

LYNDON OAKS

RMX PLANNED UNIT DEVELOPMENT

The Town of Knightdale
Case Number: ZMA-2-23
July 5, 2024



URBAN
DESIGN
PARTNERS

LANDSCAPE ARCHITECTURE + CIVIL ENGINEERING

LYNDON OAKS

RMX PLANNED UNIT DEVELOPMENT

PREPARED FOR
The Town of Knightdale

DEVELOPER
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Land Use Attorney

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Traffic Engineers

Bateman Civil Survey Company
Surveyors

Sage Ecological Services, Inc.
Environmental Consultant

SUBMITTAL DATE
July 5, 2024

URBAN DESIGN PARTNERS



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Town of Knightdale
Development Services
Gideon Smith 07/17/2024

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01



**VISION
+ INTENT**



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Community Vision

Lyndon Oaks is envisioned as a place of community. The development team believes that through **quality placemaking**, a **mix of uses**, and a **variety of housing options**, will arise a place of creativity and diversity that will reveal a vibrant and active community. Lyndon Oaks will be a community that both embraces and engages nature by providing a network of trails and open space that encourages social interactions and physical activity.



VISION



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Community Intent

Section 2.4.C. of the Town of Knightdale Unified Development Ordinance states that, “the Planned Unit Development Overlay District process **encourages creativity and innovation** in the design of developments through a master planning process that allows for flexibility from underlying zoning as approved by the Town Council.” These developments bring “**tangible benefits**” to the Town, including “exceptional amenities, outstanding environmental, landscape, architectural, or site design, or conservation of special man-made or natural features of the site.”

Lyndon Oaks meets the intent of the **Planned Unit Development Overlay District** requirements per Town of Knightdale UDO Section 12.2.G.3.g.ii.a. through the following findings:

» **Comprehensive Plan**

- Lyndon Oaks conforms to the planning policies of the Town as laid out in the KnightdaleNext2035 Comprehensive Plan. The site is designated as a Mixed-Density Neighborhood place type, in a Target Investment Area, and the planned variety of residential densities and neighborhood-serving commercial meet the Town’s future planned growth. In addition, Lyndon Oaks is a neighborhood that exemplifies many of the Guiding Principles for growth and development in Knightdale (Guiding Principles found on page 9).

» **Public Welfare**

- Lyndon Oaks is maintaining the riparian buffer that bisects the site and large existing pond to allow for maximized preservation of natural features that will be not only preserved, but amenitized through walking trails and greenways to be enjoyed by residents and the surrounding community on public greenways and sidepaths. The supply of light and air to adjacent properties will not be negatively impacted due to the tree preservation, preserved open space, and buffer plantings around the perimeter of the site. There will be no increased danger of fire to current or future residents in the area, and the public health, safety, and welfare will not only be protected but will increase through the new pedestrian and vehicular connectivity, intersection design and improvements that prioritize safety, ample behind-the-curb multi-use paths for cyclists, fountains in the SCMs to keep water aerated, and new public utilities being brought to the area.

» **Impact on Other Property**

- Lyndon Oaks is primarily a mixed-density residential community. The adjacent land uses consist of existing single family residences and vacant wooded lots. Lyndon Oaks consists of like uses and helps to provide increased connectivity and access to amenities like the greenway trail and a future neighborhood-serving commercial amenity on Bethlehem Road.

» **Impact on Public Facilities & Resources**

- Lyndon Oaks will provide adequate utilities, road access, drainage, and other necessary facilities to properly serve residents of the site. The project will dedicate a large section of the planned Widewaters Parkway extension to the Town, and plans to provide the greenway connectivity as well.

» **Archaeological, Historical, or Cultural Impact**

- Lyndon Oaks is maintaining the riparian buffer that bisects the site and large existing pond to allow for preservation of natural features on the property. No archaeological, historical, or cultural resources will be adversely impacted in the development. Lyndon Oaks will preserve and enhance existing natural resources on site for the benefit of the residents and surrounding community that utilizes the greenway.

» **Parking & Traffic**

- Lyndon Oaks is a pedestrian friendly community. The mix of housing types and rear-loaded units minimizes pedestrian-vehicular conflicts and creates a safer, more appealing streetscape. Proper sight distance triangles are also used at intersections to prevent conflicts when turning a vehicle. All street radii are adequate for emergency vehicle access. There is ample guest parking through the use of on-street parking. Traffic impacts from Lyndon Oaks have been studied and will be mitigated through TIA recommended improvements that will benefit the entire area and alleviate some existing congestion issues. Furthermore, the public roads running through the site will create additional connectivity and routes on local, multimodal streets to existing roads in the area. The public and private trails also provide a safe public pedestrian connection throughout Lyndon Oaks.

» **Appropriate Buffering**

- A 20’ Type B Buffer is proposed along the perimeter of Lyndon Oaks to provide visual and acoustical privacy between Lyndon Oaks and the surrounding neighbors. A Type B Buffer is also provided between the parking lot at the commercial parcel and Bethlehem Rd. per requirements set forth in the UDO.
- A 50’ Type D Buffer with a 6’ earthen berm and dense plantings is proposed along I-87 to provide visual and acoustical privacy between Lyndon Oaks and the adjacent interstate. The maintained riparian buffers in the center of the site will also create a buffer within the community itself to allow for a greater sense of privacy between houses and a sense of place, such that each section of the neighborhood, each home, is a stone’s throw from the natural environment and open space.

» **Performance**

- D.R. Horton is America’s largest homebuilder, and the local team that have proposed this project have a proven track record of building successful residential neighborhoods in surrounding communities, as well as in Knightdale, most recently with the Haywood Glen community. The D.R. Horton team is excited to bring a new neighborhood to the Town that reflects the Town’s plans and aligns with the Town’s and D.R. Horton’s shared vision for great neighborhoods.



02

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KNIGHTDALENEXT
2035

Comprehensive Plan Consistency

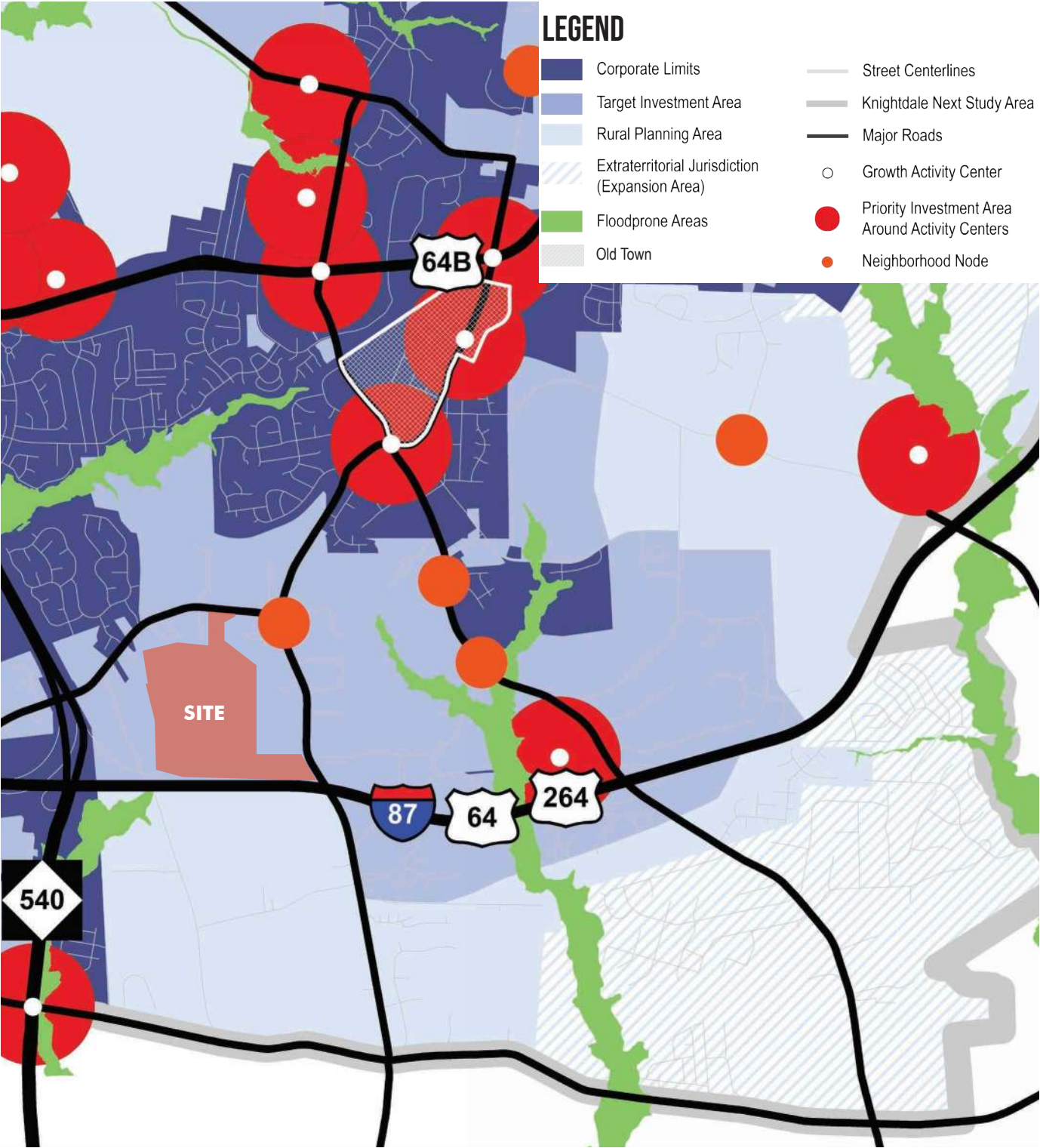


Figure 1: Growth Framework Map from KnightdaleNext2035 Comprehensive Plan

Growth Framework

This PUD request is proposing a rezoning from RT to RMX-PUD to better meet the desired outcome laid out in the KnightdaleNext2035 Comprehensive Plan.

On the Growth Framework Map, Lyndon Oaks is located near a Neighborhood Node at the intersection of Old Faison and Bethlehem Roads, and the site is within a Target Investment Area as identified in the Growth Framework Plan. Target Investment Areas are areas with existing or relatively easy potential access to water and sewer, where growth is supported, and the development will bring additional water and gravity sewer lines to this area to support continued growth and development. The plan says growth in these areas should encourage active living with a complete and comprehensive network of walkable streets in a general grid pattern. It also says that growth in these areas should be guided into more compact and efficient development patterns to justify infrastructure investments. Thus, Lyndon Oaks, which proposes compact residential growth at less than 3 units per acre and neighborhood-oriented commercial uses, in an area that will only continue to feel more growth pressure with the forthcoming I-540 extension, is supported by the Growth Framework Map.

Lyndon Oaks aligns with Knightdale’s vision of neighborhoods throughout the Town feeling a sense of connection. A public greenway trail will be added throughout the site. This aligns with the Sidepaths & Greenways Plan plan found in UDO Appendix B and incorporated into the comprehensive plan. Sidewalks and greenway trails promote pedestrian walkability and connection for the community.

The proposed plan for Lyndon Oaks provides a mix of housing types to promote a diverse and walkable community. The mixed-use community will act as a transition for residential neighborhoods while providing a community-serving commercial outparcel

KNIGHTDALENEXT 2035

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Comprehensive Plan Consistency

Comprehensive Plan - Guiding Principles

1. **Natural Environment:** Lyndon Oaks promotes and expands opportunities for community residents to enjoy Knightdale's greenways and activates the site's many streams, wetlands, and natural features by preserving them and giving residents access to enjoy those resources.
2. **Parks and Recreation:** Lyndon Oaks will provide the Town's planned pedestrian and cyclist public greenway connectivity from Old Faison Road to Bethlehem Road.
3. **Transportation:** Lyndon Oaks will provide a significant portion of the planned Widewaters Parkway extension, which will eventually provide an important connection from US-64 Business to Bethlehem Road and Crosscut Place. In addition, all of the streets in the neighborhood have been designed with multiple modes of transportation in mind—the project will provide ample bicycle and pedestrian facilities for destination - and recreation- focused trips.
4. **Compact Development Patterns:** The proposed community provides appropriate residential density and neighborhood-serving commercial in a Target Investment Area, near I-87 and I-540, which will become an even more convenient regional access route when the I-540 extension is built.
5. **Community Design:** Lyndon Oaks is a significant private investment that incorporates the distinctive elements of Knightdale. Roundabouts at intersections, strict architectural standards and commitments to beautiful and quality homes, pedestrian prioritization, preservation of open space and unique public and private recreational amenities dominate the community design.
6. **Great Neighborhoods and Expanded Home Choices:** Lyndon Oaks offers a wide variety of housing choices and lot sizes, mixed throughout the neighborhood, and not segregated to certain portions. This will provide opportunities for people and families at all ages and stages, with many different housing price-points, to find a place in this beautiful, heavily-amenitized community.



Comprehensive Plan Consistency

Growth and Conservation Map

On the Growth and Conservation Map, Lyndon Oaks is designated as a **“Mixed-Density Neighborhood.”** These are described as “subdivisions or communities with a mix of housing types and densities.” These Neighborhoods should “incorporate a comprehensive network of open space throughout to accommodate small parks, gathering places and community gardens; preserve tree stands; and help reduce stormwater runoff.”

Lyndon Oaks is consistent with this vision. The community will have a variety of housing options and price points, with six different lot sizes for single-family detached homes, both front and rear loaded, as well as three lot sizes for rear-loaded townhomes. These housing types are not segregated to their own distinct sections of the neighborhood; rather, they have been mixed in throughout the design. Beautiful gathering spaces and amenities will be programmed throughout the community, and the most sensitive natural areas will be preserved and activated.

It is also close to and will help support the planned desired land uses around the subject site. The retail and commercial amenities desired at the **“Neighborhood Node”** located at the intersection of Bethlehem and Old Faison Road will be much more viable with a new residential community so close, and the road improvements that will come with the project will help support desired development patterns in this area as well.

PLACETYPE CATEGORIES

 Preserved Open Space	 Business Office
 Rural Living	 Light Industrial
 Recreation Open Space	 Heavy Industrial
 Single Family Neighborhood	 Civic & Institutional
 Mixed-Density Neighborhood	 Old Town
 Multifamily Community	 Mixed-Use Center
 Neighborhood Node	 Mixed-Use Center (Suburban Retrofit)
 Retail	 Transit-Oriented Development (BRT)
	 Regional Mixed-Use Center

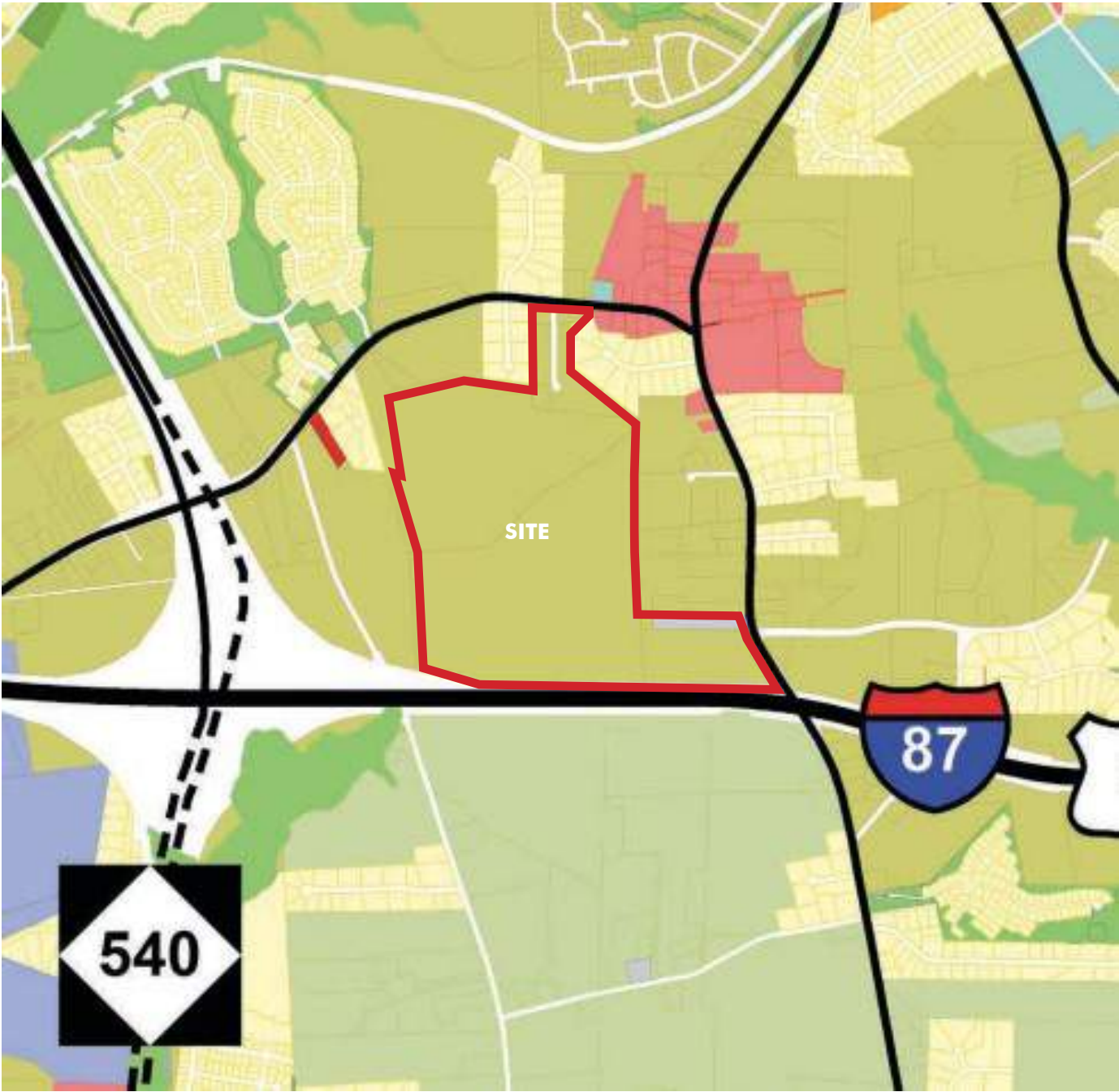


Figure 2: Growth and Conservation Map from KnightdaleNext2035 Comprehensive Plan

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Comprehensive Plan Consistency

Transportation

Lyndon Oaks furthers the goals of **Knightdale’s Comprehensive Transportation Plan (CTP)** in several ways.

