

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-054257-2021 **APPLICATION DATE:** 02/23/2021 **BLDG. PERMIT#:** RBPR-031264-2020
PIN: 1831493044 **RECORDED:** Yes
TOWNSHIP: 19 - Wake Forest **JURISDICTION:** Wake County **ZONING:** R-40W
APPLICANT: ICG Homes LLC
Ryan Perry
4020 Wake Forest RD Suite 306
BUSINESS PHONE: (919) 876-5802
HOME PHONE:
MOBILE PHONE: (919) 302-4493
HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE **EXISTING USE:**
SITE ADDRESS: 2709 TRIFLE LN
SUBDIVISION: WEXFORD RESERVE PH 1 **LOT:** 2 **ACRES:** 1.08
DIRECTIONS: Follow Falls of Neuse Rd and Old Falls of Neuse Rd to Thompson Mill Rd; Continue on Thompson Mill Rd to Jenkins to Sephora to Trifle

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: Michael Seewald

ISSUED DATE: 04/05/2021

SEPTIC TANK: David Brantley & Sons - STB-323 - 1250 gallons **DATE OF MANUFACTURE:** 07/01/2020 **FILTER:** GAG SIM/TECH - STF-110

GREASE TRAP:

DATE OF MANUFACTURE:

FILTER:

DOSING PUMP TANK: Brantley - PT-2124 - 1312 gal - 21.5 gal/in

DATE OF MANUFACTURE: 06/19/2020

FILTER:

CC1: **ETM1:**

CC2: **ETM2:**

RECIRCULATION TANK:

DATE OF MANUFACTURE:

CC1: **ETM1:**

CC2: **ETM2:**

SEPTIC TANK ELEVATION: 5.50

GREASE TRAP ELEVATION:

DOSING PUMP TANK ELEVATION: 5.66

RECIRCULATION TANK ELEVATION:

DISTRIBUTION DEVICE ELEVATION: 3

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
36	12	155	6.91
36	12	155	7.58
36	12	155	8.5

ACTUAL PRESSURE HEAD: 3

ACTUAL FLOW RATE: 23

ACTUAL DOSE VOLUME: 172

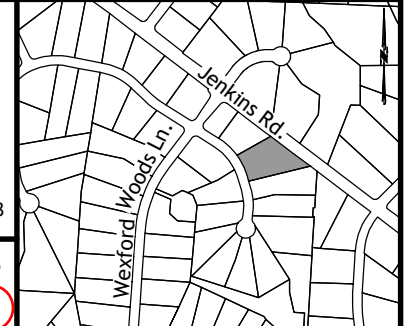
SPECIFIC OPERATION REQUIREMENTS:

- 4 bedroom home, having 480 gpd
- Pump Ashland 20
- Tanks installed under WRP-031266-2020

ISSUED BY:



DATE: 04/05/2021



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-054257-2021

APPLICATION DATE: 02/23/2021

BLDG. PERMIT#: RBPR-031264-2020

PIN: 1831493044

RECORDED: Yes

TOWNSHIP: 19 - Wake Forest

JURISDICTION: Wake County

ZONING: R-40W

APPLICANT: ICG Homes LLC

4020 Wake Forest RD Suite 306
Raleigh, NC 27609

BUSINESS PHONE: (919) 876-5802

HOME PHONE:

MOBILE PHONE: (919) 302-4493

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE

EXISTING USE:

SITE ADDRESS: 2709 TRIFLE LN

SUBDIVISION: WEXFORD RESERVE PH 1

LOT: 2

ACRES: 1.08

DIRECTIONS: Follow Falls of Neuse Rd and Old Falls of Neuse Rd to Thompson Mill Rd; Continue on Thompson Mill Rd to Jenkins to Sephora to Trifle

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: Michael Seewald

DATE: 02/24/2021

CA VALID FOR: Five Years

DESIGN FLOW: 480 GALLONS

BASEMENT: No

BASEMENT FIXTURES: No

SEPTIC TANK:

DOSING PUMP TANK:

GREASE TRAP:

RECIRCULATION PUMP TANK:

SEPTIC TANK FILTER:

DOSING PUMP TANK FILTER:

GREASE TRAP FILTER:

RECIRCULATION PUMP TANK FILTER:

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

EXISTING SYSTEM: Yes

DRAINFIELD SQ. FT: 1,395

AGGREGATE DEPTH: 12

MAX. TRENCH DEPTH: 36 INCHES

DISTRIBUTION DEVICE: PM - Pressure Manifold

TRENCH #: 3

TRENCH LENGTH: 155 FEET

TRENCH WIDTH: 36 INCHES

TOTAL TRENCH LENGTH: 465 FEET

CENTER SPACING: 9 FEET

MINIMUM SOIL COVER: 6 INCHES

PRETREATMENT:
SUBFIELDS #:
PUMP TDH:

