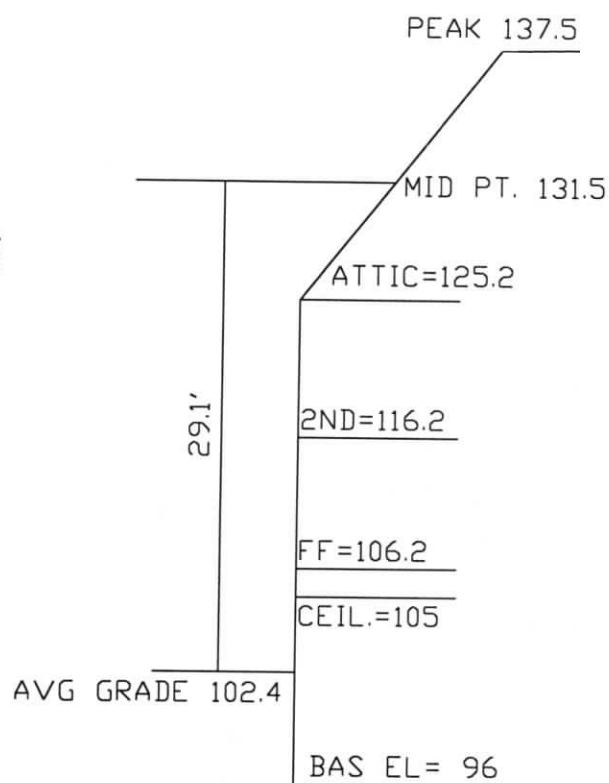
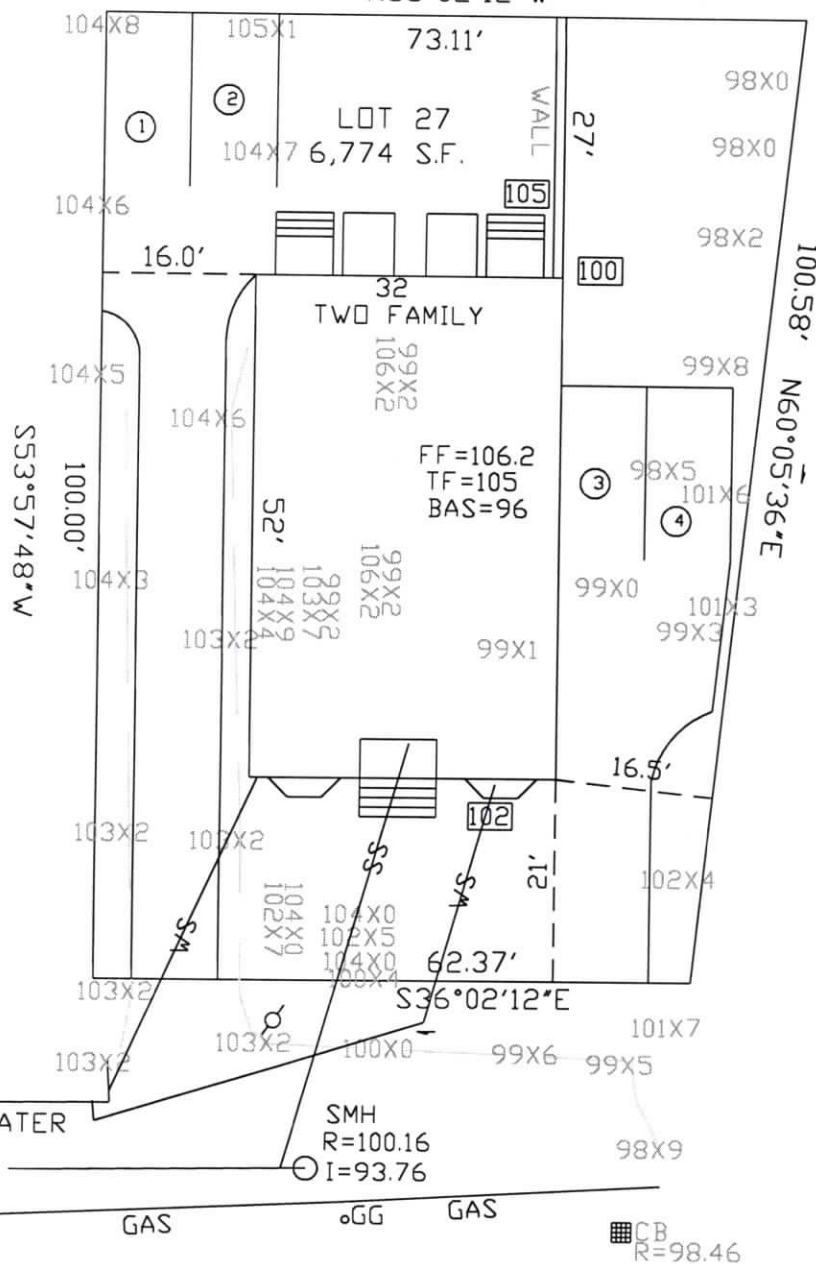


14 ASH	42.66	1
210-214 WAVERLEY	37.46	2
19-21 MIDLAND	36.23	3
7-9 ASH	35.58	4
18 ASH	35.2	5
17-19 ASH	34.3	6
20-22 MIDLAND	34.09	7
222-224 WAVERLEY	32.27	8
22-24 SHEAN	32.18	9
13-15 ASH	31.32	10
17-19 SHEAN	31.2	11
26 SHEAN	31.14	12
9-11 SHEAN	30.8	13
10-12 ASH	29.29	14
28-30 SHEAN	25.43	15

LOT COVERAGE
1664/6774 = 24.6%

OPEN SPACE
6774-3820/6774 = 43.6%

HOUSE	1664
PROP. DRIVE & PARKING	2021
STAIRS/BULKHEAD	135
TOTAL	3820



67.5% BAS. BELOW GRADE

AVG GRADE

$$\begin{array}{r} 103.2 \\ 104.5 \\ 100 \\ 102 \\ \hline 409.7 \\ 409.7/4 = 102.4 \end{array}$$


