ok Imp Permit
3-9-07

S&ME

To: Iredell County Environmental Health Department

From: Paul G. Penninger, LSS
Kathleen Saunders, LSSIT

RE: Farms Phase V – Crescent Resources, LLC – Lot 621 Fast Track

Date: February 15, 2007

Attached is the Fast Track information required to place Lot 621 Farms Phase 5 on your developer 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 use of Crescent Resources, LLC in acquiring permits under the Fast Track Program. All soil work has been approved by David Hinson 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.

S&ME, INC. / 385 Timber Road, Suite 104 / Mooresville, NC 28115-7899 / p 704.662.8625 f 704.662.8735 / www.smeinc.com

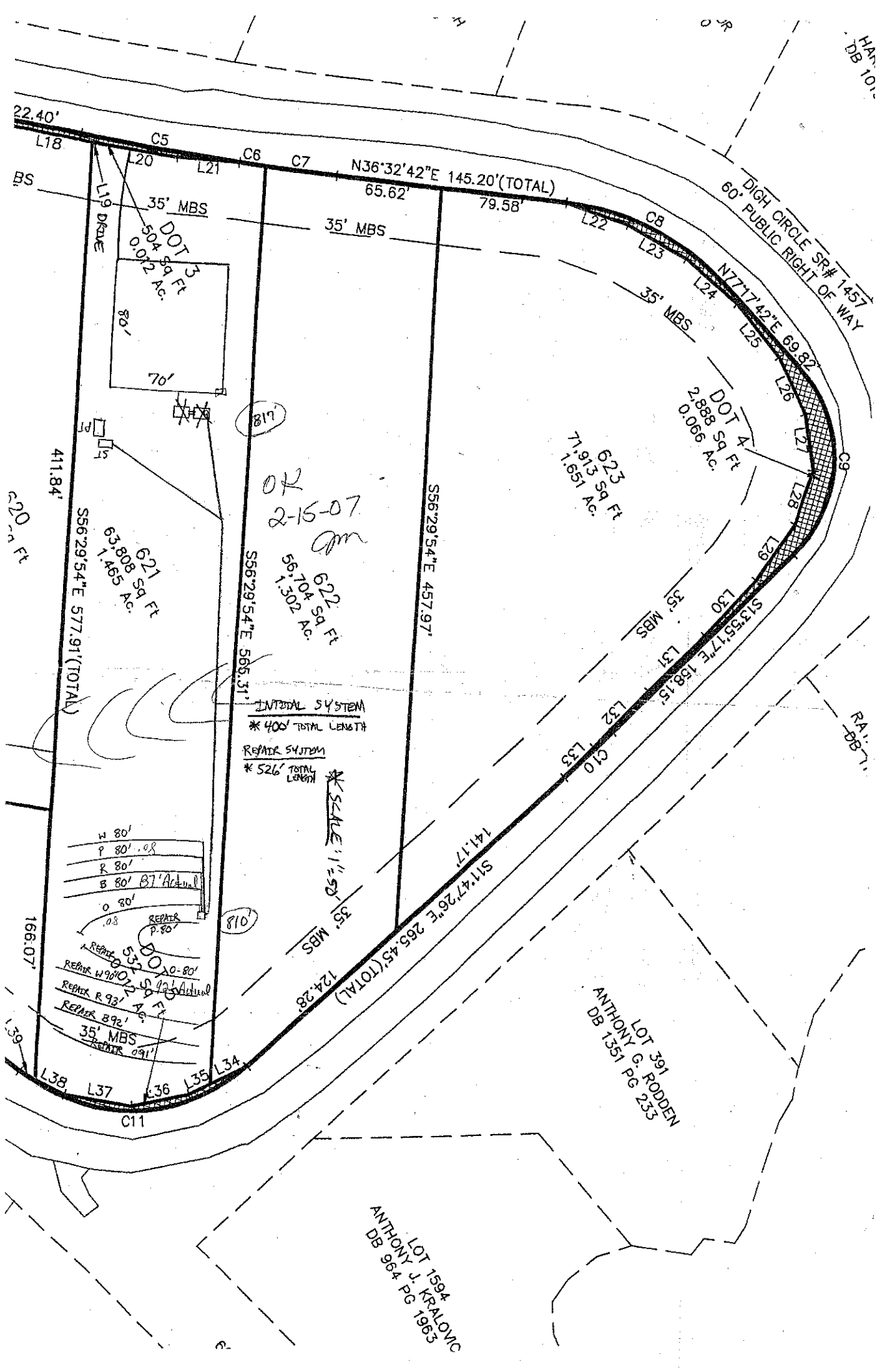
Table: Summary of Primary and Repair Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading Elevation (Ft.)
1	Repair	Pink	25% Reduction	80	810.0
2	System	Orange	25% Reduction	80 endfed	
3	System	Blue	25% Reduction	80 endfed	
4	System	Red	25% Reduction	80 endfed	
5	System	Pink	25% Reduction	80 endfed	
6	System	White	25% Reduction	80 endfed	
7	Repair	Orange	25% Reduction	80	
8	Repair	White	25% Reduction	90	
9	Repair	Red	25% Reduction	93	
10	Repair	Blue	25% Reduction	92	
11	Repair	Orange	25% Reduction	91	
				Total System: 400'	
				Total Repair: 526'	

Tank	Red	1500 gal (2 compartment)	817.0
Pump Tank	Red	1500 gal.	817.0
House	Blue		817.0

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	5
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

Note: Elevations estimated from 1 foot site specific topographic map.


