LINE SCHEDULE

LINE NUMBER	COLOR	FIELD ELEVATION	LENGTH (FT)
1	ORANGE	3.2	23
2	BLUE	4.0	46
3	YELLOW	5.0	63
4	RED	6.3	78
5	PINK	7.0	88
6	BLUE	8.2	27
7	ORANGE	8.8	132
8	RED	10.6	115
9	BLUE	13.0	105
10	RED	16.0	73
11	ORANGE	18.7	28

LOT 5 BELLS CROSSING SUBDIVISION

4-BEDROOM ACCEPTED STATUS GRAVITY SYSTEM
LINES 6-11 TOTAL 480 LINEAR FEET
EZFLOW OR CHAMBER
LTAR 0.25
25%REDUCTION
20" TRENCH DEPTH

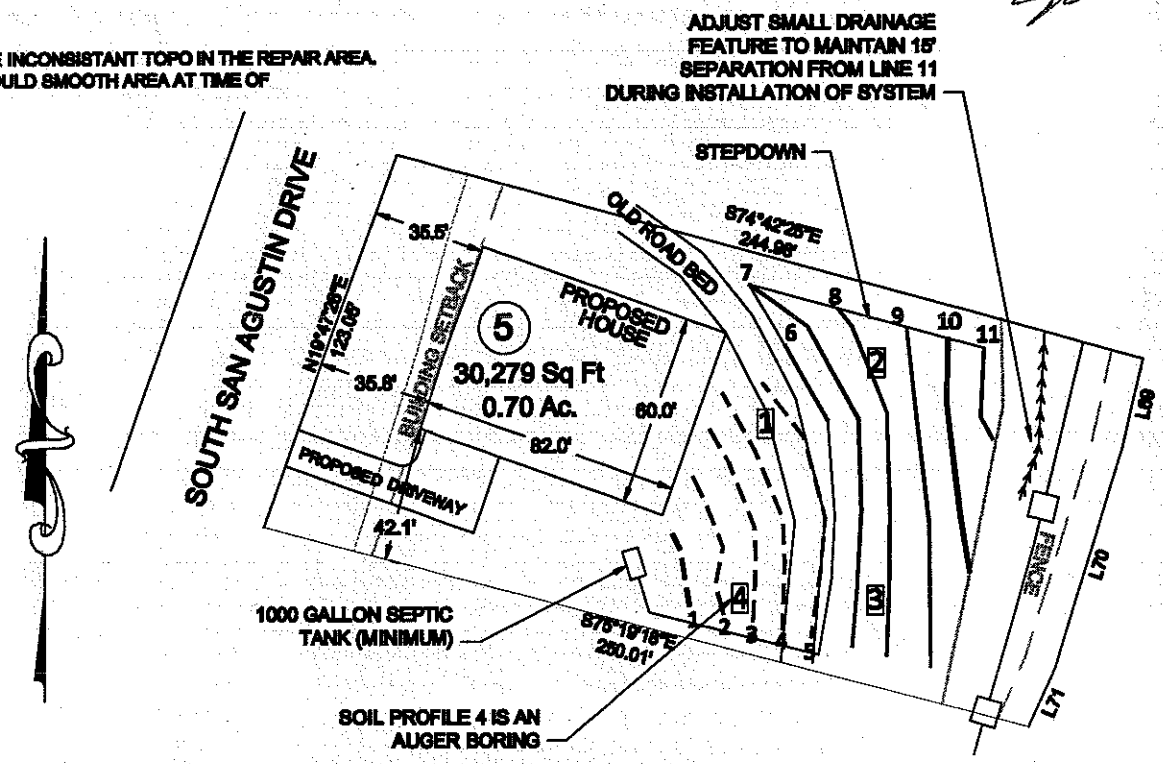
4-BEDROOM LPP FED PANEL BLOCK REPAIR
LINES 1-5 TOTAL 298 LINEAR FEET
LTAR 0.275
50% REDUCTION
28" TRENCH DEPTH

FOR GENERAL USE NOT A SURVEY
PRELIMINARY NOT FOR CONSTRUCTION

SOIL PROFILES AND ANALYSIS PROVIDED BY
PRICE ENVIRONMENTAL RESOURCE CONSULTING, PC

ICHD OK
APPROVED FEB 02 2015

NOTE:
THERE IS SOME INCONSISTANT TOPO IN THE REPAIR AREA. INSTALLER SHOULD SMOOTH AREA AT TIME OF INSTALLATION.



1 PIT OR AUGER BORING

PRIMARY LINES

REPAIR LINES

ADDITIONAL REPAIR LINES

SCALE:
1" = 60 ft.

Bateman Civil Survey Company
Engineers • Surveyors • Planners
200 N. Main Street, Holly Springs, NC 27540 Ph: 919.577.1080 Fax: 919.577.1081
www.batemancivilsurvey.com info@batemancivilsurvey.com
NCBELS Firm No. C-0578

MeritageHomes

LOT 5
BELLS CROSSING SUBDIVISION
MOORESVILLE, NC
IREDELL COUNTY
REVISED 01/27/15
DATE: 01/05/15 DRAWN BY MB CHECKED BY: TMB

REVISION

PERC SOIL/SITE EVALUATION DESCRIPTIONS

Client: Bateman Civil Survey Company, PC — Date Evaluated: 11/24 & 12/30/201 and Jan 2015