PAUL J. FINOCCHIO P.L.S. No.36115 DATE

OWNER RUTH ANN BETTS,EDMUND BETTS
HOUSE NO. 18 ASH STREET
LOT NO. 30-28
APP. NO.
DATE JAN. 1, 2023
SCALE 1"=20'
FILE NO. 7815E

Zoning Compliance Check List

(Registered Land Surveyor)

Property Address: 18 Ash Street

Zone: GR

Surveyor Signature and Stamp: Paul Finocchi

Date: 1/2/23

	REQUIRED	EXISTING	PROPOSED
Lot Area	7,000 sf	6,774 sf	6,774 sf
Lot Frontage	70 ft.	62.37 ft	62.37 sf
Floor Area Ratio	—	—	—
Lot Coverage	30 %	16.4%	26.1%
Open Space	40 %	62 %	43.6%
Front Setback	20 ft.	64.5 ft.	21 ft.
Side Setback LT	10 ft.	20.9 ft.	16.0 ft.
Side Setback RT	10 ft.	9.5 ft.	16.5 ft.
Rear Setback	20.0 ft.	70 ft.	27 ft.
Building Height	33 ft.	26.6 ft.	29.1 ft.
Stories	2.5	2	2.5
½ Story Calculation			

NOTES:



June 4, 2013

New Duplex Construction

18 Ash Street, Belmont, MA

Builder:
Michael Collins

buildcollins@gmail.com

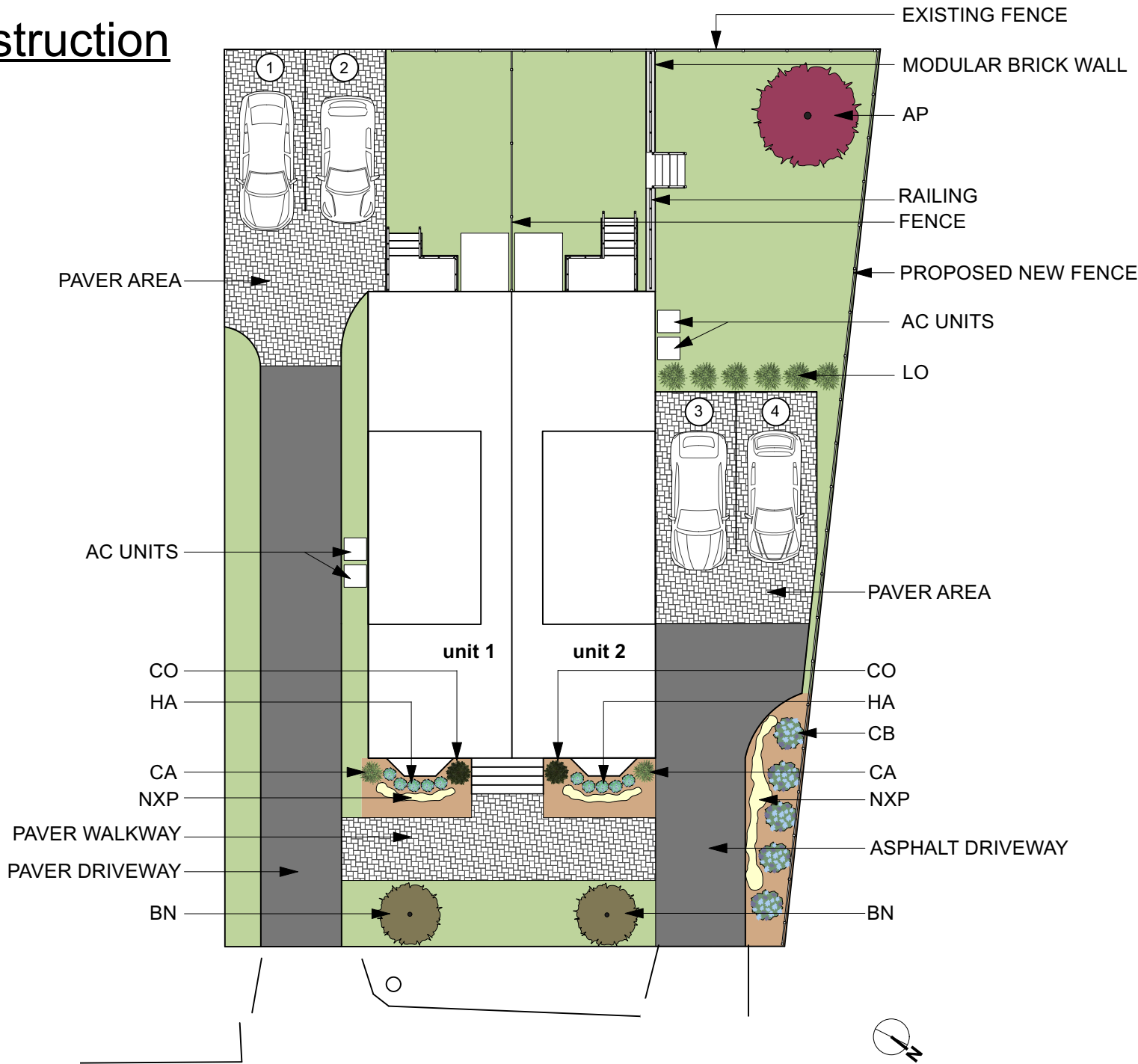
Collins Development
Stoneham, MA

Architect:
Brigitte Steines
650-814-8542
brigitte@inkstonearchitects.com

InkStone Architects
18 Main Street #3B
Concord, MA 01742

SHEET INDEX

- T1Title Page w/ Landscape Plan 1/16"=1'-0"
- T2Neighborhood Calculations
- A0Foundation Plan 1/8"=1'-0"
- A1First Floor Plan 1/8"=1'-0"
- A2Second Floor Plan 1/8"=1'-0"
- A3Third Floor Plan 1/8"=1'-0"
- A4Front and Left Exterior Elevation 1/8"=1'-0"
- A5Rear and Right Exterior Elevation 1/8"=1'-0"
- A63D Model Views



