

## Clifton Road Conservation Subdivision

(ZMA-8-24)

0 Pine Country Ln  
Knightdale, NC

Owner

David Jonathan Adams  
6000 Mal Weathers Road  
Raleigh, NC 27603-7831

Developer

DR Horton  
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Raleigh, NC 27615  
Contact: Reese Bridges  
Telephone: 984.247.9614  
Email: Trbridges@drhorton.com

Applicant

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Surveyor

CMP Professional Land Surveyors  
333 White Street  
P.O. Box 1253  
Wake Forest , NC 27588  
Telephone: 919.556.3148

Consultant

Duncan Land Consultants  
5204 Blakenban Trail  
Fuquay Varina , NC 27526  
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C3.00	Stormwater Management Plan	April 25, 2025
C4.00	Utility Plan	April 25, 2025
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Reference Drawings

No.	Drawing Title	Latest Issue
C-FIRE	Apparatus Access Plan	April 25, 2025
1 of 1	Topographic Survey	November 11, 2024
1 of 1	Tree Survey	February 27, 2025

Architectural Design 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:	4. MAIN ROOF PITCHES (EXCLUDING PORCHES) WILL BE AT LEAST 6:12.
a. STONE	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.
b. BRICK	6. EACH FRONT ENTRANCE SHALL CONTAIN A COVERED STOOP OR PORCH.
c. LAP SIDING	7. 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.
d. SHAKES	
e. BOARD AND BATTEN	
f. WINDOW PEDIMENTS	
g. RECESSED WINDOWS	
h. SIDE AND/OR FRONT WINDOW BOX BAYS	
i. ROOF GABLES	
j. ROOF DORMERS	
k. ROOFLINE CORNICES	
l. METAL ROOFING AS ACCENT	
m. COLUMN	
n. SHUTTERS	
o. 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 COMPLEMENTARY COLORS.	
3. VINYL IS PROHIBITED EXCEPT FOR WINDOW TRIM, SOFFITS, FASCIA, AND/OR CORNER BOARDS.	

STANDARDS FOR SINGLE-FAMILY DETACHED FRONT-LOADED HOMES	
8. ALL HOMES SHALL HAVE A MINIMUM 100 SQUARE FOOT PATIO, DECK, TERRACE, OR COURTYARD.	
9. A MINIMUM OF 33% OF HOMES SHALL INCLUDE STONE OR BRICK AS A FRONT FACADE MATERIAL.	
10. FRONT-FACING GARAGE DOORS SHALL HAVE ONE OF THE FOLLOWING: WINDOWS, DECORATIVE DETAILS, OR CARRIAGE-STYLE ADORNMENTS.	

RALEIGH WATER CONDITIONS OF APPROVAL:	
*ALL WATER, SANITARY SEWER AND REUSE FACILITIES SHALL BE INSTALLED, INSPECTED, TESTED, AND ACCEPTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT FOR OPERATIONS AND MAINTENANCE PRIOR TO 1ST CO	
*A PETITION FOR ANNEXATION INTO THE CITY LIMITS SHALL BE SUBMITTED IN ACCORDANCE WITH CITY COUNCIL POLICY FOR EXTENSION OF UTILITY SERVICE TO PROPERTIES CURRENTLY OUTSIDE OF THE CITY LIMITS PRIOR TO PLAT RECORDATION	
*CONSTRUCTION DRAWINGS MUST BE APPROVED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT FOR ALL PUBLIC WATER, PUBLIC SEWER AND/OR PRIVATE SEWER EXTENSIONS PRIOR TO PLAT RECORDATION.	
*A PLAT MUST BE RECORDED AT THE WAKE COUNTY REGISTER OF DEEDS OFFICE FOR ALL UTILITY EASEMENT DEDICATIONS PRIOR TO BUILDING PERMIT ISSUANCE*A DOWNSTREAM SEWER CAPACITY STUDY IN COMPLIANCE WITH THE RALEIGH WATER PUBLIC UTILITY DESIGN MANUAL SHALL BE SUBMITTED VIA THE COR PERMIT & DEVELOPMENT PORTAL BY THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION DRAWING APPROVAL	
*A WATER MODEL IN COMPLIANCE WITH THE RALEIGH WATER PUBLIC UTILITY DESIGN MANUAL MAY BE REQUIRED TO BE SUBMITTED BY THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CD APPROVAL	
*THREE-PARTY DOT ENCROACHMENT AGREEMENT REQUIRED PRIOR TO START OF CONSTRUCTION. SUBMIT TO COR TRANSPORTATION. LINWOOD "LENNY" WALLACE ENGINEER DEVELOPMENT SERVICES, LAND DEVELOPMENT 919-996-2493 LINWOOD.WALLACE@RALEIGHNC.GOV MAILING ADDRESS: ATTN: LINWOOD WALLACE CITY OF RALEIGH 1 EXCHANGE PLAZA, SUITE 500 RALEIGH, NC 27601	

Development Allowances

THE PROPOSED ZONING OF GR3 MEETS ALL STANDARDS SET FORTH IN THE TOWN OF KNIGHTDALE'S UNIFIED DEVELOPMENT ORDINANCE WITH THE EXCEPTION OF A FEW CONDITIONS.	PUBLIC ROADWAY CENTERLINE RADII
NOTE: CONTENTS OF THIS SECTION WILL BE MODIFIED AND/OR EXPANDED WITH FURTHER COMMUNICATION AND REVIEW WITH STAFF AND COUNCIL. DUE PRIMARILY TO 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:	THE DEVELOPMENT REQUESTS A REDUCTION IN THE MINIMUM CENTERLINE RADII FOR PUBLIC STREETS FROM 150' TO 100' SO LONG AS ADEQUATE EMERGENCY VEHICLE ACCESS AND MANEUVERABILITY IS NOT COMPROMISED.
LOT WIDTH	RESIDENTIAL CLEARING & GRADING (UDO SEC. 9.3.B)
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'. 50' LOT WIDTHS ARE PROPOSED FOR A MINORITY OF THE DEVELOPMENT.	THE PROJECT 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. FRONT LOAD SINGLE FAMILY LOT WIDTHS SHALL BE A MINIMUM OF 50' IN WIDTH AND MASS GRADING SHALL BE PERMITTED.
DRIVEWAY LENGTH	CONNECTIVITY INDEX
IN THE GR3 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. 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.	THE CONNECTIVITY INDEX SHALL BE PERMITTED TO BE 1.0 DUE TO A LACK OF EXISTING STREET CONNECTIONS TO THE NEIGHBORHOOD AND THE PRESENCE OF EXISTING ENVIRONMENTAL CONDITIONS (THAT WE WOULD LIKE TO RETAIN) TO THE NORTH AND WEST OF THE DEVELOPED AREA.
BUILDING SETBACKS	PORTION OF CLIFTON ROAD IMPROVEMENTS
FOR FRONT-LOADED SINGLE FAMILY LOTS, WE'RE PROPOSING A MINIMUM 20' FRONT, 15' REAR AND 5' SIDE MINIMUM BUILDING SETBACK.	THE DEVELOPMENT IS REQUESTING A FEE-IN-LIEU OF CONSTRUCTION FOR A PORTION OF THE CLIFTON RD IMPROVEMENTS (CURB & GUTTER, SIDEWALK ETC.) NORTH OF THE EAST-TO-WEST JURISDICTIONAL STREAM THAT BISECTS CLIFTON RD. FURTHER DEVELOPMENT NORTH OF THE PROJECT IS UNLIKELY, AND CREATING POTENTIALLY UNNECESSARY ENVIRONMENTAL IMPACTS TO JURISDICTIONAL WETLANDS AND STREAMS DOES NOT ALIGN WITH THE OVERALL THEME OF CONSERVATION. THE DEVELOPER WILL PAY A LUMP SUM FEE-IN-LIEU OF CONSTRUCTION TO THE TOWN OF KNIGHTDALE WITH THE FIRST SUBDIVISION PLAT. THE AMOUNT WILL BE ESTIMATED BY A PROFESSIONAL ENGINEER AND REVIEWED BY THE TOWN OF KNIGHTDALE.
FOR COTTAGES, WE'RE PROPOSING A MINIMUM OF 10' SEPARATION BETWEEN UNITS AND 10' MIN FRONT BUILDING SETBACK.	

Site Data Table

PROJECT:	CLIFTON ROAD CONSERVATION SUBDIVISION
OWNER:	DAVID ADAMS 6000 MAL WEATHERS ROAD RALEIGH, NC 27603
SITE ADDRESS:	0 PINE COUNTRY LANE KNIGHTDALE, NC 27545
PIN:	1743-73-8469
WATERSHED:	NEUSE RIVER
TOWNSHIP:	ST MATTHEWS
PARCEL AREA:	32.05 AC
CURRENT ZONING:	RR1
PROPOSED ZONING:	GR3 PUD
CURRENT USE:	VACANT
PROPOSED USE:	RESIDENTIAL
SINGLE FAMILY SETBACKS:	
FRONT:	20'
SIDE:	5'
REAR:	15'
COTTAGE SETBACKS:	
FRONT:	10'
CORNER:	5'
BUILDING SEPARATION:	
MINIMUM:	10'





Legend

Exist.	Prop.		Exist.	Prop.	
		PROPERTY LINE			CONCRETE
		PROJECT LIMIT LINE			HEAVY DUTY PAVEMENT
		RIGHT-OF-WAY/PROPERTY LINE			BUILDINGS
		EASEMENT			RIPRAP
		BUILDING SETBACK			CONSTRUCTION EXIT
		PARKING SETBACK			TOP OF CURB ELEVATION
		BASELINE			BOTTOM OF CURB ELEVATION
		CONSTRUCTION LAYOUT			SPOT ELEVATION
		ZONING LINE			TOP & BOTTOM OF WALL ELEVATION
		TOWN LINE			BORING LOCATION
		LIMIT OF DISTURBANCE			TEST PIT LOCATION
		WETLAND LINE WITH FLAG			MONITORING WELL
		FLOODPLAIN			UNDERDRAIN
		BORDERING LAND SUBJECT TO FLOODING			DRAIN
		WETLAND BUFFER ZONE			ROOF DRAIN
		NO DISTURB ZONE			SEWER
		200' RIVERFRONT AREA			FORCE MAIN
		GRAVEL ROAD			OVERHEAD WIRE
		EDGE OF PAVEMENT			WATER
		BITUMINOUS BERM			FIRE PROTECTION
		BITUMINOUS CURB			DOMESTIC WATER
		CONCRETE CURB			GAS
		CURB AND GUTTER			ELECTRIC
		EXTRUDED CONCRETE CURB			STEAM
		MONOLITHIC CONCRETE CURB			TELEPHONE
		PRECAST CONC. CURB			FIRE ALARM
		SLOPED GRAN. EDGING			CABLE TV
		VERT. GRAN. CURB			CATCH BASIN CONCENTRIC
		LIMIT OF CURB TYPE			CATCH BASIN ECCENTRIC
		SAWCUT			DOUBLE CATCH BASIN CONCENTRIC
					DOUBLE CATCH BASIN ECCENTRIC
					GUTTER INLET
					DRAIN MANHOLE CONCENTRIC
					DRAIN MANHOLE ECCENTRIC
					TRENCH DRAIN
					PLUG OR CAP
					CLEANOUT
					FLARED END SECTION
					HEADWALL
					SEWER MANHOLE CONCENTRIC
					SEWER MANHOLE ECCENTRIC
					CURB STOP & BOX
					WATER VALVE & BOX
					TAPPING SLEEVE, VALVE & BOX
					FIRE DEPARTMENT CONNECTION
					FIRE HYDRANT
					WATER METER
					POST INDICATOR VALVE
					WATER WELL
					GAS GATE
					GAS METER
					ELECTRIC MANHOLE
					ELECTRIC METER
					LIGHT POLE
					TELEPHONE MANHOLE
					TRANSFORMER PAD
					UTILITY POLE
					GUY POLE
					GUY WIRE & ANCHOR
					HAND HOLE
					PULL BOX
					MATCHLINE

Abbreviations

General	
ABAN	ABANDON
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
BIT	BITUMINOUS
BS	BOTTOM OF SLOPE
BWLL	BROKEN WHITE LANE LINE
CONC	CONCRETE
DYCL	DOUBLE YELLOW CENTER LINE
EL	ELEVATION
ELEV	ELEVATION
EV	ELECTRIC VEHICLE CHARGING SPACE
EX	EXISTING
FDN	FOUNDATION
FFE	FIRST FLOOR ELEVATION
GRAN	GRANITE
GTD	GRADE TO DRAIN
LA	LANDSCAPE AREA
LOD	LIMIT OF DISTURBANCE
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PERF	PERFORATED
PROP	PROPOSED
REM	REMOVE
RET	RETAIN
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
SWEL	SOLID WHITE EDGE LINE
SWLL	SOLID WHITE LANE LINE
TS	TOP OF SLOPE
TYP	TYPICAL
Utility	
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
DCB	DOUBLE CATCH BASIN
DMH	DRAIN MANHOLE
CIP	CAST IRON PIPE
COND	CONDUIT
DIP	DUCTILE IRON PIPE
FES	FLARED END SECTION
FM	FORCE MAIN
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GI	GUTTER INLET
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
INV	INVERT ELEVATION
I=	INVERT ELEVATION
LP	LIGHT POLE
MES	METAL END SECTION
PIV	POST INDICATOR VALVE
PWW	PAVED WATER WAY
PVC	POLYVINYLCHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R=	RIM ELEVATION
RIM=	RIM ELEVATION
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE, VALVE AND BOX
UG	UNDERGROUND
UP	UTILITY POLE

Notes

- General**
- THE "NORTH CAROLINA 811 LAW" REQUIRES FOR THE CONTRACTOR TO CALL 811 AT LEAST 3 WORKING DAYS IN ADVANCE OF THE PLANNED WORK TO ALLOW TIME FOR MARKING, THAT THE MARKS BE RESPECTED AND PROTECTED, AND THAT EXCAVATION BE COMPLETED CAREFULLY.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.
  - ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS AND WALKWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER ARE MORE STRINGENT).
  - AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL FOLLOW THE MPDES SPECIFICATIONS FOR SITE SPECIFIC SEEDING MIXTURES.
  - WITHIN THE LIMITS OF THE BUILDING FOOTPRINT, THE SITE CONTRACTOR SHALL PERFORM EARTHWORK OPERATIONS REQUIRED UP TO SUBGRADE ELEVATIONS.
  - WORK WITHIN THE LOCAL RIGHTS-OF-WAY SHALL CONFORM TO LOCAL MUNICIPAL STANDARDS. WORK WITHIN STATE RIGHTS-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE STATE HIGHWAY DEPARTMENTS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.
  - UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALKS, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
  - TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
  - AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
  - IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND STANDARD ACTION CAN BE TAKEN.
  - CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
  - DAMAGE RESULTING FROM CONSTRUCTION LOADS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
  - CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO OWNER.
  - DESIGN OF THE ACCESS IMPROVEMENTS AT THE INTERSECTIONS OF THE SITE WITH BETHLEHEM ROAD AND OLD FAISON ROAD IS BY DRMP AND IS SHOWN HEREON FOR REFERENCE ONLY
- Utilities**
- THE LOCATIONS, SIZES, AND TYPES OF EXISTING UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR IT'S REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATIONS, SIZES, AND ELEVATIONS OF THE POINTS OF CONNECTIONS TO EXISTING UTILITIES AND, SHALL CONFIRM THAT THERE ARE NO INTERFERENCES WITH EXISTING UTILITIES AND THE PROPOSED UTILITY ROUTES, INCLUDING ROUTES WITHIN THE PUBLIC RIGHTS OF WAY.
  - WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT AND CONTRACTOR'S FAILURE TO NOTIFY PRIOR TO PERFORMING ADDITIONAL WORK RELEASES OWNER FROM OBLIGATIONS FOR ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED TO RESOLVE THE CONFLICT.
  - SET CATCH BASIN RIMS, AND INVERTS OF SEWERS, DRAINS, AND DITCHES IN ACCORDANCE WITH ELEVATIONS ON THE GRADING AND UTILITY PLANS.
  - RIM ELEVATIONS FOR DRAIN AND SEWER MANHOLES, WATER VALVE COVERS, GAS GATES, ELECTRIC AND TELEPHONE PULL BOXES, AND MANHOLES, AND OTHER SUCH ITEMS, ARE APPROXIMATE AND SHALL BE SET/RESET AS FOLLOWS:
    - PAVEMENTS AND CONCRETE SURFACES: FLUSH
    - ALL SURFACES ALONG ACCESSIBLE ROUTES: FLUSH
    - LANDSCAPE, TOPSOIL AND SEED, AND OTHER EARTH SURFACE AREAS: ONE INCH ABOVE SURROUNDING AREA AND TAPER EARTH TO THE RIM ELEVATION.
  - THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, FIRE ALARM, ETC.). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH OWNER AND ARCHITECT.
  - CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR PAYING FEES FOR POLE RELOCATION AND FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY CONTRACTOR OR BY THE UTILITIES COMPANY.
  - UTILITY PIPE MATERIALS SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED ON THE PLAN:
    - WATER PIPES SHALL BE DUCTILE IRON PIPE (DIP).
    - SANITARY SEWER PIPES SHALL BE DUCTILE IRON PIPE (DIP) OR POLYVINYL CHLORIDE (PVC) SEWER PIPE.
    - STORM DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP) AND HIGH DENSITY POLYETHYLENE (HDPE), OR APPROVED EQUIVALENT. HDPE PIPE MAY BE USED WHEN COVER FROM SUBGRADE IS A MINIMUM OF TWO NOMINAL PIPE DIAMETERS.
  - CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND SHALL FURNISH EXCAVATION, INSTALLATION, AND BACKFILL OF ELECTRICAL FURNISHED ITEMS SUCH AS PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES, AND CONCRETE PADS. CONTRACTOR SHALL FURNISH CONCRETE ENCASUREMENT OF DUCT BANKS IF REQUIRED BY THE UTILITY COMPANY AND AS INDICATED ON THE DRAWINGS.
  - CONTRACTOR SHALL EXCAVATE AND BACKFILL TRENCHES FOR GAS IN ACCORDANCE WITH GAS COMPANY'S REQUIREMENTS.
  - ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4" MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS AND LOCAL MUNICIPAL STANDARDS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.
  - LOCATION OF FITTINGS SHOWN HEREON ARE APPROXIMATE ONLY. CONTRACTOR SHALL DETERMINE ALL FITTING REQUIREMENTS AND LOCATIONS FROM ACTUAL FIELD CONDITIONS.
  - PIPE LENGTHS SHOWN HEREON ARE FROM CENTERLINE TO CENTERLINE OF STRUCTURE AND ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE ACTUAL PIPE LENGTHS FROM FIELD CONDITIONS.
  - INVERTS CONTROL ELEVATIONS AT ALL STRUCTURES, SLOPES AND LENGTHS ARE APPROXIMATE ONLY.
  - REFER TO SHEET C4.00 FOR CITY OF RALEIGH UTILITY NOTES.

Layout and Materials

- DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
- CURB RADII ARE 3 FEET TO FACE OF CURB UNLESS OTHERWISE NOTED.
- CURBING SHALL BE 30" CONCRETE CURB AND GUTTER WITHIN THE SITE UNLESS OTHERWISE INDICATED ON THE PLANS.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
- PROPOSED BOUNDS AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE SET OR RESET BY A PROFESSIONAL LAND SURVEYOR.
- PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES.
- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY

SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.

- CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.

Demolition

- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS. REMOVE AND DISPOSE OF EXISTING UTILITIES, FOUNDATIONS AND UNSUITABLE MATERIAL BENEATH AND FOR A DISTANCE OF 10 FEET BEYOND THE PROPOSED BUILDING FOOTPRINT INCLUDING EXTERIOR COLUMNS.
- EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
- CONTRACTOR SHALL DISPOSE OF DEMOLITION DEBRIS IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND STATUTES.
- THE DEMOLITION LIMITS DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING THE DETAILED SCOPE OF DEMOLITION BEFORE SUBMITTING ITS BID/PROPOSAL TO PERFORM THE WORK AND SHALL MAKE NO CLAIMS AND SEEK NO ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK.
- UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTES OR POLLUTANTS AT THE PROJECT SITE. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY CLAIMS OF LOSS, DAMAGE, EXPENSE, DELAY, INJURY OR DEATH ARISING FROM THE PRESENCE OF HAZARDOUS MATERIAL AND CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER FROM ANY CLAIMS MADE IN CONNECTION THEREWITH. MOREOVER, THE ENGINEER SHALL HAVE NO ADMINISTRATIVE OBLIGATIONS OF ANY TYPE WITH REGARD TO ANY CONTRACTOR AMENDMENT INVOLVING THE ISSUES OF PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF ASBESTOS OR OTHER HAZARDOUS MATERIALS.

Erosion Control

- PRIOR TO STARTING ANY OTHER WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS AND AS IDENTIFIED IN FEDERAL, STATE AND LOCAL APPROVAL DOCUMENTS PERTAINING TO THIS PROJECT.
- CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES, AND REMOVE SEDIMENT THEREFROM ON A WEEKLY BASIS AND WITHIN TWELVE HOURS AFTER EACH STORM EVENT AND DISPOSE OF SEDIMENTS IN AN UPLAND AREA SUCH THAT THEY DO NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND OR DIRECT DEPOSIT.
- CONTRACTOR SHALL PERFORM CONSTRUCTION SEQUENCING SUCH THAT EARTH MATERIALS ARE EXPOSED FOR A MINIMUM OF TIME BEFORE THEY ARE COVERED, SEEDED OR OTHERWISE STABILIZED TO PREVENT EROSION.
- UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, CONTRACTOR SHALL REMOVE AND DISPOSE OF EROSION CONTROL MEASURES AND CLEAN SEDIMENT AND DEBRIS FROM ENTIRE DRAINAGE AND SEWER SYSTEMS.

Existing Conditions Information

- THIS SURVEY MAP IS INTENDED TO REPRESENT THE EXISTING CONDITIONS/TOPOGRAPHY ON A PORTION OF THE PROPERTY AND ALL ENCUMBRANCES UPON THE PROPERTY MAY NOT BE SHOWN.
- HORIZONTAL DATUM IS NAD 83-2011 AND VERTICAL DATUM IS NAVD88.
- THIS DRAWING DOES NOT CONFORM TO N.C. GS47-30 AND THEREFORE IS NOT FOR RECORDATION.
- SURVEY INFORMATION BASED ON ALTA/NSPS SURVEY COMPLETED ON 11/14/2025 BY CMP PROFESSIONAL LAND SURVEYORS.
- TREES SHOWN HEREON MAY NOT REPRESENT ALL VEGETATION ON THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY LIES IN ZONES X (AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE CONDITIONS 1% ANNUAL CHANCE FLOODPLAIN), BASED ON THE FLOOD INSURANCE RATE MAP COMMUNITY MAP NUMBERS 3720174300K AND 3720175300K DATED JULY 19, 2022.

