail - P.O. Box 250, Apex, NC 27502), at least two business days prior to the Town Council vote. You must provide your name and address for the record. The written statements will be delivered to the Town Council members prior to their vote. Please include the Public Hearing name in the subject line.

In the event that the Town Council meeting is held remotely or with at least one member attending virtually, written comments may be submitted up to 24 hours prior to the scheduled time of the meeting per NCGS §166A-19.24 according to the methods specified above. Virtual meetings may be viewed via the Town's YouTube livestream at https://www.youtube.com/c/townofapexgov.

Vicinity Map:



Property owners, tenants, and neighborhood associations within 300 feet of the proposed conditional zoning have been sent this notice via first class mail. All interested parties may submit comments with respect to the application by the means specified above. In addition to the above map, the location of the property may be viewed online at https://maps.raleighnc.gov/imaps. The 2045 Land Use Map may be viewed online at https://www.apexnc.org/DocumentCenter/View/478. You may call 919-249-3426, Department of Planning and Community Development, with questions or for further information. To view the petition and related documents on-line: https://www.apexnc.org/DocumentCenter/View/38521

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Dianne F. Khin, AICP
Director of Planning and Community Development

Published Dates: July 1-July 26, 2022

APEX, NORTH CAROLINA 27502 TELÉFONO 919-249-3426

NOTIFICACIÓN PÚBLICA DE AUDIENCIAS PÚBLICAS

ORDENAMIENTO TERRITORIAL CONDICIONAL #22CZ07 Chapel Ridge North PUD (Desarrollo de Unidad Planificada)

De conformidad con las disposiciones de los Estatutos Generales de Carolina del Norte §160D-602 y con la Sección 2.2.11 de la Ordenanza de Desarrollo Unificado (UDO) del ayuntamiento de Apex, por la presente se notifican las audiencias públicas ante el Consejo Municipal del Ayuntamiento de Apex. El propósito de estas audiencias es considerar lo siguiente:

Solicitante: High Street District Development, Inc.

Agente autorizado: Joshua Dix

Dirección de las propiedades: 1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd, and 1512 Clark Farm Rd

Superficie: ±20.62 acres

Números de identificación de las propiedades: 0732340602, 0732347912, 0732343920, 0732354594, 0732352538,

0732249869. & 0732256180.

Designación actual en el Mapa de Uso Territorial para 2045: Medium Density Residential

Si se aprueba el cambio de zonificación como se propone, el Mapa de Uso Territorial para el 2045 cambiará a:

High Density Residential

Ordenamiento territorial existente de las propiedades: Rural Residential (RR)

Ordenamiento territorial propuesto para las propiedades: Planned Unit Development-Conditional Zoning (PUD-

Lugar de la audiencia pública: Ayuntamiento de Apex

Cámara del Consejo, 2º piso

73 Hunter Street, Apex, Carolina del Norte

Los comentarios recibidos antes de la audiencia pública de la Junta de Planificación no se proporcionarán al Consejo Municipal. Los comentarios para la audiencia pública del Consejo Municipal deben presentarse por separado en el plazo especificado a continuación.

Fecha y hora de la audiencia pública del Consejo Municipal: 26 de julio de 2022 6:00 P.M.

Puede asistir a la reunión de manera presencial o seguir la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov. Por favor visite www.apexnc.org el día de la reunión para confirmar si la reunión se llevará a cabo de manera presencial o remotamente.

Si no puede asistir, puede enviar una declaración escrita por correo electrónico a public.hearing@apexnc.org, o presentarla a la oficina del Secretario Municipal (73 Hunter Street o por correo USPS a P.O. Box 250, Apex, NC 27502), al menos dos días hábiles antes de la votación del Consejo Municipal. Debe proporcionar su nombre y dirección para que conste en el registro. Las declaraciones escritas se entregarán al Consejo Municipal antes de la votación. No olvide incluir el nombre de la audiencia pública en el asunto.

En caso de que la reunión del Consejo Municipal se lleve a cabo remotamente o que por lo menos uno de los miembros asista virtualmente, se permite presentar comentarios por escrito hasta 24 horas antes de la hora programada de la reunión según los estatutos de Carolina del Norte NCGS §166A-19.24 siguiendo los métodos especificados anteriormente. Las reuniones virtuales se pueden seguir en la transmisión en directo por YouTube a través del siguiente enlace: https://www.youtube.com/c/townofapexgov.