PLANT LIST

SYMB.	QNTY.	SCIENTIFIC NAME	COMMON NAME	SIZE
AP	1	Acer Palmatum "Bloodgood"	Blood Good Japanese Maple	7'-8"
BN	2	Betula Nigra Multi Stem	River Birch	7'-8"
CB	5	Rhododendron Catawbiense	Catawba Rhododendron	5 GAL
CO	2	Chamaecyparis Obtusa "Gracilis"	Hinoki Cypress	5'-6"
NXP	20	Nepeta X "Psike" Little Turoy	Catmint	1 GAL
LO	6	Ligustrum Ovalifolium	California Privet	4'-5"
HA	10	Hydrangea Arborescens "Incrediball"	Incrediball Hydrangea	5 GAL
CA	2	Cornus Alba	Tatarian Dogwood	7 GAL

Half Story Calculation

Second Floor: 772 sq.ft. (per unit) x 2 = 1,544 sq.ft.

Third Floor: 433 sq.ft. (per unit) x 2 = 866 sq.ft.

Third Floor Percentage: 56 %

Total Living Area

First Floor: 764 sf.ft. (per unit) x 2 = 1,528 sq.ft.

Second Floor: 772 sq.ft. (per unit) x 2 = 1,544 sq.ft.

Third Floor: 310 sq.ft. (per unit) x 2 = 620 sq.ft.

Total Building: 3,692 sq.ft.

Each Unit : 1,846 sq.ft.

Neighborhood Calculations

18 Ash Street, Belmont, MA

Neighborhood reference building list based on neighborhood determination by Planning Board.

Height Table			
Address	Height Sidewalk to Peak	Rank	Percentile
14 - 16 Ash	42.66	1	
210 - 214 Waverley	37.46	2	
19 - 21 Midland	36.23	3	
7 - 9 Ash	35.58	4	
18 Ash Proposed	35.2	5	73%
17 -19 Ash	34.32	6	
20 -22 Midland	34.09	7	
222 - 224 Waverley	32.37	8	
22 -24 Shean	32.18	9	
13 -15 Ash	31.32	10	
17 - 19 Shean	31.2	11	
24 - 26 Gordon	31.14	12	
9 - 11 Shean	30.8	13	
10 - 12 Ash	29.29	14	
28 - 30 Shean	25.43	15	

TLA to Lot Area Building Rank					
Address	TLA	Lot Area	TLA/Lot Area	Rank	Percentile
14 -16 Ash	3939	5000	79%	1	
7 - 9 Ash	3141	5370	58%	2	
210 -214 Waverley	2950	5145	57%	3	
17 - 19 Ash	3272	6000	55%	4	
18 Ash Proposed	3692	6774	55%	5	73%
17 - 19 Shean	3266	6000	54%	6	
9 - 11 Shean	3266	6000	54%	7	
13 - 15 Ash	2535	4882	52%	8	
22 - 24 Shean	3488	7174	49%	9	
20 -22 Midland	2400	5000	48%	10	
28 - 30 Shean	2376	5630	42%	11	
222 Waverley 1,2,3	2780	6985	40%	12	
24 - 26 Gordon	2317	6411	36%	13	
19 - 21 Midland	2720	7848	35%	14	
16 - 18 Shean	1170	6972	17%	15	

TLA Building Rank			
Address	TLA	Rank	Percentile
14 -16 Ash	3939	1	
18 Ash Proposed	3692	2	93%
22 - 24 Shean	3488	3	
17 - 19 Ash	3272	4	
17 - 19 Shean	3266	5	
9 - 11 Shean	3266	6	
7 - 9 Ash	3141	7	
210 -214 Waverley	2950	8	
222 Waverley 1,2,3	2780	9	
19 - 21 Midland	2720	10	
13 - 15 Ash	2535	11	
20 -22 Midland	2400	12	
28 - 30 Shean	2376	13	
24 - 26 Gordon	2317	14	
16 - 18 Shean	1170	15	

Total Living Area - Ash Street Only		
Address	TLA	Rank Percentile
14-16 Ash	3939	
18 Ash Proposed	3692	80%
17-19 Ash	3272	
7-9 Ash	3141	
13-15 Ash	2535	
TLA to Lot Area - Ash Street Only		
Address	TLA to Lot Area	Rank Percentile
14-16 Ash	79%	
7-9 Ash	58%	
17-19 Ash	55%	
18 Ash Proposed	55%	40%
13-15 Ash	52%	

TLA Dwelling Unit Rank			
Address	TLA Unit	Rank	Percentile
16 Ash	1984	1	
11 Ash	1967	2	
14 Ash	1955	3	
214 Waverley	1895	4	
18 Ash Proposed	1846	5	80%
22 - 24 Shean	1744	6	
17 - 19 Ash	1636	7	
17 - 19, 9 -11 Shean	1633	8	
9 Ash	1581	9	
7 Ash	1560	10	
19 -21 Midland	1360	11	
13 Ash	1320	12	
15 Ash	1215	13	
20 -22 Midland	1200	14	
28 - 30 Shean	1188	15	
222 Waverley 2	1076	16	
210 Waverley	1055	17	
222 Waverley 1	1014	18	
222 Waverley 3	690	19	
16 - 18 Shean	585	20	