Document Use

- THESE PLANS AND CORRESPONDING CADD DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICE, AND SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN FOR WHICH IT WAS CREATED WITHOUT THE EXPRESSED, WRITTEN CONSENT OF VHB. ANY UNAUTHORIZED USE, REUSE, MODIFICATION OR ALTERATION, INCLUDING AUTOMATED CONVERSION OF THIS DOCUMENT SHALL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO VHB.
- CONTRACTOR SHALL NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS, BUT SHALL VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
- SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR SHALL REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.



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Suite 500  
Raleigh, NC 27606  
919.829.0328  
Corp. # C-3705

Clifton Road  
Conservation Subdivision  
0 Pine Country Lane  
Knightdale, NC

No.	Revision	Date	Appr'd.
1	TOWN OF KNIGHTDALE	4/25/2025	CDT

Designed by	VHB	Checked by	CDT
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Issued for  
Master Plan Review  
March 24, 2025

Legend and General Notes

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ENGINEER  
MARLES D. TOWNSEND  
04/24/2025

C0.01

Sheet 2 of 11

Project Number  
39510.03



PRELIMINARY DEVELOPMENT SUMMARY

PROJECT: CLIFTON RD CONSERVATION SUBDIVISION

OWNER : DAVID ADAMS  
6000 MAL WEATHERS RD  
RALEIGH, NC 27603

DEVELOPER: DR HORTON, INC  
7208 FALLS OF NEUSE RD, STE 201  
RALEIGH, NC 27615

PIN: 1743-73-8469

SITE ADDRESS: 0 PINE COUNTRY LN

WATERSHED: NEUSE RIVER - C<sub>1</sub>NSW

TOWNSHIP: ST MATTHEWS  
TRACT AREA: 32.05  
EX ZONING: RR1 (RURAL RESIDENTIAL 1)  
PROPOSED ZONING: GR3 PUD  
EX USE: VACANT  
PROPOSED USE: RESIDENTIAL  
EX STRUCTURES: N/A  
RES UNITS PROPOSED: 95  
TRADITIONAL SINGLE FAMILY DETACHED: 27  
COTTAGES: 68

DENSITY: 95 UNITS/32.05 AC = 2.96 UNITS/AC

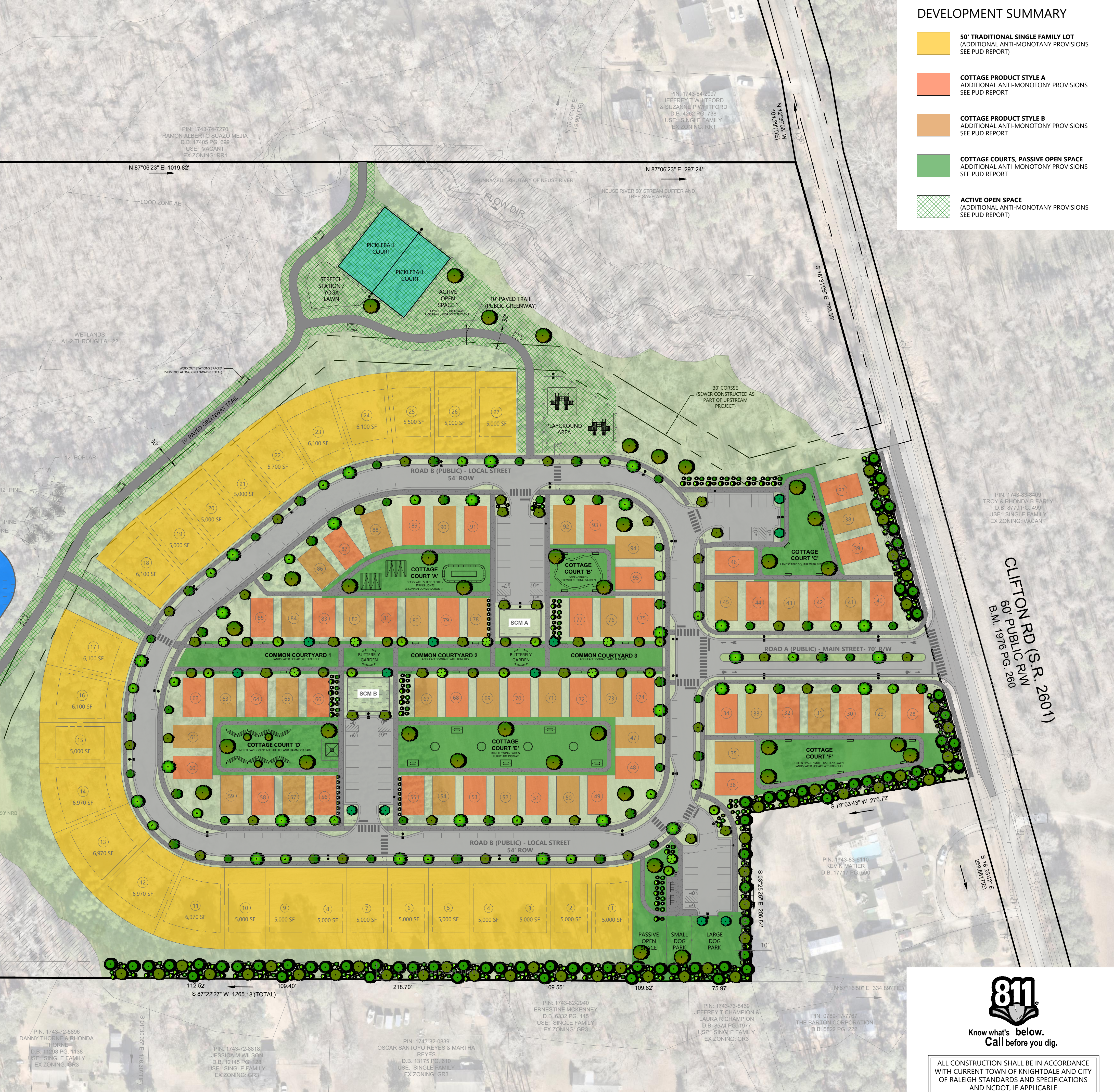
RECREATIONAL OPEN SPACE CALCULATIONS

OPEN SPACE REQUIRED: 3.97 AC  
TOTAL BEDS OUTSIDE 1/2 MILE: 333 BEDS (95 UNITS\*3.5 UNITS/BED)  
OPEN SPACE CALC: 333 beds \* 520 SF = 173,160 SF (3.97 AC)  
OPEN SPACE PROVIDED: 4.00± AC MIN.

ACTIVE OPEN SPACE  
ACTIVE OPEN SPACE REQ'D: 1.98 AC (0.5\*3.97 AC)  
ACTIVE OPEN SPACE PROVIDED: 2.00± AC  
PASSIVE OPEN SPACE  
PASSIVE OPEN SPACE REQ'D: 1.98 AC (0.5\*3.97 AC)  
PASSIVE OPEN SPACE PROVIDED: 2.41± AC  
UNDISTURBED OPEN SPACE:  
10± ACRES (REFER TO OPEN SPACE PLAN)  
WETLAND IMPACT: NO IMPACTS PLANNED

PARKING  
TRADITIONAL SF UNITS: (2/UNIT \* 27) = 54 SPACES  
COTTAGE UNITS: (1.7/UNIT \* 68 UNITS) = 116 SPACES  
TOTAL PROVIDED: 172 SPACES

CONNECTIVITY INDEX: 2 LINKS/ 2 NODES= 1.0 (DEV ALLOWANCE)



DEVELOPMENT SUMMARY

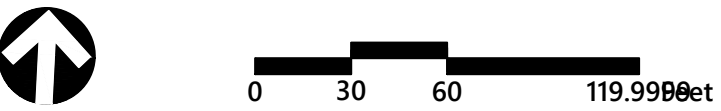
- 50' TRADITIONAL SINGLE FAMILY LOT**  
(ADDITIONAL ANTI-MONOTANY PROVISIONS  
SEE PUD REPORT)
- COTTAGE PRODUCT STYLE A**  
ADDITIONAL ANTI-MONOTANY PROVISIONS  
SEE PUD REPORT
- COTTAGE PRODUCT STYLE B**  
ADDITIONAL ANTI-MONOTANY PROVISIONS  
SEE PUD REPORT
- COTTAGE COURTS, PASSIVE OPEN SPACE**  
ADDITIONAL ANTI-MONOTANY PROVISIONS  
SEE PUD REPORT
- ACTIVE OPEN SPACE**  
(ADDITIONAL ANTI-MONOTANY PROVISIONS  
SEE PUD REPORT)



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Corp. # C-3705

Site Legend

- WETLANDS
- 50' NEUSE RIVER BUFFER
- PROPERTY LINE
- BUILDING SETBACK
- CONCRETE SIDEWALK
- GREENWAY
- GREENWAY EASEMENT
- 8 FT PRIVACY FENCE



**Clifton Road**  
**Conservation Subdivision**  
0 Pine Country Lane  
Knightdale, NC

No.	Revision	Date	Appr.
1	TOWN OF KNIGHTDALE	4/25/2025	CDT

Designed by: VHB  
Checked by: CDT

Issued for: Master Plan Review  
Date: March 24, 2025

Drawing Title  
**Illustrative Master Plan**

811  
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OF RALEIGH STANDARDS AND SPECIFICATIONS  
AND NCDOT, IF APPLICABLE

North Carolina Professional Engineer  
NOT FOR CONSTRUCTION  
WALTERS D. TOWNS  
04/24/2025

Sheet 3 of 11  
Project Number: 39510.03





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PASSIVE OPEN SPACE

Open Space A = 11,200 SF (0.26 AC)  
Open Space B = 5,240 SF (0.12 AC)  
Open Space C = 23,580 SF (0.54 AC)  
Open Space D = 11,000 SF (0.25 AC)  
Open Space E = 19,000 SF (0.44 AC)  
Open Space F = 10,000 SF (0.23 AC)  
Open Space G = 11,823 SF (0.27 AC)  
Open Space H = 13,340 SF (0.30 AC)

Total Passive Open Space: 105,183 SF (2.41 AC)

ACTIVE OPEN SPACE

Total Active Open Space: 87,250 SF (2.00 AC)

TOTAL PROGRAMMED OPEN SPACE

192,433 SF (4.41 ACRES)\*

\*REFER TO PUD DOCUMENT FOR ACTIVATION INFORMATION

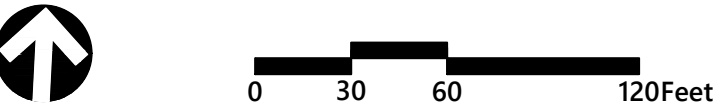
UNDISTURBED OPEN SPACE  
435,600 (10 ACRES)

LEGEND

- Active Open Space
- Passive Open Space
- Undisturbed Open Space

Site Legend

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Issued for		Date	March 24, 2025

Master Plan Review

Open Space Plan

Drawing Number

C1.01

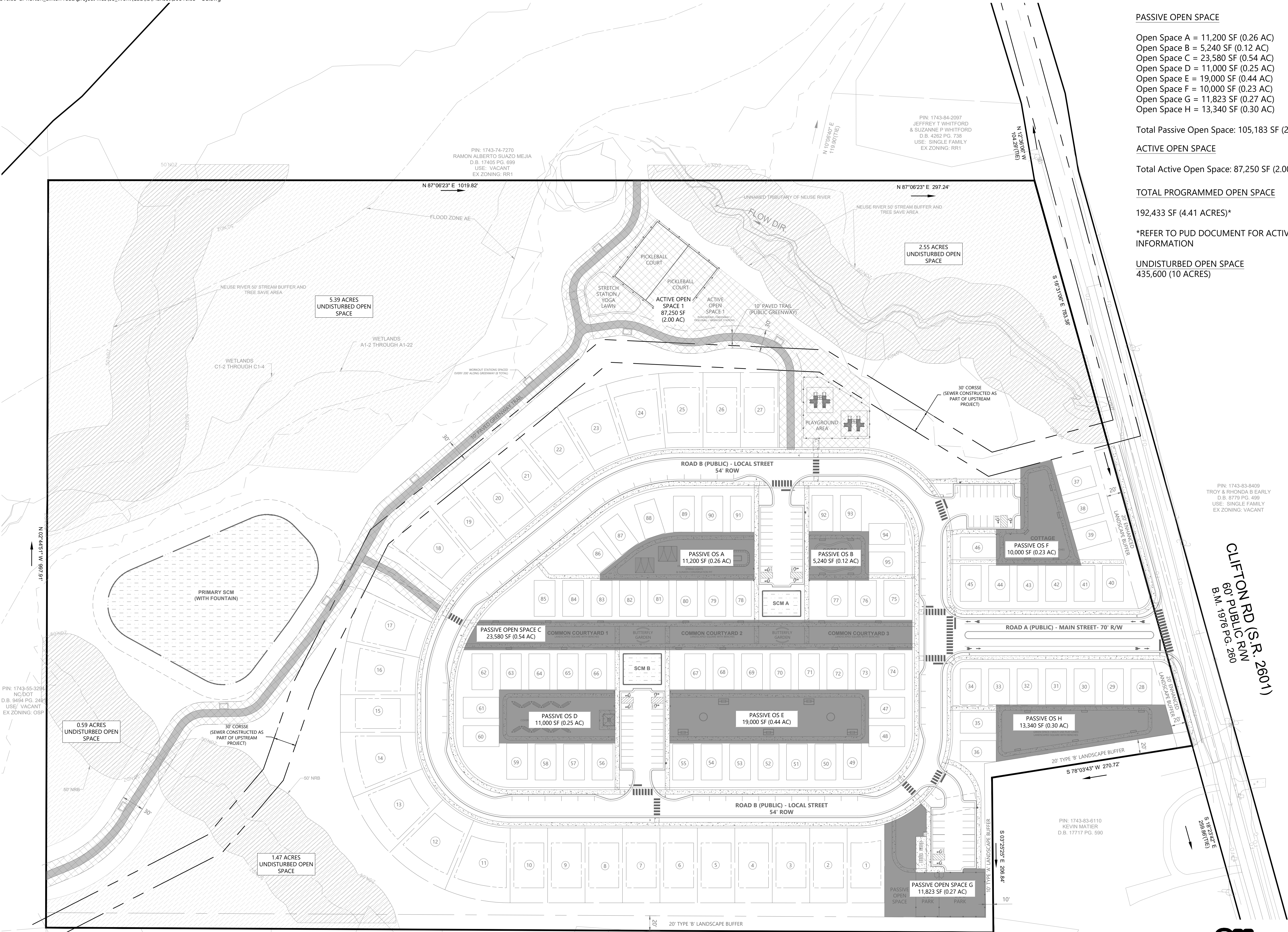
Sheet 4 of 11

Project Number  
39510.03

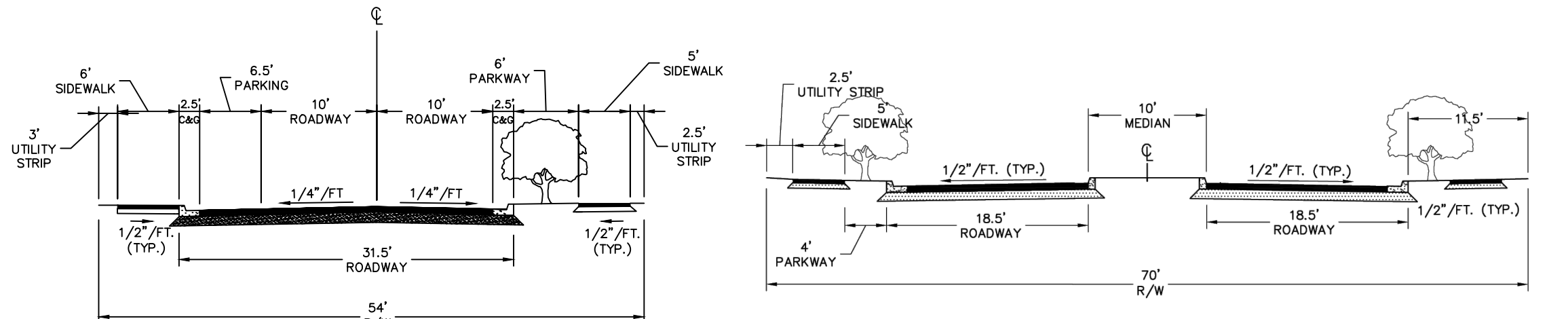


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**TYPICAL CROSS SECTION - 54' ROW**  
NOT TO SCALE Source: TOWN OF KNIGHTDALE DET 3.02-2

**TYPICAL CROSS SECTION - 70' ROW**  
NOT TO SCALE Source: TOWN OF KNIGHTDALE DET 3.02-2

Site Data Table			
PROJECT:	CLIFTON ROAD CONSERVATION SUBDIVISION	CURRENT ZONING:	RR1 GR3 PUD
OWNER:	DAVID ADAMS 6000 MAL WEATHERS ROAD RALEIGH, NC 27603	PROPOSED ZONING:	RR1 GR3 PUD
SITE ADDRESS:	0 PINE COUNTRY LANE KNIGHTDALE, NC 27545	CURRENT USE:	VACANT RESIDENTIAL
PIN:	1743-73-8469	SINGLE FAMILY SETBACKS:	
WATERSHED:	NEUSE RIVER	FRONT:	20'
TOWNSHIP:	ST MATTHEWS	SIDE:	5'
PARCEL AREA:	32.05 AC	REAR:	15'
		COTTAGE SETBACKS:	
		FRONT:	10'
		CORNER:	5'
		BUILDING SEPARATION:	
		MIN:	10'

**TRANSPORTATION NETWORK**

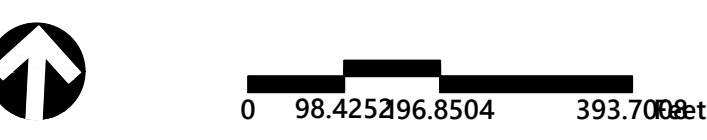
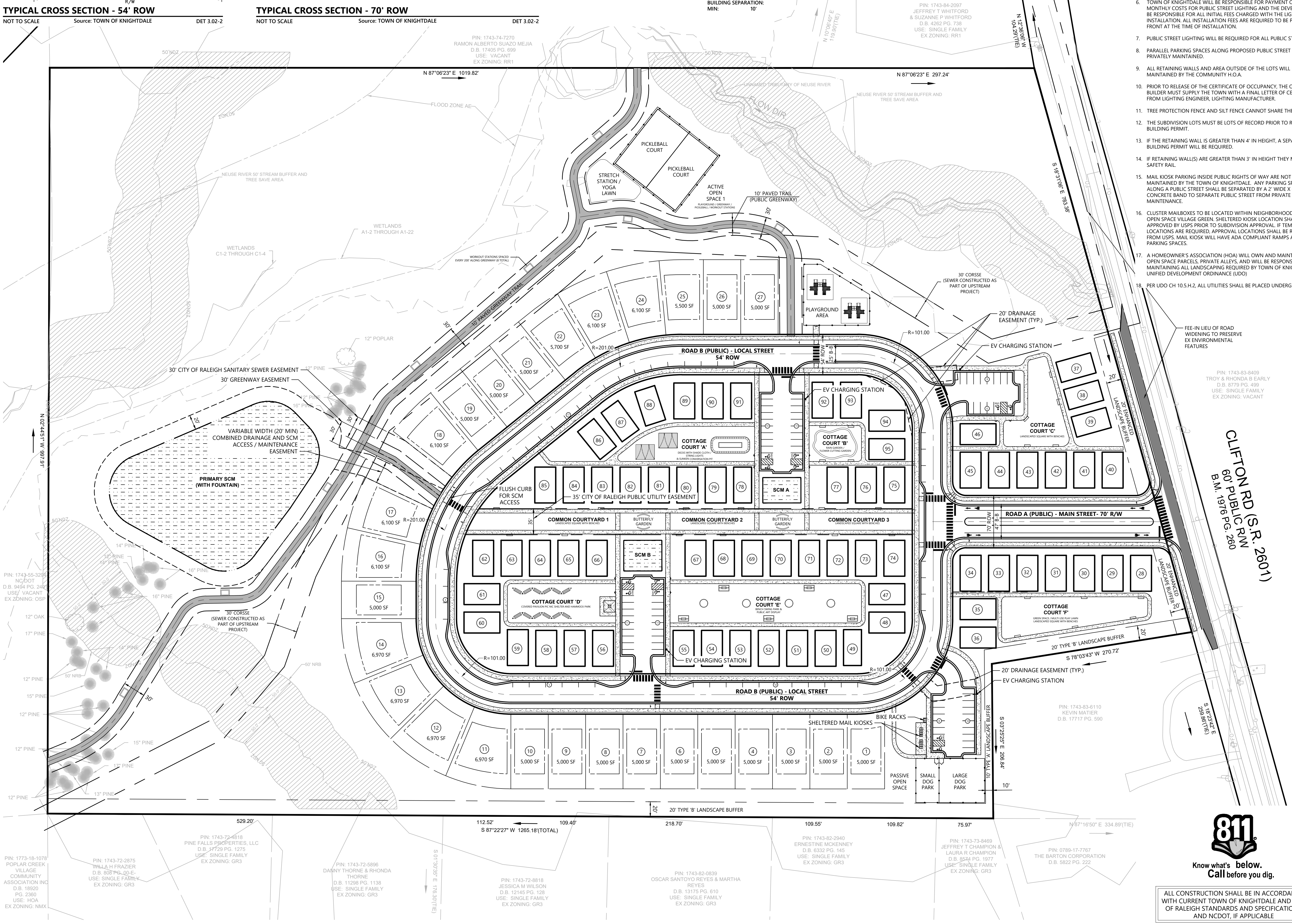
AN EXCEPTION TO SECTION 10.5A OF THE UDO, TO ALLOW A MINIMUM CENTERLINE RADIUS OF 100 FEET FOR ROAD A (PUBLIC) LOCAL STREET - ON STREET PARKING.

