

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR INTENDED USE CHANGED

OPERATIONS PERMIT**PERMIT # WRP-076191-2022****APPLICATION DATE:** 02/14/2022**BLDG. PERMIT#:** RBPR-084888-2022**PIN:** 1607957248**RECORDED:** Yes**TOWNSHIP:** 15 - Panther Branch**JURISDICTION:** Wake County**ZONING:** R-30

APPLICANT: KB Home Raleigh Durham Inc
Rachel Cavalear
4506 S Miami Blvd Suite 100

BUSINESS PHONE:
HOME PHONE:
MOBILE PHONE:

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE**EXISTING USE:** 0019 Subdivision Improvement Permitting**SITE ADDRESS:** 512 THORNY BRANCH DR**SUBDIVISION:** SAULS GLEN**LOT:** 16**ACRES:** 0.85**DIRECTIONS:** From 401 S turn left onto old stage road and turn left onto ten ten road then right onto sauls rd

Systems defined as either type III-b, III-g with a pump, IV, V or VI, in accordance with the North Carolina administrative code 15A NCAC 18a .1961, table V as adopted by reference in the "Regulations Governing Wastewater Treatment Dispersal Systems in Wake County", requires Wake County Environmental Services to conduct periodic inspections of the system type pursuant to 15A NCAC 18a. 1961 (j). Fees for these inspections will be charged as per the approved Fee Schedule. In addition, all systems are to be operated and maintained as specified in 15A NCAC 18A .1961. This permit is based in part on information provided by the homeowner and/or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The environmental health specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him/her in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

OPERATION PERMIT VALID FOR: No Expiration**INSTALLED BY:** BRANTLEY, CORY - 1036 - IV**PROPRIETARY SYSTEM:** EZ1203HG - EZFlow EZ 1203H Geo **PRETREATMENT SYSTEM:****SYSTEM TYPE INSTALLED:** III B**OPERATION PERMIT: STATUS:** Issued**ISSUED BY:** John Bowers**ISSUED DATE:** 10/31/2023

SEPTIC TANK: David Brantley & Sons - STB-502 - 1000 gallons **DATE OF MANUFACTURE:** 11/28/2022 **FILTER:** Other

GREASE TRAP: **DATE OF MANUFACTURE:** **FILTER:**

DOSING PUMP TANK: Brantley - PT-237 - 1000 gal - 20.63 gal/in **DATE OF MANUFACTURE:** 08/22/2022 **FILTER:**

CC1: 807 **ETM1:** 1 **CC2:** **ETM2:**

RECIRCULATION TANK: **DATE OF MANUFACTURE:**

CC1: **ETM1:** **CC2:** **ETM2:**

SEPTIC TANK ELEVATION: 8.33**GREASE TRAP ELEVATION:****DOSING PUMP TANK ELEVATION:** 8.75

RECIRCULATION TANK ELEVATION:

DISTRIBUTION DEVICE ELEVATION: 2

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
15	12	85	4.5
15	12	85	5.583
15	12	85	7
15	12	85	8.25

ACTUAL PRESSURE HEAD: 2

ACTUAL FLOW RATE: 31

ACTUAL DOSE VOLUME: 155

SPECIFIC OPERATION REQUIREMENTS:

- System designed for a 3 bedroom home, with 360 gals per day.
- Future repair is a IIB type system, with a 15" trench depth, and a .275 LTAR.
- Initial and repair are shallow placement, which requires imported soil cover at time of installation. This imported soil must cover the entirety of the system area and extend beyond the system area 5 feet on all sides. A minimum of 6" of soil cover is required after settling, additional soil cover beyond 6" may be required to account for settling. Imported soil cover must be approved by WCES prior to placement. System area must be seeded and strawed for stabilization.
- Site serviced by a community well.
- Watercore C4CBF filter installed.