First, with this project, an additional road connection will be made between Old Faison Road (at Tart Farm Road) and Bethlehem Road (at Crosscut Place), creating instant additional connectivity in the area. Additional road connections create more routes for drivers and ease congestion at nearby intersections, and create local streets that are safer for walking and biking, making these more viable forms of transportation. These are just a few of the reasons the CTP encourages additional local connector streets like those planned in Lyndon Oaks.

Second, Lyndon Oaks will construct ±0.8 miles of the planned Widewaters Parkway extension through the project area, which is a key part of a larger planned connection of Widewaters Parkway to Cross Cut Place on the Roadway Network Plan. When completed across Old Faison Road to the north, this road will make it much easier for residents traveling to and from US 64. The Master Plan has placed the Widewaters Parkway stub in a location that will make it easy to angle in a way that will sync with the alignment of the extension to the north.

Lyndon Oaks also supports the CTP goal of making new streets multimodal and accessible for pedestrians and cyclists. Sidewalks will line both sides of every planned street to enhance pedestrian safety and connectivity in the neighborhood, many of them wider 6’ and 10’ sidewalks. Buffered bike lanes will line both sides of Widewaters Parkway and additional pedestrian safety infrastructure will be provided at pedestrian crossings across Widewaters Parkway. Lyndon Oaks will also make pedestrian crossings on Widewaters Parkway safer by providing Rectangular Rapid Flash Beacons (RRFBs) at the private trail crossing and the entrance road (Tart Farm Road) intersection.

Finally, Lyndon Oaks has studied the projected transportation impact of the development on numerous roads and intersections, and will implement recommended improvements to mitigate those impacts and improve area roads, consistent with the CTP policy of “account[ing] for broader impacts of development on the surrounding mobility networks.” See TIA summary in the Infrastructure section of this document.

Legend

- Comprehensive Transportation Plan Planning Area
- Street Type & Status:
- | | |
|------------------------|-----------------------------|
| Freeway, Existing | Avenue, Existing |
| Freeway, Proposed | Avenue, Proposed |
| Boulevard, Existing | Urban Main Street, Existing |
| Boulevard, Proposed | Urban Main Street, Proposed |
| Urban Avenue, Existing | Main Street, Existing |
| Urban Avenue, Proposed | Main Street, Proposed |

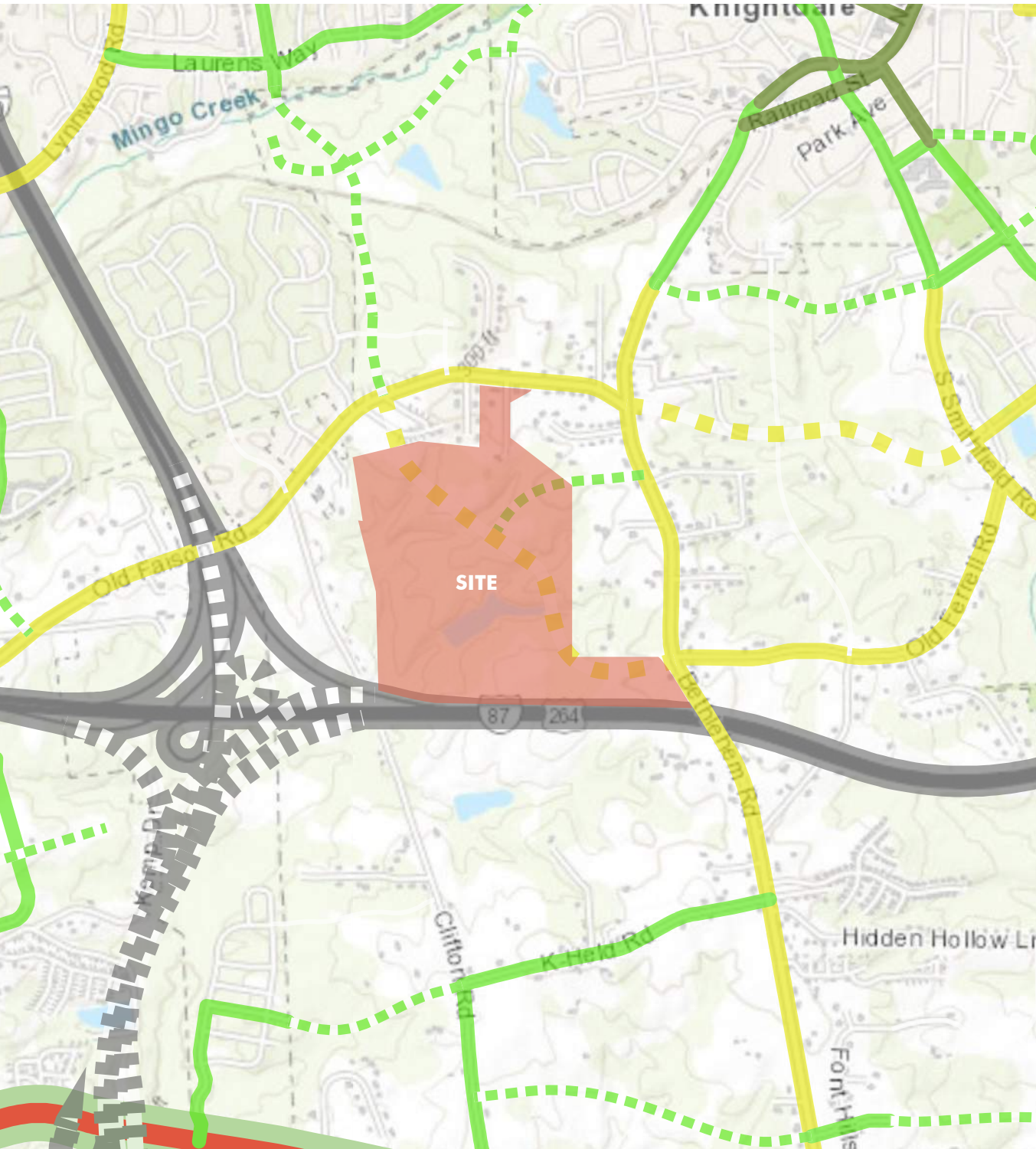


Figure 3: Roadway Network Plan from the Knightdale UDO



Comprehensive Plan Consistency

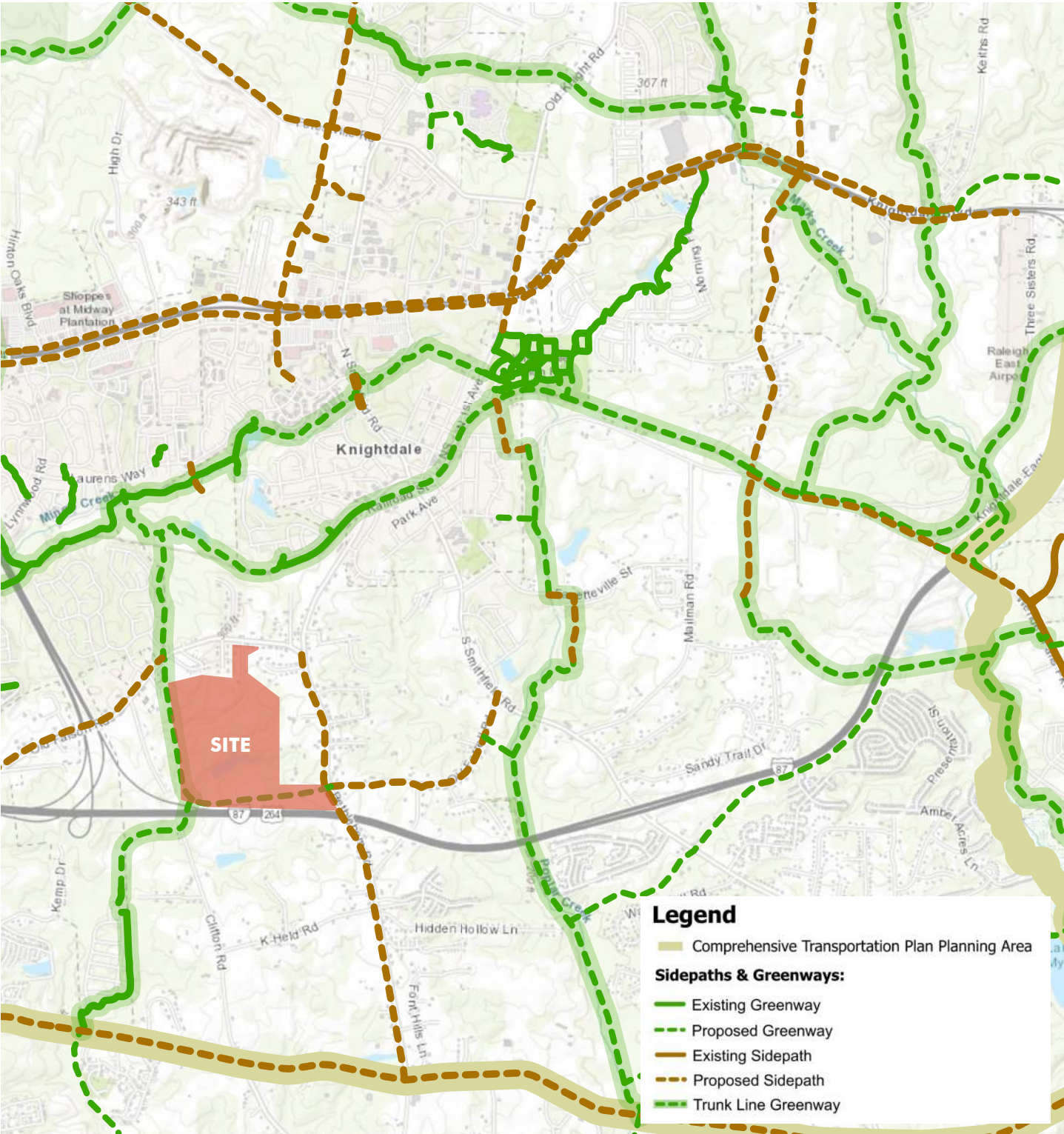


Figure 4: Sidepaths & Greenways Plan from the Knightdale UDO

Trails & Greenways

Lyndon Oaks will provide a network of public greenways and private trails in its open space, as well as recreational amenities while maintaining existing natural features. The plan also provides safe and convenient pedestrian and bicycle access for nearby residents through the use of sidewalks, buffered bike lanes on both sides of Widewaters Parkway, and 10' sidewalks on Tart Farm Road as well, and public and private trails in the natural areas to connect the neighborhood's residential sections.

Pet waste stations and benches will be provided along public greenways and private greenways with public access easements every 2,000 linear feet. Signage shall be provided where the public greenway intersects with other greenways. Signage, bench design, and pet waste station design shall adhere to applicable Town Standard Specifications.

Environmental Impacts and Permitting: The Town of Knightdale has planned substantial street and public greenway improvements on a site with many environmentally-sensitive streams and wetlands that will require extensive permitting through state and federal agencies at the next stage of development, and developer will provide the Town's desired public improvements to enhance vehicular and pedestrian connectivity in this area. Developer will provide and will facilitate environmental permitting for the stream and wetlands impacts of the planned Widewaters Parkway extension. Developer will also pursue environmental permitting for a greenway alignment that is substantially similar to the "Option A" alignment of the greenway shown on the Master Plan. If the US Army Corps of Engineers (USACE) defines the "project" in such a way that the project will cause a cumulative stream and wetland impact of 0.5 acres or more, the developer may adjust plans to reduce stream and wetlands impacts by the following:

- » Providing the greenway alignment shown in Option B
- » Providing boardwalks instead of paved bridges over streams and wetlands
- » Removing the turn lane and narrowing the Widewaters Parkway section in the areas where it crosses streams and wetlands
- » Providing the planned public greenway connection from Old Faison Road to Bethlehem Road as a side path on Widewaters Parkway, with private natural trails in the natural areas that connect residential areas of the neighborhood
- » Any other minor plan adjustments approved by Town staff that do not include impacts to planned residential lots.





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Comprehensive Plan Consistency

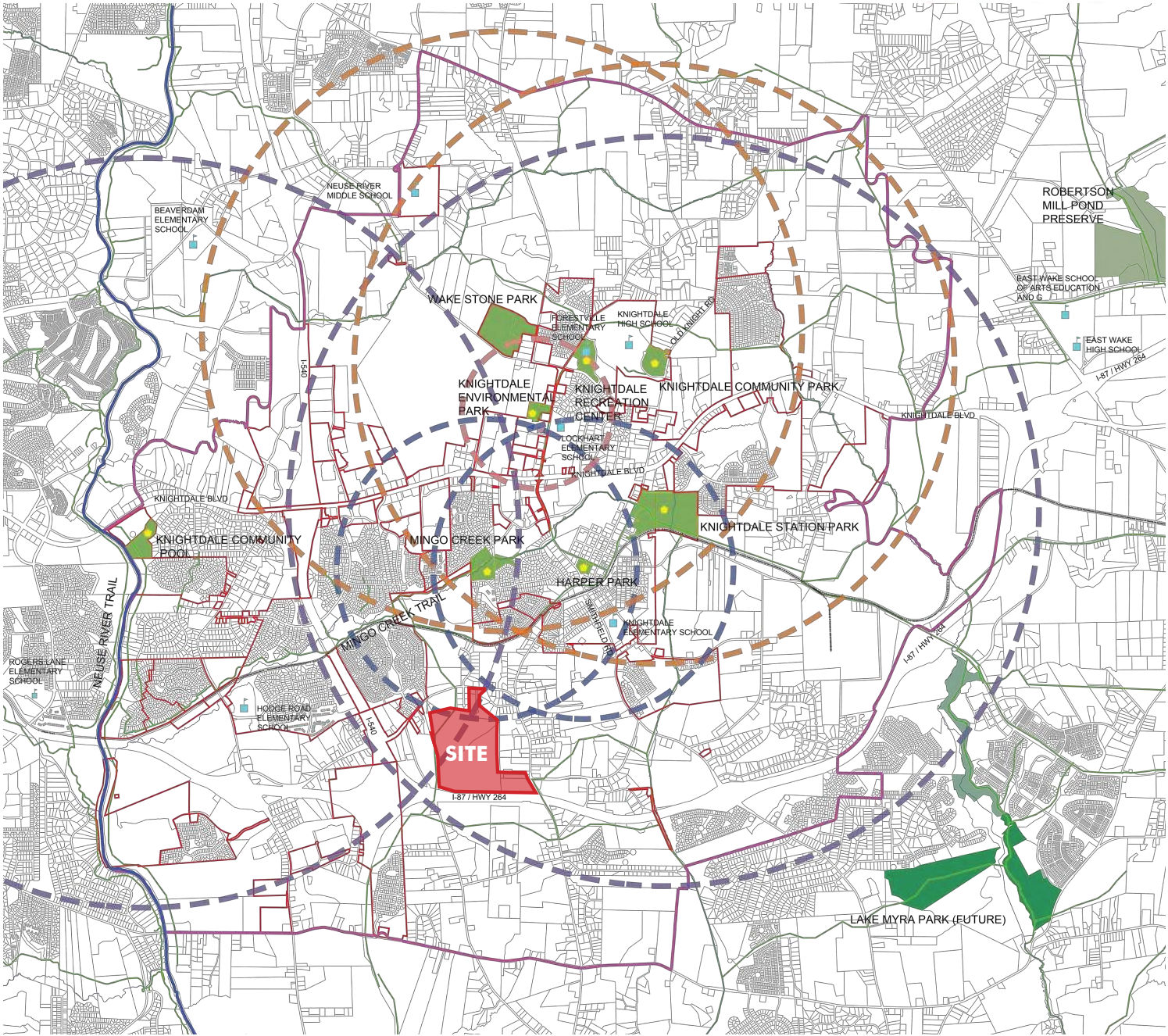


Figure 5: 2021 Town of Knightdale Comprehensive Parks and Rec. Master Plan

Parks and Recreation

Consistent with the **Comprehensive Parks and Recreation Master Plan**, Lyndon Oaks is within the two-and-a-half mile service area of Knightdale Station Park, and part of the neighborhood will be in the one-mile service area of Mingo Creek Park. When the Widewaters Parkway extension is completed to the north, Lyndon Oaks residents will be able to easily walk or bike to this park. The ample amenities, open space, and approximately ± 6.5 miles of trails and sidewalks within the planned community will also provide recreational opportunities for residents.

