DENR/DEH

ON-SITE WASTEWATER SECTION

Sheet 1 of 3
PROPERTY ID #: 9305
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Maurice Morris
ADDRESS: 173 Perrin Dr. Mooresville NC
PROPOSED FACILITY: SFR
PROPOSED DESIGN FLOW (.1949): 360 GPD
LOCATION OF SITE: Same
APPLICATION DATE
DATE EVALUATED:
PROPERTY SIZE: .837 Acre
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
P 1	LSS 7%	0-7	CL SBK	Fi, SS, SP	Chroma 2 @ 42" Mang. @ 39"	39"	4	39"	.25 Above 39"
		7-34	RC, SBK	Fi, S, SP					
		35-63	Mass. Sap w/	Clay Incl.					
P 2	LSS 8%	0-8	CL, SBK	Fr, SS, SP	Chroma 1 @ 43"	64"	N/A	43"	.25 Above 43"
		8-30	RC, SBK	Fi, S, SP					
		30-43	CL/C, SBK	Fi, SS SP					
		43-64	C, ABK						
P 3	TS 8%	0-6	CL, SBK	Fr, SS, SP	Chroma 2 @ 32" Grey @ 32"	64"	N/A	32"	.25 Above 32"
		6-17	C, SBK	Fi, S, SP					
		17-32	C, SBK	Fi, SS, SP					
		32-64	C, ABK	Fr, SS, SP					
P 4	7%	0-10	Fill		Chroma 2 @ 28"	64"	N/A	28"	.225 17"-34"
		10-17	C, SBK	Fi, S, SP					
		17-26	CL/C, SBK	Fi, SS, SP					
		26-34	CL, WSBK	Fi, SS, SP					
		34-64	C/CL, Prismatic						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	Ps	Ps
System Type(s)	25%	25% / Drip
Site LTAR	.25	.25 / .1

OTHER FACTORS (.1946): —
SITE CLASSIFICATION (.1948): TS
EVALUATED BY: Shane Cushion
OTHER(S) PRESENT: Tom Shuck, Shannon Davidson

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 9305
DATE OF EVALUATION: _____
COUNTY: Craven

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
P 5	LL 5%	0-8	CL, SBK	Fr, SS, SP	Chroma 2 @ 26"		SAP @ ~30"	26"	.25 above 26"
		8-26	RL, SBK	Fr, SS, SP					
		26+	Mass Sap						
P 6	LL 5%	0-8	CL, SBK	Fr, SS, SP	Chroma 2 @ 18"	18"	SAP @ ~25"		.225-.25 above 18"
		8-18	BC, SBK	Fi, SS, SP					
		18+	Mass Sap						
P 7		0-8	Fill		wk Few V/B's	26"	N/A	N/A	.25 8-26"
		8-26	C, SBK	Fr, SS, SP					

COMMENTS: _____

LEGEND

use the following standard abbreviations

LANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL .1955 LTAR*	LPP .1957 LTAR*	MINERALOGY/ CONSISTENCE	STRUCTURE
CC (Concave Slope) CV (Convex Slope) D (Drainage Way) DS (Debris Slump) FP (Flood Plain) FS (Foot Slope) H (Head Slope) L (Linear Slope) N (Nose Slope) R (Ridge) S (Shoulder Slope) T (Terrace)	I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4	NEXP (Non-expansive) SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain) M (Massive) CR (Crumb) GR (Granular) SBK (Subangular Blocky) ABK (Angular Blocky) PL (Platy) PR (Prismatic)
	II	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3		
	III	Si (Silt) SiCL (Silty Clay Loam) CL (Clay Loam) SCL (Sandy Clay Loam) SiL (Silt Loam)	0.6 - 0.3	0.3 - 0.15		
	IV	SC (Sandy Clay) SiC (Silty Clay) C (Clay)	0.4 - 0.1	0.2 - 0.05		
		O (Organic)	None	None		

MOIST	WET
VFR (Very Friable)	NS (Non-sticky)
FR (Friable)	SS (Slightly Sticky)
FI (Firm)	S (Sticky)
VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
EFI (Extremely Firm)	NP (Non-plastic)
	SP (Slightly Plastic)
	P (Plastic)
	VP (Very Plastic)

*Adjust LTAR due to depth, consistence, structure, soil wetness, landscape, position, wastewater flow and quality.

