DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ____ of ____
PROPERTY ID #: ____
COUNTY: ____

# SOIL/SITE EVALUATION
## *for* ON-SITE WASTEWATER SYSTEM

Applicant

139087
4/23/2008

OWNER: MOORE-REED BLDRS
ADDRESS: 1516 OLD MOCKS Hwy 28625
PROPOSED FACILITY: 4/BR BASEMENT PROPOSED DESIGN FLOW (.1949): 420
LOCATION OF SITE: BUFFALO CREEK
APPLICATION DATE: 2/28/08
DATE EVALUATED: 3/7/08
PROPERTY SIZE: 2.89 A C
PROPERTY RECORDED: YES

WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other ____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE | .1941 CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10% loose 3.6" ≈ 4" | 0-5 | SCL wk gr | fr nsp nmp | | 38" | | | PS .3 |
| | | 5-38" | cmod sbk | fr ss ps sp | | | | | |
| | | 38" | SL sap wk gr | fr ns np mp | | | | | |
| | | | | | 38-12=26" | 4" | 30" TB | | |
| 2 | 7% 8":10" | 0-5 | SCL wk gr | fr ns np mp | 40-12-3= 25" TB | | | | PS .3 |
| | | 5-22 | cmod sbk | fr ss ps sp | | | | | |
| | | 22-40' | cmod sbk | fr ss ps sp | | | | | |
| | | 40-48 | loamy sap wk gr | fr ns np mp | | | | | |
| 3 | 12% L | 0-5 | SCL wk gr | fr ns np mp | 2.5Y 7/4 @ 30"-40" | | | | PS .25 |
| | | 5-18' | CL wk sbk | fr ss ps sp | | | | | |
| | | 18-40 | cmod sbk | fr sp sl sp | yellow/brown CLAY 18-30" | | | | |
| | | 40" ROCK | | | RED CLAY 32"-40" | | | | |
| | | | | | 40-12-5=23" TB | | | | |
| 4 | | | | | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | YES | YES |
| System Type(s) | CRAW 25 | CRAW 25 |
| Site LTAR | .3 | .25 |

OTHER FACTORS (.1946): ____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: L COOK
OTHER(S) PRESENT: M. MOORE-REED / BROTHER

COMMENTS: 24" TBS. KEY FALL TO 1st Line From BASEMENT. SOILS GETS WORSE DOWN HILL

# LEGEND

***use the following standard abbreviations***

| LANDSCAPE POSITION | GROUP | SOIL TEXTURE | CONVENTIONAL .1955 LTAR* | LPP .1957 LTAR* | MINERALOGY/ CONSISTENCE | STRUCTURE |
|---|---|---|---|---|---|---|
| CC (Concave Slope)<br>CV (Convex Slope)<br>D (Drainage Way)<br>DS (Debris Slump)<br>FP (Flood Plain)<br>FS (Foot Slope)<br>H (Head Slope)<br>L (Linear Slope)<br>N (Nose Slope)<br>R (Ridge)<br>S (Shoulder Slope)<br>T (Terrace) | I | S (Sand)<br>LS (Loamy Sand) | 1.2 - 0.8 | 0.6 - 0.4 | NEXP (Non-expansive)<br>SEXP (Slightly Expansive)<br>EXP (Expansive) | G (Single Grain)<br>M (Massive)<br>CR (Crumb)<br>GR (Granular)<br>SBK (Subangular Blocky)<br>ABK (Angular Blocky)<br>PL (Platy)<br>PR (Prismatic) |
| | II | SL (Sandy Loam)<br>L (Loam) | 0.8 - 0.6 | 0.4 - 0.3 | | |
| | III | Si (Silt)<br>SiCL (Silty Clay Loam)<br>CL (Clay Loam)<br>SCL (Sandy Clay Loam)<br>SiL (Silt Loam) | 0.6 - 0.3 | 0.3 - 0.15 | | |
| | IV | SC (Sandy Clay)<br>SiC (Silty Clay)<br>C (Clay)<br>O (Organic) | 0.4 - 0.1<br>None | 0.2 - 0.05<br>None | **MOIST**<br>VFR (Very Friable)<br>FR (Friable)<br>FI (Firm)<br>VFI (Very Firm v. Very Sticky)<br>EFI (Extremely Firm) | **WET**<br>NS (Non-sticky)<br>SS (Slightly Sticky)<br>S (Sticky)<br>VS (Very Sticky)<br>NP (Non-plastic)<br>SP (Slightly Plastic)<br>P (Plastic)<br>VP (Very Plastic) |

