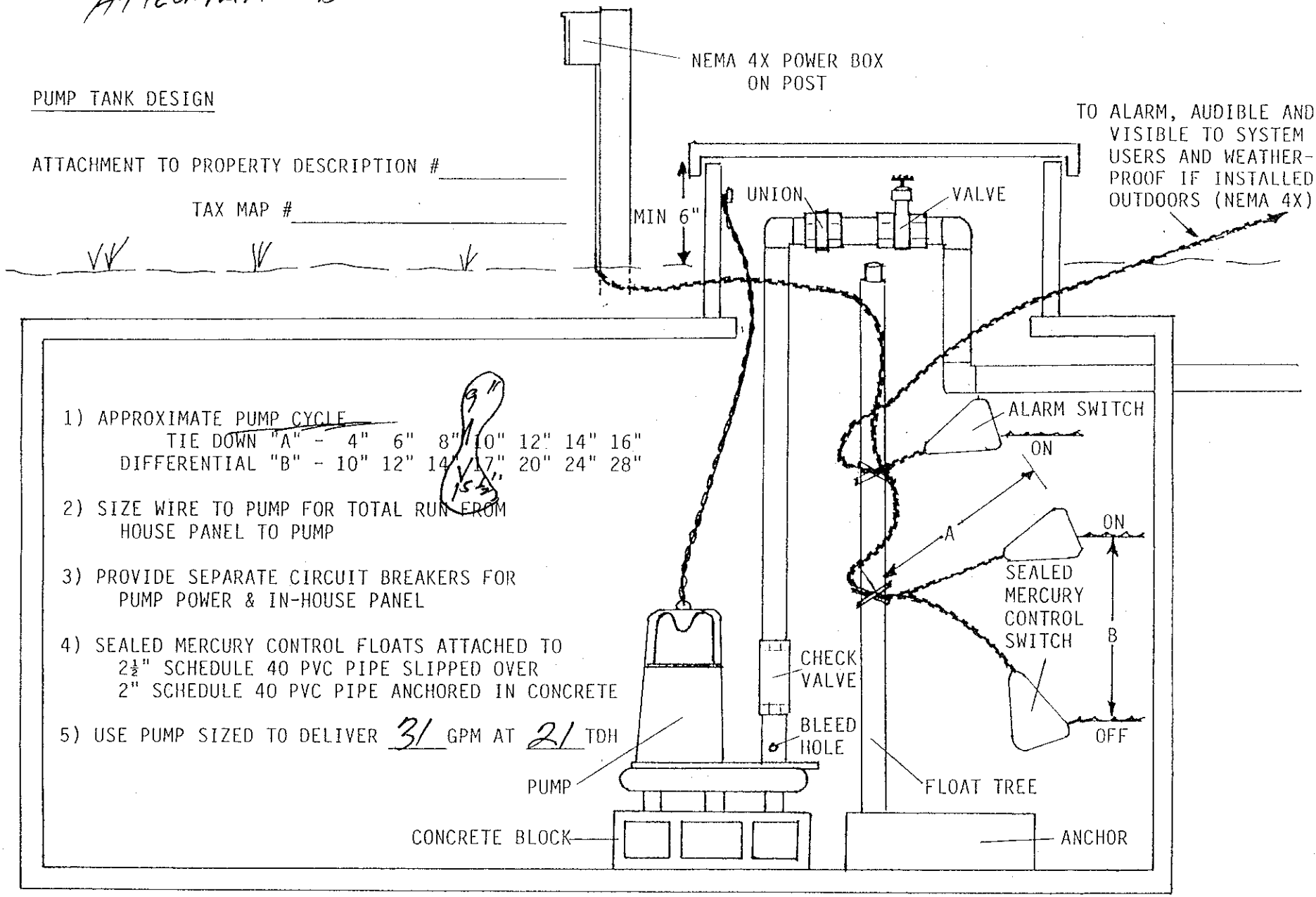
Chris Hedrick
Nixon Rd, Statesville, NC

Attachment "B"

PUMP TANK DESIGN

ATTACHMENT TO PROPERTY DESCRIPTION # _____

TAX MAP # _____



1) APPROXIMATE PUMP CYCLE
TIE DOWN "A" - 4" 6" 8" 10" 12" 14" 16"
DIFFERENTIAL "B" - 10" 12" 14" 17" 20" 24" 28"

9"
15½"

2) SIZE WIRE TO PUMP FOR TOTAL RUN FROM HOUSE PANEL TO PUMP

3) PROVIDE SEPARATE CIRCUIT BREAKERS FOR PUMP POWER & IN-HOUSE PANEL

4) SEALED MERCURY CONTROL FLOATS ATTACHED TO 2½" SCHEDULE 40 PVC PIPE SLIPPED OVER 2" SCHEDULE 40 PVC PIPE ANCHORED IN CONCRETE

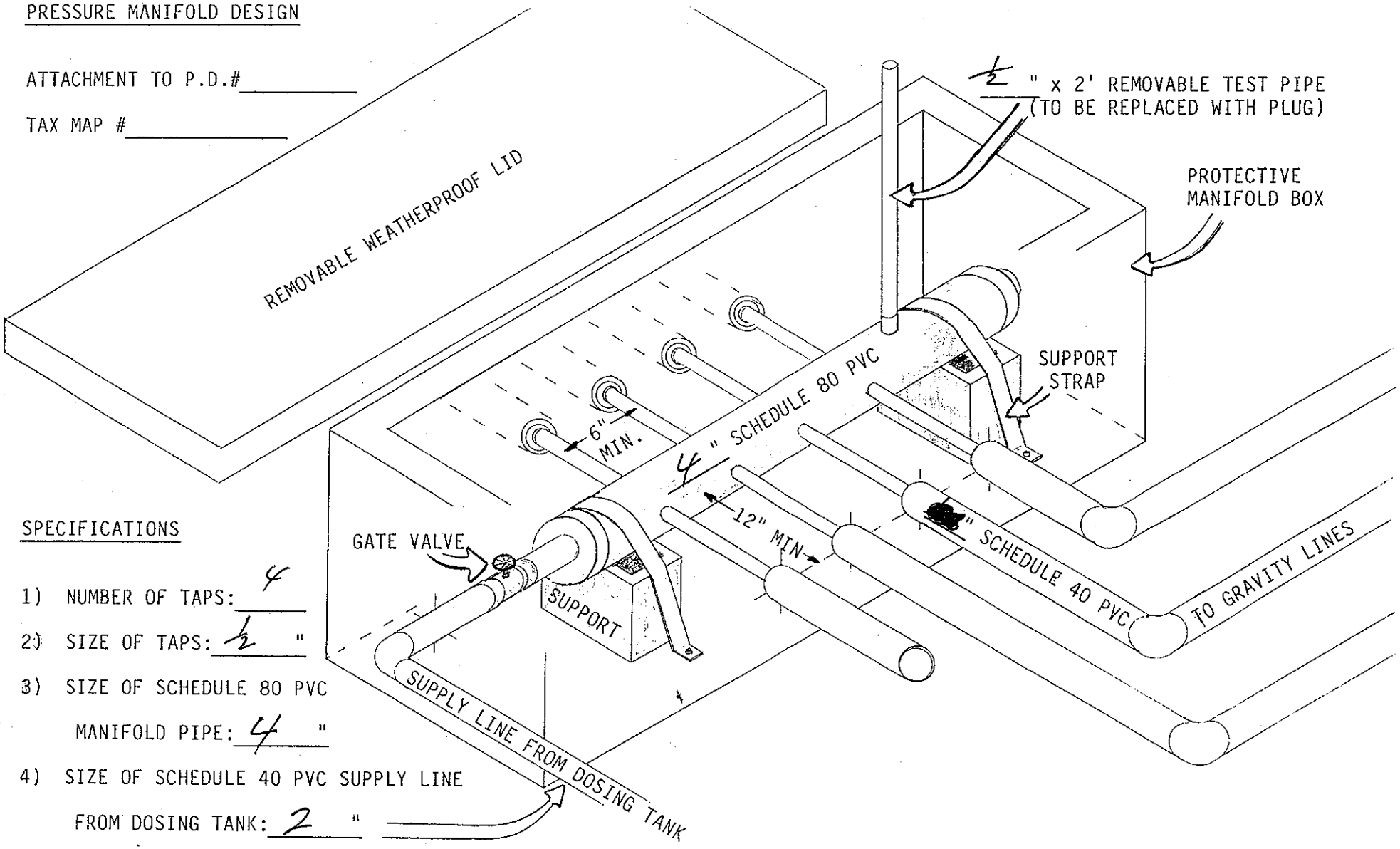
5) USE PUMP SIZED TO DELIVER 31 GPM AT 21 TDH