Mapa de las inmediaciones:



Los propietarios, inquilinos y asociaciones de vecinos en un radio de 300 pies del Ordenamiento Territorial Condicional propuesto han recibido esta notificación por correo postal de primera clase. Todas las partes interesadas pueden presentar comentarios sobre la solicitud a través de los medios especificados anteriormente. La ubicación de la propiedad también puede https://maps.raleighnc.gov/imaps. Puede ver el Mapa de Uso aquí: www.apexnc.org/DocumentCenter/View/478. Si tiene preguntas o desea obtener más información, puede comunicarse con el Departamento de Planificación y Desarrollo Comunitario al 919-249-3426. Puede ver la solicitud y otros documentos relacionados aquí: https://www.apexnc.org/DocumentCenter/View/38521

> Dianne F. Khin, AICP Directora de Planificación y Desarrollo Comunitario

Fechas de publicación: 1 de julio - 26 de julio de 2022



POST OFFICE BOX 250 APEX, NORTH CAROLINA 27502 PHONE 919-249-3426

AFFIDAVIT CERTIFYING Public Notification – Written (Mailed) Notice

Section 2.2.11

Town of Apex Unified Development Ordinance

Project Name:

Conditional Zoning #22CZ07

Chapel Ridge North PUD

Project Location:

1200, 1204, 1205, 1209, 1220, 1225 Chapel Ridge Rd and 1512 Clark Farm

Rd

Applicant or Authorized Agent:

Joshua Dix

Firm:

High Street District Development, Inc.

This is to certify that I, as Director of Planning and Community Development, mailed or caused to have mailed by first class postage for the above mentioned project on July 1, 2022, a notice containing the time and place, location, nature and scope of the application, where additional information may be obtained, and the opportunity for interested parties to be heard, to the property owners and tenants within 300' of the land subject to notification. I further certify that I relied on information from the Wake County Tax Assessor and the Town of Apex Master Address Repository provided to me by Town of Apex GIS Staff as to accuracy of the list and accuracy of mailing addresses of property owners and tenants within 300' of the land subject to notification.

7 7 2000

STATE OF NORTH CAROLINA COUNTY OF WAKE

Sworn and subscribed before me,

Jeri Chastain Pederson, a Notary Public for the above

State and County, this the

7 day of July , 202 2

JERI CHASTAIN PEDERSON Notary Public Wake County, North Carolina My Commission Expires

March 10, 2024

My Commission Expires: 3 / 10 / 2024

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Student Assignment

5625 Dillard Drive Cary, NC, 27518

Email: studentassignment@wcpss.net

April 13, 2022

Dianne Khin, AICP
Director, Department of Planning and Community Development
Town of Apex
Dianne.Khin@apexnc.org

Dear Dianne,

The Wake County Public School System (WCPSS) Office of School Assignment received information about a proposed rezoning/development within the Town of Apex planning area. We are providing this letter to share information about WCPSS's capacity related to the proposal. The following information about the proposed rezoning/development was provided through the Wake County Residential Development Notification database:

- Date of application: March 1, 2022
- Name of development: 22CZo7 Chapel Ridge Apartments PUD
- Address of rezoning: 1200, 1204, 1205, 1209, 1220, & 1225 Chapel Ridge Rd; 1512 Clark Farm Rd
- Total number of proposed residential units: 370
- Type(s) of residential units proposed: Apartments

Based on the information received at the time of application, the Office of School Assignment is providing the following assessment of possible impacts to the Wake County Public School System:

	Schools at <u>all</u> grade levels within the current assignment area for the proposed rezoning/development are anticipated to have <u>sufficient</u> capacity for future students.								
\square	Schools at the following grade levels within the current assignment area for the proposed rezoning/development are anticipated to have insufficient capacity for future students; transportation to schools outside of the current assignment area should be anticipated:								
	abla	Elementary		Middle	abla	High			
The following mitigation of capacity concerns due to school construction or expansion is anticipated:									
	Not applicable - existing school capacity is anticipated to be sufficient.								
	School expansion or construction within the next five years is not anticipated to address concerns								
\square	School expansion or construction within the next five years may address concerns at these grade levels:								
	✓	Elementary		Middle	~	High			
Thank you for sharing this information with the Town of Apex Planning Board and Town Council as they consider the proposed rezoning/development.									

Sincerely, Glenn Carrozza tel: (919) 431-7333

fax: (919) 694-7753

| Agenda Item | cover sheet

for consideration by the Apex Town Council

Item Type: CLOSED SESSION

Meeting Date: July 26, 2022

Item Details _____

Presenter(s): Laurie Hohe, Town Attorney

Department(s): Legal

Requested Motion

Possible motion to go into closed session pursuant to NCGS 143-318.11(a)(3) to consult with the Town Attorney in order to preserve the attorney-client privilege.

Approval Recommended?

Yes

<u>Item Details</u>

N/A

Attachments

N/A

