App# BRES2007-0029

Harnett County Department of Public Health

Improvement Permit

A building permit cannot be issued with only an Improvement Permit

ISSUED TO: _____ PROPERTY LOCATION: _____

SUBDIVISION _____ LOT # _____

NEW ☐ REPAIR ☐ EXPANSION ☐

Site Improvements required prior to Construction Authorization Issuance:

Type of Structure: _____

Proposed Wastewater System Type: _____

Projected Daily Flow: _____ GPD

Number of bedrooms: _____ Number of Occupants: _____ max

Basement ☐ Yes ☐ No

Pump Required: ☐ Yes ☐ No ☐ May be required based on final location and elevations of facilities

Type of Water Supply: ☐ Community ☐ Public ☐ Well Distance from well _____ feet

Permit valid for: ☐ Five years ☐ No expiration

Permit conditions: _____

Authorized State Agent:: _____ Date: _____ SEE ATTACHED SITE SKETCH

The issuance of this permit by the Health Department in no way guarantees the issuance of other permits. The permit holder is responsible for checking with appropriate governing bodies in meeting their requirements. This site is subject to revocation if the site plan, plat, or the intended use changes. The Improvement Permit shall not be affected by a change in ownership of the site. This permit is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to conditions of this permit..

Construction Authorization

(Required for Building Permit)

The construction and installation requirements of Rules .1950, .1952, .1954, .1955, .1956, .1957, .1958, and .1959 are incorporated by references into this permit and shall be met. Systems shall be installed in accordance with the attached system layout.

ISSUED TO: Juan Sanchez PROPERTY LOCATION: 727 Mt Olive Church Rd

SUBDIVISION _____ LOT # _____

Facility Type: SFD (89'x36') ☒ New ☐ Expansion ☐ Repair

Basement? ☐ Yes ☒ No Basement Fixtures? ☐ Yes ☐ No

Type of Wastewater System** Pump to 25% Reduction System (Initial) Wastewater Flow: 360 GPD

(See note below, if applicable ☐)

Pump to Panel Block (Repair)

Installation Requirements/Conditions

Septic Tank Size 1000 gallons

Pump Tank Size 1000 gallons

Number of trenches 1

Exact length of each trench 300 feet

Trenches shall be installed on contour at a

Maximum Trench Depth of: 21 inches

(Trench bottoms shall be level to +/-1/4" in all directions)

Trench Spacing: 9 Feet on Center

Soil Cover: 9 inches

(Maximum soil cover shall not exceed 36" above the trench bottom)

Pump Requirements: _____ ft. TDH vs. _____ GPM

_____ inches below pipe

Aggregate Depth: _____ inches above pipe

_____ inches total

Conditions: Permit based on applicant's proposal.

WATER LINES (INCLUDING IRRIGATION) MUST BE 10FT. FROM ANY PART OF SEPTIC SYSTEM OR REPAIR AREA.
NO UTILITIES ALLOWED IN INITIAL OR REPAIR DRAIN FIELD AREA.

**If applicable: *I understand the system type specified is different from the type specified on the application. I accept the specifications of this permit.*

Owner/Legal Representative Signature: _____ Date: _____

This Construction Authorization is subject to revocation if the site plan, plat, or the intended use changes. The Construction Authorization shall not be transferred when there is a change in ownership of the site. This Construction Authorization is subject to compliance with the provisions of the Laws and Rules for Sewage Treatment and Disposal and to the conditions of this permit. SEE ATTACHED SITE SKETCH

Authorized State Agent: RC(H) Date: 8/12/22

Construction Authorization Expiration Date: 8/12/27

HAL OWEN & ASSOCIATES, INC.

Soil Investigation and Septic System Design
727 Mt Olive Church Road; PIN 0518-95-4622.000
5 July 2022