APPROVAL #:
PUMP DESIGN FLOW:
ZONE VALVE: No

ASDMS REQUIRED:
P.E. SIGN OFF/ASBUILT REQUIRED:

LINE OF CREDIT REQUIRED:
TRIPARTY AGREEMENT REQUIRED:

OPERATOR REQUIRED:

SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:

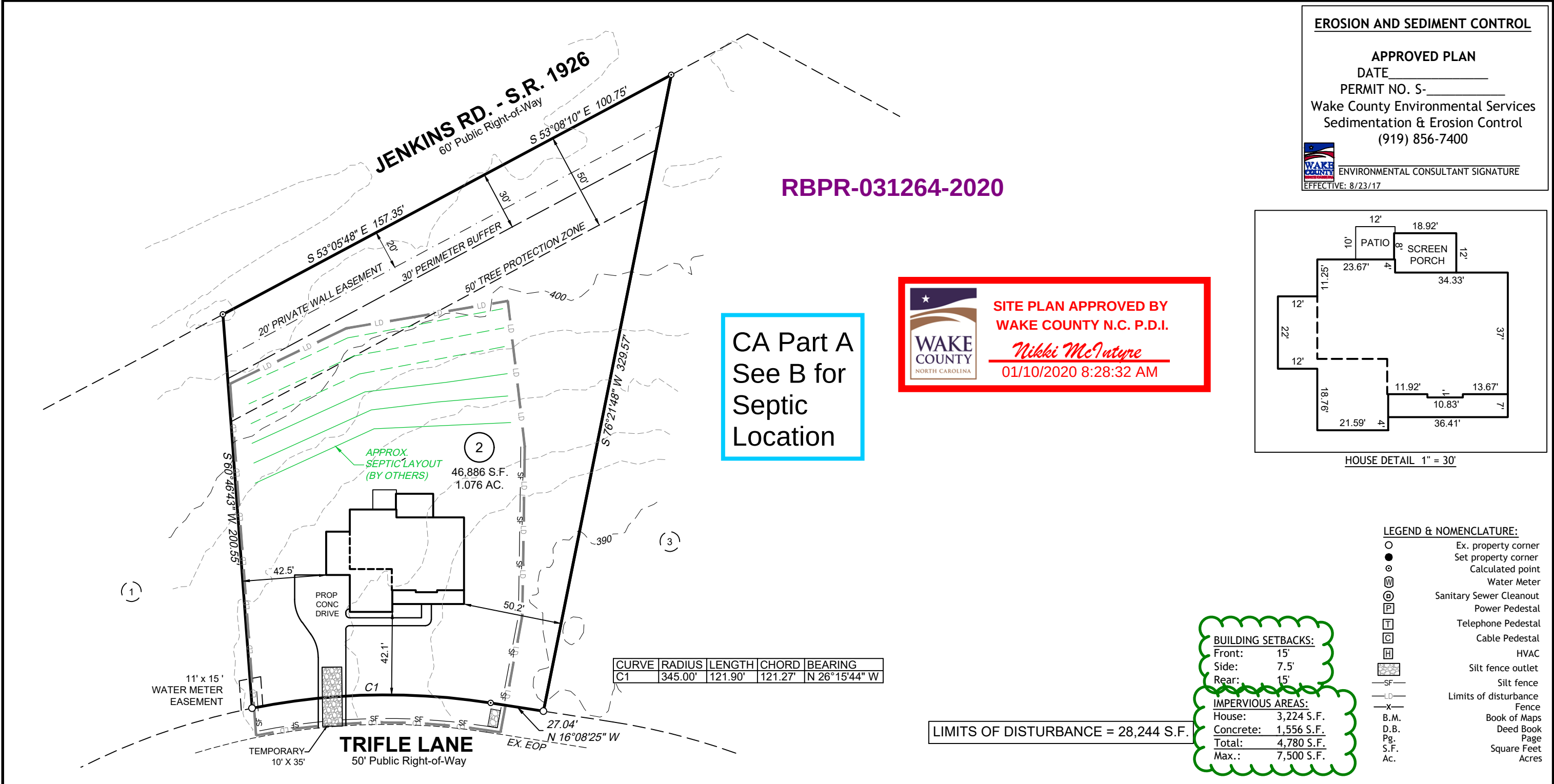
- System designed for 4 bedroom home, having 480 gals per day (design flow).
- Current 1200gal ST & PT installed.
- Original Permit WRP-031266-2020 having to be altered due to heavy storm-water run off damaging system. Site must be dried out before pulling up existing line and installing new line at a deeper trench.
- Future Repair is a III B type system. With a Max Trench depth of 36" and a 0.3LTAR.
- Site serviced by Community Well water.
- Any deviation from accepted design must be approved by the CCSC & Wake County ES prior to system installation
- House has a partial foundation drain.
- If drain line flags removed contact your consultant to re-flag.
- House has a partial foundation drain.
- Maintain all required setbacks.
- All property lines must be fully marked at time of install or reinspection required.
- Please contact EHS with any questions prior or during install.