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**EXISTING
CONDITIONS**

Vicinity Map

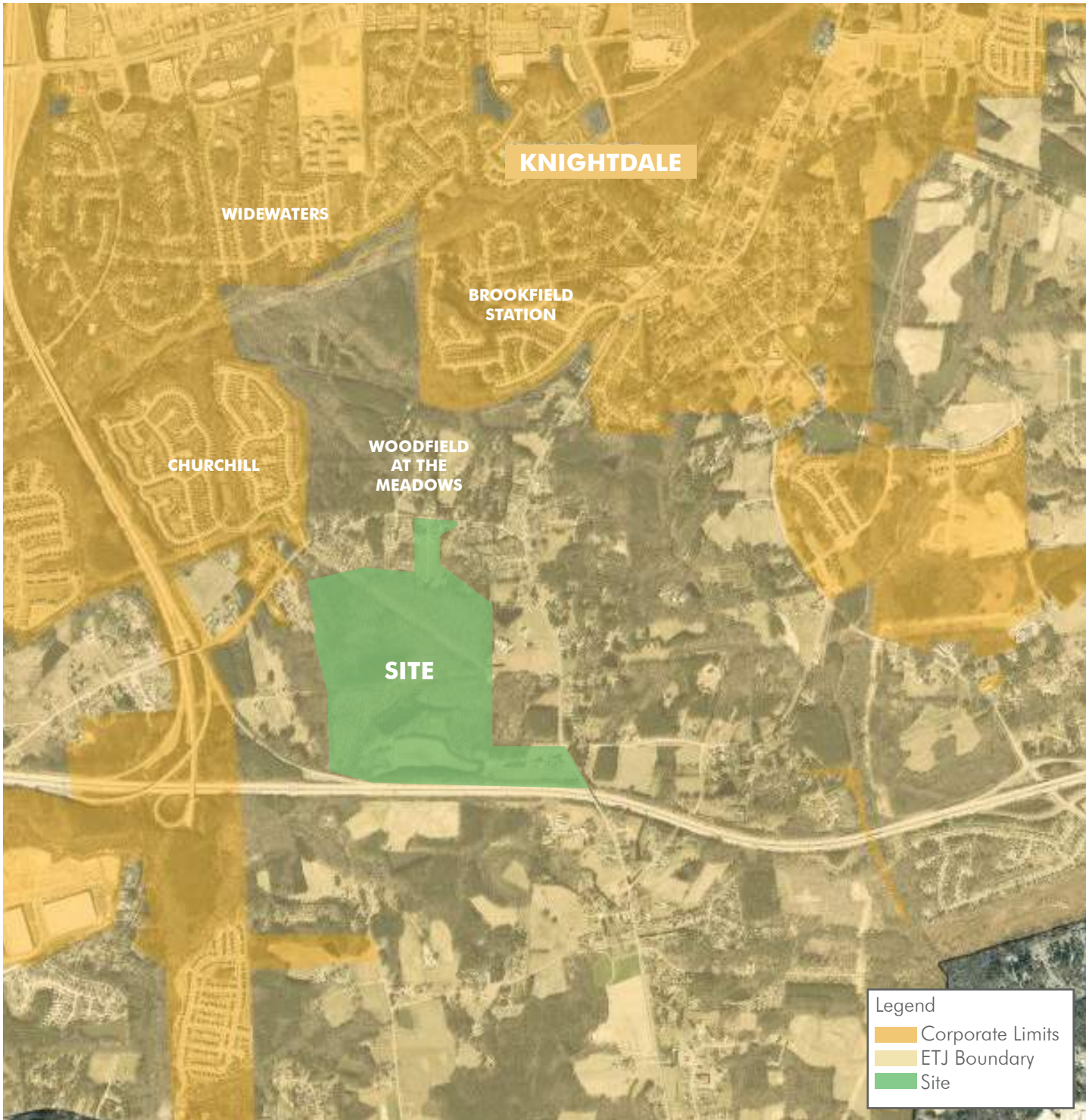


Figure 6: Vicinity Map (Not to Scale)

Vicinity Map

The site is within **Knightdale's ETJ**, and approximately 150 feet from the primary corporate limits at the northwest corner. Most of the site is undeveloped, except for a few larger homes on the portions of the site that front Old Faison Road and Bethlehem Road. The largest portion of the property is bisected by multiple streams and wetlands, and features a large natural pond. Two overhead utility easements also run from east to west through the property.

Uses in the vicinity are almost exclusively residential, as is the current Knightdale ETJ zoning. Residential uses vary in size and housing type. Immediately to the north on Bethlehem Road is a mobile home park. Very large residential lots lie to the to the east, and the parcel immediately to the west on Clifton Road is vacant. Churchill, an established Knightdale neighborhood, is located to the northwest of the site across Old Faison Road, and it is zoned GR8.

EXISTING CONDITIONS

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Current Zoning Map

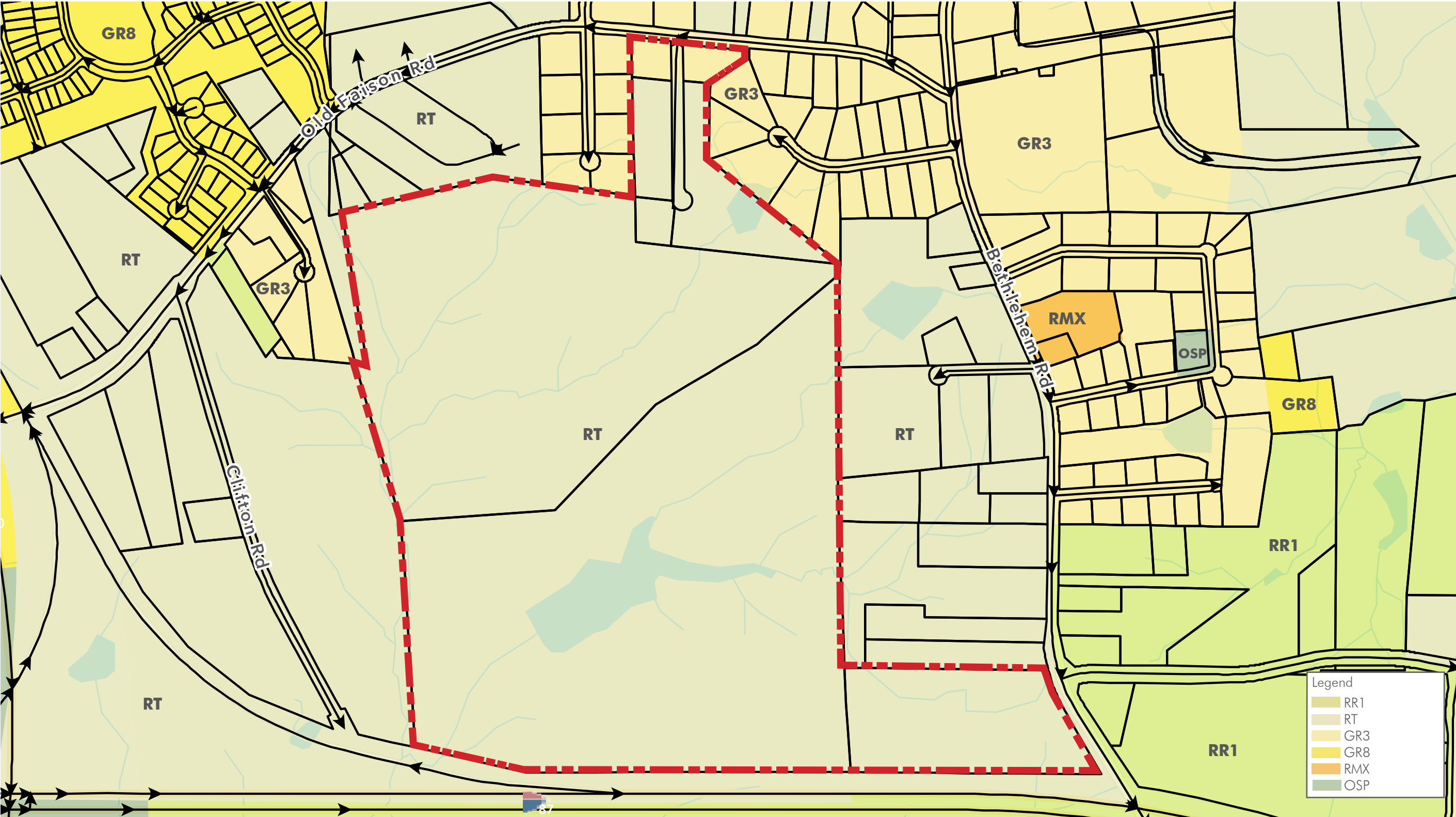


Figure 7: Current Zoning Map

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LYNDON OAKS - PLANNED UNIT DEVELOPMENT (PUD)

EXISTING CONDITIONS

Current Uses

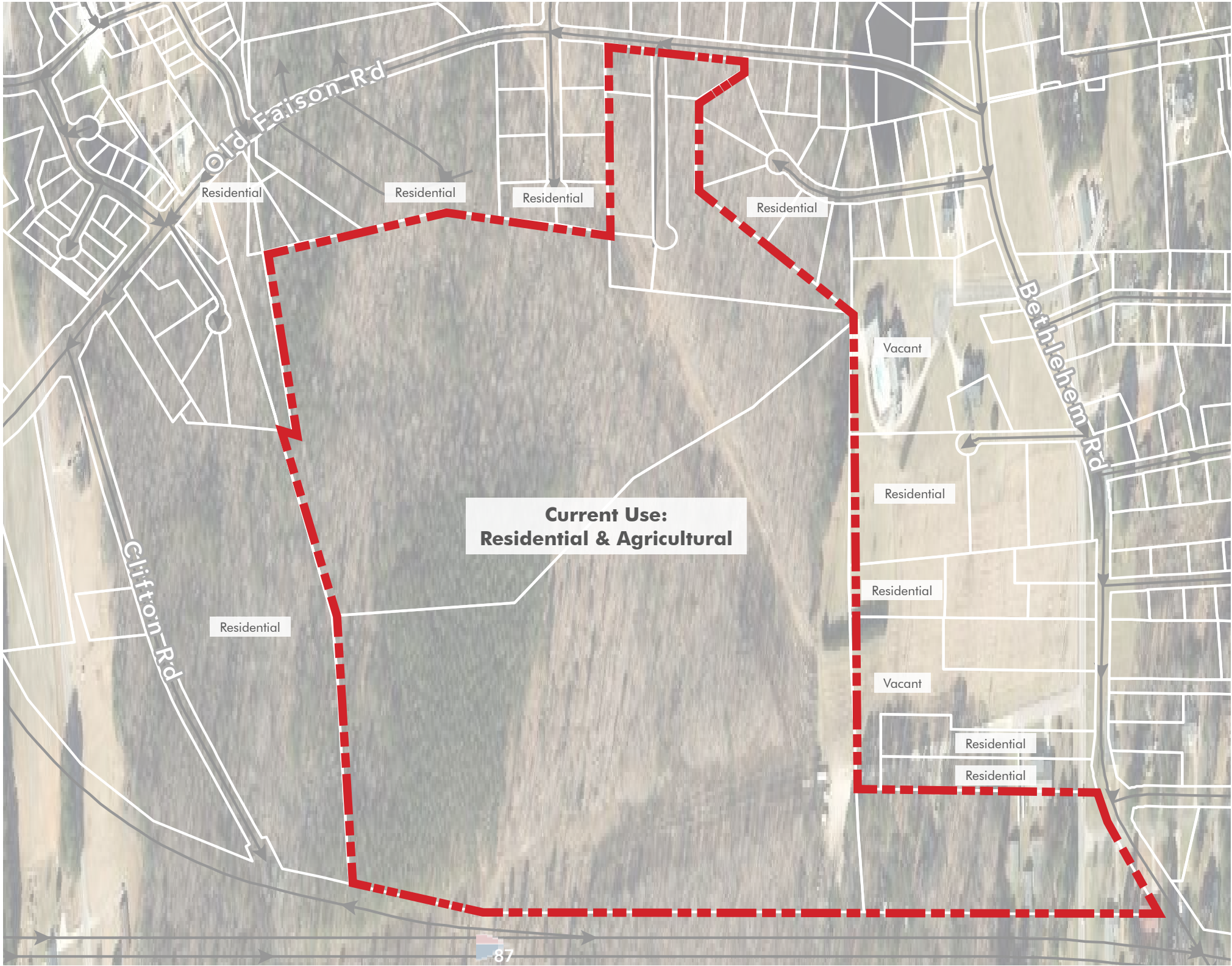


Figure 8: Current Uses Map



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LYNDON OAKS - PLANNED UNIT DEVELOPMENT (PUD)

