ROLLANS *SOIL & ENVIRONMENTAL SERVICES*

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Attached is a design proposal for a gravity PPBPS system for a 3 Bedroom single family residence at Harbor Watch Subdivision lot 10 Iredell County, North Carolina.

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June 2, 2005
Design by: Rollans Soil and Environmental Services

GRAVITY 4-BEDROOM SYSTEM
FOR WASTEWATER TREATMENT

Owner: Gary Voorhees
Att: Steve Pelchat
Address: 119 Kensington St
Mooresville, NC 28117
Phone: (704) 528 - 3999
County: Iredell
Location: Harbor Watch lot 10

Source of Wastewater Flow: 3 Bedroom single family residence
Estimated Daily Wastewater Production: 360 gpd
System Flow: Gravity/On-Demand

Design Specifications

System Type: PPBPS
Drainfield Size: 210 linear feet
Loading Rate: 0.3 gpd/ft.^{2}
Depth of Gravel in Trench: NA
Gravel Size: NA
Trench Depth: 36 in.
Trench Width: [redacted]24"
Septic Tank Size: 1000
Pump Tank Size: NA

Estimated Supply Line Length: 15
Supply Line Diameter: 3 in. sch. 40
Supply Line Volume: NA
Dosing Volume: NA
Supply Manifold: NA
Supply Manifold Length: NA
Supply Manifold Volume: NA

Recommended Float Controls: NA

Recommended Control Panel:

Pressure Head: NA
Friction Head: NA
Elevation Head: NA
Total Dynamic Head: NA

Threaded Union: NA
Gate Valves: NA
NA
Check Valves: NA
Anti-Siphon Hole: NA

Recommended Pump: NA

NA
NA

Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services

Harbor Watch lot 10
DESIGN INFORMATION

DESIGN FLOW:	360
SOIL APPLICATION RATE:	0.3 gpd/ft.^{2}
TOTAL AREA TRENCH BOTTOM:	420 sq ft
TOTAL LATERAL LENGTH:	210
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	200
DISTRIBUTION METHOD	Drop Boxes
SUPPLY LINE LENGTH:	15'
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1000 gal.
PUMP TANK SIZE:	NA
RECOMMENDED PUMP:	NA

HARBOR WATCH / LOT #100

Project #: 01-1099

June 2
~~April 27,~~ 2005

LAYOUT FOR 4 BEDROOM HOME

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		0.0			200.00		
INSTR. 1			200.00				
HOUSE CNR				158.90	158.90		
S. TANK				153.97	153.97		
1	ORANGE	REPAIR		150.80	150.80	25	25
2	***BLUE***			***149.97***	***149.97***	***74***	***70***
3	ORANGE	REPAIR		148.30	148.30	74	70
4	BLUE/ORANGE	REPAIR		145.30	145.30	74	70
5	***BLUE***			***142.55***	***142.55***	***74***	***70***
6	***ORANGE***			***140.22***	***140.22***	***74***	***70***
7	BLUE	REPAIR		137.30	137.30	64	60
					Total	**459**	**435**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	INNOVATIVE SYSTEM	DISTRIBUTION
****System***	***210***	***0.30***	***MOD.***	***0.30***	***PPBPS***	***GRAVITY***
Repair	225	0.30	*MOD.*	0.30	PPBPS	LOW PRESSURE

Notes:

**TMB is located on top of rebar noted on site plan
**TBM is assumed to be 200.00 ft
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet 1 *of* ___
PROPERTY ID #: _____
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

