

REVISION:

DRAWN:
DJR

CUSTOM DESIGNED HOME FOR:
Aaron & Lisa Butler
COLUMBIA COUNTY, FLORIDA
Dimension Plan

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N3
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DATE:
09/22/2023
COMP:

SHEET:

A.5
5 of 15

Digitally signed by: N. P. GEISLER
DN: CN = N. P. GEISLER C = US
O = AR0007005 OU = ARCHITECT
Date: 2023.09.14 13:58:07 -05'00'

HEADER SPANS FOR EXTERIOR BEARING WALLS					
HEADERS SUPPORTING:	HEADER SIZE	BUILDING WIDTH (FT)			
		20'	28'	36'	
ROOF CEILING	2-x4	SPAN * JACKS	SPAN * JACKS	SPAN * JACKS	
	2-x4	3'-6"	1	3'-2"	1
	2-x6	5'-5"	1	4'-8"	1
	2-x8	6'-10"	1	5'-11"	2
	2-x10	8'-5"	2	7'-3"	2
	2-x12	9'-9"	2	8'-5"	2
	3-x8	8'-4"	1	7'-5"	1
	3-x10	10'-6"	1	9'-1"	2
	3-x12	12'-2"	2	10'-1"	2
	4-x8	9'-2"	1	8'-4"	1
	4-x10	11'-8"	1	10'-6"	1
	4-x12	14'-1"	1	12'-2"	2

BUILDING COMPONENTS & CLADDING LOADS				
45° 21° MEAN BUILDING HEIGHT = 30.0', EXPOSURE "B" 1° ROOF ANGLE 21° TO 45°				
ZONE	AREA	WALL	ROOF 21° TO 45°	WALL
1	10	19.3 / -21.8	23.1 / -25.9	130 MPH
2	20	19.4 / -20.1	23.0 / -24.6	140 MPH
3	50	18.6 / -19.2	22.2 / -22.8	150 MPH
4	10	19.3 / -25.5	23.1 / -30.3	160 MPH
5	20	19.4 / -24.3	23.0 / -29.0	170 MPH
6	50	18.6 / -22.9	22.2 / -21.2	180 MPH
7	10	19.3 / -25.5	23.1 / -30.3	190 MPH
8	20	19.4 / -24.3	23.0 / -29.0	200 MPH
9	50	18.6 / -22.9	22.2 / -21.2	210 MPH
10	10	21.8 / -23.6	25.9 / -34.1	220 MPH
11	20	20.8 / -22.6	24.1 / -26.9	230 MPH
12	50	19.5 / -21.9	23.1 / -25.4	240 MPH
13	10	19.3 / -25.5	23.1 / -30.3	250 MPH
14	20	19.4 / -24.3	23.0 / -29.0	260 MPH
15	50	18.6 / -22.9	22.2 / -21.2	270 MPH
16	10	21.8 / -23.6	25.9 / -34.1	280 MPH
17	20	20.8 / -22.6	24.1 / -26.9	290 MPH
18	50	19.5 / -21.9	23.1 / -25.4	300 MPH
19	10	19.3 / -25.5	23.1 / -30.3	310 MPH
20	20	19.4 / -24.3	23.0 / -29.0	320 MPH
21	50	18.6 / -22.9	22.2 / -21.2	330 MPH
22	10	21.8 / -23.6	25.9 / -34.1	340 MPH
23	20	20.8 / -22.6	24.1 / -26.9	350 MPH
24	50	19.5 / -21.9	23.1 / -25.4	360 MPH
25	10	19.3 / -25.5	23.1 / -30.3	370 MPH
26	20	19.4 / -24.3	23.0 / -29.0	380 MPH
27	50	18.6 / -22.9	22.2 / -21.2	390 MPH
28	10	21.8 / -23.6	25.9 / -34.1	400 MPH
29	20	20.8 / -22.6	24.1 / -26.9	410 MPH
30	50	19.5 / -21.9	23.1 / -25.4	420 MPH