STREET TABLE			
STREET NAME	TYPE	ROW (LF)	LENGTH (LF)
ROAD A (PUBLIC)	LOCAL STREET - ON STREET PARKING	54	305
ROAD B (PUBLIC)	MAIN STREET	70	1,960
		TOTAL	2,265

- Site Notes**
- CONSTRUCTION DRAWINGS SHALL BE SUBMITTED AND APPROVED BY THE TOWN OF KNIGHTDALE PRIOR TO CONSTRUCTION.
  - SEE SHEET C0.01 FOR GENERAL AND SITE NOTES.
  - PERMANENT AND TEMPORARY SINGLE REQUIRES AN APPROVED SIGN PERMIT PRIOR TO INSTALLATION. SIGNAGE IS A SEPARATE SUBMITTAL, REVIEW, AND APPROVAL.
  - SUBDIVISION LOTS MUST BE LOT OF RECORD PRIOR TO RECEIVING A BUILDING PERMIT.
  - PRIOR TO OBTAINING BUILDING PERMITS, CONTRACTOR TO SCHEDULE A PRECONSTRUCTION MEETING THROUGH TOWN OF KNIGHTDALE.
  - TOWN OF KNIGHTDALE WILL BE RESPONSIBLE FOR PAYMENT OF THE MONTHLY COSTS FOR PUBLIC STREET LIGHTING AND THE DEVELOPER WILL BE RESPONSIBLE FOR ALL INITIAL FEES CHARGED WITH THE LIGHT INSTALLATION. ALL INSTALLATION FEES ARE REQUIRED TO BE PAID UP FRONT AT THE TIME OF INSTALLATION.
  - PUBLIC STREET LIGHTING WILL BE REQUIRED FOR ALL PUBLIC STREETS.
  - PARALLEL PARKING SPACES ALONG PROPOSED PUBLIC STREET WILL BE PRIVATELY MAINTAINED.
  - ALL RETAINING WALLS AND AREA OUTSIDE OF THE LOTS WILL BE MAINTAINED BY THE COMMUNITY H.O.A.
  - PRIOR TO RELEASE OF THE CERTIFICATE OF OCCUPANCY, THE OWNER/ BUILDER MUST SUPPLY THE TOWN WITH A FINAL LETTER OF CERTIFICATION FROM LIGHTING ENGINEER, LIGHTING MANUFACTURER.
  - TREE PROTECTION FENCE AND SILT FENCE CANNOT SHARE THE SAME POLE.
  - THE SUBDIVISION LOTS MUST BE LOTS OF RECORD PRIOR TO RECEIVING A BUILDING PERMIT.
  - IF THE RETAINING WALL IS GREATER THAN 4' IN HEIGHT, A SEPARATE BUILDING PERMIT WILL BE REQUIRED.
  - IF RETAINING WALL(S) ARE GREATER THAN 3' IN HEIGHT THEY MUST HAVE SAFETY RAIL.
  - MAIL KIOSK PARKING INSIDE PUBLIC RIGHTS OF WAY ARE NOT MAINTAINED BY THE TOWN OF KNIGHTDALE. ANY PARKING SPACES ALONG A PUBLIC STREET SHALL BE SEPARATED BY A 2' WIDE X 8' DEEP CONCRETE BAND TO SEPARATE PUBLIC STREET FROM PRIVATE PARKING MAINTENANCE.
  - CLUSTER MAILBOXES TO BE LOCATED WITHIN NEIGHBORHOOD PHASE 1 OPEN SPACE VILLAGE GREEN. SHELTERED KIOSK LOCATION SHALL BE APPROVED BY USPS PRIOR TO SUBDIVISION APPROVAL. IF TEMPORARY LOCATIONS ARE REQUIRED, APPROVAL LOCATIONS SHALL BE RECEIVED FROM USPS. MAIL KIOSK WILL HAVE ADA COMPLIANT RAMPS AND PARKING SPACES.
  - A HOMEOWNER'S ASSOCIATION (HOA) WILL OWN AND MAINTAIN ALL OPEN SPACE PARCELS, PRIVATE ALLEYS, AND WILL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING REQUIRED BY TOWN OF KNIGHTDALE UNIFIED DEVELOPMENT ORDINANCE (UDO).
  - PER UDO CH 10.5.H.2, ALL UTILITIES SHALL BE PLACED UNDERGROUND.

**Site Legend**

	WETLANDS
	50' NEUSE RIVER BUFFER
	PROPERTY LINE
	BUILDING SETBACK
	CONCRETE SIDEWALK
	GREENWAY
	GREENWAY EASEMENT
	8 FT PRIVACY FENCE

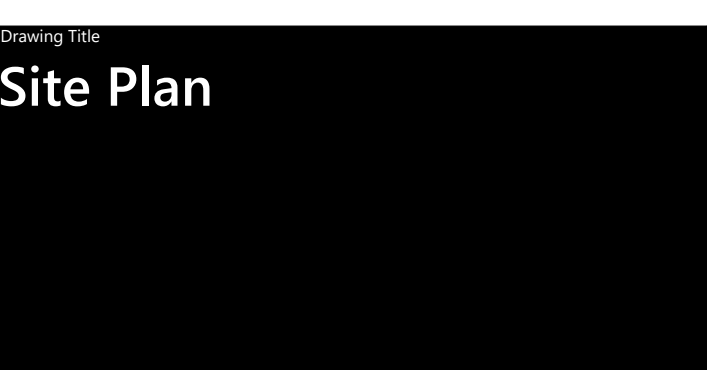


**Clifton Road Conservation Subdivision**  
0 Pine Country Lane  
Knightdale, NC

No.	Revision	Date	Appr.
1	TOWN OF KNIGHTDALE	4/25/2025	CDT

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Issued for		Date	March 24, 2025

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**North Carolina Professional Engineer**  
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WALTER D. TOWNSEND  
04/24/2025

Project Number  
39510.03





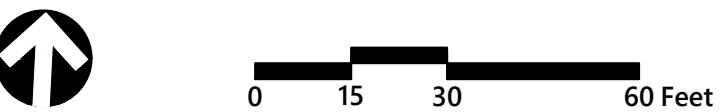
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940 Main Campus Drive  
Suite 500  
Raleigh, NC 27606  
919.829.0328  
Corp. # C-3705

Sign Summary			
Number	Specification		Desc.
	Width	Height	
R1-1	30"	30"	STOP
W11-2	30"	30"	WALK
W16-7PL	30"	18"	WALK
R7-8	12"	18"	RESERVED PARKING
R7-8P	12"	6"	RESERVED PARKING
R3-17	24"	18"	BIKE LANE
R1-4	18"	6"	ALLEY

Symbol	Description	Material
T61	WHITE STOPBAR (24", 90 MIL)	THERMO
T62	WHITE CROSSWALK LINE (24", 90 MIL)	THERMO
T90	BICYCLE SYMBOL, HEATED-IN-PLACE (90 MIL)	THERMO
T91	BICYCLE STRAIGHT ARROW, HEATED-IN-PLACE (90 MIL)	THERMO
T101	HANDICAP PARKING (90 MIL)	THERMO

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Master Plan  
Review

Pavement and Marking  
Signage Plan

Drawing Number

C2.01

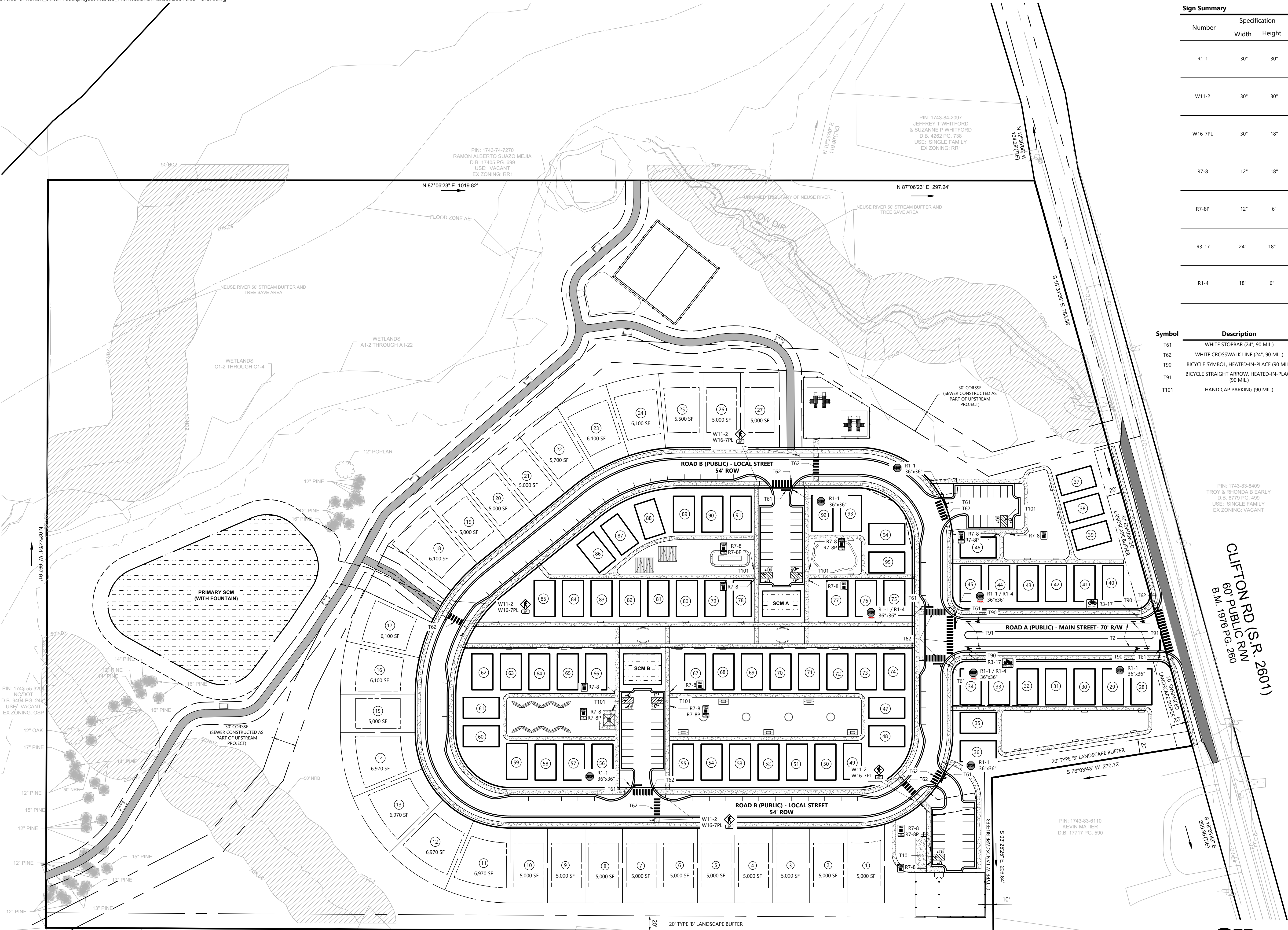
Sheet 6 of 11

Project Number 39510.03

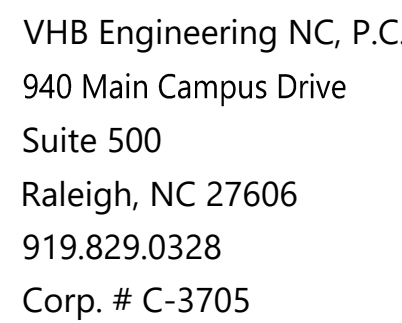
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- ### Site Legend
- |   |                        |
|---|------------------------|
|  | WETLANDS               |
|  | 50' NEUSE RIVER BUFFER |
|  | PROPERTY LINE          |
|  | BUILDING SETBACK       |
|  | CONCRETE SIDEWALK      |
|  | GREENWAY               |
|  | GREENWAY EASEMENT      |
|  | 8 FT PRIVACY FENCE     |



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# Stormwater Management Plan

## C3.00

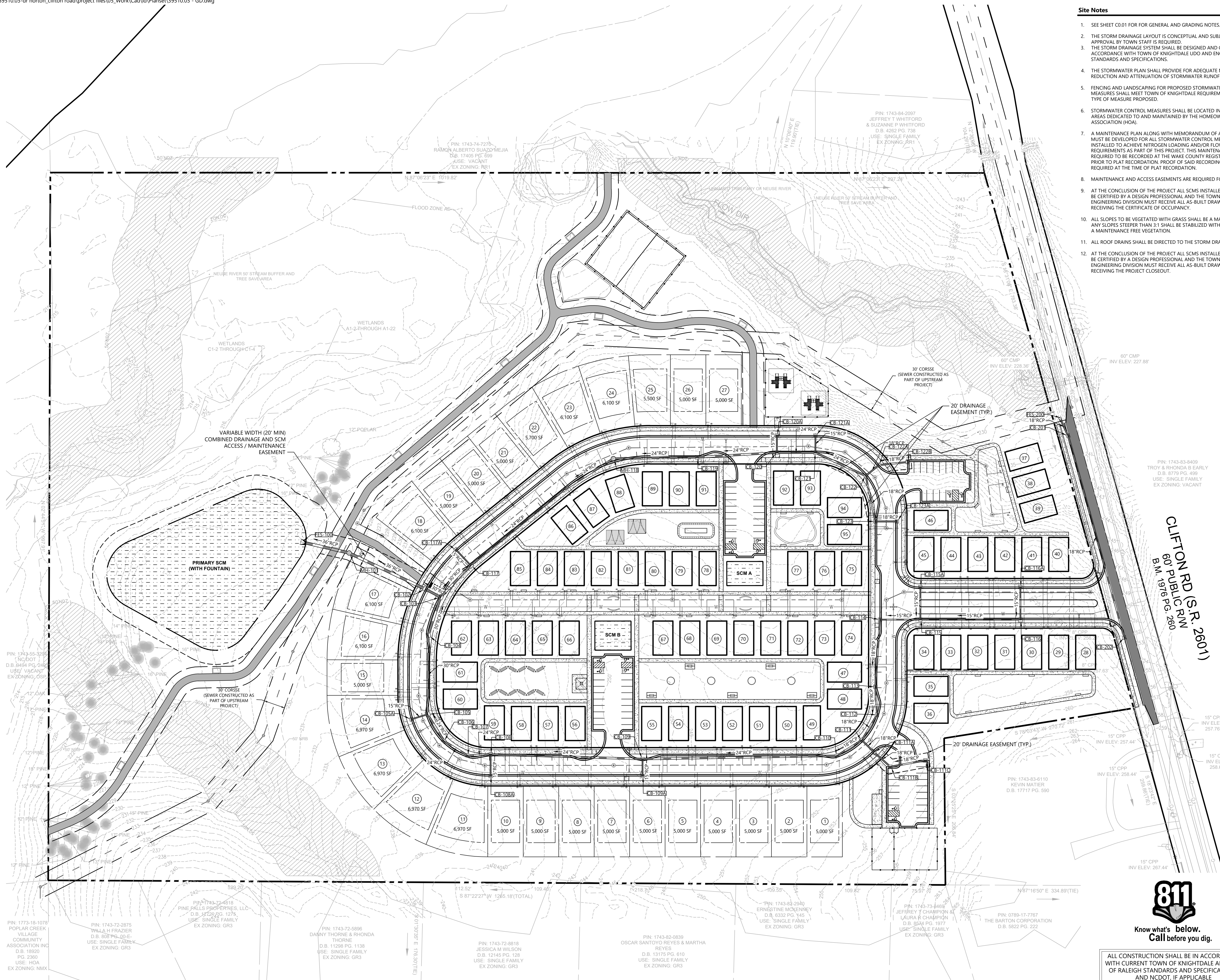
Project Number  
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## 2. Utility separation requirements

- |  |  |
|--|--|
| <p>1. All materials &amp; construction methods shall be in accordance with City of Raleigh design standards, details &amp; specifications (reference: CORPUD Handbook, current edition)</p> <p>2. Utility separation requirements:</p> <ul style="list-style-type: none"> <li>a) A distance of 100' shall be maintained between sanitary sewer &amp; any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified &amp; installed to watertight specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.</li> <li>b) When installing water &amp;/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer &amp; must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.</li> <li>c) Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel easement extended 10' on each side of crossing must be specified &amp; installed to watertight specifications.</li> <li>d) 50' minimum horizontal separation is required between all sanitary sewer &amp; storm sewer facilities, unless DIP material is specified for sanitary sewer.</li> <li>e) Maintain 18" min. vertical separation at all watermain &amp; RCP storm drain crossings; maintain 18" min. vertical separation at all sanitary sewer &amp; RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials &amp; a concrete cradle having 6" min. clearance (per CORPUD details W-41 &amp; S-49).</li> <li>f) All other underground utilities shall cross water &amp; sewer facilities with 18" min. vertical separation required.</li> </ul> | <p>3. Any necessary field revisions are subject to review &amp; approval of an amended plan &amp;/or profile by the City of Raleigh Public Utilities Department prior to construction.</p> <p>4. Developer shall provide 30 days advance written notice to owner for any work required within an existing City of Raleigh Utility Easement traversing private property.</p> <p>5. Contractor shall maintain continuous water &amp; sewer service to existing residences &amp; businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24-hour advance notice to the City of Raleigh Public Utilities Department.</p> <p>6. SEWER BYPASS PUMPING – A bypass plan sealed by an NC Professional Engineer shall be provided to Raleigh Water prior to pumping operations for approval. The operations and equipment shall comply with the Public Utilities Handbook.</p> <p>7. 3.0' minimum cover is required on all water mains &amp; sewer force mains. 4.0' minimum cover is required on all reuse mains.</p> <p>8. It is the developer's responsibility to abandon or remove existing water &amp; sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main &amp; removal of service from ROW or easement per CORPUD Handbook procedure.</p> <p>9. Install water services with meters located at ROW or within a 2x2' Watertight Easement immediately adjacent. NOTE: it is the applicant's responsibility to properly size the water service for each connection to provide adequate flow &amp; pressure.</p> |
|--|--|

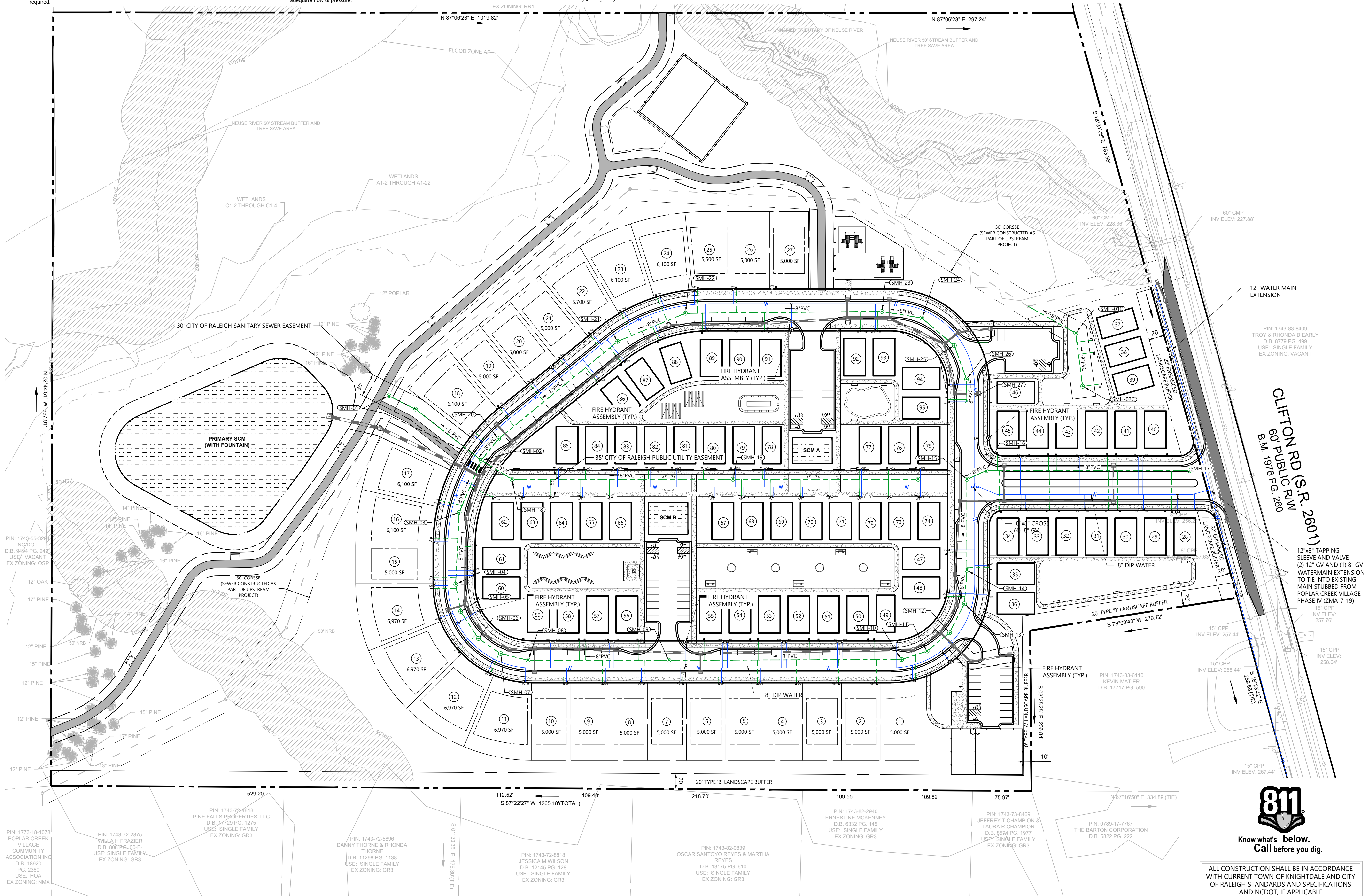
10. Inspections of 4" and larger water mains of the private distribution system will be inspected as part of the infrastructure permit.
11. Private sewer mains as part of a collection system are permitted and inspected under the private infrastructure permit for sewer.
12. Any water or sewer services on private property that will be installed under Construction Drawings may require a Plumbing Utility Permit in the City of Raleigh. Consult with the Engineering Inspection Coordinator during the pre-construction meeting on the necessary permits.
13. Install sewer services with cleanouts located at ROW or easement line & spaced per the current NC Plumbing code.
14. Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1'0" above the next upstream manhole.
15. All environmental permits applicable to the project must be obtained from NCDQW, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
16. NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction.
17. Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the RWQ FOG Program Coordinator prior to issuance of a UC and/or Building Permit. Contact (919) 996-4516 or fog@raleighnc.gov for more information.

18. Cross-connection control protection devices are required based on the degree of health hazard involved as listed in Appendix B of the Rules Governing Public Water Systems in North Carolina.
19. The devices shall meet the American Society of Sanitary Engineering (ASSE) standards and be on the University of Southern California approval list.
20. The device and installation shall meet the guidelines of Appendix A – Guidelines and Requirements for the Cross Connection Program in Raleigh's Service Area.
21. The devices shall be installed and tested (both, initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross connection control program, whichever is more stringent. Contact Cross.connection@raleighnc.gov for more information.
22. NOTICE for projects that involve an oversized main or urban main replacement. Any City reimbursement greater than \$250,000.00 must undergo the public bidding process.
23. Private sub-metering - No resale of water shall occur without approval of the North Carolina Utility Commission.
24. Sub-metering shall be in accordance with Section 1400 of the "SAFE DRINKING WATER ACT".

