

51/5-5

MASSENGILL ASSOCIATES, P. A.

116 EAST MAIN STREET

BENSON, NORTH CAROLINA 27504

PHONE: 919-894-2071 FAX: 919-894-7288

STRUCTURAL CALCULATIONS - REPORT

PROJECT: JESSICA PACHECU

SUBJECT: ROOF STRUCTURE REPAIR

LOCATION: LOT 49 IDEAL RD

BY: *Larry W. Massengill*



SITE VISIT 5-28-19 5-30-19

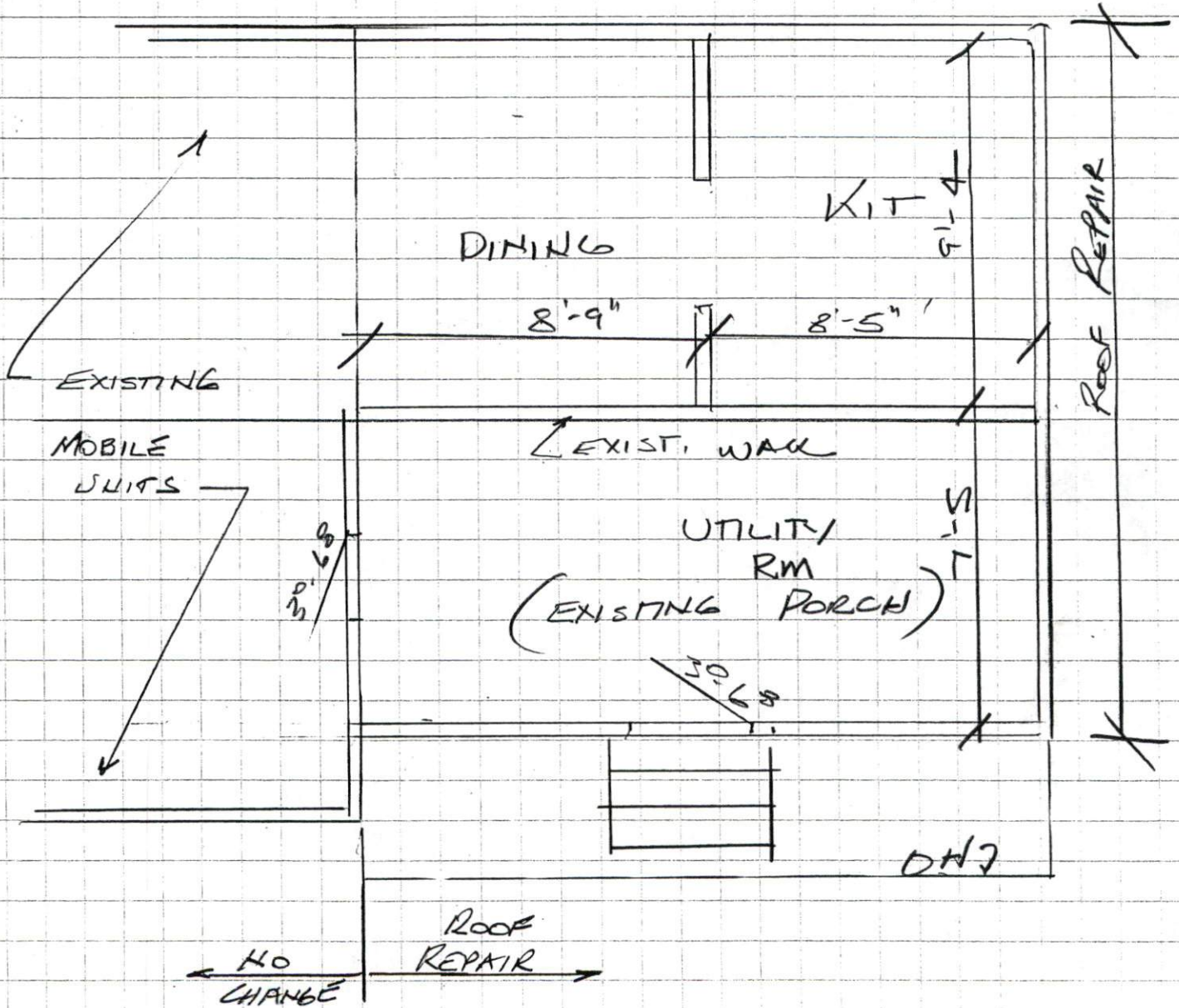
OWNER: JESSICA PACHECU

5-2/5-5
5-30-19

Massengill Associates, P.A.
116 E. Main Street
Benson, N.C. 27504
Phone (919) 894-2071