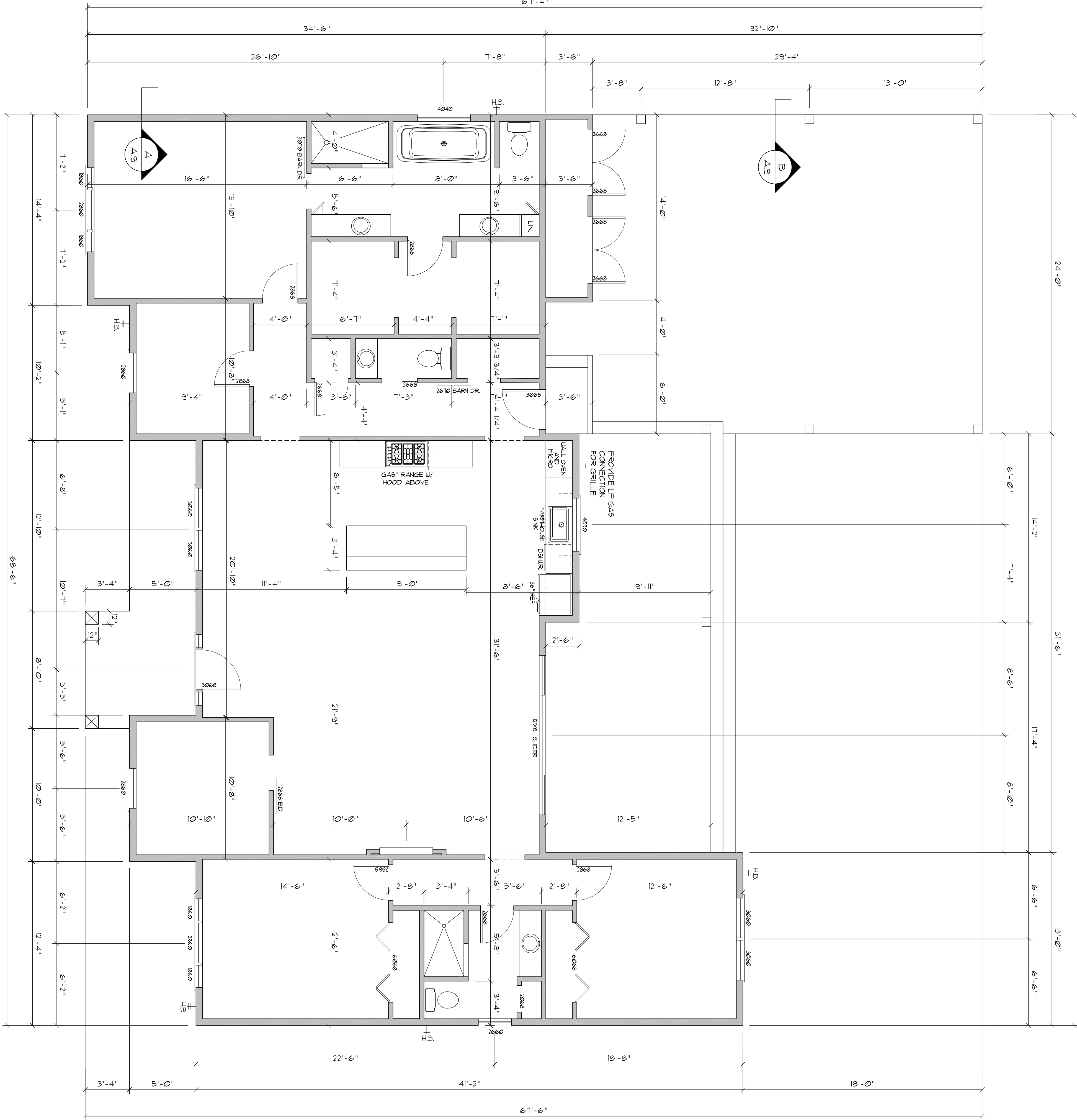
HEIGHT & EXPOSURE ADJUSTMENT COEFFICIENTS FOR BUILDING COMPONENTS & CLADDING				
BUILDING HEIGHT	EXPOSURE "B"	EXPOSURE "C"	EXPOSURE "D"	EXPOSURE
15	1.00	1.21	1.41	
20	1.00	1.29	1.55	
25	1.00	1.35	1.61	
30	1.00	1.40	1.66	

Structural Design Data

- THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE - SECTION 1609 AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.
- WIND LOAD CRITERIA RISK CATEGORY 2, EXPOSURE, "B"
BASED ON ANSI/ASCE 7-10, 2010 FBC 1609-4 WIND VELOCITY: V_{WT} = 130 MPH
- ROOF DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: 20 PSF
SUPERIMPOSED LIVE LOADS: 20 PSF
V_{WD} = 107 MPH
- FLOOR DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: 25 PSF
SUPERIMPOSED LIVE LOADS: 40 PSF
RESIDENTIAL
BALCONIES 60 PSF
- WIND NET UPLIFT: ARE AS INDICATED ON PLANS

Design Data

2255 S.F. - LIVING AREA
133 S.F. - FRONT PORCH
356 S.F. - COVERED REAR LANAI
188 S.F. - (2) CAR GARPORT
3532 S.F. - TOTAL AREA



Floor Plan

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