1-21-2016 (Thurs.)

To: Scott Cleary
Mobility Concepts, Inc.
Scott@mobilityconceptsinc.com

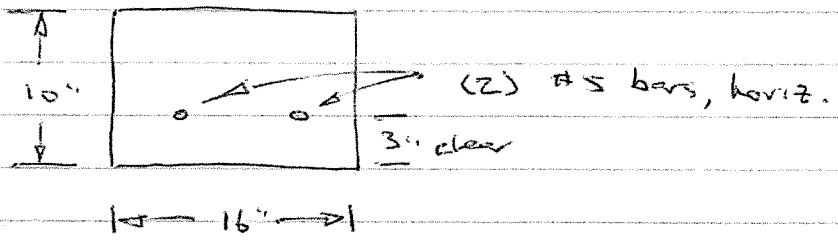
Re: I.O.O.F. Building Main floor replacement framing system

Scott - Here is Travis as-built of the present main floor framing system. To replace all of the dry-rotted areas of the main floor, this system will work:

1) Remove the floor joists, beams and columns.

2) Leave the concrete footings that are present and in good condition along the N-S beam lines.

3) Pour new reinforced concrete footings that are 10" thick x 16" wide along the N-S beam lines and against the East and West exterior walls.



4) Build 6 N-S oriented stud walls using 2x6 D.F. studs @ 16" o.c. Bottom plate (mud sill) 2x6 P.T. Hem-Fir w/ 5/8" A.B.'s cast-in-place @ 4 ft. o.c. Double top plate to carry new BCI. floor joists.

5) Sheath the new stud walls w/ 7/16" OSB. or 1/2" CDX plywood, nailed w/ #8 common, edge nailing @ 4" o.c. & field nailing @ 8" o.c., all edges blocked

6) New floor joists BCI. 6000 1.8 Series, blocked over every bearing location. Use full-length, 5-span floor joists, if available that long.

7) New subfloor is 1 1/8" CDX or plywood T&G Sturd-I-Floor. Butt joints staggered, glued & screwed.

I will call you after you receive this report/recommendations.

Sincerely,
Tom Hurley

Floor joist calcs:

