S&ME

Health Dept. Copy

To: Iredell County Environmental Health Department

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

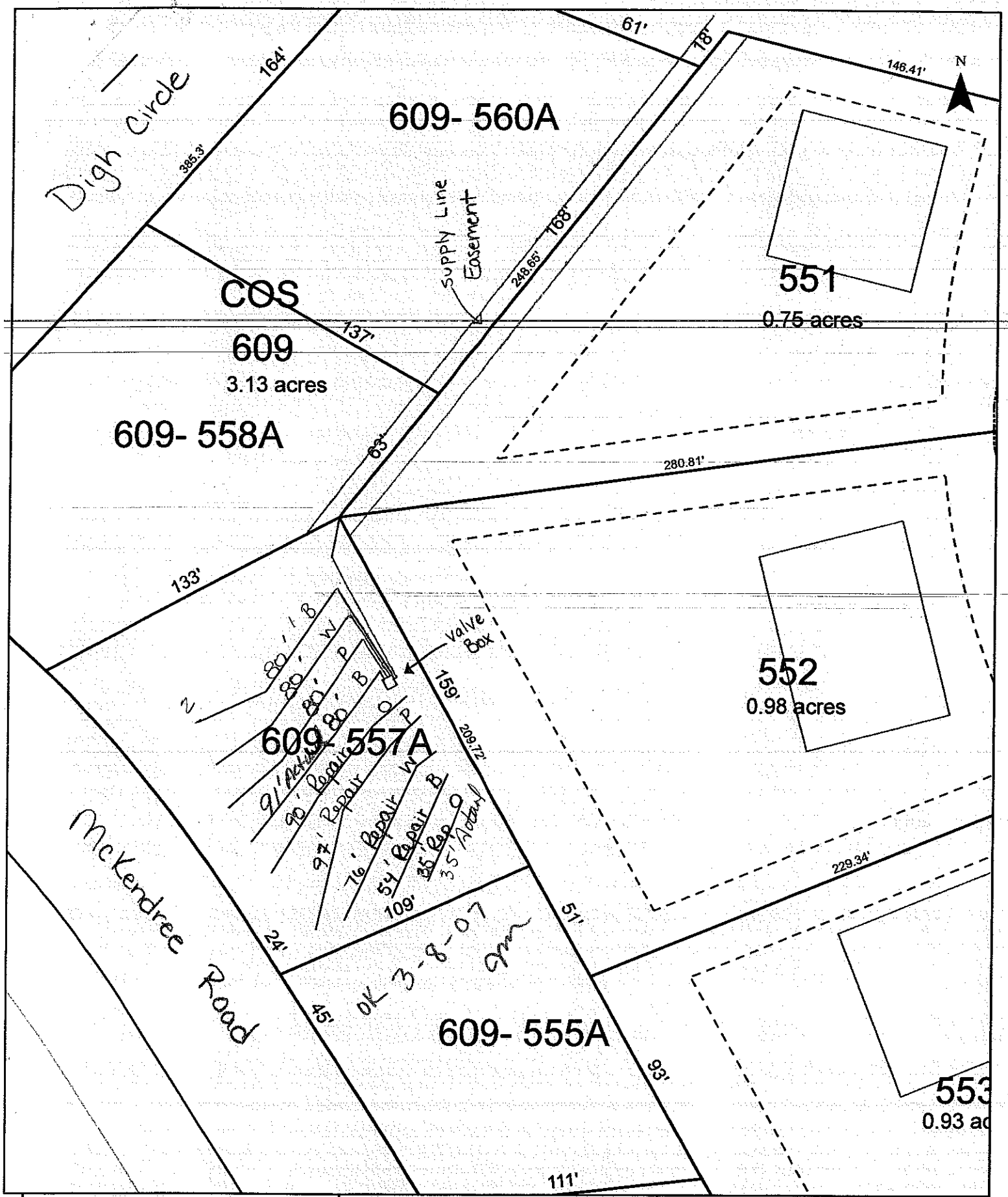
RE: Farms Phase V – Crescent Resources, LLC – Lot 557 Fast Track

Date: March 7, 2007

Attached is the Fast Track information required to place Lot 557 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.