Major Subdivision	
Major Subdivision (Base Points)	15
Conservation of Natural Habitat (Public Greenway)	10
Construct a fountain within the SCM	4
Outdoor Display of Public Art	4
Pickleball Courts	5
IPWMA Certified Playground Equipment	4
Stormwater- Underground Capture System	5
Deck/Patio- More than 1,000 square feet	1
Enhanced Roadsides Landscaping and Hardscaping	2
Total Required	50
<b>Total Provided</b>	<b>50</b>



VHB Engineering NC, P.C.  
940 Main Campus Drive  
Suite 500  
Raleigh, NC 27606  
919.829.0328  
Corp. # C-3705



WETLANDS  
50' NEUSE RIVER BUFFER  
PROPERTY LINE  
BUILDING SETBACK  
CONCRETE SIDEWALK  
GREENWAY  
GREENWAY EASEMENT  
8 FT PRIVACY FENCE



**Clifton Road  
Conservation Subdivision**  
0 Pine Country Lane  
Knightdale, NC

No.	Revision	Date	Appr'd.
1	TOWN OF KNIGHTDALE	4/25/2025	CDT

Designed by <b>VHB</b>	Checked by <b>CDT</b>
Issued for	Date
<b>Master Plan</b>	<b>March 24, 2025</b>

# Utility Plan

---

Drawing Number



Know what's below.  
**Call** before you dig.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE  
WITH CURRENT TOWN OF KNIGHTDALE AND CITY  
OF RALEIGH STANDARDS AND SPECIFICATIONS  
AND NCDOT, IF APPLICABLE



# C4.00

Sheet 8 of 11

Project Number  
**39510.03**



NOTES

1. STREET TREES SHALL BE LOCATED WITHIN THE RIGHT OF WAY.
2. STREET TREES SHALL BE PLANTED BY EACH BUILDER PRIOR TO RECEIVING C.O. FOR HOUSE.
3. ALL LANDSCAPING SHOULD BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE TOWN OF KNIGHTDALE'S UDO.
4. ALL PLANT MATERIALS TO COMPLY WITH AMERICAN STANDARD FOR NURSERY STOCK ANSI.Z60.
5. CONTRACTOR ENGAGED IN LANDSCAPE IMPLEMENTATION SHALL BE A LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF NORTH CAROLINA.
6. SUBSTITUTIONS OF PLANT MATERIALS SPECIFIED CAN ONLY OCCUR WITH PRIOR APPROVAL BY LANDSCAPE ARCHITECT.
7. ALL NEW TREES TO HAVE A 5" DIAMETER SHREDDED HARDWOOD MULCH RING AT 4" DEEP UNLESS OTHERWISE NOTED OR LOCATED IN A PLANT BED PER SITE PLAN.
8. LANDSCAPE CONTRACTOR TO GUARANTEE PLANT MATERIALS FOR A ONE YEAR PERIOD FOLLOWING SUBSTANTIAL COMPLETION.
9. AREAS DAMAGED BY LANDSCAPE CONTRACTOR TO BE REPAIRED TO PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE OWNER.
10. ALL LANDSCAPE ISLANDS SHALL BE GRADED FOR POSITIVE DRAINAGE WITH NO LOW SPOTS ALLOWING WATER TO BE TRAPPED.
11. ALL ABOVE GROUND UTILITIES MUST BE SCREENED.

100' SECTION OF 10' WIDE TYPE A BUFFER YARD

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	MATURE WIDTH / HEIGHT	QTY
TREES					
	CA	CANOPY - Cornus x Rubra / Aurora Flowering Dogwood	2 1/2" Cal. Min.	20'00'	3
	MG	UNDERSTORY - Magnolia grandiflora / Southern Magnolia	2 1/2" Cal. Min.	10'10"	2
SHRUBS					
	IV	Ilex vomitoria / Yaupon Holly	15 Gal., 5" Ht.	12-20' / 2-10'	6
	IE	Ilex x 'Emily Bruner' / Emily Bruner Holly	15 Gal., 5" Ht.	10-20' / 8-12'	7
	IK	Ilex x 'Magdalen' / Oakland™ Holly	15 Gal., 5" Ht.	10-20' / 8-10'	7

100' SECTION OF 20' WIDE TYPE B BUFFER YARD

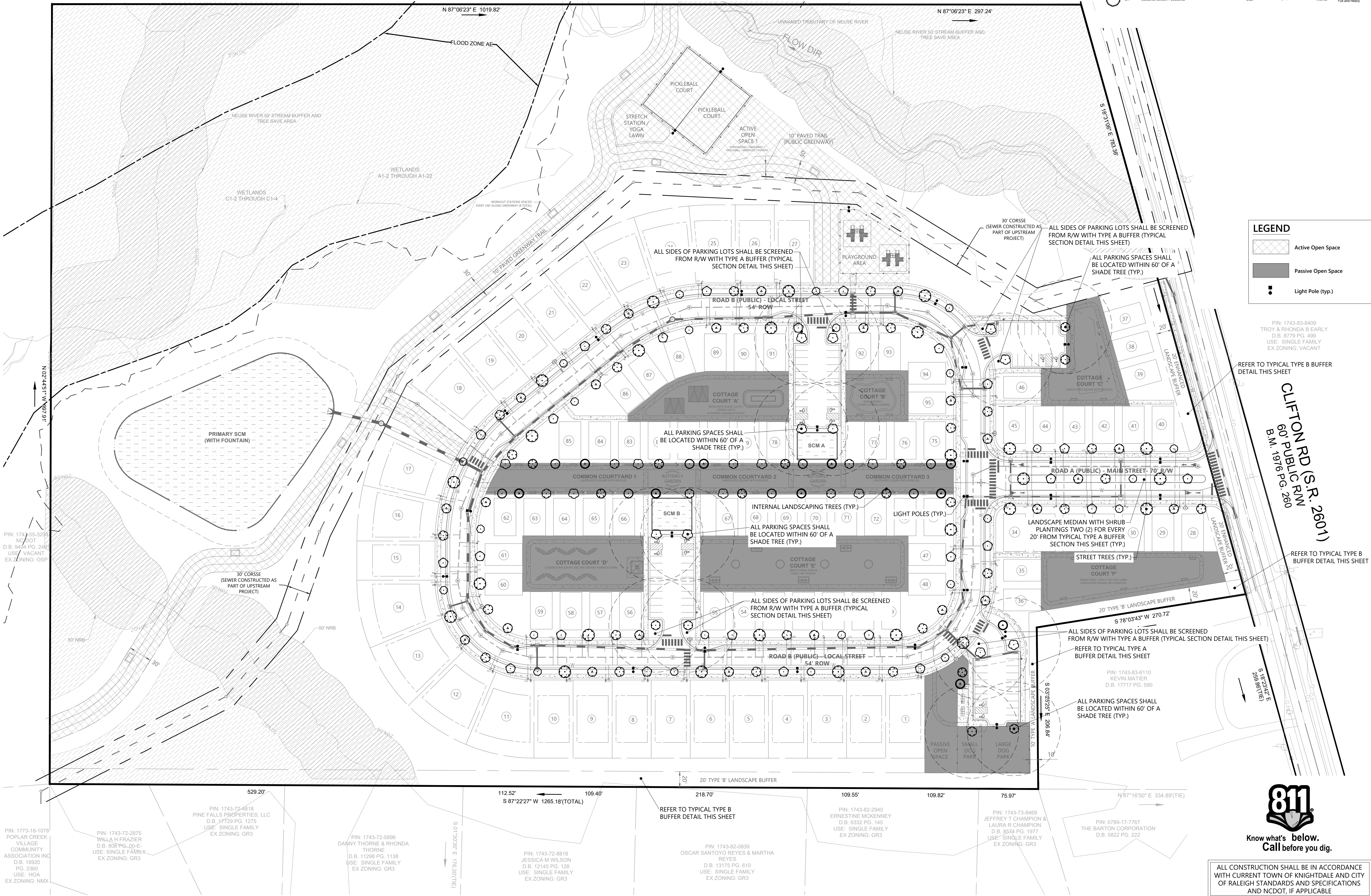
SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	MATURE WIDTH / HEIGHT	QTY
TREES					
	CA	CANOPY - Cornus x Rubra / Aurora Flowering Dogwood	2 1/2" Cal. Min.	20'00'	5
	MG	UNDERSTORY - Magnolia grandiflora / Southern Magnolia	2 1/2" Cal. Min.	10'10"	3
SHRUBS					
	IV	Ilex vomitoria / Yaupon Holly	15 Gal., 5" Ht.	12-20' / 2-10'	6
	IE	Ilex x 'Emily Bruner' / Emily Bruner Holly	15 Gal., 5" Ht.	10-20' / 8-12'	7
	IK	Ilex x 'Magdalen' / Oakland™ Holly	15 Gal., 5" Ht.	10-20' / 8-10'	7

TREE CHART

SYMBOL	CODE	BOTANICAL / COMMON NAME	ROOT	MIN INSTALLED SIZE	TYPE	NOTES
	AB	Acer buergerianum / Trident Maple	B&B	2.5" Caliper, 12 Min.	Street Tree	Single Straight Leader - Full and Heavy
	AS	Acer saccharum / Sugar Maple	B&B	2.5" Caliper, 12 Min.	Street Tree	Single Straight Leader - Full and Heavy
	AA	Amelanchier arborea / Downy Serviceberry	B&B	2.5" Caliper, 12 Min.	Internal	Single Straight Leader - Full and Heavy
	HC	Halesia carolina / Silverbell	B&B	2.5" Caliper, 12 Min.	Internal	Single Straight Leader - Full and Heavy
	LI	Lagerstroemia indica / Crape Myrtle	B&B	2.5" Caliper, 12 Min.	Street Tree	Single Straight Leader - Full and Heavy
	ML	Magnolia grandiflora 'Little Gem' / Little Gem Dwarf Southern Magnolia	B&B	2.5" Caliper, 12 Min.	Street Tree	Single Straight Leader - Full and Heavy
	PA	Prunus angustifolia / Chickadee Plum	B&B	2.5" Caliper, 12 Min.	Internal	Single Straight Leader - Full and Heavy
	PC	Prunus caroliniana / Carolina Cherry Laurel	B&B	2.5" Caliper, 12 Min.	Internal	Single Straight Leader - Full and Heavy
	QA	Quercus acutifolia / Sawtooth Oak	B&B	2.5" Caliper, 12 Min.	Street Tree	Single Straight Leader - Full and Heavy
	SA	Sassafras albidum / Sassafras	B&B	2.5" Caliper, 12 Min.	Internal	Single Straight Leader - Full and Heavy



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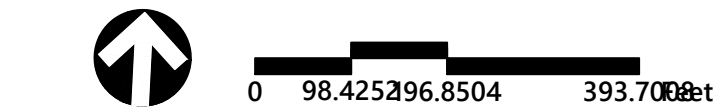


LEGEND

- Active Open Space
- Passive Open Space
- Light Pole (typ.)

Site Legend

- WETLANDS
- 50' NEUSE RIVER BUFFER
- PROPERTY LINE
- BUILDING SETBACK
- CONCRETE SIDEWALK
- GREENWAY
- GREENWAY EASEMENT
- 8 FT PRIVACY FENCE



Clifton Road Conservation Subdivision  
0 Pine Country Lane  
Knightdale, NC

No.	Revision	Date	Appr.
1	TOWN OF KNIGHTDALE	4/25/2025	CDT

Designed by	VHB	Checked by	CDT
Issued for		Date	March 24, 2025

Master Plan Review

Landscape Plan

811 Know what's below. Call before you dig.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF KNIGHTDALE AND CITY OF RALEIGH STANDARDS AND SPECIFICATIONS AND NCDOT, IF APPLICABLE

Project Number 39510.03

04/24/2025

L1.00

Sheet 9 of 11





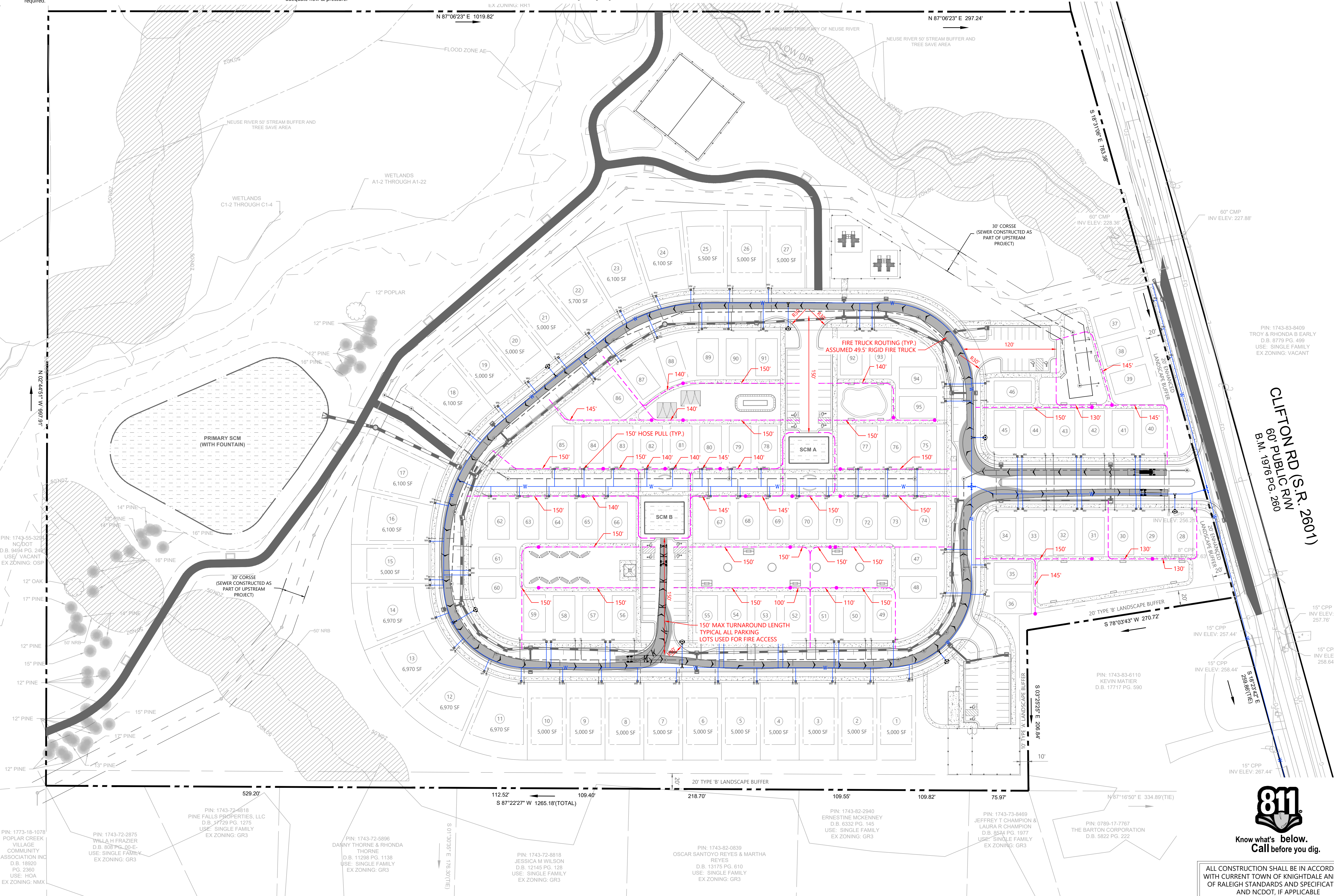


Utility Notes

- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition)
- Utility separation requirements:
  - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to wateline specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well.
  - When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter.
  - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to wateline specifications.
  - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
  - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 18" min. vertical separation at all sanitary sewer & RCP stormdrain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W- 41 & S-49).
  - All other underground utilities shall cross water & sewer facilities with 18" min. vertical separation required.
- Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction.
- Developer shall provide 30 days advance written notice to owner for any work required within an existing City of Raleigh Utility Easement traversing private property.
- Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24-hour advance notice to the City of Raleigh Public Utilities Department.
- SEWER BYPASS PUMPING – A bypass plan sealed by an NC Professional Engineer shall be provided to Raleigh Water prior to pumping operations for approval. The operations and equipment shall comply with the Public Utilities Handbook.
- 3.0' minimum cover is required on all water mains & sewer force mains. 4.0' minimum cover is required on all reuse mains.
- It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal of service from ROW or easement per CORPUD Handbook procedure.
- Install water services with meters located at ROW or within a 2x2' Waterline Easement immediately adjacent. NOTE: it is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure.

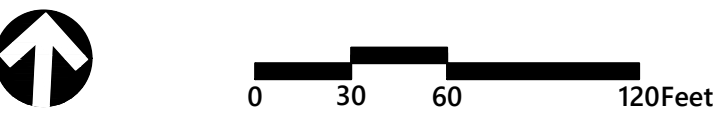
- Inspections of 4" and larger water mains of the private distribution system will be inspected as part of the infrastructure permit.
- Private sewer mains as part of a collection system are permitted and inspected under the private Infrastructure permit for sewer.
- Any water or sewer services on private property that will be installed under Construction Drawings may require a Plumbing Utility Permit in the City of Raleigh. Consult with the Engineering Inspection Coordinator during the pre-construction meeting on the necessary permits.
- Install sewer services with cleanouts located at ROW or easement line & spaced per the current NC Plumbing code.
- Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0' above the next upstream manhole.
- All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction.
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Site Legend

- WETLANDS
- 50' NEUSE RIVER BUFFER
- PROPERTY LINE
- BUILDING SETBACK
- CONCRETE SIDEWALK
- GREENWAY
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- 8 FT PRIVACY FENCE



Clifton Road Conservation Subdivision  
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Designed by: VHB  
Checked by: CDT

Issued for: Master Plan Review  
Date: March 24, 2025

APPERATUS ACCESS PLAN

Drawing Number



C-FIRE

Sheet 11 of 11

Project Number  
39510.03



ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF KNIGHTDALE AND CITY OF RALEIGH STANDARDS AND SPECIFICATIONS AND NCDOT, IF APPLICABLE



I, L. JORDAN PARKER, JR. CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY PERFORMED UNDER MY SUPERVISION FROM REFERENCES AS NOTED HERE ON; THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION SHOWN IN THE REFERENCES; THAT THE RATIO OF PRECISION AS CALCULATED IS GREATER THAN 1:10000; THAT THE GLOBAL POSITIONING SYSTEM (GPS) SURVEY AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE GPS/GNSS SURVEY;

CLASS OF SURVEY: AA  
POSITIONAL ACCURACY: HORIZONTAL 0.05 US SURVEY FEET  
TYPE OF GPS FIELD PROCEDURE: REAL TIME KINEMATICS NETWORK (VRS)  
DATES OF SURVEY:  
DATUM/EPOCH: NAD 83(2011) 2010.00  
PUBLISHED/FIXED CONTROL USE: RALEIGH DOT CORRS ARP  
LAT: 35°45'49.50795"  
LONG: 78°34'44.39448"

GEIOD MODEL: GEIOD12B  
COMBINED GRID FACTORS: 1.00009392886225  
UNITS: US SURVEY FOOT

THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED, WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL

THIS IS THE DAY OF NOVEMBER A.D. 2024  
**PRELIMINARY**

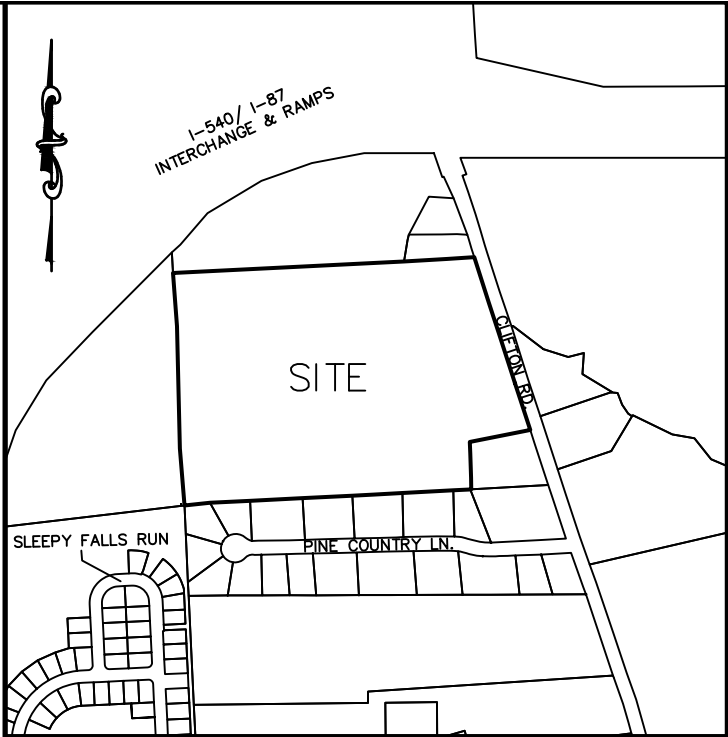
FOR REVIEW PURPOSES ONLY

PROFESSIONAL LAND SURVEYOR LICENSE NUMBER

FLOOD HAZARD STATEMENT

THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD ZONE. IT IS LOCATED IN ZONE "AE" AS DEFINED BY F.I.R.M. COMMUNITY PANEL NUMBER 3720-1743-00K WITH AN EFFECTIVE DATE OF 07/19/2022.