EXISTING CONDITIONS

Topography & Boundary Map

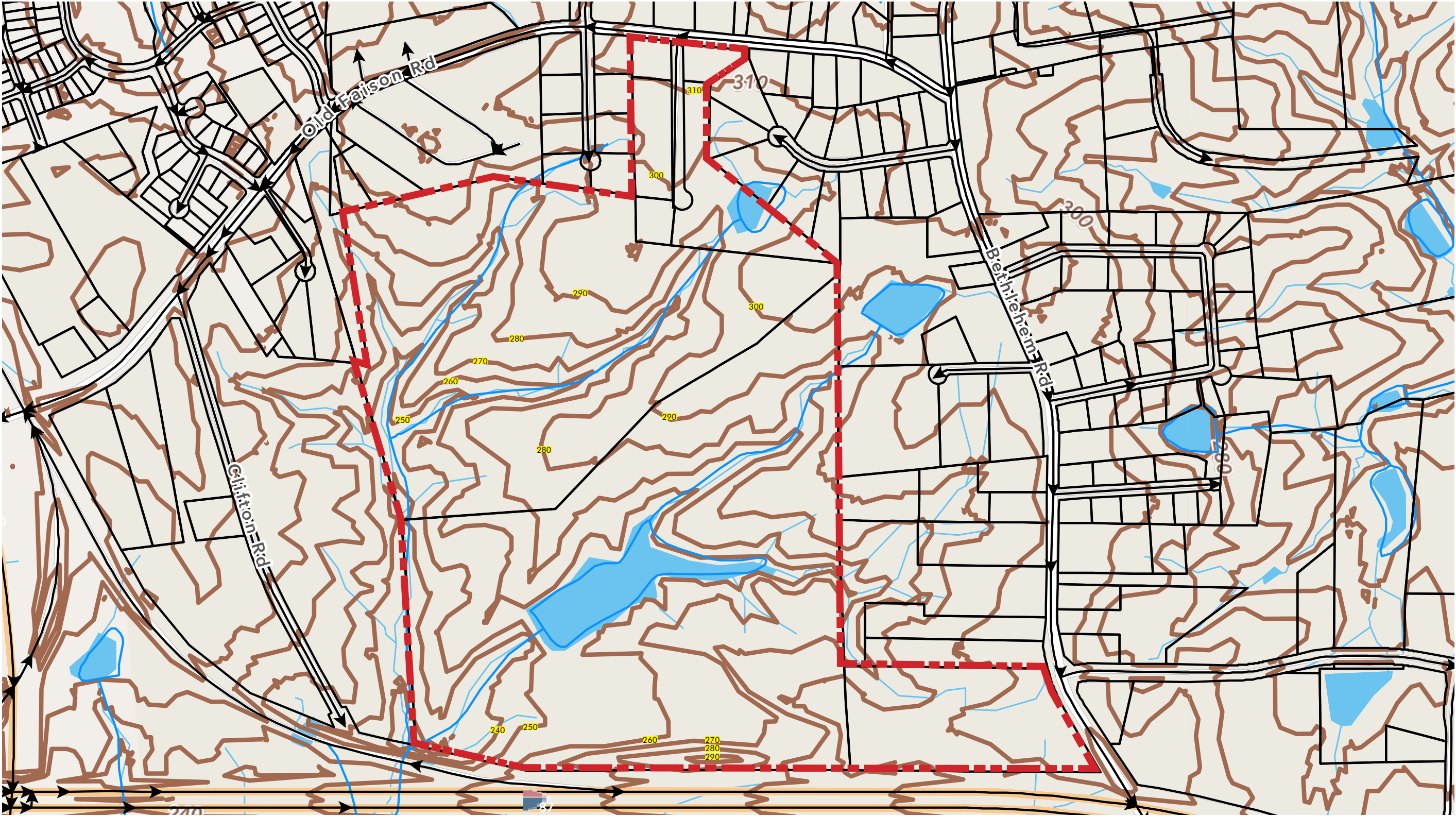


Figure 9: Topography Map

EXISTING CONDITIONS

Soils Map

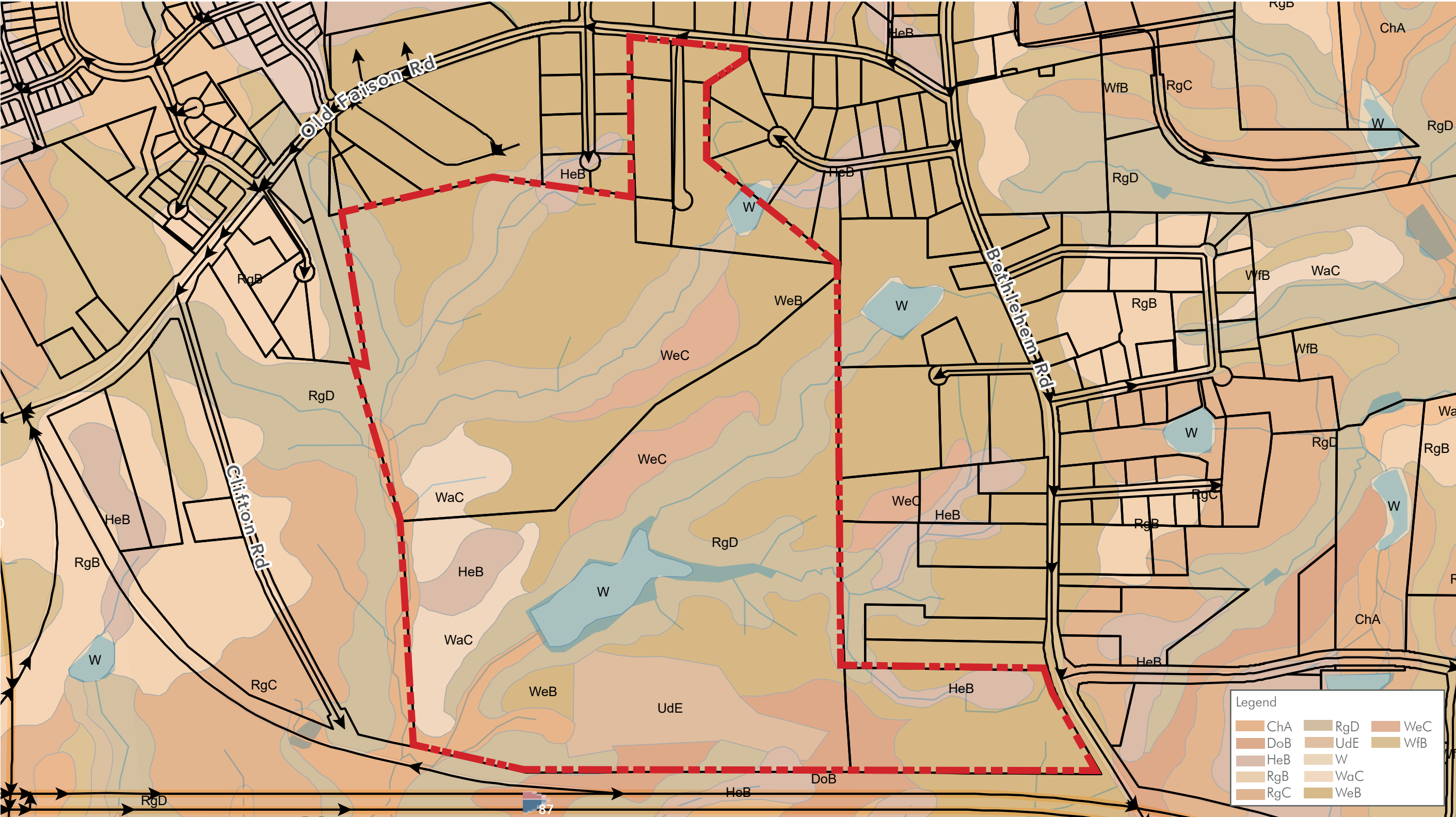


Figure 10: Soils Map

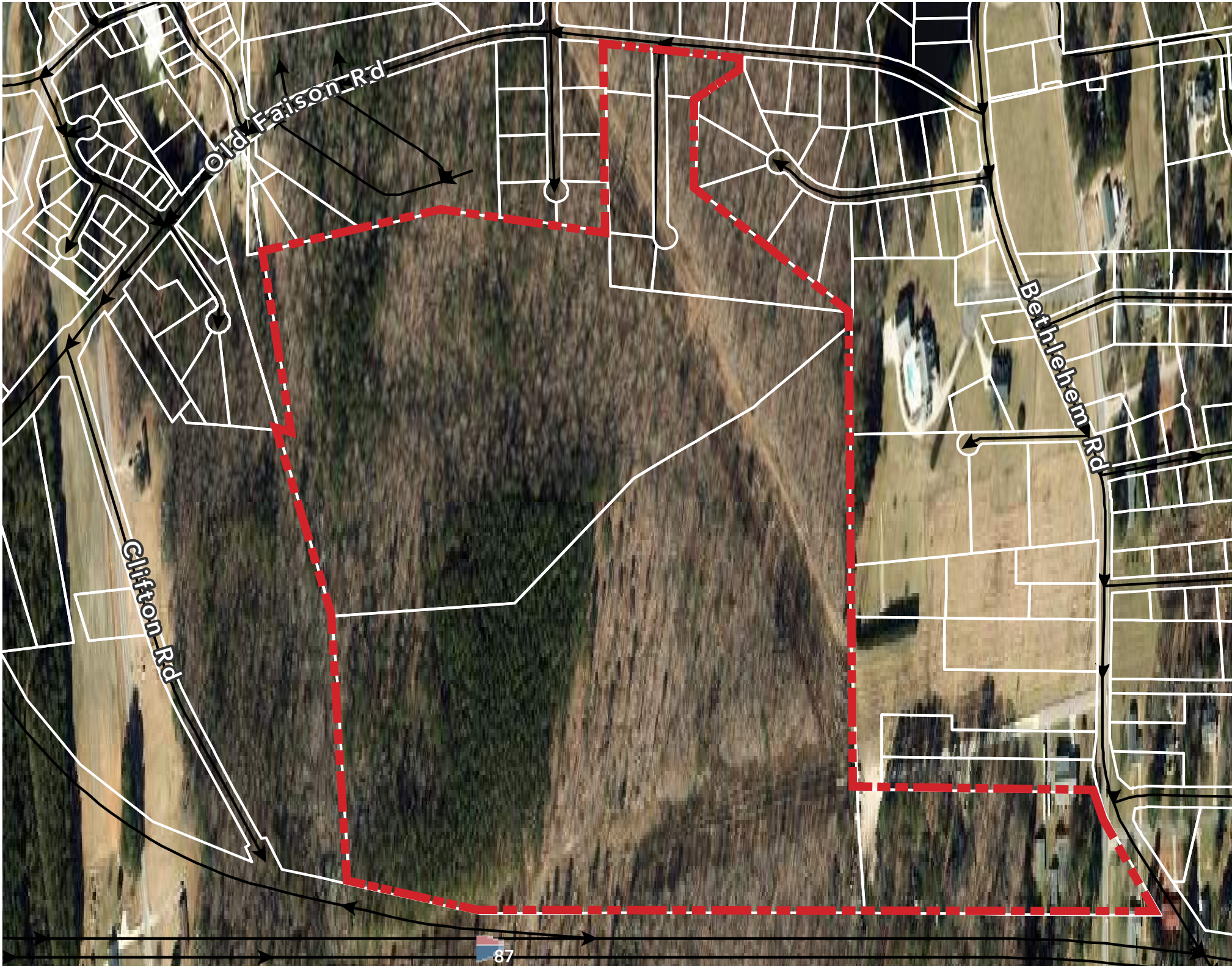
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LYNDON OAKS - PLANNED UNIT DEVELOPMENT (PUD)



EXISTING CONDITIONS

Vegetation Map



The site currently consists of mainly vacant land, two existing ponds, four perennial streams, two large electric easements, and several single family homes.

EXISTING CONDITIONS

Figure 11: Vegetation Map

Preliminary Wetland & Stream Map



Legend

- Project Study Area
- Too Thick Too Evaluate
- 2' Contour
- Data Point
- 50-Foot Neuse River Riparian Stream Buffer
- Non-Buffered Intermittent Stream - Jurisdictional Waters of the US
- Perennial Stream - Jurisdictional Waters of the US; Subject to 50-Foot Neuse River Riparian Buffers
- Wetlands - Jurisdictional Waters of the US
- Non-Jurisdictional Pond - Pond Built In High Ground
- Pond - Jurisdictional Waters of the US; Subject to 50-Foot Neuse River Riparian Buffer

Detailed Delineation of Waters of the US

Suitable for Preliminary Planning Only

S&EC reserves the right to modify this map based on more fieldwork, and any other additional information. Approximations were mapped using topographic maps, air photos and ground truthing. If the site is going to be disturbed, S&EC's detailed delineation should be approved and permitted by the U.S. Army Corps of Engineers as required. If the user of this work desires an accurate map of the regulated features flagged by S&EC, they should retain a NC Registered Professional Land Surveyor to locate S&EC's flagging.



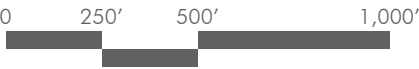
Figure 3

Drawn By:
David Gainey

Sage Ecological Services, Inc.
Office: 919-335-6757
Cell: 919-559-1537

NOTE: Location, shape and size of depicted features on the evaluated site are approximate and should be surveyed by a licensed NC surveyor for final site planning.

Figure 12: Wetland Sketch Map from Sage Ecological Services



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LYNDON OAKS - PLANNED UNIT DEVELOPMENT (PUD)

EXISTING CONDITIONS



**MASTER
PLAN**

Lyndon Oaks - Master Plan



Figure 13: Lyndon Oaks Master Plan

SITE DATA

» ACRES:	± 171.88 AC TOTAL
» PINS:	1753-15-2116; 1743-95-3683; 1743-97-1085; 1743-98-6356; 1743-98-9384; 1753-07-1583; 1743-97-6575
» EXISTING ZONING:	RT
» PROPOSED ZONING:	RMX-PUD

DEVELOPMENT SUMMARY

COMMERCIAL:	± 15,000 SF
RESIDENTIAL:	
FRONT LOADED (SINGLE FAM. DETACHED)	
60' LOTS	66 DU
70' LOTS	24 DU
80' LOTS	10 DU
REAR LOADED (SINGLE FAM. DETACHED)	
30' LOTS	46 DU
35' LOTS	39 DU
40' LOTS	24 DU
TOWNHOMES (REAR LOADED)	
20' UNITS	117 DU
22' UNITS	130 DU
DUPLEXES (REAR LOADED)	
22' UNITS	26 DU
TOTAL:	482 DU(UP TO 500 DU)

REQ. PARKING (MINIMUM):	
SINGLE FAMILY:	627 SPACES
TOWNHOMES:	819 SPACES
COMMERCIAL:	27 SPACES
• EV	2 SPACES
• BICYCLE	3 SPACES

- NOTES:
1. THIS PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE.
 2. THIS EXHIBIT WAS PREPARED USING AVAILABLE RECORD INFORMATION, ALTA SURVEY, GIS MAPS, RECORD PLANS, AERIAL IMAGERY, AND LAND RECORDS.
 3. THIS PLAN WILL BE SUBJECT TO REVIEW AND APPROVAL BY LOCAL AND STATE PLANNING AND ENGINEERING REVIEW AGENCIES.
 4. THE WORK OF THIS PRODUCT IS THE PROPERTY OF URBAN DESIGN PARTNERS, PLLC. NO USE OR REPRODUCTION OF THIS PLAN IS PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM URBAN DESIGN PARTNERS, PLLC.



MASTER PLAN

Lyndon Oaks - Distribution of Uses

USE AREAS				
USE TYPE	TYP. LOT SIZE (SF)	# OF LOTS	TOTAL AREA (SF)	ACRES
SINGLE FAMILY				
30' LOT	3,600	51	183,600	
35' LOT	4,200	53	222,600	
40' LOT	4,800	27	129,600	
60' LOT	7,200	68	489,600	
70' LOT	8,400	25	210,000	
80' LOT	9,600	12	115,200	
			1,350,600	31.0
DUPLEX / TOWNHOUSE				
20' TH	1,800	116	208,800	
22' TH	1,980	126	249,480	
22' DUPLEX	2,160	22	47,520	
			505,800	11.6
COMM/RETAIL**			77,033	1.77
DISTRIBUTION OF USES				
				ACRES
GROSS SITE AREA (PER SURVEY)				171.8
DEDICATED RECREATIONAL OPEN SPACE				21.4
PUBLIC R/W				28.3
NET AREA***				122.1
USE TYPE	PROP. (AC)	MIN.-MAX. DISTRIBUTION(%)	PROV. DIST. (%)	
SINGLE FAMILY	31.0	15%-60%	25.4%	
DUPLEX / TOWNHOUSE	11.6	10%-40%	9.5%	
COMMERCIAL / RETAIL	1.77	5%-20%	1.4%	

** Retail is not required in Lyndon Oaks because there are no multi-family units being proposed.

*** Net area is calculated by removing the area of open space (required amount) and rights-of-way from the total site area. The Town of Knightdale UDO Sec 11.1.B states that the required distribution of uses shall be calculated as the net development area which excludes streets rights-of-way and dedicated open space.

Lyndon Oaks is proposing a development density of ±3 dwelling units per acre. The maximum density for RMX zoning is 18 dwelling units per acre. Density is calculated by dividing the amount of dwelling units by the total site area. Knightdale requires use distribution minimum and maximum percentages (based on use areas) for subdivisions with both residential and non residential uses (Section 11.1.B of the UDO). The distribution of uses is calculated by dividing the use areas by the net site area. In this PUD, we are proposing an allowance on the distribution of uses for both duplex/townhomes, and retail. See site allowances page for more information.



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05



INFRASTRUCTURE



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Street Plan

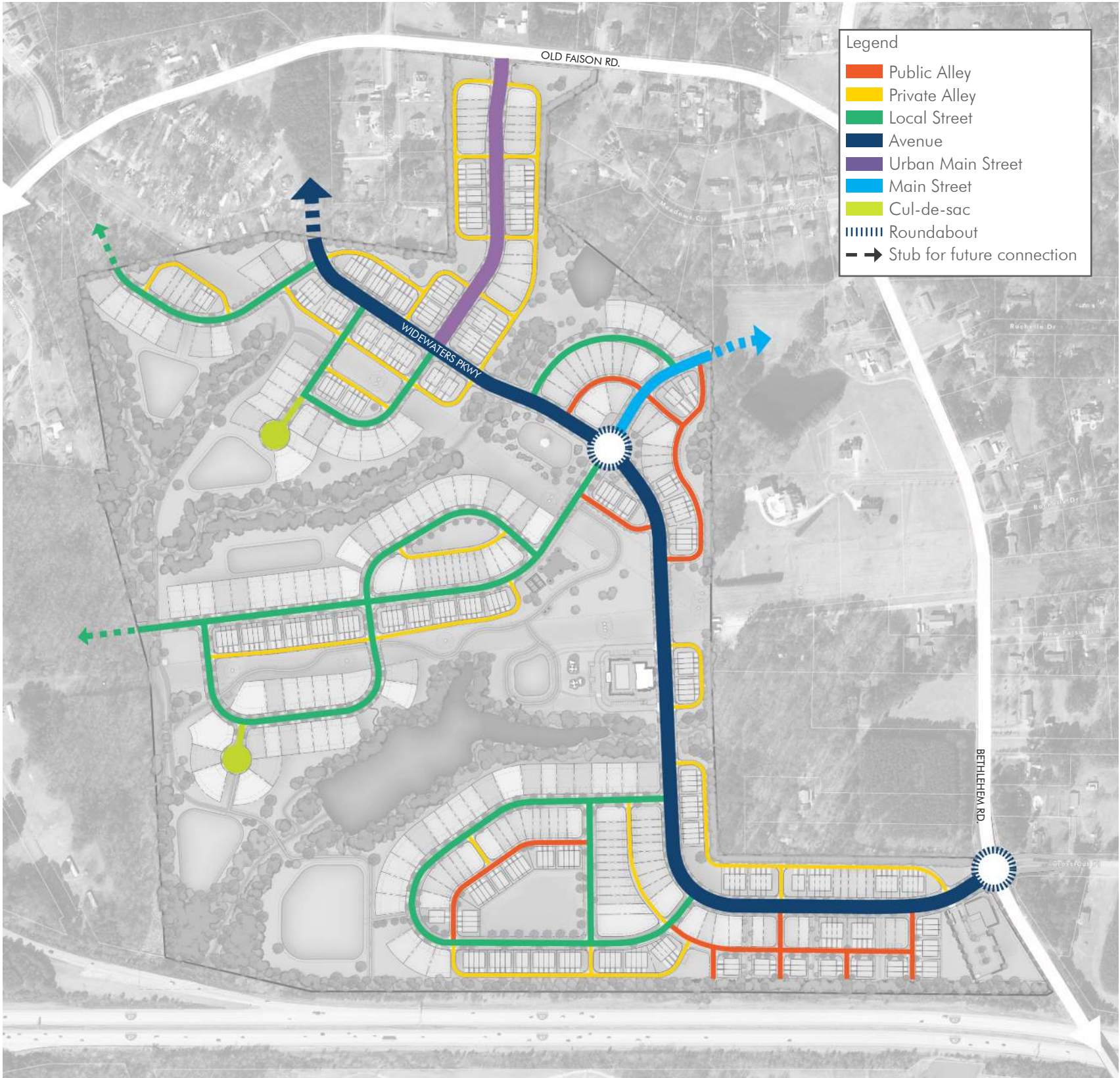


Figure 14: Vehicular Circulation

TOWN OF KNIGHTDALE STREET TYPES

PRIVATE ALLEY	
» RIGHT OF WAY:	20'
» STREET WIDTH:	20' (BOC-BOC)
» DESIGN SPEED:	10 MPH
PUBLIC ALLEY	
» RIGHT OF WAY:	32'
» STREET WIDTH:	18' (FOC-FOC)
» DESIGN SPEED:	10 MPH
LOCAL STREET	
» RIGHT OF WAY:	54'
» STREET WIDTH:	28' - 41' (FOC-FOC)
» DESIGN SPEED:	20 - 25 MPH
URBAN MAIN STREET	
» RIGHT OF WAY:	72'
» STREET WIDTH:	48' (BOC-BOC)
» DESIGN SPEED:	20 - 25 MPH
CUL-DE-SAC	
» RIGHT OF WAY:	61.5'
» STREET WIDTH:	48' RADIUS
» DESIGN SPEED:	20 - 25 MPH
MAIN STREET	
» RIGHT OF WAY:	70'
» STREET WIDTH:	47'
» DESIGN SPEED:	20 - 25 MPH
WIDEWATERS PARKWAY AVENUE (3 LANE - SIDEPATHS)	
» RIGHT OF WAY:	75'-80'
» STREET WIDTH:	VARIES
» DESIGN SPEED:	30 - 35 MPH





PROVIDED SCORE: 1.47

● NODES: 19 NODES

$$\frac{28 \text{ LINKS}}{19 \text{ NODES}} = 1.47 \text{ CONNECTIVITY INDEX SCORE}$$

** Block lengths shown are the lengths of the links. Block lengths are all under 800 LF when alleys are included. See Master Plan ZMA-2-23.



