

"Attachment B"

CHAPEL RIDGE TOWNS

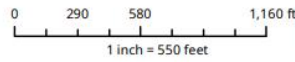
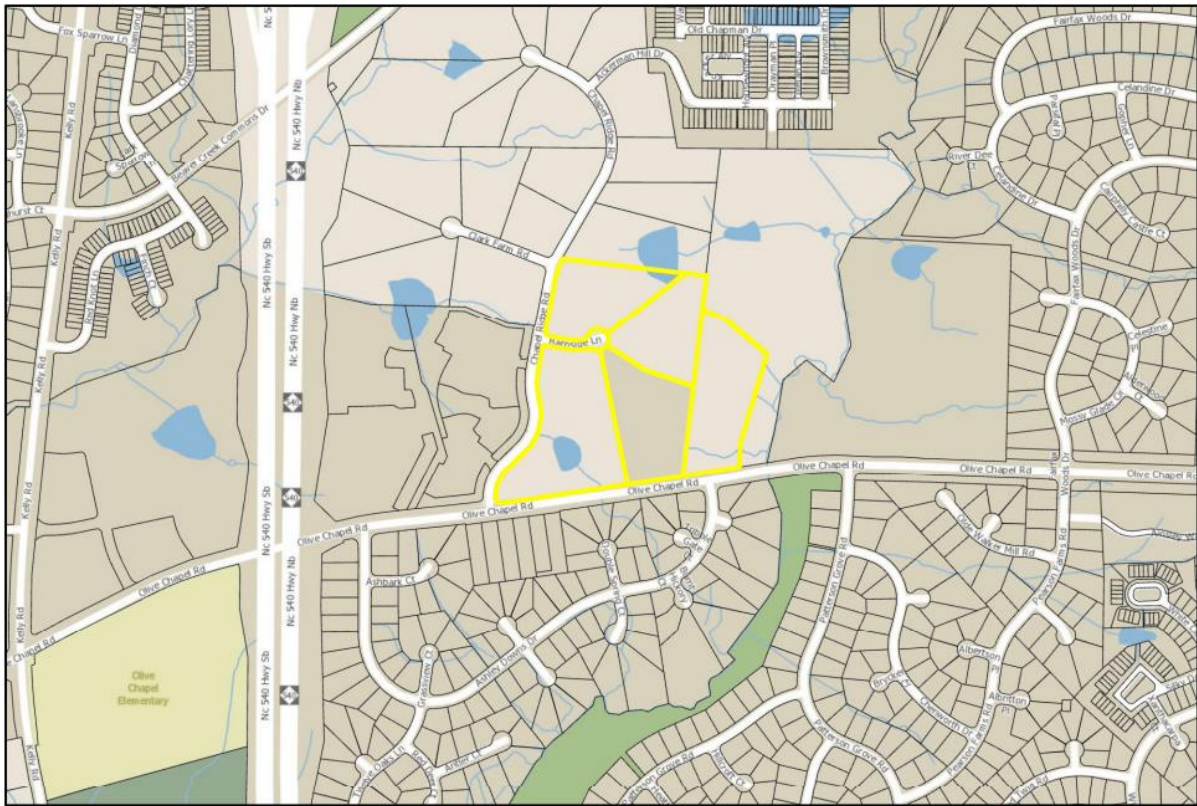
PLANNED UNIT DEVELOPMENT

December 1, 2021
Updated March 15, 2022

CONTENTS

VICINITY MAP	2
PROJECT INFORMATION	3
LIST OF USES.....	4
PURPOSE STATEMENT	4
DESIGN CONTROLS.....	6
Intensity and Density	6
Perimeter Buffers.....	6
Additional Buffer Conditions for West Buffer Along Chapel Ridge Road	6
ARCHITECTURAL CONTROLS	7
SIGNAGE.....	7
PARKING.....	7
ENVIRONMENTAL ADVISORY BOARD RECOMMENDATIONS	7
NATURAL RESOURCE AND ENVIRONMENTAL DATA.....	8
Watershed.....	8
FEMA Floodplain.....	8
Resource Conservation Area.....	8
Tree Replanting.....	8
STORMWATER MANAGEMENT REQUIREMENTS.....	9
PARKS, RECREATION AND CULTURAL ADVISORY COMMISSION	9
PUBLIC FACILITIES REQUIREMENTS	9
Sanitary Sewer Service.....	9
Water Service.....	9
Gas & Electric Service.....	9
Roadways	9
Transit	10
Pedestrian Facilities	10
PHASING PLAN	10
AFFORDABLE HOUSING.....	10
ELEVATIONS	11
CONSISTENCY WITH ADVANCE APEX, THE 2045 PLAN	11
CONSISTENCY WITH UNIFIED DEVELOPMENT ORDINANCE	11

VICINITY MAP



Disclaimer
 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.

PROJECT INFORMATION

Name of Project	Chapel Ridge Towns
PIN(s)	0732333570, 0732337537, 0732347080, 0732345135, 0732430661
Preparer Information	WithersRavenel 115 MacKenan Drive, Cary, NC 27511 Phone: 919.469.3340 Fax: 919.467.6008 Email: bvega@withersravenel.com bmayo@withersravenel.com Attn: Brendie Vega, AICP, CNU-A Ben Mayo, PE
Contract Purchaser	Toll Bros. Inc 900 Perimeter Park Drive, Suite B3, Morrisville, NC 27560 (919) 321-4800 Attn: Jeff Westmoreland, PLA
Attorney	Morningstar Law Group 421 Fayetteville St, Suite 530, Raleigh, NC 27601 (919)590-0371 Attn: Jason L. Barron, Partner
Traffic Consultant	Exult Engineering 304-F West Millbrook Road Raleigh, NC 27609 Attn: Lisa Lundeen, PE
Current Zoning Designation	Rural Residential (RR)
Proposed Zoning Designation	Planned Unit Development (PUD-CZ)
Current 2045 Land Use Map Designation	Medium Density Residential
Proposed 2045 Land Use Map Designation	Medium Density Residential
Area of Tracts (ac.)	21.17 Parcel Area 0.40 Barnside Lane R/W 21.57 Total Rezoning

LIST 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.

<u>Residential</u>	<u>Non-Residential</u>
Single-Family	Utility, Minor
Accessory Apartment	Park, Active
Townhouse	Park, Passive
	Greenway

PURPOSE STATEMENT

The Chapel Ridge Towns PUD meets the standards of the Town of Apex UDO Sections 2.3.4.F.1.iv-vi as follows:

- 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 are provided on all streets throughout the subdivision, as well as sidewalk that will be installed on the frontage of Chapel Ridge and Olive Chapel Road.
- Cul-de-sacs will be avoided and instead will provide connectivity in the form of connections to existing roads and provide stubs to future connection points.
- 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 non-residential uses.
- The site will be across from a proposed transit stop and is walkable to many shopping opportunities in the area.
- The PD Plan proposes architectural standards that are exceptional and provide high quality while incorporating energy saving features.

