DESIGN SPECIFICATIONS
OAK SPRING GIRL SCOUT CAMP
SEASONAL VILLAGE #1
IREDELL COUNTY, NORTH CAROLINA

AS BUILT 9/20/2010

SYSTEM TREATMENT

Design Flow:	1,920 G/D (Unreduced Flow) 512 G/D (Reduced Flow for Field)
Septic Tank Size:	3,000 Gallon Precast Concrete with Baffled Wall
Effluent Filter:	ZABEL A-100 8x32 (Rated for 2,400 G/D or less)
Field Pumping Tank Size:	3,000 Gallon Precast Concrete Tank (No Baffle)

NITRIFICATION FIELD

Effluent Loading Rate:	0.30 G/D/SF (Primary & Repair)
Supply Force Main Length:	508 ~~540~~ LF
Supply Force Main Size:	2" Diameter SCH 40 PVC Pressure-Rated Pipe
Total Linear Feet of Laterals:	432 LF Total (25% Reduction), 6 Lines at 72 LF Ea. 9' Centers Minimum
Number of Chambers:	18 Infiltrator Quick 4 Chambers/Lateral 108 Infiltrator Quick 4 Chambers Total
Pressure Manifolds:	4" SCH 80 PVC W/ 6-½" Dia. SCH 80 PVC Taps
Manifold Placement:	Above Field
Flow Rate thru System:	32.88 G/M

SYSTEM HEAD

Elevation Head:	17 Ft.
Operation Head:	2.00 Ft.
Friction Head:	11.33 ~~12.07~~ Ft. *(Includes minor losses)*
Total Dynamic Head (TDH):	30.33 ~~31.39~~ Ft.
Pump Requirements:	30.33 32.88 GPM @ ~~31.39~~ Ft. TDH; Use Zoeller Model 140 1 HP–230V–1 PH *(Contractor to Verify)*
Control Panel:	SJE Rhombus Simplex Panel or Approved Equal

DOSING REQUIREMENTS

Dosing Volume:	205 Gallons
Depth of Water Pumped Per Dose:	4.79 Inches
Pump Run Time per Dose:	6.23 Minutes per Dose
Check Valve:	2 Inch Diameter
Siphon Break Hole:	5/32 Inch Diameter