INITIAL SYSTEM

DESIGN SPECIFICATIONS FOR LOW PRESSURE PIPE SYSTEM FOR PROPOSED 3-BEDROOM RESIDENCE + GARAGE BUILDING ON 5.778 ACRE TRACT AT SOUTHWESTERN INTERSECTION OF N.C. HWY 150 BY-PASS AND W. MCNEELY (SELMA) ROAD SR #1164, MOORESVILLE, IREDELL COUNTY, N.C.

DENNIS J. SHEA, OWNER

DAILY WASTEFLOW:	400 gpd
SEPTIC TANK SIZE:	1,500 gallons
PUMPING TANK SIZE:	1,000 gallons
EFFLUENT LOADING RATE:	0.1429 gpd/sq. ft.
TOTAL ABSORPTION AREA:	2,800 sq. ft.
TOTAL LINEAR FEET AND DIAMETER OF LATERALS:	560 feet of 1 1/4" diameter within 4" diameter porous plastic tubing
TOTAL LENGTH AND DIAMETER OF SUPPLY MANIFOLD:	270 feet of 3" diameter Sch 40 PVC 115 feet of 2" diameter Sch 40 PVC
NUMBER AND LENGTH OF LATERALS:	8 @ 70' each
MANIFOLD PLACEMENT:	One end and middle
HOLE SIZE:	5/32" diameter
TOTAL NUMBER OF HOLES:	97 orifices
TOTAL FLOW THROUGH SYSTEM (SEE ORIFICE DATA SHEET)	Disposal Field = 48.0 gpm Anti-siphon hole= 2.0 gpm Total 50.0
ELEVATION HEAD:	17.4 feet
PRESSURE HEAD:	2.4' @ upper disposal line
FRICTION HEAD:	6.8'
TOTAL HEAD:	26.6 feet
STORAGE VOLUME IN PIPES:	Manifold = 123.7, Laterals =50.4 Total = 174.1 gals

DOSING VOLUME:	270 gallons, 12 3/4" in 1,000 gal. tank
CHECK VALVE NEEDED:	Yes
PUMP REQUIREMENTS:	50.0 gpm at 26.6' TDH. Use Goulds 1/2 horsepower WE0511H Pump, Model 3885, or Hydromatic 1/2 horsepower SP50MH1 Pump, or Myers 1/2 horsepower WHRH5-11C Pump, or approved equal
PUMP RUN TIME PER DOSE	5 2/3 minutes