16" O.C. B.C.I. is, spanning ≈12 ft. from ℄ of stud wall to ℄ of stud wall

100 lb/ft² L.L.
+20 lb/ft² Struc. D.L.
= 120 lb/ft², total

$\frac{16}{12} \times 120 = 160$ lb/ft on each B.C.I. joist

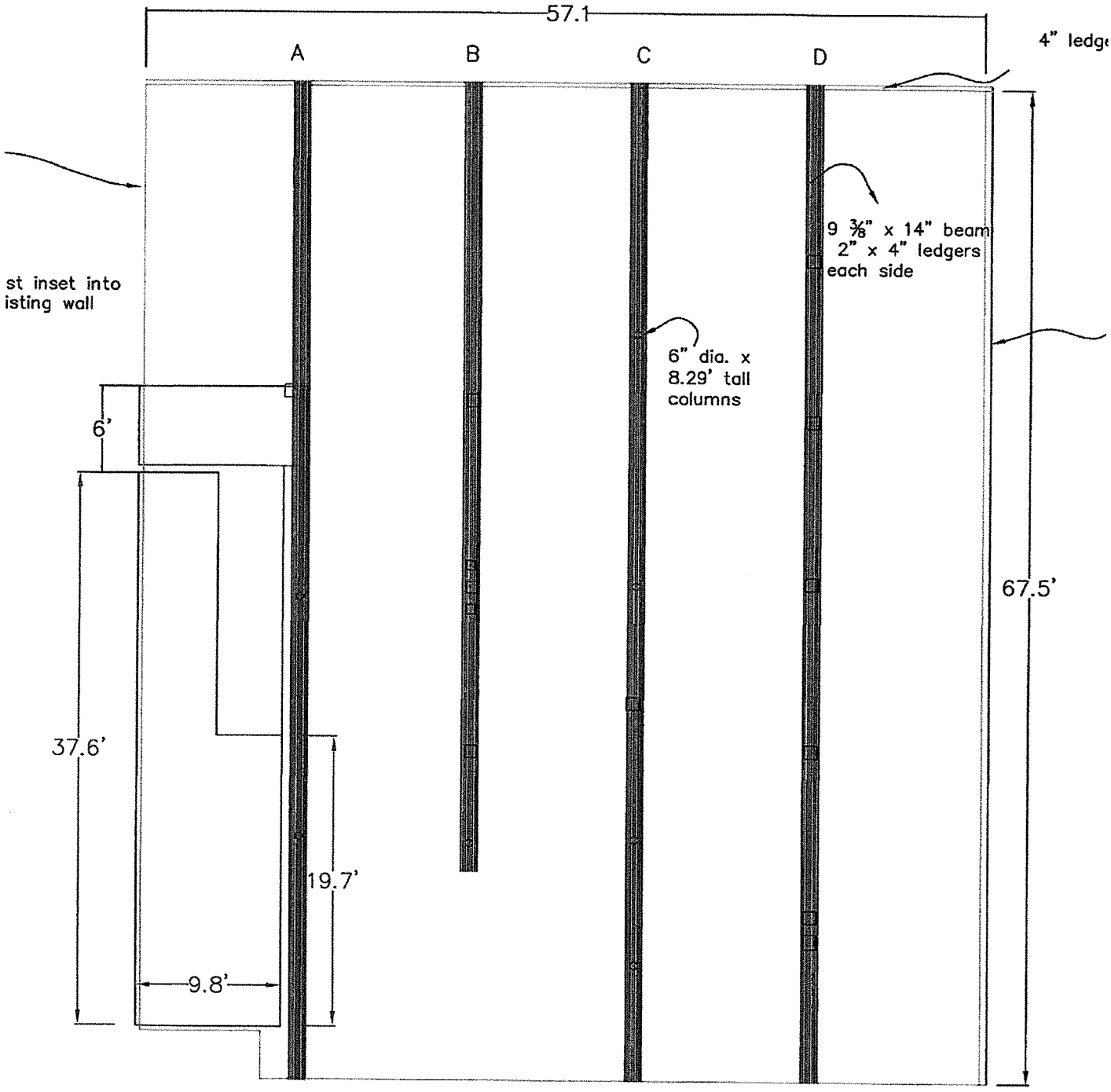
B.C.I. 6000 1.8 Series

Allowable total load = 166 lb/ft > 160 lb/ft, O.K.

$\frac{160}{166} \times 100\% = 96\%$ loaded in total load

Allowable L.L. = >138 lb/ft, O.K.

$\frac{133}{>138} \times 100\% = <96\%$ loaded in L.L.


57.1
A
B
C
D
4" ledge
st inset into
isting wall
9 3/8" x 14" beam
2" x 4" ledgers
each side
6" dia. x
8.29' tall
columns
6'
67.5'
37.6'
19.7'
9.8'

Floor Load Tables

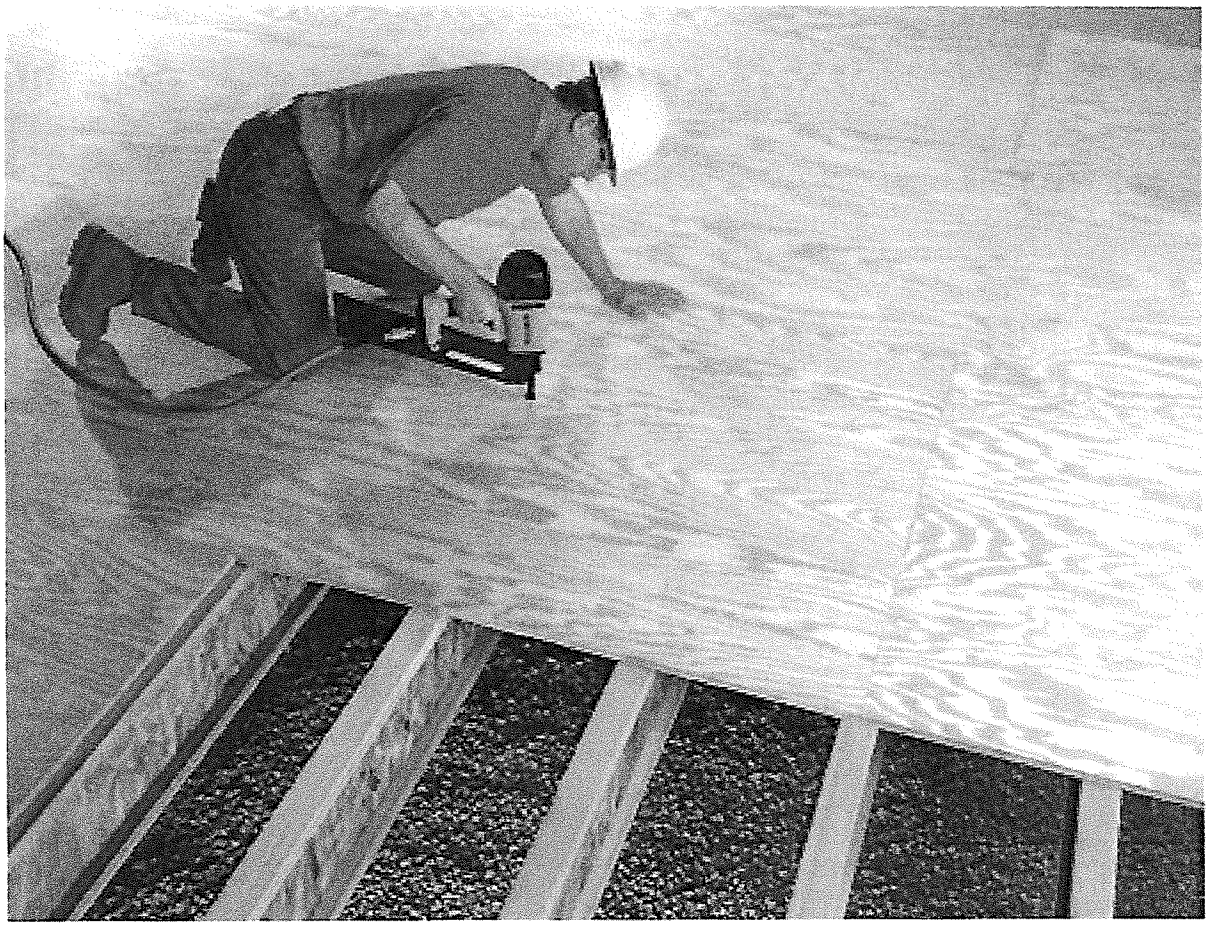
Allowable Uniform Floor Load
(in pounds per linear foot [PLF])