Figure 2. Septic system design and layout

Scale 1 in = 50 ft

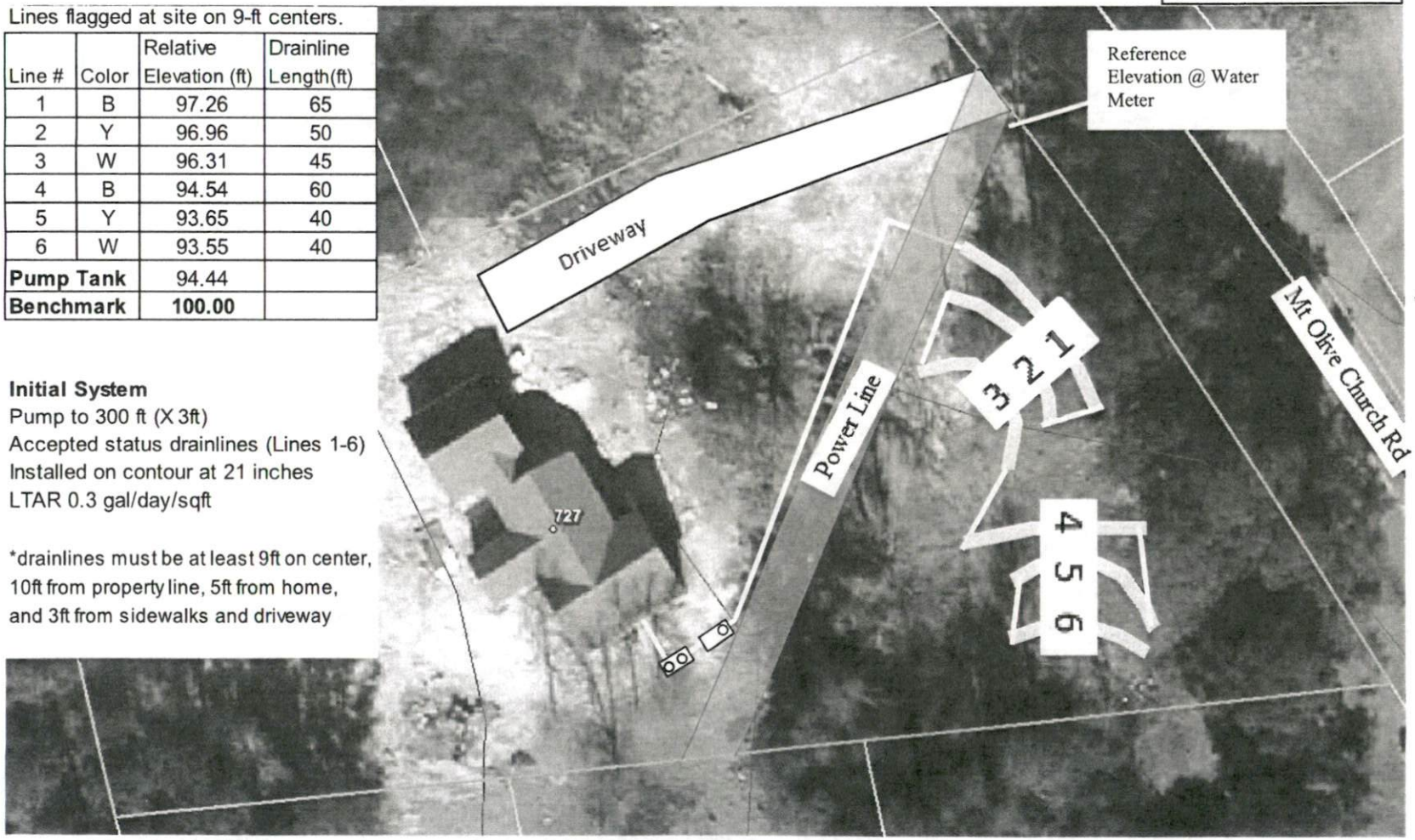
Distances are paced and approximate. For reference only. Not a survey.

Lines flagged at site on 9-ft centers.

Line #	Color	Relative Elevation (ft)	Drainline Length(ft)
1	B	97.26	65
2	Y	96.96	50
3	W	96.31	45
4	B	94.54	60
5	Y	93.65	40
6	W	93.55	40
Pump Tank		94.44	
Benchmark		**100.00**	

Initial System
Pump to 300 ft (X 3ft)
Accepted status drainlines (Lines 1-6)
Installed on contour at 21 inches
LTAR 0.3 gal/day/sqft

*drainlines must be at least 9ft on center, 10ft from property line, 5ft from home, and 3ft from sidewalks and driveway



APPROVED SITE SKETCH
REHS (OLIVER TOLKSDORF) 8/12/22

P 2/3

Mt Olive Church Road

Pump System Design Criteria

DESIGN DAILY FLOW 360 gallons **SOIL LTAR:** 0.3 gpd/ft^2

TANKS (min) Septic Tank: 1000 gallons Pump Tank: 1000 gallons

SUPPLY LINE Length (ft): 165 Diameter: 2 " sch 40 pvc

Min total flow (gpm) to maintain 2fps scour velocity = 20.9 gpm

TRENCHES Drainline Type: Accepted (25% reduction) System Elevation 97.98 feet

Max trench depth: 21 inches

Trench width: 3 feet Trench Length Factor: 75 %

Absorption Area: 900 sqft Min Linear Length: 300 feet

Actual Trench Length: 1 X 300 feet = **300 feet**

PUMP CALCULATIONS:

Total Flow: 23 gpm

Dose Volume (gal): 147 gallons, with Pipe Volume at 75 % *65.3gal/100ft pipe

Dose Pump Run Time (min): 6.39 Daily Pump Run Time (min): 15.65

Drawdown (in.): 147 gallons ÷ 20 gal/ inch = 7.35 inches

Pump Tank Elevation (ft): 94.44 Pump Elevation (ft): 89.44

Friction Head: 2.56 *Hazen Williams Formula (use supply line length+70' for fittings in pump tank)

Elevation Head: 9.5 Design Head: 2.0 Total Head: 14.10 feet

Pump to Deliver: **23.00** gpm @ **14.10** ft head

NEMA 4X Simplex Control Panel with elapsed time meter, cycle counter, audible and visible alarm, hand-off-automatic (HOA) switch, and pump on separate circuits is required. A septic tank filter is required. Floats to be determined by type of pump tank used.

Prepared By: Hal Owen and Associates, Inc.
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7/5/2022