LINE TABLE		
LINE	BEARING	DISTANCE
L-1	N 22°31'27" W	529.63'
L-2	S 77°54'21" W	269.92'
L-3	S 03°24'02" E	206.37'
L-4	N 87°09'50" E	28.92'
L-5	S 11°42'59" E	264.78'
L-6	S 11°42'59" E	507.09'
L-7	N 10°09'38" E	119.75'
L-8	S 17°46'28" E	270.76'
L-9	S 17°46'28" E	509.58'



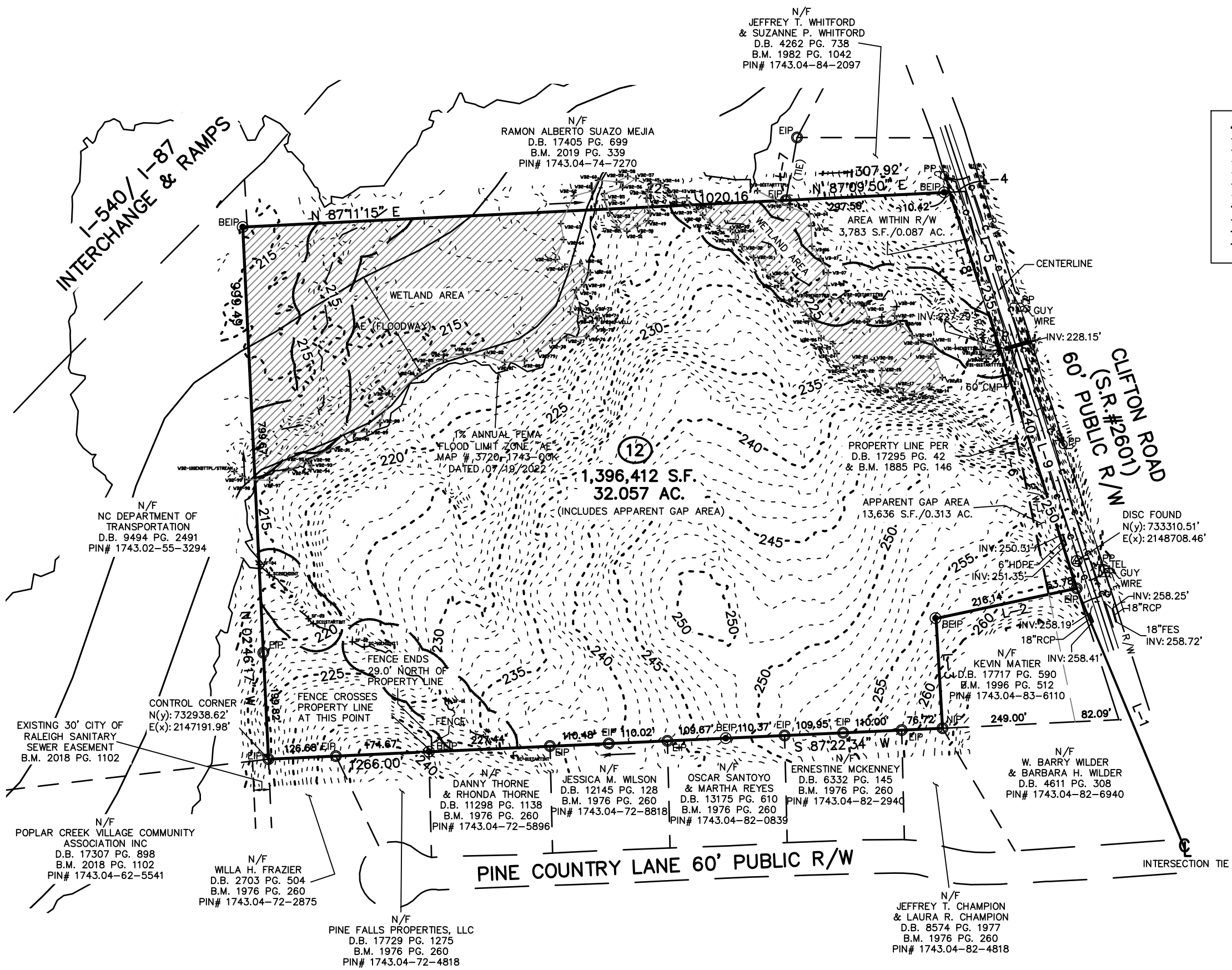
VICINITY MAP  
(NOT TO SCALE)

LEGEND:

EIP - EXISTING IRON PIPE  
EIB - EXISTING IRON BAR  
BEIP - BENT IRON PIPE  
BEIB - BENT IRON BAR  
CM - CONCRETE MONUMENT  
EPK - EXISTING PK NAIL  
SPK - SET PK NAIL  
NIP - NEW IRON PIPE SET  
R/W - RIGHT OF WAY  
CATV - CABLE TV BOX  
EB - ELECTRIC BOX  
TEL - TELEPHONE PEDESTAL  
PP - POWER POLE  
OHL - OVERHEAD LINE  
LP - LIGHT POLE  
WM - WATER METER  
WV - WATER VALVE  
CO - SEWER CLEAN-OUT  
CC - CONCRETE  
CB - CATCH BASIN  
MH - MANHOLE  
FH - FIRE HYDRANT

LINE TYPE LEGEND

---	PROPERTY LINE - LINE SURVEYED
---	RIGHT-OF-WAY
---	ADJOINING LINE - LINE NOT SURVEYED
---	OVERHEAD LINE
---	BUILDING SETBACK
---	EASEMENT
---	BUFFER
---	FLOOD HAZARD SOILS
---	ELECTRIC LINE
---	GAS LINE
---	COMMUNICATION



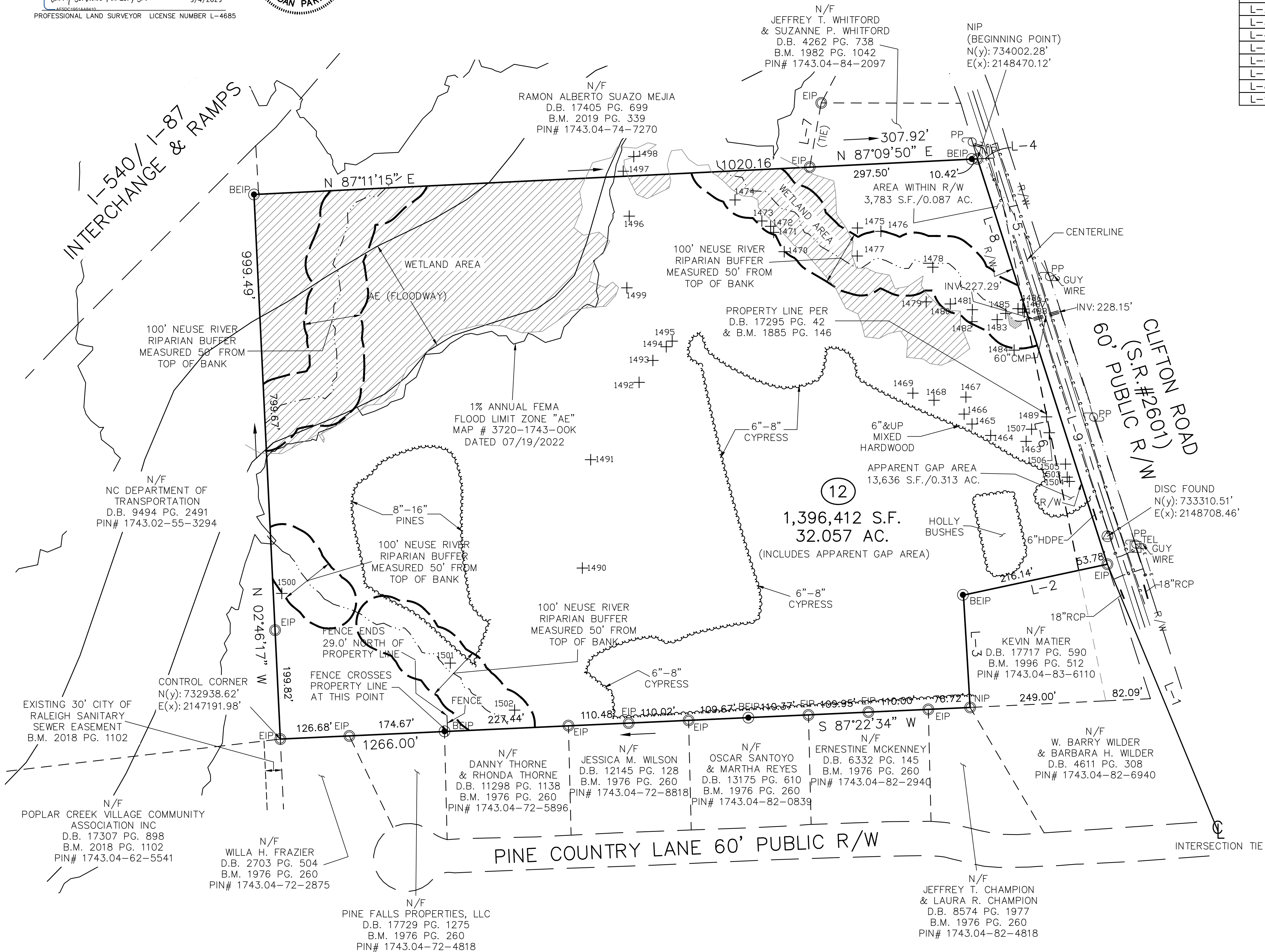


I, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY PERFORMED UNDER MY SUPERVISION FROM REFERENCES AS NOTED HERE ON; THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION SHOWN IN THE REFERENCES; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS GREATER THAN 1:10000; THIS SURVEY IS NOT TO BE RECORDED WITHOUT THE WRITTEN CONSENT OF THE SURVEYOR.

Designed by  
Larry Jordan Parker, Jr.

3/4/2025

PROFESSIONAL LAND SURVEYOR LICENSE NUMBER L-4685



FLOOD HAZARD STATEMENT

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VICINITY MAP  
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LP - LIGHT POLE  
E - E - E  
EAS LINE (APPROXIMATE LOCATION)  
C - C - C  
COMMUNICATION (APPROXIMATE LOCATION)  
TREELINE

LINE TYPE LEGEND

PROPERTY LINE - LINE SURVEYED  
RIGHT-OF-WAY  
ADJOINING LINE - LINE NOT SURVEYED  
OVERHEAD LINE  
BUILDING SETBACK  
EASEMENT  
BUFFER  
FLOOD HAZARD SOILS  
E - E - E  
EAS LINE (APPROXIMATE LOCATION)  
C - C - C  
COMMUNICATION (APPROXIMATE LOCATION)  
TREELINE

TREE TABLE			
Point	Northing	Easting	SIZE/TREE TYPE
1463	733484.445	2148559.376	35" BLACKGUM
1464	733495.287	2148494.345	28" SWEETGUM
1465	733516.193	2148460.186	28" WHITEOAK
1466	733534.457	2148445.726	28" SWEETGUM
1467	733565.602	2148448.919	25" POPLAR
1468	733559.757	2148390.502	26" POPLAR
1469	733572.707	2148351.692	29" SWEETGUM
1470	733832.188	2148115.880	32" REDOAK
1471	733867.593	2148096.431	31" PINE
1472	733878.614	2148090.971	29" PINE
1473	733888.367	2148074.879	39" WILLOWOAK
1474	733927.006	2148025.580	32" REDOAK
1475	733875.574	2148250.108	24" POPLAR
1476	733869.456	2148293.088	45" POPLAR-UNHEALTHY
1477	733824.205	2148249.775	37" SWEETGUM
1478	733803.743	2148388.273	46" DOUBLE-POPLAR-UNHEALTHY
1479	733740.136	2148376.084	24" MAPLE-UNHEALTHY
1480	733736.328	2148420.362	33" SWEETGUM
1481	733725.699	2148460.810	31" POPLAR-UNHEALTHY
1482	733703.870	2148460.159	28" MAPLE
1483	733707.540	2148506.310	27" POPLAR
1484	733651.674	2148537.334	28" DOUBLE-POPLAR
1485	733718.971	2148522.113	28" PINE
1486	733727.628	2148544.551	25" POPLAR
1487	733727.015	2148553.048	28" POPLAR
1488	733721.054	2148555.876	30" POPLAR
1489	733529.356	2148596.753	44" TRIPLE-POPLAR
1490	733252.206	2147745.754	27" PINE
1491	733450.821	2147760.941	32" REDOAK
1492	733592.574	2147849.738	39" TRIPLE-WHITEOAK
1493	733632.783	2147874.981	25" SWEETGUM
1494	733657.863	2147899.553	29" PINE
1495	733668.193	2147910.405	24" WHITEOAK
1496	733897.310	2147831.695	24" POPLAR
1497	733979.629	2147820.691	25" PINE
1498	734006.625	2147839.998	25" PINE
1499	733765.929	2147827.369	31" MAPLE
1500	733205.706	2147194.643	26" DOUBLE-RED OAK
1501	733077.905	2147503.630	25" SWEETGUM
1502	732991.760	2147621.551	24" PINE
1503	733418.744	2148634.695	25" SWEETGUM
1504	733410.941	2148638.636	24" SWEETGUM
1505	733442.724	2148631.568	27" SWEETGUM
1506	733500.243	2148601.803	26" POPLAR
1507	733506.709	2148569.323	25" POPLAR

TREE SURVEY FOR

D.R. HORTON, INC.

CLIFTON ROAD  
GREATER PORTION FARM LOT 12, THE OAKS

OWNER: DAVID JONATHAN ADAMS

REF: D.B. 17295 PAGE 42

REF: B.M. 1885 PAGE 146

ST. MATTHEWS TOWNSHIP

WAKE COUNTY, NORTH CAROLINA



SCALE 1"=100'

NOVEMBER 11, 2024

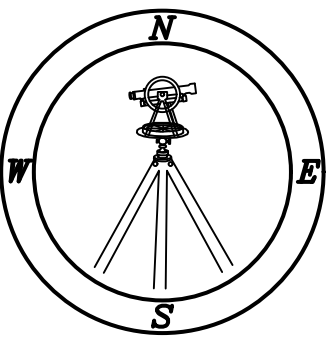
REVISED FEBRUARY 27, 2025

ZONED RR1

PIN #1743.04-73-8469

NOTES:

- BASIS OF BEARINGS IS NORTH CAROLINA GEODETIC SURVEY NAD '83 ADJUSTMENT.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES. VERTICAL DATUM IS NAVD '88.
- HORIZONTAL AND VERTICAL DATUM WAS ACQUIRED BY USE OF NCGS VRS GPS.
- THIS PROPERTY MAY BE SUBJECT TO NEUSE RIVER RIPARIAN BUFFER RULES. CALL N.C. DIVISION OF WATER QUALITY TO VERIFY (919-791-4200).
- UNDERGROUND UTILITIES HAVE BEEN MARKED OR LOCATED FOR THIS PLAT BY GC MAPPING, PLLC (919) 901-5641.



PROFESSIONAL LAND SURVEYORS, C-1525, 333 S. WHITE STREET, P.O. BOX 1253, WAKE FOREST N.C., 27588, (919) 556-3148



# CLIFTON ROAD CONSERVATION SUBDIVISION

## PLANNED UNIT DEVELOPMENT

**1st Submittal- 03-24-2025**  
**2nd Submittal- 04-24-2025**

**CASE: ZMA-8-24**

### **DEVELOPER**

DR Horton Inc  
7208 Falls of Neuse, Ste #201  
Raleigh, NC 27615

### **CIVIL ENGINEER, TRAFFIC ENGINEER AND LANDSCAPE ARCHITECT**

VHB  
940 Main Campus Drive, #500  
Raleigh, NC 27606

### **SURVEYOR**

CMP Professional Land Surveyors  
333 S. White Street  
Wake Forest, NC 27587

### **ENVIRONMENTAL**

Sage Ecological Services

### **CONSULTANT**

Duncan Land Consultants  
5204 Blakenbran Trail  
Fuquay-Varina, NC 27526



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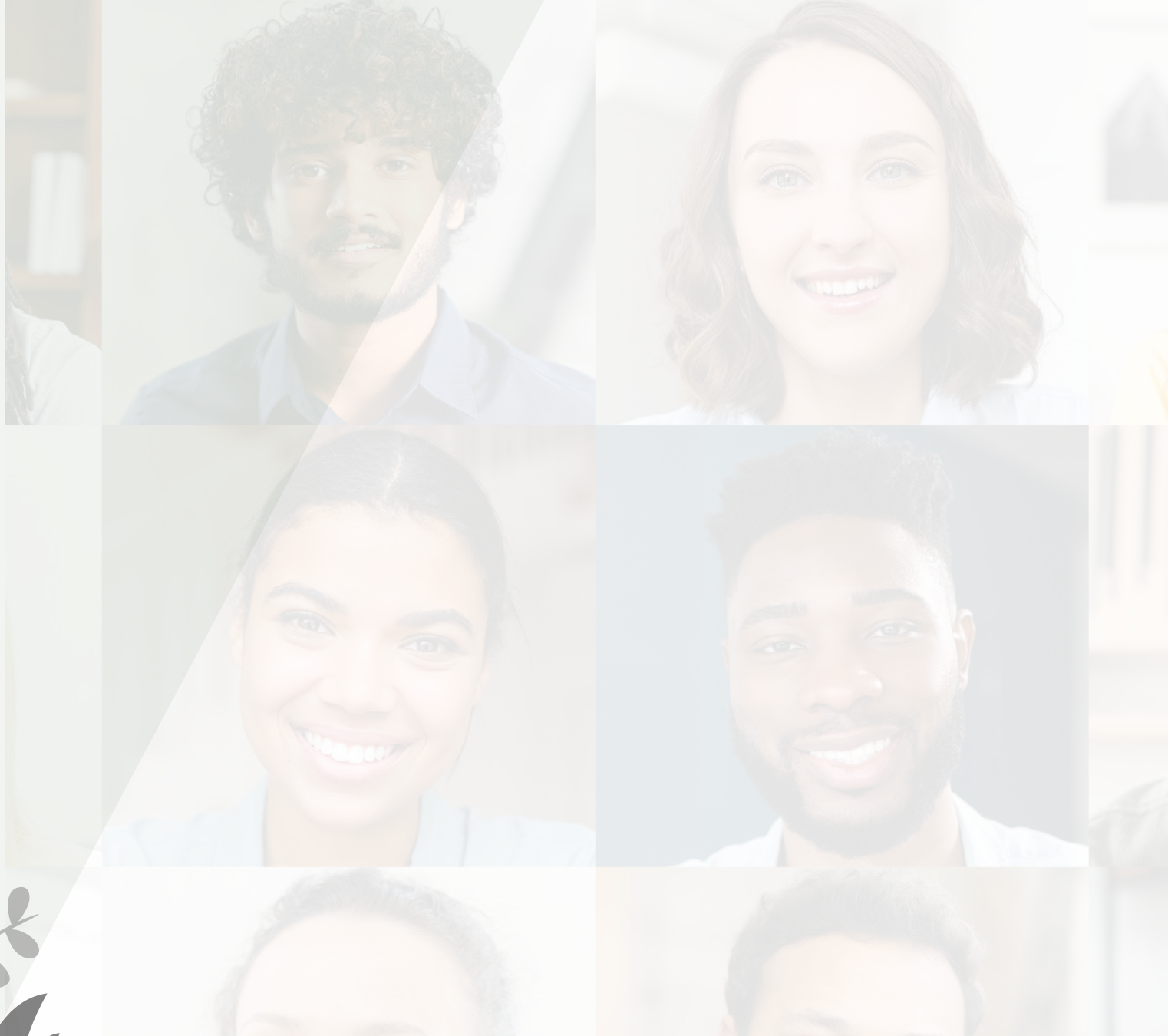
1. Cover
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3. Community Vision
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6. Community Intent
7. Intentional Growth Area
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9. Trails and Greenways
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## COMMUNITY VISION

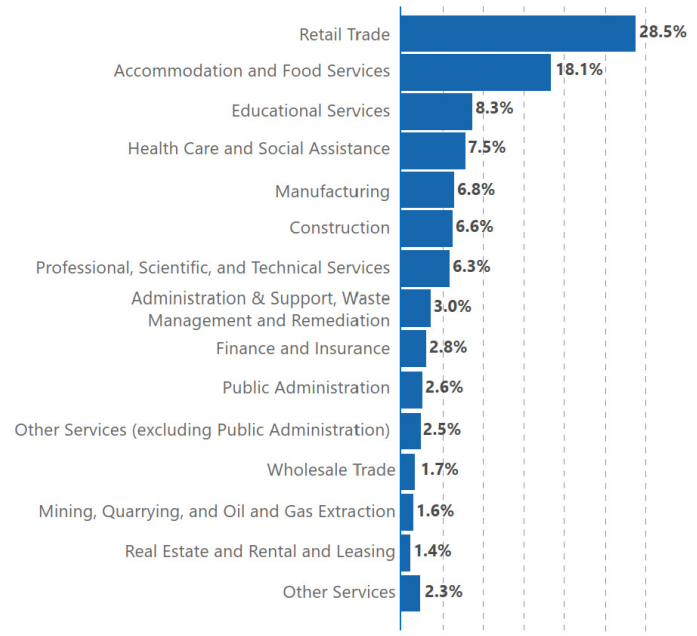
The Clifton Road Conservation Subdivision is envisioned as an inclusive space for community and preservation. Through quality placemaking, a mix of uses and a variety of housing options, will arise a place of creativity and diversity that will reveal a vibrant and active community. The neighborhood will 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.

M I S  
V I S I O N





**JOBS BY INDUSTRY IN KNIGHTDALE**



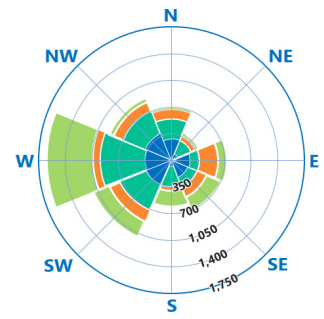
Source: US Census Bureau, ON THE MAP 2021

Recent US Census data suggest the retail/food service and healthcare industries make up a vast majority of the employment sector in the Town of Knightdale. The Clifton Road Conservation PUD aims to meet one of the Town's primary goals by broadening neighborhood and home choice options within the Town's limits. Additionally, the development aims to be more inclusive of a variety of income ranges.

Only 5% of Knightdale employees live within the Town's jurisdictional limits. The Clifton Rd Conservation PUD will broaden opportunities to keep more of the workforce in Town by offering a larger variety of home choices and price points to pick from.

**Town Vision** Knightdale is, and will continue to be, an inclusive and connected urban small town with unique gathering places that foster a sense of community.

**WHERE KNIGHTDALE EMPLOYEES LIVE**



- Less than 10 miles
- 10-24 miles
- 25-49 miles
- 50 or more miles

	Count	Share
Raleigh	1,334	20%
Knightdale*	335	5%
Cary	210	3%
Wake Forest	162	2%
Durham	137	2%
Apex	106	2%
Garner	103	2%
Clayton	95	1%
Wendell	91	1%
Charlotte	76	1%
Other Wake County	1,315	20%
Other	2,692	40%
All Places (Total)	6,656	100%



## GUIDING PRINCIPLES

### Town Vision

Knightdale is, and will continue to be, an inclusive and connected urban small town with unique gathering places that foster a sense of community.

### Growth Framework

The proposed Clifton Rd Conservation Subdivision PUD property is located directly south of I-87 near the southern termination of Clifton Rd. The property is directly adjacent to Pine Country Estates and Poplar Creek to the south. The development group is proposing a rezoning from RT to GR3 PUD in an effort to align with several of the desired guiding principles laid out in the KnightdaleNext2035 Comprehensive Plan. The plan aligns with the Town's overall guiding vision of creating an inclusive and connected urban small town with unique gathering places that foster a sense of community.



### Home and Neighborhood Choices

The Clifton Rd Conservation Subdivision PUD aims to create an exceptional quality of life for future residents by providing new affordable and diverse housing options. The cottage product proposed in this development is not currently available within the Town's jurisdiction. Multiple cottage products are proposed with a variety of available architectural treatments for each product. Furthermore, traditional single family homes will be offered along the perimeter of the development to further expand housing choice. Aging grandparents who want to downsize will have the ability to live in the same neighborhood as their children with expanding families.