100% Load Duration

Span Length	BCI® 5000 1.7 Series 2" Flange Width						BCI® 6000 1.8 Series 2 5/16" Flange Width							
	9½" BCI® 5000 1.7		11⅞" BCI® 5000 1.7		14" BCI® 5000 1.7		9½" BCI® 6000 1.8		11⅞" BCI® 6000 1.8		14" BCI® 6000 1.8		16" BCI® 6000 1.8	
	Live Load	Total Load	Live Load	Total Load	Live Load	Total Load	Live Load	Total Load	Live Load	Total Load	Live Load	Total Load	Live Load	Total Load
6	-	280	-	300	-	313	-	320	-	333	-	346	-	353
7	-	240	-	257	-	268	-	274	-	285	-	297	-	302
8	-	210	-	225	-	235	-	240	-	250	-	260	-	265
9	-	186	-	200	-	208	-	213	-	222	-	231	-	235
10	151	168	-	180	-	188	175	192	-	200	-	208	-	212
11	117	152	-	163	-	170	135	174	-	181	-	189	-	192
12	91	136	146	150	-	156	107	160	-	166	-	173	-	176
13	73	116	117	138	-	144	85	147	138	153	-	160	-	163
14	59	100	95	128	-	134	69	129	113	142	-	148	-	151
15	48	87	78	112	115	125	57	112	93	133	135	138	-	141
16	40	76	65	98	96	116	47	95	78	125	113	130	-	132
17			55	87	80	103	40	80	65	112	95	122	-	124
18			47	77	68	92			56	100	81	115	108	117
19			40	69	58	82			48	89	70	106	93	111
20					50	74			41	81	60	96	80	106
21					44	67					52	87	70	99
22											46	79	61	90

- Total Load values are limited by shear, moment, or deflection equal to L/240.
- Live Load values are limited by deflection equal to L/480. For deflection limits of L/360 and L/960, multiply the Live Load values by 1.33 and 0.50 respectively.
- Both the Total Load and Live Load columns must be checked. Where a Live Load value is not shown, the Total Load value will control.
- Table values apply to either simple or multiple span joists. Span is measured center to center of the minimum required bearing length. Analyze multiple span joists with the BC CALC® software if the length of any span is less than half the length of an adjacent span.
- Table values do not consider composite action from gluing and nailing floor sheathing (composite action is considered in floor span tables on page 4).
- Total Load values assume minimum bearing lengths without web stiffeners for joist depths of 16 inches and less. 18 and 20 inch joists require web stiffeners.
- For assistance with floor design, consult the section *About Floor Performance* on page 4.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

Georgia-Pacific Wood Products / OSB & Plywood



1-21-2016 (Thurs.)
P.M.

To: Scott Cleary
Mobility Concepts, Inc.
Scott@Mobilityconceptsinc.com

Re: I.O.O.F. Building / my contact w/ Amy Briels & Stu Edwards

Scott -

Yesterday (Wed., 1-20-2016) afternoon, I was contacted by Amy Briels of Compass Real Estate in Baker city, Phone #541-523-5838. She has a prospective buyer for your I.O.O.F. building and she was interested in what I have in the way of a report on it. I told Amy that I needed to write up my recommendations for the replacement of the main floor and report to you.