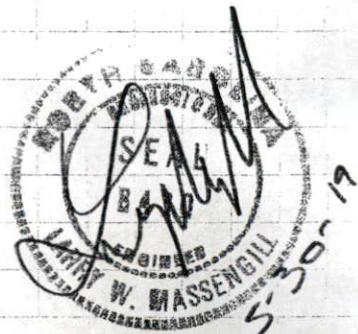
ROOF STRUCTURE REPAIR

LOT 49 IDEAL RD



1
52

EXISTING FLOOR PLAN



5-3/5-5

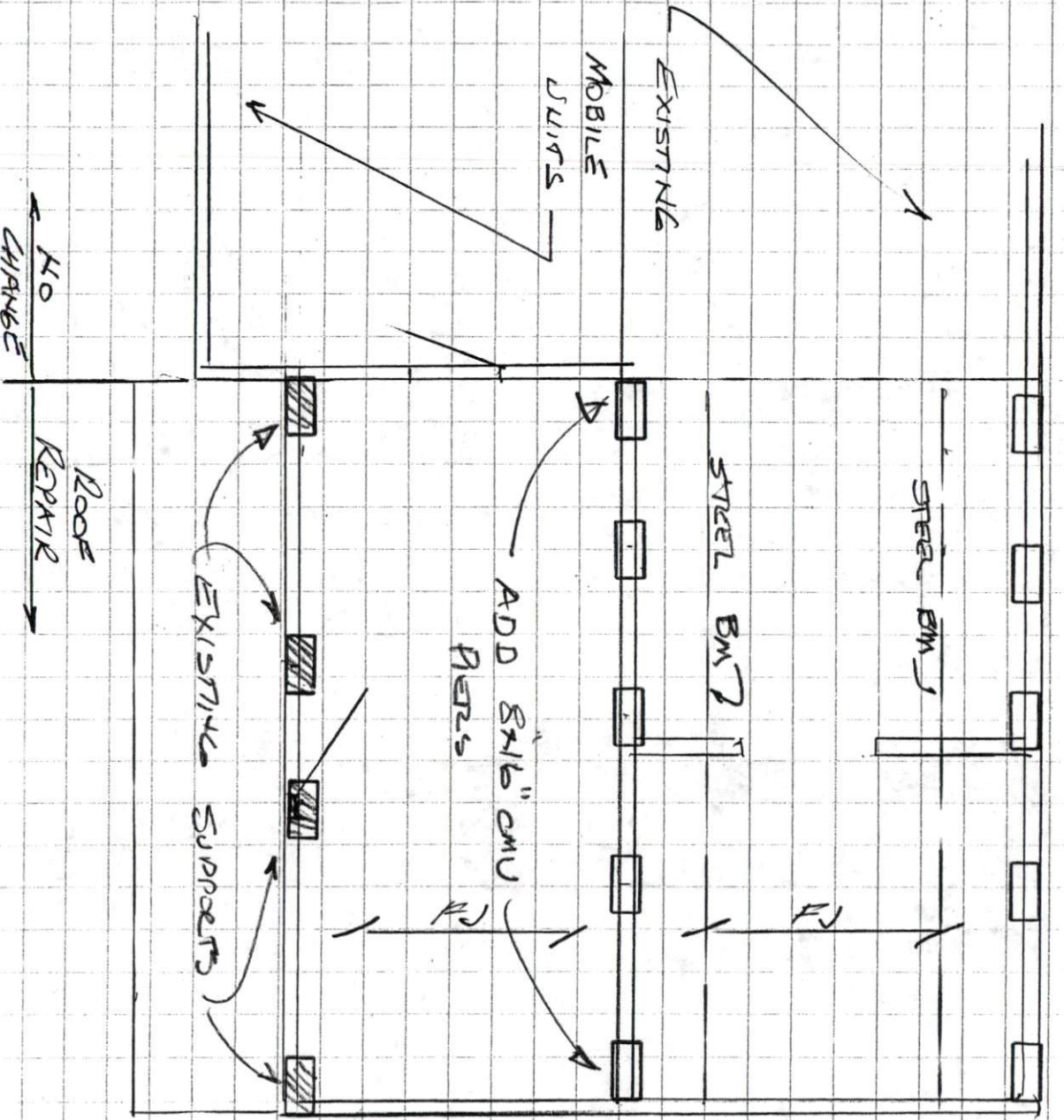
5-3-14

OWNER: JESSICA RACHECU

ROOF STRUCTURE REPAIR

LOT 49 IDEAL RD

Massengill Associates, P.A.
116 E. Main Street
Bensenville, N.S. 27504
Phone (919) 894-2071