### Inclusive, Livable Town

The rising cost of living in Knightdale and surrounding communities has made the dream of home ownership less attainable for a vast majority of the population. The Clifton Rd Conservation Subdivision PUD aims to be a welcoming and inclusive neighborhood by offering new products and pricepoints seldom seen within the Town's jurisdiction. Everyone doesn't start from the same place, and intentional and unintentional barriers exist everyone's daily life. The development will work to bridge gaps in home choice and affordability. Numerous voluntary site and architectural conditions offered by the developer will ensure quality is not sacrificed to achieve this goal.



### Environmental Stewardship and Sustainability

The Clifton Rd Conservation PUD will create a vast network of interconnected active and passive open spaces for residents and visitors to enjoy. Greenways will meander along established tree canopies with a focus on permanently preserving environmental features along with vast areas of undisturbed open spaces. Mass grading is primarily proposed in areas that are already cleared.

The overall impervious area will be substantially reduced through the utilization of smaller cottage footprints surrounded by pervious courts and green spaces. The central courtyard will be a grand focal point for the community and highly visible as you enter the neighborhood. The courtyard will be adorned with shade trees, decorative lighting, sitting areas, a pollinator garden and pavilion for residents to enjoy. Smaller regional stormwater control devices will be placed at the ends of the 2 internal parking lots with educational signage for residents.



## 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.” The Clifton Rd Subdivision meets the intent of the Planned Unit Development Overlay District requirements per Town of Knightdale UDO through the following findings:

### » **Comprehensive Plan**

The Clifton Rd Conservation Subdivision conforms to the planning policies of the Town as laid out in the KnightdaleNext2035 Comprehensive Plan. The site is designated as a Secondary Growth Area with a Conservation Neighborhood place type. The planned variety of residential products with reduced impervious footprints and varying densities meet several of the Town's objectives. Furthermore, vast areas of preservation are proposed along with numerous pervious courtyards and densities. The Clifton Rd Conservation PUD is a neighborhood that exemplifies many of the Guiding Principles for growth and development in Knightdale.

### » **Public Welfare and Impact to Surrounding Property**

- The Clifton Rd Subdivision is maintaining riparian buffers and sensitive environmental areas that adorn the site primarily to the north and west. These natural features will not only be preserved, but amenitized through greenways for the permanent enjoyment of residents and visitors alike. 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 developed portion of the site. All units will be accessible via a public roadway or fire-rated subsurface for quicker emergency vehicle response times. As a result, there will be no increased danger of fire to current or future residents in the area. The public health, safety, and welfare will be protected through new pedestrian and vehicular connectivity and numerous interconnected paths situated in a manner that aims to keep cyclists and pedestrians separated from the vehicular travel way. A fountain in the primary SCM will help keep the water aerated for safety and attractiveness. Furthermore, new public infrastructure will be extended to and through the project.

### » **Impact on Public Facilities & Resources**

- The Clifton Rd Subdivision will provide adequate public utilities, road access, drainage, and other necessary facilities to properly serve residents of the site along with future residents upstream of the development. Public greenway facilities will be extended through the site with private paved connections to it.

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

- No archaeological, historical or cultural resources will be adversely impacted as a result of the proposed development. The Clifton Rd Subdivision will preserve and enhance large amounts of existing natural resources on site for the benefit of the residents and surrounding community that utilize the public greenway.

### » **Parking & Traffic**

- The Clifton Rd Subdivision is a pedestrian-friendly community. The mix of housing types paired with a highly interconnected pedestrian layout alongside courtyards minimizes conflicts between pedestrians and vehicles. The loop street is designed to be traffic calming through the integration of numerous turns that force drivers to reduce speeds and increase awareness. Proper sight distance is utilized throughout the development to prevent conflicts when performing turning movements. All street radii are adequate for emergency traffic. On-street parking options along the loop provide an additional traffic calming feature while supplying the development with ample visitor and cottage parking in closer to proximity to units.

### » **Buffering**

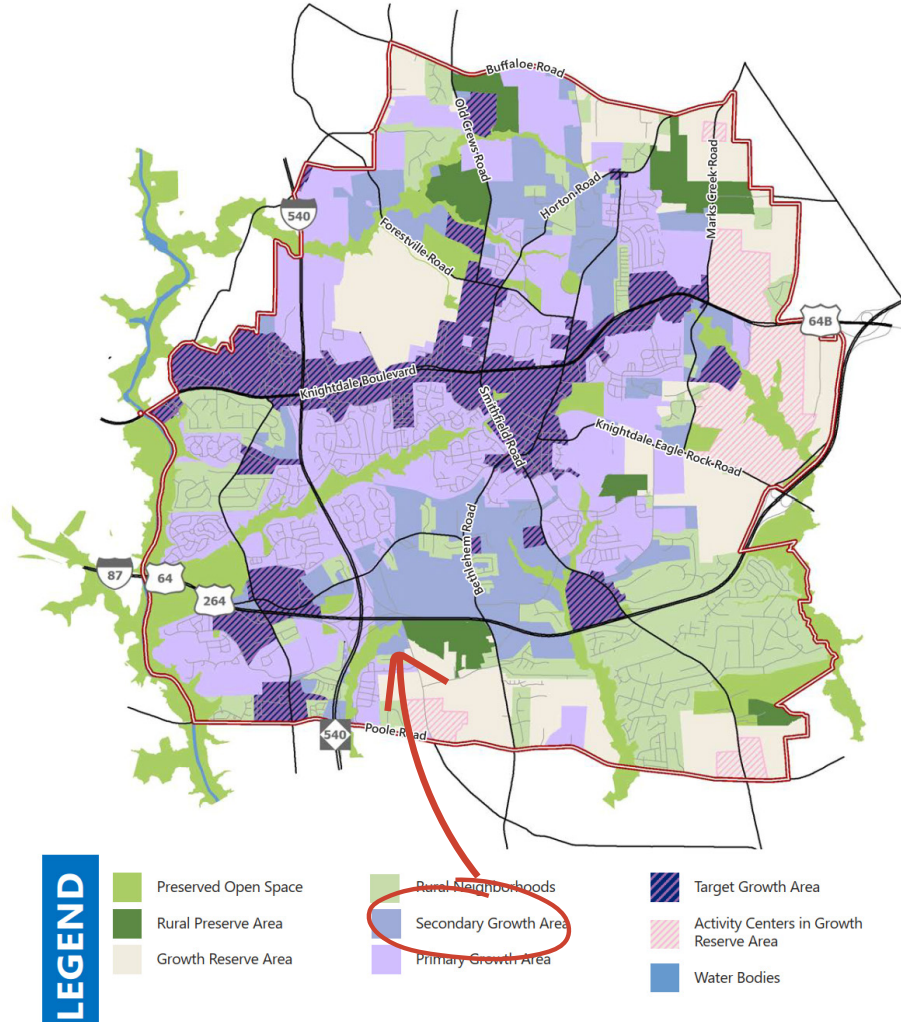
- A 20' Type B Buffer is proposed along the southern perimeter of the development adjacent to Pine Country Estates. The remainder of the site will be naturally buffered through preservation of existing stands of trees and environmental features along the northern and western property lines. Appropriate landscaping will be provided within all off-street parking lots to shield adjacent residents from headlight pollution. .
- A minimum 20' enhanced buffer with dense plantings and a 4' average height berm will be provided along Clifton Road to provide visual privacy for residents and commuters.

### » **Performance**

- D.R. Horton is America's largest homebuilder, and the local team who is proposing this project has a proven track record of building successful residential neighborhoods in surrounding communities, as well as in Knightdale, most recently with the Haywood Glen and Lyndon Oaks communities. 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.



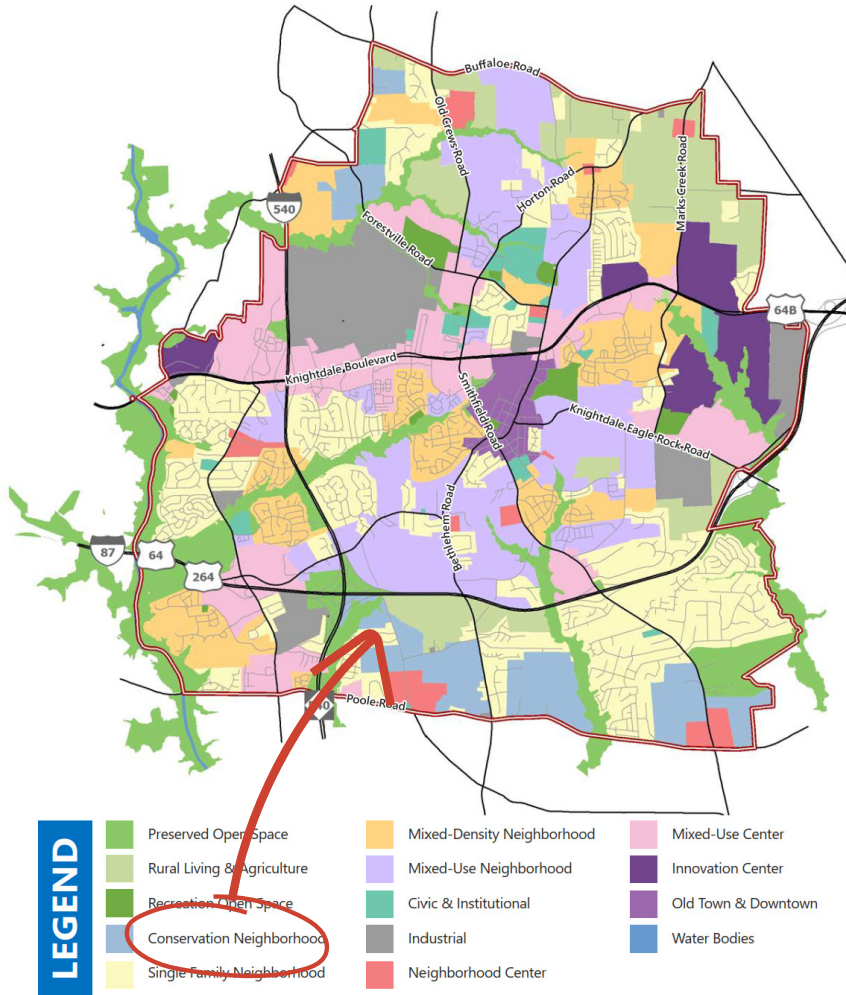
## INTENTIONAL GROWTH AREAS



The Clifton Rd Conservation PUD is located in a Secondary Growth Area within the newly adopted Intentional Growth Areas Map. The project presents an opportunity to be forward-thinking about the creation of areas for permanent conservation by preserving large areas of open space and exploring new approaches to housing to reduce impervious area. The project will provide a diverse mix of unit choices while keeping the overall density under 3 units per acre.

This project will expand the Town's infrastructure by filling in missing segments of public greenways, public water and sanitary sewer systems, a primary goal of secondary growth areas.





## Conservation Neighborhood

The Clifton Road Conservation PUD is designated as a Conservation Neighborhood place type on the Town's Future Place Type Map. The neighborhood aims to meet the intent of a conservation neighborhood while simultaneously meeting other town goals as outlined in this document. The development will protect vast stands of trees and environmental features by clustering development together with varying product offerings paired with smaller impervious footprints. Large and meaningful continuous areas of open space are provided.



### Sustainability

- Developed areas will take advantage of tree cover, both existing and proposed to promote natural cooling.
- Single family residences will provide pre-configured internal infrastructure to promote solar panel installation.
- Electric vehicle charging stations will be provided throughout the neighborhood.



### Open Spaces and Natural Areas

- Permanent open space is substantial in size, interconnected and functional in nature to residents and visitors.
- Natural resources will remain more informal and accessible via greenways.
- A large focal courtyard and pollinator garden is provided.



### Building Types and Massing

- Density is clustered in areas current or recently cleared areas to promote additional conservation.



### Transportation

- Streets are designed with curb and gutter drainage.
- Residential and open space areas are highly walkable and bikable throughout developed areas.
- Internal parking lots will provide green stormwater infrastructure. .



## TRAILS AND GREENWAYS

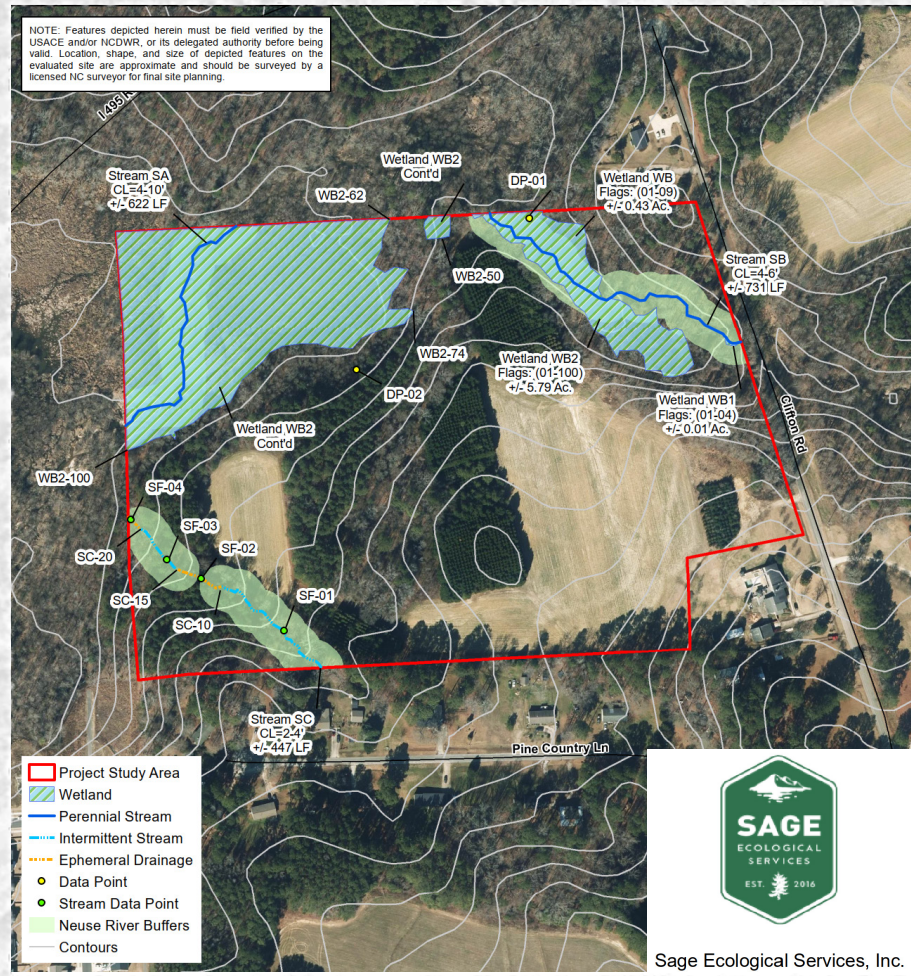


The Clifton Road conservation subdivision will provide a network of public greenways and private trails throughout the community. Public and private greenways will be paved and a minimum of 10' in width. Environmental features will be avoided as much as possible during construction for permanent preservation.

The proposed public greenway will bridge a ~1,600 LF gap of proposed infrastructure in accordance with the adopted Town of Knightdale Sidepaths and Greenways Plan. Signage will be provided where the 2 private greenways intersect the public greenway. At least 2 benches will be provided along the public portion of the trail. All designs will meet applicable Town of Knightdale Standards and Specifications.







### Current Use

The project site is currently vacant. A portion of the property is cleared and occasionally leased for agriculture.

### Topography

The property has very mild to moderate slopes generally flowing from the southeastern boundary to the north and southwest.

### Vegetation and Environmental Features

The project site presently consists of vacant farmland, wooded areas and environmentally sensitive features such as streams and wetlands primarily along the northern and western project boundaries. The neighborhood aims to permanently preserve as much of the aforementioned areas as possible.



MASTER PLAN

**PRELIMINARY DEVELOPMENT SUMMARY**

PROJECT: CLIFTON RD CONSERVATION SUBDIVISION

OWNER: DAVID ADAMS  
6600 HAIL WEATHERS RD  
RALEIGH, NC 27603

DEVELOPER: DR HORTON, INC  
7208 FALLS OF NEUSE RD, STE 201  
RALEIGH, NC 27615

PIN: 1743-73-8469

SITE ADDRESS: 0 PINE COUNTRY LN

WATERSHED: NEUSE RIVER - C/NSW

TOWNSHIP: ST MATTHEWS  
TRACT AREA: 32.05  
EX ZONING: 681 (RURAL RESIDENTIAL 1)  
PROPOSED ZONING: GR3 PUD  
EX USE: VACANT  
PROPOSED USE: RESIDENTIAL  
EX STRUCTURES: N/A  
RES UNITS PROPOSED: 95  
TRADITIONAL SINGLE FAMILY DETACHED: 27  
COTTAGES: 68

DENSITY: 95 UNITS/32.05 AC = 2.96 UNITS/AC

**RECREATIONAL OPEN SPACE CALCULATIONS**

OPEN SPACE REQUIRED: 3.97 AC  
TOTAL BEDS OUTSIDE 1/2 MILE: 333 BEDS (95 UNITS \* 3.5 UNITS/BED)  
OPEN SPACE CALC:  $333 \text{ BEDS} \times 520 \text{ SF} = 173,160 \text{ SF}$  (3.97 AC)  
OPEN SPACE PROVIDED: 4.00+ AC MIN.

**ACTIVE OPEN SPACE**  
ACTIVE OPEN SPACE REQ'D: 1.98 AC (0.5 \* 3.97 AC)  
ACTIVE OPEN SPACE PROVIDED: 2.00+ AC

**PASSIVE OPEN SPACE**  
PASSIVE OPEN SPACE REQ'D: 1.98 AC (0.5 \* 3.97 AC)  
PASSIVE OPEN SPACE PROVIDED: 2.41+ AC

**UNDISTURBED OPEN SPACE**  
10% ACRE (REFER TO OPEN SPACE PLAN)  
WETLAND IMPACT: NO IMPACTS PLANNED

**PARKING**  
TRADITIONAL SF UNITS: (2/UNIT \* 27) = 54 SPACES  
COTTAGE UNITS: (1.7/UNIT \* 68 UNITS) = 116 SPACES  
TOTAL PROVIDED: 172 SPACES

CONNECTIVITY INDEX: 2 LINKS/ 2 NODES = 1.0 (DEV ALLOWANCE)



**DEVELOPMENT SUMMARY**

- 18' TRADITIONAL SINGLE FAMILY LOT (ADDITIONAL ANY MONETARY PROVISIONS SEE PUD REPORT)
- COTTAGE PRODUCT STYLE A (ADDITIONAL ANY MONETARY PROVISIONS SEE PUD REPORT)
- COTTAGE PRODUCT STYLE B (ADDITIONAL ANY MONETARY PROVISIONS SEE PUD REPORT)
- COTTAGE COURTS, PASSIVE OPEN SPACE (ADDITIONAL ANY MONETARY PROVISIONS SEE PUD REPORT)
- ACTIVE OPEN SPACE (ADDITIONAL ANY MONETARY PROVISIONS SEE PUD REPORT)

**vhb**

VHB Engineering NC, P.C.  
940 Main Campus Drive  
Suite 500  
Raleigh, NC 27606  
919.829.0328  
Corp. # C-3705

- Site Legend**
- WETLANDS
  - 10' BUFFER OVER BUFFER
  - PROPERTY LINE
  - BLAZING STRUCK
  - CONCRETE SIDEWALK
  - CEMENTARY
  - CEMENTARY EXISTENCE
  - 6 FT PRELACY FENCE

**Clifton Road Conservation Subdivision**  
0 Pine Country Lane  
Knightdale, NC

NO.	REVISION	DATE
1	ISSUED FOR PERMIT REVIEW	03/24/2025
2	FOR PERMIT REVIEW ONLY	
3	NOT FOR CONSTRUCTION	

Master Plan Review March 24, 2025

**Illustrative Master Plan**

**C1.00**

3 of 11

04/24/2025

29510.03

**BTL**

Know what's below. Call before you dig.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF KNOTHDALE AND CITY OF RALEIGH STANDARDS AND SPECIFICATIONS AND NCDOT IF APPLICABLE



# PLAN CONCEPTS

MASTER PLAN

## PRELIMINARY DEVELOPMENT SUMMARY

PROJECT: CLIFTON RD CONSERVATION SUBDIVISION

OWNER: DAVID ADAMS  
6600 MIAL WEATHERS RD  
RALEIGH, NC 27603

DEVELOPER: DR HORTON, INC  
7208 FALLS OF NEUSE RD, STE 201  
RALEIGH, NC 27615

PI#: 1743-73-8469

SITE ADDRESS: 0 PINE COUNTRY LN

WATERSHED: NEUSE RIVER - C/NEW

TOWNSHIP: ST MATTHEWS  
TRACT AREA: 32.00  
EX ZONING: RR1 (RURAL RESIDENTIAL 1)  
PROPOSED ZONING: GR3 PUD  
EX USE: VACANT  
PROPOSED USE: RESIDENTIAL  
EX STRUCTURES: N/A  
RES UNITS PROPOSED: 95  
TRADITIONAL SINGLE FAMILY DETACHED: 27  
COTTAGES: 68

DENSITY: 95 UNITS/32.05 AC = 2.96 UNITS/AC

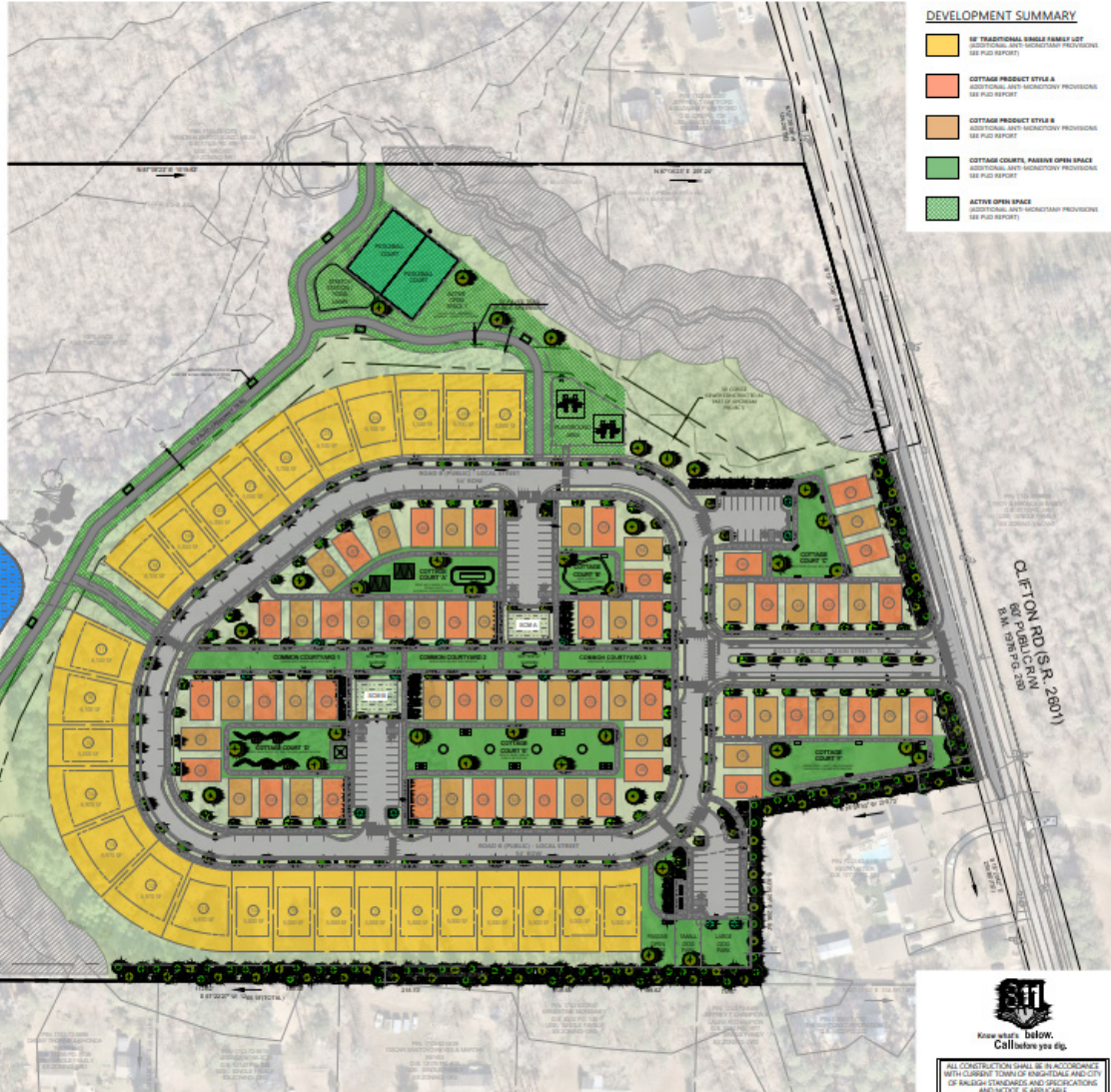
## RECREATIONAL OPEN SPACE CALCULATIONS

OPEN SPACE REQUIRED: 3.97 AC  
TOTAL BEDS OUTSIDE 1/2 MILE: 333 BEDS (95 UNITS \* 3.5 UNITS/BED)  
OPEN SPACE CALC: 333 BEDS \* 0.0125 SF = 173,160 SF (3.97 AC)  
OPEN SPACE PROVIDED: 4,064 AC MIN.