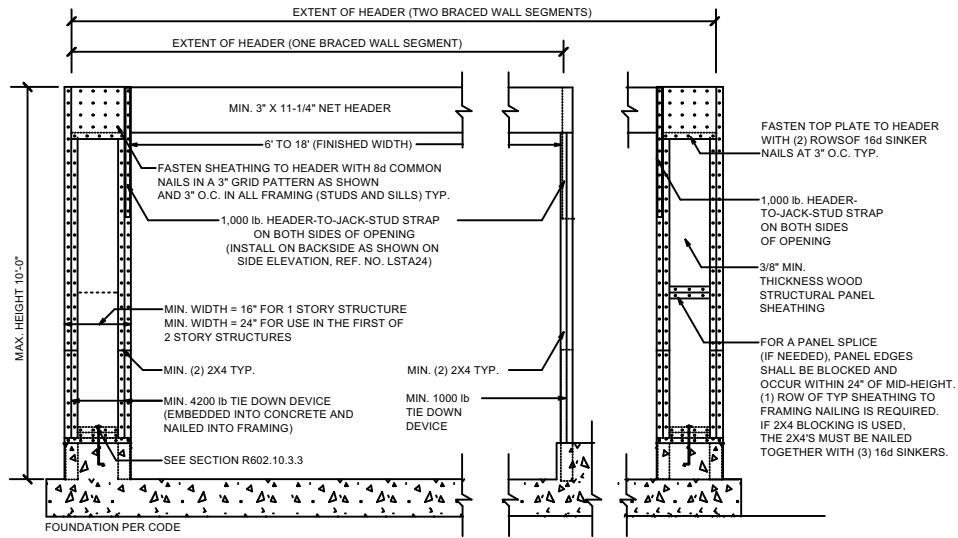
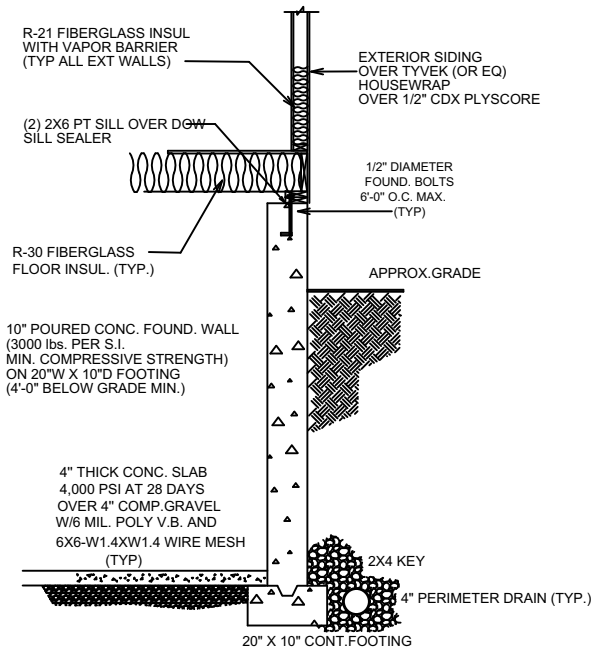
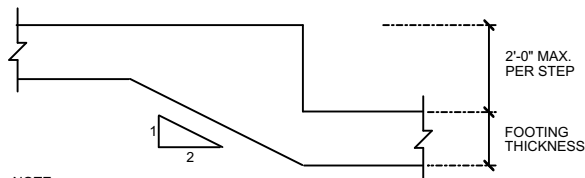


FIGURE R602.10.3.3
METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS
NOT TO SCALE