Issued By:



Date: 02/24/2021

CA Part
A-C



EROSION AND SEDIMENT CONTROL

APPROVED PLAN

DATE

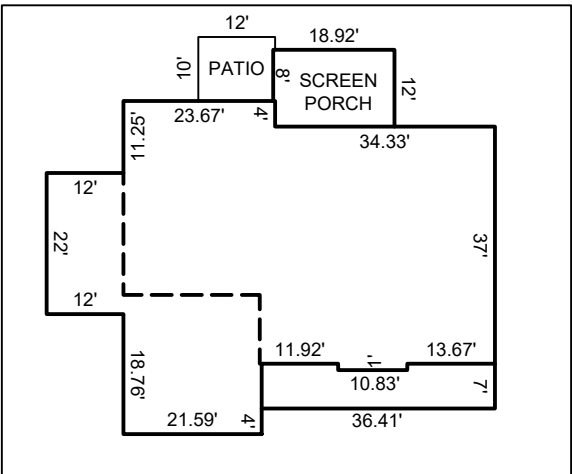
PERMIT NO. S-

Wake County Environmental Services
Sedimentation & Erosion Control
(919) 856-7400



ENVIRONMENTAL CONSULTANT SIGNATURE

EFFECTIVE: 8/23/17

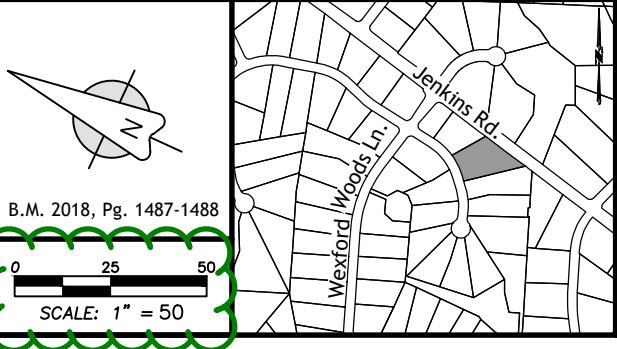


The purpose of this Plot Plan is to depict the proposed location of the house and drive on the subject property for building permit purposes only. No on-the-ground survey of the property boundaries has been performed by Taylor Land Consultants, PLLC. This is not a certified survey and cannot be used for any property conveyance or sale.



PLOT PLAN
SHEET 1 OF 5
ICG HOMES, LLC
2709 Trifle Lane
PIN: 1831-49-3044
Wexford Reserve - Phase 1
B.M. 2019, Page 914-918, Lot # 02
Wake Forest Township, Wake County, NC
January 7, 2020
Job #: 19920

- NOTES:**
- 1) The basis of North and all easements, right-of-way's, buffers, setbacks and adjoiners, etc., referenced from Book of Maps 2019, Page 914-918 unless otherwise noted.
 - 2) 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.
 - 3) Topography referenced from Wake Co. GIS.



CA Part B

Remove existing septic lines and dig new trenches at 36" with 155' of Accepted Product per line. Use existing taps on Manatee.

TIE TO THE INTERSECTION OF WEXFORD WOODS LANE & TRIFLE LANE

11"x15" WATER METER EASEMENT
B.M. 2019, PG. 914

TRIFLE LANE 50' PUBLIC R/W

30' PERIMETER BUFFER
B.M. 2019, PAGE 914

20' PRIVATE WALL EASEMENT
B.M. 2019, PAGE 914

JENKINS ROAD N.C.S.R. 1926 60' PUBLIC R/W

46,886 sq.ft.
1.076 AC.
M.I.A.=7,500 S.F.

