LINE SCHEDULE

LINE NUMBER	COLOR	FIELD ELEVATION	LENGTH (FT)	DESIGN LENGTH (FT)
1	BLUE	2.2	27	24
2	YELLOW	3.4	46	36
3	ORANGE	5.7	62	60
4	RED	8.0	63	60
5	BLUE	10.0	60	60
6	YELLOW	11.3	60	60
7	ORANGE	12.9	60	60
8	YELLOW	13.7	25	
9	RED	14.9	73	60
10	BLUE	15.9	62	60
11	YELLOW	17.2	64	60
12	ORANGE	18.9	55	
13	RED	21.0	67	
14	BLUE	22.6	39	
15	PINK	2.6	27	
16	RED	3.5	58	
17	YELLOW	4.5	57	
18	PINK	5.1	51	
19	RED	5.9	48	
20	YELLOW	6.7	45	
21	PINK	7.9	38	
22	RED	8.8	37	

LOT 34 BELLS CROSSING SUBDIVISION

5-BEDROOM ACCEPTED STATUS PRESSURE MANIFOLD SYSTEM
LINES 1-7 & 9-11 TOTAL 540 LINEAR FEET
EZFLOW OR CHAMBER
LTAR 0.3
25% REDUCTION
18" TRENCH DEPTH

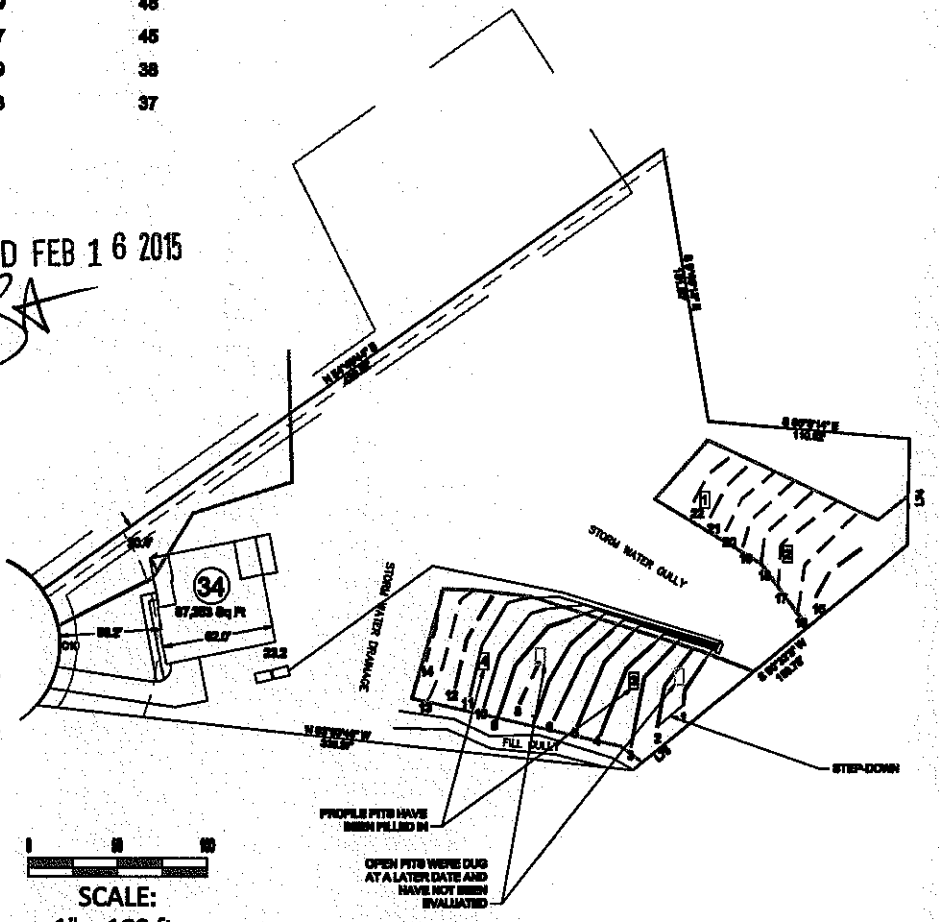
5-BEDROOM ACCEPTED STATUS PRESSURE MANIFOLD SYSTEM
LINES 8 & 12-22 TOTAL 547 LINEAR FEET
EZFLOW OR CHAMBER
LTAR 0.275
25% REDUCTION
18" TRENCH DEPTH

NOTE: LINES MAY BE LONGER IN THE FIELD. TRIM TO DESIGNED LENGTH.

FOR GENERAL USE NOT A SURVEY
PRELIMINARY NOT FOR CONSTRUCTION

SOIL PROFILES AND ANALYSIS PROVIDED BY CENTRAL CAROLINA SOIL CONSULTING PLLC

APPROVED FEB 16 2015



PRIMARY SYSTEM ——————

REPAIR SYSTEM — — — — — —

REPAIR LINES (NOT USED) - - - - - - - - - -

PIT OR AUGER BORING [1]

SCALE:
1" = 100 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-2378

Meritage Homes

LOT 34
BELLS CROSSING SUBDIVISION
MOORESVILLE, NC
IREDELL COUNTY
REVISED 02/12/15
DATE: 02/02/15 DRAWN BY TMB CHECKED BY: TMB

