

MDT ENGINEERING

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Structural Calculations For Mawer/Benitez Remodel Mercer Island, WA

March 4, 2020
REVISED 6/19/20



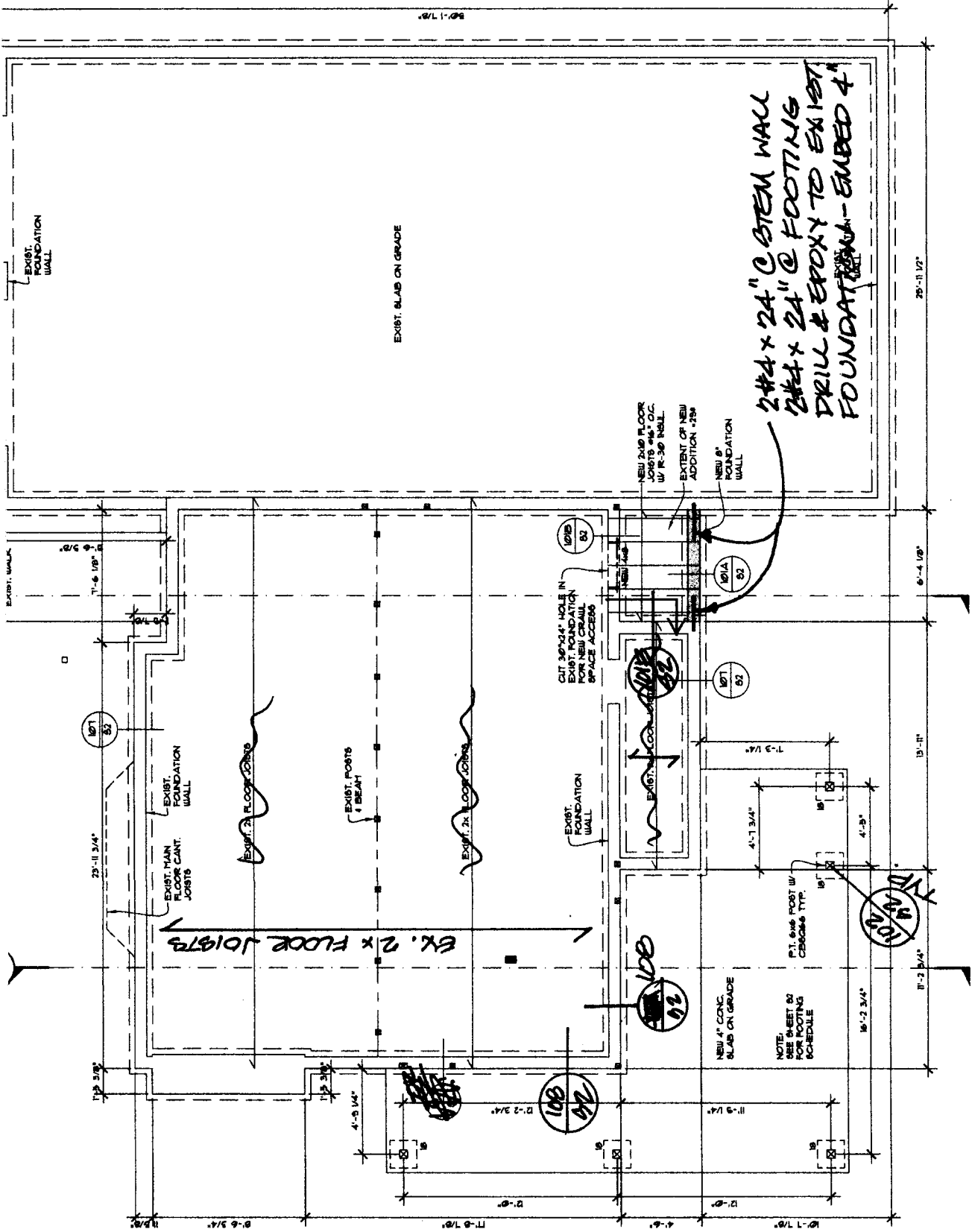
**Building Official: Please accept this engineering packet only for the site
noted above.**

BENITEZ RESIDENCE
 8005 SE 70TH PL
 MERCER ISLAND, WA 98040

JOB NO: 09-015
 DATE: 3/09/20
 DRUN. BY: NPM
 REVISED:

SHEET NO.

A1



FOUNDATION & MAIN FLOOR FRAMING PLAN (PROPOSED)

SCALE: 1/4\" = 1' - 0\"

ROOF ROTATIONAL FORCES:

SN ⑤: $V = 4176\#$

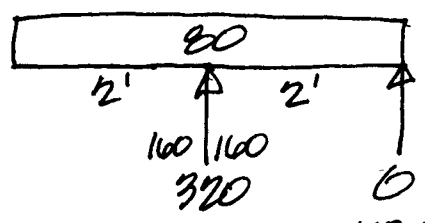
$M = 4176\#(4.5') = 18792\#'$

$T = C = 18792\#'/20.42' = 920\# \Rightarrow$ M5TC28 STRAP

OVERHANGS: $l_{MAX} = 2'$

$W = 2(40) = 80\text{ PLF}$

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$-M = 160\#'$

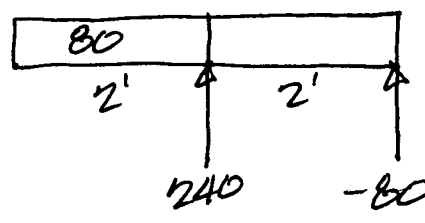
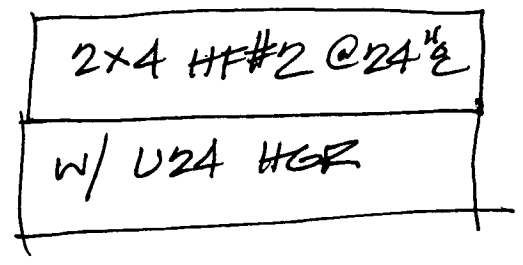
$R = 160\#$

$B_{REQ} = 2$

$A_{REQ} = 3.2$

NO UPLIFT

BUT CALLED OUT
~~THE~~ U24 HGR
W/ UPLIFT = 240#



U24 HGR
UPLIFT = 240#