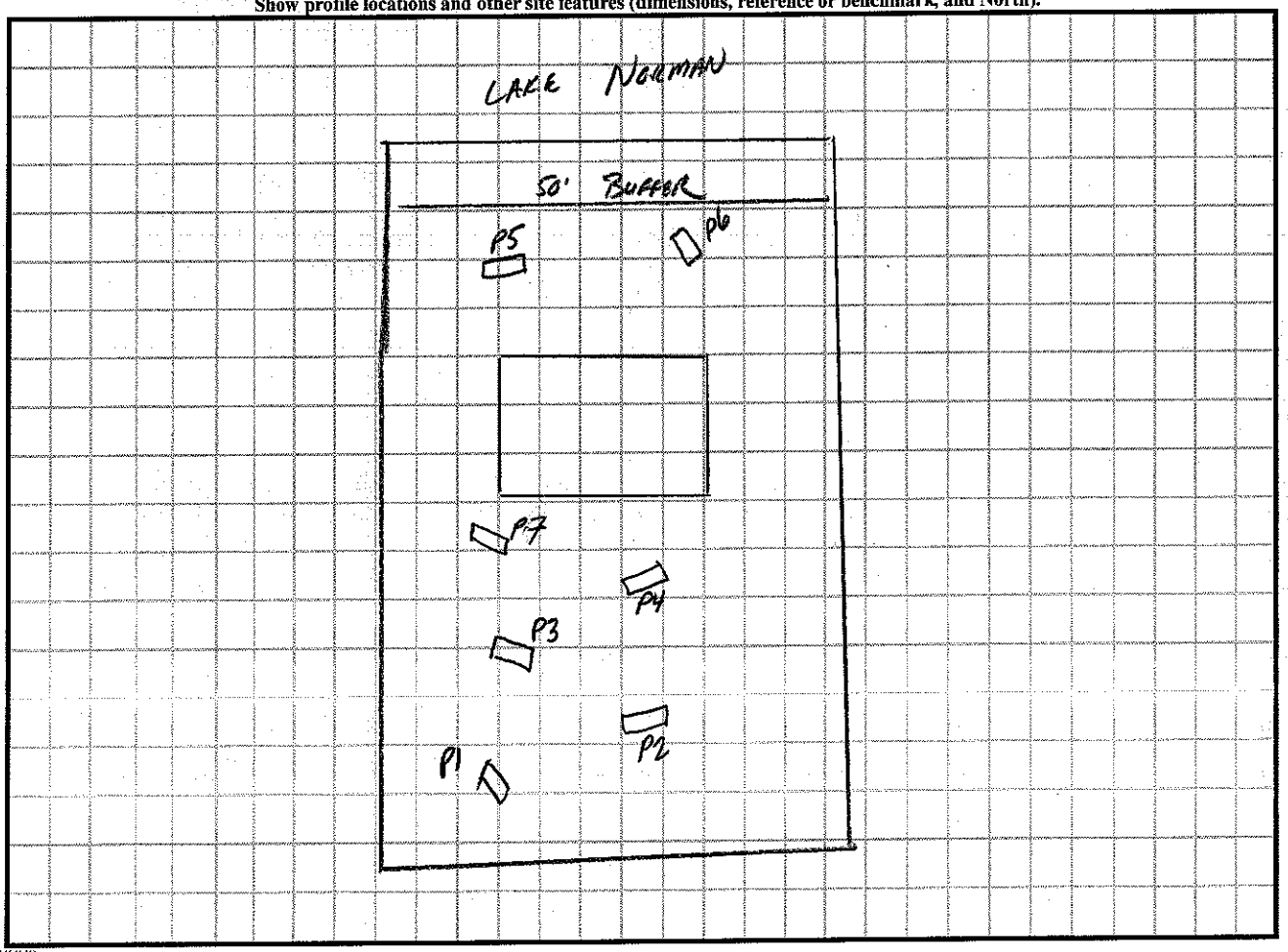
NOTES

HORIZON DEPTH	In inches below natural soil surface
DEPTH OF FILL	In inches from land surface
RESTRICTIVE HORIZON	Thickness and depth from land surface
SAPROLITE	S(suitable) or U(unsuitable)
SOIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
CLASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

Evaluation of saprolite shall be by pits.