Location of site: Bells Crossing Phase 3 Lot 5

Water Supply: [ ] Public [ ] Individual [ ] Well [ ] Spring [ ] Other

Evaluation Method: [X] Auger Boring [X] Pit [ ] Cut

Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941		b PROFILE FACTORS				
			.1941 Structure/ Texture	1941 Consistence Mineralogy	1942 Soil Wetness/ Color	1943 Soil Depth (IN)	1956 Sapro Class	1944 Restr Horiz	Profile Class & LTAR
1	LS 10%	0-12	SBK / C	VFI SS SP	>52 RELIC MOTTLES	52+	NA	NA	PS 0.275
		12-25	SBK / C	FI SS SP					
		25-38	SBK / C	FI SS SP					
		38-52	W SBK / CL	FR SS SP					
2	LS 20%	0-7	W SBK / SCL	FR SS SP	>41	41+	NA	NA	PS 0.275
		7-28	SBK / C	FI SS SP					
		28-41	W SBK / CL	FI SS SP					
3	LS 10%	0-9	SBK / C	VFI SS SP	>48	48+	NA	NA	PS 0.25
		9-24	SBK / C	FI SS SP					
		24-38	W SBK / CL	FR SS SP					
		38-48	W SBK / CL	FI SS SP					
4 boring 1 30-Dec	LS 10%	0-2	W SBK / SCL	FR SS SP	>45	45	NA	NA	PS 0.275
		2-24	SBK / C	FI SS SP					
		24-45	W SBK / CL	FR SS SP					

COMMENTS: Pit 1 compacted upper 12", and weathered rock and rock in profile. Pit 2 had yellow jackets is soil pile to the side of pit, weathered rock and rock in profile (<15%). Pit 3 compacted to 9" and saprolite inclusions @ 24", weathered rock (<15%). Boring 1 is located at bottom of undulating topography area and may need to be smoothed out.

Evaluation By: Steven Price

Landscape Position	Group	Texture	.1955 LTAR
R-Ridge	I	S-Sand	1.2 - 0.8
SS-Shoulder Slope		LS-Loamy Sand	
LS-Linear Slope			
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6
NS-Nose Slope		L-Loam	
HS-Head Slope			
CC-Concave Slope	III	SI-Silt	0.6 - 0.3
CV-Convex Slope		SICL-Silty Clay Loam	
T-Terrace		CL-Clay Loam	
FP-Flood Plain		SCL-Sandy Clay Loam	
	IV	SC-Sandy Clay	0.4 - 0.1
		SIC-Silty Clay	
		C-Clay	

Structure
SG-Single Grain
M-Massive
CR-Crumb
GR-Granular
SBK-Subangular Blocky
ABK-Angular Blocky
PL-Platy
PR-Prismatic
W-Weak

Consistence Moist	Consistence Wet
VFR-Very Friable	NS-Non-Sticky
FR-Friable	SS-Slightly Sticky
FI-Firm	S-Sticky
VFI-Very Firm	VS-Very Sticky
EFI-Extremely Firm	NP-Non-Plastic
	SP-Slightly Plastic
	P-Plastic
	VP-Very Plastic

I and O K

APPROVED FEB 02 2015

LICENSED SOIL SCIENTIST STEVEN M. PRICE 7163 STATE OF NORTH CAROLINA

Shane Cashion

From: Matt Burdette <matt@batemancivilsurvey.com>
Sent: Thursday, January 29, 2015 4:39 PM
To: Shane Cashion
Subject: Bells Crossing Phase 3 Lot 5
Attachments: Bells Crossing Lot 5 Soil Profile Revised 012715.pdf; Lot 5 Bells Crossing Revised 012715.pdf

Shane –

ok
APPROVED FEB 02 2015
SL

Attached is a revised septic plan and your comments and our responses are listed below.

Comments:
Lot 3/5:

1. *24" max trench bottom is spec'ed on design with 20% slope on soil notes. I'm not coming up with 6" or more of cover per this design by working off of the paperwork provided.*
2. *The supply line spec'ed does not appear to have room between the house box and drainfield. There should be minimum 7' there to have room for 5' off the foundation with the supply line and a 2' separation for the drainfield. With the measurements you provided I don't think you allowed for this.*
3. *The topo in the repair area is not consistant. With a 24" trench bottom it would be noteworthy to put something on the design sheet not to fill this area, but rather to remove the rough topopgraphy. An installer/grader would not know this without noting it on the design sheet.*
4. *The bottom most line on the design was not flagged as it was drawn on the design sheet. The way it was flagged did not have 15' of separation from the drainage that appeared to be on the design sheet.*
5. *This is not so much as a requirement but some of the features in the landscape I would note (ex the old road bed that line 5 is on, and the drainage path on the lower side of the lot.) Most setbacks on our permits are noted on our design sheet.*

Responses:

1. We adjusted the proposed trench depth to accommodate the slope. ✓
2. We re-routed the supply to meet the setbacks. ✓
3. For the inconsistent topo in the repair area and a 28" trench bottom for the panel block I would rather fill any depressions with approved fill from the trench excavations. X
4. I corrected the drawing of the bottom line and shortened it by 2'. Then noted on the site plan that the small drainage feature be moved over to accommodate the 15' setback at time of installation. ✓
5. We noted the old road bed and the drainage feature on the lot. ✓

Let me know if you have any questions or comments.

Thanks,

#3 NOT OK.
NO FILL IN THIS AREA.

Matt Burdette
Environmental Specialist
Bateman Civil Survey Company
200 N. Main Street
Holly Springs, North Carolina 27540
Office 919-577-1080
Cell 919-422-2827

8-11-16

Tom Shuck
Inspector

12% Slope

Pit 5 0-6 R Loam w/SBK — Sl. Firm, SS, Sp, Sexp

6-30 R Clay (Br) w. SBK/ABK

30-60 Very Light Br Clay Loam weak SBK some mica saprolite mixed — Very Friable SS, Sp, Sexp

60-65 Loamy Saprolite — moderately Drained

MA

32" install ok