Figure 15: Connectivity Index for Lyndon Oaks

Pedestrian Circulation Plan

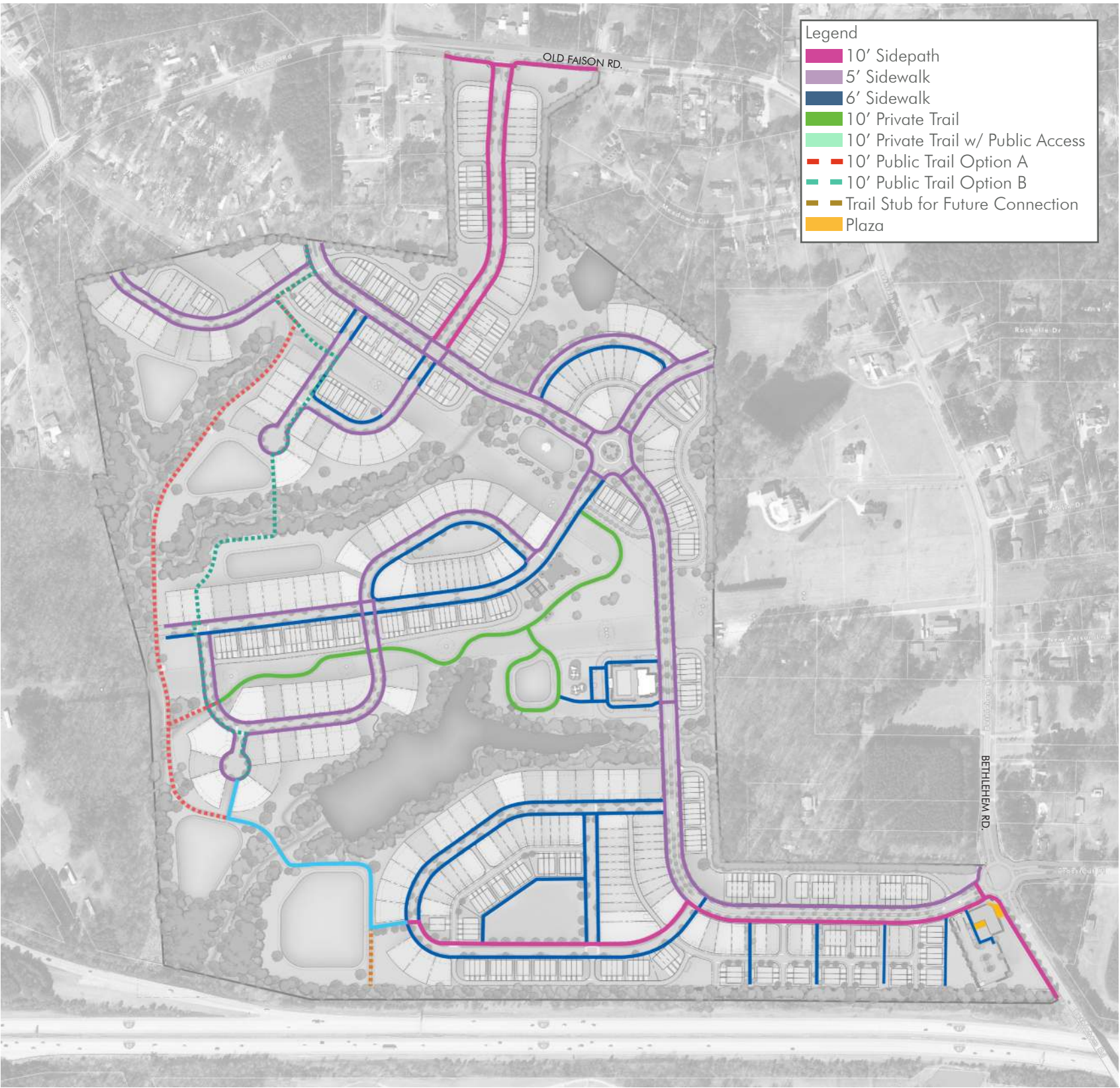


Figure 16: Pedestrian Network for Lyndon Oaks

PEDESTRIAN CIRCULATION

Lyndon Oaks is proposing a connected network of amenity spaces and dwelling units through the use of sidewalks, sidepaths, and greenway trails to create a walkable, pedestrian-friendly community as seen in Figure 16.

» The plan shown is preliminary and subject to change at the time of site plan.

SIDEWALK NETWORK

» WIDTH: 5'-6' wide

SIDE PATH

» WIDTH: 10' wide

GREENWAY TRAIL

» WIDTH: 10' pavement width (30' easement)

PLAZA

» PROVIDED SIZE: ± 2,000 SF

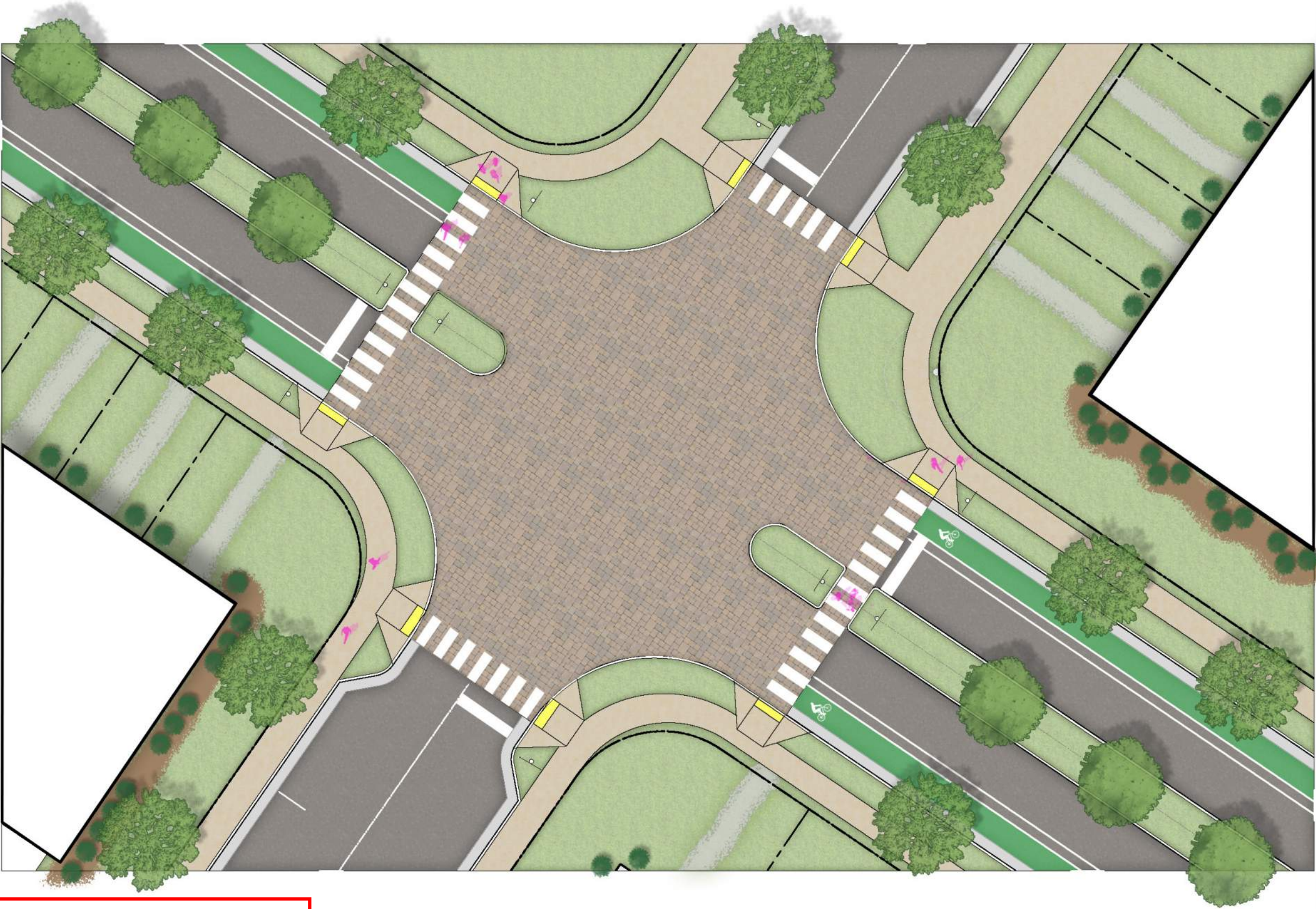
AMENITY SPACES

» See Open Space Plan

Easement for future pedestrian bridge over I-87: Prior to approval of construction drawings for the first phase of development, the applicant will offer a minimum of 100 square feet of site area as a non-exclusive, permanent easement area to be dedicated to the Town for construction, maintenance, and repair of footings for a future pedestrian bridge over I-87, together with such temporary construction easements as are necessary for completion of such work. If accepted by the Development Services Director, such easement area shall be shown on the construction drawings and subdivision plat and granted to the Town pursuant to a recorded Deed of Easement.



Urban Main St (Tart Farm Rd) & Widewaters Parkway Intersection Design



PEDESTRIAN CIRCULATION

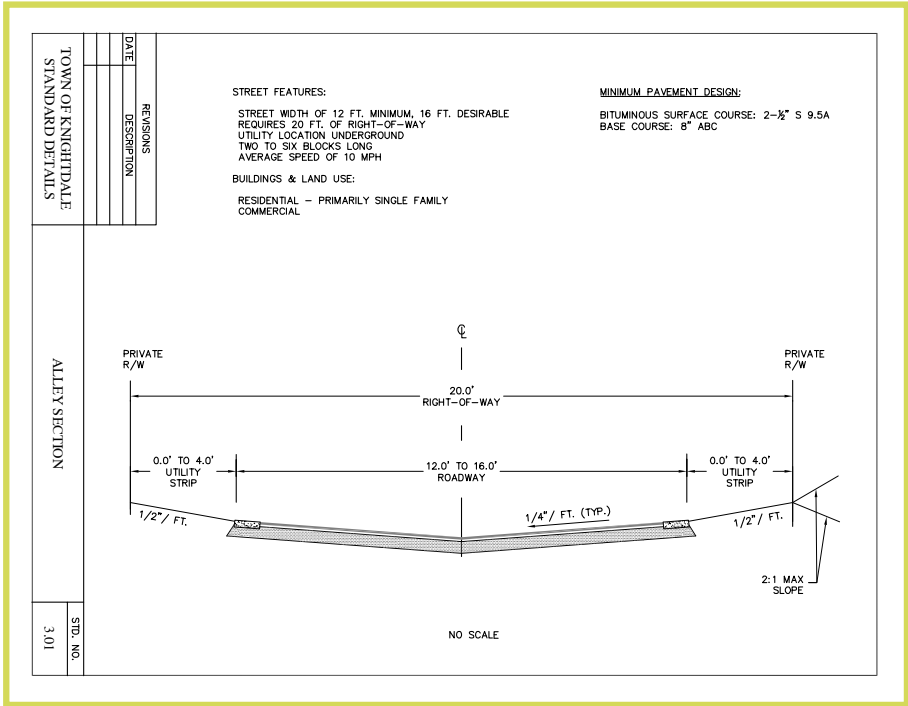
Lyndon Oaks proposes a four-way stop with traffic calming measures, including high-visibility crosswalks, stamped concrete, Rectangular Rapid Flash Beacons (RRFBs), and pedestrian refuges in the Widewaters Parkway median at the intersection of the Urban Main Street and Widewaters Parkway.

INFRASTRUCTURE

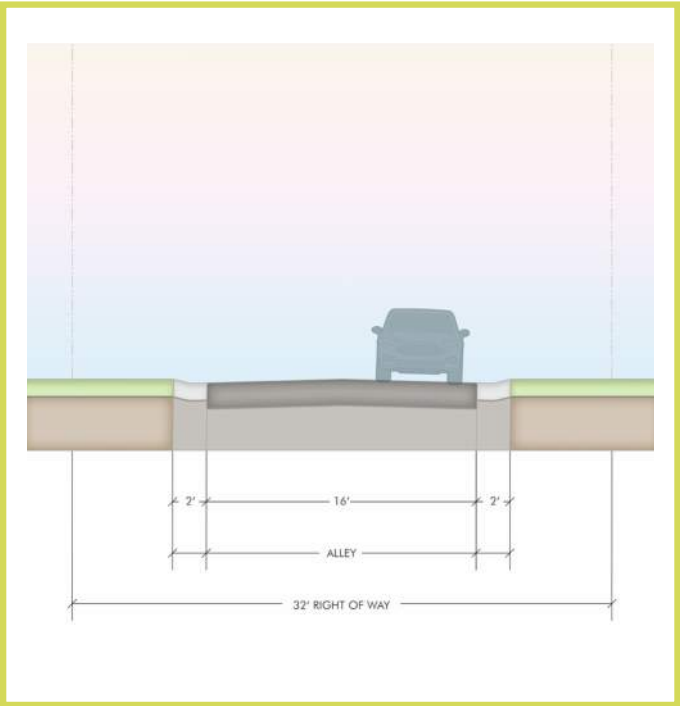


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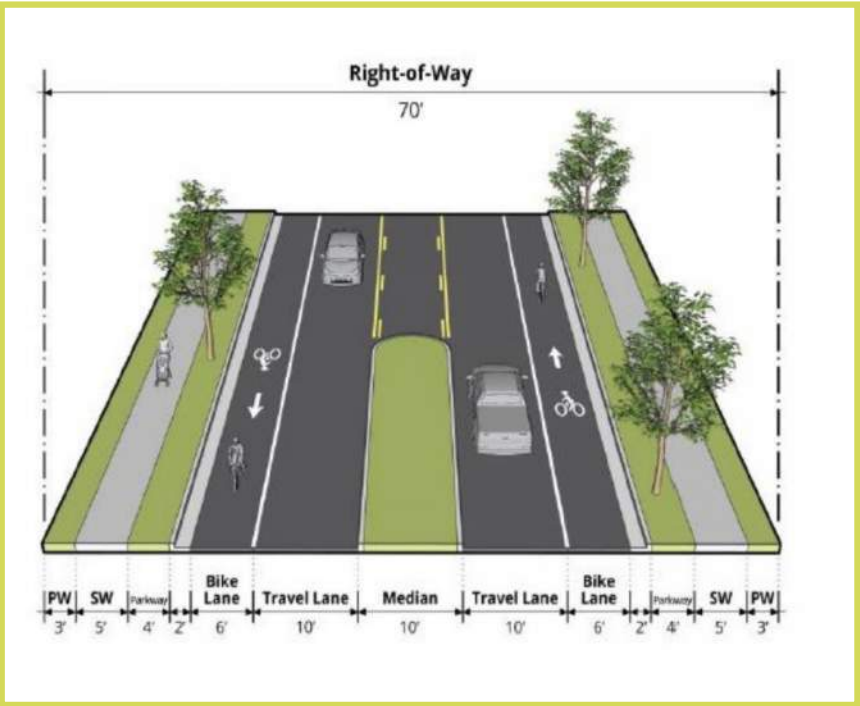
Street Sections