ACTIVE OPEN SPACE  
ACTIVE OPEN SPACE REQ'D: 1.98 AC (0.5 \* 3.97 AC)  
ACTIVE OPEN SPACE PROVIDED: 2.884 AC  
PASSIVE OPEN SPACE  
PASSIVE OPEN SPACE REQ'D: 1.98 AC (0.5 \* 3.97 AC)  
PASSIVE OPEN SPACE PROVIDED: 2.411 AC  
UNDISTURBED OPEN SPACE  
10% MINIMUM RATIO TO OPEN SPACE PLANNED  
WETLAND IMPACT: NO IMPACTS PLANNED

PARKING  
TRADITIONAL SF UNITS (2/UNIT \* 27) = 54 SPACES  
COTTAGE UNITS (1.5/UNIT \* 68 UNITS) = 102 SPACES  
TOTAL PROVIDED: 156 SPACES

CONNECTIVITY INDEX: 2 LINKS/ 2 NODES = 1.0 (DEV ALLOWANCE)



## DEVELOPMENT SUMMARY

- 16 TRADITIONAL SINGLE FAMILY LOTS  
(ADDITIONAL ART/ SECONDARY PROVISIONS  
SEE PUD REPORT)
- COTTAGE PRODUCT STYLE A  
(ADDITIONAL ART/ SECONDARY PROVISIONS  
SEE PUD REPORT)
- COTTAGE PRODUCT STYLE B  
(ADDITIONAL ART/ SECONDARY PROVISIONS  
SEE PUD REPORT)
- COTTAGE COURTS, PASSIVE OPEN SPACE  
(ADDITIONAL ART/ SECONDARY PROVISIONS  
SEE PUD REPORT)
- ACTIVE OPEN SPACE  
(ADDITIONAL ART/ SECONDARY PROVISIONS  
SEE PUD REPORT)

## Distribution of Uses

Use distribution shall meet the intent of the Town of Knightdale's UDO.

## Street Plan

The entrance to the Clifton Rd Conservation PUD shall greet residents with an attractive landscaped median-divided collector roadway. Ingress traffic will have a stunning view of the central tree-lined green courtyard upon entering which will act as a central focal point for the community. A local road with on-street parking will loop the outer perimeter of the neighborhood thus creating no cul-de-sacs. Maneuverable turns are proposed throughout the loop for traffic calming.

## Pedestrian Circulation

Clifton Rd subdivision is proposing a vast network of interconnected courtyards along with active and passive open spaces. 5' concrete sidewalks are proposed on both sides of all streets, along courtyards and throughout open space areas. Approximately 1,600 LF of 10' wide paved public and private greenway trails are proposed.

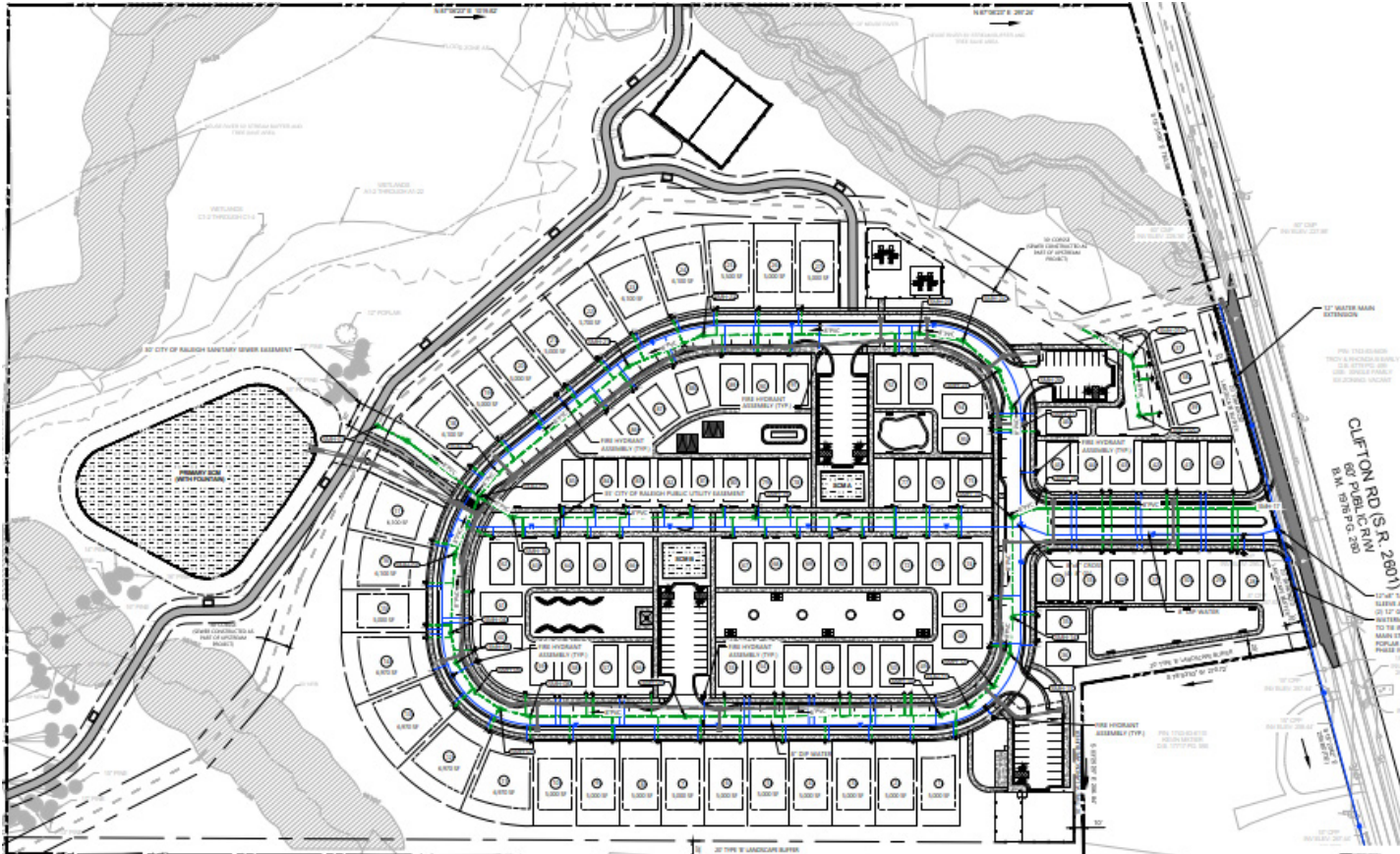


ALL CONSTRUCTION SHALL BE IN ACCORDANCE  
WITH CURRENT TOWN OF KNIGHTDALE AND CITY  
OF KNIGHTDALE ORDINANCES AND SPECIFICATIONS  
AND RESOLVE IF APPLICABLE



## PRELIMINARY UTILITY OVERVIEW

### UTILITY PLAN



#### Public Water

A 12" public waterline will be extended along Clifton Rd from the south and along a majority of the frontage. Once entering the project, public water will be extended in all public streets as well as the central courtyard to serve all units. Fire hydrants will be installed throughout the development. A water system analysis will be performed to demonstrate all fireflow requirements are met throughout the development.

#### Public Sewer

All units will be served with public sanitary sewer via a previously acquired CORSSE from the homeowner to the south. Sanitary sewer stubs will be provided for future development as directed by Raleigh Water. All public sewer will be designed and installed to meet Raleigh Water's standards and specifications.

#### Water Allocation Policy

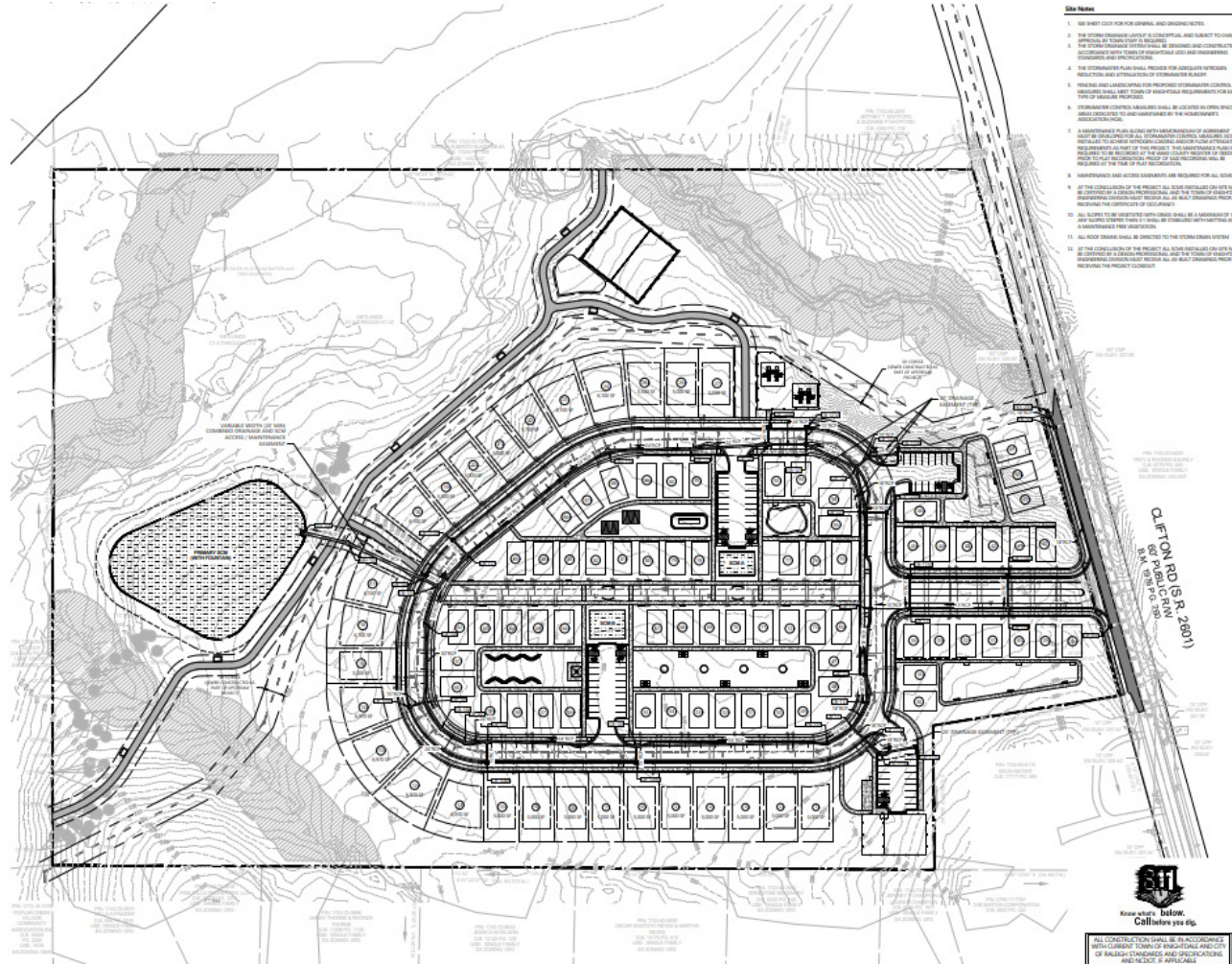
Water allocation points will be met for the major subdivision through the utilization of site programming with points as described in the Town's Water Allocation policy. A minimum of 50 points will be achieved.

Major Subdivision		
Major Subdivision (Base Points)		15
Conservation of Natural Habitat (Public Greenway)		10
Construct a fountain within the SCM		4
Outdoor Display of Public Art		4
Pickleball Courts		5
IPEMA Certified Playground Equipment		4
Stormwater- Underground Capture System		5
Deck/Patio- More than 1,000 square feet		1
Enhanced Roadside Landscaping and Hardscaping		2
<b>Total Required</b>		<b>50</b>
<b>Total Provided</b>		<b>50</b>



# PRELIMINARY STORMWATER OVERVIEW

## STORMWATER PLAN



- Site Notes**
1. SEE SHEET C-301 FOR GENERAL AND UNRESOLVED NOTES.
  2. THE STORMWATER MANAGEMENT PLAN IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION. THE STORMWATER MANAGEMENT PLAN IS SUBJECT TO CHANGE WITHOUT NOTICE.
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### Preliminary Stormwater Plan

The project is proposing 1 primary stormwater device with fountain and 2 smaller alternate stormwater devices at the north and south ends of the central parking areas for additional stormwater retention and treatment. The neighborhood will be designed to meet and exceed the Town's stormwater regulations.



Fountain Example

### Alternative Stormwater Device Concept

The project will integrate 2 green stormwater infrastructure devices (A and B) along interior parking areas to further reduce runoff and enhance nutrient removal from the developed site. Examples include a bioretention, filterra, sand filter.



Bioretention Example

**Clifton Road Conservation Subdivision**  
0 Pine Country Lane  
Knightdale, NC

Master Plan Review  
March 24, 2025

Stormwater Management Plan

**C3.00**

7 11

DATE: 04/24/2025

PROJECT NO: 24010-03







## Playground

IPEMA certified playground equipment will be provided in an active open space area for families.



## Public Greenway & Fitness Trail

The project will construct ~1,300 linear feet of public greenway along mostly undeveloped areas.



## Covered Mail Kiosk

The mail kiosk will be covered for rainy days.



## Bicycle Racks

Bicycle racks will be provided at various points of interest.



## Central Courtyard

The tree-lined central courtyard will be a vibrant focal point for community with full visibility as you enter the neighborhood. The courtyard will be adorned with amenities such as benches, seating areas and decorative lighting. It will double as a large open space green which can be used for a variety of activities. Additionally, the courtyard will have a fire-rated substructure for emergency service access to the front of cottages.



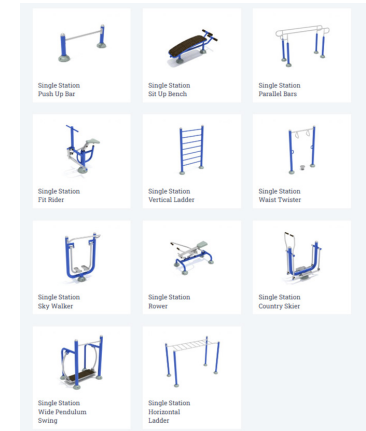
## Pickleball Courts

Two pickleball courts will be situated away from mass clearing areas to allow for private active recreation.



## Dog Park

The dog park will provide a place for large and small pets to run and play. This will be located in an area with distance from residential units with paired with partial shade.



## Workout Stations

Workout stations will be provided in an active open space area adjacent to the playground. The placement will give parents the opportunity to be active alongside their children.



## AMENITIES CONTINUED

(Conceptual images)



### **Pollinator Garden**

A proposed pollinator garden situated adjacent to main courtyard will create a habitat for pollinators in the community.



### **EV Charging Stations**

Standalone EV charging stations are proposed in every parking lot throughout the community.



### **Masonry Sitting Walls**

Half moon masonry sitting walls are proposed north and south of the pollinator garden for observation and additional seating adjacent to the central courtyard.



### **Benches**

Numerous benches are proposed throughout the community and along the public greenway.



### **Covered Pavilion**

A covered pavilion is proposed adjacent to the central courtyard to provide shade and a place of gathering.



### **Cottage Courtyards**

Six Cottage Courtyards are proposed throughout the community to provide additional local areas for resident gatherings and play. The shared green spaces replace the traditional backyard for cottages and promote a more intimate sense of community.



## COTTAGE COURT ACTIVATION

(Conceptual images)

SITE PROGRAMMING



Hammock Park



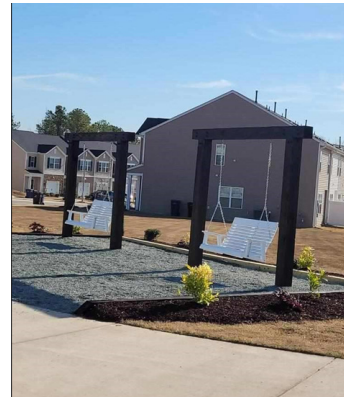
Yoga Lawn



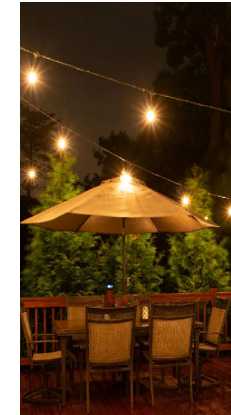
Multi-Use Play Lawn  
(with benches)



Sunken Conversation Pit



Bench Swing Park & Public Art  
Display

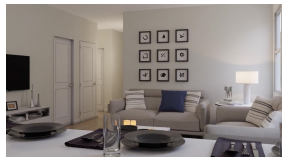
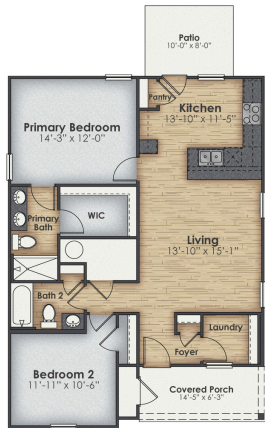


Raised deck with Sting Lights



# SAMPLE ARCHITECTURAL ELEVATIONS

ARCHITECTURAL DESIGN STANDARDS



**SAMPLE COTTAGE PRODUCT**  
2 BEDROOMS, 2 BATHS, 1,045 SQUARE FEET



**SAMPLE COTTAGE PRODUCT**  
3 BEDROOMS, 2 BATHS, 1,245 SQUARE FEET



**SAMPLE SINGLE FAMILY PRODUCT**



# ARCHITECTURAL DESIGN 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:
  - a. stone
  - b. brick
  - c. lap siding
  - d. shakes
  - e. board and batten
  - f. window pediments
  - g. recessed windows
  - h. side and/or front window box bays
  - i. roof gables
  - j. roof dormers
  - k. roofline cornices
  - l. metal roofing as accent
  - m. column
  - n. shutters
  - o. 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. Each front entrance shall contain a covered stoop or porch.
7. 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**

8. All homes shall have a minimum 100 square foot patio, deck, terrace, or courtyard.
9. A minimum of 33% of homes shall include stone or brick as a front façade material.
10. Front-facing garage doors shall have one of the following: windows, decorative details, or carriage-style adornments.



## DEVELOPMENT ALLOWANCES

The proposed zoning of GR3 meets all standards set forth in the Town of Knightdale's Unified Development Ordinance with the exception of a few conditions.

Note: Contents of this section will be modified and/or expanded with further communication and review with Staff and Council.

Due primarily to 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:

### **Lot width**

- In order to create a variety of housing types and price-points we are proposing single family detached front-loaded homes with lot widths of less than 80'. 50' lot widths are proposed for a minority of the development.

### **Driveway length**

- In the GR3 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. 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.

### **Building Setbacks**

- For front-loaded single family lots, we're proposing a minimum 20' front, 15' rear and 5' side minimum building setback. For cottages, we're proposing a minimum of 10' separation between units and 10' min front building setback.

### **Public Roadway Centerline Radii**

- The development requests a reduction in the minimum centerline Radii for public streets from 150' to 100' so long as adequate emergency vehicle access and maneuverability is not compromised. The Apparatus Access Plan (C-FIRE) sheet in the master plan demonstrates appropriate maneuverability.

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

- The project 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. Front-load single family lot widths shall be a minimum of 50' in width and mass grading shall be permitted.

### **Connectivity Index**

- The connectivity index shall be permitted to be 1.0 due to a lack of existing street connections to the neighborhood and presence of existing environmental conditions (that we would like to retain) north and west of the developed area.

### **Portion of Clifton Road Improvements**

- The development is requesting a fee-in-lieu of construction for a portion of the Clifton Rd improvements (curb & gutter, sidewalk etc.) north of the east-to-west jurisdictional stream that bisects Clifton Rd. Further development north of the project is unlikely, and creating potentially unnecessary environmental impacts to jurisdictional wetlands and streams does not align with the overall theme of conservation. The developer will pay a lump sum fee-in-lieu of construction to the Town of Knightdale with the first subdivision plat. The amount will be estimated by a Professional Engineer and reviewed by the Town of Knightdale.