Scale: 1 inch equals 50 feet	S&ME	The Farms - Phase V	FIGURE
Drawn by: JBP		Lot 557	2
Reviewed by: KS		Iredell County, NC	
Date: February, 2007	ENVIRONMENTAL SERVICES • ENGINEERING • TESTING	S&ME Project #1588-05-070	

Lot 557 The Farms Fast Track Septic System Information

Number of Bedrooms	4
Basement or Crawl	**Basement w/ Plumbing**
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	3' min.
Trench Spacing	9' min.
Pump Required	Yes
Distribution Device	Gate Valve Box w/ LPP Distribution
Maintenance Agreement Required	Yes
Length and Diameter of Supply Pipe	850' of 2.5" SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	36 gpm
Elevation head	Approx. 55'
Pressure head	3.0'
Friction head	7.7'
20% Contingency	13.1'
Total Head	78.8'
Pump Requirements	36 gpm @ 78.8' of head To be designed by installer.
Maximum Dosing Volume	259.2 gal -1.9 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	No
Repair System	**LP PPBPS**
Total Linear Feet	352

***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	System	Blue	LPPPBPS	80 endfed	825.0	18	18	1 per panel	5/32"
2	System	White	LPPPBPS	80 endfed		18	18	1 per panel	5/32"
3	System	Pink	LPPPBPS	80 endfed		18	18	1 per panel	5/32"
4	System	Blue	LPPPBPS	80 endfed		18	18	1 per panel	5/32"
5	Repair	Orange	LPPPBPS	90					
6	Repair	Pink	LPPPBPS	97					
7	Repair	White	LPPPBPS	76					
8	Repair	Blue	LPPPBPS	54					
9	Repair	Orange	LPPPBPS	35	820.0				
						Total: 72	Total: 72 (1 in each panel turned up)		
				Total System: 320'					
				Total Repair: 352'					

Tank	Red	1500 gal (2 compartment)	776.0
Pump Tank	Red	1500 gal.	776.0
House	Blue		780.0

Note: System and Repair located on septic easement 557A.
Elevations provided by 1 foot site specific topography map and should be verified by surveyor before obtaining an AFC.

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

OWNER: Farms V — APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: _____
PROPOSED FACILITY: House — PROPOSED DESIGN FLOW (.1949): 480 — PROPERTY SIZE: _____
LOCATION OF SITE: Lot 557 — 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)		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	
1	pit #3 L	0-20	Mo SBK/ WK ABK C	Fi/Fr SS/SP	Red Br		F sap		0.3
		20-39	Mo SBK C	FR SS/SP	Red				
		39-48	Mo SBK CL	FR SS/SP	Lt Red				
2	pit #4 L 5%	0-20	Mo SBK C	Fi/Fr SS/SP	Red		C/M sap		0.3 - 0.25
		20-36	Mo SBK C	Fi/Fr SS/SP	Red				
		36-48	MA SL sap	Fr ns/np	Yel Br				
3	pit #5 L	0-15	WK SBK SCL	FR SS/SP	Red Br		F sap		0.3
		15-44	Mo SBK C	FR SS/SP	Red				
		44-48	Mo SBK C	FR SS/SP	Red				
4	#1	0-8	mo gr scl	fr ss/sp	OK. Br				.25
		8-32	mo sbk C	fr ss/sp	Red Br				
		32-48	wk abk C	fr/fi ss/sp	Red Br few yel br				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

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

COMMENTS:

Pit #2

0.3

L 0-15 WK SBK CL FR ss/sp Red
15-44 WK ABK/SBK C FR ss/sp Red
44-58 WK ABK CL FR ss/sp Red F sap inc