1
5.3

FOUNDATION WALL



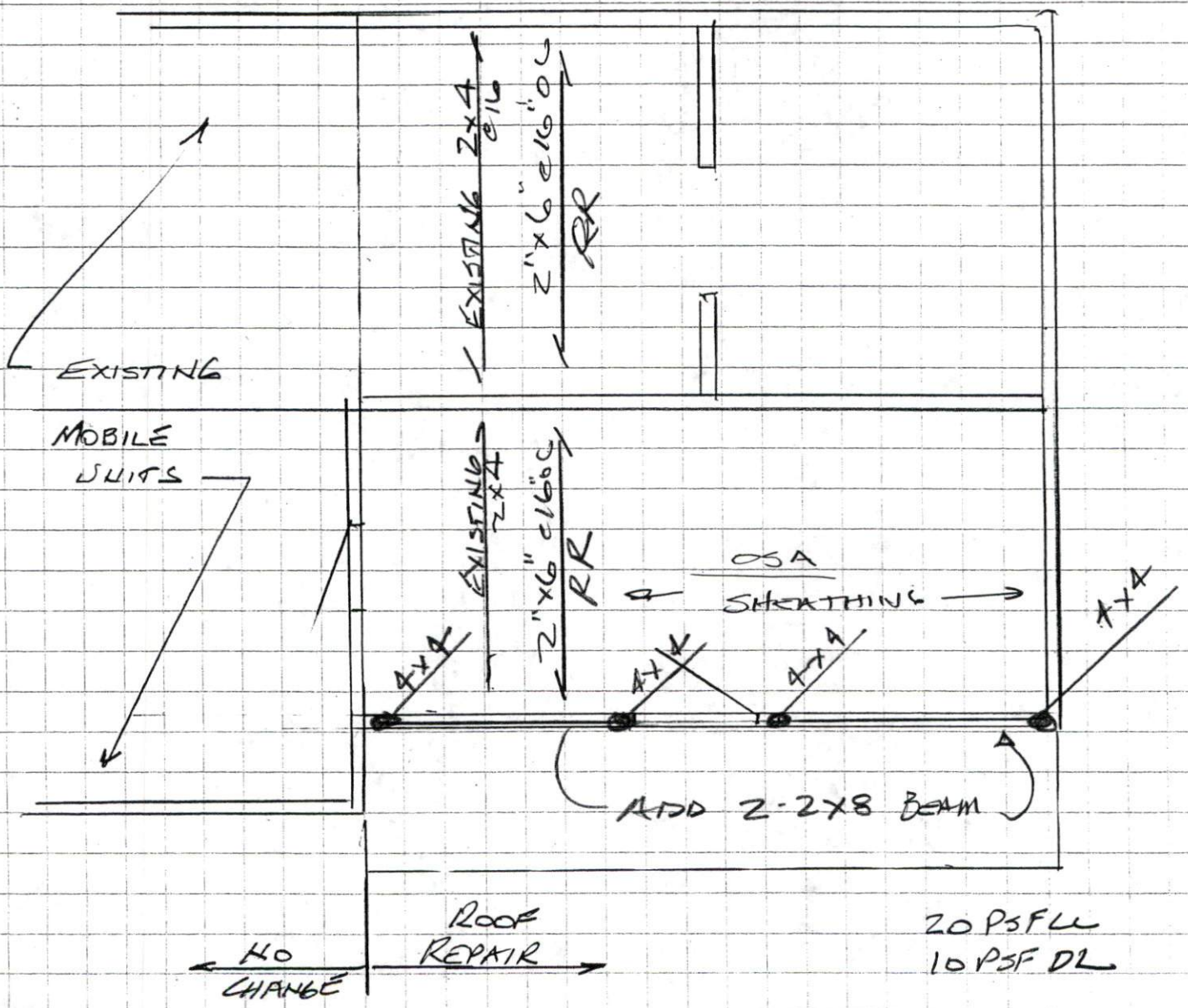
5-4/5-5
5-30-19

OWNER: JESSICA PACHECU

Massengill Associates, P.A.
116 E. Main Street
Benson, N.C. 27504
Phone (919) 894-2071