BELLS CROSSING PH 2 S/D Lot 34

Layout/Design Specifications

Facility Type:	Single Family Home	
# of Bedrooms:	5	
Daily Flow:	600	**gal/day**
L.T.A.R.:	0.30	**gal/day/sq.ft**
Trench Depth:	18	**in**
Trench Width:	36	**in**
Stone Depth:	EZ-FLOW	**in**
Manifold Length:	72	**in**
Manifold Diameter:	4	**in sch 80pvc**
Supply Line Length:	265	**ft**
Supply Line Diameter:	2	**in sch 40pvc**
Supply Line Volume:	46.11	**gallons**
Friction Loss + Fitting Loss:	14.97	**ft(supply line length + 70' for fittings in pump tank)**
Design Head:	2	**ft**
Elevation Head:	27.40	**ft**
Total Head:	44.37	**ft**
Dose Volume:	263.57	**gals**
% of Pipe Vol.	.75	
Drawdown:	12.51	**in @ 21.07 gal/in**
Pump Run Time:	5.34	**Minutes**
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)	
Pump:	Zoeller M165 Flow-Mate (or approved equivalent)	
Tank Effluent Filter:	Zoeller 170-0144 residential effluent filter (or approved equivalent)	
Septic Tank:	1275	**gallon Shoaf**
Pump Tank:	1275	**gallon Shoaf**

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BELLS CROSSING PH 2 S/D Lot 34
SYSTEM TAP CHART

Bench Mark:	4	= 100.00	**Manifold elev:**	102.80	
Pump tank elevation:	80.80		**Pump elev:**	75.40	

line	color	rod read	elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1 & 2	BLUE/YEL	2.20	101.80	60	1/2in SCH 80	5.48	66.67	180	0.3704
3	ORANGE	5.70	98.30	60	1/2in SCH 80	5.48	66.67	180	0.3704
4	RED	8.00	96.00	60	1/2in SCH 80	5.48	66.67	180	0.3704
5	BLUE	10.00	94.00	60	1/2in SCH 80	5.48	66.67	180	0.3704
6	YELLOW	11.30	92.70	60	1/2in SCH 80	5.48	66.67	180	0.3704
7	ORANGE	12.90	91.10	60	1/2in SCH 80	5.48	66.67	180	0.3704
9	RED	14.90	89.10	60	1/2in SCH 80	5.48	66.67	180	0.3704
10	BLUE	15.90	88.10	60	1/2in SCH 80	5.48	66.67	180	0.3704
11	YELLOW	17.20	86.80	60	1/2in SCH 80	5.48	66.67	180	0.3704
	P-TANK	23.20	80.80						
		total	**feet =**	**540**	**gal/min =**	**49.32**		**LTAR =**	**0.30**
				Des. Flow	600			**(ltar + 5%)**	0.32
				24 Hour Pump Run=	12.17			**(ltar W/ INOV)**	0.40
								(ltar + 5%)	0.42

Comments:

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BA

APPROVED FEB 16 2015

Sheet: 1 of 2
Property ID:
Lot #:
File #:
AppID:

CCSC SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Meritage Homes
Address: 11605 N Community House Rd Charlotte NC 28277
Proposed Facility: Design Flow (.1949)
Location of Site: Lot 34 Bells Crossing
Water Supply: [X] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [X] Pit [ ] Cut
Type of Wastewater: [X] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Same
Date Evaluated: 10-2-2013
Property Size:
Property Recorded: 2013

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	A	0-3	GR SL	VFR NS NP	10YR 3/2				
	E	3-6	GR SL	VFR NS NP	10YR 5/4				
	Bt	6-23	SBK Clay	FI SS SP	2.5YR 4/8				PS 0.3
	BC	23-30	SBK SCL	FI SS SP	(2.5YR 4/8 25% 7.5YR 6/8				PS 0.35
	C	30-56	SG SL	VFR NS NP	7.5YR 7/8		SAP		PS 0.4
2	A	0-3	GR SL	VFR NS NP	10YR 3/2				
	Bt	3-18	SBK SC	FI SS SP	(5YR 4/6 20% 2.5YR 3/6				0.3 PS
	BC	18-36	WK SBK SCL	FI SS SP	7.5YR 5/8 15% 5YR 5/8 10% 10YR 8/3				0.35 PS
	C	36-53	SG SL	VFR NS SP	7.5YR 5/8 15% 10YR 8/3 10% 7.5YR 6/2				UW

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Accepted
Site LTAR	0.3	0.3

Other Factors (.1946):
Soil Evaluation By: JH
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

LICENSED SOIL SCIENTIST JASON M. HA 1248 STATE OF NORTH CAROLINA

APPROVED FEB 16 2015 RA

Sheet: 2 of 2
Property ID:
Lot #: 34
File #:
AppID:

CCSC SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Meritage Homes
Address: 11605 N Community House Rd Charlotte NC 28277
Proposed Facility: 5 Bedroom Design Flow (.1949) 1000
Location of Site: Bells Crossing 34
Applicant: Sam
Date Evaluated: 10-2-2013
Property Size:
Property Recorded:

Water Supply: [Y] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [Y] Pit [ ] Cut
Type of Wastewater: [Y] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	PROFILE FACTORS b .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
3	SS 10%A	0-3	Gr SL	VFR NS NP	10YR 5/8				
	B+1	3-23	SBK clay	FI SS SP	2.5YR 4/8	PS			PS .3
	B+2	23-50	SBK Clay	FI SS SP	2.5YR 4/8	S			S .3
					7.5 4/6 5%				
4	A	0-3	Gr SL	VFR NS NP					
	B+1	3-24	SBK Clay	FI SS SP	2.5YR 4/8	PS			PS .3
	B+2	24-50	SBK SCL	FI SS SP	2.5YR 4/8	S			S .35
					7.5YR 4/6				

Description	Initial System	Repair System
Available Space (.1945)	Yes	Yes
System Type(s)	Accepted	Accepted
Site LTAR	0.3	0.3

Other Factors (.1946):
Soil Evaluation By:
Others Present:
Site Classification (.1948):
Site Evaluation By:
Others Present:

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