# NEIGHBORHOOD MEETING SIGN-IN SHEET

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

Meeting Address: \_\_\_\_\_

Date of meeting: \_\_\_\_\_ Time of meeting: \_\_\_\_\_

Property Owner(s) name(s): \_\_\_\_\_

Applicant(s): \_\_\_\_\_

Please print your name below, state your address and/or affiliation with a neighborhood group, and provide your phone number and email address. Providing your name below does not represent support or opposition to the project; it is for documentation purposes only. For virtual meetings, applicants must include all known participants and request the information below.

	NAME/ORGANIZATION	ADDRESS	PHONE #	EMAIL	SEND PLANS & UPDATES
1.					
2.					
3.					
4.					
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# SUMMARY OF DISCUSSION FROM THE NEIGHBORHOOD MEETING

Property Owner(s) name(s): \_\_\_\_\_

Applicant(s): \_\_\_\_\_

Contact information (email/phone): \_\_\_\_\_

Meeting Address: \_\_\_\_\_

Date of meeting: \_\_\_\_\_ Time of meeting: \_\_\_\_\_

Question/Concern #1:

\_\_\_\_\_

\_\_\_\_\_

Applicant's Response:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Question/Concern #2:

\_\_\_\_\_

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Applicant's Response:

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Question/Concern #3:

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Applicant's Response:

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Question/Concern #4:

\_\_\_\_\_

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Applicant's Response:

\_\_\_\_\_

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## Memorandum

To: Reese Bridges, PE, AICP  
D.R. HORTON  
7208 Falls of Neuse Road., Suite 201  
Raleigh, NC 27615

Date: February 25, 2025  
Project #: 39510.03

From: Andrew Topp, PE, PTOE  
Senior Project Manager, VHB

Re: Clifton Road Residential Trip Generation -  
Clifton Road Residential; Knightdale, NC

This memorandum provides an assessment of trip generation (site-generated traffic volumes) projected by a proposed 95-lot single-family home development, located along the west side of Clifton Road (SR 2601), north of Pine Country Lane in Knightdale, NC.

### Project Background

The Clifton Road Residential development is proposed to be located northwest of the Clifton Road (SR 2601) and Pine Country Lane intersection. The Site Plan is included in the Appendix to this memo. The Clifton Road Residential development is planned to contain 95 single-family home lots and is expected to have a single full access driveway onto Clifton Road.

### Trip Generation

The trip generation for the proposed site was prepared using the *Institute of Traffic Engineers (ITE) Trip Generation Manual, 11<sup>th</sup> Edition*. The land use code (LUC) for Single-Family Detached Housing (LUC 210) was utilized to determine the future site trips generated by the development. The trip generation for the site is shown in Table 1.

**Table 1: Traffic Generation – Clifton Road Residential Development in Knightdale, NC**

Land Use Code <sup>1</sup>	Land Use	Unit	ADT	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
210	Single-Family Detached Housing	95 du	963	18	53	71	60	35	95

Notes:

1. Land Use Code and trip generation rates are determined based on *ITE Trip Generation, 11<sup>th</sup> Edition*
2. Total site trips are determined based on the suggested method in the NCDOT Rate vs Equation Spreadsheet

As shown in Table 1, the Clifton Road Residential development is expected to generate 71 trips during the AM peak hour, 95 peak hour trips during the PM peak hour, and a total of 963 daily trips. None of these values exceed the minimum required for a TIA for either the Knightdale UDO (150 peak hour trips), Wake County UDO (100 peak hour trips or 1,000 daily trips), or NCDOT TIA Checklist (3,000 daily trips).

### Trip Distribution

Clifton Road terminates just north of the site, and as a result, entering traffic was distributed under the following assumptions:

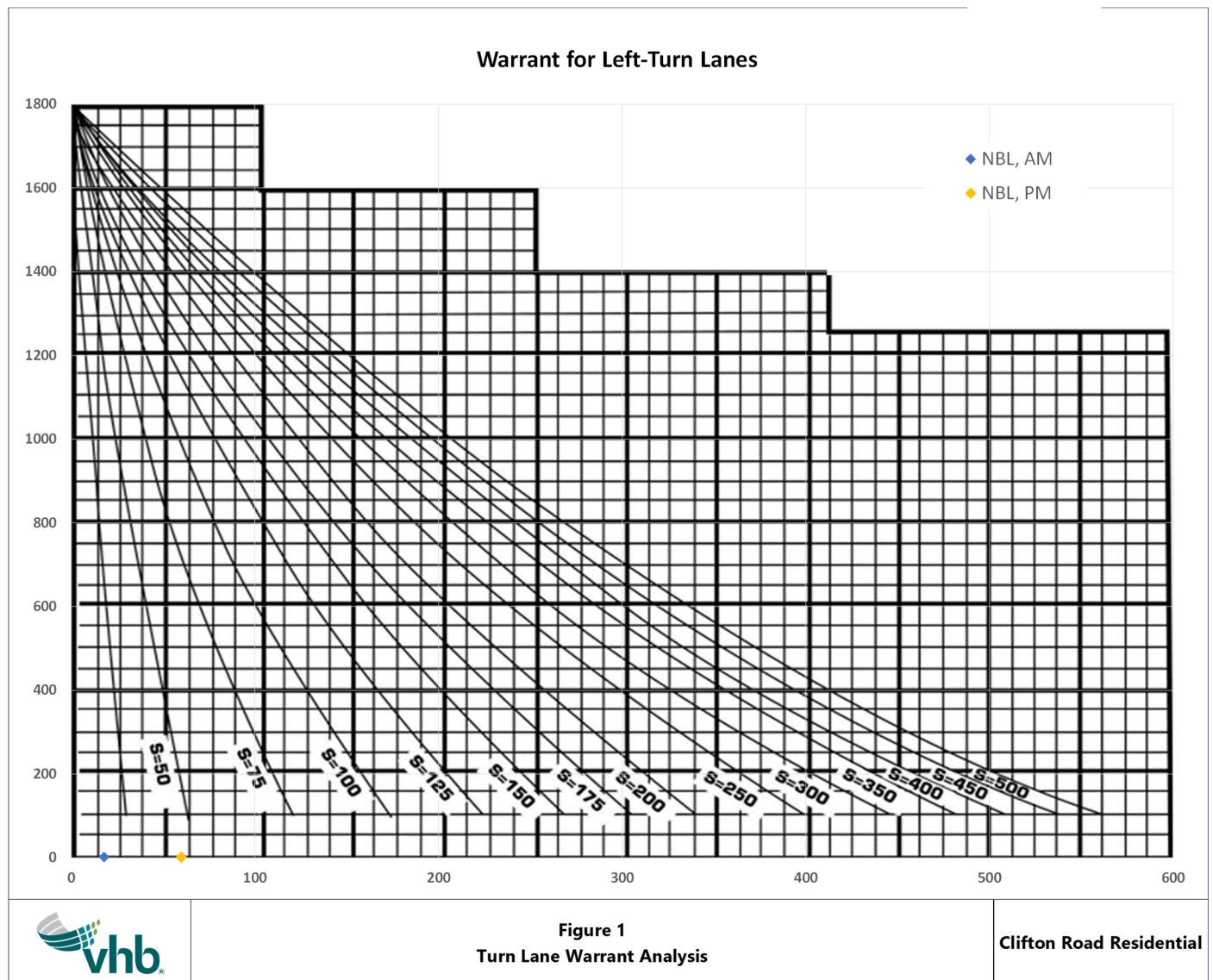
- 100% from the south on Clifton Road



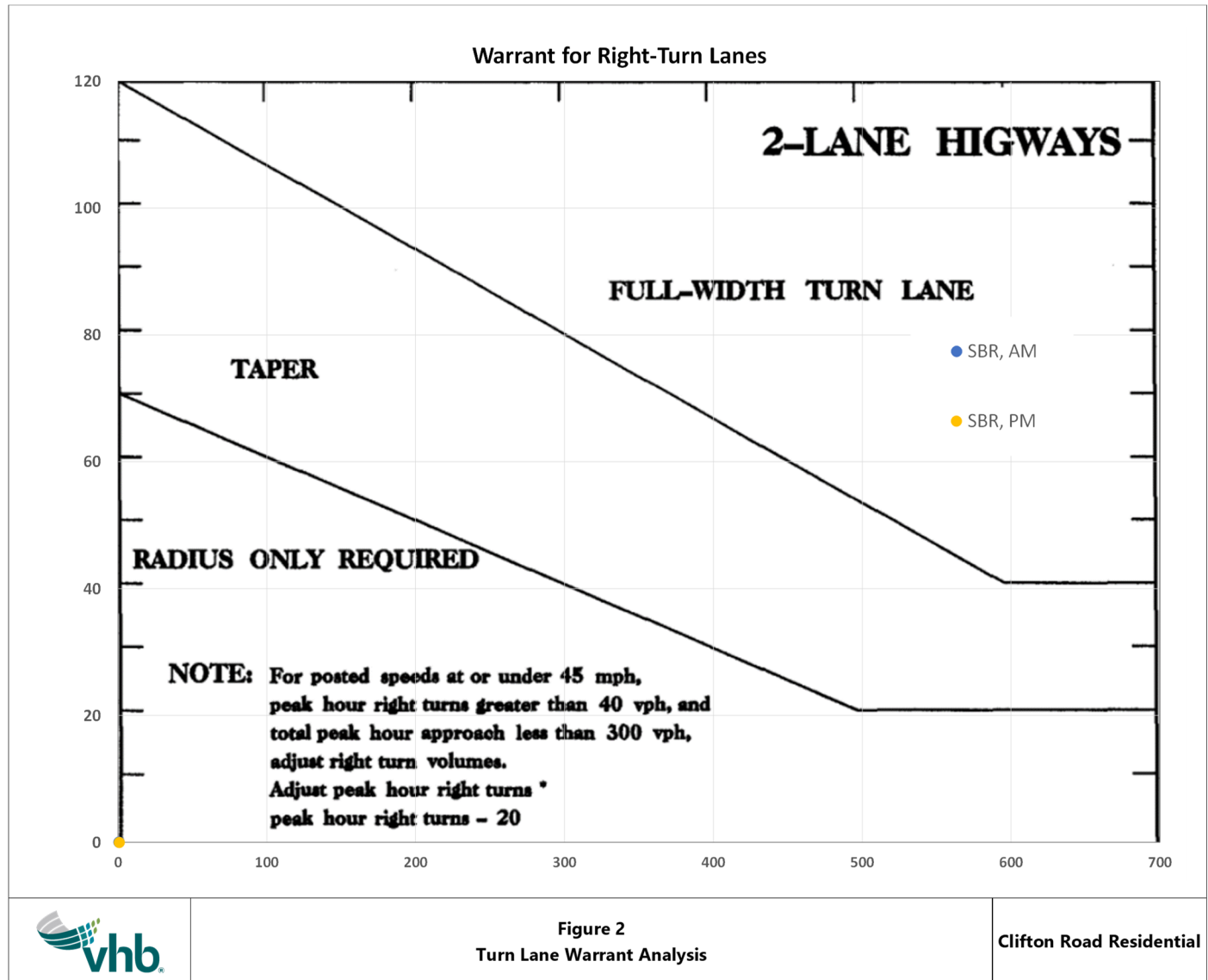
## Turn Lane Warrant Analysis

There are only two residences located between the site and the terminus of Clifton Road. As a result, the trips from north of the development were generated for the two houses by using the *ITE Trip Generation Manual, 11<sup>th</sup> Edition* (LUC 210) and directing those trips past the site.

Figures 1 and 2 show the resulting turn lane warrant analysis. Note that this development does not meet the minimum threshold for a turn lane or taper.







## Conclusions

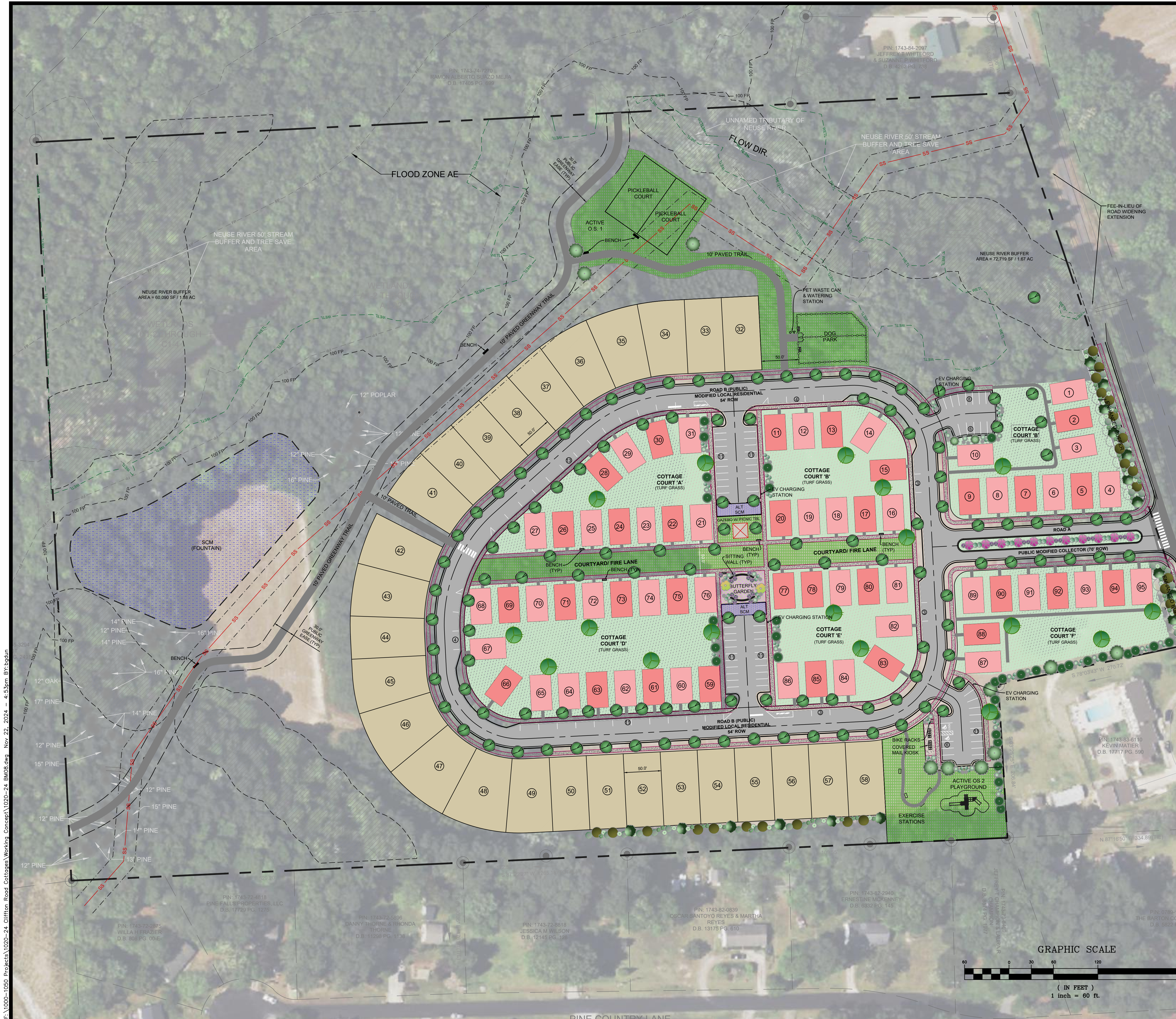
As indicated in the Trip Generation Table, the proposed development does not meet the minimum threshold for conducting a TIA based on requirements from the Town of Knightdale, Wake County, and NCDOT. The left-turns into the site will essentially operate free flowing due to the lack of opposing traffic volume and therefore no turn lanes are required. Similarly, exiting traffic will have steady gaps to turn right out of the site. This development accesses a low volume road and is projected to have a minimal impact on the traffic operations along the roadways within the study area. Therefore, no TIA is recommended for this development.



## Appendices

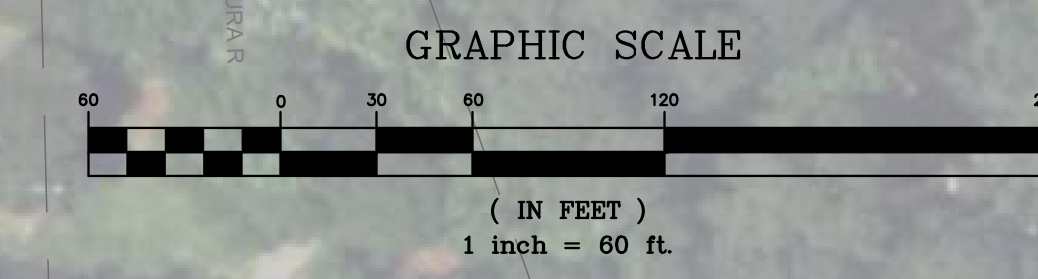
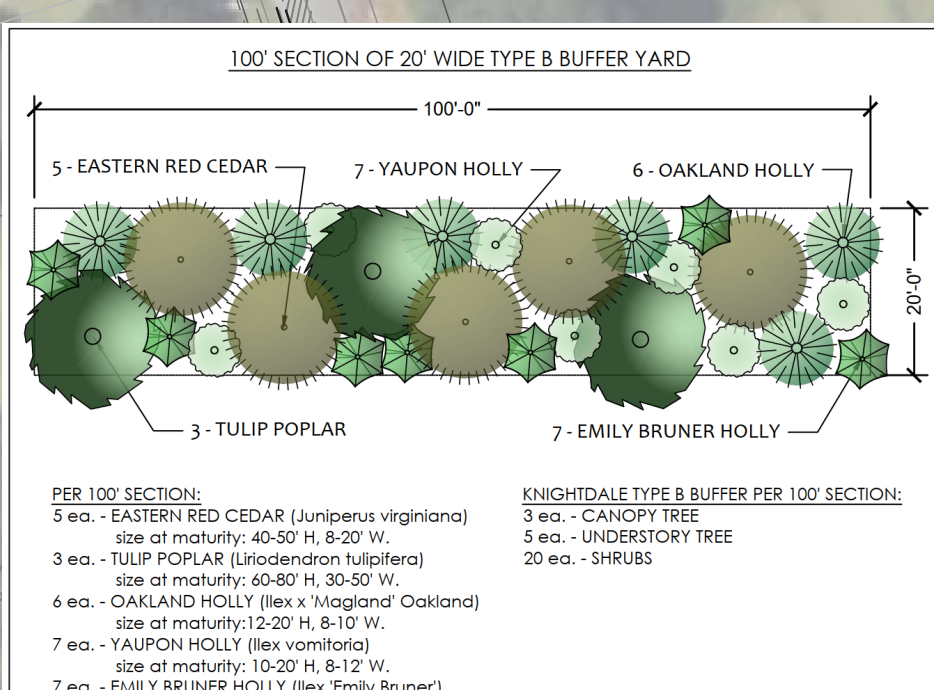


F:\1000-1050 Projects\1020-24 Clifton Road Cottages\Working Concept\1020-24 BM08.dwg Nov 22, 2024 - 4:53pm Bjt:bdm



PRELIMINARY DEVELOPMENT SUMMARY	
PROJECT:	CLIFTON ROAD CONSERVATION SUBDIVISION
OWNER OF RECORD:	DAVID ADAMS 6000 MAL WEATHERS RD RALEIGH, NC 27603
DEVELOPER:	DR HORTON, INC 7208 FALLS OF NEUSE ROAD, SUITE 201 RALEIGH, NC 27615
PROJECT DESIGNER:	DUNCAN LAND CONSULTANTS 5204 BLAKENBURN TRAIL FUGUAY-VARINA, NC 27526
PIN NO.:	1743-73-8469
SITE ADDRESS:	0 PINE COUNTRY LN
TOWNSHIP:	ST. MATTHEW'S
EXISTING NUMBER OF PARCELS:	1
TOTAL EXISTING TRACT AREA:	32.05 AC
EXISTING ZONING:	RR1
PROPOSED ZONING:	GR3 PUD
EXISTING USE:	VACANT
PROPOSED USE:	SINGLE FAMILY RESIDENTIAL
EXISTING STRUCTURES:	N/A
RESIDENTIAL UNITS PROPOSED:	95
FRONT LOADED = 27	COTTAGES = 68
DENSITY CALCULATIONS:	
TOTAL PROJECT AREA:	32.05 AC
RESIDENTIAL DENSITY PROVIDED:	(95 UNITS/32.05 AC) = 2.96 UNITS/AC
RECREATIONAL OPEN SPACE CALCULATIONS:	
OPEN SPACE REQUIRED:	3.97 AC
TOTAL BEDS OUTSIDE 1 MILE:	333 BEDS (95 UNITS*3.5 UNITS/BED)
OPEN SPACE CALCULATION:	333 BEDS/920 SF (FIG. 7.3B) = 173,160 SF OR 3.97 AC
ACTIVE OPEN SPACE REQUIRED:	1.98 AC (0.5*3.97 AC)
PASSIVE OPEN SPACE REQUIRED:	1.98 AC (0.5*3.97 AC)
TOTAL OPEN SPACE PROVIDED:	18.44 AC
ACTIVE:	
DOG PARK & PICKLEBALL:	0.90 AC
PLAYGROUND & EXERCISE ST:	0.42 AC
CENTRAL COURTYARD:	0.67 AC
	2.0 AC
PASSIVE:	
COTTAGE COURTS A-F:	5.44 AC
UNDISTURBED OPEN SPACE:	-11.0 AC
WETLAND IMPACT:	N/A
PARKING PROVIDED:	116 SPACES

LEGEND	
	COTTAGE PRODUCT A ADDITIONAL ANTI-MONOTONY PROVISIONS SEE PUD REPORT
	COTTAGE PRODUCT B ADDITIONAL ANTI-MONOTONY PROVISIONS SEE PUD REPORT
	50' FRONT LOAD SINGLE FAMILY ADDITIONAL ANTI-MONOTONY PROVISIONS SEE PUD REPORT
	COTTAGE COURT OPEN SPACE SEE PUD REPORT FOR DETAILS
	ACTIVE OPEN SPACE SEE PUD REPORT FOR DETAILS



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Duncan Land Consultants

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DATE	
REVISION	
NO.	1
PRELIMINARY	
DUNCAN LAND CONSULTANTS	
PREPARED FOR:	DR HORTON, INC 7208 FALLS OF NEUSE RD #200 RALEIGH, NC 27615
DATE:	10-31-2024
PROJECT DESIGNER:	DUNCAN LAND CONSULTANTS 3800 WILSON STREET HOLLY SPRINGS, NC 27540
PROJECT SURVEYOR:	TBE
CLIFTON ROAD CONSERVATION SUBDIVISION TOWN OF KNIGHTDALE, WAKE COUNTY, NORTH CAROLINA	
PRELIMINARY SITE SKETCH	
DRAWING SHEET SK-3.0	
PROJECT NUMBER 1020-24	