Long-term Acceptance Rate (LTAR): gal/day/ft^2

Show profile locations and other site features (dimensions, reference or benchmark, and North).



DENR (######)
Review (#####)

for ON-SITE WASTEWATER SYSTEM

APPLICATION DATE: _____
OWNER: _____ DATE EVALUATED: 9-10-15
ADDRESS: _____ PROPERTY SIZE: _____
PROPOSED FACILITY: _____ PROPOSED DESIGN FLOW (.1949): _____ PROPERTY RECORDED: _____
LOCATION OF SITE: 173 Perrin Drive
WATER SUPPLY: ☐ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____ TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed
EVALUATION METHOD: ☐ Auger Boring ☒ Pit ☐ Cut

PROFILE #	.1940 ~~LANDSCAPE~~ POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	side slope	0-7"	Clay Loam SBK	Baked Dry + Firm, SS, Sp, Sexp					0.25
		7-34	Clay SBK w/ some Sapp	Firm, Stidy, Sexp, Sp					
		35-63"	Sapprolite	—	Chroma 2 grey redox @ 42"		Black mucky Sapprolite @ 39"		
			w/ some clay mixed in						
2	side slope	0-8	clay Loam SBK	Dry Loose, SS, Sp, Sexp	some mixed gravels				0.25
		8-30	Clay SBK	moderately Firm, Sticky, Sp, Sexp					
		30-43	w/ Clay SBK w/ Manganese Nodules	Firm, SS, Sp, Sexp					
		43-64	Clay	w/ Chroma 2 greys @ 43"	43"				
3	Toe slope	0-6	Clay Loam SBK	Dry Loose, SS, Sp, Sexp					0.25
		6-17	Clay SBK	Firm, Stidy, Sp, Sexp					
		17-32	Clay SBK w/ manganese nodules	Firm, SS, Sp, Sexp	Chroma 2 (yellow) @ 32" + white gleying @ 39				
		32-64	Clay	Slightly Firm, SS, Sp, Sexp					
4	Toe Slope	0-10	Fill	Light/Gray Predgis material					0.25
		10-17	Clay SBK	Firm, Stidy, Sp, Sexp	28" redox Chroma 2			Columnar/ Prisms @ 30"	
		17-26	CL/Clay SBK w/ Manganese nodules	Firm, SS, Sp, Sexp					
		26-34	Clay Loam weak Prisdic	Firm, SS, Sp, Sexp					
		34-64	Clay / Clay Loam Prismatic	Slightly Firm, SS, Sp, Sexp					

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: _____

ON-SITE WASTEWATER SECTION

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

APPLICATION DATE ________
DATE EVALUATED: ________
PROPERTY SIZE: ________
PROPERTY RECORDED: ________

OWNER: ________
ADDRESS: ________
PROPOSED FACILITY: ________ PROPOSED DESIGN FLOW (.1949): ________
LOCATION OF SITE: ________
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	
TH 1	Behind Proposed House	0-6	Topsoil / Clay Loam Dry SBK	Loose Friable, SS, Sp, Sexp	Fill?				N/A Need Pits
		6-14	Clay Loam SBK/weak ABK	Loose Friable, SS, Sp, Sexp					
		14-43	Saprolite - Replaced	———					
		43-47	~~Fill [Black]~~	———					
			Sapprolite	[Black] efforceses					
TH 2	50' from Dock.	0-6	Topsoil / Clay Loam Dry SBK	Loose Friable, SS, Sp, Sexp	Fill?				0.3 to 0.25 @ Depth > 30"
		6-13	SBK Clay Loam some sand mixed	Friable, SS, Sp, Sexp					
		13-45"	Heavy Clay loam to Clay w/ Saprolite intrusions (clay	Loosely Firm, Sticky, Sp, Sexp					

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: ________

IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 212810

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4645-46-9305

APPLICANT: Chad Holloway (Maurice Morris: owner) APPLICANT ADDRESS: 1200 Cleveland Drive, Mooresville, NC