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

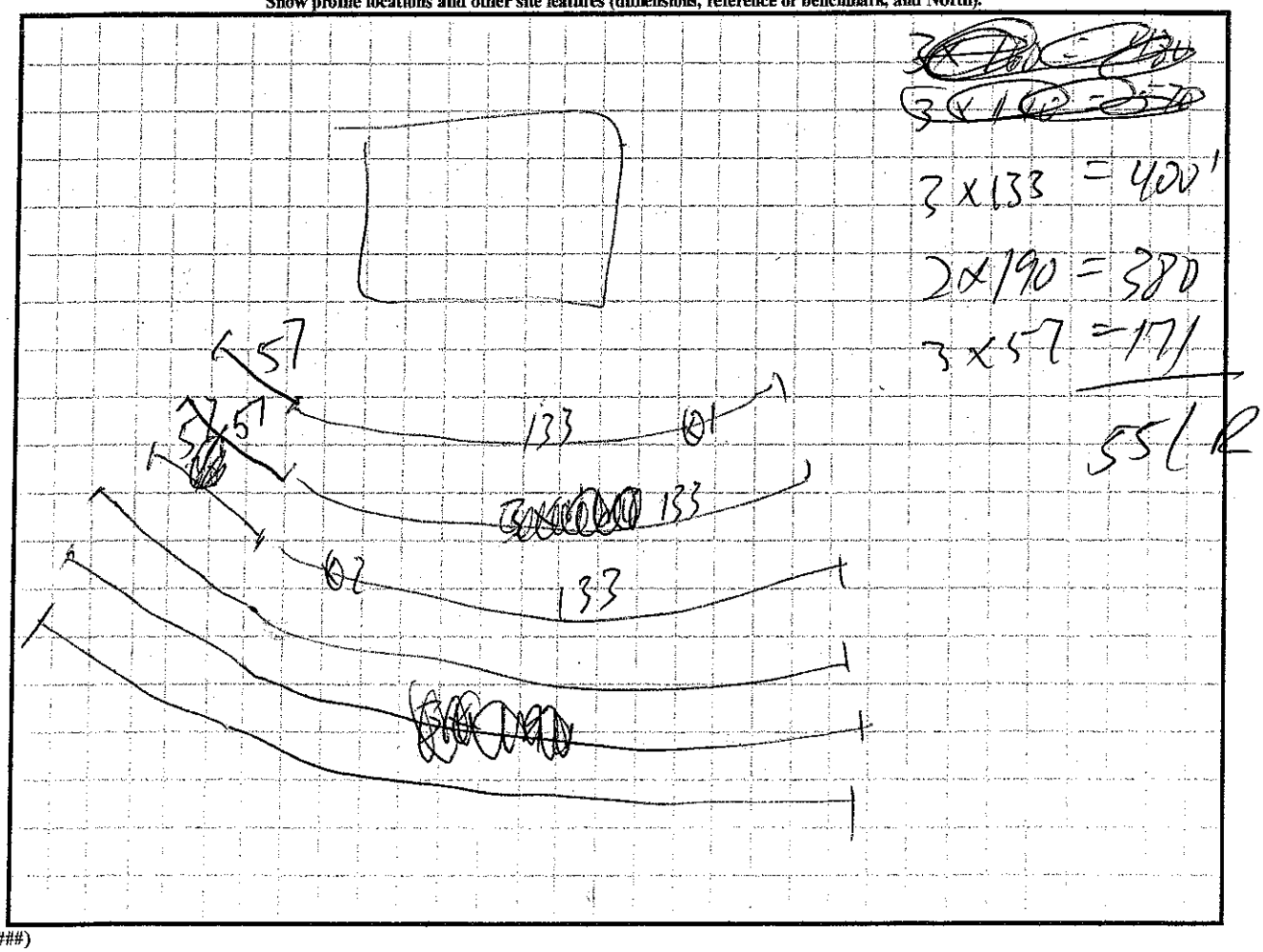
***NOTES***

| | |
|---|---|
| *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) |
| *SOIL WETNESS* | 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 |
| *CLASSIFICATION* | S (Suitable), PS (Provisionally Suitable), or U (Unsuitable) |

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft$^2$

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




DENR (######)
Review (#####)

