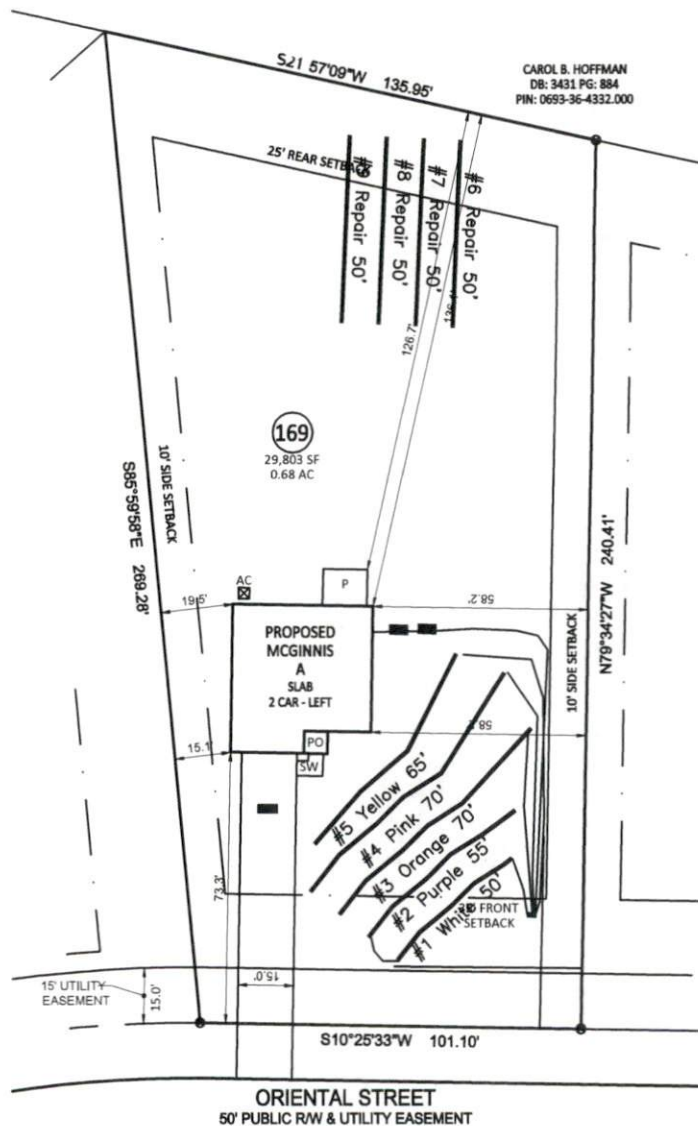


Date 3-17-25

Tobacco Road S/D - Lot #169  
 4-Bedroom Septic Design  
 332 Oriental St  
 Smith Douglass Homes  
 Harnett County PIN: 0693-35-5719  
 Revised 2-12-25

System: Pressure Manifold  
 Lines: 1-5 (310')  
 0.4 LTAR  
 21" Max Trench Bottom  
 Accepted Status System  
 Repair: Pressure Manifold  
 Lines: 6-9 (200')  
 0.4 LTAR  
 20" Max Trench Bottom  
 PPBPS - 50% reduction System

**\*\*1000 Gallon Septic Tank**  
 Tank and trenches to be located minimum of 10'  
 from any property line and minimum of 5'  
 from any building foundation.  
 \*Do Not Cut, Fill, or Alter Drainfield or Repair Area  
 \*Comply with all setbacks  
 \*Contact local health dept. and/or Alex Adams prior to  
 or during installation with any questions or concerns.



Adams  
 Soil Consulting  
 919-414-6761  
 Job #1215  
 11-25-24

GRAPHIC SCALE  
 1" = 50'



**Lot 169 - Tobacco Road**  
**PRESSURE MANIFOLD DESIGN -Initial SYSTEM**

# of BDR: 4 Daily Flow: 480 gal/day L.T.A.R.: 0.4000 gal/day/sq.ft

Septic Tank: 1000 gals Pump Tank: 1000 gals Sq. Foot: 930 System Type: Accepted

Number of Taps: 4 Length of Trenches: 310 ft(See Tap Chart for Details)

Depth of Trenches: 21 in Manifold Length: 42 in

Manifold Diameter: 4in sch 80pvc Tap Configuration: 6 in spacing 1 side(s) of manifold

Supply Line: length: 50 ft Diameter: 2 in sch 40pvc

Friction Loss + Fitting Loss: 2.73 ft(supply line length + 70' for fittings in pump tank)

Design Head: 2 ft Elevation Head: 7.00 ft

Total Head: 11.73 ft Pump to Deliver: 31.43 gals/min at 11.73 ft head

Dosing Volume: 141 gals,

Drawdown: 141 gals divided by 21.4 gals/in = 6.6 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.

**TAP CHART**

| Benchmark       | <u>0</u>     | is = 100.00 | set at       |            |              |          | Design Head:   | <u>2</u>     |           |             | Change in   |
|-----------------|--------------|-------------|--------------|------------|--------------|----------|----------------|--------------|-----------|-------------|-------------|
| Pump tank elev. | <u>2</u>     |             | <u>95.00</u> | Pump elev. | <u>90.00</u> |          | Manifold elev. | <u>97.00</u> |           | # of Panels | Spacing of  |
| line            | color        | rod read    | Elevation    | length     | hole size    | flow/tap | gal/day        | trench area  | LINE LTAR | (PPBPS)     | Panels (in) |
| 1&2             | White/Purple | 5.70        | 94.30        | 105        | 3/4in SCH 80 | 10.10    | 154.25         | 315          | 0.4897    |             |             |
| 3               | Orange       | 6.40        | 93.60        | 70         | 1/2in SCH 40 | 7.11     | 108.58         | 210          | 0.5171    |             |             |
| 4               | Pink         |             |              | 70         | 1/2in SCH 40 | 7.11     | 108.58         | 210          | 0.5171    |             |             |
| 5               | Yellow       |             |              | 65         | 1/2in SCH 40 | 7.11     | 108.58         | 195          | 0.5568    |             |             |

|                           |             |                 |              |            |              |                  |               |
|---------------------------|-------------|-----------------|--------------|------------|--------------|------------------|---------------|
| Total # of Panels (PPBPS) |             | Total Feet =    | <u>310</u>   | gal/min =  | <u>31.43</u> | LTAR =           | <u>0.4000</u> |
| % of Dose Vol.            | <u>70</u>   | Feet Required = | <u>300</u>   | Velocity = | <u>3.01</u>  | (ltar + 5%)      | <u>0.4200</u> |
| Dose Volume               | <u>141</u>  | Des. Flow       | <u>480</u>   |            |              | (ltar w/25% red) | <u>0.5333</u> |
| Dose Pump Time            | <u>4.49</u> | Pump Run=       | <u>15.27</u> |            |              | (ltar + 5%)      | <u>0.5600</u> |
| Drawdown in Inches        | <u>6.6</u>  | Tank Gal/IN     | <u>21.4</u>  |            |              |                  |               |
|                           |             | Elev. Head      | <u>7.00</u>  |            |              |                  |               |

Comments: Lines #1 & #2 will be tied together to form 1 line @95'