22.40'
L18
C5
L20
L21
C6
C7
N36°32'42"E 145.20'(TOTAL)
65.62'
79.58'
L22
C8
L23
L24
L25
L26
L27
C9
L28
L29
L30
L31
L32
L33
C10
L34
L35
L36
L37
L38
C11
L39
DIGH CIRCLE SR# 1457
60' PUBLIC RIGHT OF WAY
N77°17'42"E 69.82'
S13°55'17"E 158.15'
S11°47'26"E 265.45'(TOTAL)
124.28'
141.17'
35' MBS
L19 DRIVE
DOT 3
504 Sq Ft
0.012 Ac.
80'
70'
DOT 4
2,888 Sq Ft
0.066 Ac.
623
71,913 Sq Ft
1.651 Ac.
622
56,704 Sq Ft
1.302 Ac.
621
63,808 Sq Ft
1.465 Ac.
411.84'
S56°29'54"E 577.91'(TOTAL)
S56°29'54"E 565.31'
S56°29'54"E 457.97'
620
817'
810'
OK
2-15-07
am
INITIAL SYSTEM
* 400' TOTAL LENGTH
REPAIR SYSTEM
* 526' TOTAL LENGTH
SCALE 1" = 50'
W 80'
P 80' .08
R 80'
B 80' 87' Actual
O 80'
.08
REPAIR P.80'
REPAIR O-80'
REPAIR W 90'
REPAIR R 93'
REPAIR B 92'
REPAIR .09'
DOT 2
532 Sq Ft
0.012 Ac.
92' Actual
166.07'
LOT 391
ANTHONY G. RODDEN
DB 1351 PG 233
LOT 1594
ANTHONY J. KRALOVIC
DB 964 PG 1963

Lot 621 The Farms Fast Track Septic System Information

Number of Bedrooms	**4**
Basement or Crawl	**Crawl Space**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.3**
Primary System Type	**25% Reduction**
No. Lines	5 (See Table)
Total Linear Feet	400
Trench Width	3' min.
Trench Spacing	9' min.
Pump Required	Yes
Distribution Device	Pressure Manifold
Maintenance Agreement Required	No
Length and Diameter of Supply Pipe	300' of 2" SCH 40 PVC
Flow Rate through the system	27.5 gpm
Elevation head	Approx. 6'
Pressure head	2.0'
Friction head	4.9'
20% Contingency	2.6'
Total Head	15.5'
Pump Requirements	27.5 gpm @ 15.5' of head To be designed by installer.
Maximum Dosing Volume	240 gal -2.0 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. 8.7 min.
Check Valve	Yes
Siphon Break hole	No
Repair System	**25% Reduction**
Total Linear Feet	526
Repair Loading Rate	0.3

OF ENVIRONMENT AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH
ASTEWATER SECTION

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

WNER: Crescent Resources Farms V — APPLICATION DATE _____
DDRESS: _____ DATE EVALUATED: _____
OPOSED FACILITY: House — PROPOSED DESIGN FLOW (.1949): 480 — PROPERTY SIZE: _____
CATION OF SITE: Lot 621 — PROPERTY RECORDED: _____
ATER SUPPLY: ☐ Private ☒ Public ☒ Well ☐ Spring ☐ Other _____
ALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut — TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
		.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
Pit 201 L 2-4%	0-8	WK SBK SCL	SS NP FR	Br				
	8-20	Mo SBK C	FR SS/SP	Red				
	20-46	WK SBK CL	FR SS/SP	Red		F/c sap		0.3
7% L	0-3	Mo GR SL	FR SS/SP	Br				
	3-20	WK SBK C	FR SS/SP	Red				
	20-36	WK SBK CL	FR SS/SP	Red		Fsap		0.3
	36-58	MA FSL, sap	FR SS/SP	Red		FC inc @ boundary		
	0-3	WK GR SL	FR SS/SP	Br				
L	3-30	WK SBK C	FR SS/SP	Red				
*	30-34	MA SL sap	FR/Fi NS/NP	Yel Br		FC inclusions		0.3
10%	34-44	WK SBK CL	FR SS/SP	Red		Fsap inc		
	44-54	MA L sap	FR SS/SP	Red				
		* only on 1 wall						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
lable Space (.1945)		
m Type(s)		
.TAR		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____
EVALUATED BY: _____
OTHER(S) PRESENT: _____

IENTS: _____