SITE ADDRESS: 173 Perrin Drive PHONE: 704-872-4400 ALT. PHONE: 704-746-7094

SITE DIRECTIONS: South on Rt 21, Left onto Alcove Rd, Right onto Perrin Drive, site is on left

SUBDIVISION: Waters Edge Phase II SECTION: LOT # 24 LOT AREA: 0.837 acres DESIGN FLOW: 360 gal/day L.T.A.R.: 0.25

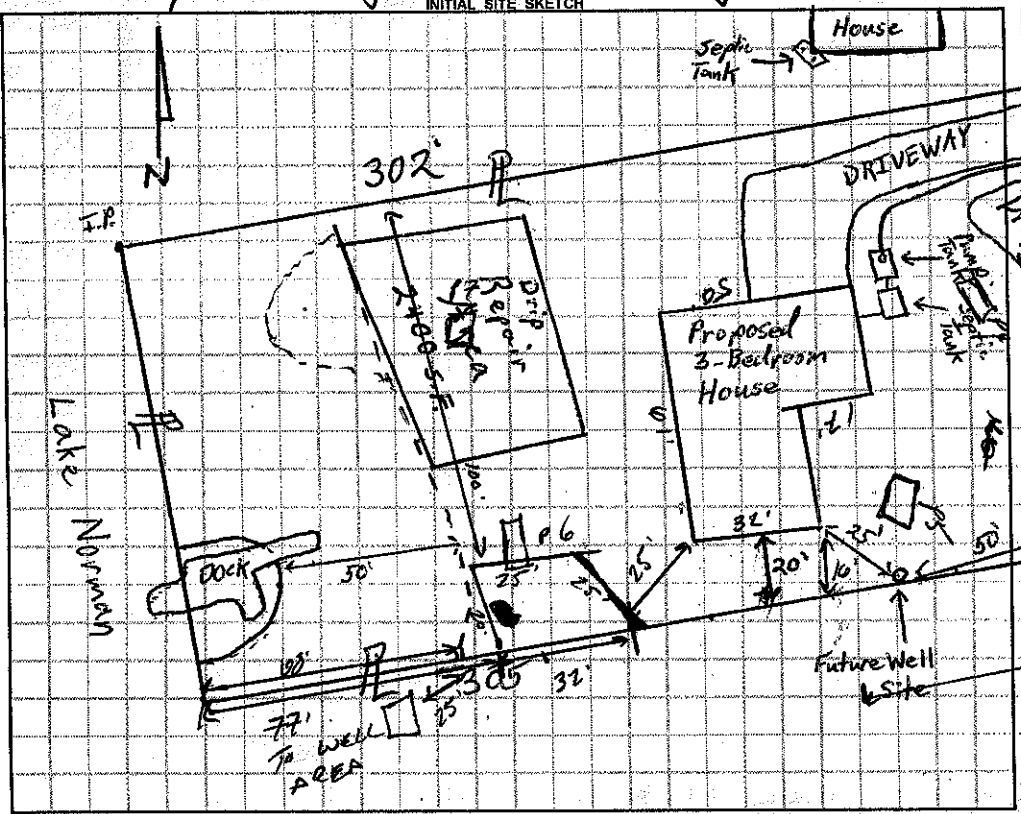
Septic Tank	1000 (gal)	STB	Date	☒ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI	☒ Residence	No. Bedrooms 3
Pump Tank	1000 (gal)	PT	Date	System Description: pump/manifold - chamber[36] (w/ a 25% reduction)		☐ Business	No. Persons 4
Pump Make		Model	Serial #	Repair System Description: Drip		☐ Other	No. Employees
# Nitrification Fields	1	# Lines 4	Linear Ft: 360'	Maintenance Agreement Required: ☐ YES ☐ NO		☐ Slab	☒ Crawl Space
Trench Width	36"	Max. Trench Bottom Depth	See comments	Gravel Depth N/A	☐ GRAVITY ☒ PRESSURE	☐ Basement w/plumbing	☐ Basement w/o plumbing