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

*Sheet 1 of 1*
PROPERTY ID #: _____
COUNTY: IREDELL

# SOIL/SITE EVALUATION
## *for* ON-SITE WASTEWATER SYSTEM

OWNER: Noble Mills APPLICATION DATE _____
ADDRESS: 226 Lippard Springs Circle Statesville, NC 28677 DATE EVALUATED: 11/15/06
PROPOSED FACILITY: 4 bedroom home PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: 2.932 ac
LOCATION OF SITE: Lot 8 Buffalo Creek PROPERTY RECORDED: _____
WATER SUPPLY: Private Public ▶▶ Well Spring Other _____
EVALUATION METHOD: ▶▶ Auger Boring Pit Cut TYPE OF WASTEWATER: ▶▶ Sewage Industrial Process Mixed

| PROFILE # | .1940 LANDSCAPE POSITION/ SLOPE % | HORIZON DEPTH (IN.) | SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE | SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY | OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR | .1943 SOIL DEPTH | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 10% LINEAR | 0-10 | WKF SBK SCL | FR NS NP NEXP | >41 | >41 | >41 | 41 | .3 PS |
| | | 10-37 | MM SBK C | FI SS SP SEXP | | | | | |
| | | 37-41 | WF SBK CL | FR SS SP SEXP | | | | | |
| | | AR@ 41 | HIT A ROCK | FR SS SP SEXP | | | | | |
| | | | | | | | | | |
| 2 | 10% LINEAR | 0-8 | WKF SBK SCL | FR NS NP NEXP | >46 | >46 | <46 | >46 | .3 PS |
| | | 8-30 | MM SBK C | FI SS SP SEXP | | | | | |
| | | 30-46 | WKF SBK CL | FI SS SP SEXP | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 3 | 12% LINEAR | 0-5 | WKF SBK SCL | FR NS NP NEXP | >46 | >46 | >46 | >46 | .3 PS |
| | | 5-24 | MM SBK C | FI SS SP SEXP | | | | | |
| | | 24-46 | WKF SBK CL | FI SS SP SEXP | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 4 | 8% LINEAR | 0-8 | WKF SBK SCL | FR NS NP NEXP | >46 | >46 | >46 | >46 | .3 PS |
| | | 8-32 | MM SBK C | FI SS SP SEXP | | | | | |
| | | 32-46 | WKF SBK CL | FR SS SP SEXP | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | 399 | 400 |
| System Type(s) | CONV/INNOV | CONV/INNOV |
| Site LTAR | .3 | .3 |

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: SP
OTHER(S) PRESENT: EB,BF

LICENSED SOIL SCIENTIST
STEVEN M. PRICE
7153
STATE OF NORTH CAROLINA

11/21/06

COMMENTS: _____

# Buffalo Creek Dr. Lot 8

**Project No. 5-1611**

**LAYOUT FOR A FOUR BEDROOM HOME** **Nov-06**

| LINE # | FLAG COLOR | BS | HI | FS | ELEVATION | FLAGGED LINE LENGTH | Designed Length |
|---|---|---|---|---|---|---|---|
| TBM | | 6.2 | | | 100.0 | | |
| INSTR. 1 | | | 106.2 | | | | |
| | | | **SYSTEM** | | | | |
| 1 | Blue | | | 4.80 | 101.4 | 156 | 133 |
| 2 | Pink | | | 5.50 | 100.7 | 170 | 133 |
| 3 | Yelow | | | 6.60 | 99.6 | 187 | 133 |
| | | | | | | **513** | **399** |
| | | | **REPAIR** | | | | |
| 4 | Yellow | | | 7.50 | 98.7 | 210 | 200 |
| 5 | Blue | | | 8.50 | 97.7 | 220 | 200 |
| | | | | | **Total** | **430** | **400** |

| | LINE LENGTH | LTAR GPD/FT$^2$ | SYSTEM TYPE | INNOVATIVE TYPE | DISTRIBUTION |
|---|---|---|---|---|---|
| *** System** | 399 | 0.30 | Innovative | Chamber | Drop Box |
| **Repair** | 400 | 0.30 | Innovative | Chamber | Drop Box |