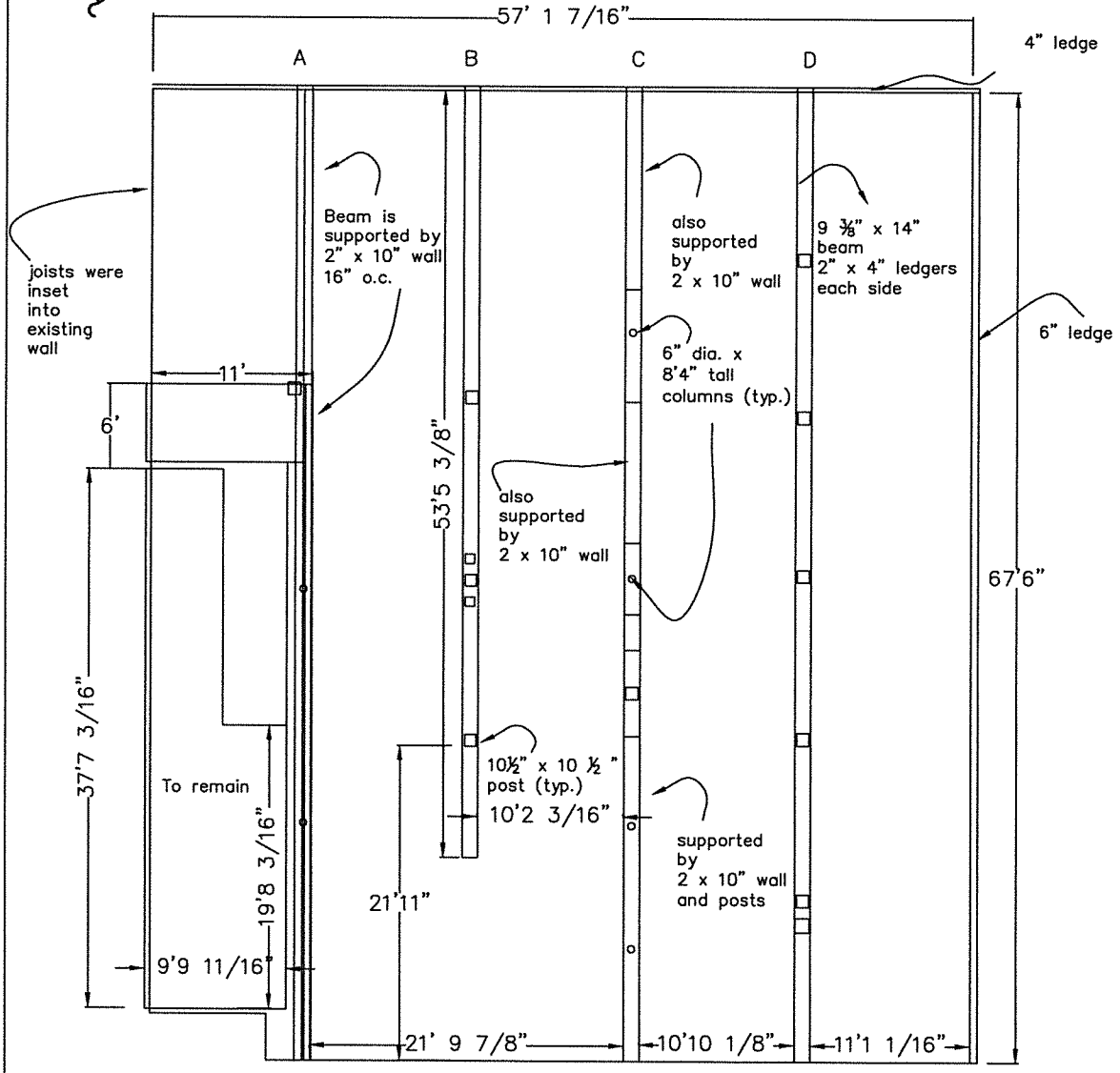
I then called for Stu Edwards, Oregon licensed structural engineer, of CK3 LLC in Ontario, Phone #541-889-5411. He called me back this morning and told me that he had gone clear through the building, including on top of the roof, back when he helped Tom & John Bootsma on it. Stu told me there are some problems with the roof structure, but that he found the walls to be good.

I told Stu that I am doing the main floor recommendations for you, and that it would be helpful if he could be available to you or the new owner for any remedial design work with the roof framing system.

Stu said yes, that he would be glad to help with it. Stu is very good at this kind of engineering and he is familiar with this building.

Sincerely,
Tom Hurley

HANLEY ENGINEERING, INC.
P.O. BOX 701, 2043 MAIN STREET, BAKER CITY, OREGON 97814 (541) 523-3803



0' 8'

AS-BUILT JANUARY 2016