ISSUED BY:



DATE: 10/31/2023

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN
AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

***PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR
INTENDED USE CHANGED***

CONSTRUCTION AUTHORIZATION PERMIT

PERMIT # WRP-076191-2022 **APPLICATION DATE:** 02/14/2022 **BLDG. PERMIT#:** RBPR-084888-2022

PIN: 1607957248 **RECORDED:** Yes

TOWNSHIP: 15 - Panther Branch **JURISDICTION:** Wake County **ZONING:** R-30

APPLICANT: KB Home Raleigh Durham Inc
4506 S Miami Blvd Suite 100
Durham, NC 27703

BUSINESS PHONE:
HOME PHONE:
MOBILE PHONE:

HD USE: 0019 Subdivision Improvement Permitting **EXISTING USE:** 0019 Subdivision Improvement Permitting

SITE ADDRESS: 512 THORNY BRANCH DR

SUBDIVISION: SAULS GLEN

LOT: 16

ACRES: 0.85

DIRECTIONS: From 401 S turn left onto old stage road and turn left onto ten ten road then right onto sauls rd

Contractors shall install system on contour. See attached SITE PLAN for wastewater system design and well location. No underground utilities, water lines or sprinklers systems may be located in the original system, or permit areas. A septic tank filter with two risers for access is required. The wastewater system shall not be covered or placed into use until inspected by the Wake County Department of Environmental Services and Operations Permit issued. An Accepted Status System may be used in place of conventional system, if it can be placed in the permitted/authorized trench footprint (except reduction in line length and/or number as allowed for in approval) and the installation in accordance with the accepted system approval, without unauthorized product alteration. If permit required use of an Accepted Status System, substitution with another accepted status system may be made, as long as no changes are necessary in the location of each nitrifications line (including any increase in line length), trench depth or effluent distribution method. If changes are necessary, prior approval by this office is required before system installation. Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

CONSTRUCTION AUTHORIZATION PERMIT VALID FOR: Five Years

CONSTRUCTION AUTHORIZATION PERMIT: CA STATUS: Issued **BY:** Bobby Weaver **DATE:** 09/16/2022

CA VALID FOR: Five Years **DESIGN FLOW:** 360 GALLONS **BASEMENT:** No **BASEMENT FIXTURES:** No

SEPTIC TANK: 1000 GALLONS

SEPTIC TANK FILTER: Yes

DOSING PUMP TANK: 1000 GALLONS

DOSING PUMP TANK FILTER:

GREASE TRAP:

GREASE TRAP FILTER:

RECIRCULATION PUMP TANK:

RECIRCULATION PUMP TANK FILTER:

PROPOSED SYSTEM: 0.25 - 25% Reduction (Innovative or Accepted)

EXISTING SYSTEM:

DRAINFIELD SQ. FT: 1,020

AGGREGATE DEPTH: 12

MAX. TRENCH DEPTH: 15 INCHES

DISTRIBUTION DEVICE: PM - Pressure Manifold

TRENCH #: 4

TRENCH LENGTH: 85 FEET

TRENCH WIDTH: 36 INCHES

TOTAL TRENCH LENGTH: 340 FEET

CENTER SPACING: 9 FEET

MINIMUM SOIL COVER: 6 INCHES

PRETREATMENT:

APPROVAL #:

SUBFIELDS #:

PUMP TDH: 35 FEET

PUMP DESIGN FLOW: 28.44

ZONE VALVE: No

ASDMS REQUIRED: No

LINE OF CREDIT REQUIRED: No

OPERATOR REQUIRED: No

P.E. SIGN OFF/ASBUILT REQUIRED: No

TRIPARTY AGREEMENT REQUIRED: No

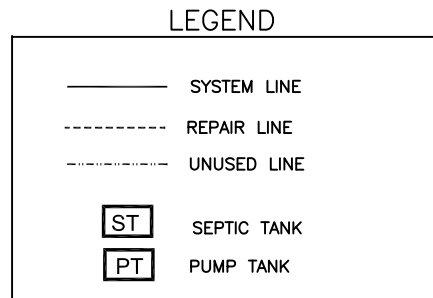
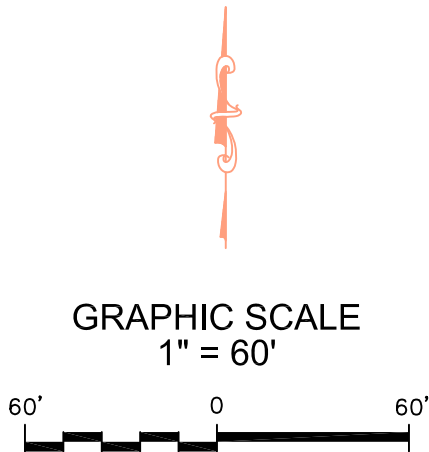
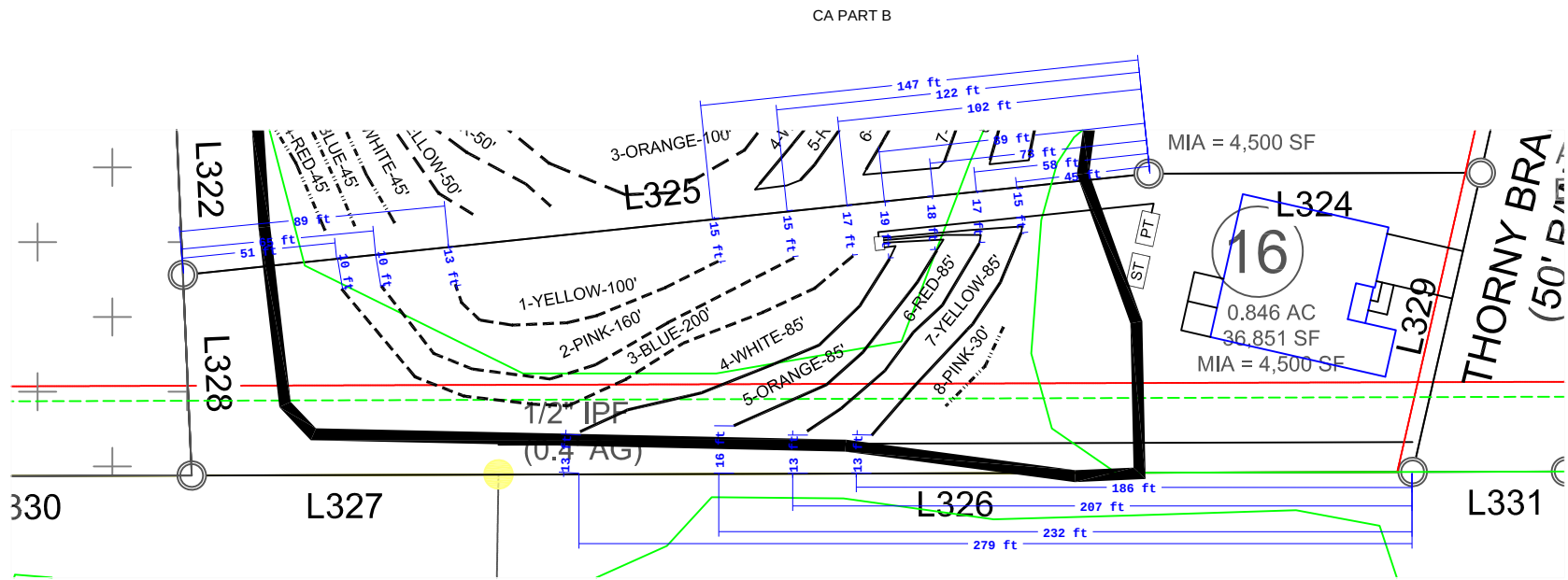
SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:

- System designed for a 3 bedroom home, with 360 gals per day.
- Future repair is a IIB type system, with a 15" trench depth, and a .275 LTAR.
- Initial and repair are shallow placement, which requires imported soil cover at time of installation. This imported soil must cover the entirety of the system area and extend beyond the system area 5 feet on all sides. A minimum of 6" of soil cover is required after settling, additional soil cover beyond 6" may be required to account for settling. Imported soil cover must be approved by WCES prior to placement. System area must be seeded and strawed for stabilization.
- Site serviced by a community well.
- Any deviation from accepted design must be approved by Bobby Weaver prior to system installation.
- Design has been flagged. Do not remove flags.
- Consultant must re-flag prior to installation if flags are removed.
- Maintain all setbacks.
- Please contact Bobby Weaver at 919-594-3069 with any questions prior to installation.

