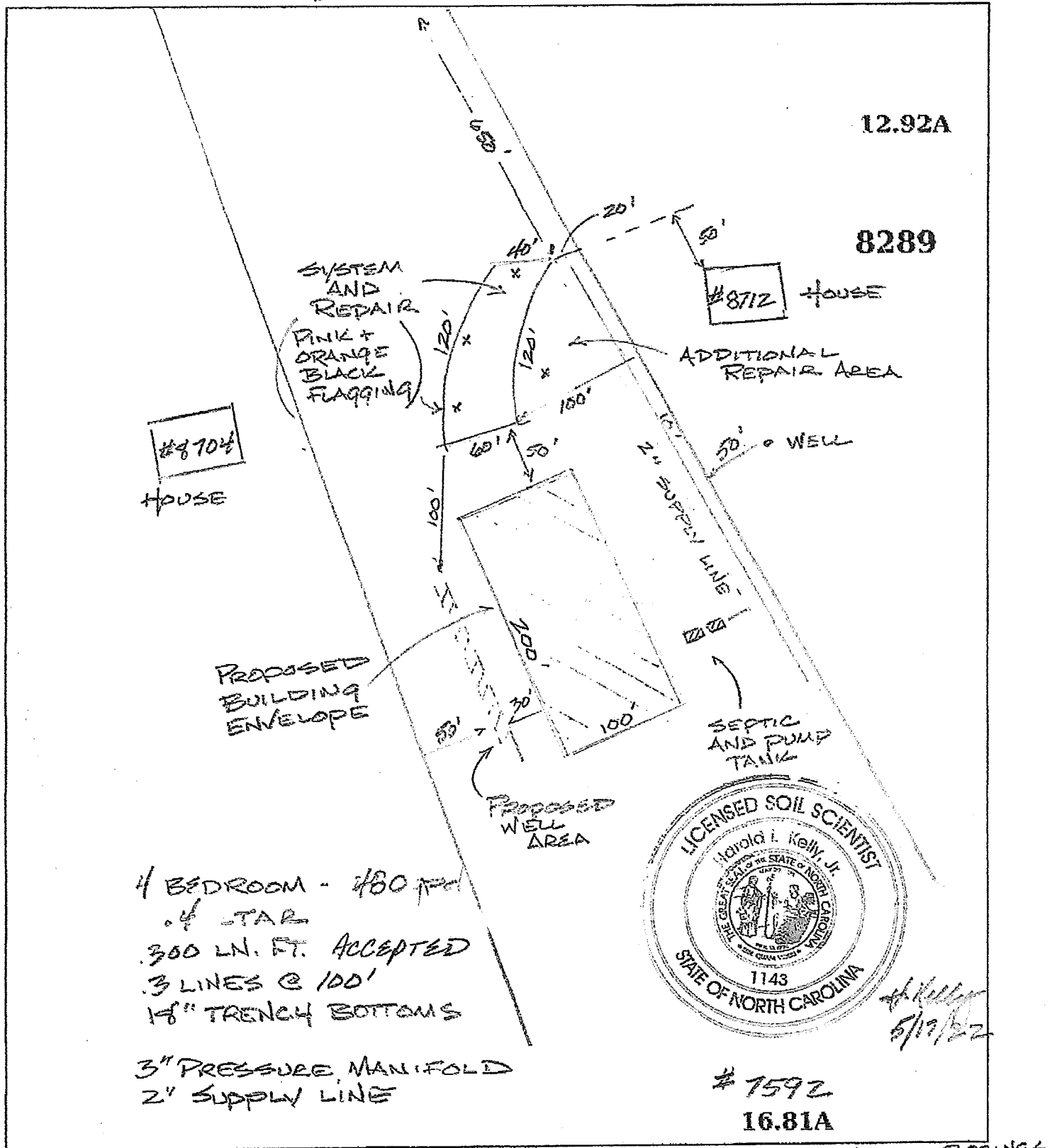


TRACT 3

THREE SISTERS S/D Granville County, NC

RECORD #: 23363

710



5/13/2022, 2:00:53 PM

TRACT 3 - THREE SISTERS S/D
LONNIE HARRIS RD.

