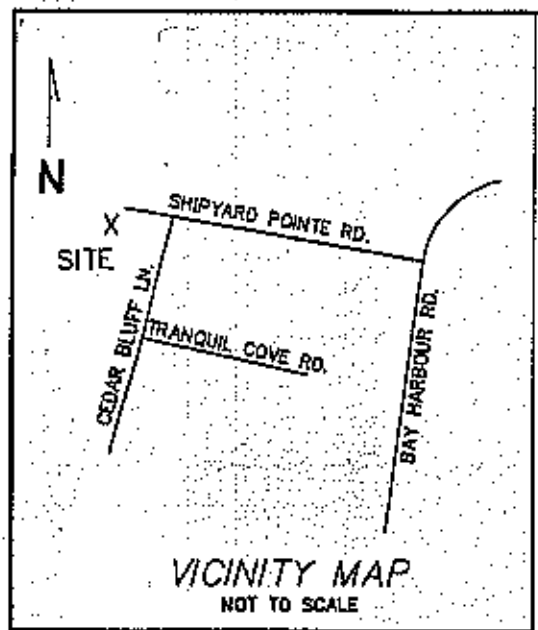


LEGEND

	PROPERTY LINE (P/L)
	RIGHT OF WAY (R/W)
	TIE LINE
	ADJOINING PROPERTY LINE FROM DEED OR PLAT
	BULDING SETBACK LINE
	FULL POND
	FEMA FLOODLINE
	FENCE
EIP	EXISTING #4 REBAR
SP	SCREENED PORCH
P	PORCH
TV	CABLE TELEVISION BOX
TPED	TELEPHONE PEDESTAL
SA	SEPTIC ACCESS
CONC	CONCRETE

REVISED 11/22/2014 – LOCATE STONE WALL ALONG SHORELINE & OWNERSHIP INFORMATION
REVISED 1/20/2015 – LOCATE SEPTIC FLAGS BY S&ME AND ADDITIONS
REVISED 1/29/2015 – POOL LOCATION
REVISED 2/2/2015 – POOL LOCATION

I, Thomas E. Williams, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book 1806, Page 1394, or other reference source AS NOTED); that the boundaries not surveyed are shown as broken lines drawn from information found in adjoining deeds and plats as noted; that the ratio of precision is 1 : 10,000+; and that this plat meets the requirements of The Standards of Practice for Land Surveying in North Carolina according to North Carolina Administrative Code Title 21, Chapter 56, Section 1600.

This survey is of an existing parcel or parcels of land and does not create a new street or change an existing street.

This 15th day of September, 2014.

THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY THOMAS E. WILLIAMS, PLS L-4718, ON FEBRUARY 2, 2016. THIS MEDIUM SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Thomas E. Williams, NCPLS 4718