The Chapel Ridge Towns PD Plan meets the Legislative Considerations as defined in the Town of Apex UDO Sections 2.3.3.F.1-10:

- The PD 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 townhomes.
- 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. The introduction of public water and sewer to a neighborhood currently served by multiple wells and septic systems will improve the facilities on the site as well as to the adjoining parcels. Several of the existing homes contain underground propane tanks, which will be removed. Improvements made to the existing infrastructure as well as new infrastructure will improve the public facilities. 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.

DESIGN CONTROLS

Intensity and Density

Maximum Density (du/Acre)	4.7 du/acre		
Maximum Dwelling Units	100		
Maximum Height of Buildings	35 feet, 2 stories		
Setbacks, Townhome:	Front: 19' from garage to lot line and 20' from garage to back of sidewalk	Side: 0' 8' Building to Building	Rear: 5'
		Corner Side: 8'	
Setbacks, Single Family:	Front: 19' from garage to lot line and 20' from garage to back of sidewalk	Side: 5'	Rear: 10'
		Corner Side: 8'	
Amount and Percentage of Built Upon Area Allowed	70%		
Amount and Percentage of Proposed Built Upon Area (Max)	Not to exceed 65%		

Perimeter Buffers

North	20' Type A Buffer
East	20' Type B Buffer
South	30' Type B Buffer
West	20' Type B Buffer

Additional Buffer Conditions for West Buffer Along Chapel Ridge Road

- North and South of the proposed access points, the buffer will be increased to a 20' Type A Buffer. *No buffer will be provided along the Colonial Pipeline easement due to planting restrictions.
- Between the two access points, an opaque fence will be placed either along the buffer or aligned with backs of units.

ARCHITECTURAL CONTROLS

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. Entrances for units with front-facing single-car garages shall have a prominent covered porch/stoop area leading to the front door.
5. Building facades shall have horizontal relief achieved by the use of recesses and projections.
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 gables
 - Decorative gable
 - Decorative cornice
 - Column
 - Portico
 - Balcony
 - Dormer

SIGNAGE

All signage on the Chapel Ridge Towns site will comply with the requirements in Section 8.7 of the Town of Apex Unified Development Ordinance.

PARKING

The parking requirements of the Town of Apex UDO Section 8.3 will be met.

ENVIRONMENTAL ADVISORY BOARD RECOMMENDATIONS

The Environmental Advisory Board held a meeting on November 18, 2021. The following recommendations are proposed by the applicant:

1. The developer shall provide pedestrian-friendly connections to the future Beaver Creek greenway expansion and surrounding neighborhoods.
2. The developer shall include signage identifying environmentally sensitive areas to discourage pet waste and chemical use in the vicinity. A minimum of 2 signs will be provided.
3. The development shall provide diverse and abundant pollinator sources (e.g. larval host plants, nectar, pollen, berries and blooming plants) that bloom in succession from spring to fall.
4. Species shall be selected from the Design & Development Manual or otherwise approved by Planning Staff.

5. The development shall provide native species listed in the Design and Development Manual or otherwise approved by Planning Staff to increase the native diversity of hardwood trees on site. No species shall constitute more than 25% of the required plantings for each planting type (trees, shrubs, etc.).
6. All homes shall be pre-configured with conduit for a solar energy system.
7. The builder will provide EV charging outlets as an option to individual units.
8. The developer shall provide at least 2 pet stations.
9. Outdoor lighting shall be full cut off and shielded to prevent glare and light spill over to minimize impact of neighboring residential properties. LED fixtures shall be used, and the lighting temperature shall be a maximum of 3500 Kelvin.

NATURAL RESOURCE AND ENVIRONMENTAL DATA

Watershed

The properties in the PD Plan are located in the Primary Watershed Overlay District and the Beaver Creek Basin.

FEMA Floodplain

The properties are not in a 100-Year FEMA Flood Plain as shown on the existing conditions plan.

Resource Conservation Area

The Site is subject to the Resource Conservation Area requirements outlined in the Town of Apex Unified Development Ordinance.

The PUD will meet the requirements of:

8.1.2.C.1 Planned Developments. The RCA for all planned developments shall be determined by the Town Council per Sec. 2.3.4.F.1.c and per Sec. 8.1.2.C.4, 5, 6, 7, or 10 as applicable.

Development located north and east of NC 540 and outside Apex Peakway which do not meet the criteria of subsections 8.1.2.C.2, 3, or 10 and which are located north and east of NC 540 and outside existing and future Apex Peakway shall provide buffers and RCA equal to or greater than 20% of the gross site acreage per UDO Section 8.1.2.C.4.

Per UDO Section 7.2.5.B.8, if any mass grading is proposed in the single-family sections of the PUD, the following provision will apply to lot coverage area for single-family: An additional five percent (5%) Resource Conservation Area (RCA) shall be set aside. This requirement is added to the standard RCA percentage requirement found in Sec. 8.1.2.C Size of the RCA.

According to the North Carolina Historic Preservation Office's records, the subject site does not contain historic structures.

Tree Replanting

Existing deciduous trees greater than 18" in diameter (DBH), as identified in the tree survey, 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 as a street tree or as other required landscaping. Excess required tree replacement will occur in common open space areas.

STORMWATER MANAGEMENT REQUIREMENTS

This project is located within the Upper Beaver Creek basin and will be required to attenuate the 1-year, 10-year, and 25-year storms.

PARKS, RECREATION AND CULTURAL RESOURCES ADVISORY COMMISSION

The project was presented to the Parks, Recreation and Cultural Resources Advisory Commission meeting on February 23, 2022. The recommendation by the Advisory Commission is for a fee-in-lieu of dedication for single family attached units with a 2022 rate of \$2,528.25.

PUBLIC FACILITIES REQUIREMENTS

All utilities shall meet the Town of Apex Master Utility Maps.

Sanitary Sewer Service

Sewer is not directly available and will require an extension. This will flow to Beaver Creek Pump Station. A capacity study will be required at Construction Document phase.

Water Service

Water extension along the property frontage will be required. Currently there is water on Chapel Ridge that goes to Olive Chapel Professional Park.

Gas & Electric Service

Electric service currently exists on-site and will be improved.

Roadways

A Trip Generation Letter was prepared showing the proposed land use and number of units would be below the threshold for requiring a Traffic Impact Analysis, so recommended improvements are limited to development frontage and proposed access. The Site will require an internal public roadway network and privately maintained parking spaces. The transportation system shall be consistent with the Town of Apex Transportation Plan and the Town of Apex Standard Specifications and Standard Details. Frontage improvements along Olive Chapel Road and Chapel Ridge Road have been identified and will be incorporated into the design of the development, subject to approval by the Town of Apex and NCDOT.

Olive Chapel Road is identified as a 4-lane median divided thoroughfare with 6' bike lanes and 5' sidewalks on 110' ROW.

- Developer shall provide frontage improvements on Olive Chapel Road, maintaining the existing westbound through lane, widening for a 6' bike lane, constructing curb and gutter along with 5' sidewalk, and ROW dedication for half of the ultimate 110' ROW, measured 55' from centerline. The existing two way left turn lane shall be restriped as needed to serve eastbound left turns at the proposed access.
- Developer shall provide a deceleration taper at the site access on westbound Olive Chapel Road with 50' of full width deceleration lane and 50' taper.

