S&ME

Health Dept. Copy

To: Iredell County Environmental Health Department

From: Kathleen Saunders, LSSIT
Paul Penninger, LSS

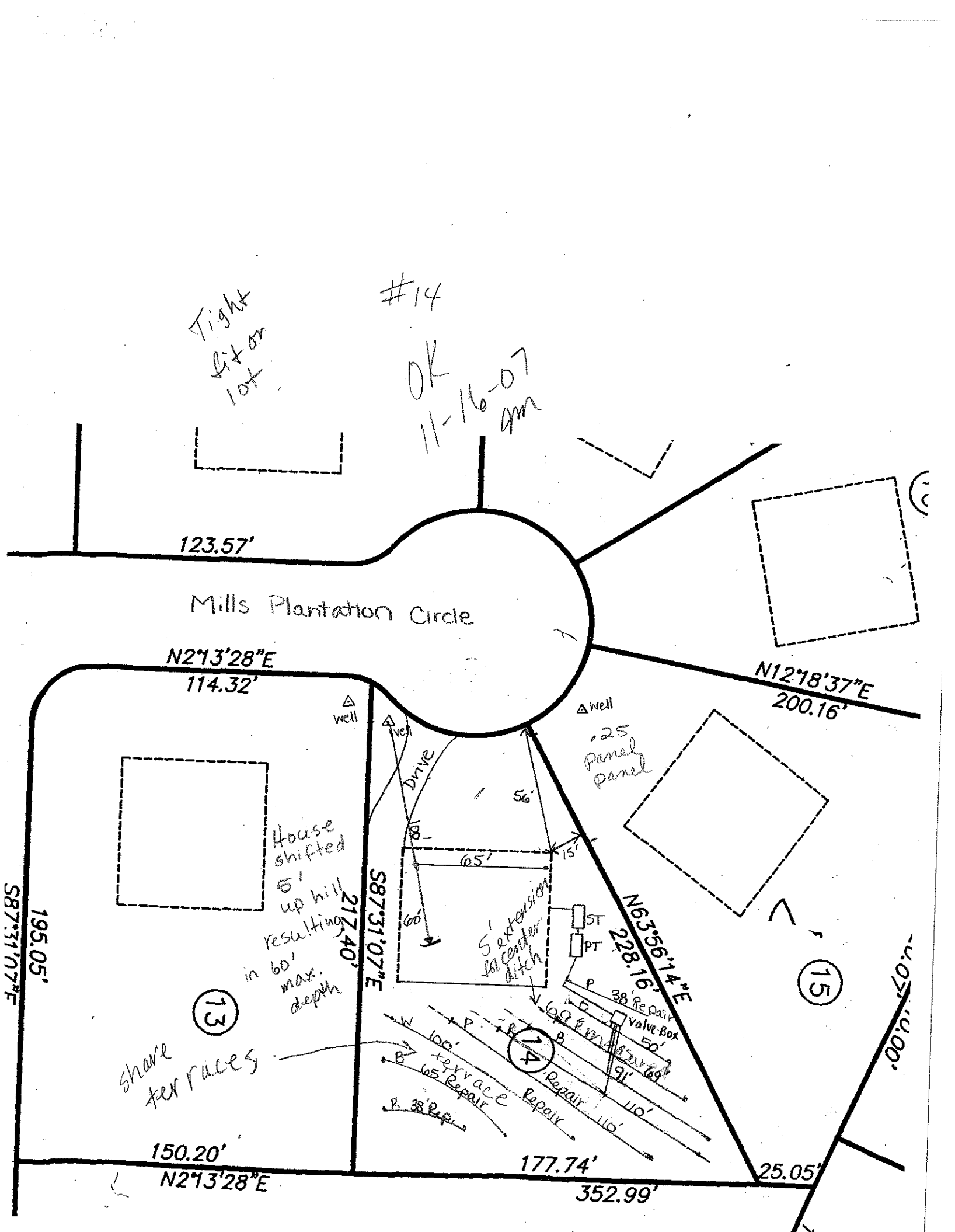
RE: Georgia Mills Plantation – Pilot Development – Lot 14 Fast Track

Date: November 14, 2007

Attached is the Fast Track information required to place Lot 14 Georgia Mills Plantation on your developer team work list to review the septic system layouts. Please call when you are ready to review the lot and we will meet you on the site.