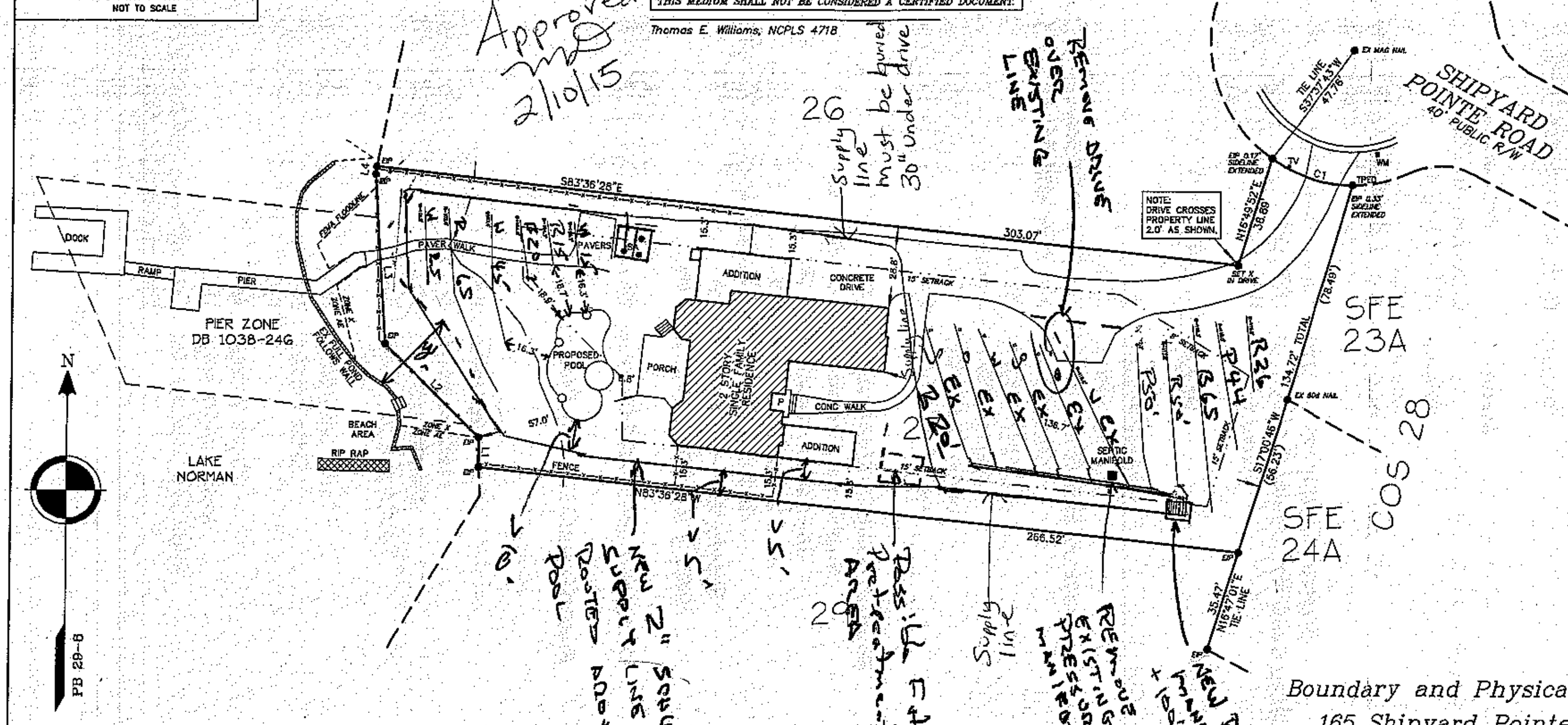
NORTH CAROLINA PROFESSIONAL LAND SURVEYOR SEAL L-4718 THOMAS E. WILLIAMS

CURVE TABLE

NUM	DELTA	ARC	RADIUS	BEARING	DISTANCE
C1	35°02'48"	30.58'	50.00'	S72°03'29"E	30.11'

LINE TABLE

NUM	BEARING	DISTANCE
L1	N01°17'48"W	10.33'
L2	N45°36'17"W	46.86'
L3	N3°30'03"W	59.29'
L4	N7°16'19"E	2.69'



THE HARBOUR LOT 27 PH. 6
SEPTIC SYSTEM EXPANSION SITE PLAN
S&ME PROJECT 1584-12-058 F
2-2-15
* SITE PLAN MUST ACCOMPANY S&ME 2-2-15 WRITTEN REPORT.

SCALE: 1" = 40'

NOTE: IRON STAKES AND MONUMENTS AS SHOWN (●), ALL OTHERS CALCULATED POINTS (O).

Williams Land Surveying, Inc.
License Number C-3638
274 Baymount Drive, Statesville, NC 28625
phone: (704)876-3998 ~ email: runningonfaith@bellsouth.net
file: 14\HARB27

NOTES:

1) Area determined by Coordinate Computation Method.
2) Property subject to any facts that may be disclosed by a full and accurate title search.
3) Property may be subject to any Easements and Right of Ways of record and those not of record if they exist.
4) A portion of Subject Property is located in a Special Flood Hazard Area (ZONE AE) as designated by the FEMA FLOOD INSURANCE RATE MAPS. See Map Number 3710462600J – Effective Date 3/18/2008.
5) No Geodetic Monument located within 2000' of Subject Property.
6) Setbacks shown per Plat Book 29 pages 6-9.
7) Current Zoning R-20.
9) Subject to Restrictions DB 937-128 and amended DB 1038-239.
10) Pier Zone shown per DB 1038-246. Dock extends beyond limits by 14.1'.