Chapel Ridge Road is identified as a minor collector street with 5' sidewalks on 60' ROW.

- Developer shall provide frontage improvements based on a minimum 27' curb and gutter roadway with 5' sidewalk and ROW dedication a minimum of 30' from roadway centerline.

Transit

GoApex Route 1 is planned to include a bus stop at the Olive Chapel Professional Park directly across Chapel Ridge Road from this site and begin service by 2022. The Route will tie into a larger network of transit that provides ridership to downtown Raleigh and the greater Triangle. A crosswalk will be provided across the stop-controlled approach of Chapel Ridge Road at Olive Chapel Road with the addition of sidewalk along the development frontage.

Pedestrian Facilities

Sidewalks shall be provided along the property frontage on Olive Chapel Road and Chapel Ridge Road as well as both sides of all proposed subdivision streets.

PHASING PLAN

Currently the intent is to prepare the site in one phase. More details will be developed at subdivision plan.

AFFORDABLE HOUSING

Of the 100 permitted townhouse dwellings, at least two (2) residential restricted median-income affordable housing townhome 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 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 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 residential restricted median-income affordable housing townhome ownership unit concurrently at the close of escrow upon the sale of the 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 coordinate with Town staff to determine the maximum affordable housing median-income ownership initial sales prices, marketing, screening and selection process of the Affordable Housing Units.

AGE RESTRICTION

Dwellings constructed on the Property shall be age-restricted in compliance with the Fair Housing Act (42 U.S.C Sec 3601, et. seq.), and the North Carolina State Fair Housing Act (N.C. Gen. Stat. 41A-1, et seq.), such that at least 80% of the dwellings shall be occupied by at least one person aged 55 or older.

ELEVATIONS

Elevations will comply with the Architectural and Design Controls for the Chapel Ridge Towns PUD. Elevations submitted with this PD Plan are representative of what may be provided. Elevations will be customized to the site and may differ from what is shown in the PD Plan or on other Toll Bros. residential townhome products.

CONSISTENCY WITH ADVANCE APEX, THE 2045 PLAN

The PD Plan is consistent with the Advance Apex Plan and Maps as follows:

- The Apex 2045 Future Land Use Map identifies the subject parcels as Medium Density Residential.
- The Transit Plan Map dated April 27, 2021 shows the Future Apex Go Route 1 having a stop at the Olive Chapel Business Park. With close access to the transit stop, residents of this subdivision will be able to take transit locally and connect to the larger transit system.
- The Thoroughfare and Collector Street Plan Map dated March 29, 2021 identifies Chapel Ridge Road as an existing Minor collector Road, and Olive Chapel Road as a 4-Lane with Median, Widening.
- The Bicycle, Pedestrian and Equestrian Plan identifies proposed sidewalks along Chapel Ridge Road, and proposed sidewalks along this section of Olive Chapel Road.

CONSISTENCY WITH UNIFIED DEVELOPMENT ORDINANCE

The proposed development is consistent with all applicable requirements of the Town of Apex Unified Development Ordinance.

PLANNED UNIT DEVELOPMENT CHAPEL RIDGE TRACTS

TOWN OF APEX, WAKE COUNTY, NORTH CAROLINA

1ST SUBMITTAL: DECEMBER 1, 2021 2ND SUBMITTAL: JANUARY 14, 2022
3RD SUBMITTAL: MARCH 7, 2022

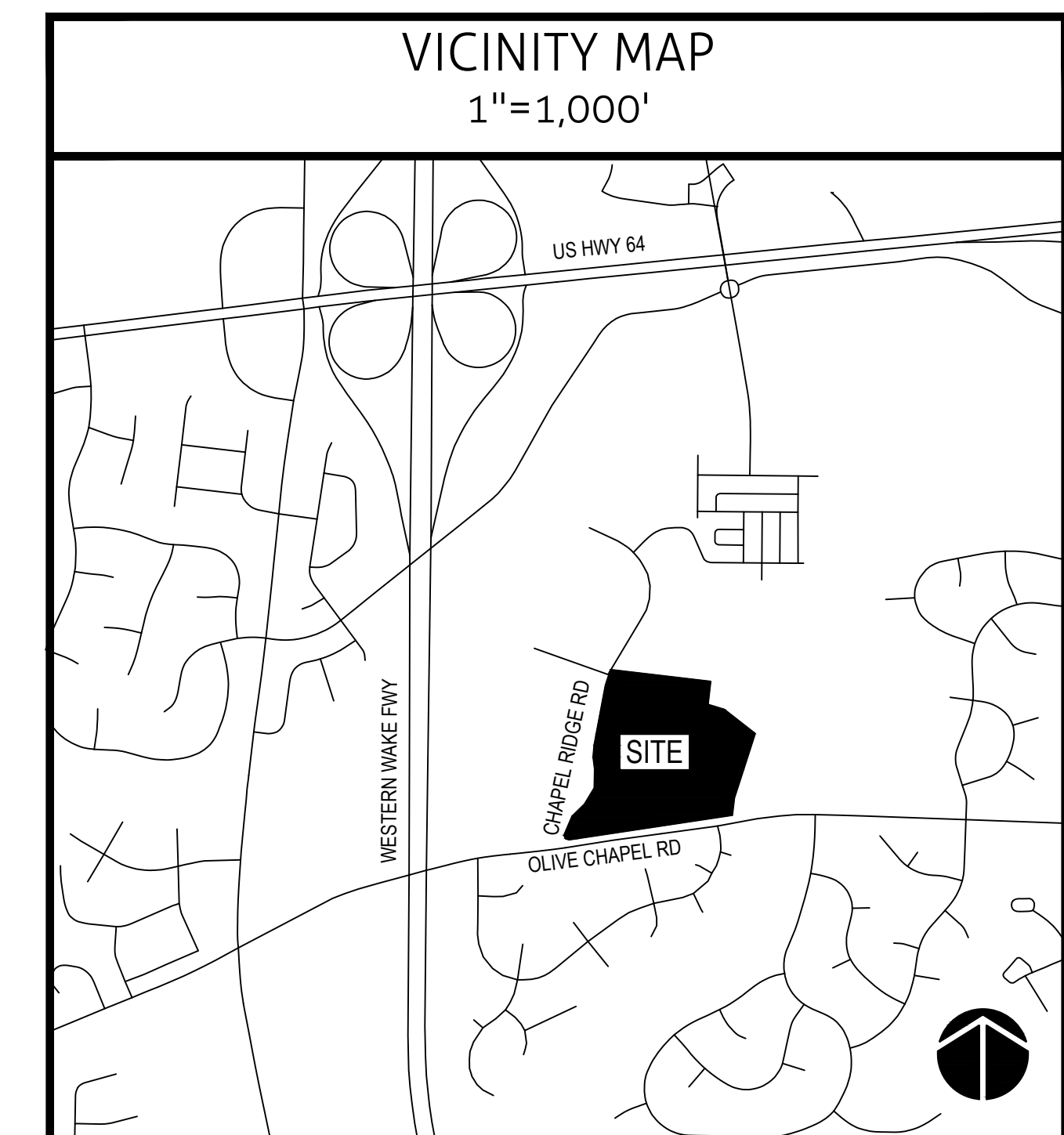
SITE DATA		
2045 LAND USE PLAN DESIGNATION	CURRENT	MEDIUM DENSITY RESIDENTIAL
	PROPOSED	NO CHANGE
ZONING	CURRENT	RURAL RESIDENTIAL (RR)
	PROPOSED	PLANNED UNIT DEVELOPMENT (PUD)
AREA OF TRACTS IN PROPOSED PUD	0732-43-0661	4.50 AC.
	0732-45-5135	3.33 AC.
	0732-34-7080	3.25 AC.
	0732-33-7537	3.99 AC.
	0732-33-3570	6.09 AC.
	BARNSIDE LANE ROW	0.40 AC.
	TOTAL =	21.57 AC.
REQUESTED SEWER CAPACITY	120 GPD * 3 BEDROOMS/TOWNHOME * 100 TOWNHOMES = 36,000 GPD	
RESIDENTIAL DENSITY	MAXIMUM	4.7 DU/ACRE
BUILDING HEIGHT	MAXIMUM	35 FT, 2 STORIES
TOWNHOUSE BUILDING SETBACKS	FRONT 19 FT* REAR 5 FT SIDE 0 FT** CORNER 8 FT	
SINGLE FAMILY BUILDING SETBACKS	FRONT 19 FT* REAR 10 FT SIDE 5 FT CORNER 8 FT	
WATERSHED	PROPERTY LOCATED WITHIN THE PRIMARY WATERSHED PROTECTION OVERLAY DISTRICT.	
HISTORIC STRUCTURES	NONE	
COMMUNITY AMENITIES	0.7 ACRE RECREATIONAL PLAY LAWN	
SITE BUFFERS	NORTH	20' TYPE A BUFFER
	EAST	20' TYPE B BUFFER
	SOUTH	30' TYPE B BUFFER
	WEST	20' TYPE B BUFFER
MAXIMUM ALLOWED IMPERVIOUS SURFACE	70%	
PROPOSED IMPERVIOUS SURFACE	65%	
*19' FROM GARAGE TO LOT LINE AND 20' FROM GARAGE TO BACK OF SIDEWALK		
**8' BUILDING TO BUILDING SETBACK		