TYP. FOUNDATION DETAIL
NO SCALE

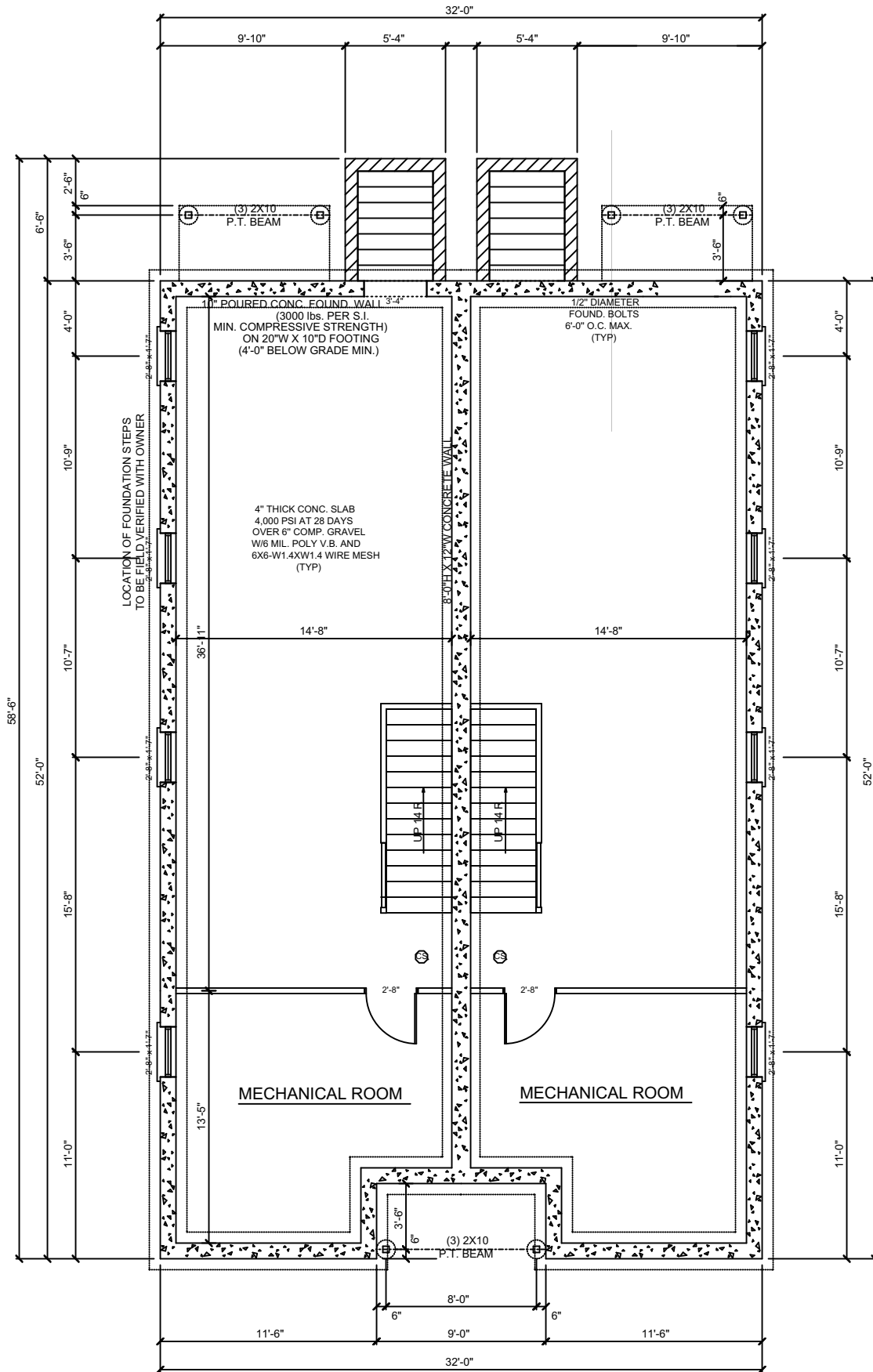


NOTE:
ALL FOOTING STEPS MUST BE
IN ACCORDANCE WITH THIS DETAIL.

TYP. FOOTING STEP
NO SCALE

FOUNDATION NOTES

- 1) CONCRETE SLABS ON GRADE SHALL HAVE CONTROL JOINTS CUT AT LEAST 1/4 THE SLAB THICKNESS. THESE SHALL BE SPACED NOT MORE THAN 90 FEET IN EACH DIRECTION. CONTROL JOINTS SHALL BE PLACED WHERE OFFSETS ARE MORE THAN 10 FEET. CONTRACTION JOINTS ARE NOT REQUIRED WHERE 6X6 W1.4 X W1.4 WELDED WIRE FABRIC OR EQ. IS PLACED AT MID-DEPTH OF THE SLAB.
- 2) THE COMPRESSIVE STRENGTH OF CONCRETE FOUNDATIONS AT 28 DAYS SHALL NOT BE LESS THAN 3,000 LBS./SQ. INCH. SLAB FLOORS TO HAVE A COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
- 3) FOUNDATION WALLS SHALL EXTEND AT LEAST 8" ABOVE FINISH GRADE.
- 4) THE BOTTOM OF ANY POINT OF A FOUNDATION SHALL BE A MINIMUM OF 4'0" BELOW FINISH GRADE.
- 5) FOUNDATION ANCHOR BOLTS SHALL BE A MINIMUM OF 1/2" IN DIAMETER. THEY SHALL HAVE A MINIMUM EMBED OF 8" IN POURED CONCRETE. THERE SHALL BE A MINIMUM OF TWO ANCHORS PER SECTION OF SILL PLATE. MAXIMUM SPACING SHALL BE 6'-0" O.C. INSTALL IN ACCORDANCE WITH MASSACHUSETTS STATE BUILDING CODE



Foundation Plan
Scale: 1/8" = 1'-0"



ELECTRICAL	SYMBOL
SMOKE DETECTOR	⬤
CO DETECTOR	◊
SMOKE / CO COMBINATION	⊗
HEAT DETECTOR	■

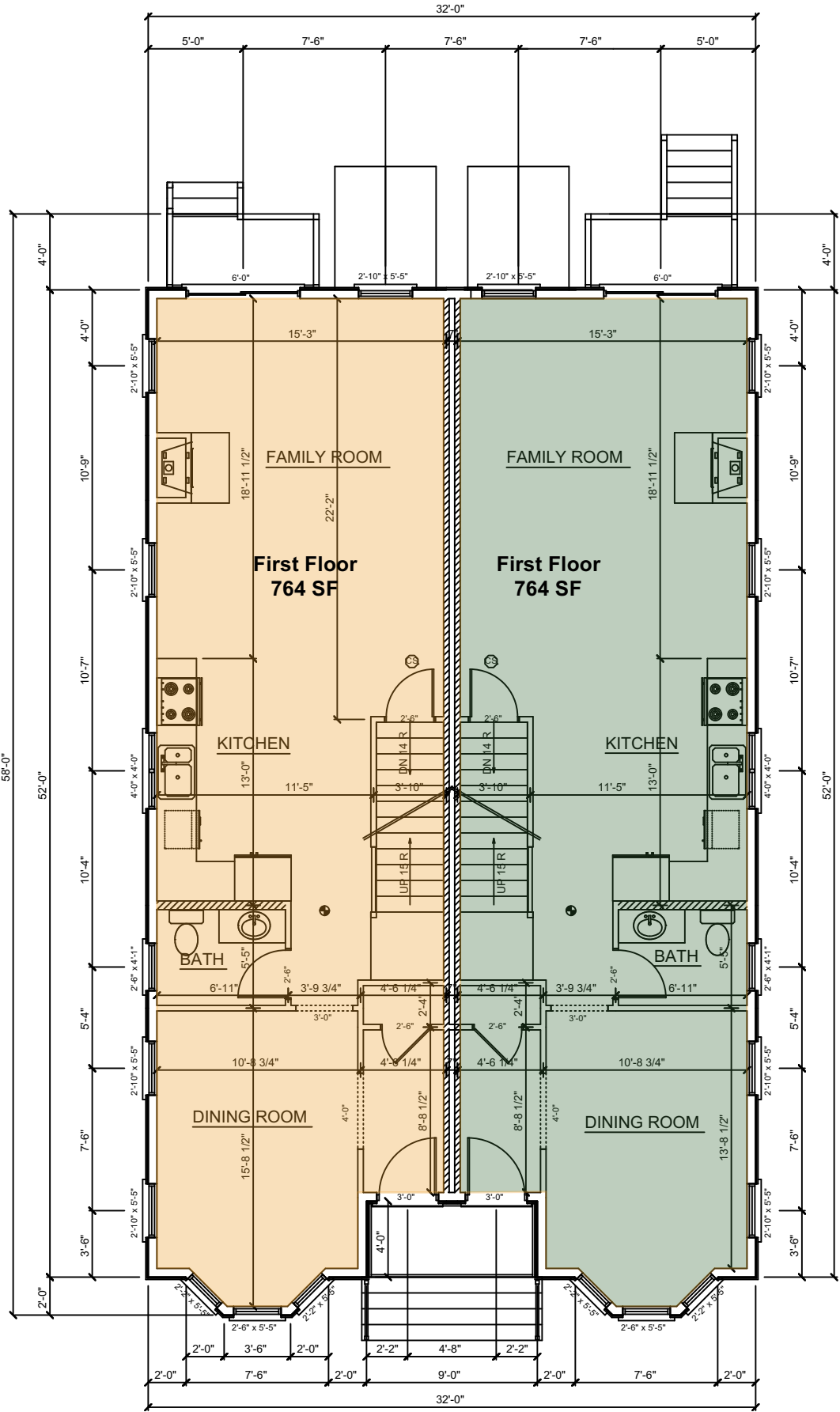
- SMOKE DETECTOR REQUIRED LOCATIONS. R314.3
- SMOKE DETECTORS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS.
1. IN ALL BEDROOMS; AND
 2. IN THE IMMEDIATE VICINITY OF BEDROOMS
 3. IN EACH STORY OF A DWELLING UNIT, INCLUDING BASEMENTS AND CELLARS BUT NOT INCLUDING CRAWL SPACES AND UNINHABITABLE ATTICS.
 5. FIXED TEMPERATURE HEAT DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF R314.5