AREA SUMMARY
LOT 27
0.732 ACRE
31,904 SQ.FT.

Boundary and Physical Survey
165 Shipyard Pointe Road
LOT 27 OF
THE HARBOUR PHASE 6
Davidson Township, Iredell County, NC
PIN# 4626-20-1059 ~ D.B. 2323-761 ~ P.B. 29-8
Property of: Ronald K. Carroll

S&ME

Approved 2/10/15

February 2, 2015

Stonebridge Luxury Homes
PO Box 4297
Mooresville, North Carolina 28117

Attention: Mr. Ron Carroll

Reference: **Technical Assistance with Fast Track Septic Permitting**
Lot 27 Phase 6 - The Harbour Subdivision
Iredell County, North Carolina
S&ME, Inc. Project No. 1584-12-058F

Dear Mr. Carroll:

S&ME, Inc (S&ME) has provided technical assistance to obtain a possible four bedroom septic Improvement Permit from the Iredell County Health Department (ICHD) for the referenced lot. The technical assistance was performed in general accordance with S&ME Proposal No. 41-1500028 dated January 8, 2015.

Attached is the Application for the Septic Improvement Permit and the ICHD Fast Track requirements presented to the ICHD on your behalf. The lot was permitted by Mr. David Hinson, former ICHD Environmental Health Supervisor, in 2002 for a three bedroom 25 Percent Reduction primary system and a Low Pressure T&J Panel Repair with an 0.3 gallons per day per square foot (gpd/sqft) Long Term Acceptance Rate (LTAR). This system was installed in 2002.

You recently purchased the lot and obtained a 2014 Existing System Inspection from the ICHD to construct an addition to the existing home and a pool between the house and lake. You have now requested a new Improvement Permit to expand the existing system to four bedrooms.

The property corners and lot lines were flagged by your surveyor and the home expansion is under construction. S&ME flagged the proposed septic drainfield and placed 4 hand auger borings on the building lot for the soil evaluation. The proposed septic lines were located by your surveyor as shown on the attached site plan. The proposed pool location was spray painted on the ground surface and then located by the surveyor. The surveyor adjusted the pool location as shown on the attached site plan to allow the 100 Percent proposed repair area to meet the required setbacks.

We are proposing adding two 50 foot, 25 Percent Reduction lines to the existing system 25 Percent Reduction System and a new pressure manifold to expand the system to four bedrooms. The expanded system will use the same 0.3 gpd/sqft LTAR permitted in 2002 and recently approved with the existing system check by the ICHD. The existing septic and pump tank will be utilized and the supply line will be re-routed around the repair and

pool and tied into the existing supply line. The installer will determine if a new pump will be required for the increased gallons per minute flow.

The 100 percent repair area is proposed as a TS-II Pretreatment T&J Panel System. The panel lines installed in the lake buffer do not receive a 50 Percent reduction and are flagged at convention trench length (one bedroom = 133 ft. conventional length at the permitted LTAR). Two Hundred and five feet of proposed repair is flagged outside the buffer for three bedrooms of repair.

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. The concrete drive will be removed where it encroaches on the existing system. There shall not be cuts of 2 feet or greater within 15 feet of any part of the permitted septic system or repair area. The pool shall be 15 feet from the tanks and drainfield and 10 feet from the supply line.

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.
Soil Scientist

Rob Willcox, L.S.S.
Senior Project Manager

Attachments:

1. ICHD Improvement Permit Application and Existing Permits
2. Site Plan and System Specifications
3. Soil Profile Descriptions

Copy: ICHD
T:\Projects\2012\ENV\1584-12-058 Stonebridge Luxury Homes\1584-12-058F The Harbour Lot 27\The Harbour Summary Letter.doc

The Harbour Lot 27 Phase 6 Fast Track System Information (2-2-15)