NOTE: THE PARKS AND RECREATION ADVISORY COMMISSION VOTED TO APPROVE FEE-IN-LIEU OF PARK LAND DEDICATION ON _____, 2021. FEE-IN-LIEU AMOUNT TO BE DETERMINED AT THE TIME OF MASTER SUBDIVISION PLANS ACCORDING TO THE TOWN OF APEX FEE SCHEDULE.

ZONING CONDITIONS	
1.	DEVELOPER SHALL PROVIDE FRONTAGE IMPROVEMENTS ON OLIVE CHAPEL ROAD, MAINTAINING THE EXISTING WESTBOUND THROUGH LANE, WIDENING FOR A 6' BIKE LANE, CONSTRUCTING CURB AND GUTTER ALONG WITH 5' SIDEWALK, AND ROW DEDICATION FOR HALF OF THE ULTIMATE 110' ROW, MEASURED 55' FROM CENTERLINE. THE EXISTING TWO WAY LEFT TURN LANE SHALL BE RE-STRIPED AS NEEDED TO SERVE EASTBOUND LEFT TURNS AT THE PROPOSED ACCESS.
2.	DEVELOPER SHALL PROVIDE A DECELERATION TAPER AT THE SITE ACCESS ON WESTBOUND OLIVE CHAPEL ROAD WITH 50' OF FULL WIDTH DECELERATION LANE AND 50' TAPER.
3.	DEVELOPER SHALL PROVIDE FRONTAGE IMPROVEMENTS ON CHAPEL RIDGE ROAD BASED ON A MINIMUM 27' CURB AND GUTTER ROADWAY WITH 5' SIDEWALK AND ROW DEDICATION A MINIMUM OF 30' FROM ROADWAY CENTERLINE.



INDEX OF SHEETS	
0	COVER
1	EXISTING CONDITIONS
2	CONCEPTUAL PUD PLAN
3	CONCEPTUAL UTILITY PLAN
4	CONCEPTUAL STORM WATER PLAN



PREPARED BY:

WithersRavenel
Engineers | Planners | Surveyors

115 MacKenan Drive | Cary, NC 27511 | t: 919.469.3340 | license #: C-0832 | www.withersravenel.com

PLANNER: BRENDIE VEGA, AICP BVEGA@WITHERSRAVENEL.COM	CIVIL ENGINEER: BEN MAYO, PE BMAYO@WITHERSRAVENEL.COM
---	--

DEVELOPER

TOLL BROTHERS INC.
900 PERIMETER PARK DRIVE, SUITE B3
MORRISVILLE, NC 27560

ATTN: JEFF WESTMORELAND, PLA - LAND ENTITLEMENTS MANAGER

- NO NGS MONUMENT FOUND WITHIN 2,000 FEET OF THE SITE.
- THE FOLLOWING INFORMATION WAS USED TO OBTAIN NC GRID NAD 83 (2011), NAVD 88 (GEOID 12B) STATE PLANE COORDINATES (SPC) FOR THIS PROJECT.
 - CLASS OF SURVEY: URBAN LAND SURVEYS (CLASS A)
 - POSITIONAL ACCURACY: 0.03' (H), 0.07' (V)
 - GPS FIELD PROCEDURE: VRS
 - DATE OF SURVEY: 03/31/2021
 - DATUM/EPOCH: NAD 83 (2011), EPOCH 2010.00
 - PUBLISHED DATE/FIXED CONTROL USED: VRS, NCRD
 - GEOID MODEL: GEOID 12B
 - COMBINED GRID FACTOR: 0.99989615
 - UNITS: U.S. SURVEY FEET
 - GRID/GROUND POINT: (Y/N) 724,296.53 (X/E) 2,033,345.72
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
- ALL AREAS DERIVED BY THE COORDINATE COMPUTATION METHOD.
- PROPERTY SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD. THIS PLAT IS A CORRECT REPRESENTATION OF THE LAND PLATTED AND HAS BEEN PREPARED IN CONFORMITY WITH NORTH CAROLINA STANDARDS, G.S. 47-30, AND REQUIREMENTS OF LAW, BUT A NORTH CAROLINA LICENSED ATTORNEY-AT-LAW SHOULD BE CONSULTED REGARDING CORRECT OWNERSHIP, WIDTH, AND LOCATION OF EASEMENTS AND OTHER TITLE QUESTIONS REVEALED BY TITLE EXAMINATION.
- PORTIONS OF SUBJECT PROPERTY IS LOCATED WITHIN A FLOOD HAZARD AREA ACCORDING TO FLOOD INSURANCE RATE MAP 3720073200J DATED MAY 02, 2006.
- LOCATION OF UTILITIES, WHETHER PUBLIC OR PRIVATE, IS BASED UPON FIELD LOCATION OF VISIBLE APPURTENANCES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATION PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. WITHERSRAVENEL CANNOT ASSUME RESPONSIBILITY FOR MISIDENTIFICATION OR OMISSION OF UNDERGROUND UTILITIES.