## Notes:

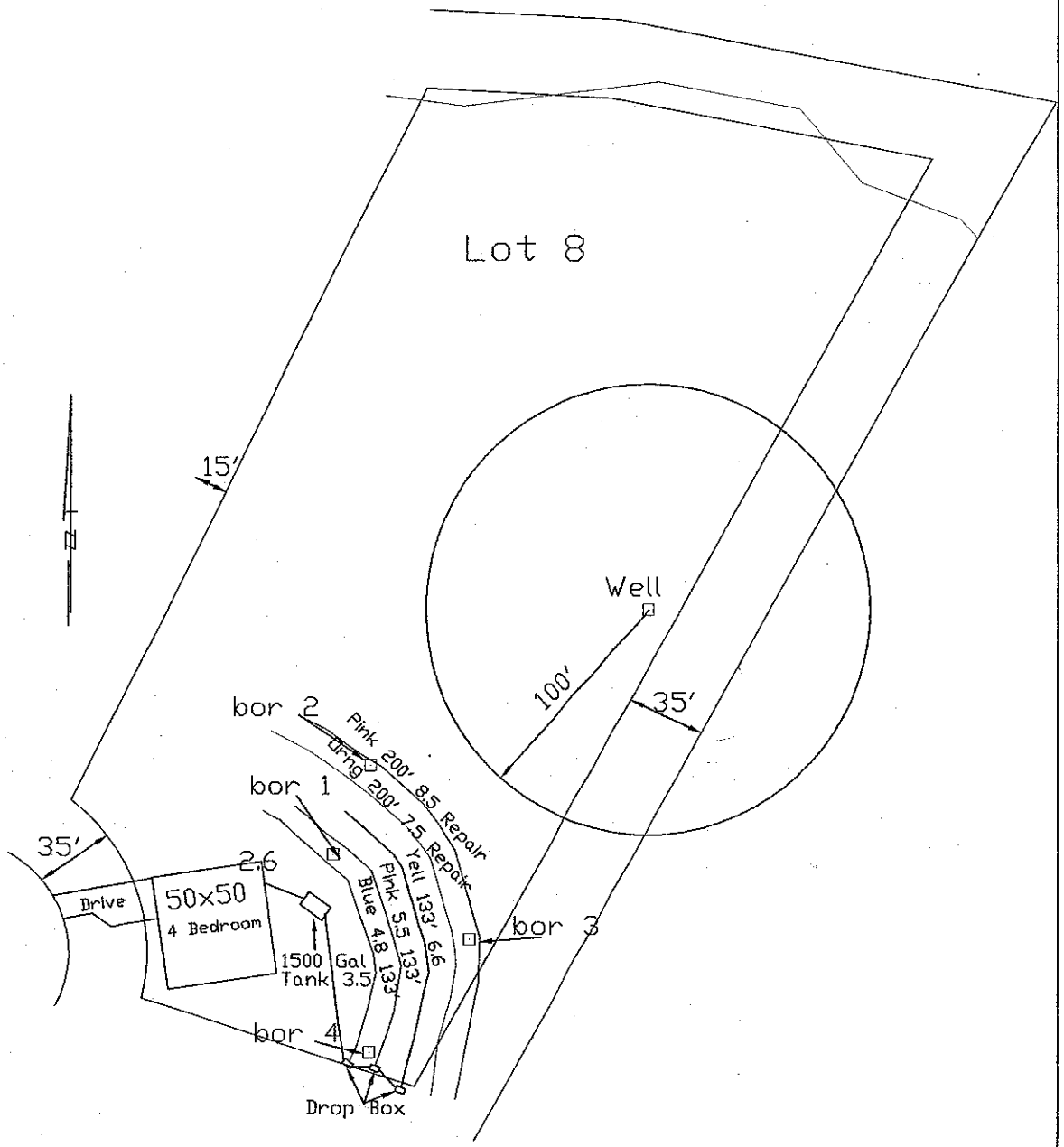
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS and FS indicate rod readings

**SUITABLE FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND TOPOGRAPHIC IRREGULARITIES.
THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS. SOME OTHER CONSIDERATIONS THAT AFFECT SITE SUITABILITY THAT SHOULD BE CONSIDERED IN DEVELOPMENT DESIGN ARE:

1) 10' SETBACK FROM PROPERTY LINE
2) 100' SETBACK FROM ANY WELL
3) 50' SETBACK FROM STREAMS, PONDS OR LAKES.

See accompanying S&EC report.

Not A Survey




GRAPHIC SCALE
1" = 50'

50 0 50 100

SHEET 1 OF 1

SHEET TITLE:
Fast Track Site Plan
EVALUATION

Buffalo Shoals
Sandy Mills
– Buffalo Shoals –
IREDELL COUNTY, NORTH CAROLINA

S&EC
Soil & Environmental Consultants, PA
336 Lafferty Ln, Ste C Concord, NC 28025 ■ Phone (704)720-3465 ■ Fax (704) 720-3466

FILE Y:\Jobs\5-1
SCALE 1" = 50'
FIELD WORK SP EB BF
DRAWN SP
PROJECT MGR.
JOB NO. 5-1611