

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

(Complete all fields in full)

OWNER: Smith Douglas DATE EVALUATED: 3-14-24  
 ADDRESS: 145 Emerald St  
 PROPOSED FACILITY: SFD 48' x 60' PROPOSED DESIGN FLOW (.0400): \_\_\_\_\_ PROPERTY SIZE: \_\_\_\_\_  
 LOCATION OF SITE: \_\_\_\_\_ PROPERTY RECORDED: \_\_\_\_\_  
 WATER SUPPLY: Public Single Family Well Shared Well Spring Other \_\_\_\_\_ WATER SUPPLY SETBACK: \_\_\_\_\_  
 EVALUATION METHOD: Auger Boring Pit Cut TYPE OF WASTEWATER: Domestic High Strength IPWW

| P<br>R<br>O<br>F<br>I<br>L<br>E<br># | .0502<br>LANDSCAPE<br>POSITION/<br>SLOPE % | HORIZON<br>DEPTH<br>(IN.) | SOIL MORPHOLOGY                |                                     | OTHER PROFILE FACTORS              |                        |                         |                         | .0509<br>PROFILE<br>CLASS<br>& LTAR* | .0503<br>SLOPE<br>CORRE<br>CTION |  |
|--------------------------------------|--|---------------------------|--------------------------------|-------------------------------------|------------------------------------|------------------------|-------------------------|-------------------------|--------------------------------------|----------------------------------|--|
|                                      |  |                           | .0503<br>STRUCTURE/<br>TEXTURE | .0503<br>CONSISTENCE/<br>MINERALOGY | .0504<br>SOIL<br>WETNESS/<br>COLOR | .0505<br>SOIL<br>DEPTH | .0506<br>SAPRO<br>CLASS | .0507<br>RESTR<br>HORIZ |                                      |                                  |  |
| 1                                    | 2-3%<br>LS                                 | 0-30                      | SL, g <sup>r</sup>             | Fr, NS, NP, SE                      | 7/1 = 82"                          | 48"                    |                         |                         | .45                                  |                                  |  |
|                                      |  | 30-32                     | SL, SBK                        | Fr, SS, NP, SE                      |                                    |                        |                         |                         |                                      |                                  |  |
|                                      |  | 32-48                     | CL, WKSBK                      | Fr, SS, NP, SE                      |                                    |                        |                         |                         |                                      |                                  |  |
| 2                                    | 2-3%<br>LS                                 | 0-22                      | SL, g <sup>r</sup>             | Fr, NS, NP, SE                      | 7/1 = 34"                          | 48"                    |                         |                         | .45                                  |                                  |  |
|                                      |  | 22-34                     | SL, SBK                        | Fr, SS, NP, SE                      |                                    |                        |                         |                         |                                      |                                  |  |
|                                      |  | 34-48                     | CL, WKSBK                      | Fr, SS, NP, SE                      |                                    |                        |                         |                         |                                      |                                  |  |
| 3<br>4<br>5                          | 2-3%<br>LS                                 | 0- <del>17</del> 17       | SL, g <sup>r</sup>             | Fr, NS, NP, SE                      | 7/1 = 26"                          | 48"                    |                         |                         | .4                                   |                                  |  |
|                                      |  | <del>17</del> -26         | SL, SBK                        | Fr, SS, NP, SE                      |                                    |                        |                         |                         |                                      |                                  |  |
|                                      |  | 26-48                     | CL, WKSBK                      | Fr, SS, NP, SE                      |                                    |                        |                         |                         |                                      |                                  |  |
| 4                                    |  |                           |                                |                                     |                                    |                        |                         |                         |                                      |                                  |  |
|                                      |  |                           |                                |                                     |                                    |                        |                         |                         |                                      |                                  |  |
|                                      |  |                           |                                |                                     |                                    |                        |                         |                         |                                      |                                  |  |
|                                      |  |                           |                                |                                     |                                    |                        |                         |                         |                                      |                                  |  |

| DESCRIPTION             | INITIAL SYSTEM | REPAIR SYSTEM  | SITE CLASSIFICATION (.0509): <u>S</u><br>EVALUATED BY: <u>RL</u><br>OTHER(S) PRESENT: _____ |
|-------------------------|----------------|----------------|---|
| Available Space (.0508) | ✓              | ✓              |   |
| System Type(s)          | <u>25% Red</u> | <u>25% Red</u> |   |
| Site LTAR               | <u>.4</u>      | <u>.4</u>      |   |
| Maximum Trench Depth    | <u>13"</u>     | <u>13"</u>     |   |

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

# LEGEND

| LANDSCAPE POSITION | SOIL GROUP | SOIL TEXTURE           | CONVENTIONAL LTAR (gpd/ft <sup>2</sup> ) | SAPROLITE LTAR (gpd/ft <sup>2</sup> ) | LPP LTAR (gpd/ft <sup>2</sup> ) | MINERALOGY/ CONSISTENCE |                      | STRUCTURE               |                       |            |
|--------------------|------------|------------------------|--|---------------------------------------|---------------------------------|-------------------------|----------------------|-------------------------|-----------------------|------------|
|                    |            |                        |  |                                       |                                 | MOIST                   | WET                  |                         |                       |            |
| CC (Concave slope) | I          | S (Sand)               | 0.8 - 1.2                                | 0.6 - 0.8                             | 0.4 - 0.6                       | MOIST                   | WET                  | SG (Single grain)       |                       |            |
| CV (Convex Slope)  |            | LS (Loamy sand)        |  | 0.5 - 0.7                             |                                 | Lo (Loose)              | NS (Non-sticky)      | M (Massive)             |                       |            |
| D (Drainage way)   | II         | SL (Sandy loam)        | 0.6 - 0.8                                | 0.4 - 0.6                             | 0.3 - 0.4                       | VFR (Very friable)      | SS (Slightly sticky) | GR (Granular)           |                       |            |
| FP (Flood plain)   |            | L (Loam)               |  | 0.2 - 0.4                             |                                 | FR (Friable)            | S (Sticky)           | SBK (Subangular blocky) |                       |            |
| FS (Foot slope)    | III        | SiL (Silt loam)        | 0.3 - 0.6                                | 0.1 - 0.3                             | 0.15 - 0.3                      | FI (Firm)               | VS (Very sticky)     | ABK (Angular blocky)    |                       |            |
| H (Head slope)     |            | SCL (Sandy clay loam)  |  | 0.05 - 0.15**                         |                                 | VFI (Very firm)         | NP (Non-plastic)     | PR (Prismatic)          |                       |            |
| L (Linear Slope)   |            | CL (Clay loam)         |  | None                                  |                                 | None                    | None                 | EFI (Extremely firm)    | SP (Slightly plastic) | PL (Platy) |
| N (Nose slope)     |            | SiCL (Silty clay loam) |  |                                       |                                 |                         |                      | P (Plastic)             |                       |            |
| R (Ridge/summit)   |            | Si (Silt)              |  |                                       |                                 |                         |                      |                         | VP (Very plastic)     |            |
| S (Shoulder slope) | IV         | SC (Sandy clay)        | 0.1 - 0.4                                | 0.05 - 0.2                            | SEXP (Slightly expansive)       |                         |                      |                         |                       |            |
| T (Terrace)        |            | SiC (Silty clay)       |  |                                       | EXP (Expansive)                 |                         |                      |                         |                       |            |
| TS (Toe Slope)     |            | C (Clay)               |  |                                       |                                 |                         |                      |                         |                       |            |
|                    |            | O (Organic)            | None                                     |                                       |                                 |                         |                      |                         |                       |            |

\* Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

\*\*Sandy clay loam saprolite can only be used with advanced pretreatment in accordance with 15A NCAC 18E .1200.

*HORIZON DEPTH* In inches below natural soil surface

*DEPTH OF FILL* In inches from land surface

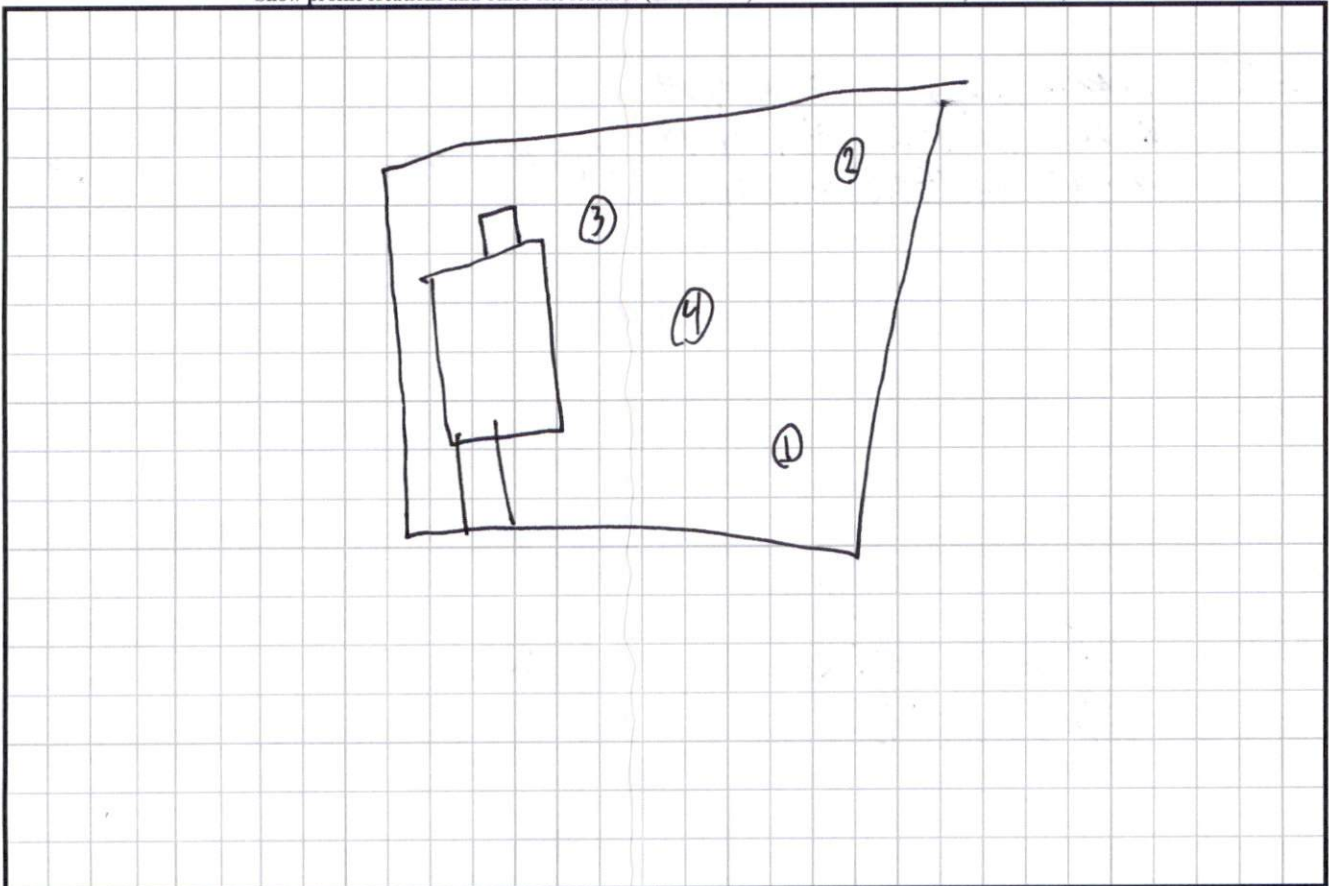
*RESTRICTIVE HORIZON* Thickness and depth from land surface

*SAPROLITE* S(suitable) or U(unsuitable); Evaluation of saprolite shall be by pits.

*SOIL WETNESS CLASSIFICATION* Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation

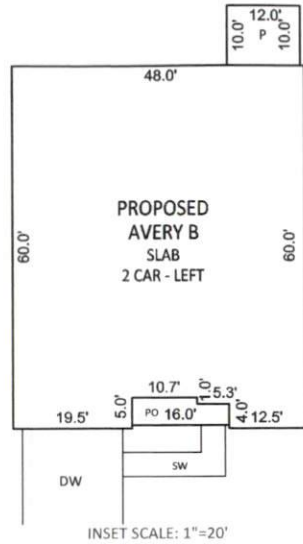
S (Suitable) or U (Unsuitable)

**Show profile locations and other site features (dimensions, reference or benchmark, and North).**



**LOT INFORMATION:**

PIN: 0693-46-2521.000  
 REFERENCE: DB, 4212 PG 1222  
 TOTAL LOT AREA = 0.58 AC = 25,165 SF  
 MAX. IMPERVIOUS = 5,500 SF  
 HOUSE = 2,805 SF  
 PORCH = 67 SF  
 SIDEWALKS = 85 SF  
 DRIVEWAY = 617 SF  
 PATIO = 120 SF  
 PROPOSED IMPERVIOUS = 3,694 SF  
 PERCENT IMPERVIOUS = 14.68%