Issued By:



Date: 09/16/2022



NOTES:

- 1) SITE DATA TO INCLUDE PROPERTY BOUNDARIES, STRUCTURE LOCATION, UTILITIES, ROADS, AND OTHER SITE FEATURES WERE PROVIDED BY THE SURVEYOR AND ARE SHOWN TO DISPLAY GENERAL SITE CONDITIONS.
- 2) ALL SEPTIC SYSTEM COMPONENTS TO INCLUDE TANKS, PUMPS, MANIFOLDS, AND SYSTEM AND REPAIR LINES HAVE BEEN GPS LOCATED BY SOIL AND ENVIRONMENTAL CONSULTANTS, PA. ALL LOCATIONS, ELEVATIONS, AND DIMENSIONS ARE APPROXIMATE AND AS SUCH NO SPECIFIC ACCURACY EITHER VERTICAL OR HORIZONTAL IS IMPLIED.
- 3) THIS MAP AND CORRESPONDING SITE EVALUATION IS NOT CONFORMANT TO THE ENGINEERED OPTION PERMIT (EOP) PROCESS OR LSS OPTION PERMIT PROCESS. ADDITIONAL SITE TESTING AND EVALUATIONS WILL BE REQUIRED TO UTILIZE THE EOP OR LSS OPTION PROCESS.
- 4) PROPERTY AND EASEMENT BOUNDARIES SHOWN ON THIS SITE SKETCH ARE APPROXIMATE AND ARE NOT INTENDED FOR LOCATING PROPERTY OR IDENTIFYING PROPERTY OR EASEMENT CORNERS. THIS IS NOT A SURVEY. 9-12-2022

3-BEDROOM PUMP MANI-TEE SYSTEM
LINES 4-7 0.275 LTAR EZ FLOW
3-BEDROOM PRESSURE MANIFOLD REPAIR
LINES 1-3 0.275 LTAR LOW PROFILE CHAMBER

Project No. 13287.512	Drawn: CCJM, RP	Field Works: JMA, CC, JA	Sheet No.: 1 of 1
Project: SAULS GLEN SUBDIVISION, LOT 16 512 THORNY BRANCH DRIVE	Manager: RP	Client: KB HOMES	
Location: WAKE CO., NC	Scale: 1"=60'	Sheet Title: SEPTIC SYSTEM & REPAIR LAYOUT	

Soil & Environmental Consultants, PA

8412 Falls of Neuse Rd., Suite 104 • Raleigh, North Carolina 27615 • www.SandEC.com
Phone: (919) 846-5900 • Fax: (919) 846-9467

S&EC

Sauls Glen Subdivision, Lot 16
Project No.13287.S10
SYSTEM TAP CHART

Line #	Color	Field Elev. (ft)	Length (ft)	Hole Size (in)	Flow/Tap (gpm)	gpd	Trench Area (sq ft)	Line LTAR (gpd/sq ft)
4	WHITE	120.10	85	1/2" SCH. 40	7.11	90.00	255	0.353
5	ORANGE	119.20	85	1/2" SCH. 40	7.11	90.00	255	0.353
6	RED	117.80	85	1/2" SCH. 40	7.11	90.00	255	0.353
7	YELLOW	116.50	85	1/2" SCH. 40	7.11	90.00	255	0.353

total feet = 340 gal/min = 28.44

Des. Flow	360	gpd	
Pump Run=	12.66	min	TDH 35 FT
soil LTAR	0.28	gpd/sq ft	2 FT PRESSURE HEAD
INNOV. Product Reduction	25%		
LTAR with INNOV.	0.37	gpd/sq ft	
LTAR with INNOV. + 5%	0.39	gpd/sq ft	
100% Dose Volume	221.26	gal	
Percent Dose Volume	71%		
Total	157.09	gal	
Pump Run Time	5.52	min	

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN
AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

***PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR
INTENDED USE CHANGED***

IMPROVEMENT PERMIT

PERMIT #: WRP-076191-2022

APPLICATION DATE: 02/14/2022

BLDG. PERMIT #: RBPR-084888-2022

PIN: 1607957248

RECORDED: No

TOWNSHIP: 15 - Panther Branch

JURISDICTION: Wake County

ZONING: R-30

APPLICANT: KB Home Raleigh Durham Inc
4506 S Miami Blvd Suite 100

BUSINESS PHONE:

HOME PHONE:

MOBILE PHONE:

HD USE: 0019 Subdivision Improvement Permitting

EXISTING USE: 0019 Subdivision Improvement Permitting

SITE ADDRESS: 512 THORNY BRANCH DR

SUBDIVISION: SAULS GLEN

LOT: 16

ACRES: 0.85

DIRECTIONS: From 401 S turn left onto old stage road and turn left onto ten ten road then right onto sauls rd

Permit is subject to revocation if the Site Plan or Plat changes or the intended use changes.

*Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

IP VALID FOR: Five Years AS PER GS 130A-335 (f)

DESIGNED BY: SE&C

SYSTEM LAYOUT: Private Sector

SITE CLASSIFICATION: Provisionally Suitable

IP STATUS: Issued

BY: Bobby Weaver

DATE: 05/23/2022

NUMBER OF BEDROOMS: 3

OR TOTAL NUMBER OF OCCUPANTS: 6

PERMITTED DESIGN FLOW: 360 GPD

BASEMENT: No

BASEMENT PLUMBING: No

WASTEWATER STRENGTH: Domestic

SYSTEM TYPE: III B

LTAR: 0.275

EXISTING SYSTEM UTILIZED:

PRETREATMENT STRENGTH REQUIRED:

EASEMENT FOR WW SYSTEM ASSOCIATED WITH PARCEL:

MAXIMUM TRENCH DEPTH: 15 INCHES

PUMP REQUIRED: Yes

SPECIFIC SYSTEM REQUIREMENTS: -System Designed for a 3 bedroom home, with 360 gals per day

-Future Repair is a type IIIB system with a trench depth of 15" and a .275 LTAR

-Initial and repair are shallow placement, which requires imported soil cover at time of installation. This imported soil must cover the entirety of the system area and extend beyond the system area 5 feet on all sides. A minimum of 6" of soil cover is required after settling, additional soil cover beyond 6" may be required to account for settling. Imported soil cover must be approved by WCES prior to placement. System area must be seeded and strawed for stabilization.

-Site serviced by a community well.

-No cutting, grading, alterations, or utilities in septic area.

-Maintain all setbacks

ISSUED BY:

A handwritten signature in black ink, appearing to read "Robert Weaver", is written over a light gray rectangular background.

DATE: 05/23/2022

LOT INFORMATION:
PIN: NOT AVAILABLE
TOTAL LOT AREA = 0.846 AC = 36,851 SF
HOUSE = 2,530 SF
PORCH = 74 SF
SIDEWALK = 49 SF
DRIVEWAY = 423 SF
SCREENED PATIO = 100 SF
PATIO = 100 SF
MAXIMUM IMPERVIOUS = 4,500 SF
PROPOSED IMPERVIOUS = 3,276 SF
PERCENT IMPERVIOUS = 8.89%

084888-2022

WAKE COUNTY
SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.
Doree Garner
07/15/2022 8:45:43 AM

Required Setbacks
Front 15
Side 15
Rear 15
Corner

NOTES:
1. THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
2. THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
3. PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING FIELD EVIDENCE, EXISTING DEEDS AND PLATS OF PUBLIC RECORD, AND INFORMATION SUPPLIED TO THE SURVEYOR BY THE CLIENT.
4. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
5. THIS MAP IS NOT FOR RECORDED AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
6. THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
7. NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
8. SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
9. UPON EXAMINATION OF FLOOD INSURANCE RATE MAPS, PANEL NUMBERS 1607J & 1617K OF COMMUNITY NUMBER 370368 (WAKE COUNTY), BEARING MAP #3720160700J & BEARING MAP #3720161700K, BOTH DATED MAY 2, 2006: A PORTION OF THE SUBJECT PROPERTY LIES IN ZONE "AE" AND "X-SHADED", WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE CONDITIONS 1% ANNUAL CHANCE FLOODPLAIN.
10. ZONING IS R-30(C) (CLUSTER).
11. PROPERTY OWNER: KB HOMES RALEIGH-DURHAM INC.
4506 S. MIAMI BLVD. #100
DURHAM, NC 27703

PROPOSED
149,215 'D'
SLAB
FOUNDATION
2 CAR RIGHT
3 Bedroom

PO 12.3'
SW 16.5'
DW 20.7'

INSET SCALE: 1" = 20'

25' TREE AND VEGETATION PROTECTION ZONE
30' PERIMETER BUILDING SETBACK

OPEN SPACE
15' REAR SETBACK
5' SIDE SETBACK
15' FRONT SETBACK
5' PUBLIC UTILITY EASEMENT

THORNY BRANCH DRIVE
PUBLIC 50' RIGHT-OF-WAY

16
36,851 SF
0.851 AC

15

SCALE:
1" = 50 ft