CARBON MONOXIDE DETECTOR SPECIFIC INSTALLATION PROVISIONS R315.2

EVERY RESIDENTIAL STRUCTURE THAT PRESENTLY OR IN THE FUTURE CONTAINS FOSSIL FUEL BURNING EQUIPMENT OR HAS ENCLOSED PARKING SHALL BE EQUIPPED, BY THE OWNER, LANDLORD OR SUPERINTENDENT, WITH WORKING AND LISTED CARBON MONOXIDE ALARM PROTECTION.

(A) CARBON MONOXIDE ALARM PROTECTION SHALL BE LOCATED IN EACH LEVEL OF EACH DWELLING UNIT INCLUDING HABITABLE PORTIONS OF BASEMENTS, CELLARS AND ATTICS, BUT NOT INCLUDING CRAWL SPACES.

(B) WHEN MOUNTING CARBON MONOXIDE ALARM PROTECTION ON A LEVEL OF A DWELLING UNIT WITH A SLEEPING AREA, THE ALARM SHALL BE INSTALLED IN THE IMMEDIATE VICINITY OF THE SLEEPING AREA, NOT TO EXCEED 10 FEET AS MEASURED IN ANY DIRECTION FROM ANY BEDROOM DOOR.



First Floor Plan
Scale: 1/8" = 1'-0"