**NOTES:**

- THIS SURVEY WAS PREPARED BY BATEMAN CIVIL SURVEY CO., UNDER THE SUPERVISION OF STEVEN P. CARSON, PLS.
- THIS PLAN HAS BEEN PREPARED FOR LAYOUT AND PERMITTING PURPOSES ONLY.
- 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.
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES AND ALL BEARINGS ARE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM UNLESS OTHERWISE SHOWN.
- THIS MAP IS NOT FOR RECORDATION AND SHOULD BE REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS.
- THE BASIS OF NORTH AND ALL EASEMENTS, RIGHTS-OF-WAYS, BUFFERS, SETBACKS AND ADJOINERS, ETC. REFERENCED IN TITLE BLOCK.
- NO INVESTIGATION INTO THE EXISTENCE OF JURISDICTIONAL WETLANDS OR RIPARIAN BUFFERS PERFORMED BY THIS FIRM.
- 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.
- THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA. IT IS LOCATED IN ZONE "X" PER F.E.M.A. MAP NUMBER 3720068200J DATED 10/03/2006.
- ZONING: RA-30
- PROPERTY OWNER: SMITH DOUGLAS HOMES  
2520 RELIANCE AVENUE  
APEX, NC 27539

**BUILDING SETBACKS**

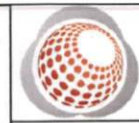
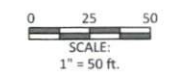
FRONT - 35'  
 REAR - 25'  
 SIDE - 10'  
 SIDE CORNER - 20'



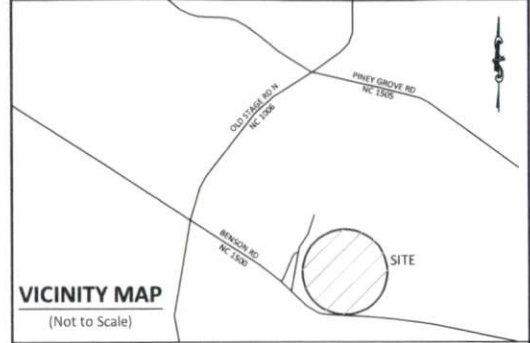
NJ  
 WRKDR PROPERTIES LLC  
 DB 4162 PG 439



| CURVE TABLE |         |        |                 |        |
|-------------|---------|--------|-----------------|--------|
| CURVE       | RADIUS  | LENGTH | CHORD DIRECTION | CHORD  |
| C92         | 525.00' | 85.20' | N36°03'59"E     | 85.10' |



**Bateman Civil Survey Company**  
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 NCBELS Firm No. C-2378



**LEGEND**

- PO = PORCH
- CP = COVERED PORCH
- SP = SCREENED PORCH
- SW = SIDEWALK
- DW = CONC DRIVEWAY
- SP = SCREENED PORCH
- P = CONCRETE PATIO
- ⊗ = COMPUTED POINT
- ⊙ = IRON PIPE FOUND (IPF)
- = IRON PIPE SET (IPS)
- = DRILL HOLE FOUND
- ⊕ = WATER METER
- CO = CLEAN OUT
- AC = AIR CONDITIONER PAD
- ⊙ = CABLE BOX
- ⊕ = SEWER MANOLE
- ⊕ = TELEPHONE PEDESTAL
- CB = CATCH BASIN
- ⊕ = LIGHT POLE
- ⊕ = HAND HOLE
- ⊕ = ELECTRIC BOX
- ⊕ = FIRE HYDRANT
- YI = YARD INLET
- G = GAS METER
- E = ELECTRIC METER
- LW = LEAD WALK

I, STEVEN P. CARSON, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY DIRECT SUPERVISION FROM A SURVEY MADE UNDER MY SUPERVISION (PLAT BOOK REFERENCED IN TITLE BLOCK); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION LISTED UNDER REFERENCES; THAT THE RATIO OF PRECISION AS CALCULATED IS 1:10,000+; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARD OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA. L-4752  
 DATED:

**PRELIMINARY**

This map is of an existing parcel of land and is only intended for the parties and purposes shown. This map not for recordation. No title report provided.

BUILDER TO VERIFY HOUSE LOCATION DIMENSIONS AND REVIEW TOTAL IMPERVIOUS NOTED ON THIS PLOT PLAN

**PRELIMINARY PLOT PLAN**  
 FOR  
**SMITH DOUGLAS HOMES**

**TOBACCO ROAD - PHASE 1 & 3 - LOT 155**  
 145 ORIENTAL STREET, ANGIER, NC  
 BLACK RIVER TOWNSHIP, HARNETT COUNTY

DATE: 2/27/24 DRAWN BY: AHB CHECKED BY: SPC  
 REFERENCE: BM 2023 PGS. 563-568 BCS# 230801 SCALE: 1" = 50'