Attachment "A"
Chris Hedrick
Nixon Rd

PRESSURE MANIFOLD DESIGN

ATTACHMENT TO P.D.#_____

TAX MAP #_____



SPECIFICATIONS

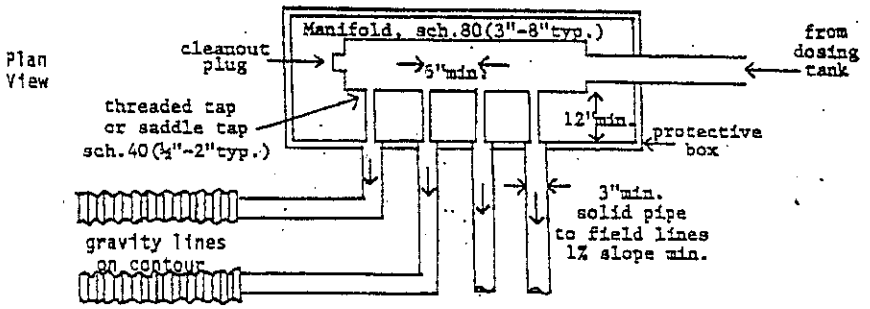
1) NUMBER OF TAPS: 4

2) SIZE OF TAPS: ½ "

3) SIZE OF SCHEDULE 80 PVC
MANIFOLD PIPE: 4 "

4) SIZE OF SCHEDULE 40 PVC SUPPLY LINE
FROM DOSING TANK: 2 "

Chris Hedrick
416 Nixon Rd



Pressure Manifold Design

4 Number of Taps = Number of trenches

4 Manifold Diameter (in) (obtain from table 1)

½" Tap Size (in) (obtain from table 1)

12" Tap Length (in)

30" Manifold Length (in) = # of Taps 4 X Tap Spacing 6 (in)

+ Tap Spacing 6 (in)

7.11 Flow per Tap (gpm) (obtain from table 2)

(*) 31.0 Total Flow of Taps (gpm) = Flow per Tap X # of Taps

Round to Next Highest #

2" Supply Line Size (in)

125 Supply Line Length (ft)

2.32 Friction Loss per 100 ft of Supply Line (ft / 100 ft) (from table 3)

× 4.0 Friction Head (ft) = Friction Loss (ft/ 100 ft) X Supply Length (ft)

(*) 15.0 Elevation Head (ft) ~~3.71~~ 2.37 × 1.25 = ~~4.64~~ × 1.2 (25)

For capping from 1.55

(X) 2.0 Pressure Head (ft)

(*) 21.0 Total Head (ft) = Friction head + Elevation Head + Pressure Head

3 17 2

___ Pump required to supply total flow of 45 gpm
against a total head of 25 ft

(obtain from pump curve)

31 × 6 min. = 186 gallons over ~~12" drawdown~~

186 gal
20 gal

(9" drawdown off on in Tank)