

SOIL: STIFF/MED CLAY

ASSUMES:

$$W = 120 \text{ pcf}$$

$$\phi = 25^\circ$$

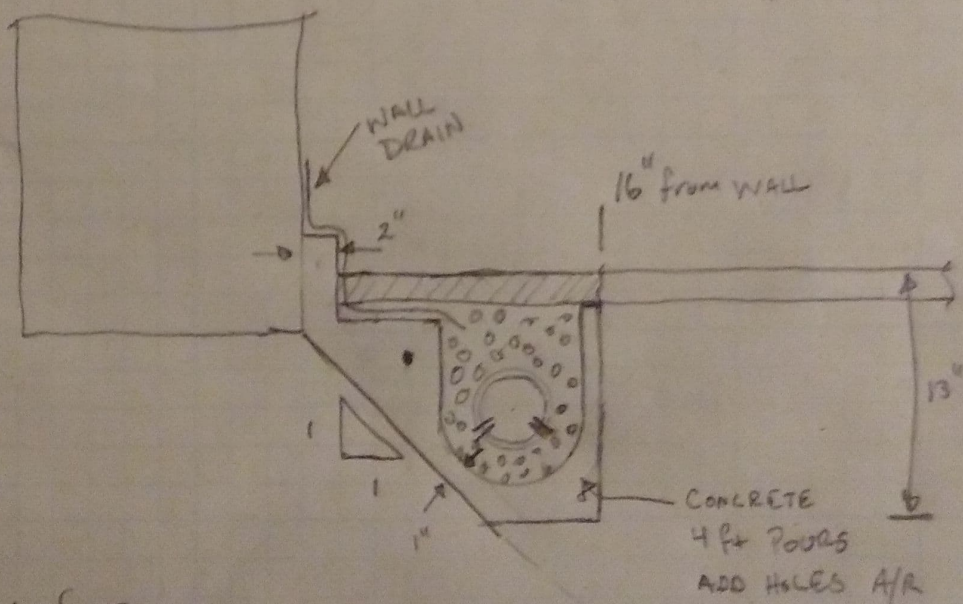
$$K_{ah} = \frac{1 - \sin \phi}{1 + \sin \phi} = 0.406$$

OPTION 1

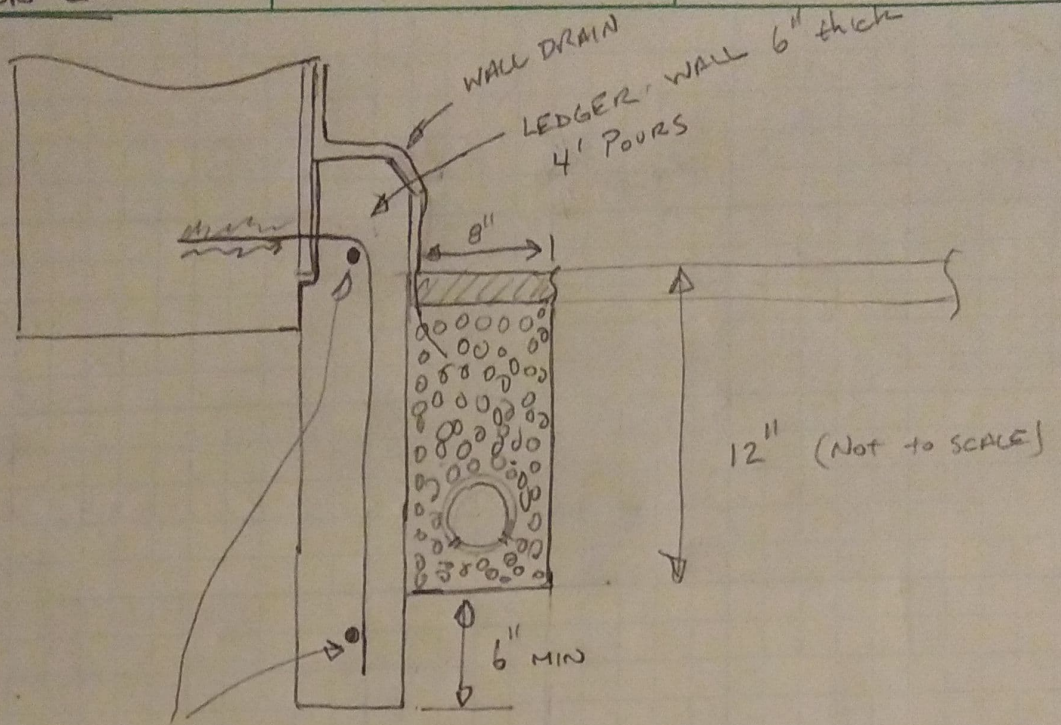
o STAY OUT OF BEARING TRIANGLE

- PROS: EASY

- CONS: UNDERMINING MAY NOT BE ADDRESSED -
IF SOIL DOES SHIFT, WEDGE MAY RISE.

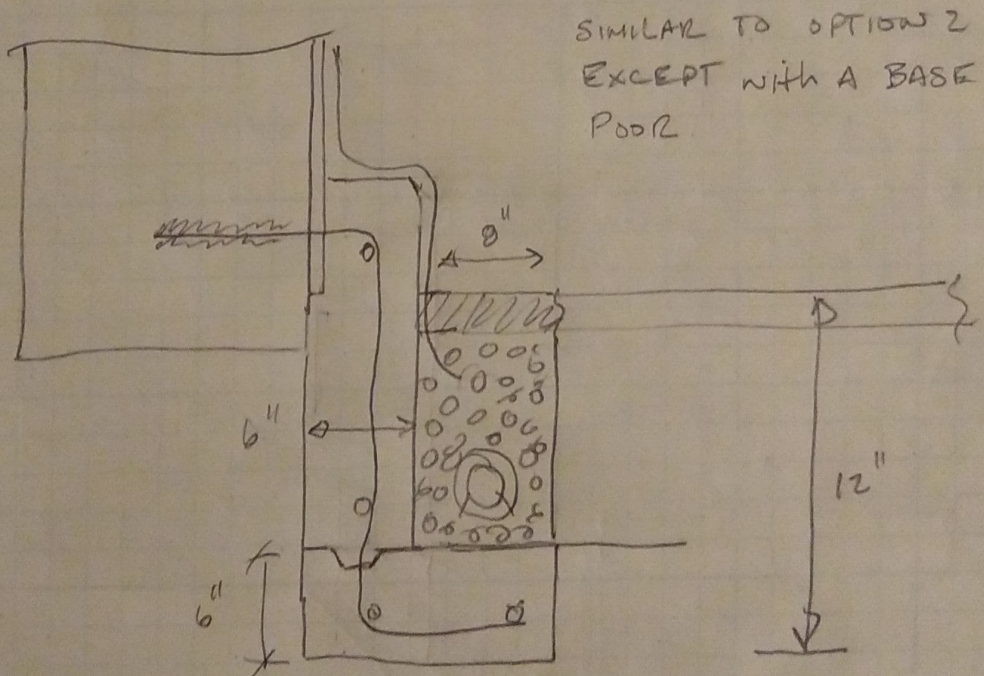


OPTION 2

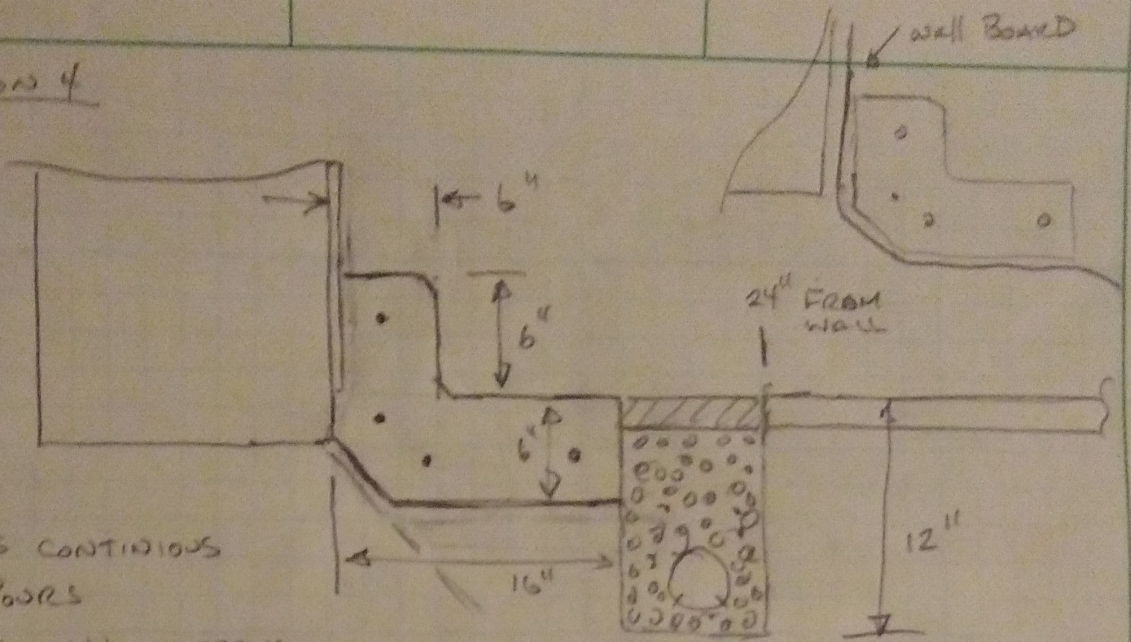


CONTINUOUS
ALONG WALL

OPTION 3



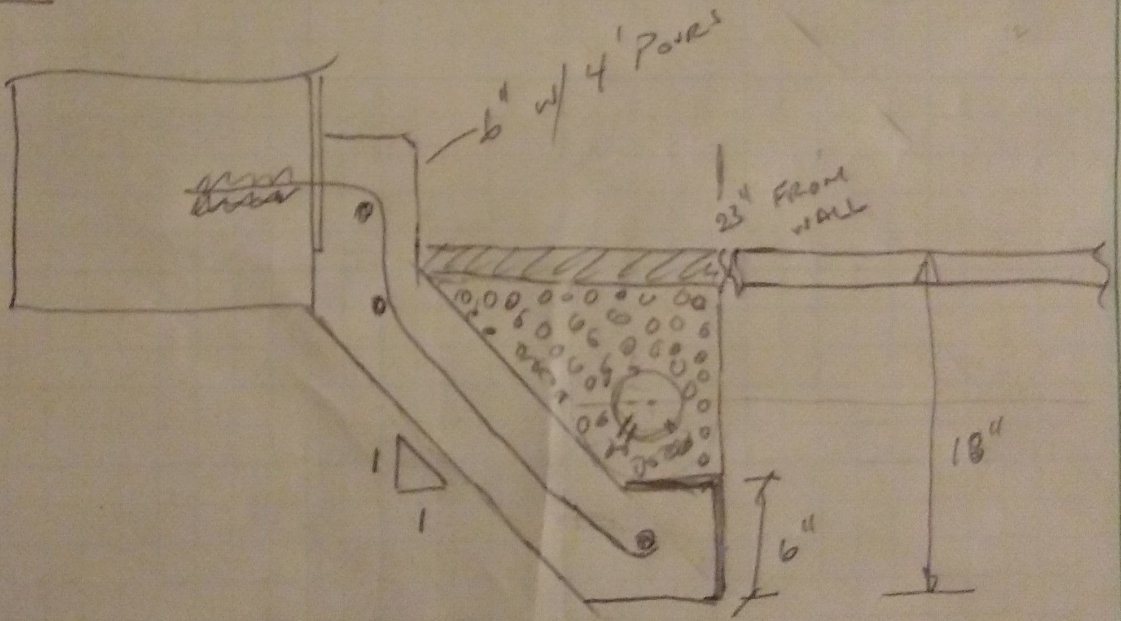
OPTION 4



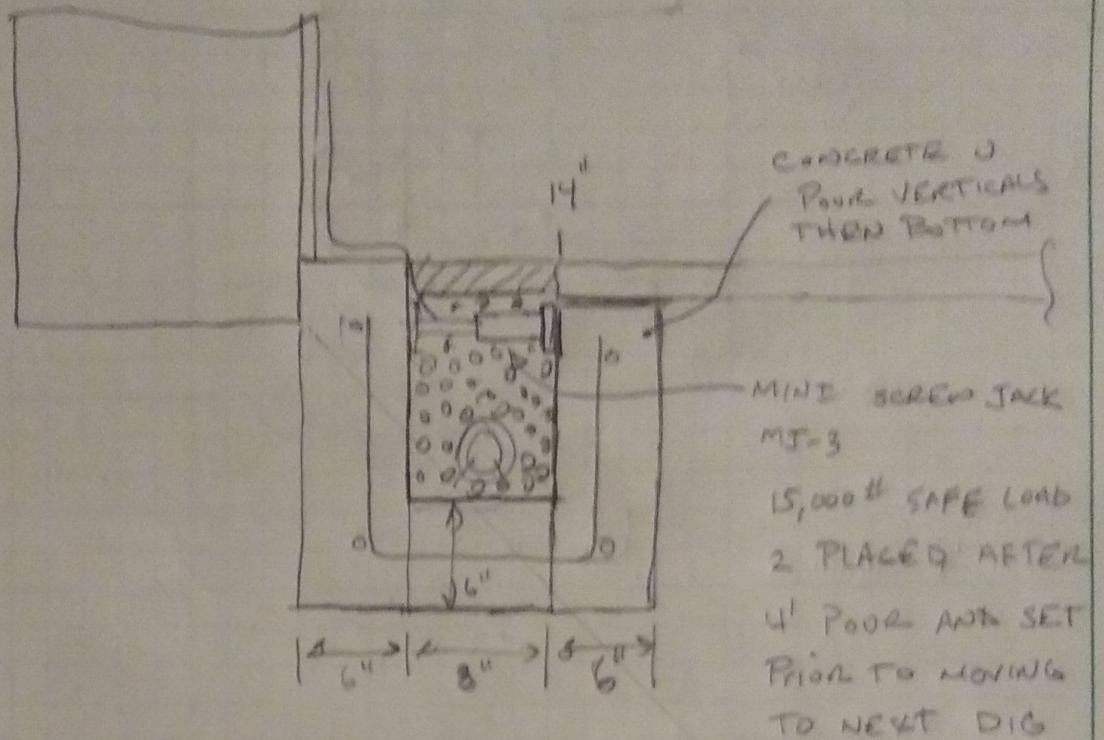
BARS CONTINUOUS
4' POURS

- LATERALLY STIFFENS
1/2 RESTRAINS BOTTOM OF WALL

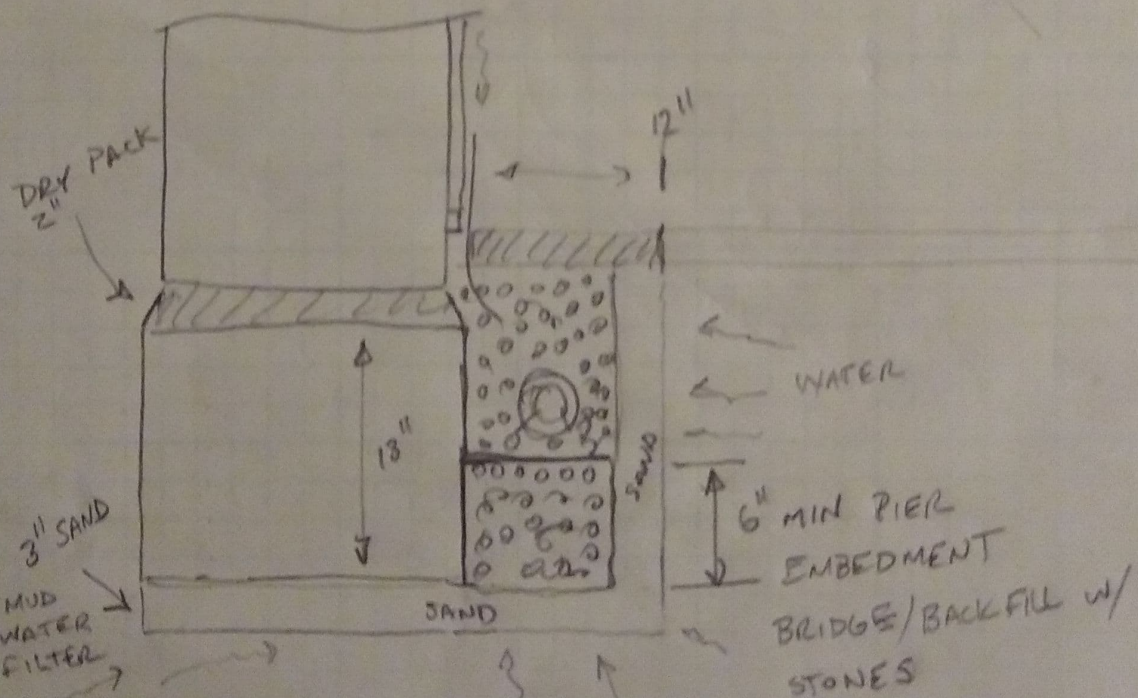
OPTION 5



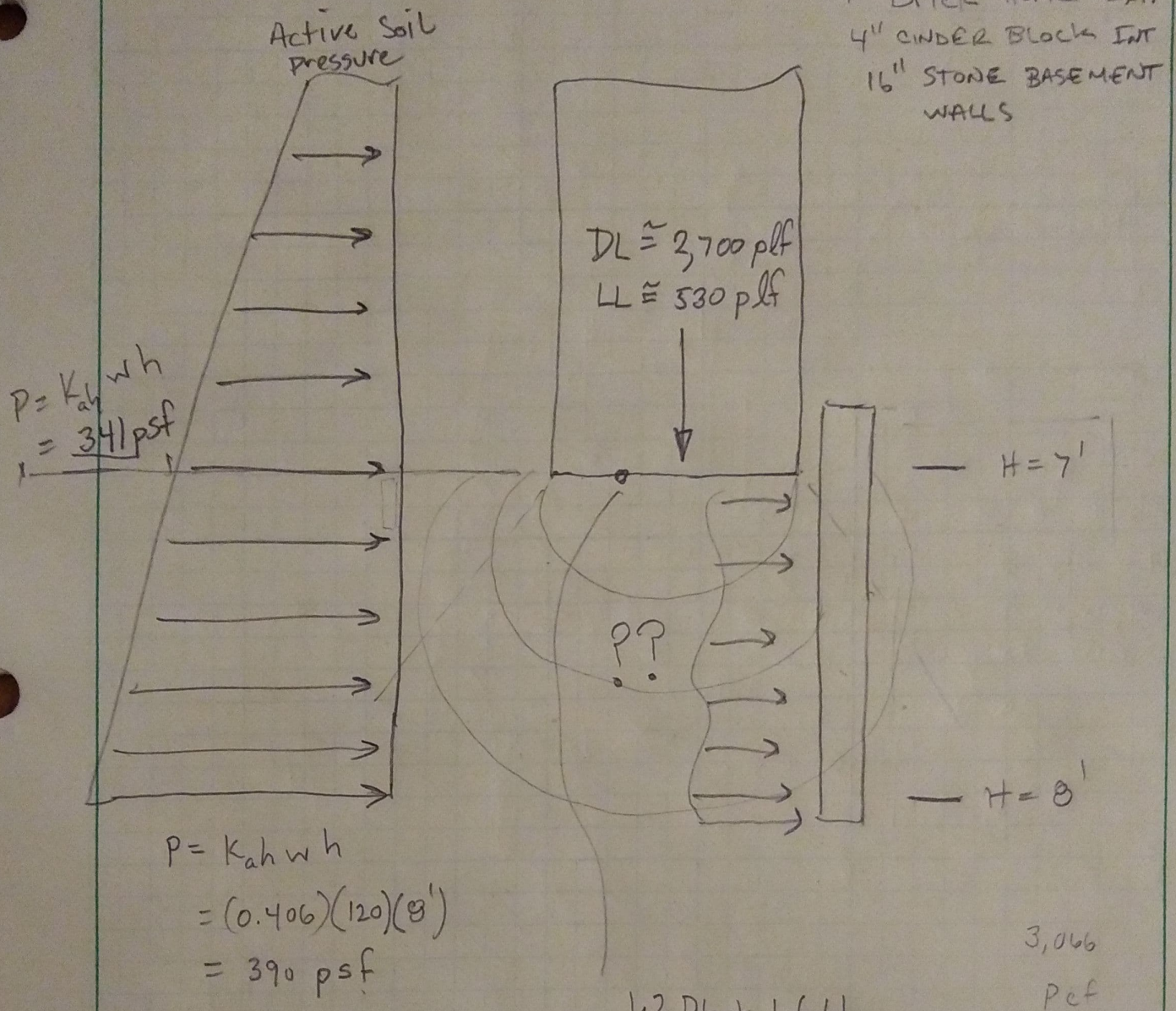
OPTION 6



OPTION 7 : JUST UNDERPIN



LAST Question



$$P = K_a \gamma h$$

$$= (0.406)(120)(8')$$

$$= 390 \text{ psf}$$

$$1.2 DL + 1.6 LL$$

$$= 4,088 \text{ plf}$$

$$P = 4,088 / (16' \times 12') = 21 \text{ psi}$$

$$3,070 \text{ psf}$$

So,

Does the adjacent structure

see $3,070 + 341 \text{ psf}$, OR would it just

be the $3,070 \text{ psf}$ which would ~ be 50%
DNE wall thickness (16") Down?

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