ROOF STRUCTURE REPAIR

LOT 49 IDEAL RD

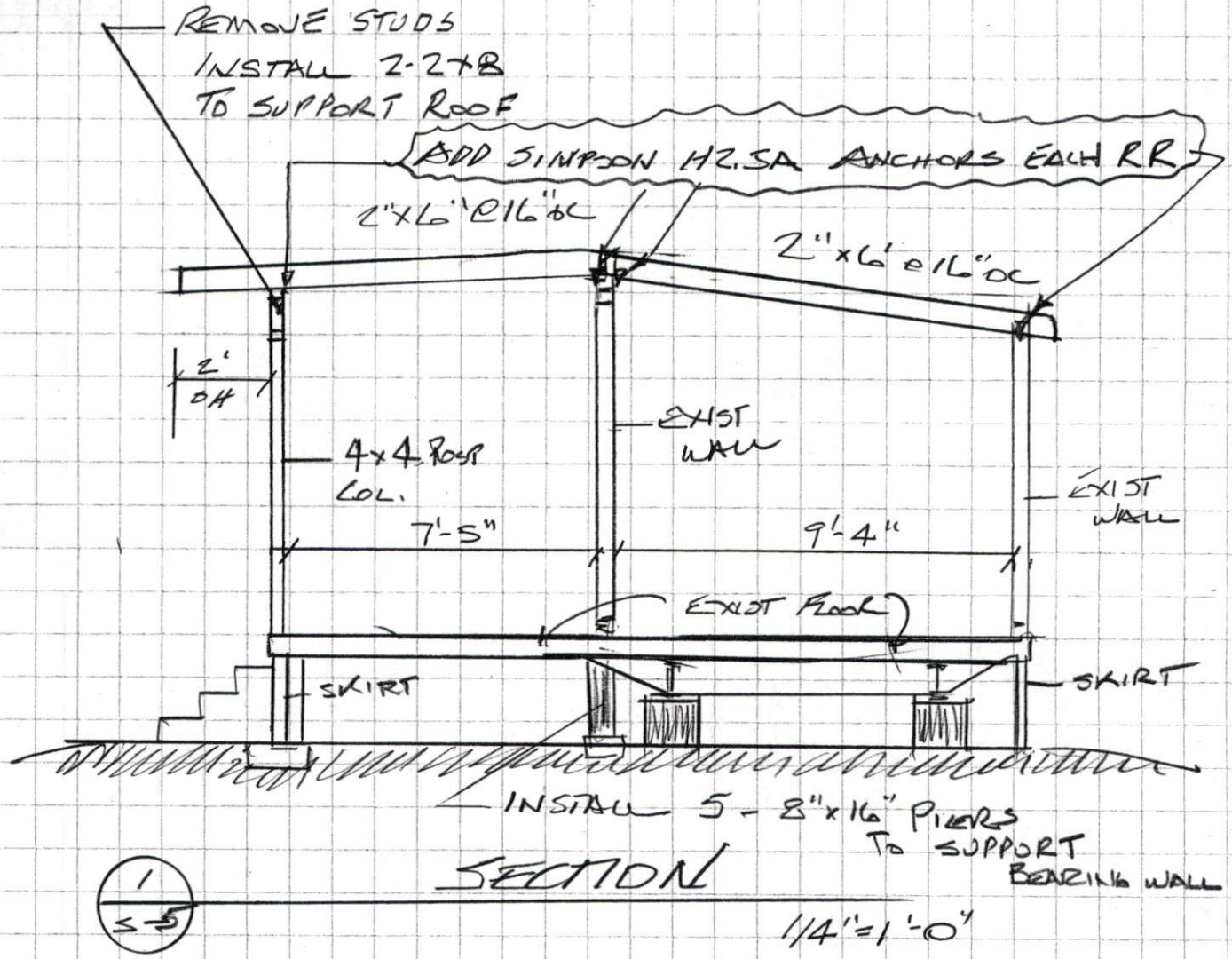


1
5-4

ROOF FRAMING PLAN

Professional Engineer Seal for Larry W. Massengill, dated 5-30-19.