DWELLING UNDER CONSTRUCTION

SEPTIC LIDS(3)
Pump Tank
Septic Tank

PANEL BOX

Septic Tank

WEXFORD RESERVE, PHASE 1
B.M. 2019, PAGE 914

50' TREE PROTECTION ZONE
B.M. 2019, PAGE 914

GRAPHIC SCALE
1" = 60'



System: Pressure Manatee
3 Lines at 155' (465')
Accepted Status System
0.3 Soil LTAR

Repair: Pressure Manifold
Lines: 1-6, (480')
Accepted Status System
0.3 Soil LTAR



Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

SEPTIC SITE PLAN
Lot 2 Wexford Subdivision
Wake County, North Carolina

Job# : 3147
Drawn By : JH
Date : 10/26/2018
Revision: 1/2/2020
Revision: 2/11/2021



Environmental Services

TEL 919 856 7400
FAX 919 856 7407

Water Quality Division
336 Fayetteville St. • P.O. Box 550 • Raleigh, NC 27602
www.wakegov.com/water/

Foundation Drain Request Form

Wastewater Permit: WRP-031266-2020 Building Permit: RBPR-031264-2020

Parcel PIN: 1831493044

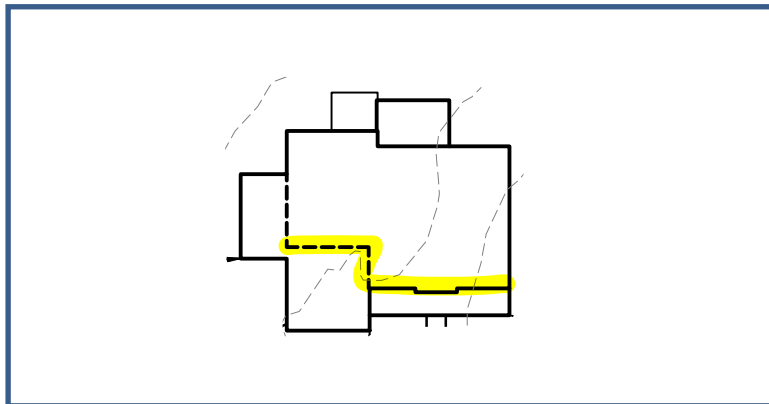
Project (Site) Address: 2709 Trifle Lane

PLEASE CIRCLE:

Foundation Drain? YES NO **PARTIAL (demonstrate below)**

If PARTIAL FOUNDATION DRAIN is circled, please demonstrate where the foundations drain will be located on the diagram below, (add decks, patios, etc. as needed)

Rear



Front

Applicant Signature:  **Ryan Perry**

Digitally signed by Ryan Perry 3/1/20
Date: 2021.03.01 12:34:54 -05'00'

Date: **3/1/20**

CA Part C

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES 3 TAP PRESSURE MANI-TEE DESIGN

Name: ICG Homes P.I.N. #: 1831493044 Permit #: WRP-054257-2021

Address: 2709 Trifle Ln Subdiv: Wexford Lot#: 2

of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.30 gal/day/sq.ft

Septic Tank: 1200 gals Pump Tank: 1200 gals Sq. Foot: 1350 Aggregate Depth:

Number of Taps: 3 Length of Trenches: 450 ft(See Tap Chart for Details)

Depth of Trenches: 36 in Manifold Length: 36 in

Manifold Diameter: 2in sch 40pvc Mani-Tee Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 60 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 2.10 ft(supply line length + 70' for fittings in pump tank)

Design Head: 3 ft Elevation Head: 6 ft

Total Head: 11.10 ft Pump to Deliver: 26.13 gals/min at 11.10

Dosing Volume: 219 gals,

Drawdown: 219 gals divided by 20 gals/in = 11.0 inches

Simplex Control Panel required; elapsed time meter and cycle counter required; Floats to be determined by type of pump tank used. A septic tank filter is required, see permit details for specifics.

