NEW ICRD copy

S&ME

May 29, 2015

Harris Construction Group
9935D Rey Road, #210
Charlotte, North Carolina 28277

Attention: Mr. Bob Volles

Reference: Technical Assistance with Septic Permitting
Lot 567 The Farms Subdivision
Iredell County, North Carolina
S&ME, Inc. Project No. 1584-12-080B Phase 01

Dear Mr. Volles:

S&ME, Inc (S&ME) has provided technical assistance to obtain a possible new, four bedroom gravity, septic system permit on the above referenced lot from the Iredell County Health Department (ICHD). The technical assistance was performed in general accordance with S&ME Proposal No. 43-1500436 dated April 30, 2015.

Lot 567 was issued a 4 bedroom T&J Panel Improvement Permit by the ICHD in 2007. A Construction Authorization was issued in 2015 and you are nearing completion of the home on the lot. During a site meeting with you and Mr. Paul Kumar on April 22, 2015, you requested that S&ME assist with a possible pressure manifold 25% reduction system in the permitted septic area by placing part of the T&J Panel repair area between the house and the drain.

S&ME re-flagged the exiting septic lines for the new, proposed 25 Percent Reduction primary system, flagged proposed repair lines behind the house, and described one backhoe pit in the new repair area. Your surveyor staked the property corners.

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. The ICHD had previously evaluated and approved the soil and long term acceptance rate in the proposed primary system area.

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 ICHD may show any changes or modifications they want to the proposed system on the report or attached site 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.
Soil Scientist

Rob Willcox, L.S.S.
Senior Project Manager / Soil Scientist

Attachments:

1. New Construction Authorization Application, Proposed Site Plan and System Information
2. 2007 ICHD Septic Permit

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Approved 6-12-15 ALP

The Farms Lot 567 Fast Track System Information (5-6-15)

Harris Construction Group	
Number of Bedrooms	**4**
Basement or Crawl	**Crawl**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.25 per 2007 ICHD Permit**
Primary System Type	**25% Reduction**
No. Lines	6 @ 64 ft.; 2 @ 48 ft.
Total Linear Feet	480
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	~210' of 2.5" SCH 40 PVC
Flow Rate through the system	53.6 gpm
Elevation head	*Approx. 13'
Pressure head	2.0'
Friction head	Approx. 6.5'
20% Contingency	4.3'
Total Head	25.8'
Pump Requirements	53.6 gpm @ 25.8' 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. 4.5 min.
Check Valve	Yes
Siphon Break hole	yes
Repair System	**LP PPBPS**
Total Linear Feet	350' shown *320' Required*
Repair Loading Rate	0.25 to 0.3

Approved 6-12-15 ALP

The Farms Lot 567 Fast Track System Information (5-6-15)

Harris Construction Group

Table: Summary of Primary Nitrification Lines

Line No.	Use	Line Color	System Type	Line Length (Ft.)	*Rod Reading (Ft.)
1	System	orange	25% Reduction	48	0.8
2	System	blue	25% Reduction	48	0.8
3	System	pink	25% Reduction	64	1.1
4	System	orange	25% Reduction	64	1.1
5	System	blue	25& Reduction	64	1.2
6	Repair	pink	25& Reduction	64	2.4
7	Repair	Red	25& Reduction	64	3.7
8	Repair	orange	25& Reduction	64	5.7
				Total System: 480'	

Tank	white	1500 gal (2 compartment)	*Rod Reading (ft)
Pump Tank	white	~~4500 gal.~~ 1000 (FP)	5.4
House		Left Rear Corner	5.3

Manifold Information		
Tap Size (In.)	1/2	1/2
Tap Material	SCH 40 PVC	SCH 80 PVC**
No. Taps	6	2
Barrel Size (In.)	4	4
Barrel Material	SCH 80 PVC	SCH 80 PVC
Flow (gpm)/Tap	7.1	5.5

NOTES:

*** elevations must be verified by installer at installation and final tank placement.**

****Use 1/2 in SCH 80 Taps for two 48 ft lines.**

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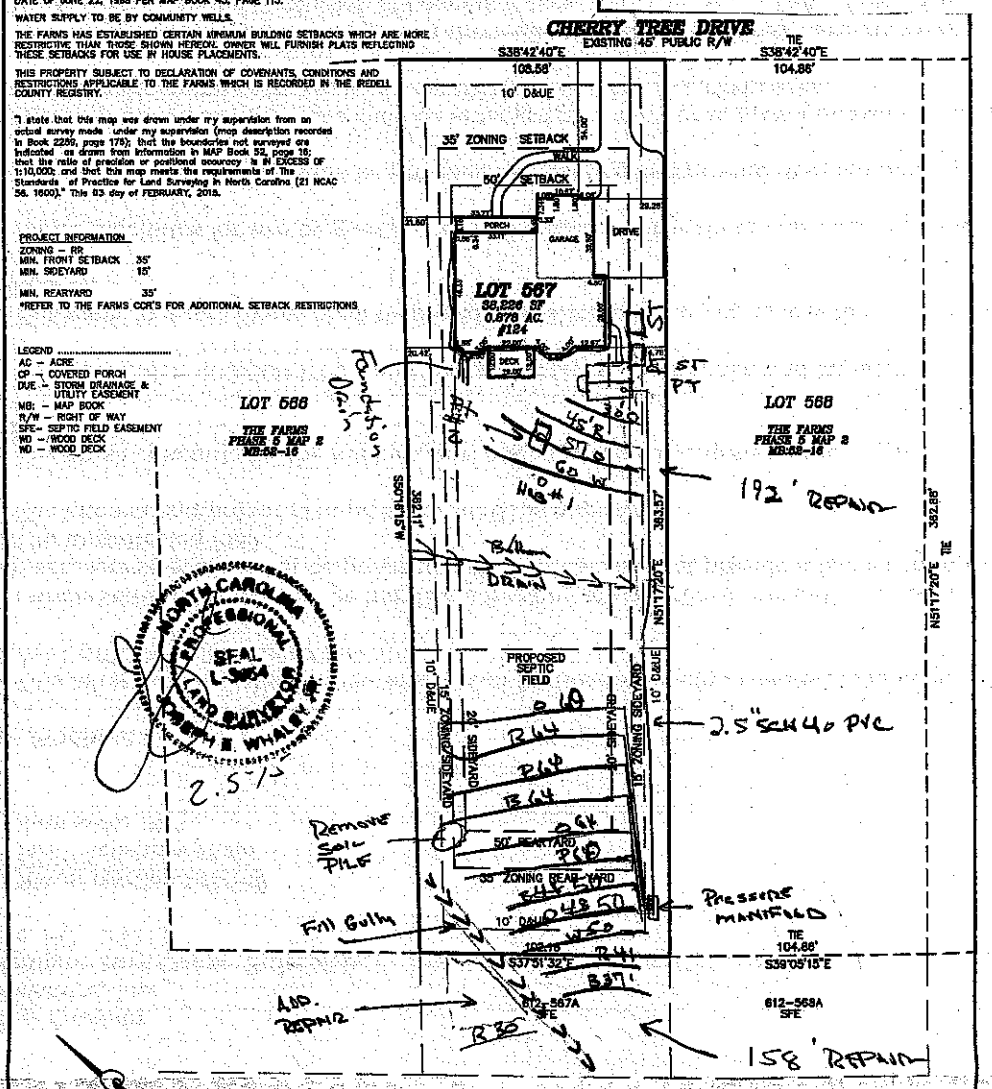
**Use 1/2 in SCH 80 Taps for two 45 ft lines.

NOTES
IRON PINS ON ALL CORNERS UNLESS OTHERWISE NOTED
AREAS WERE CALCULATED BY COORDINATE METHOD.
NO NCGS TRAVERSE WAS FOUND TO BE WITHIN 2000'
THIS PROPERTY SUBJECT TO ANY OTHER EASEMENTS, AGREEMENTS, OR RIGHTS-OF-WAY OF RECORD.
THIS PROPERTY MAY BE SUBJECT TO WETLANDS REGULATIONS. INDIVIDUAL PROPERTY OWNERS NEED TO REVIEW CURRENT GOVERNMENTAL REGULATIONS PRIOR TO CONSTRUCTION
THIS LOT HAS A 10' STORM DRAINAGE AND UTILITY EASEMENT WHICH RUNS WITH THE PERIMETER OF THE LOT.
SEWAGE DISPOSAL WILL BE BY INDIVIDUAL SEPTIC TANKS.
THIS PROPERTY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PANEL NO. 3703130200 C WITH AN EFFECTIVE DATE OF JUNE 22, 1998 PER MAP BOOK 45, PAGE 115.
WATER SUPPLY TO BE BY COMMUNITY WELLS.
THE FARMS HAS ESTABLISHED CERTAIN MINIMUM BUILDING SETBACKS WHICH ARE MORE RESTRICTIVE THAN THOSE SHOWN HEREON. OWNER WILL FURNISH PLATS REFLECTING THESE SETBACKS FOR USE IN HOUSE PLACEMENTS.
THIS PROPERTY SUBJECT TO DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS APPLICABLE TO THE FARMS WHICH IS RECORDED IN THE IREDELL COUNTY REGISTRY.

"I state that this map was drawn under my supervision from an actual survey made under my supervision (map description recorded in Book 2259, page 178); that the boundaries not surveyed are indicated as drawn from information in MAP Book 52, page 16; that the ratio of precision or positional accuracy is IN EXCESS OF 1:10,000; and that this map meets the requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56. 1600)." This 03 day of FEBRUARY, 2015.

PROJECT INFORMATION
ZONING – RS
MIN. FRONT SETBACK 35'
MIN. SIDEYARD 15'
MIN. REARYARD 35'
*REFER TO THE FARMS CCR'S FOR ADDITIONAL SETBACK RESTRICTIONS

LEGEND
AC – ACRE
CP – COVERED PORCH
DUE – STORM DRAINAGE & UTILITY EASEMENT
MB: – MAP BOOK
R/W – RIGHT OF WAY
SFE – SEPTIC FIELD EASEMENT
WD – WOOD DECK
WD – WOOD DECK



REVISED 02/03/2015

PRELIMINARY——NO EXISTING BUILDINGS
02/03/15

GRAPHIC SCALE
50 0 25 50 100
1 inch = 50 ft.

MAP FOR: PLOT PLAN FOR CYRAS CUSTOM HOMES

SCALE	TOWNSHIP	COUNTY	STATE	DATE
1" = 50'	DAVIDSON	IREDELL	N.C.	01/13/15

124 CHERRY TREE DRIVE
LOT 567 OF THE FARMS PHASE 5 MAP 2

SURVEYED
DRAWN TWH

YARBROUGH-WILLIAMS & HOULE, INC.
730 WINDSOR OAK COURT CHARLOTTE, NC., 28273
704-556-1990 NCBELS LICENSE # C-0475

MAP RECORDED 52-16
DEED RECORDED 2125-2070

HARRIS CONSTRUCTION GROUP
Sime Project 1584-12-080B Ph. 01
SITE PLAN MUST ACCOMPANY SIME WRITTEN REPORT