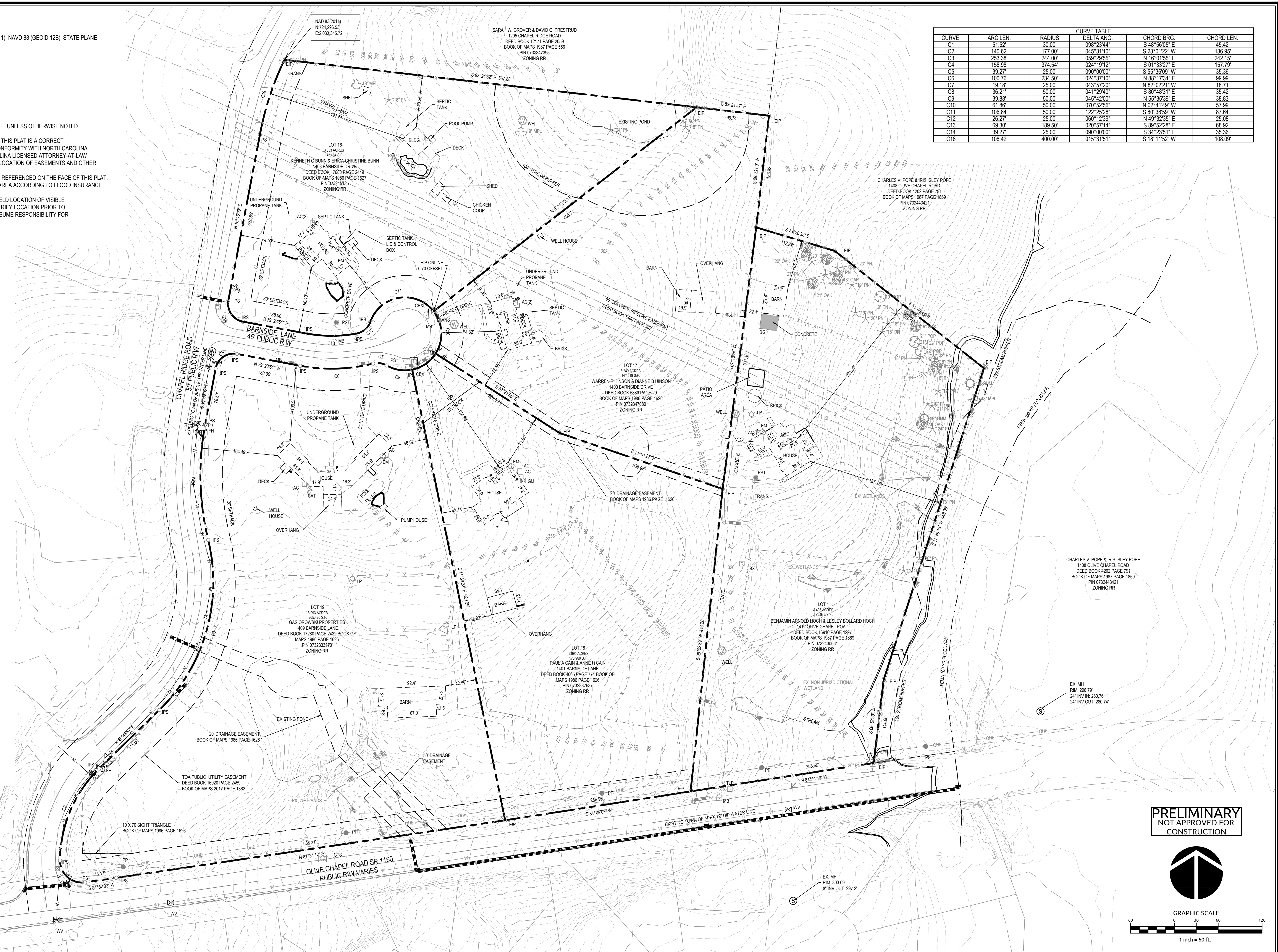
CURVE		CURVE TABLE			
CURVE	ARC LEN.	RADIUS	DELTA ANG.	CHORD BRG.	CHORD LEN.
C1	51.57'	30.00'	088°23'41"	S 48°58'05" E	45.42'
C2	140.62'	177.00'	045°31'10"	S 23°01'22" W	136.95'
C3	253.38'	244.00'	059°29'55"	N 16°01'55" E	242.15'
C4	158.98'	374.54'	024°19'12"	S 01°33'27" E	157.79'
C5	39.27'	25.00'	090°00'00"	S 55°36'09" W	35.36'
C6	100.76'	234.50'	024°37'10"	N 89°11'34" E	99.99'
C7	19.18'	25.00'	043°57'20"	N 82°02'21" W	18.71'
C8	36.21'	50.00'	041°29'40"	S 80°48'31" E	35.42'
C9	39.88'	50.00'	045°42'00"	N 55°36'39" E	38.83'
C10	61.86'	50.00'	070°52'56"	N 02°41'49" W	57.99'
C11	105.84'	50.00'	122°25'28"	S 90°38'59" W	87.64'
C12	28.27'	25.00'	060°12'39"	N 49°33'25" E	25.08'
C13	69.30'	189.50'	020°57'14"	S 89°52'28" E	68.92'
C14	38.27'	25.00'	090°00'00"	S 34°23'51" W	35.36'
C16	108.42'	400.00'	015°31'51"	S 18°11'52" W	108.09'

LINETYPES	
PROPERTY LINE	---
ADJOINER LINE	---
OVERHEAD ELECTRIC	---OHE---
GAS LINE	---G---
FLOOD LINE	---
BUFFER	---
WATER LINE	---W---
EASEMENT	---
GRAVEL	---
WETLANDS	---
STORM DRAIN	---

LEGEND	
EXISTING IRON PIPE	○ EIP
IRON PIPE SET	○ IPS
SIGN	⊠
CLEANOUT	⊙
SEWER MANHOLE	⊙ SSMH
CATCH BASIN	⊙ CB
DROP INLET	⊙
FLARED END SECTION	⊙
WATER SPIGOT	⊙ SPG
TELEPHONE PEDESTAL	⊙ TLP
CATV BOX	⊙ CBX
GAS VALVE	⊙
WELL	⊙ WELL
FIRE HYDRANT	⊙
FIBER OPTIC MARKER	⊙
WATER MANHOLE	⊙ WMH
BASKETBALL GOAL	⊙
SATELLITE DISH	⊙ SAT
AIR CONDITION UNIT	⊙ AC
POWER POLE	⊙ PP
LIGHT POLE	⊙ LP
TRANSFORMER	⊙ TRANS
UNDERGROUND TELEPHONE BOX	⊙
MAILBOX	⊙ MB
WATER VALVE	⊙

EXISTING CONDITION NOTES:

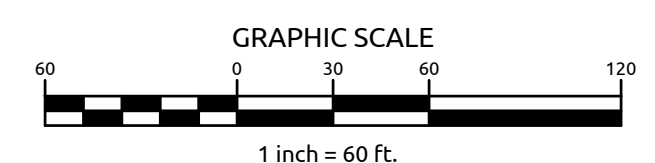
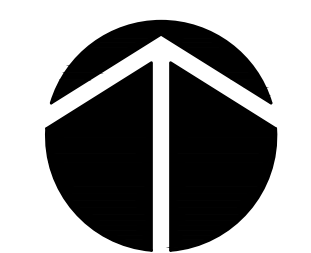
- TOPOGRAPHIC AND UTILITY INFORMATION BASED ON SURVEY BY WITHERSRAVENEL DATED 4/13/2021. PRELIMINARY BOUNDARY SURVEY PREPARED BY WITHERSRAVENEL DATED 4/13/21.
- WETLAND/STREAM INFORMATION BASED ON EVALUATION BY WITHERSRAVENEL DATED 4/27/21. BUFFERS BASED ON TOWN OF APEX STREAM BUFFER DETERMINATION (APEX #20-011).
- REGULATORY FEMA MAPPED FLOODPLAIN EXISTS ON SITE PER FIRM MAP #3720073200J (5/2/06).
- THE SUBJECT PROPERTY IS LOCATED WITHIN THE TOWN OF APEX PRIMARY WATERSHED PROTECTION OVERLAY DISTRICT.
- TREE INFORMATION BASED ON SURVEY BY WITHERSRAVENEL DATED 4/13/21.
- ALL EXISTING STRUCTURES ON THE SUBJECT PROPERTY SHALL BE REMOVED PER TOWN OF APEX STANDARDS AND REQUIREMENTS.



CHARLES V. POPE & IRIS ISLEY POPE
1408 OLIVE CHAPEL ROAD
DEED BOOK 4202 PAGE 791
BOOK OF MAPS 1987 PAGE 1869
PIN 0732443421
ZONING RR

EX MH
RIM: 296.79'
24" INV IN: 280.76'
24" INV OUT: 280.74'

**PRELIMINARY
NOT APPROVED FOR
CONSTRUCTION**



No.	Revision	Date	By
1	REVISED PER TOWN COMMENTS	04/11/21	WR
2	REVISED PER TOWN COMMENTS	07/09/21	WR

Designer	WR	Scale	AS NOTED
Drawn By	WR	Date	04/20/2021
Checked By	WR	Job No.	02201034

CHAPEL RIDGE PUD
NORTH CAROLINA

EXISTING CONDITIONS

WithersRavenel
Engineers | Planners | Surveyors
115 MacKenan Drive | Cary, NC 27511 | t: 919.469.3340 | license #: C-0832 | www.withersravenel.com

Sheet No.
1

LEGEND

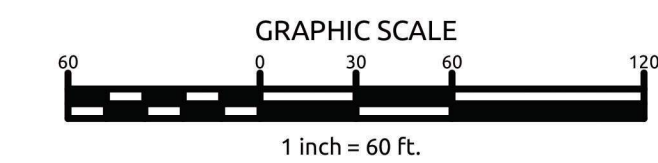
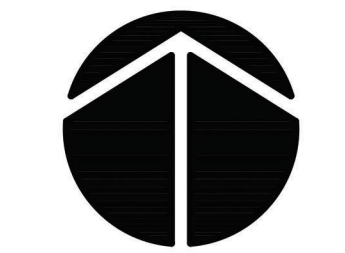
- RESIDENTIAL
- PERIMETER BUFFER
- STREETYARD BUFFER
- STREAM BUFFER
- EXISTING POND
- RIGHT OF WAY DEDICATION
- EXISTING GAS PIPELINE EASEMENT
- EXISTING DRAINAGE EASEMENT
- EXISTING WETLAND
- CONCEPTUAL SCM LOCATION

CURVE TABLE					
CURVE	ARC LEN.	RADIUS	DELTA ANG.	CHORD BRG.	CHORD LEN.
C1	51.52	30.00	098°23'44"	S 48°56'05" E	45.42
C2	140.62	177.00	045°31'10"	S 23°01'22" W	136.95
C3	253.38	244.00	059°29'55"	N 16°01'55" E	242.15
C4	158.98	374.54	024°19'12"	S 01°33'27" E	157.79
C5	39.27	25.00	090°00'00"	S 55°36'09" W	35.36
C6	100.76	234.50	024°37'10"	N 88°17'34" E	99.99
C7	19.18	25.00	043°57'20"	N 82°02'21" W	18.71
C8	36.21	50.00	041°29'40"	S 80°48'31" E	35.42
C9	39.88	50.00	045°42'00"	N 55°35'39" E	38.83
C10	61.86	50.00	070°52'58"	N 02°41'49" W	57.99
C11	108.84	50.00	122°25'28"	S 80°38'59" W	87.64
C12	26.27	25.00	060°12'39"	N 49°32'35" E	25.08
C13	69.30	189.50	020°57'14"	S 89°52'28" E	68.92
C14	39.27	25.00	090°00'00"	S 34°23'51" E	35.36
C16	108.42	400.00	015°31'51"	S 18°11'52" W	108.09

- NOTES:**
- PLAN SHEETS ARE INTENDED FOR ILLUSTRATIVE USE ONLY.
 - PER 2.3.4(F)(VI) OF THE UDO, THE PD PLAN FOR PUD-CZ SHALL DEMONSTRATE 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.
 - EXISTING PONDS WILL BE EVALUATED BY A LICENSED ENGINEER. EVALUATION RECOMMENDATIONS MAY REQUIRE A CHANGE TO SIZE, BOUNDARY OR REMOVAL OF EXISTING PONDS.
 - A 30' TYPE B SHALL BE PROVIDED IF HOMES ALONG OLIVE CHAPEL ROAD ARE NOT ALLEY LOADED.
 - THIS PROJECT IS LOCATED WITHIN THE UPPER BEAVER CREEK BASIN AND WILL BE REQUIRED TO ATTENUATE THE 1-YEAR, 10-YEAR, AND 25-YEAR STORMS.



**PRELIMINARY
NOT APPROVED FOR
CONSTRUCTION**



No.	Revision	Date	By
1			

Designer	WR	Scale	AS NOTED
Drawn By	WR	Date	12/01/2021
Checked By	WR	Job No.	02201034