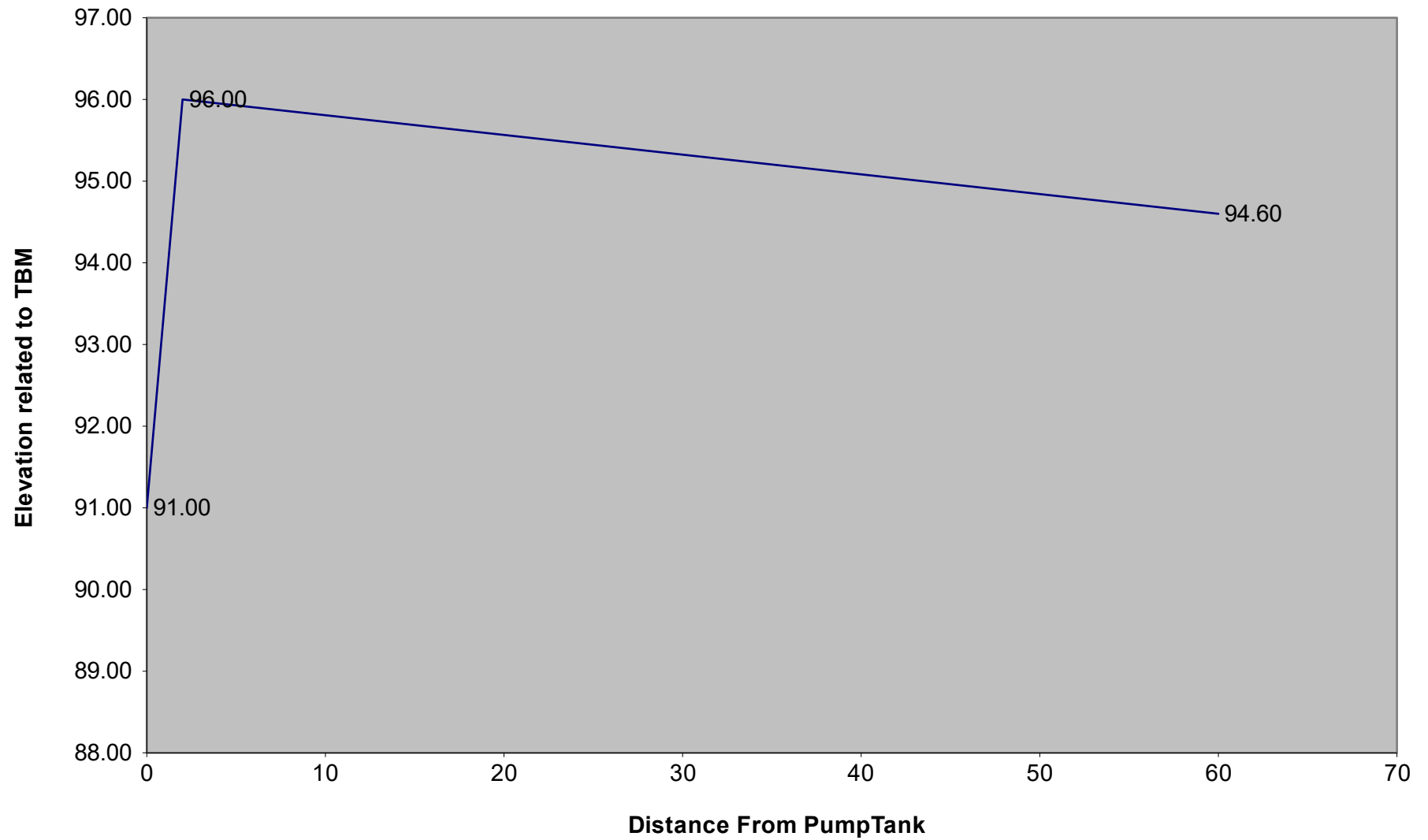
TAP CHART

Bench Mark		is = 100.00	set at				Design Head:	3		
Pump tank elev.		4	96.00	Pump elev.	91.00		Manifold elev.	94.60		
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	Line LTAR	
1		6.4	93.60	150	1/2in SCH 40	8.71	160.00	450		
2		7.4	92.60	150	1/2in SCH 40	8.71	160.00	450	0.356	
3		8.2	91.80	150	1/2in SCH 40	8.71	160.00	450		
		total	feet =	450	gal/min =	26.13		LTAR =		
% of Dose Vol.		75		Des. Flow	480			(Itar + 5%)		
Dose Volume		219		Pump Run=	18.37			(Itar W/ INOV)		
Dose Pump Time		8.40		Tank Gal/IN	20			(Itar + 5%)		
Drawdown in Inches		11.0		Elev. Head	6					
Supply Line Length		60								
Comments:										