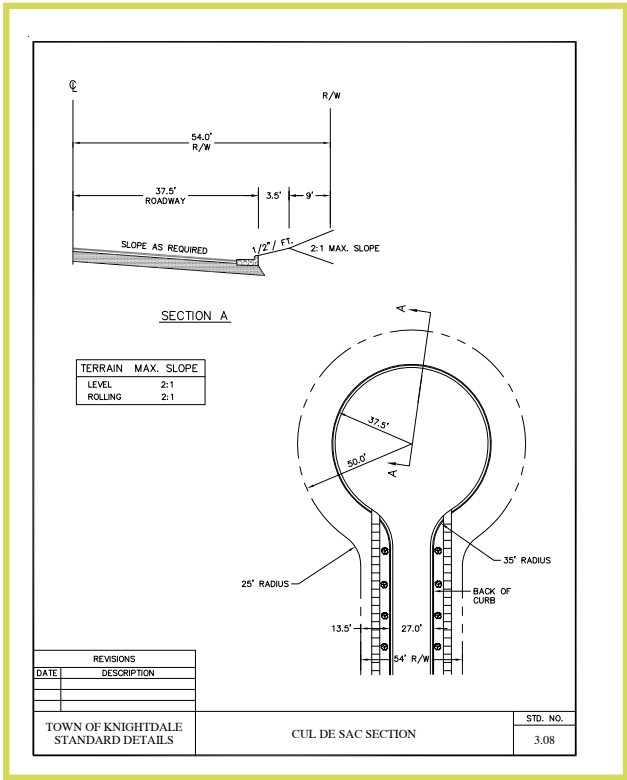
Private Alley



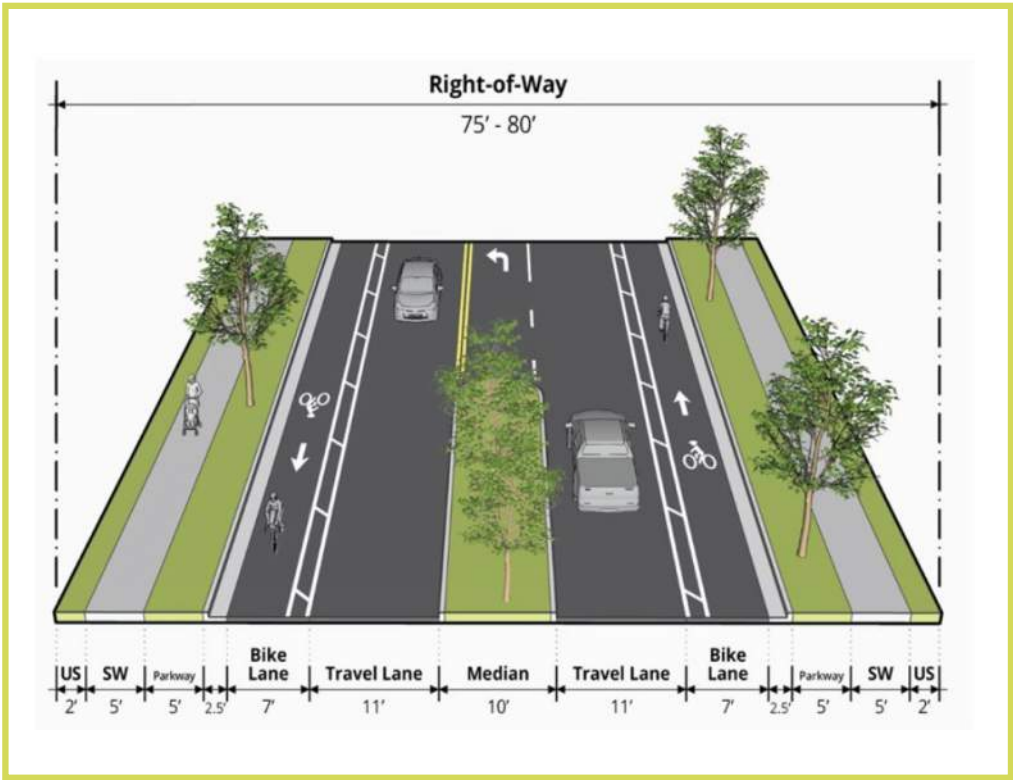
Public Alley



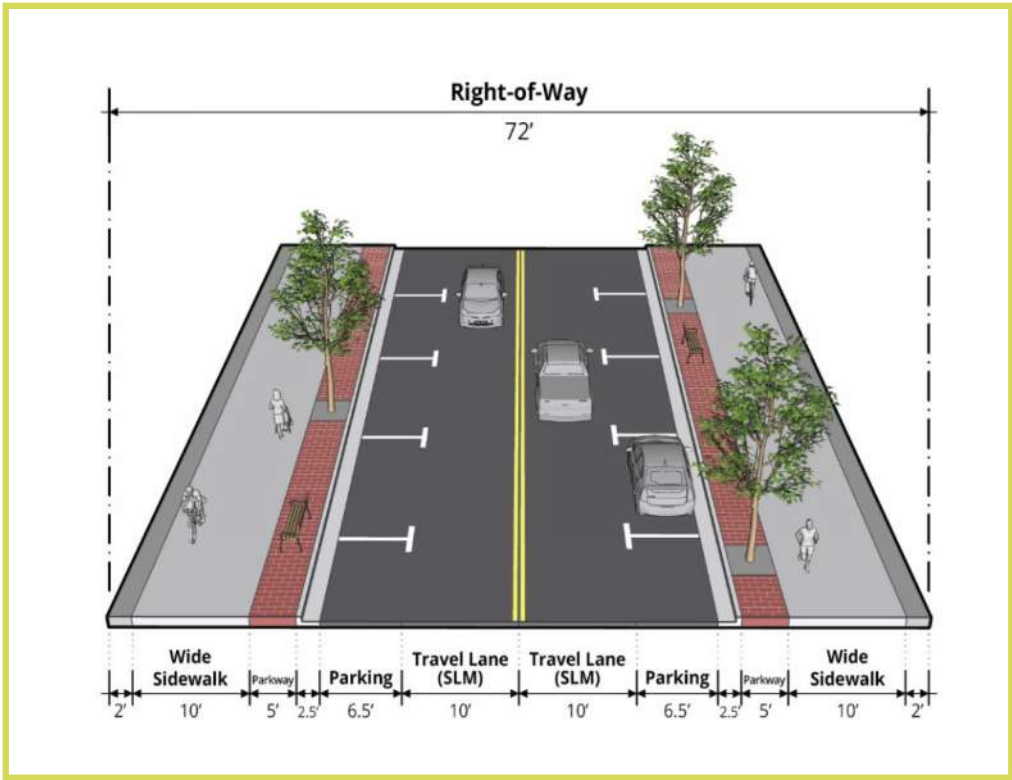
Main Street



Cul-de-sac



Avenue 3 Lane Divided



Urban Main Street

*Note: Staff is developing updated sections and details. Sections to be updated once updates received from Town of Knightdale

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Local Street Sections

LOCAL STREET: NO ON STREET PARKING (54' R/W)



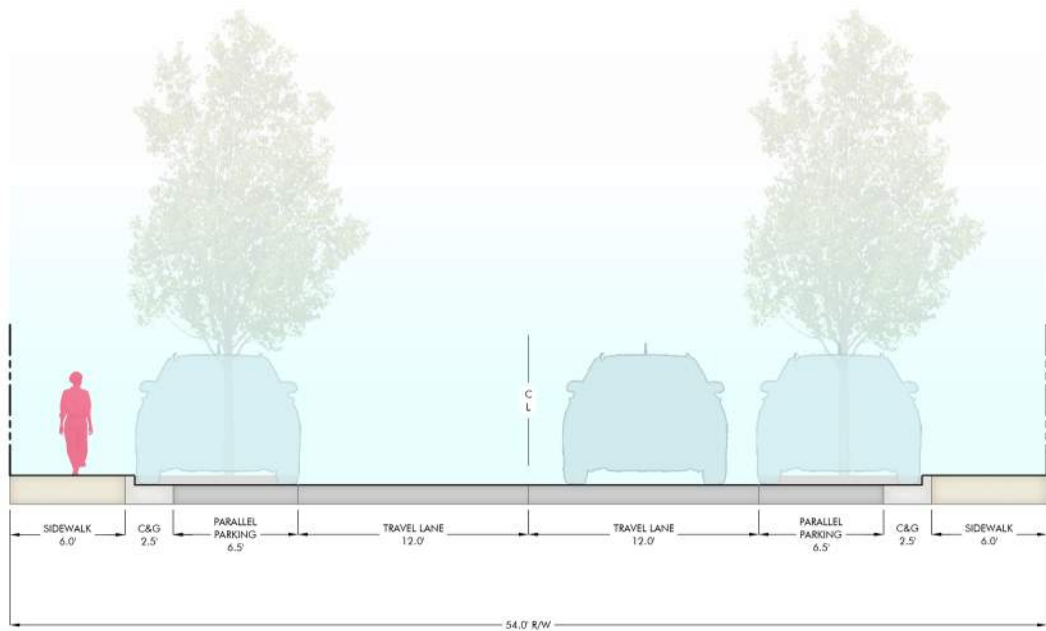
*Note: "No Parking" signage shall be provided where on-street parking is not present to prevent parking in the travel lane.

LOCAL STREET: 1 SIDE ON STREET PARKING (54' R/W)

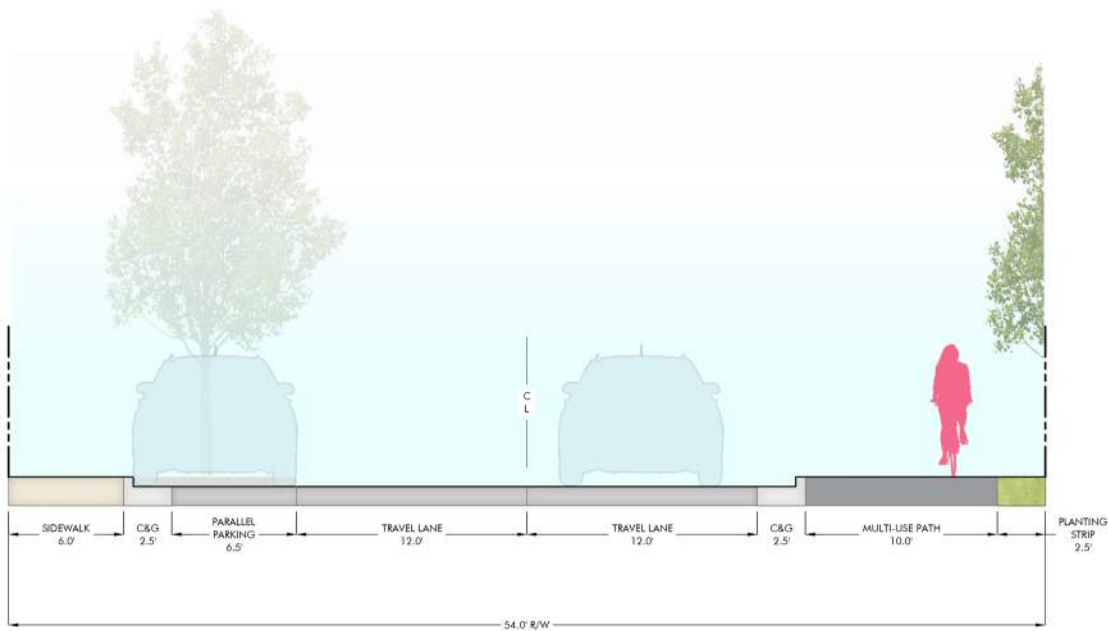


*Note: "No Parking" signage shall be provided where on-street parking is not present to prevent parking in the travel lane.

LOCAL STREET: 2 SIDE ON STREET PARKING (54' R/W)



LOCAL STREET: GREENWAY CONNECTOR (54' R/W)



*Note: "No Parking" signage shall be provided where on-street parking is not present to prevent parking in the travel lane.

Preliminary Stormwater Plan



Figure 17a: Stormwater Plan for Lyndon Oaks

STORMWATER

The property is located within the Neuse River Basin. The site consists of two existing ponds, and 4 perennial streams which create four unique drainage areas. Stormwater runoff within these areas will be controlled by multiple SCMs as seen in Figure 17a. The outfall is located at the southwest corner of the property. All stormwater shall be subject to the stormwater management requirements set forth in Chapter 9 of The Town of Knightdale Unified Development Ordinance. The stormwater treatment shall adhere to guidelines established in the NCDEQ Stormwater Design Manual.

The SCM in the center of the site and near the central roundabout will have a fountain installed to create a water amenity. See Figure 17b for an example of a pond fountain. One of the stormwater management devices located in and around the main amenity center shall include alternative SCM infrastructure such as cisterns, bioswales, or planted wetlands, with educational signage (Figure 17c).

The developer will work with Town staff during the construction drawing phase on SCM design if any "additional safety structures such as fences, vegetative buffers, landscaping elements, or any combination of the three" are needed, pursuant to UDO Sec. 7.3.J, and shall look for ways to incorporate elements into the design that mimic nature, reduce maintenance burdens, and/or provide natural aesthetic value.

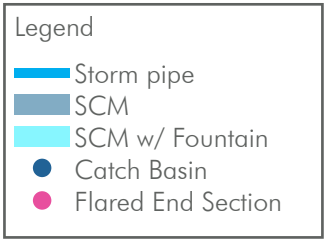
» The plan shown is preliminary and subject to change per direction from Knightdale staff.



Figure 17b: SCM fountain example



Figure 17c: Alternative SCM infrastructure examples



Preliminary Utility Plan



Figure 18: Utility Plan for Lyndon Oaks

WATER & SEWER

Lyndon Oaks will design all water and sewer to meet the standards of the City of Raleigh. Water allocation points will be met for the Major Subdivision through the use of many site elements that listed in the tables below. Precedent images of these elements can be found in the Site Programming section of this PUD.

» The plan shown is preliminary and subject to change per direction from City of Raleigh staff.

WATER ALLOCATION POLICY

Required amount: 50 pts.

MAJOR SUBDIVISION	
Major Subdivision (Base points)	15 pts.
Conservation of Natural Habitat	7 pts.
Construct a fountain within the SCM	4 pts.
On Street Parking	4 pts.
Residential Architectural Standards	15 pts.
3,000' or more of 6-foot wide path	3 pts.
Resort Style Pool	2 pts.
Deck/Patio (2,000 SF minimum)	2 pts.
Clubhouse (No Meeting Space, bathrooms and changing rooms only)	3 pts.
Pickleball Courts	5 pts.
Outdoor display of public art	4 pts
IPEMA Certified Playground Equipment	4 pts.
TOTAL PROVIDED	68 pts.
TOTAL MIN. REQUIRED	50 pts.
SINGLE-USE RETAIL	
Single Use Retail Base Points	41 pts.
Construction of Gateway Landscaping	5 pts.
Deck/Patio (2,000 SF minimum)	2 pts.
Outdoor Display of Public Art	4 pts.
TOTAL PROVIDED	52 pts.
TOTAL MIN. REQUIRED	50 pts.

Note: Any combination of features listed above can be used to meet the 50 point minimum requirement. Single-Use Retail Water Allocation Policy points are preliminary and subject to change when the developer of the commercial outparcel submits a site plan.



Transportation Impact Analysis Summary

A Traffic Impact Analysis (TIA) was conducted by Ramey Kemp Associates in accordance with the Knightdale Unified Development Ordinance (UDO) and the North Carolina Department of Transportation (NCDOT) capacity analysis guidelines. A full copy of the TIA was submitted for review and approval with the PUD submittal. The listed recommended improvements are subject to further review and final approval by NCDOT, and shall be phased with the development.

Study Area

The study area for the TIA was determined through coordination with the Town and NCDOT and consists of the following existing intersections:

- » Old Faison Road & Bethlehem Road
- » Old Faison Road & Tart Farm Road
- » Old Faison Road & Pleasant Colony Drive
- » Old Faison Road & Quiet Way
- » Bethlehem Road & Crosscut Place
- » US 64 EB Ramps & Hodge Road
- » US 64 WB Ramps & Old Faison Road
- » Smithfield Road & Old Ferrell Road
- » Bethlehem Road & Poole Road

Recommended Improvements

Based on the analysis of the TIA (including improvements to be installed by the Lyndon Oaks development), the following improvements have been recommended to be constructed to mitigate traffic impacts by the proposed development.

Westbound I-87 Ramps & Hodge Road (Improvements by STIP W-5705AK)

- Construct a westbound right turn lane with 100 feet of storage and appropriate decel and taper.
- Construct a westbound left turn lane with 100 feet of storage and appropriate decel and taper.
- Modify signal timings and signal phasing.

Old Faison Road & Bethlehem Road (Improvements by Developer)

- Construct a signal. A mast arm signal design will be provided if a transportation impact fee credit term is included in the Development Agreement between the Developer and the Town of Knightdale.
- Developer will provide additional gateway features desired by the Town, including landscaping and/or gateway signage in the right-of-way, if these upgrades fit within the right-of-way required for the signal, do not require additional right-of-way or easements to be acquired, and are approved by NCDOT and Town staff. The total cost of these gateway features to the Developer shall not exceed \$40,000.
- Construct a northbound left turn lane with 250 feet of storage.
- Construct a westbound right turn lane with 250 feet of storage.
- Construct a westbound left turn lane with 175 feet of storage.
- Roundabout improvement may be provided in lieu of the signal and turn lanes recommended by the TIA if later requested by the Town, sufficient right-of-way is available, and this improvement is approved by NCDOT.

Old Faison Road & Tart Farm Road / Site Access A (Improvements by Developer)

- Construct an eastbound right turn lane with 75 feet of storage and appropriate decel and taper.
- Construct exclusive northbound left turn lane with full storage.
- Provide stop control for northbound approach.

Bethlehem Road & Crosscut Place / Site Access B (Improvements by Developer)

- Construct a single-lane roundabout.
- Construct eastbound approach with one ingress and one egress lane.
- Provide yield control for eastbound approach.

Westbound I-87 Ramps & Hodge Road (Improvements by Developer)

- Extend westbound left turn lane to contain 175 feet of storage and appropriate decel and taper.
- Extend southbound left turn lane to contain 275 feet of storage and appropriate decel and taper.
- Extend eastbound left-through lane to contain 275 feet of storage and appropriate decel and taper.

Bethlehem Road & Poole Road (Improvements by Developer)

- Construct left turn lanes with 100 feet of storage.





AMENITIES



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Site Programming



Lyndon Oaks will provide a variety of amenities to promote a healthy lifestyle, opportunities to enjoy the outdoors, and foster a sense of community. The site is proposing a network of ± 20 acres of open space and recreational amenities. The proposed amenities may include but are not limited to the following:

- 1 Greenway Trail**
 - » Public and private greenway trails will be located throughout Lyndon Oaks and will be 10' wide asphalt paths. In addition to the 10' multi-use paths along Widewaters Parkway, there are many pedestrian routes through the community.
- 2 Village Green**
 - » The Village Green will be a large open green space that can be used for a variety of activities by the community.
- 3 Playground**
 - » The IPEMA certified playground will be located in two open spaces to allow for greater access for families in Lyndon Oaks
- 4 Dog Park**
 - » The playground will be located in one of the active open space areas and will provide a place for residents to let their dogs run.
- 5 SCM Fountains**
 - » The pond fountains will amenitize the stormwater ponds located in both the center of the site, and near the central roundabout active open space.
- 6 Neighborhood Serving Commercial**
 - » The commercial outparcel will be low-intensity, and will meet the needs of nearby residents.
- 7 Pickleball Court**
 - » Two Pickleball courts will allow for additional active recreational opportunities for the neighborhood



AMENITIES

Site Programming



- 1 Pocket Park**
- » Pocket parks will be located in several places throughout Lyndon Oaks and may include benches, open play lawn, landscaping, exercise equipment, and other recreational opportunities.

