

Porch Roof

JOISTS 2x6 @ 24
SPAN ~ 5'-6"

RIDGE Bm

L = 13'

$W = .035(5.5) = .19k$

R = 1.2k

M = 4k'

4x10

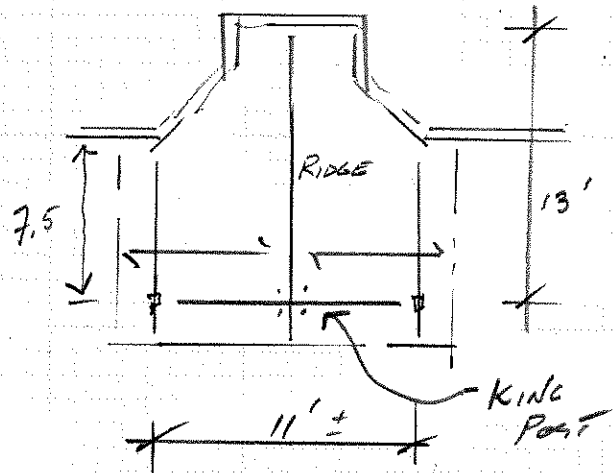
$f_b = .96 ksi$

$\delta = .35" = \frac{e}{442}$

6x8

$f_b = .93 ksi$

$\delta = .42" = \frac{e}{370}$



CROSS Bm

P = 1.2k

R = .6k

M = 3.3k'



4x8

$f_b = 1.29 ksi$

$\delta = .34" = \frac{e}{383}$

SIDE BEAMS

L = 7.5'

$W = .035(4.5) = .16k$

R = .6k

M = 1.1k'

4x6

$f_b = .77 ksi$

$\delta = .16" = \frac{e}{575}$

STRUCT SLAB ON GRADE

MAX SPAN ~ 5'-6"

5" SLAB, LL = 100 psf

$W = .175 ksf (.25 ULT)$

$M_u = .25(5.5)^2/8 = 1k'$

$d = 2\frac{1}{2}" \quad A_s = .1 in^2/ft$

$\beta = 12$

#4 @ 16 ok

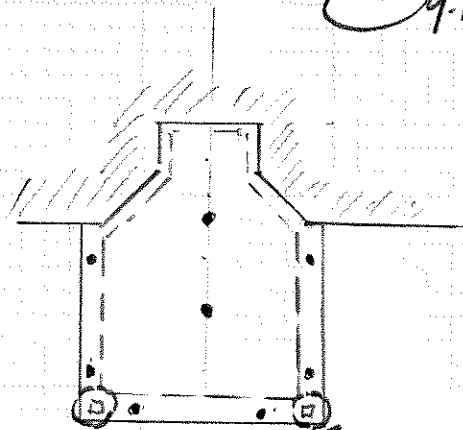
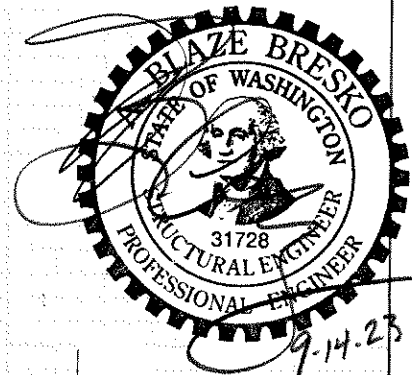
$f_c' = 2500 psi$

MAX LOAD TO Pile

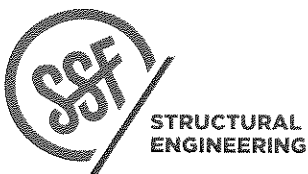
$.175(5)(5)(1.25) = 5.5k$

2"φ PILE DRIVEN TO REFUSAL

$P_u = 3TON$



EX 12" SQUARE DOWEL INTO THEM FROM THICKENED SLAB



Dreil

PROJECT

9-14-23

DATE

Blay

DESIGN

SHEET