Client copy

S&ME

Septic Plan
Approved 8/30/12
ICHD
M Dotson

August 28, 2012

Crescent Resources, LLC
PO Box 396
Terrell, North Carolina 28682

Attention: Mr. Donald Reid

Reference: **Technical Assistance with Fast Track Septic Permitting**
Lot 455, Section 6 CL&T
Ripplewater Lane
Iredell County, North Carolina
S&ME, Inc. Project No. 1588-05-068

Dear Mr. Reid:

S&ME, Inc (S&ME) has provided technical assistance to obtain a possible new, four bedroom septic Improvement Permit from the Iredell County Health Department (ICHD) for the above referenced lot. The technical assistance was performed in general accordance with S&ME Proposal No. 1584-12-P248 dated August 28, 2012. All ratings were determined in accordance with the "Laws and Rules for Sewage Treatment and Disposal Systems (15A NCAC 18A .1900)".

Attached is the Application for the Septic Improvement Permit, the Environmental Health Requirements form, and the ICHD Fast Track requirements presented to the ICHD on your behalf. The lot was originally permitted by the ICHD on September 12, 2003 for a 4 bedroom house pad. The 2003 Improvement Permit is still valid with the North Carolina House and Senate Bills suspending the permit expiration dates, but will expire on September 12, 2012. You are now requesting a new 4 bedroom Improvement Permit with a new house pad and a proposed pool since you have the lot under contract for sale. Since the lot was recorded in 1976, it is repair exempt and the septic system can be installed 5 feet from the property boundaries. Based on our conversations with the ICHD on August 28, 2012, they will consider this request as an Intermediate Relayout with a fast track fee of $195.

The property corners and lot lines were flagged by your surveyor. S&ME flagged the proposed septic drainfield and house pad on the site. The proposed septic lines, well location, house pad, and pool area were approximately sketched on the attached site plan you provided. This was a copy of the 1976 record map. The zoning setbacks required should be reviewed with the Iredell County Planning and Zoning to ensure the house can

be located on the lot as shown. Also, we recommend the buyer obtaining a well permit from the ICHD for the proposed well site prior to closing.

Once the septic area is permitted, it should be fenced off for protection during home construction. Access to the lot should only be by the proposed drive. There shall not be cuts of 2 feet or greater within 15 feet of any part of the permitted septic system. No fill shall be placed on the proposed drainfield. If any changes are made to the proposed site plan, they shall be approved by the ICHD prior to issuing the Authorization to Construct.

S&ME appreciates the opportunity to provide these services to you. The attached information is not an Improvement Permit or Authorization to Construct, and is only to assist you and the ICHD with the Fast Track site evaluation. The attached plan is not intended to be a Professional Engineer plan. The ICHD must approve each lot and only the ICHD can issue these permits. The ICHD should verify all soils and system specifications, required setbacks, and whether a professional engineer plan is required before permitting and/or septic system installation. Soil evaluations and system layouts are done based on interpretations of the rules governing wastewater treatment and disposal systems and are not guarantees for site approval or future septic system performance.

If you have any questions or require additional information please contact us at your convenience.

Sincerely,

S&ME, Inc.

Paul G. Penninger, L.S.S.
Senior Soil Scientist

MEH Rob Willcox, L.S.S.
Natural Resources Services Leader

Attachments:

1. ICHD Improvement Permit Application, and Health Department Requirements
2. Site Plan and System Specifications
3. 2003 ICHD Improvement Permit

Copy: ICHD

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Lot 455 Ripplewater Lane Fast Track System Specifications (8-28-12)

Number of Bedrooms	4
Basement or Crawl	**Partial Basement/Crawl**
Design Flow (gpd)	480
LTAR (gpd/ft2)	0.3
Primary System Type	**LP PPBPS**
No. Lines	4 (See Table)
Total Linear Feet	270
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	approx. 120' of 2 " SCH 40 PVC
Size of laterals	1 1/4" SCH 40 PVC
Flow Rate through the system	30.5 gpm
Elevation head	Approx.18'
Pressure head	3.0'
Friction head	approx. 3'
20% Contingency	4.8'
Total Head	28.8'
Pump Requirements	30.5 gpm @ 29' of head To be verified by installer and ICHD.
Maximum Dosing Volume	220 gallons max
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	244 shown (lot is repair exempt)
Repair LTAR	0.3

