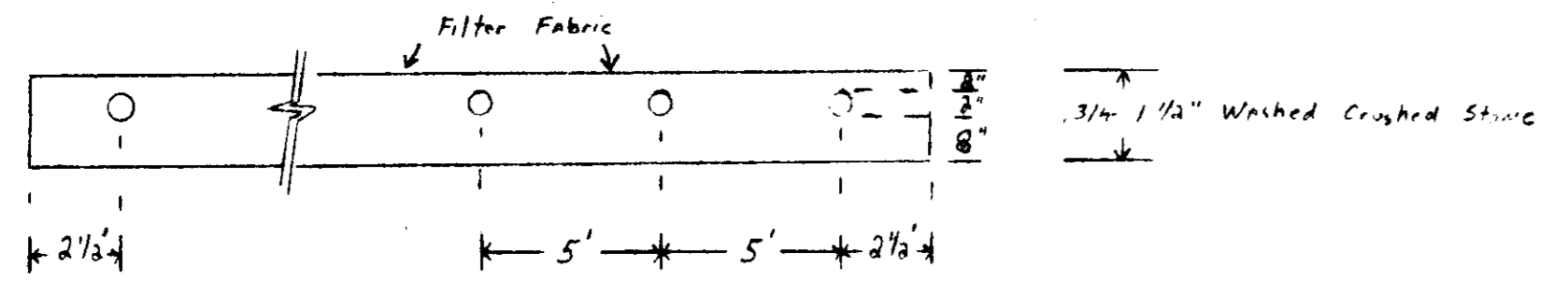
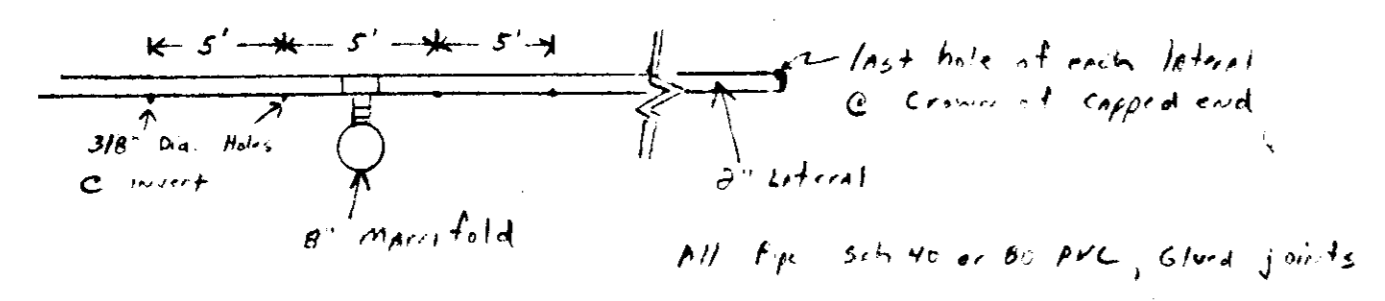