Water Supply: ☒ Private ☐ Public ☐ Community

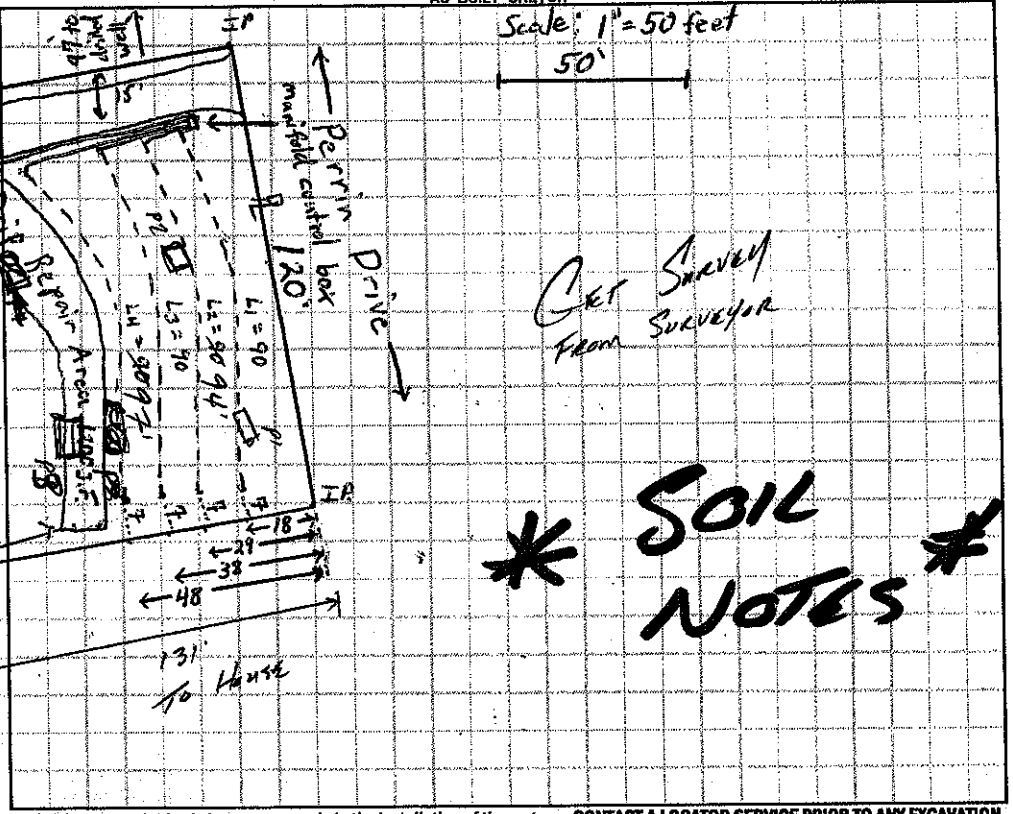
Comments / Conditions: Trench installation depth must be at 20" deep on the high side of the trench wall and at 17" deep on the low side [3" difference for 8% slope correction. 1" of clean fill cover will be needed to provide the system with the necessary 6" of cover.

The top 10" of existing fill material in front yard repair area will need to be removed when utilization of the repair area becomes needed. Follow all N.C. septic rules

