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Attached is a proposed design for an Accepted (25% reduction) Septic System with Gravity distribution for a 73 LOT subdivision amentities pool site on Lot #104 Watertree Subdivision, Iredell County, North Carolina.

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March 26, 2008
Project #: 01-1430
Design By: Rollans Soil and Environmental Services

Gravity 25% Reduction
FOR WASTEWATER TREATMENT

Owner:	MID-ATLANTIC CUSTOM BUILDERS
Address:	P.O. BOX 3792 Mooresville, NC 28117
Phone:	704-202-5568
County:	Iredell
Location:	WATERTREE LANDING LOT 104

NUMBER OF LOTS:	73
Source of Wastewater Flow:	5 GALLONS PER LOT
Estimated Gallons Per Day Flow:	365
System Flow:	NA

Design Specifications

Drainfield Size:	330 (304)
Loading Rate (gpd/ft.^{2}):	0.30
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:	N/A
Estimated Supply Line Length:	15
Supply Line Diameter:	3 in. SCH 40 PVC
Supply Line Volume:	5.40
Dosing Volume:	NA
Supply Manifold:	DROP-BOX
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.

WATERTREE LANDING LOT 104

DESIGN FLOW (gpd):	365
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	990(1216.66)
TOTAL LATERAL LENGTH:	330
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	304.1666667
SUPPLY LINE LENGTH:	15
TOTAL DYNAMIC HEAD:	NA
MANIFOLD SIZE:	NA
DOSING VOLUME:	NA
PUMP TANK DRAW DOWN*:	NA
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	NA

AMENITIES AREA LOT 104 WATERTREE

Project #: 01-1430

LAYOUT FOR A 73 LOT AMENTITIES AREA

March 26, 2008

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		NA			NA		
INSTR. 1			NA				
HOUSE CRN				NA	NA		
P. TANK				NA	NA		
1	ORANGE			NA	NA	21	21
2	RED			NA	NA	45	45
3	PINK			NA	NA	67	67
4	***BLUE***			***NA***	***NA***	***110***	***110***
5	***ORANGE***			***NA***	***NA***	***110***	***110***
6	BLUE			NA	NA	40	40
7	***RED***			***NA***	***NA***	***110***	***110***
8	PINK			NA	NA	74	74
					Total	**577**	**577**

	LINE LENGTH	LTAR GPD/FT²	SYSTEM TYPE	SOIL LTAR GPD/FT²	TRENCH SYSTEM	DISTRIBUTION
** System*	*330*	*0.30*	*ACCEPT.*	*0.30*	*25% RED.*	**GRAVITY**
Repair	247	0.30	*MOD.*	0.30	PPBPS	**DISTRIBUTION** LOW PRESSURE

Notes:

** TBM Is Not Required.

**All measures in feet

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

**BS, HI, and FS indicate rod readings