- 2 Bench Swing Park**
- » A bench Swing Park will be located in one of the open spaces for the community and will provide a fun seating alternative for people of all ages.

- 3 Hammock Park**
- » A Hammock Park will be located in Lyndon Oaks to add an additional type of open space that will allow residents of all ages to relax and unwind.

- 4 Pollinator Garden**
- » A pollinator garden will be provided around the SCM nearest to the central roundabout to create a habitat for pollinators in the community.

- 5 Overlook with Gazebo**
- » The central pond will have an overlook plaza and gazebo to allow for a community gathering focal point.

- 6 Benches**
- » Benches will be provided in open spaces around Lyndon Oaks to provide spaces for the community to relax & rest.

- 7 Public Display of Art**
- » An art installation and roadside landscaping may be provided near the central roundabout for enjoyment from both vehicular and pedestrian users of the site.

- 8 Workout Stations**
- » Workout stations will be provided in several areas throughout Lyndon Oaks.



Entry Signage Concept



*Note: Signage is conceptual in nature and subject to change at time of construction documents.

Clubhouse Programming



- 1 Clubhouse**
Lyndon Oaks will have a Clubhouse for the residents that will include community amenities and a resort-style pool.
- 2 Pool**
The Clubhouse will include an outdoor resort-style pool for the neighborhood residents.
- 3 Clubhouse Amenities**
The Clubhouse may include a kitchen, outdoor area, and community room.



AMENITIES

Open Space Plan



Figure 19: Open Space Plan for Lyndon Oaks

Lyndon Oaks provides both active and passive recreation areas throughout the development. All recreation spaces are located in places that are accessible to all residents of the community. The network of public Greenway Trails and private trails create additional connection opportunities between all of the provided open spaces.

Active open space areas may include but are not limited to the following uses: A Clubhouse, Resort-style Pool, (2) Playgrounds, (2) Pickleball courts, Greenway Trails with fitness equipment, and additional pocket parks with exercise equipment.

Passive open space areas may include but are not limited to the following uses: Village Green, Pollinator Gardens, Public Display of Art, Path & Benches, a Bench Swing Park, a Hammock Park, Open Lawns, and entry landscaping and hardscaping.

Enhanced landscaping, hardscaping, and unique signage will be provided at both neighborhood entrances.

A minimum of three (3) pieces of exercise equipment shall be provided along the public and private trails for more active recreational opportunities for users.

Please see Site programming page for example imagery.

RECREATIONAL OPEN SPACE STANDARDS*

PROXIMITY ZONE:	All outside 1/2 mile distance
REQ. OPEN SPACE:	± 751,920 sf (17.26 ac)
» REQ. ACTIVE SPACE (50%):	± 8.63 ac (50% of req.)
» REQ. PASSIVE SPACE (50%):	± 8.63 ac (50% of req.)
PROP. OPEN SPACE:	± 21.40 ac total
» PROP. ACTIVE SPACE:	± 9.03 ac (0.4 ac over req.)
» PROP. PASSIVE SPACE:	± 12.37 ac (3.74 ac over req.)

* Open space is calculated according to Town of Knightdale UDO Sec. 11.2.c.
**According to Town of Knightdale UDO Sec. 11.2.A, Recreational Open Space can not include areas covered by buildings, structures, parking lots, dry ponds, required setbacks, or public R/W.

Legend

Active Open Space

Passive Open Space

Sidepath (in R/W)



AMENITIES



LANDSCAPE

Preliminary Landscape Plan



Lyndon Oaks will design all landscape areas according to the Knightdale Unified Development Ordinance. The site is surrounded by a 20' Type B Buffer yard as required in Section 7.4.I.1. of the UDO. The preliminary plan only shows typical buffer plantings and street tree plantings as seen in Figure 20. The riparian buffer will consist of tree preservation to maintain the natural qualities of the site.

- » The plan shown is preliminary and subject to change per direction from Town of Knightdale staff.
- » More detailed landscape plans with planting details and species list will be provided at the time of site plan and are subject to review from Town of Knightdale Staff.
- » Location and amounts of trees are conceptual in nature and subject to change.

LANDSCAPE

Figure 20: Landscape Plan for Lyndon Oaks



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Landscape Buffers

The perimeter Lyndon Oaks contains a Type B Buffer Yard per Town of Knightdale Unified Development Ordinance Chapter 7. Figure 21 shows a typical 100' section of the Type B buffer for Lyndon Oaks.

TYPE B BUFFER YARD STANDARDS (UDO Sec. 7.4.I.3)

- Minimum width: 20'
- Minimum landscape height/opacity:
- » Ground to 6' Semi-opaque screen
 - » 6' - 30' Intermittent visual obstruction
- Maximum landscape horizontal openings:
- » 5' Semi-opaque screen
 - » 20' Intermittent visual obstruction
- Required plantings:
- » Canopy Trees 3 per 100 linear feet
 - » Understory Trees 5 per 100 linear feet
 - » Shrubs 20 per 100 linear feet
 - » Evergreen vs. deciduous
 - Canopy trees: A minimum of 40% / maximum 60% must be evergreen
 - Understory trees: A minimum of 40% / maximum 60% must be evergreen
 - Shrubs: At least 80% must be evergreen

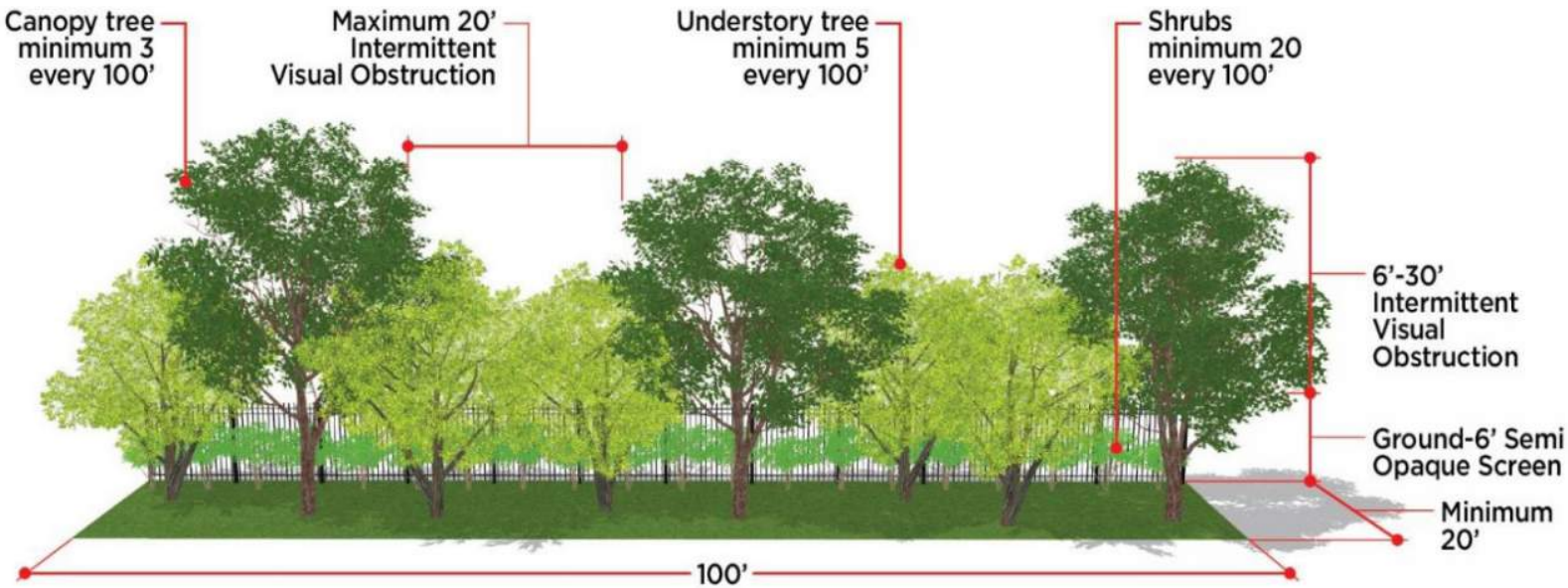


Figure 21: Type B Buffer

The southern property line of Lyndon Oaks contains a Type D Buffer Yard per Town of Knightdale Unified Development Ordinance Chapter 7. Figure 22 shows a typical 100' section of the Type D buffer for Lyndon Oaks.

TYPE D BUFFER YARD STANDARDS (UDO Sec. 7.4.I.5)

- Minimum width: 50'
- Minimum landscape height/opacity:
- » Ground to 30' Opaque Screen
 - » Ground to 6' Earthen Berm
- Maximum landscape horizontal openings:
- » None permitted
- Required plantings:
- » Canopy Trees 5 per 100 linear feet
 - » Understory Trees 8 per 100 linear feet
 - » Shrubs 35 per 100 linear feet
 - » Evergreen vs. deciduous
 - Canopy trees: A minimum of 40% / maximum 60% must be evergreen
 - Understory trees: A minimum of 40% / maximum 60% must be evergreen
 - Shrubs: At least 80% must be evergreen

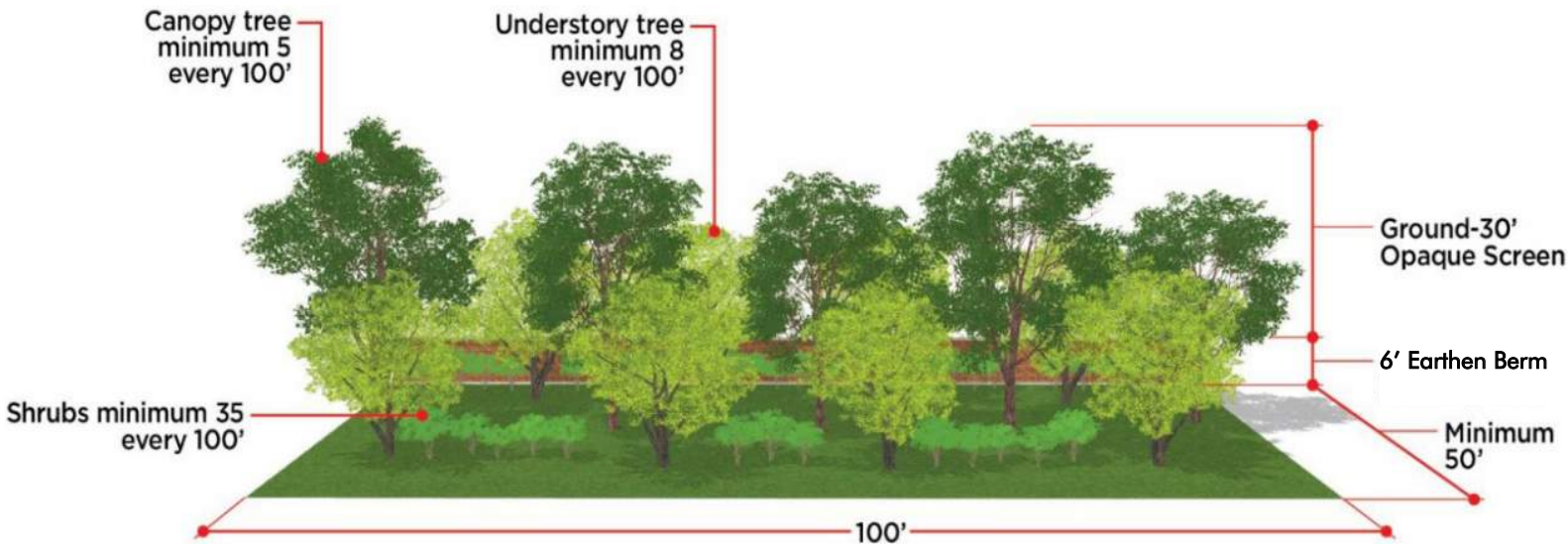


Figure 22: Type D Buffer

08



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**ARCHITECTURAL
DESIGN STANDARDS**

Architectural Elevations - Single Family Detached



ARCHITECTURAL DESIGN STANDARDS

LYNDON OAKS - PLANNED UNIT DEVELOPMENT (PUD)



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Architectural Elevations - Single Family Attached (Townhomes)



Elevations shown are conceptual in nature and subject to change. Individual townhome units will be combined into duplexes, triplexes, and quadplexes. (See images in upper middle and upper right.) See page 45 for list of architectural standards.

STANDARDS FOR ALL HOMES

1. All homes will have a combination of two or more of the following materials on the front facade (not including foundation) unless the home is only stone or brick:
 - » *stone*
 - » *brick*
 - » *lap siding*
 - » *Shakes*
 - » *board and batten*
 - » *window pediments*
 - » *recessed windows*
 - » *side and/or front window box bays*
 - » *roof gables*
 - » *roof dormers*
 - » *roofline cornices*
 - » *metal roofing as accent*
 - » *column*
 - » *shutters*
 - » *fiber cement siding*
2. The exterior siding material on the side and rear facades will be fiber cement. When two materials are used, the materials shall be different but complimentary colors.
3. Vinyl is prohibited except for window trim, soffits, fascia, and/or corner boards.
4. Main roof pitches (excluding porches) will be at least 6:12
5. For every 30 feet (or fraction) of continuous side elevation (calculated on a per floor basis), there shall be one window or door added to the side elevations. Any siding break on the side of the home such as a fireplace, side porch, wall offsets could be used as an alternative to windows.
6. Anti-monotony provisions: in order to promote variation in home appearances,

no home located adjacent, across the street, or diagonal shall have the same elevation and color combination.

7. All front doors shall have glass inserts, transoms, or glazing.
8. There shall be a minimum 12" overhang on every gable end.
9. Each front entrance shall contain a covered stoop or porch.
10. Foundation shall be raised to a minimum height of 18 inches above finished yard grade in the front and shall contain a minimum of 2 stair risers up to the front porch. Foundations will be wrapped in brick or stone on all sides. Areas under front porches may be enclosed with lattice or other decorative form of screening to match architectural style.

STANDARDS FOR SINGLE-FAMILY DETACHED FRONT-LOADED HOMES

1. Single-family 2 story homes will have a minimum heated area of 1,900 square feet.
2. Single-family 1 or 1.5 story homes will have a minimum heated area of 1,600 square feet.
3. All homes will have a front porch with a minimum depth of 6 feet, which may encroach up to 6 feet in the front setback. Front porch posts will be at least 6"x6".
4. Garages will not protrude more than 6 feet from the front porch stoop, unless an alternative is approved by staff.
5. All garage doors shall contain window inserts and decorative hardware.
6. Garages will not exceed 50% of the front façade width or will be split into two bays.
7. All homes shall have a minimum 100 square foot patio, deck, terrace, or courtyard.
8. A minimum of 33% of homes shall include stone or brick as a front facade material.

Architectural Design Standards (cont.)

STANDARDS FOR SINGLE-FAMILY DETACHED REAR-LOADED HOMES

1. Homes will have a minimum heated area of 1,500 square feet, except up to 50% of rear-loaded single-family detached homes may have a minimum heated area of 800 square feet.
2. All homes will have a front porch with a minimum depth of 5 feet, which may encroach up to 6 feet in the front setback. Front porch posts will be at least 6"x6".

STANDARDS FOR TOWNHOMES AND DUPLEXES

1. Townhomes shall be at least 2 stories with rear loaded garages and a with a minimum heated area of 1,100 square feet.
2. All townhouse units shall provide detailed design elements using at least one (1) of the features from each of the four categories below:
 - a. Entrance
 - i. *Recessed entry with 6" minimum width door trim*
 - ii. *Covered porch with 6" minimum width pillars/posts/columns*
 - b. Building Offset
 - i. *Facade offset*
 - ii. *Roofline offset*

- c. Roof
 - i. *Dormer*
 - ii. *Gable*
 - iii. *Cupola/Tower/Chimney*
 - iv. *Decorative cornice of roof line (flat roof only)*
- d. At least two (2) of the following facade elements:
 - v. *Bay window*
 - vi. *Balcony*
 - vii. *Porch*
 - viii. *Shutters*
 - ix. *Window trim with 4" minimum width*
 - x. *Patterned finish (scales, shakes, wainscoting, brick, or stone)*

3. Townhomes shall have a front porch with a minimum depth of 4 feet.



Development Conditions - Commercial Outparcel



1. Use Standards: The proposed use standards will restrict certain uses otherwise permitted in the RMX zoning district. This will encourage more neighborhood oriented and small businesses to better serve residents.
 - » Businesses with operating hours of 24 hours per day are not permitted.
 - » Vape, Tobacco, and CBD Stores, or businesses that sell these products are not permitted.
 - » The following principal uses shall be the only allowable uses, and shall be permitted by-right:
 - Child/Adult Day Care Center (6 or more people)
 - Personal Services
 - Professional Services
 - Medical Services
 - Neighborhood Retail/Restaurant (2,000 sf or less)
 - Allowed RMX district accessory uses
 - Bar/Tavern/Microbrewery
 - Studio (Arts, dance, martial arts, music)
2. Developer shall stub potable water, sanitary sewer, and storm drainage to commercial outparcel prior to plat recordation.
3. Developer shall construct curb, gutter, and sidewalk improvements along commercial outparcel prior to plat recordation.
4. The commercial outparcel shall not be owned by the Homeowners Association.
5. Developer is responsible for maintaining the commercial outparcel in a manner consistent with Lyndon Oaks Homeowners Association properties, until the commercial property is developed and/or sold by developer.
6. A 10' landscape buffer shall be planted adjacent to residential lots prior to plat recordation.
7. Parking lots shall contain vegetative screening in accordance with Knightdale's UDO.
8. Buildings shall be permitted up to two (2) stories.
9. Buildings shall meet the design standards for mixed-use buildings in UDO Sec 6.8.
10. All infrastructure on the residential portion of the project shall be sized appropriately to accommodate a two story commercial building.
11. Development of the proposed retail outparcel shall be completed within the term of the Development Agreement between the Developer and the Town of Knightdale.
12. Food trucks shall be permitted if a Food Truck Permit has been issued by the Town of Knightdale.
13. Temporary uses, such as seasonal sales, or other temporary uses and special events like farmers' markets, produce stands, or special social events, shall be permitted for up to forty-five (45) days with a zoning compliance permit approved by the Land Use Administrator.