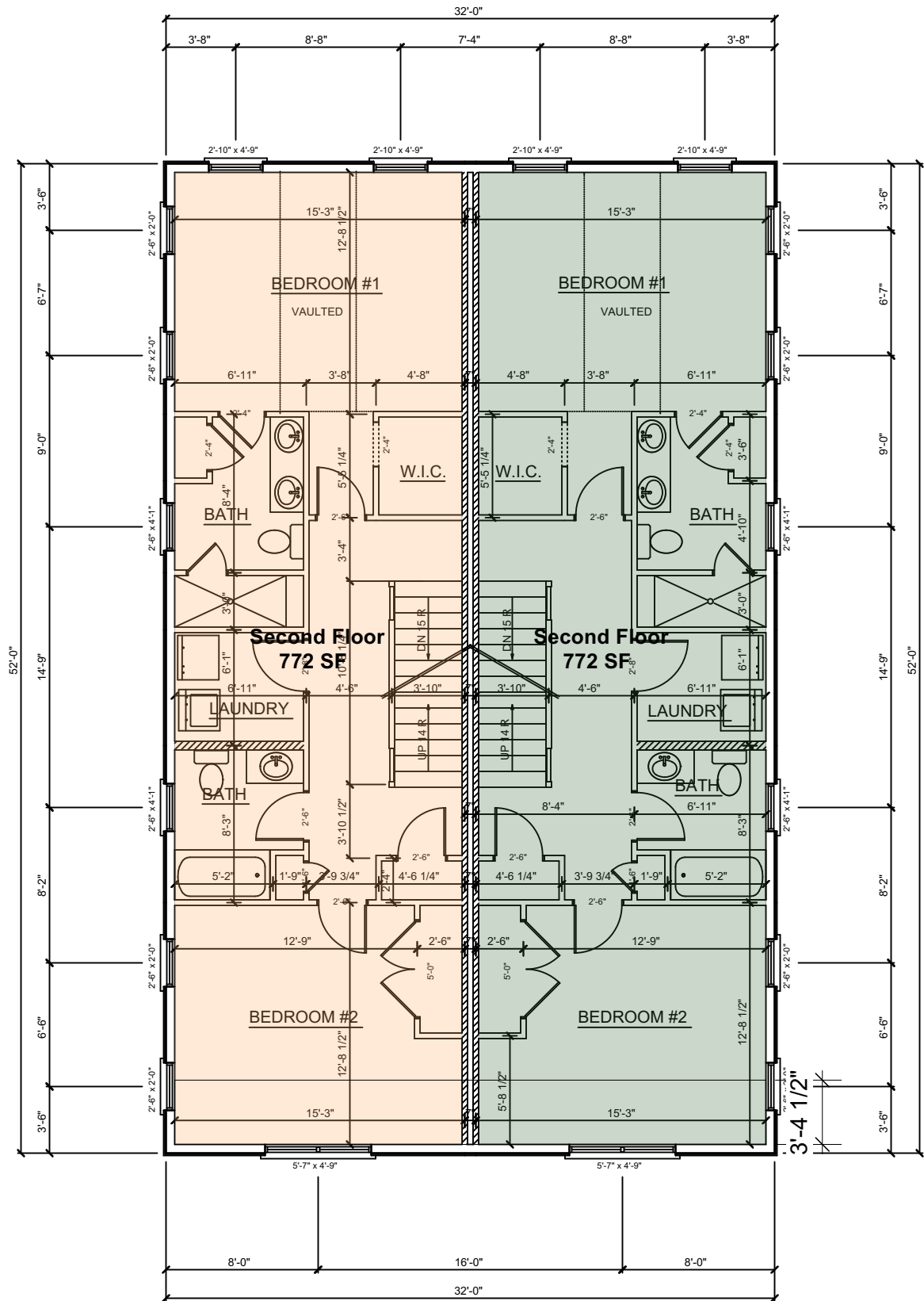


R311.7.4.2 TREAD DEPTH:
THE MINIMUM TREAD DEPTH SHALL BE NINE INCHES.
THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8" INCH.
WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH EQUAL TO THE TREAD DEPTH OF THE STRAIGHT RUN PORTION OF THE STAIRS MEASURED AS ABOVE AT A POINT 12 INCHES FROM THE SIDE WHERE THE TREADS ARE NARROWER. WINDER TREADS SHALL HAVE A MINIMUM TREAD DEPTH OF THREE INCHES AT ANY POINT. WITHIN ANY FLIGHT OF STAIRS, THE GREATEST WINDER TREAD DEPTH AT THE 12 INCH WALK LINE SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".

R312.1 GUARDS REQUIRED.
GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS, AND LANDINGS, THAT ARE LOCATED MORE THAN 30" TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36" HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. INSECT SCREENING SHALL NOT BE CONSIDERED A GUARD.

R311.7.7 HANDRAILS.
HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE
OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS.

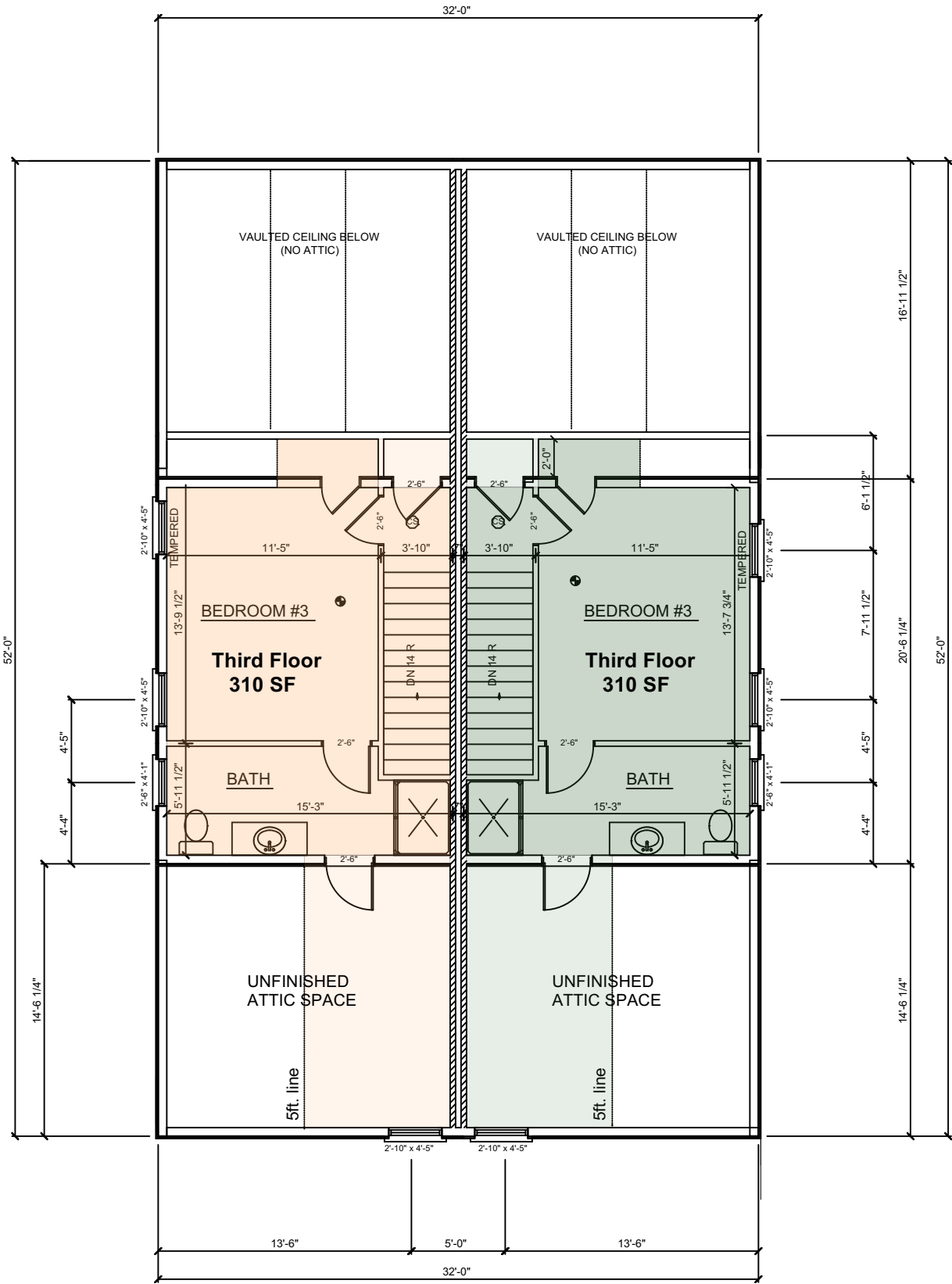
R311.7.7.1 HEIGHT.
HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPE PLANE
ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL NOT BE
LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.