Stonebridge Luxury Homes, S&ME Job No. 1584-12-058F

Number of Bedrooms	**3 Bdr. Expanson to 4 Bdr.**
Basement or Crawl	**Crawl**
Design Flow (gpd)	**480**
Primary System LTAR (gpd/ft2)	**0.3 (LTAR in 2002 permit)**
Primary System Type	**25% Reduction**
No. Lines	6 @ 50 existing, add 2 @ 50 ft.
Total Linear Feet	Add 100 ft for 400 ft total
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	~440' of 2" SCH 40 PVC
Flow Rate through the system	44 gpm
Elevation head	*Approx. 21'
Pressure head	2.0'
Friction head	Approx. 19'
20% Contingency	8.4'
Total Head	50.4'
Pump Requirements	44 gpm @ 50.4' 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. 5.4 min.
Check Valve	Yes
Siphon Break hole	No
Repair System	**LP PPBPS (T&J Panel) with TS-II Pretreatment**
Total Linear Feet	333' - one bedroom in lake setback designed at conv. Length (340 ft showr
Repair Loading Rate	0.3

The Harbour Lot 27 Phase 6 Fast Track System Information (1-26-15)

Stonebridge Luxury Homes, S&ME Job No. 1584-12-058F

Table: Summary of Primary Nitrification Line Specifications

Line No.	Use	Line Color	System Type	Line Length (Ft.)	*Elevation (Ft.)
1	System	Green	25% Reduction	50	Existing
2	System	Orange	25% Reduction	50	Existing
3	System	White	25% Reduction	50	Existing
4	System	Green	25% Reduction	50	Existing
5	System	Orange	25% Reduction	50	Existing
6	System	White	25% Reduction	50	Existing
7	System	Pink	25% Reduction	50	777.3
8	System	Red	25% Reduction	50	777.8
				Total System: 400'	

1000 Existing

Tank		~~1500~~ gal (2 compartment)	*Elevation (ft)
Pump Tank		1000 gal.	Approx. 766
House		Front, Right Corner	Existing

Manifold Information	
Tap Size (In.)	1/2
Tap Material	SCH 80 PVC
No. Taps	8
Barrel Size (In.)	4
Barrel Material	SCH 80 PVC
Flow (gpm)/Tap	5.5

NOTES:

***Elevations from surveyor and must be verified by installer at installation.**

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Sheet 1 of 1
PROPERTY ID #: 46262010597
COUNTY: Iredell

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**
(Complete all fields in full)

OWNER: Stonebridge Lux. Homes
ADDRESS:
PROPOSED FACILITY: 4 Bd
LOCATION OF SITE: 145 Shipyard
APPLICATION DATE
DATE EVALUATED: Jan 15
PROPOSED DESIGN FLOW (.1949): 480
PROPERTY SIZE: 0.73
PROPERTY RECORDED: 1997
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

Approved MM 2/10/15

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L 5-10%	0-3	Fragmental	—	br				PS .3+
		3-20	SBK C	fm SS/SP	red				
		20-60	WSBK Cl	fm SS/SP	red yell f gran	60"	⊖	⊖	
2	L 5-10%	0-4	WSBK Cl	fm SPSS	br				PS .3+
		4-24	SBK C	fm SS/SP	red				
		24-48	SBK Cl	fm SS/SP	yel red	f SAP			
					⊖	48	⊖	⊖	
3	C ~10%	0-4	WSBK scl	fm SS/SP	br				PS .3
		4-29	MSBK C	fm SS/SP	red yell f	kaolinite, pine root			
		29-60	WSBK	fr SS/SP	red yel, f	SAP, pine root			
					⊖	60	⊖	⊖	
4	C ~10%	0-7	WSBK scl	fm SS/SP	br				PS .3
		7-26	MSBK C	fm SS/SP	red f yell	kaolinitic/mica			
		26-99	WSBK scl	fm SS/SP	yel red	f yell MP, c	SAP, f quartz		
					⊖	49	⊖	⊖	

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	25%/-	PPGPS
Site LTAR	-3	partially TS-11 -3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: PGP - 2002 by DH ICHD
OTHER(S) PRESENT: * must be Approved by ICHD.

COMMENTS: Expansion of 2Bd to 4Bd. 2002 ICHD Report.