INITIAL SITE SKETCH



AS BUILT SKETCH



Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

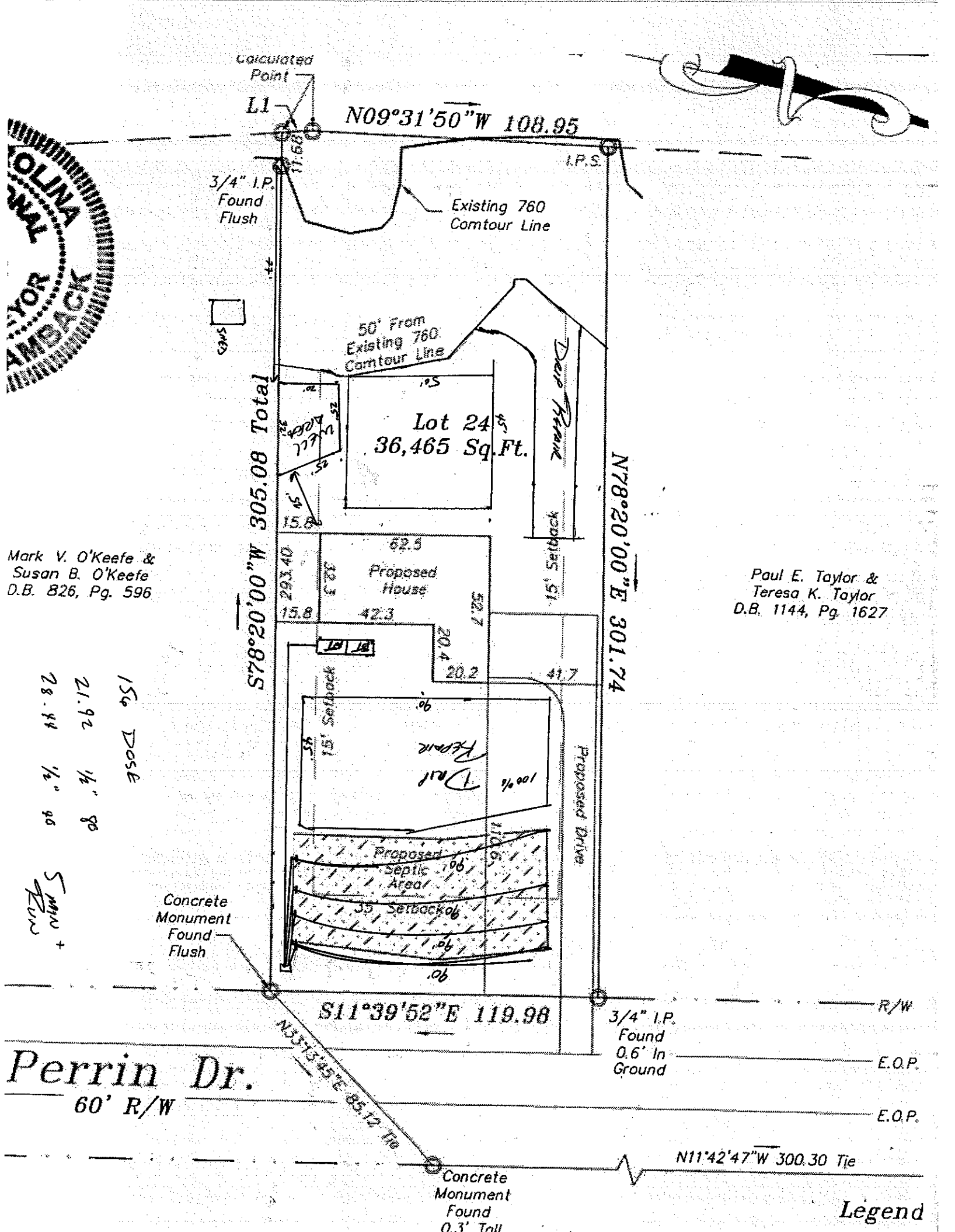
☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☒ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☒ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: Installed by:

IMPROVEMENT PERMIT by: [signature] Date: 9-11-15 OPERATION PERMIT by: Date:

AUTHORIZATION TO CONSTRUCT by: [signature] Date: 9-11-15 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK


Calculated Point
L1
N09°31'50"W 108.95
I.P.S.
3/4" I.P. Found Flush
Existing 760 Comtour Line
50' From Existing 760 Comtour Line
Lot 24
36,465 Sq.Ft.
Deep Creek
Well
S78°20'00"W 305.08 Total
N78°20'00"E 301.74
Proposed House
62.5
42.3
20.2
41.7
15' Setback
35' Setback
Proposed Septic Area
Proposed Drive
Concrete Monument Found Flush
S11°39'52"E 119.98
3/4" I.P. Found 0.6' In Ground
N33°13'45"E 85.12 Tie
N11°42'47"W 300.30 Tie
Concrete Monument Found 0.3' Toll
Mark V. O'Keefe & Susan B. O'Keefe D.B. 826, Pg. 596
Paul E. Taylor & Teresa K. Taylor D.B. 1144, Pg. 1627
Perrin Dr.
60' R/W
R/W
E.O.P.
E.O.P.
Legend