ROLLANS *SOIL & ENVIRONMENTAL SERVICES*

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Attached is a proposed design for an Accepted (25% reduction) Septic System with Gravity distribution for a 3 bedroom single family residence on Lot #25 OAK RIDGE Subdivision, Iredell County, North Carolina.

Contents:

	Page
Information for the Installer	1
Design Information	
Design Specifications	2-3
Layout Specifications	4
Site Plan/System Plan	5
Calculations	6
Profile Descriptions	7

September 20, 2006

Design By: Rollans Soil and Environmental Services

Gravity 25% Reduction
FOR WASTEWATER TREATMENT

Owner: CORINTHIAN BUILDERS

Address: PO BOX 990
DENVER, NC 28037
Phone: 704-400-1258
County: Iredell
Location: OAK RIDGE LOT 25

Source of Wastewater Flow: 3 Bedroom Single Family Residence
Estimated Daily Wastewater Production: 360 gpd
System Flow: NA

Design Specifications

Drainfield Size: 360
Loading Rate: 0.3
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Trench Depth: 36 in.
Trench Width: 36 in.
Septic Tank Size: 1000
Pump Tank Size: NA

Estimated Supply Line Length: 20
Supply Line Diameter: 3 in. SCH 40 PVC
Supply Line Volume: 3.48
Dosing Volume: NA
Supply Manifold: Drop Boxes
Supply Manifold Length: NA
Supply Manifold Volume: N/A

Recommended Float Controls: NA

Recommended Control Panel: NA

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

OAK RIDGE LOT 25

DESIGN FLOW:	360
SOIL APPLICATION RATE:	0.3
TOTAL AREA TRENCH BOTTOM:	1080
TOTAL LATERAL LENGTH:	360
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	300
SUPPLY LINE LENGTH:	20
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	NA

OAK RIDGE LOT 25

LAYOUT FOR 3 BEDROOM HOME

9/20/2006

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		N/A			100.00		
TANK		N/A	N/A				
HOUSE		N/A	N/A				
INSTR. 1			N/A				
1	ORANGE			N/A	N/A	50	50
2	PINK			N/A	N/A	57	57
3	***RED***			***N/A***	***N/A***	***60***	***60***
4	***BLUE***			***N/A***	***N/A***	***60***	***60***
5	***ORANGE***			***N/A***	***N/A***	***54***	***50***
6	***PINK***			***N/A***	***N/A***	***119***	***115***
7	***RED***			***N/A***	***N/A***	***79***	***75***
8	BLUE			N/A	N/A	50	50
9	ORANGE			N/A	N/A	56	56
10	RED			N/A	N/A	55	55
					Total	**640**	**628**

* System	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
	360	***0.30***	***ACCEPT.***	***0.30***	***25% RED.***	**GRAVITY**
Repair	268	0.30	*MOD.*	0.30	PPBPS	**DISTRIBUTION** GRAVITY DISTRIBUTION

Notes:

** TBM NOT REQUIRED

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS, HI, and FS indicate rod readings