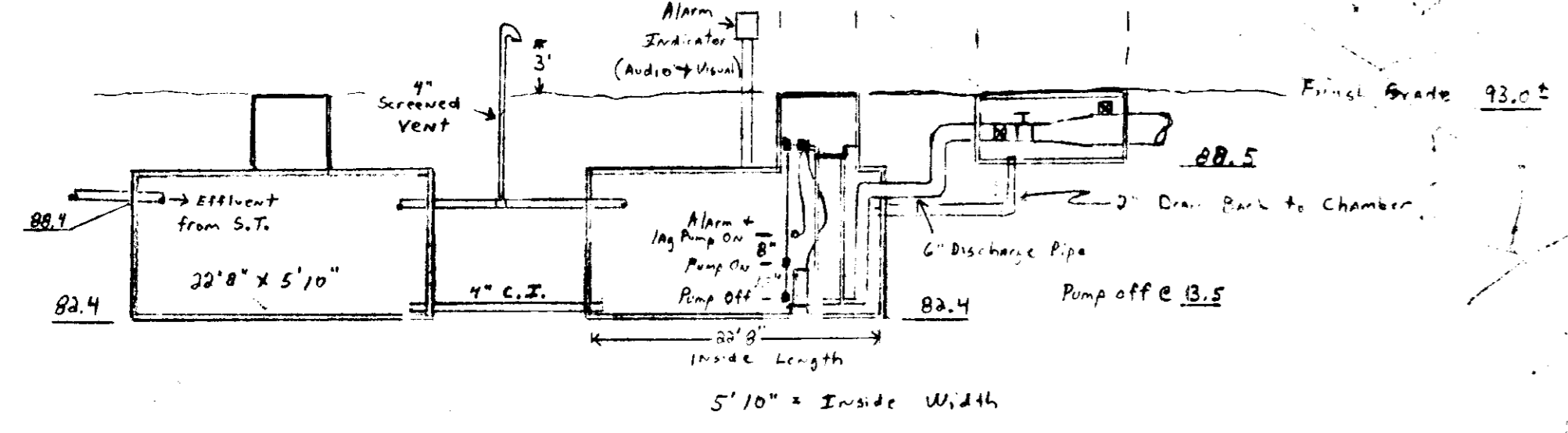
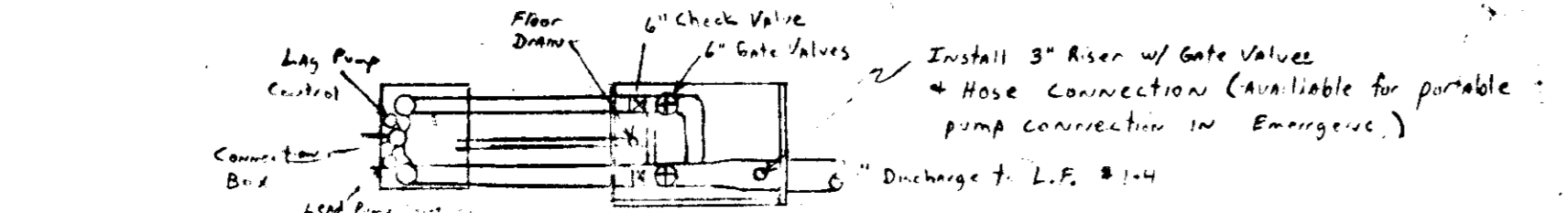
Min. invert at  
 Sill (Existing) - 89.4'  
 S.T.#1 inlet - 89.3'  
 S.T.#2 " - 88.8'  
 Dosing Tank inlet - 88.4'  
 Bottom Pump - 83.5' (Pump off)  
 Lateral inverts - 92.7'

**PROFILE (NTS)**

\* Grease Trap - use automatic grease removal unit on kitchen sink - 2 @ 4 fixture units  
 Suggest: Thermaco Model #200  
 20gpm unit or equivalent  
 40 lbs net capacity for Grease  
 Maximum sink volume of 50 gallons



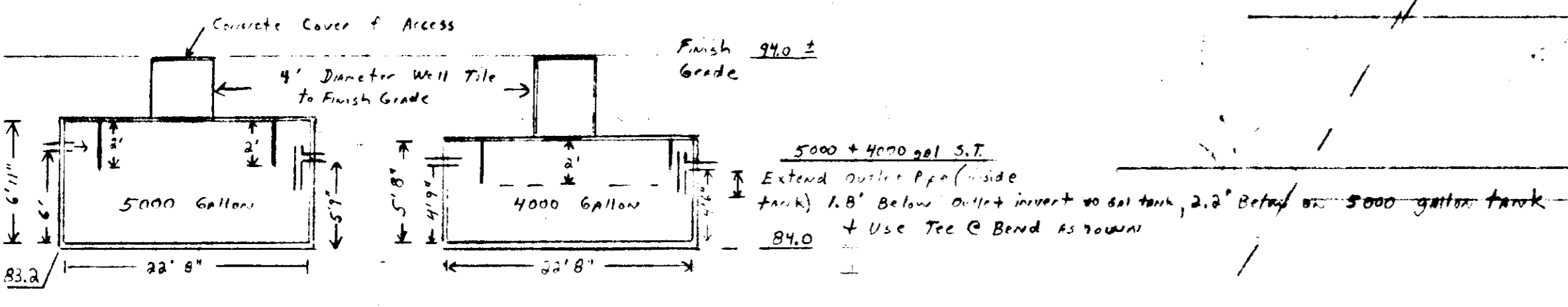
**BED SECTION (NTS)**



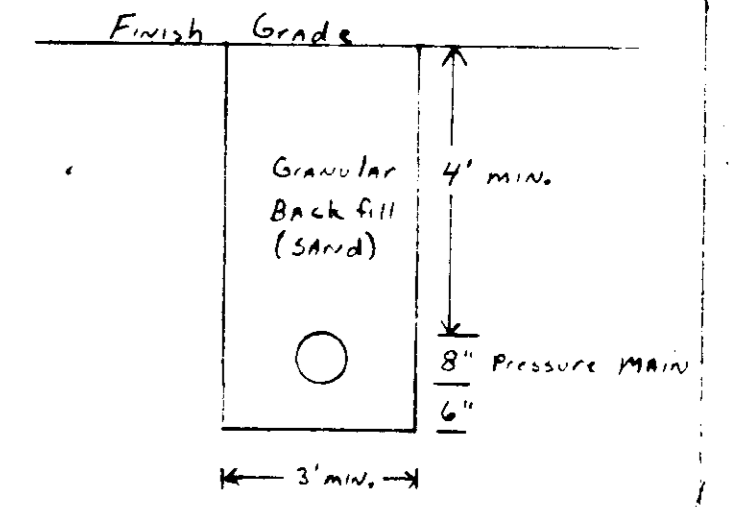
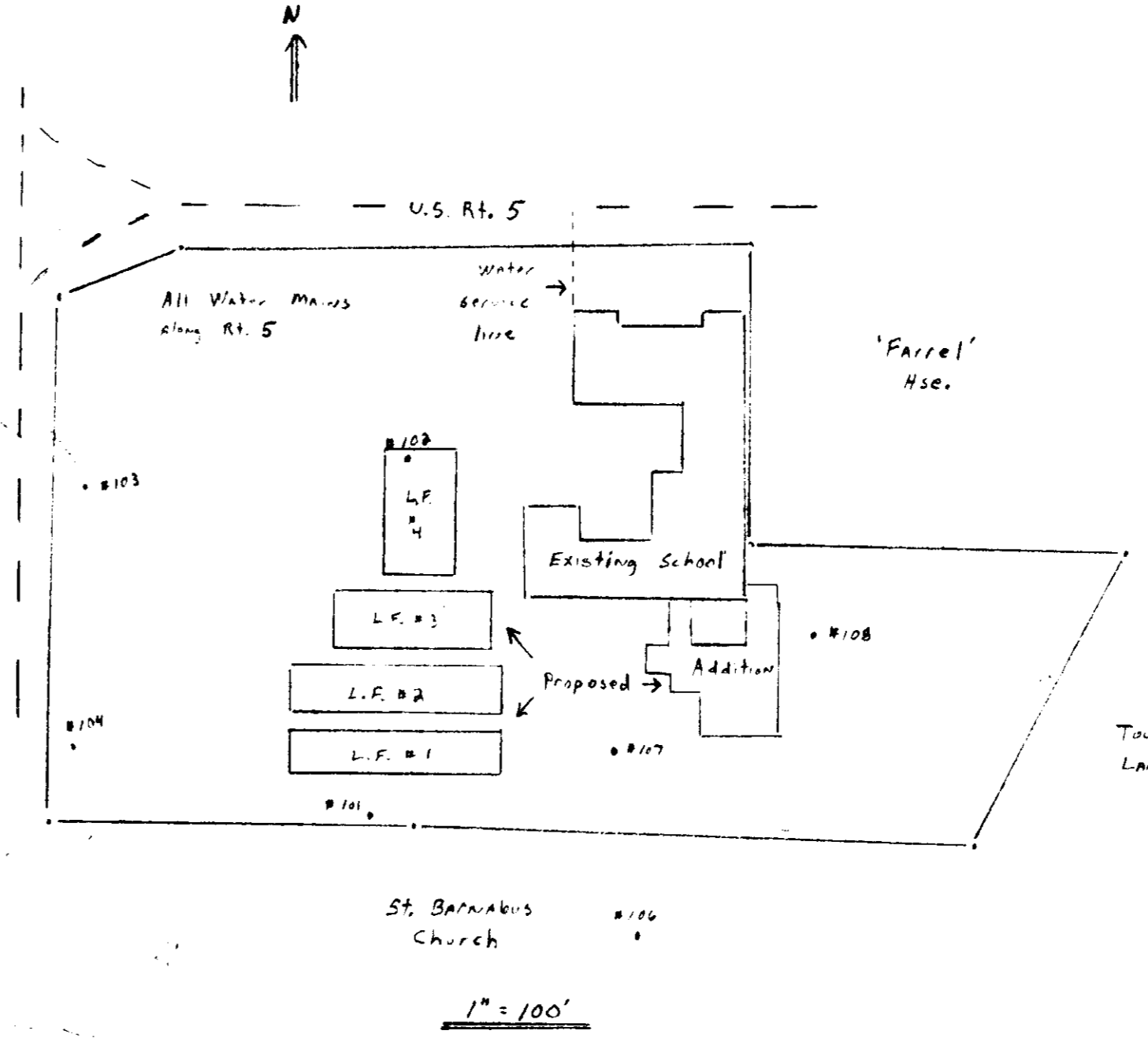
**Dosing Chambers**