CHAPEL RIDGE PUD
NORTH CAROLINA

CONCEPTUAL LAYOUT PLAN

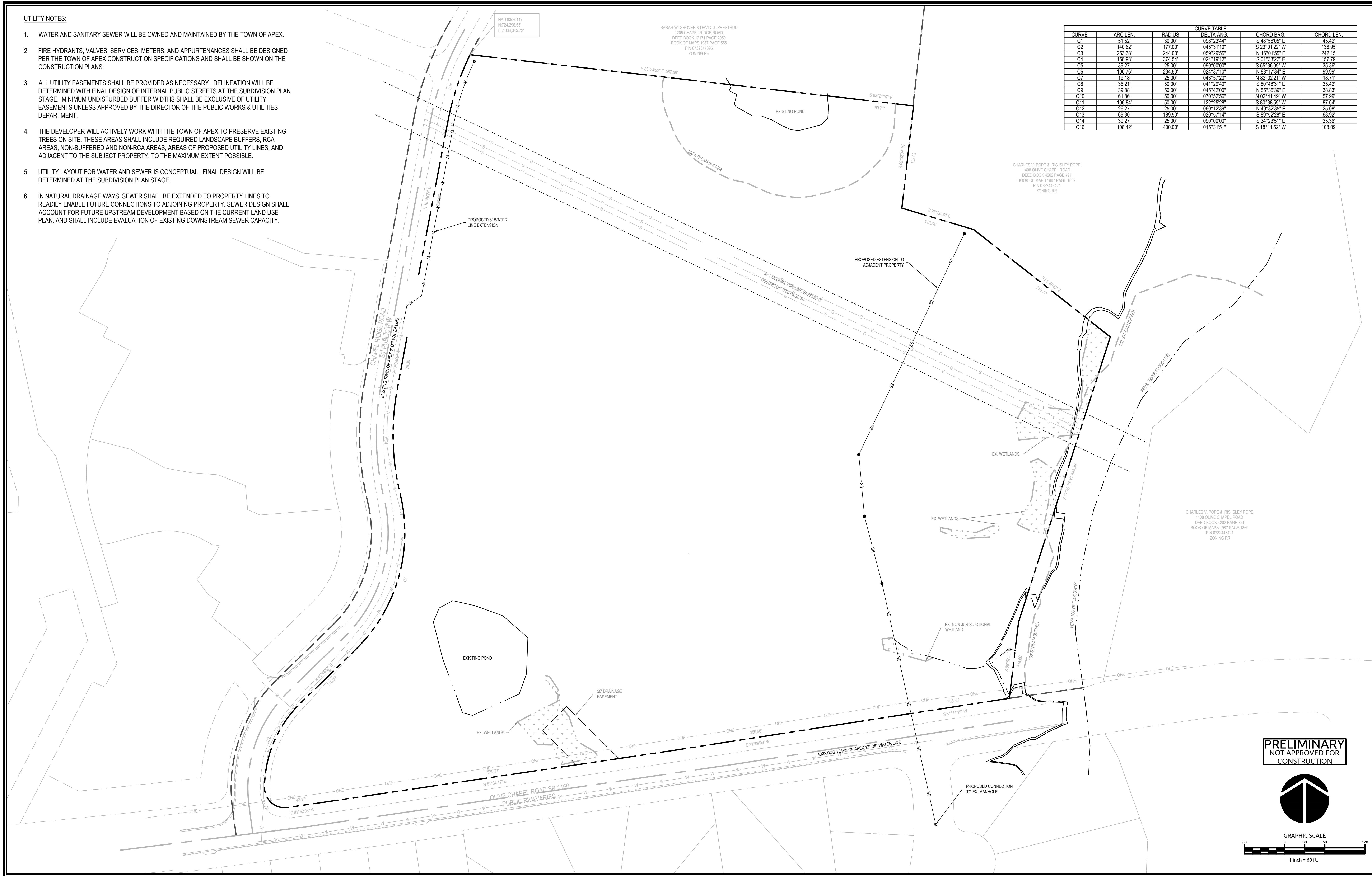
WithersRavenel
Engineers | Planners | Surveyors
115 MacKenan Drive | Cary, NC 27511 | t: 919.469.3340 | license #: C-0832 | www.withersravenel.com

Sheet No.
2

UTILITY NOTES:

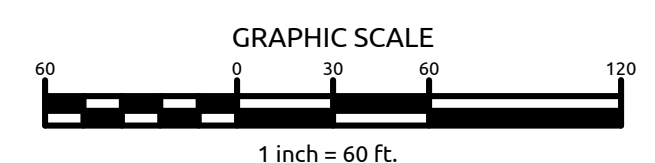
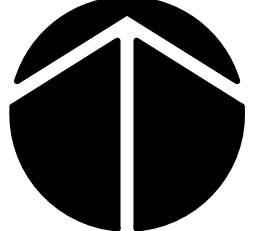
1. WATER AND SANITARY SEWER WILL BE OWNED AND MAINTAINED BY THE TOWN OF APEX.
2. FIRE HYDRANTS, VALVES, SERVICES, METERS, AND APPURTENANCES SHALL BE DESIGNED PER THE TOWN OF APEX CONSTRUCTION SPECIFICATIONS AND SHALL BE SHOWN ON THE CONSTRUCTION PLANS.
3. ALL UTILITY EASEMENTS SHALL BE PROVIDED AS NECESSARY. DELINEATION WILL BE DETERMINED WITH FINAL DESIGN OF INTERNAL PUBLIC STREETS AT THE SUBDIVISION PLAN STAGE. MINIMUM UNDISTURBED BUFFER WIDTHS SHALL BE EXCLUSIVE OF UTILITY EASEMENTS UNLESS APPROVED BY THE DIRECTOR OF THE PUBLIC WORKS & UTILITIES DEPARTMENT.
4. THE DEVELOPER WILL ACTIVELY WORK WITH THE TOWN OF APEX TO PRESERVE EXISTING TREES ON SITE. THESE AREAS SHALL INCLUDE REQUIRED LANDSCAPE BUFFERS, RCA AREAS, NON-BUFFERED AND NON-RCA AREAS, AREAS OF PROPOSED UTILITY LINES, AND ADJACENT TO THE SUBJECT PROPERTY, TO THE MAXIMUM EXTENT POSSIBLE.
5. UTILITY LAYOUT FOR WATER AND SEWER IS CONCEPTUAL. FINAL DESIGN WILL BE DETERMINED AT THE SUBDIVISION PLAN STAGE.
6. IN NATURAL DRAINAGE WAYS, SEWER SHALL BE EXTENDED TO PROPERTY LINES TO READILY ENABLE FUTURE CONNECTIONS TO ADJOINING PROPERTY. SEWER DESIGN SHALL ACCOUNT FOR FUTURE UPSTREAM DEVELOPMENT BASED ON THE CURRENT LAND USE PLAN, AND SHALL INCLUDE EVALUATION OF EXISTING DOWNSTREAM SEWER CAPACITY.