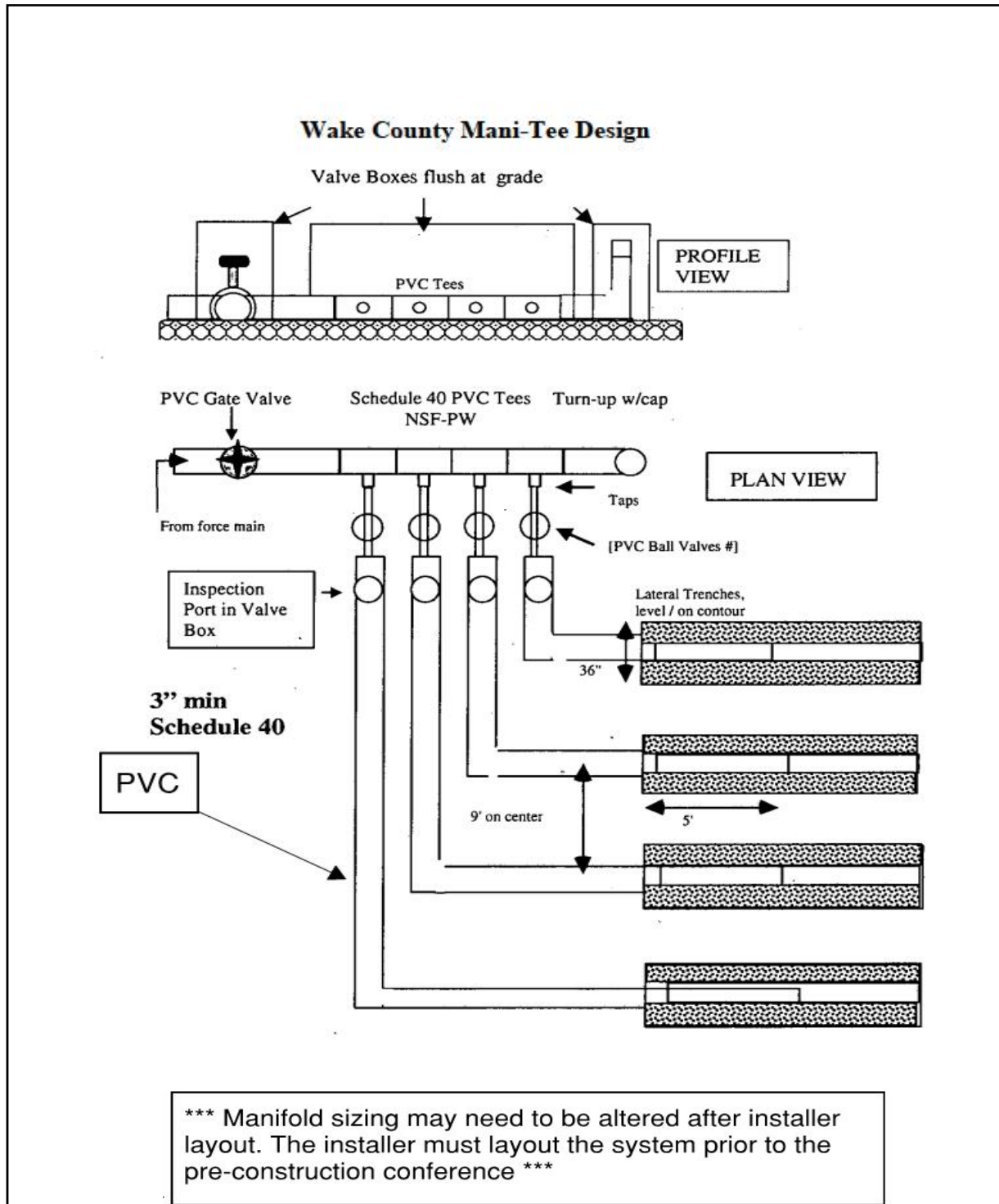
Hydraulic Profile

Manifold Elevation	94.60	60
Pump tank elev.	96.00	2
Pump elev.	91.00	0

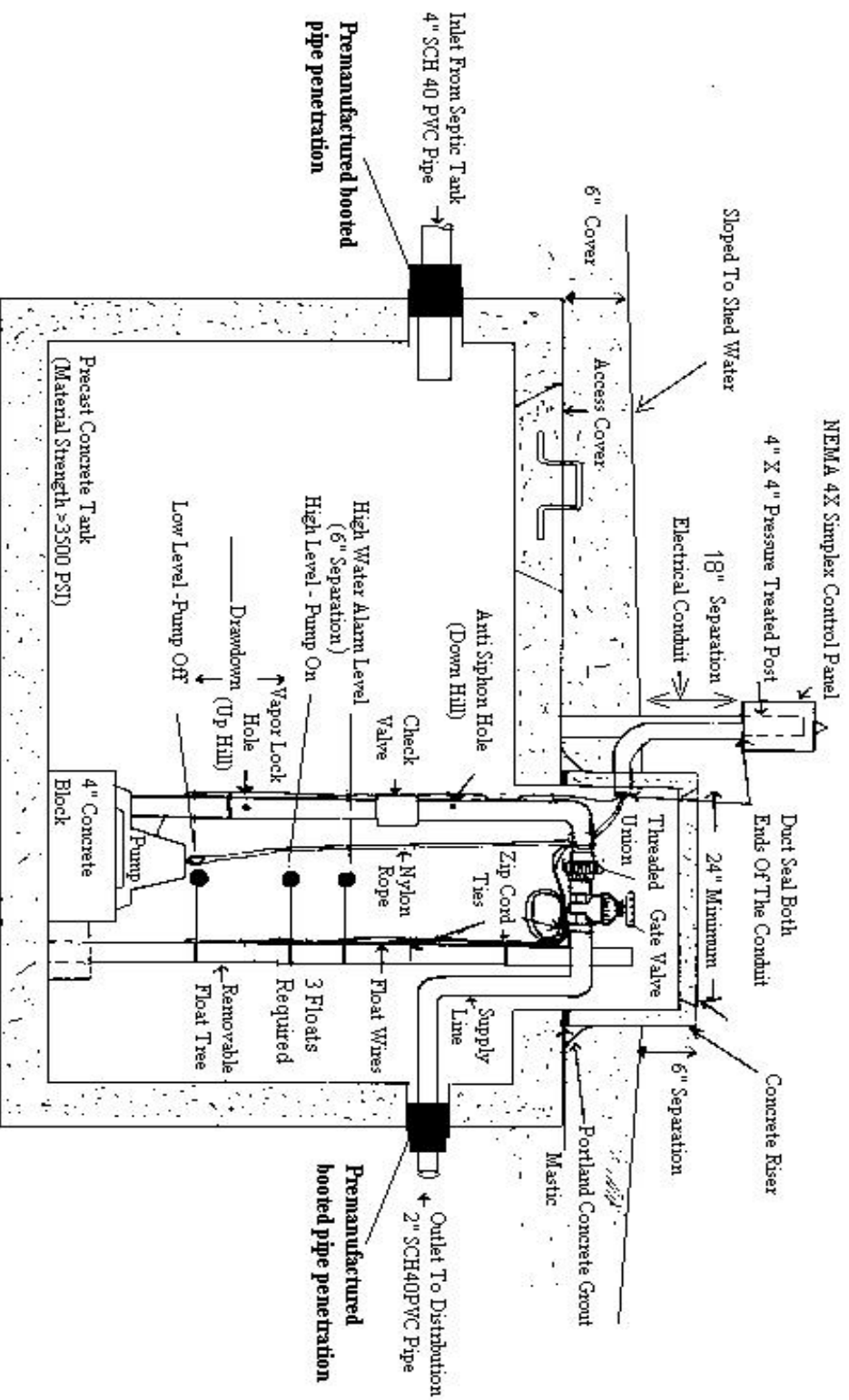
Hydraulic Profile



	Line 1	Line 2	Line 3
Taps	1/2in SCH 40	1/2in SCH 40	1/2in SCH 40
Flow	8.71	8.71	8.71



Wake County Department Of Environmental Services



_____ GALLON PUMP TANK

1200 Gals Pump Tank

Minimum Panel Requirements

The following items will be considered the minimum for all pump systems:

1. It must be a NEMA 4X Box.
2. It must use a HOA (Hand, Off, Auto) switch to control the pump. No more use of piggyback plugs!
3. It must have a motor contactor to prevent high voltage electricity in the water at all times.
4. It must have an audible and visual alarm.
5. **All Pressure Manifold and LPP Systems must have an elapsed time meter and cycle counter installed in the panel.**
6. It must have 2 separate power supplies, wired from the fuse panel at the house.
7. All panels must have 2 circuit breakers installed in the panel to allow for disconnecting of power, so that the pump or switches may be serviced.
8. Panels and pumps are to be wired at the time of our inspection. Power must be supplied by use of generators or from the house temporary meter, if the builder applied for it and has had all required inspections and the temporary meter has been set. **We will no longer inspect any system that has been hot wired from the temporary power pole or jumped through the house wiring without a meter being set.**