The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist the Iredell County Environmental Health Department (ICHD) with the site evaluation. The ICHD has to approve each lot and only the ICHD can issue these permits. The system should be installed according to the ICHD permits, policies, and NC rules. If the ICHD wishes to change tank locations, distribution devices, etc., this can be shown on the Improvement Permit.

All information and specifications were prepared in conjunction with the Fast Track Program for Iredell County and are for the sole use of Pilot Development in acquiring permits under the Fast Track Program. All soil work has been approved by Judy Melville of the Iredell County Health Department. It is ultimately the Iredell County Health Department's responsibility to verify all specifications before permitting and/or septic system installation.


#14
Tight fit on lot
OK
11-16-07
gm
123.57'
Mills Plantation Circle
N2°13'28"E
114.32'
N12°18'37"E
200.16'
well
well
well
Drive
.25 panel
panel
House shifted 5' up hill resulting in 60' max. depth
S87°31'07"E
217.40'
195.05'
S87°31'07"E
56'
65'
15'
60'
5' extension to center ditch
ST
PT
N63°56'14"E
228.16'
38' Repair
Valve Box
50'
100' terrace
65' Repair
Repair
110'
91'
69'
13
14
15
share terraces
150.20'
N2°13'28"E
177.74'
25.05'
352.99'

Lot 14 GA. Mills Plantation Fast Track Septic System Information

Number of Bedrooms	4
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.25
Primary System Type	**LP PPBPS**
No. Lines	4 (See Table)
Total Linear Feet	320
Trench Width	2' min.
Trench Spacing	8' min.
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	40' of 2" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	36.5 gpm
Elevation head	Approx. 8.0'
Pressure head	3.0'
Friction head	1.1'
20% Contingency	2.4'
Total Head	14.5'
Pump Requirements	36.5 gpm @ 14.5' of head To be designed by installer.
Maximum Dosing Volume	262.8 gal -1.8 doses/day @ design flow*
Volume of water pumped per dose	Calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump Run per dose	approx. 7.2 min.
Check Valve	Yes
Siphon Break hole	Yes
Repair System	**LP PPBPS**
Total Linear Feet	351
Repair LTAR	0.25

***Before placement of cap block, one panel on each line near the center of the field should be observed filling to make certain that it does not overflow top chamber into air chambers of panel. If overflow occurs, reduce floats by 25 gallons and reset until no overflow is observed.**

Table 1: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elev. (Ft.)	Panels	Holes	Hole Spacing	Hole Size (In.)
1	Repair	Pink	LPPPBPS	38	4.3				
2	System	Orange	LPPPBPS	50 centerfed		11	11	1 per panel	5/32"
3	System	Pink	LPPPBPS	69 centerfed		16	16	1 per panel	5/32"
4	System	Blue	LPPPBPS	91 centerfed		21	21	1 per panel	5/32"
5	System	Red	LPPPBPS	110 centerfed		25	25	1 per panel	5/32"
6	Repair	Pink	LPPPBPS	110					
7	Repair	White	LPPPBPS	100					
8	Repair	Blue	LPPPBPS	65					
9	Repair	Red	LPPPBPS	38	9.7				
						Total: 73	Total: 73 (1 in each panel turned up)		
				Total System: 320'					
				Total Repair: 351'					

Tank	Red	1000 gal (2 compartment)	4.2
Pump Tank	Red	1000 gal.	4.2
House	Blue		5.1

Note: Shave off all berms