**SITE DEVELOPMENT
ALLOWANCES**

Lyndon Oaks - Site Development Allowances

The proposed zoning for Lyndon Oaks is RMX-PUD. Lyndon Oaks meets all standards set forth in the Town of Knightdale’s Unified Development Ordinance with the exception of a few conditions. Due to primarily environmental and other site constraints, and in order to provide more landscape conservation and beneficial common open space for an overall better-integrated design, the applicant is requesting the following site development allowances:

Bulk and Dimensional Standards (UDO Sec. 3.4)

- Lot width (street loaded)
 - » In the RMX base district, the minimum required lot width for a street loaded single-family lot is 80’, and the minimum lot width for an alley-loaded single-family lot is 30’.
 - » In order to create a variety of housing types and price-points, and a more walkable community, we are proposing single family detached front-loaded homes with lot widths of less than 80’, and single family attached alley-loaded homes with lot widths of less than 30’.
- Driveway length
 - » In the RMX base district, the minimum required driveway length is 35’ for a residential lot.
 - » For front-loaded residential types, we are proposing a 25’ minimum driveway length, and a 20’ minimum driveway length for rear-loaded. This is mitigated by ample on-street guest parking, and the proposed driveway lengths allow for homeowners or guests to park a car in the driveways without blocking pedestrian facilities.
- Setbacks
 - » For the House building type, the minimum required rear setback is 25’ and the side setbacks can be a minimum of 20% of the lot width (to a minimum of 5’ for lots over 60’ wide and 3’ for lots less than 60’ wide).
 - » For front-loaded single family lots, we are proposing a 20’ rear minimum setback and 5’ minimum side setback, and for a rear-loaded single family lots, we are proposing a 10’ rear minimum setback and a 3’ side minimum setback, in order to adequately develop all lots within site constraints.

Standard Street Sections (UDO Sec. 10.4.A.1.b & Town Standard Details)

- Local Street Section - Two Way
 - » The standard detail calls for a 54.0’ right-of-way, and allows for informal parking.
 - » Lyndon Oaks is proposing on-street parking along sections of road where there are no residential driveways. On street parking will allow for guest parking near units. We are not providing on-street parking on street with front-loaded units to avoid any potential sight triangle conflicts as residents exit their driveways. Trees will be provided on residential lots adjacent to on-street parking and sidepaths at the same planting rate required for street trees.

Proposed Distribution (UDO Sec. 11.1.B)

- Lyndon Oaks is providing residential uses and nonresidential space, and thus has a required distribution of uses listed in Knightdale’s UDO Sec. 11.1.B. Lyndon Oaks will meet the required distribution ranges for single-family homes, but will not be providing a multifamily component, and the commercial component, which is not at a planned Neighborhood Node and will likely be small-scale neighborhood-serving commercial or office use(s), is smaller than the minimum 5%. The proposed distribution range for townhomes is also smaller than the minimum of 10%. The proposed use distribution is as follows:

» Dwelling - Single Family	25.4%
» Dwelling - Townhouse	9.5%
» Retail/Restaurant/Entertainment/Office/Service	1.4%

Residential Clearing & Grading (UDO Sec. 9.3.B)

- Lyndon Oaks will require a site development allowance pertaining to Residential Clearing and Grading as specified in Section 9.3.B of the UDO in order to provide more efficient utility infrastructure and effective stormwater design.
 - » Currently, mass grading is prohibited on lots 60’ in width or greater.
 - » Lyndon Oaks requests to mass grade 60’ and 70’ single-family lots (an additional 96 lots, 19.2% of the lots being developed). Any lot 80’ in width or greater shall not be mass graded.

Street Section for Neighborhood Streets (UDO Sec. 11.3.B.3.)

- The project places residential development in pods to avoid additional impacts to the site’s many streams and wetlands, and the pod at the center of the site is greater than 20 acres and can only be accessed by the street to the west of the Widewaters Parkway roundabout without creating additional undue environmental impacts. Because the street provides access from Widewaters Parkway to a residential area of over 20 acres, UDO 11.3.B.3 would require a Main Street section; however, Lyndon Oaks proposes a modified Local Street Section - Two Way, which is 16’ feet narrower than the Main Street section, and will allow for more green space on the site. The proposed modified Local Street Section - Two Way would not require a median, which would cause the residential sections to the north and south of the road to be disconnected and makes pedestrian crossings more difficult. The project does not wish to build a larger street section than what is needed to access this pod of residential development, and that will not be needed to connect to what is planned to be Mixed Density Residential development on the approximately 20 vacant acres to the east on Clifton Road, which is a dead-end road and is not planned to connect over I-87 on the Roadway Network Plan. Thus, this future street connection will likely only serve to connect two residential neighborhoods and will not collect regional trips, so a more neighborhood-friendly, slower street section is more appropriate.



Rear-Loaded Homes that Front a Public Green with Pedestrian Facilities (UDO Sec. 11.2.C.11)

- In order to provide flexibility for the proposed neighborhood design that includes small groups of rear-loaded townhomes that front passive open space areas with pedestrian facilities to encourage community gathering and use of alternative forms of transportation, Lyndon Oaks requests a site development allowance for open space areas that have a minimum of 34’ of frontage on either a public street or alley, rather than 50’ of frontage.

Public Alleys for Utilities (UDO Sec. 10.4.A.1.b)

- Lyndon Oaks requests 32’ public rights-of-way widths for alleys, as shown in the Master Plan, in order to provide utilities to rear-loaded homes that either front public open space rather than a public right-of-way, or do not directly front a public right-of-way, and alley access provides a more-direct route to connect homes to public utilities (particularly around the Widewaters Parkway roundabout). A wider public alley right-of-way may be approved administratively if 32’ is deemed impractical by the Land Use Administrator on the basis of infrastructure or other identified constraints.

Modified Avenue (currently called Tart Farm Rd) and Widewaters Parkway Intersection Design (UDO 11.3.B.4)

- Lyndon Oaks proposes a four-way stop with traffic calming measures, including high-visibility crosswalks, stamped concrete, Rectangular Rapid Flash Beacons (RRFBs), and pedestrian refuges in the Widewaters Parkway median at the intersection of the Urban Main Street, and Widewaters Parkway. These measures will slow down traffic and ensure pedestrian safety at this intersection, which is very close to the intersection of Widewaters Parkway and the Roadway Network Plan’s planned Main Street connection to a future Neighborhood Node at the intersection of Bethlehem and Old Faison Roads, where the development will be providing a roundabout to calm traffic as well.

Active Private Greenways (UDO Sec. 11.2.C.7)

- The Open Space Menu in Figure 11.1 lists “Private Greenways” as a passive open space use and “Public Greenways” as an active open space use. Lyndon Oaks proposes a network of privately-maintained greenways that will be indistinguishable from publicly-maintained greenways. They will have the same design and easement area, and Lyndon Oaks has committed to further activating the private trails by providing benches, dog waste stations, and fitness equipment along the trails. Thus, the proposed private trails provide the same active recreational opportunities for residents (and likely nonresidents) as the public trails, and Lyndon Oaks proposes to count its private trails as an active open space feature.



10



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Town of Knightdale
Development Services
Gideon Smith 07/17/2024

**NEIGHBORHOOD
MEETING**

Meeting Information

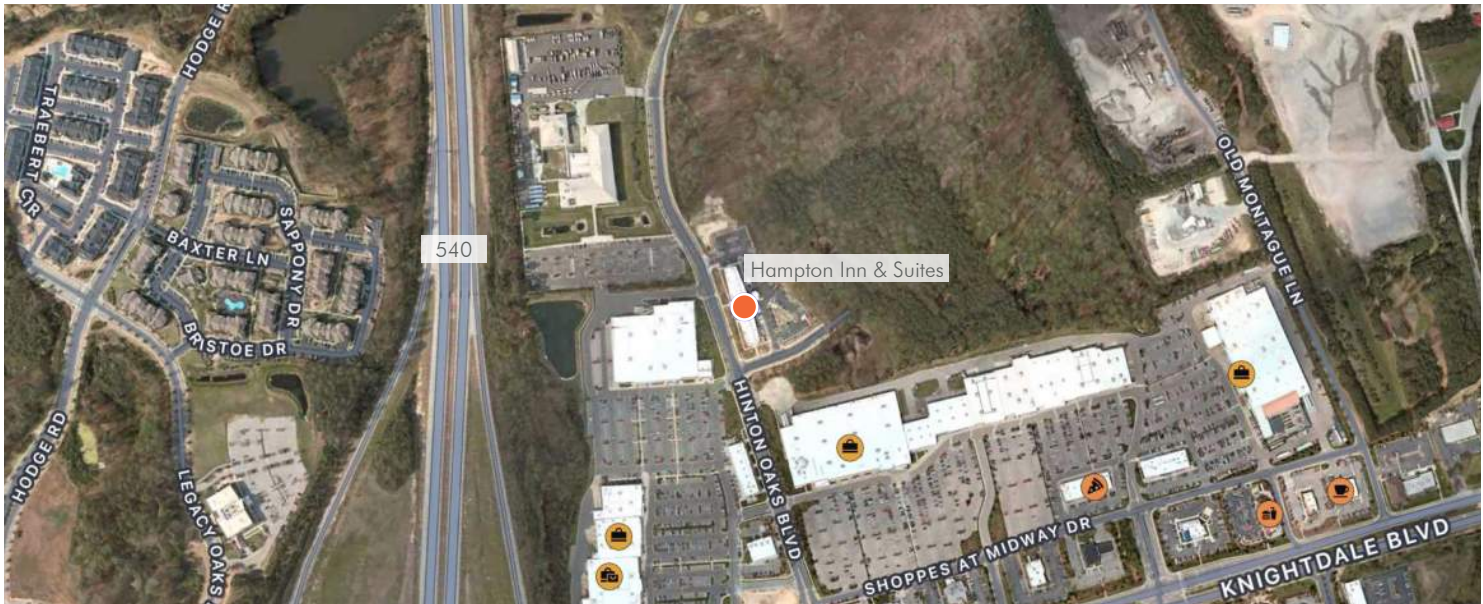


Figure 23: Hampton Inn & Suites Knightdale Vicinity Map (Not to scale)

A neighborhood meeting was held on November 14th, 2023 at 6:00 pm at the Hampton Inn & Suites Knightdale. See Figure 23 for a map of the meeting location. There were approximately 40 neighbors in attendance, along with a member of the development team, four members of the design team, and one Senior Planner from the Town of Knightdale.

Date of meeting:	Tuesday Nov. 14, 2023
Time of meeting:	6:00 pm EST
Meeting address:	Hampton Inn & Suites Knightdale 405 Hinton Oaks Blvd. Knightdale, NC 27545
Developer:	
» DR Horton:	Reese Bridges, PE, Entitlements Manager Cameron Jones
Design consultants:	
» Urban Design Partners:	Brian Richards, PLA
» Ramey Kemp Associates:	Caroline Cheeves, PE
» Parker Poe:	Ashley Honeycutt Terrazas, Land Use Attorney
Town of Knightdale:	Gideon Smith, AICP, Senior Planner



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Development Services
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Neighborhood Meeting Questions

At the neighborhood meeting for Lyndon Oaks, the neighbors had questions about stormwater, density, renter vs. owner housing, traffic, number of new children in schools, forced annexation, construction timeline, target price for homes, quality of residents moving, wildlife habitat, and property values. Their questions are as follows:

- » **Question/Concern #1: Stormwater, Runoff, and Grading**
 - Applicant clarified that grading is not complete but the goal is for the site to be balanced (no import, no export dirt) but ultimately the site will tie into the grade along the perimeter of the site. Stormwater runoff is state-regulated and cannot be increased on adjacent properties. SCMs are monitored yearly.
- » **Question/Concern #2: How Is Density Calculated?**
 - Applicant clarified that density is calculated based on total gross acreage, it does not exclude amenity areas, thus residential density on the site is less than 3 units/acre.
- » **Question/Concern #3: Renter vs. Owner-Occupied Housing**
 - Applicant clarified that North Carolina law prohibits regulating occupancy in a zoning ordinance.
- » **Question/Concern #4: Traffic on Bethlehem Road & Roundabouts Being Dangerous for Large Emergency Vehicles**
 - Applicant clarified that roundabouts are designed such that emergency vehicles can drive over the center island. Roundabouts are safer because they eliminated left turns which are the most dangerous at an intersection. Knightdale UDO has been prioritizing roundabouts to improve community safety.

- » **Question/Concern #5: Traffic in General, TIA Process, Intersections Studied**
 - Applicant’s transportation engineer clarified the Traffic Impact Analysis process and highlighted that focus is on weekday peak hours, 7AM-9AM and 4PM-6PM. She clarified that all of the traffic counts and turning movements are taken into account. She listed the intersections that would be studied. She clarified that the goal of TIA is to determine worst-case scenario (maximum trip generation at buildout). Town requires study of roadway network considering compounded growth until 2042. TIA would be submitted with the application.
- » **Question/Concern #6: Number of New Children in Schools & Strain on Emergency Services**
 - Applicant clarified information will be submitted to Wake County Public Schools and emergency services.
- » **Question/Concern #7: Taking Neighbors Land, Forced Annexation**
 - Applicant clarifies that it is giving land to Knightdale to make roadway improvements. Applicant clarified that roadway improvements will be within the already existing public right of way, but if property needed to be acquired to make an improvement, the Town and NCDOT cannot use eminent domain to take property for a private development. NC law now requires voluntary annexation.
- » **Question/Concern #8: Timeline of Construction of Development**
 - Applicant clarified estimated timing: Zoning process through Spring and Summer of 2024; Design drawings (water, sewer, grading, traffic) 12 months later (end of 2024); At least a year to a year and a half to develop the first phase (end of 2025, beginning 2026); begin wrapping up houses at end of 2026; Early 2027 moving first customers into first phase



Neighborhood Meeting Questions (Continued)

- » **Question/Concern #9: Target Price for the Homes**
 - Applicant clarified that sizes ranged from 1,500 square feet for townhouses and smaller houses to 3,000+ square feet for single family homes; in today's terms, pricing would range from \$200,000 to \$600,000+, but could not commit to pricing for future market rates.
- » **Question/Concern #10: Quality of Residents Moving**
 - Town is strict about architectural standards, and the plan is to provide a high quality product.
- » **Question/Concern #11: Wildlife and Native Habitat**
 - Applicant clarified that natural vegetation will be retained around pond, lake, and streams and there will be a walking trail as a natural amenity onsite and they are doing their homework to develop consistently with the history of the land. Approximately 17 acres of preserved area.
- » **Question/Concern #12: Decrease in Property Values**
 - Applicant clarified they have never seen property values decrease due to development with exception of some industrial projects.



Attendance Sheet

Neighborhood Meeting for Lyndon Oaks Planned Unit Development

Hampton Inn & Suites, 405 Hinton Oaks Blvd, Knightdale, NC 27545

Date: November 14, 2023

Name	Address	Name	Address
Karen Palke	121 Meadows Cr Knightdale	Kenny Holley	307 Rochelle Dr. Knightdale
Leamon Dixon	107 Shady Circle Knightdale	Donald Kay	932 Bethlehem Rd Knightdale
Eddie Matthews	106 Shady Circle Knightdale	Barbara & Dick Sossomon	1124 Poplar Circle Knightdale
Joyce Liles (Gayle)	4040 Clifton Rd	Brad Pope	1008 Bethlehem Rd. Knightdale
Tim Ferrell	3033 Churchill Road	Carrie Gray	1940 Bethlehem Rd. Raleigh
Kristin Trent	5309 Crosscut Pl	Michael & Karen Palko	121 Meadows Circle Knightdale
Don Curtis Jr.	5309 Crosscut Pl	Laurie Pope	116 Bethlehem Rd Knightdale
Carole & Kenny Faison	802 Bethlehem Rd Knightdale	Sam Maise	203 Robertson St. Knightdale
Chris Posh	4308 Old Faison Rd Knightdale	Patricia Loftin	1044 Stone Eagle Lane Raleigh 27610
Trey Tart	106 Tart Farm Rd Knightdale	Sara Hauser	4228 K Held Rd Knightdale
EC Tart	4325 Old Faison Rd		
Sonya Debnam	4521 Old Faison Rd		
Wesley Knapp	919-740-9955 Churchill HOA		
Nanay & Gene Zack	133 Meadows Circle Knightdale		
Caster Kennemer			
Gwen Gray	4275 Old Faison Rd Knightdale		
Don & Doris Curtis	5309 Cross Cut Place Knightdale		
Annette Miltz	128 Meadows Circle Knightdale		
Trudy Guffey	5101 Woodfield Ln Knightdale		
Rhonda Neely	129 Meadows Circle Knightdale		
Brian & Kim King	125 Meadows Circle Knightdale		
Tim & Denise Jones	132 Meadows Circle Knightdale		
Jack & Angela Worden	4407 Omaha Dr. Knightdale		
Gerald & Ann Akland	112 Old Ferrell Rd		

NEIGHBORHOOD MEETING



URBAN
DESIGN
PARTNERS

LANDSCAPE ARCHITECTURE + CIVIL ENGINEERING