Pressure Manifolds

1. A float tree or hanging floats must be used.
2. A Simplex Control Panel with a Hand - Off - Auto switch and alarm in a NEMA - 4X box is required. See the plans or CA comments for further details on the panel.
3. 2 separate power supplies are needed. Try to look and make sure they have not used a 120V only panel with a 240V pump.
4. The taps and pipes for the taps must be of the same material! If it is a sch80 tap (usually gray plastic) then the tap, pipe and valve (the valve can be sch40pvc if there is an adequate amount of sch80 pipe used) must be constructed of sch80pvc. The same goes for sch40 taps, you cannot use sch80 pieces with the sch40.
5. The taps must go directly to the 3" pipe; no elbows can be used in the tap connections.
6. All of the tap must be the same size or larger. 3/4" pipe cannot have a 1/2" valve, but a 1/2" pipe could have a 3/4" valve, if at there is at least 6" total 1/2" pipe used.
7. Should the wrong size or material be used in the tap itself, the flow to the line can be corrected by using an adequate amount of the proper pipe material and size. The amount of pipe needed to control the flow is dependent on the size pipe/tap. If 1/2" pipe is needed, then at least 6" of total pipe is needed. A 3/4" size requires at least 9" of pipe to be used. A 1" size needs 12" of total pipe length to control the flow.