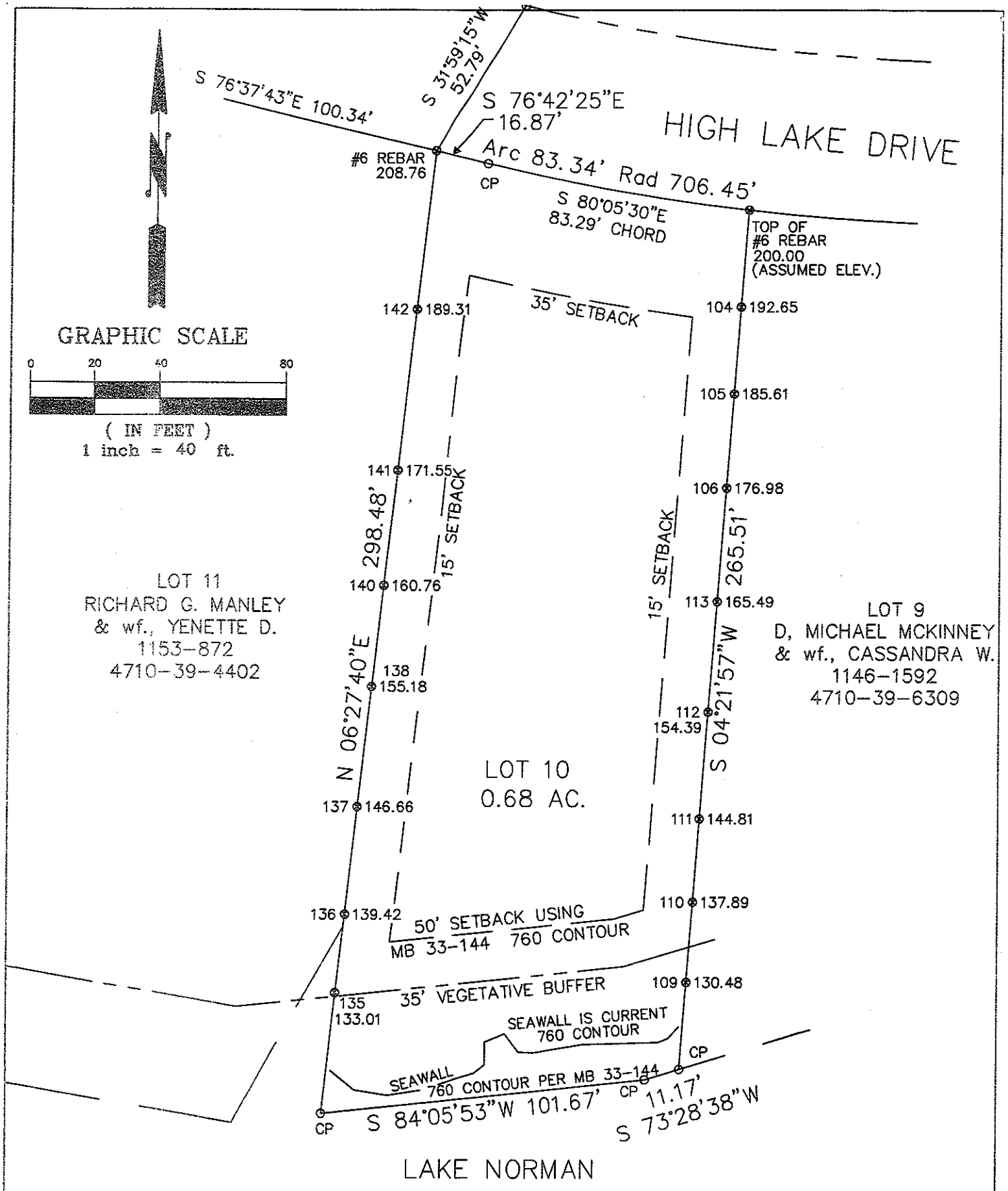
OWNER: Gary Voorhees APPLICATION DATE 5/27/05
ADDRESS: 119 Kensington St Mooresville, NC 28117 DATE EVALUATED: 5/31/05
PROPOSED FACILITY: RES PROPOSED DESIGN FLOW (.1949): 360gpd PROPERTY SIZE: _____
LOCATION OF SITE: Harbor Watch lot 10 PROPERTY RECORDED: Yes
WATER SUPPLY: ☑ Private ☐ Public ☐ Well ☐ 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	
A 1	Linear 17%	0-18	RC SBK	FRI SSSP SEXP	N/A	49	N/A	N/A	PS .3 GPD/FTSQ
		18-49	RCL MWSBK	FRI SSSP SEXP					
B 2	Linear 17%	0-8	BSCL GR	FRI SSSP SEXP	N/A	52	N/A	N/A	PS .3 GPD/FTSQ
		8-29	RC SBK	FRI SSSP SEXP					
		29-52	RCL MWSBK	FRI SSSP SEXP					
C 3	Linear 17%	0-3	BSCL GR	FRI SSSP SEXP	N/A	53	N/A	N/A	PS .3 GPD/FTSQ
		3-21	RC SBK	FRI SSSP SEXP					
		21-53	RCL MWSBK	FRI SSSP SEXP					
D 4	Linear 17%	0-6	COMPACTED CL	FI SSSP SEXP	N/A	60	N/A	N/A	PS .3 GPD/FTSQ
		6-26	RC SBK	FRI SSSP SEXP					
		26-60	RC SBK	FRI SSSP SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	420 SQFT	450 SQFT
System Type(s)	PPBPS	PPBPS
Site LTAR	.3 GPD/FTSQ	.3 GPD/FTSQ

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Rollans Soil and Env. Services
OTHER(S) PRESENT: Steve Pelchat

COMMENTS:



SHEET 1 of 1

ROLLANS SOIL & ENVIRONMENTAL SERVICES
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MOUNT ULLA, NC 28125
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ASHLEY ROLLANS, NC LICENSED SOIL SCIENTIST
MOBILE: (704) 746 - 5046
EMAIL: ROLLANSFORTCJ@AOL.COM

SHEET TITLE:
"FAST TRACK" EVALUATION

PROJECT NAME:
PRESTIGE BUILDING COMPANY
– HARBOR WATCH LOT #10 –
IREDELL COUNTY, NORTH CAROLINA
JUNE 2005

PROJECT NO.	01-1118
PROJECT MGR.	S.A.R.
DRAWN BY	S.A.R.
FIELD WORK	S.A.R.
SCALE	
BAR SCALE ON MAP	
FILE	G:\JOBS\01-1118