Second Floor Plan

Scale: 1/8" = 1'-0"

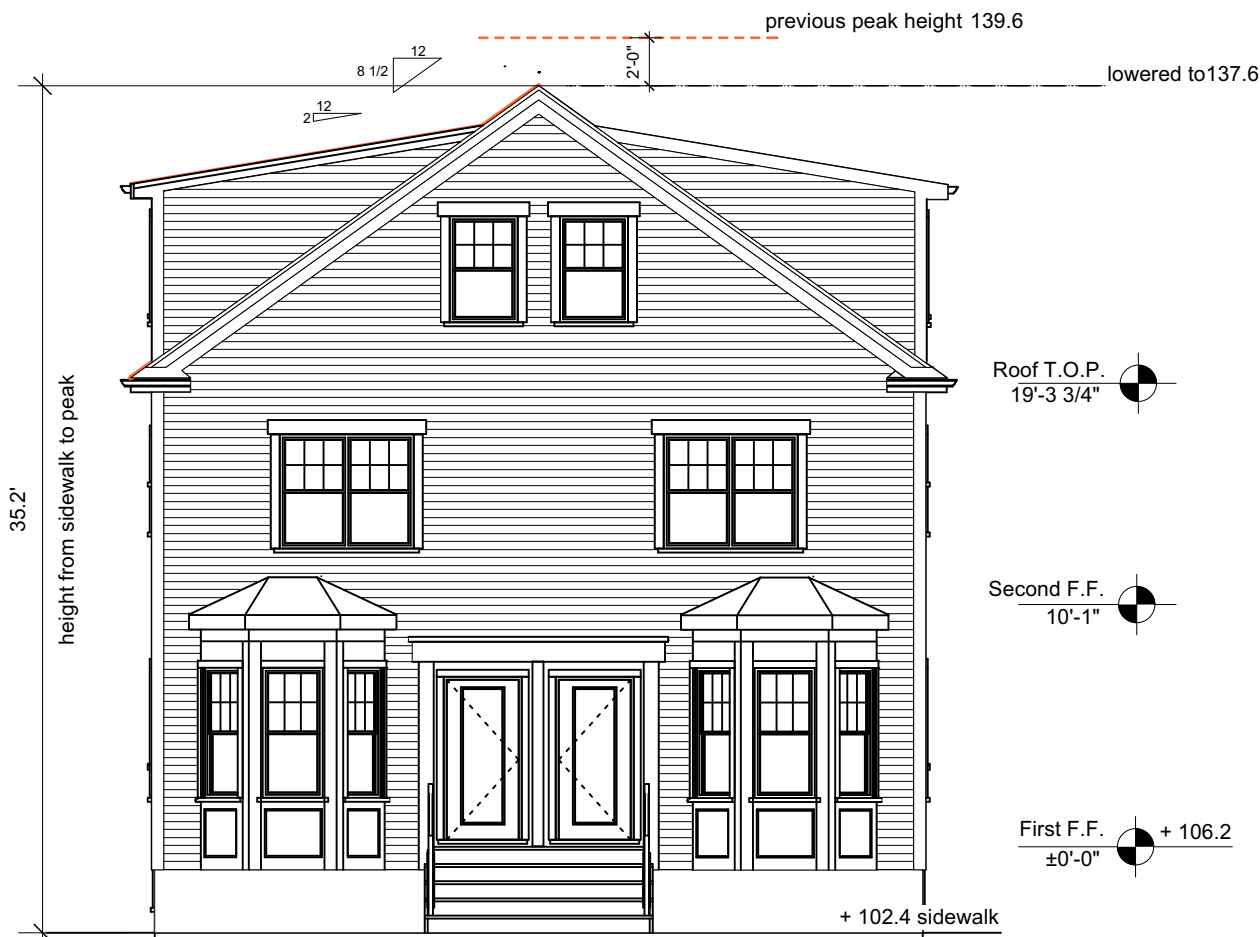




Third Floor Plan
Scale: 1/8" = 1'-0"

A3	18 Ash St. Belmont, MA	DATE	SUBMISSION/REVISION	DRAWING TITLE: Third Floor Plan	INKSTONE ARCHITECTS 18 Main Street #3B, Concord, MA 650-814-8542 brigitte@inkstonearchitects.com
		12/13/22			
		12/30/22 rev.			
SCALE : 1/8=1'-0"					

14 - 16 +143.8 in relationship to benchmark
42.7 ft. sidewalk to peak



FRONT ELEVATION

Front and Left Elevation
Scale: 1/8" = 1'-0"



LEFT ELEVATION

DRAWING TITLE: Front and Left Side Elevation		SCALE : 1/8=1'-0"	
DATE	SUBMISSION/REVISION	18 Ash St. Belmont, MA	
12/13/22	12/30/22 rev.	A4	



REAR ELEVATION



RIGHT ELEVATION

Rear and Right Elevation
Scale: 1/8" = 1'-0"

A5	18 Ash St. Belmont, MA	DATE	SUBMISSION/REVISION	DRAWING TITLE: Rear and Right Side Elevation SCALE : 1/8=1'-0"	INKSTONE ARCHITECTS 18 Main Street #3B, Concord, MA 650-814-8542 brigitte@inkstonearchitects.com
		12/13/22 12/30/22 rev.			



A7	18 Ash St. Belmont, MA	DATE	SUBMISSION/REVISION	DRAWING TITLE: 3D Model Views	INKSTONE ARCHITECTS	18 Main Street #3B, Concord, MA 650-814-8542 brigitte@inkstonearchitects.com
		12/13/22				
		12/30/22	rev.			
				SCALE : 1/8=1'-0"		