***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.**

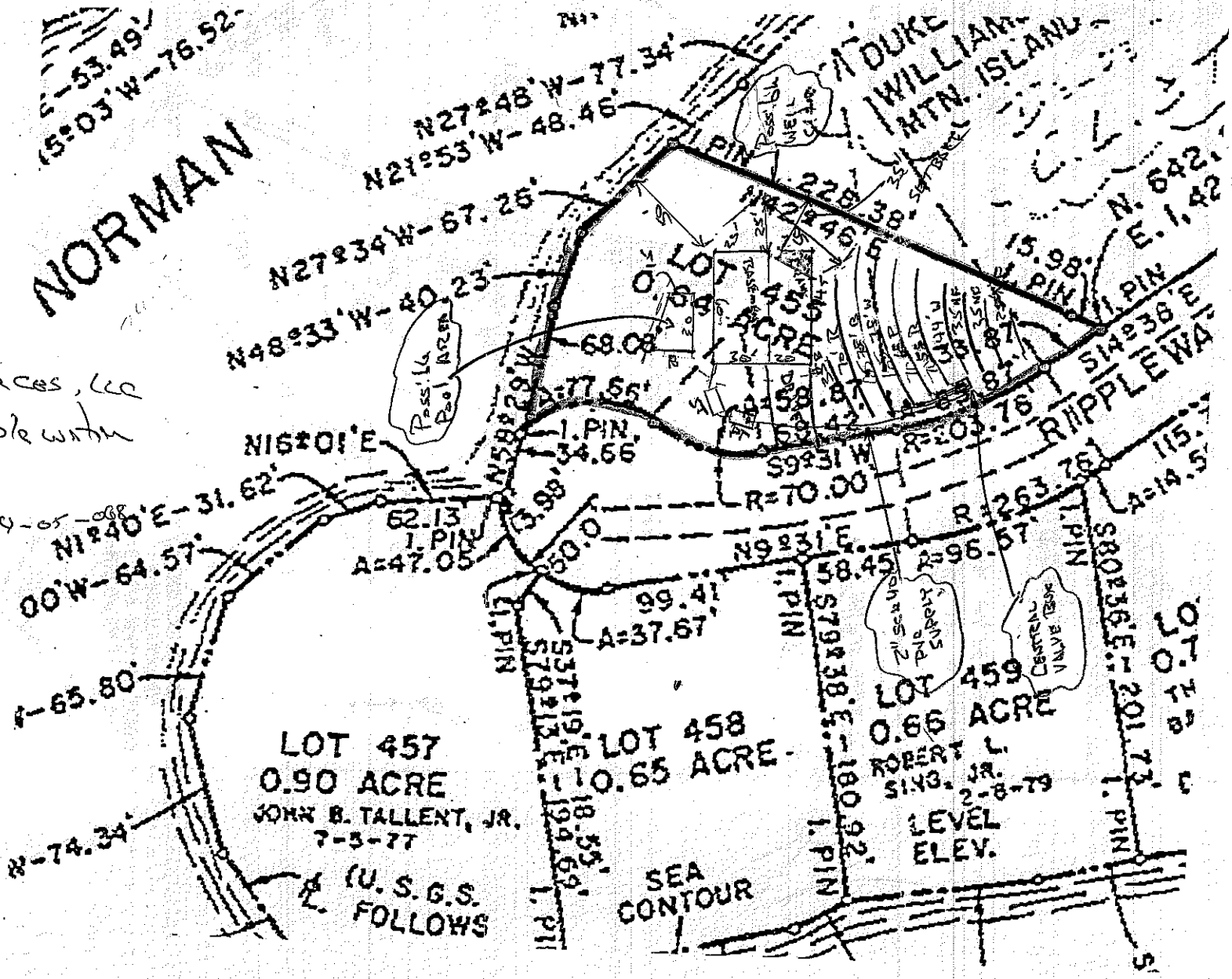
Table 1: Lot 455 Ripplewater Lane Fast Track Summary of Primary Line Specs. (8-28-12)

Line No.	Use	Line Color	System Type	Line Length (Ft.)	Rod Reading (Ft.)	Panels	Holes	Hole Spacing	Hole Size (In.)
1	System	red	LPPPBPS	~~55~~ 65	6.0	12	12	1 per panel	5/32"
2	System	pink	LPPPBPS	65	6.5	15	17	1 per panel	5/32"
3	System	white	LPPPBPS	75	6.9	17	17	1 per panel	5/32"
4	System	blue	LPPPBPS	75	7.7	17	17	1 per panel	5/32"
						Total: 61	Total:61 (1 in each panel turned up)		

Total System: 270' (267 required)
Total Repair: 244' shown (lot is repair exempt)

Tank		1500 gal (2 compartment)	
Pump Tank		1500 gal.	approx. 16
House	(FL)		11.9

Note: **Installer and ICHD shall verify all line locations, tank locations, and elevations prior to installation.**
System is to be installed according to any other ICHD requirements or policies.
These specifications are to satisfy the ICHD Fast Track LSS checklist and are not intended to represent an Engineered System Design.
Use trench depth on ICHD IP



Crescent Resources, LLC
Lot 455 Ripple with
Re-Layout
5 of 6 Sob 1589-05-08B
8-28-12
1"=50'

DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

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

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: _____ APPLICATION DATE _____
ADDRESS: _____ DATE EVALUATED: _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ PROPERTY SIZE: _____
LOCATION OF SITE: 455 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) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1		0-48	RC-cl sbk	Fr ss sp					
			Ind sap (a) 22"						
2		0-44	RC-cl sbk	Fr ss sp					
			Ind sap (a) 23"						
3									
4									

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: _____