CURVE TABLE					
CURVE	ARC LEN.	RADIUS	DELTA ANG.	CHORD BRG.	CHORD LEN.
C1	51.57	30.00	098°23'44"	S 49°58'05" E	45.42'
C2	140.62	177.00	045°31'10"	S 23°01'22" W	136.95'
C3	253.38	244.00	059°29'55"	N 18°01'55" E	242.15'
C4	158.98	374.54	024°19'12"	S 01°33'27" E	157.79'
C5	39.27	25.00	090°00'00"	S 55°36'09" W	35.36'
C6	100.76	234.50	024°37'10"	N 83°11'34" E	99.99'
C7	19.18	25.00	043°57'20"	N 82°02'21" W	18.71'
C8	36.21	50.00	041°29'40"	S 80°48'31" E	35.42'
C9	39.88	50.00	045°42'00"	N 55°35'39" E	38.83'
C10	61.86	50.00	070°52'56"	N 02°41'49" W	57.99'
C11	105.84	50.00	122°25'28"	S 90°38'59" W	87.64'
C12	28.27	25.00	060°12'39"	N 49°32'35" E	25.08'
C13	69.30	189.50	020°57'14"	S 89°52'28" E	68.92'
C14	39.27	25.00	090°00'00"	S 34°23'51" E	35.36'
C16	108.42	400.00	015°31'51"	S 18°11'52" W	108.09'



CHARLES V. POPE & IRIS ISLEY POPE
 1408 OLIVE CHAPEL ROAD
 DEED BOOK 4202 PAGE 791
 BOOK OF MAPS 1887 PAGE 1869
 PIN 073243421
 ZONING RR

**PRELIMINARY
 NOT APPROVED FOR
 CONSTRUCTION**



No.	Revision	Date	By
1	REVISED PER TOWN COMMENTS	04/11/21	WR
2	REVISED PER TOWN COMMENTS	07/09/21	WR

Designer	WR	Scale	AS NOTED
Drawn By	WR	Date	04/20/2021
Checked By	WR	Job No.	02201034

CHAPEL RIDGE PUD
 NORTH CAROLINA
 APEX

CONCEPTUAL UTILITY PLAN

WithersRavenel
 Engineers | Planners | Surveyors
 115 MacKenan Drive | Cary, NC 27511 | t: 919.469.3340 | license #: C-0832 | www.withersravenel.com

K:\2020\10201034_PUD\Drawings\Sheet\A03_Conceptual_Utilities_Plan.dwg Plot Date: July 8, 2021 9:30:19 AM DWG: BKN

STORMWATER MANAGEMENT NOTES:

1. TOPOGRAPHIC AND UTILITY INFORMATION BASED ON SURVEY BY WITHERSRAVENEL DATED 4/13/2021. PRELIMINARY BOUNDARY SURVEY PREPARED BY WITHERSRAVENEL DATED 4/13/21.
2. WETLAND/STREAM INFORMATION BASED ON EVALUATION BY WITHERSRAVENEL DATED 4/27/21.
3. REGULATORY FEMA MAPPED FLOODPLAINS EXIST ON SITE PER FIRM MAP #3720073200J (5/2/06).
4. THE SUBJECT PROPERTY IS LOCATED WITHIN THE TOWN OF APEX PRIMARY WATERSHED PROTECTION OVERLAY DISTRICT.
5. STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED PER THE TOWN OF APEX STANDARDS AND REGULATIONS FOR STORMWATER QUANTITY AND QUALITY (UDO SECTION 6.1.7 B).
6. ALL APPLICABLE LOCAL AND STATE ENVIRONMENTAL PERMITS SHALL BE OBTAINED PRIOR TO START OF CONSTRUCTION.
7. STORMWATER TREATMENT WILL BE HANDLED BY INDIVIDUAL OR REGIONAL FACILITIES WITHIN THE SUBJECT PROPERTY OR ADJACENT OFF-SITE DRAINAGE EASEMENT.
8. THE POST DEVELOPMENT PEAK FLOW RATE OF ON-SITE STORMWATER WILL NOT EXCEED THE PRE-DEVELOPMENT PEAK FLOW RATE IN ACCORDANCE WITH THE UDO.
9. STORMWATER CONTROL MEASURES SHOWN ARE CONCEPTUAL IN NATURE AND WILL BE FINALIZED AT TIME OF MASTER SUBDIVISION PLAN.

NAD 83(2011)
N:724,296.53
E:2,033,345.72

SARAH W. GROVER & DAVID G. PRESTRUD
1285 CHAPEL RIDGE ROAD
DEED BOOK 12171 PAGE 2059
BOOK OF MAPS 1987 PAGE 556
PIN 073247895
ZONING RR

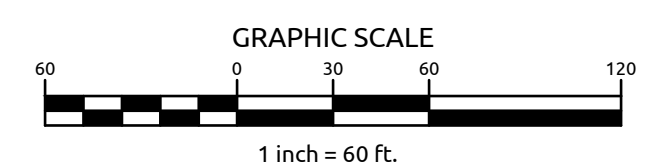
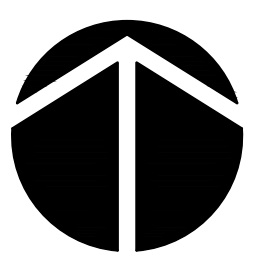
CURVE TABLE					
CURVE	ARC LEN.	RADIUS	DELTA ANG.	CHORD BRG.	CHORD LEN.
C1	51.57	30.00	098°23'44"	S 49°56'05" E	45.42'
C2	140.62	177.00	045°31'10"	S 23°01'22" W	136.95'
C3	253.38	244.00	059°29'55"	N 18°01'55" E	242.15'
C4	158.98	374.54	024°19'12"	S 01°33'27" E	157.79'
C5	39.27	25.00	090°00'00"	S 55°36'09" W	35.36'
C6	100.76	234.50	024°37'10"	N 83°17'34" E	99.99'
C7	19.18	25.00	043°57'20"	N 82°02'21" W	18.71'
C8	36.21	50.00	041°29'40"	S 80°48'31" E	35.42'
C9	39.88	50.00	045°42'00"	N 55°35'39" E	38.83'
C10	61.86	50.00	070°52'56"	N 02°41'49" W	57.99'
C11	105.84	50.00	122°25'28"	S 90°38'59" W	87.64'
C12	28.27	25.00	060°12'39"	N 49°32'35" E	25.08'
C13	69.30	189.50	020°57'14"	S 89°52'28" E	68.92'
C14	39.27	25.00	090°00'00"	S 34°23'51" W	35.36'
C16	108.42	400.00	015°31'51"	S 18°11'52" W	108.09'

CHARLES V. POPE & IRIS ISLEY POPE
1408 OLIVE CHAPEL ROAD
DEED BOOK 4202 PAGE 791
BOOK OF MAPS 1987 PAGE 1869
PIN 0732443421
ZONING RR

CHARLES V. POPE & IRIS ISLEY POPE
1408 OLIVE CHAPEL ROAD
DEED BOOK 4202 PAGE 791
BOOK OF MAPS 1987 PAGE 1869
PIN 0732443421
ZONING RR



PRELIMINARY
NOT APPROVED FOR
CONSTRUCTION



No.	Revision	Date	By
1	REVISED PER TOWN COMMENTS	04/11/21	WR
2	REVISED PER TOWN COMMENTS	07/09/21	WR

Designer	WR	Scale	AS NOTED
Drawn By	WR	Date	04/20/2021
Checked By	WR	Job No.	02201034

CHAPEL RIDGE PUD
NORTH CAROLINA

CONCEPTUAL STORMWATER PLAN

WithersRavenel
Engineers | Planners | Surveyors
115 MacKenan Drive | Cary, NC 27511 | t: 919.469.3340 | license #: C-0832 | www.withersravenel.com

Sheet No.
4

K:\2020\1020\1041\1041_SitePlan\1041_SitePlan_Consulting\Stormwater_Plan.dwg, July 8, 2021 9:38:15 AM, JAWO, BBN