5-5/5-5
5-30-19



ROOF LOAD 20 PSF LL
" " 10 PSF DL
WIND VEL 120 MPH (ULT)



19
Massengill Associates, P.A.
116 E. Main Street
Benson, N.C. 27504
Phone (919) 894-2071

JOB **SPAN CHART 2018 CODE**

SHEET NO. **1**

CALCULATED BY _____

DATE _____

CHECKED BY _____

DATE _____

SCALE **3**

MEMBER TYPE	SIZE	12" OC	16" OC	24" OC	SIZE	12" OC	16" OC	24" OC
FLOOR JOIST	2x12	10-3	13-6	14-11	2x6	11-3	10-3	8-6
	3D PSF LL	2x8	14-11	13-6	2x8	14-11	13-3	10-10
10 PSF DL	2x10	17-3	15-5	12-7	2x10	16-2	14-0	11-5
FLOOR JOIST	2x10	10-3	12-3	10-3	2x10	10-3	9-4	7-7
	40 PSF LL	2x8	13-6	12-3	2x8	13-6	11-10	9-8
10 PSF DL	2x10	17-3	15-5	12-7	2x10	16-2	14-0	11-5
FLOOR JOIST	2x12	11-3	14-11	13-6	2x6	11-3	10-3	8-6
	3D PSF LL	2x8	14-11	13-6	2x8	14-11	13-3	10-10
10 PSF DL	2x10	17-3	15-5	12-7	2x10	16-2	14-0	11-5
MEMBER TYPE	12" OC	16" OC	24" OC	SIZE	12" OC	16" OC	24" OC	
	SOUTHERN PINE #2							

KARERS	2x4	10-4	9-5	8-0	2x4	10-4	9-0	7-4
20 PSF LL	2x10	16-3	14-4	11-9	2x10	15-7	13-6	11-0
10 PSF DL	2x8	21-0	18-2	14-10	2x8	19-8	17-1	13-11
2x10	2x10	25-8	22-3	18-2	2x10	23-5	20-3	16-6
L/180	2x12	31-7	25-9	21-0	2x12	26-0	23-10	19-6
KARERS	2x4	9-5	8-7	7-6	2x4	9-5	8-7	7-4
20 PSF LL	2x6	14-9	13-5	11-9	2x6	14-9	13-5	11-0
10 PSF DL	2x8	19-6	17-9	14-10	2x8	19-6	17-1	13-11
2x10	2x10	24-10	22-3	18-2	2x10	23-5	20-3	16-6
L/180	2x12	26-0	25-9	21-0	2x12	26-0	23-10	19-6
SEE CODE	2x10	22-7	19-10	16-3	2x10	22-11	19-10	14-9
10 PSF DL	2x8	18-6	15-3	13-3	2x8	17-7	16-3	12-6
20 PSF LL	2x6	14-5	12-10	10-6	2x6	13-11	12-10	9-10
LELNB JOIST	2x4	9-2	8-7	7-2	2x4	9-3	8-7	6-7
10 PSF DL	2x8	18-6	15-3	13-3	2x8	17-7	16-3	12-6
2x10	2x10	22-7	19-10	16-3	2x10	22-11	19-10	14-9
LELNB JOIST	2x4	11-10	10-9	9-5	2x4	11-10	10-9	9-3
NO LL	2x6	18-8	16-11	14-9	2x6	18-8	16-11	13-11
10 DL	2x8	24-7	22-4	18-9	2x8	24-7	21-7	17-7
2x10	2x10	31-4	28-1	22-11	2x10	26-0	25-7	20-11
FLOOR JOIST	2x12	23-0	19-11	16-3	2x12	21-4	18-6	15-1
10 PSF DL	2x10	19-0	17-2	14-1	2x10	18-1	15-8	12-10
3D PSF LL	2x8	14-11	13-6	11-6	2x8	14-11	13-3	10-10
2x12	2x12	21-6	17-10	14-7	2x12	19-1	16-6	13-6
FLOOR JOIST	2x10	10-3	9-4	8-1	2x10	10-3	9-4	7-7
40 PSF LL	2x8	13-6	12-3	10-3	2x8	13-6	11-10	9-8
10 PSF DL	2x10	17-3	15-5	12-7	2x10	16-2	14-0	11-5