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-054257-2021

APPLICATION DATE: 02/23/2021

BLDG. PERMIT #: RBPR-031264-2020

PIN: 1831493044

RECORDED: Yes

TOWNSHIP: 19 - Wake Forest

JURISDICTION: Wake County

ZONING: R-40W

APPLICANT: ICG Homes LLC

4020 Wake Forest RD Suite 306

BUSINESS PHONE: (919) 876-5802

HOME PHONE:

MOBILE PHONE: (919) 302-4493

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE

EXISTING USE:

SITE ADDRESS: 2709 TRIFLE LN

SUBDIVISION: WEXFORD RESERVE PH 1

LOT: 2

ACRES: 1.08

DIRECTIONS: Follow Falls of Neuse Rd and Old Falls of Neuse Rd to Thompson Mill Rd; Continue on Thompson Mill Rd to Jenkins to Sephora to Trifle

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: CCSC

SYSTEM LAYOUT: Private Sector

SITE CLASSIFICATION: Provisionally Suitable

IP STATUS: Issued

BY: Michael Seewald

DATE: 02/24/2021

NUMBER OF BEDROOMS: 4

OR TOTAL NUMBER OF OCCUPANTS: 8

PERMITTED DESIGN FLOW: 480 GPD

BASEMENT: No

BASEMENT PLUMBING: No

WASTEWATER STRENGTH: Domestic

SYSTEM TYPE: III B

LTAR: 0.300

EXISTING SYSTEM UTILIZED: No

PRETREATMENT STRENGTH REQUIRED: None

EASEMENT FOR WW SYSTEM ASSOCIATED WITH PARCEL: No

MAXIMUM TRENCH DEPTH: 36 INCHES

PUMP REQUIRED: No

SPECIFIC SYSTEM REQUIREMENTS: -Original Permit WRP-031266-2020 having to be altered due to heavy storm-water run off damaging system.

-Existing 1200gal ST & PT being utilized from previous approved permit.

-System designed for 4 bedroom home, having 480 gals per day (design flow).

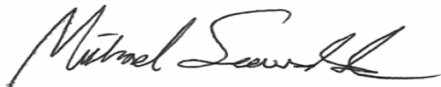
-Future Repair is a III B type system. With a Max Trench depth of 36" and a 0.3LTAR.

-Site serviced by Community Well water.

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

-Maintain all required setbacks.

ISSUED BY:

A handwritten signature in black ink, appearing to read "Michael S. Smith". The signature is fluid and cursive, with a long horizontal stroke at the end.

DATE: 02/24/2021

IP Part B

Remove existing septic lines and dig new trenches at 36" with 155' of Accepted Product per line. Use existing taps on Manatee.

TIE TO THE INTERSECTION OF WEXFORD WOODS LANE & TRIFLE LANE

11'x15' WATER METER EASEMENT
B.M. 2019, PG. 914

TRIFLE LANE 50' PUBLIC R/W

30' PERIMETER BUFFER
B.M. 2019, PAGE 914

20' PRIVATE WALL EASEMENT
B.M. 2019, PAGE 914

JENKINS ROAD N.C.S.R. 1926 60' PUBLIC R/W

46,886 sq.ft.
1.076 AC.
M.I.A.=7,500 S.F.

DWELLING UNDER CONSTRUCTION

SEPTIC LIDS(3)
Pump Tank
Septic Tank

PANEL BOX

WEXFORD RESERVE, PHASE 1
B.M. 2019, PAGE 914

50' TREE PROTECTION ZONE
B.M. 2019, PAGE 914

GRAPHIC SCALE
1" = 60'



System: Pressure Manatee
3 Lines at 155' (465')
Accepted Status System
0.3 Soil LTAR

Repair: Pressure Manifold
Lines: 1-6, (480')
Accepted Status System
0.3 Soil LTAR



Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

SEPTIC SITE PLAN
Lot 2 Wexford Subdivision
Wake County, North Carolina

Job# : 3147
Drawn By : JH
Date : 10/26/2018
Revision: 1/2/2020
Revision: 2/11/2021