Total Volume req'd: one day storage - 10,000 gallons  
 Use two 5000 gallon septic tanks sealed & leak proof hydraulically connected vented to atmosphere  
 Dose Volume: 4 dose / day = 2500 gal./dose

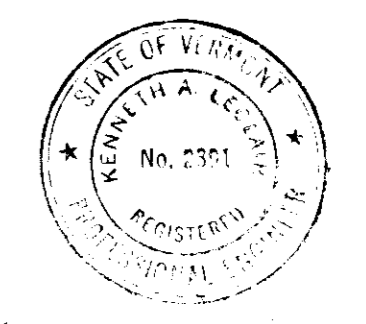
**Pump Critterion**  
 Static head - 9.2  
 friction head - 2.3 @ 850gpm  
 minor losses - 2.6  
 total 14.1'  
 Pump must produce 850gpm @ 1-1' total head  
 Use two effluent pumps - 2 @ 6" equivalent  
 Set cutoff float @ 15" for 500 gallon dose  
 Pumps to be wired such that the alternate doses  
 Use alarm to indicate failure & pump on  
 Lag Pump on C Same elec. as Alarm  
 \* Use Rail Lift-out System  
 Bottom of Pump @ Elev. 83.5



**Septic Tank Detail (NTS)**



**Typical Trench Section (NTS)**  
 (Pressure Line)



**DESIGN DATA**

500 students w/ kitchen = 10,000 g.p.d.  
 Required: dosing, dual alternating systems,  
 4 leach fields - 5,000 g.p.d. each  
 Perc rate: 1.2 g.p.d./ft.  
 Loading: 1.2 g.p.d./ft.  
 Area required: 4167 ft<sup>2</sup> per system  
 Use 4,000 ft<sup>2</sup>  
 L.F. #1 - 30' x 140'  
 #2 - 30' x 140'  
 #3 - 40' x 105'  
 #4 - 45' x 95'  
 Septic Tanks:  
 req'd volume = 1125 + .75 Q = 8,625 gal.  
 S.T. #1 - 5000 gallon  
 #2 - 4000 "

APPROVED  
 DIVISION OF PROTECTION  
 DATE: 7/26/88  
 BY: Roger Thompson  
 This approval is subject to the terms and conditions of the permit.  
 PB-3-0867  
 OFFICE COPY

\* Use Leach Fields = 3 @ 4 or over number years  
 #1 & 2 = add  
 \* Central is w/ 8" B-monthly valves  
 \* Install in concrete box w/ access cover  
 Example: SHUT VALVE #1 or even years  
 Open " #2 " " "

\* Bottom of stone to be a maximum of 30" below original grade @ uphill side

Soils: see Indirect Discharge Permit Application  
 \* Hydraulic Leakage test for 8" Pressure Line  
 50psi min. for 2 hour duration  
 ref: Building Protection Rules pg. A-14, A-CY 64W  
 Allowable Leakage =  $\frac{50 \times L \times T}{1000}$  P.A. first press. No. of Per. Tanks in tested length

**SEWAGE DISPOSAL SYSTEM DESIGN**

**MARION CROSS SCHOOL**  
 NORWICH, VERMONT  
 SCALE 1"=20'  
 APRIL 21, 1988  
 Revised 6/10/88  
 Revised 6/26/88  
 K.A. LECLAIR ASSOC., INC. CIVIL ENGINEERS  
 HANOVER, N.H. PROJECT NO. 112987A

\* Village has community water supply  
 Isolation req'd - 50' min. to main line & school service line  
 from any septic system component