MANIFOLD +
PUMP SHEET 3/16

RECORD # 23363 Owner: DIXSON
Tax Map: Parcel #: Date: 5/17/22

Line #	Tap Diameter(in)	Tap (Sch)	Tap Flow (gpm)	Line Length (ft)	Flow / foot
1	1/2	40	7.1	100	
2	1/2	40	↓	↓	
3	1/2	40	↓	↓	
4					
5					
6					
7					
8			21.3	300	
9	ANTI-SIPHON - 2				
10		40	23.3		

300 ft of line x 65 gal. per 100 ft = _____ ÷ 100 = 195 gal
75% x 195 gal = 150 gal per dose _____ gal per minute (gpm) = Flow Rate

Friction Head

Loss: 1.27 ft per 100 ft of supply line x 300 ft of supply line ÷ 100 = 3.8 ft
3.8 ft x 1.2 = 4.6 ft of friction head

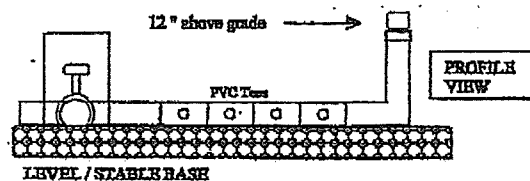
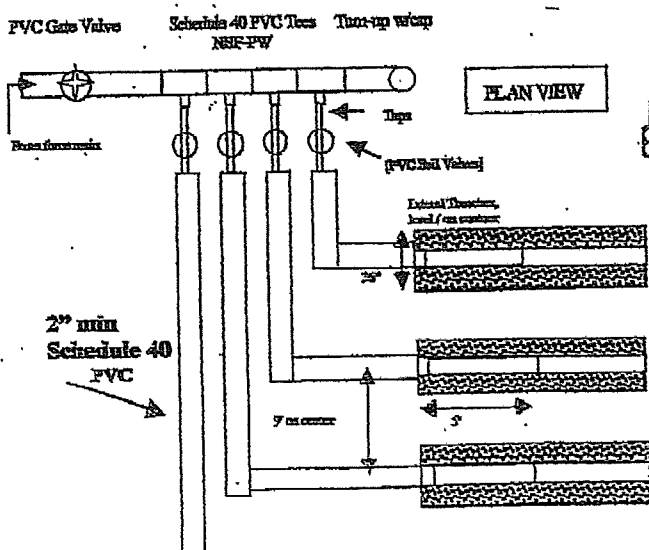
Manifold Size: 3" Force Main Size: 2" PVC

Total Dynamic Head = 10 ft of Elevation head + 2 ft of Pressure head + 4.6 ft of Friction Head = 17 TDH

Pump Requirement: 24 GPM @ 17 ft of Head

Drawdown: 150 gal per dose ÷ 21 gal per inch = 7 inch drawdown per dose

General Design Information



Manifold Size	Manifold Size / # Taps		
	Max No. Taps off one side (Reduce by 1/2 for tapping both sides)		
	1/2" taps	3/4" taps	1" taps
2"	4	2	
3"	9	5	3
4"	16	9	5
6"	40+	21	12

Flow per Tap		
Size	Material	Flow GPM
1/2"	Sched 80	5.5
1/2"	Sched 40	7.1
1"	Sched 40	10.1

SOIL/SITE EVALUATION

(Continuation Sheet-Complete all field in full)

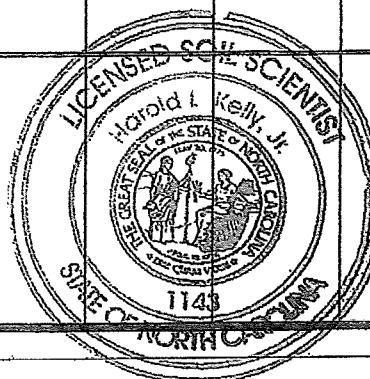
Sheet 4/6 of

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

TRACT 3
THREE SISTERS S/D
LONNIE HARRIS RD.

PROPERTY ID #: 23363
DATE OF EVALUATION: 5/11/22
COUNTY: GRANVILLE

P R O F I L E #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZ ON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
⑥	L 5%	0-6"	sil gr	1/4 fr NP/NS		30"			PS .4
		6-30"	sicl sbk	fr SP/SS					
		30"+	sil M	fr NP/NS					
⑦	L 5%	0-5	sil gr	1/4 fr NP/NS		32"			PS .4
		5-32	sicl sbk	fr SP/SS					
		32"+	sil M	fr NP/NS					
⑧	L 5%	0-5	sil gr	1/4 fr NP/NS		31"			PS .4
		5-31	sicl sbk	fr SP/SS					
		31+	sil M	fr NP/NS					
⑩	L 5%	0-7	sil gr	1/4 fr NP		30"			PS .4
		7-30	sicl sbk	fr SP/SS					
		30+	sil M	fr NP/NS					



H. Kelly
5/12/22

COMMENTS: