



CITY OF CAMBRIDGE

BOARD OF ZONING APPEAL

831 Massachusetts Avenue, Cambridge MA 02139

617-349-6100

BZA Application Form

2023 JUL 19 PM 3:15
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

BZA Number: 232270

General Information

The undersigned hereby petitions the Board of Zoning Appeal for the following:

Special Permit: _____ Variance: X Appeal: _____

PETITIONER: John Baker & Azilah Iskandar

PETITIONER'S ADDRESS: 25 Normandy Terrace, Cambridge, MA 02138

LOCATION OF PROPERTY: 25 Normandy Terrace Ext, Cambridge, MA

TYPE OF OCCUPANCY: 2 Family

ZONING DISTRICT: Residence B Zone

REASON FOR PETITION:

DESCRIPTION OF PETITIONER'S PROPOSAL:

1) Covered front porch, which services both 23 & 25 Normandy Terrace is beyond setback by 4 ft. 2) Uncovered back porch for 23 Normandy Terrace is beyond setback by 6 ft. 3) Uncovered back porch for 25 Normandy Terrace is beyond setback by 6 ft.

Illegal Deck Construction at 25 Normandy Terrace, Ext., Cambridge, MA

SECTIONS OF ZONING ORDINANCE CITED:

Article: 5.000 Section: 5.31 (Table of Dimensional Requirements).
Article: 10.000 Section: 10.30 (Variance).

Original
Signature(s):

(Petitioner (s) / Owner)

AZILAH ISKANDAR

(Print Name)

Address: 25 NORMANDY TER, CAMBRIDGE MA
Tel. No. 7346783798
E-Mail Address: azilah360@gmail.com

02138

Date: 7/13/23

BZA Application Form

SUPPORTING STATEMENT FOR A VARIANCE

EACH OF THE FOLLOWING REQUIREMENTS FOR A VARIANCE MUST BE ESTABLISHED AND SET FORTH IN COMPLETE DETAIL BY THE APPLICANT IN ACCORDANCE WITH MGL 40A, SECTION 10.

A) A literal enforcement of the provisions of this Ordinance would involve a substantial hardship, financial or otherwise, to the petitioner or appellant for the following reasons:

From a financial standpoint, removal of the porches will require a minimum expenditure of \$50,000. This large sum represents a significant burden, one not easily absorbed. In addition, this expense would essentially be used to devalue the property, as the removal of these structures would decrease its overall utility and aesthetic appeal.

The hardship extends beyond financial. The porches have already been constructed, a process that was both long and strenuous for us and our neighbors. The removal process would likely be equally disruptive, if not more so, due to the need to deconstruct and safely remove materials. This additional period of disruption would further strain relations in our close-knit community, which is already recovering from the initial construction phase.

Moreover, the removal process would drastically and detrimentally impact the daily lives of the 2 families comprising five people residing in units 23 and 25. The front porch is heavily utilized as it is the main point of entry and exit for both units. Without the front and back porches, even temporarily, there would be no safe way of entering the premises for unit 23 in particular and both units as a whole, given the height of the entrances from ground level. Families in both units 23 and 25 utilize the back porches daily for meals, gardening and relaxation. Removal of the front and back porches would adversely impact the quality of life for all residents.

We believe these reasons combined demonstrate a substantial hardship that extends beyond financial implications, but significantly impacts community relations and daily life.

B) The hardship is owing to the following circumstances relating to the soil conditions, shape or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located for the following reasons:

The hardship we are facing arises from unique circumstances related to the land's soil conditions, shape and topography, as well as external factors related to the surrounding state woodland and property line ambiguities.

Our properties, units 23 and 25 Normandy Terrace, sit adjacent to state woodlands at the back. There is a separate buffer of 10 feet between our property line and these woodlands, providing a natural partition that ensures no families residing behind our property are disrupted. The back porches, which extend over the setback lines, are designed to provide an outdoor living space with views overlooking these beautiful state woodlands. The unique topography and proximity to the state woodlands are special circumstances affecting our properties that generally do not affect other properties in our zoning district.

In regard to the front porches, the unusual narrowness of the front property line posed a significant design challenge. To accommodate this and ensure an accessible and functional design, an integrated porch with a single walkway was built rather than two separate walkways, leading to the shared porch extending over the setback line.

Further compounding the situation, there were ambiguities concerning the setback property line during the construction phase. We own the property extending to the middle of the road, yet the site survey measured from the sidewalk, which is not part of our property, as it is private property.

If the setback is measured from the middle of the road, as we believe it should be, the front porch is well within the appropriate setback. However, as per the measurements taken by the site surveyor from the sidewalk, it overextends the setback by 4 feet. This inconsistency contributes to the hardship and reflects a unique circumstance not generally encountered by other properties within our zoning district.

Overall, the combination of our land's peculiar topography, the proximity to the state woodland, the shape of our lots, and the ambiguity about the property line measurements form the basis of our hardship and underpin our request for a variance.

C) DESIRABLE RELIEF MAY BE GRANTED WITHOUT EITHER:

1) Desirable relief may be granted without substantial detriment to the public good for the following reasons:

- 1. No Impact on Neighbors:** The porches in the back overlook state woodlands, and there is a separate buffer of 10 feet between our property line and these woodlands. This buffer ensures that there are no neighboring families behind our property that would be disrupted by the porches. Moreover, our front porch, although shared, does not encroach on any neighboring properties.
- 2. Consistent Aesthetic:** The design of the porches is in harmony with the character of the neighborhood, thus maintaining a consistent aesthetic. Removing these structures could negatively impact the overall visual appeal and character of the locality.
- 3. No Obstruction of Views or Light:** The construction does not obstruct any views or natural light to neighboring properties. The porches, though they extend over the setback lines, are not imposing structures that would have an adverse effect on the neighbors' access to light or enjoyment of their views.
- 4. Prevention of Disruption:** Removal of the porches would result in substantial disruption to the neighborhood due to the demolition and removal process. This would not only be a noise nuisance but could also temporarily affect road access, particularly if heavy machinery or dumpsters are required. Additionally, further demolition and construction would adversely impact the air quality in our neighborhood.
- 5. Resolving Ambiguities:** As per our understanding, the front porch is well within the appropriate setback when measured from the middle of the road, which we consider our property line. Hence, granting the variance may also help in resolving property line ambiguities for future reference and set a precedent for similar situations.

In light of these factors, the requested variance can be granted without causing a substantial detriment to the public good.

2) Desirable relief may be granted without nullifying or substantially derogating from the intent or purpose of this Ordinance for the following reasons:

- 1. No Impact on Neighbors:** The porches in the back overlook state woodlands, and there is a separate buffer of 10 feet between our property line and these woodlands. This buffer ensures that there are no neighboring families behind our property that would be disrupted by the porches. Moreover, our front porch, although shared, does not encroach on any neighboring properties.
- 2. Consistent Aesthetic:** The design of the porches is in harmony with the character of the neighborhood, thus maintaining a consistent aesthetic. Removing these structures could negatively impact the overall visual appeal and character of the locality.
- 3. No Obstruction of Views or Light:** The construction does not obstruct any views or natural light to neighboring properties. The porches, though they extend over the setback lines, are not imposing

structures that would have an adverse effect on the neighbors' access to light or enjoyment of their views.

4. **Prevention of Disruption:** Removal of the porches would result in substantial disruption to the neighborhood due to the demolition and removal process. This would not only be a noise nuisance but could also temporarily affect road access, particularly if heavy machinery or dumpsters are required. Additionally, further demolition and construction would adversely impact the air quality in our neighborhood.
5. **Resolving Ambiguities:** As per our understanding, the front porch is well within the appropriate setback when measured from the middle of the road, which we consider our property line. Hence, granting the variance may also help in resolving property line ambiguities for future reference and set a precedent for similar situations.

In light of these factors, the requested variance can be granted without causing a substantial detriment to the public good.

***If you have any questions as to whether you can establish all of the applicable legal requirements, you should consult with an attorney.**

BZA Application Form

DIMENSIONAL INFORMATION

Applicant: John Baker & Azilah Iskandar
Location: 25 Normandy Terrace Ext., Cambridge, MA
Phone: 7346783798

Present Use/Occupancy: 2 Family
Zone: Residence B Zone
Requested Use/Occupancy: 2 Family

		<u>Existing Conditions</u>	<u>Requested Conditions</u>	<u>Ordinance Requirements</u>
TOTAL GROSS FLOOR AREA:		2576	2620	2622.5 (max.)
LOT AREA:		5245	5245	5245 (min.)
RATIO OF GROSS FLOOR AREA TO LOT AREA: ²		0.49	0.49	0.50
LOT AREA OF EACH DWELLING UNIT		n/a	n/a	n/a
SIZE OF LOT:	WIDTH	42	42	50
	DEPTH	100	100	n/a
SETBACKS IN FEET:	FRONT	11	15	11
	REAR	19	25	19
	LEFT SIDE	10.1	No request	10
	RIGHT SIDE	10.1	No request	10
SIZE OF BUILDING:	HEIGHT	31.5	No request	35
	WIDTH	38.1	No request	38.1
	LENGTH	East: 38' 11"	No request	East: 39'
RATIO OF USABLE OPEN SPACE TO LOT AREA:		1482.09	No request	2500
NO. OF DWELLING UNITS:		2	2	2
NO. OF PARKING SPACES:		n/a	No Request	n/a
NO. OF LOADING AREAS:		n/a	No request	n/a
DISTANCE TO NEAREST BLDG. ON SAME LOT		No other buildings	No other buildings	n/a

Describe where applicable, other occupancies on the same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g; wood frame, concrete, brick, steel, etc.:

No other buildings

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.
3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.



Commonwealth of Massachusetts

Manufactured Buildings Program

Transmittal Form for all correspondences relating to
Manufactured Buildings and Building Components

To: Linda McAlister factured Buildings Program	Phone Number:	Date Transmitted
Linda.McAlister e.ma.us	508-422-1955	3/22/18
Commonwealth of Massachusetts	Department of Public Safety	
Board of Building Regulations and Standards	50 Maple Street, Suite One	
Milford	Massachusetts	01757-3698

The person forwarding this material shall complete the following portion of this transmittal

Name of Person Transmitting Material	Brett Hebert	MC Number	TPIA Number
		352	02

The following information is being transmitted to the Board of Building Regulations and Standards and / or the Department of Public Safety for reasons detailed below (Please check the appropriate box or give a further description of the transmitted items under the section labeled <i>other</i> . Be sure to identify the appropriate Use Group.)	Please indicate the Distinct Model and / or Serial Number pertaining to transmitted items	Use Group
---	---	-----------


Building Plans for Review and Approval	<input type="checkbox"/>		
Building Plans forwarded as a record copy for your files (Review not required)	<input checked="" type="checkbox"/>	O#7575	R-3
Revised building plans for review. (Please clearly identify revisions on the plans.)	<input type="checkbox"/>		
Revised Building Plans forwarded as a record copy for your files (Review not required - Please clearly identify revisions on the plans.)	<input type="checkbox"/>		

Compliance Assurance Programs	Original Submission <input type="checkbox"/>	Modification to:	<input type="checkbox"/>
Calculations Manual	Original Submission <input type="checkbox"/>	Modification to:	<input type="checkbox"/>
Installation Manual	Original Submission <input type="checkbox"/>	Modification to:	<input type="checkbox"/>
Systems Drawings	Original Submission <input type="checkbox"/>	Modification to:	<input type="checkbox"/>

Other - Provide a detailed description of any other materials which are being transmitted. **Identify any revisions clearly along with BBRs number.**
Also, identify the requested action.

Site Location: 25 Normandy Terrace, Cambridge, MA 02138 (Middlesex County)

The office transmitting this information has reviewed the above mentioned and attached materials and has found them, to the best of our knowledge and abilities, to be in compliance with the codes and \ or rules and regulations for the Commonwealth of Massachusetts' Manufactured Building Program, as applicable

Signed By for TPIA:	 <p>Digitally signed by Harold Raup DN: cn=Harold Raup, o=PFSTECO, ou, email=harold.raup@pfsteco.com, c=US Date: 2018.03.28 12:17:43 -04'00'</p>	BBRS No: assigned by Mass.	Signed By for MASS:
---------------------	---	----------------------------	---------------------

Print Form

4/4/2020

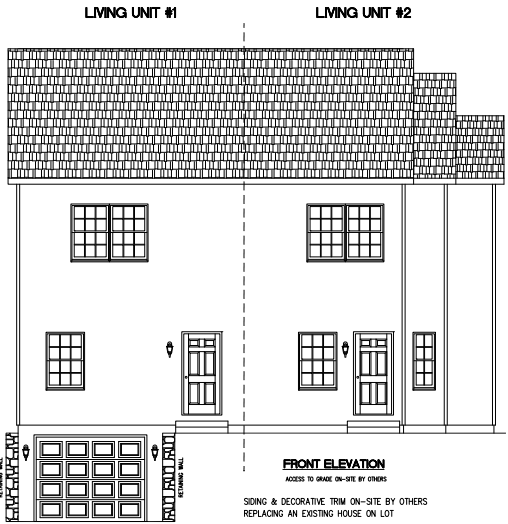
DRAWING INDEX			
SHEET#	DESCRIPTION	CLASSIFICATION	
CV	COVER SHEET		
E1	FRONT ELEVATION	OCCUPANT LOAD:	SINGLE FAMILY / DUPLEX
E2	REAR ELEVATION	USE GROUP:	R-3
E3	LEFT ELEVATION	CONSTRUCTION TYPE:	VB WOOD FRAME UNPROTECTED
E4	RIGHT ELEVATION		
FP1	1ST STORY FLOOR PLAN		
FP2	2ND STORY FLOOR PLAN		
SW1	1ST STORY BRACE WALL PLAN		
SW2	2ND STORY BRACE WALL PLAN		
EL1	1ST STORY ELECTRICAL PLAN	DESIGN LOADS	
EL2	2ND STORY ELECTRICAL PLAN	ROOF LIVE LOAD:	40 PSF GSL
ELC	ELECTRICAL LOAD CALCS	ROOF DEAD LOAD:	10 PSF
CS	CIRCUIT SCHEDULE	CEILING DEAD LOAD:	10 PSF
FND	FOUNDATION PLAN	CEILING LIVE LOAD:	20 PSF (STORAGE) / 30 PSF (HABITABLE)
TR1	35'-2" 7/12 RAFTER	FLOOR LIVE LOAD:	40 PSF
TR2	28'-2" 7/12 RAFTER	FLOOR DEAD LOAD:	10 PSF
TR3	16'-1" 7/12 RAFTER	HORIZONTAL WIND LOAD:	128 VULT
TR4	7/12 RAFTER CONNECTIONS	EXPOSURE:	C
SE1	7/12 CROSS SECTION	GROUND SNOW LOAD:	40 PSF
DWS	DOOR AND WINDOW SCHEDULE	SEISMIC CATEGORY:	B
PL1	PLUMBING DETAILS	APPLICABLE CODES	
PL2	PLUMBING DETAILS	MA 1&2 FAMILY DWELLING CODE --(780 CMR) 9TH EDITION	
PL3	PLUMBING NOTES	MA FUEL/GAS/PLUMBING (248 CMR)	
HL1	1ST STORY HEATLOSS	2015 INTERNATIONAL MECHANICAL CODE W/ MA AMENDMENTS	
HL2	2ND STORY HEATLOSS	2017 NATIONAL ELECTRICAL CODE W/ MA AMENDMENTS	
FS1	FIRE SEPARATION DETAILS	2015 INTERNATIONAL ENERGY CONS. CODE W/ MA AMENDMENTS	
	RES CHECK		
	RAFTER CALCS		
		INSULATION VALUES	
		ROOF TO EXTERIOR:	R-38 w/ R-11 ABOVE
		EXTERIOR WALLS TO EXTERIOR:	R-21 HIGH DENSITY
		FLOOR TO BASEMENT OR CRAWL SPACE:	R-19 (ON-SITE)
		THESE DRAWINGS ARE DESIGNED TO BE USED FOR THE CONSTRUCTION OF FACTORY BUILT HOUSING UNITS. THESE UNITS ARE DESIGNED IN ACCORDANCE WITH THE APPROVED SYSTEMS PACKAGE AND THE APPLICABLE STATE BUILDING CODES AS LISTED ABOVE ON THIS PAGE.	
		A 48 HOUR NOTIFICATION IS REQUIRED PRIOR TO THE SET. THE CSL ON RECORD WILL RELAY THIS TO THE LOCAL BUILDING AUTHORITY. IF ANY CONNECTIONS HAVE BEEN CONCEALED PRIOR TO INSPECTION, THE BUILDING OFFICIAL MAY REQUEST HAVING THE REMOVAL OF ELEMENTS THAT CONCEAL THE CONNECTIONS TO PROVIDE ACCESS. THIS WOULD NOT CONSTITUTE "DESTRUCTIVE DISSASSEMBLY". ALL CONNECTIONS ON SITE MUST BE INSPECTED BY THE LOCAL AUTHORITY.	



Icon - Legacy Custom Modular Homes, LLC

246 SAND HILL ROAD
SELINGSGROVE, PA 17870
PHONE 570-374-3280
FAX 570-374-1122
WWW.ICONLEGACY.COM

O#7575 TWO-STORY



R.A. AND P.E. STAMP

PFS STAMP

PFS CORPORATION
Approval Limited to Factory Built Portion Only

State: Massachusetts
Signature: Harold Raup
Title: Staff Plan Reviewer
Date: 3/28/18

THIS BUILDING HAS BEEN
CONSIDERED FOR APPROVAL
STATUS OF THE LOCAL APPROVAL
JEA

SHEET # / ORDER #
O#7575

COVER PAGE

PAGE #
CV

DATE	REVISION	BY
2/1/2018 <td>PRELIM <td>PIF </td></td>	PRELIM <td>PIF </td>	PIF
2/9/18 <td>REV. PRELIM <td>BLS </td></td>	REV. PRELIM <td>BLS </td>	BLS
3/2/18 <td>FINAL <td>PIF </td></td>	FINAL <td>PIF </td>	PIF

INDEPENDENT BUILDER	STATE	ZIP	WIND SPEED (MPH)
AVALON BUILDING SYSTEMS	MA	02138	128 VULT
ADDRESS	SNOW LOAD (LBS)	TYPE	DUPLEX
25 NORMANDY TERRACE	40	2.576	
CITY	COUNTY	ORDER NO	
CAMBRIDGE	MIDDLESEX	7575	
SERIAL NO			

246 SAND HILL ROAD
SELINGSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



[Handwritten signature]

LIVING UNIT #1

LIVING UNIT #2



PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

246 SAND HILL ROAD
 SELINGSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER		AVALON BUILDING SYSTEMS	
ADDRESS		25 NORMANDY TERRACE	
STATE	ZIP	SNOW LOAD (LBS)	WIND SPEED (MPH)
MA	02138	40	128 VULT
COUNTY	MIDDLESEX	SF	TYPE
ORDER NO	7575	2,576	DUPLEX
SERIAL NO			
PLAN #	0#7575		

FRONT ELEVATION

ACCESS TO GRADE ON-SITE BY OTHERS

SIDING & DECORATIVE TRIM ON-SITE BY OTHERS
 REPLACING AN EXISTING HOUSE ON LOT

THIS BUILDING HAS BEEN
 CONSIDERED AND APPROVED
 SUBJECT TO THE LOCAL APPROVAL
 JEA

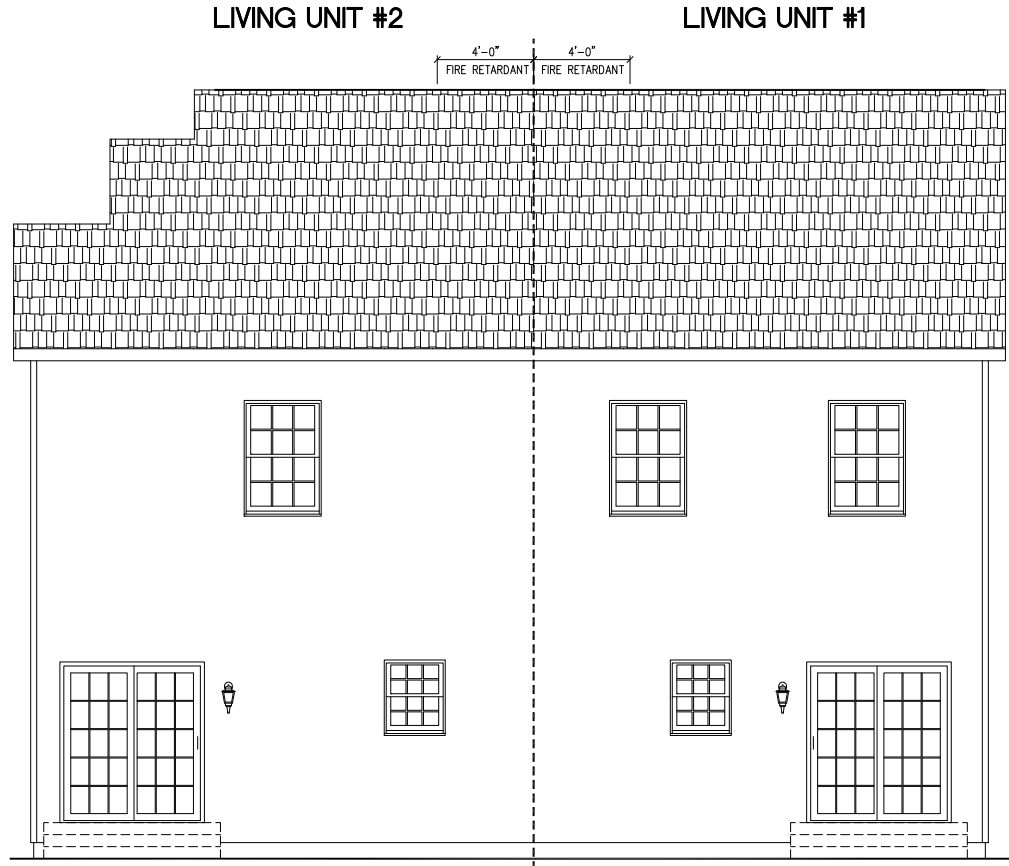
SERIAL #/ ORDER #
0#7575

PAGE #
EV1

JR

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
Factory Built Portion

246 SAND HILL ROAD
 SELINGSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



REAR ELEVATION

ACCESS TO GRADE ON-SITE BY OTHERS

SIDING & DECORATIVE TRIM ON-SITE BY OTHERS

9'-0" CEILING HEIGHT
 8'-6" CEILING HEIGHT

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER		AVALON BUILDING SYSTEMS	
ADDRESS		25 NORMANDY TERRACE	
STATE	ZIP	SNOW LOAD (LBS)	WIND SPEED (MPH)
MA	02138	40	128 VUL T
COUNTY		SF	TYPE
MIDDLESEX		2,576	DUPLEX
ORDER NO.	SERIAL NO.		
07575			
REV.	0#7575		

REAR ELEVATION

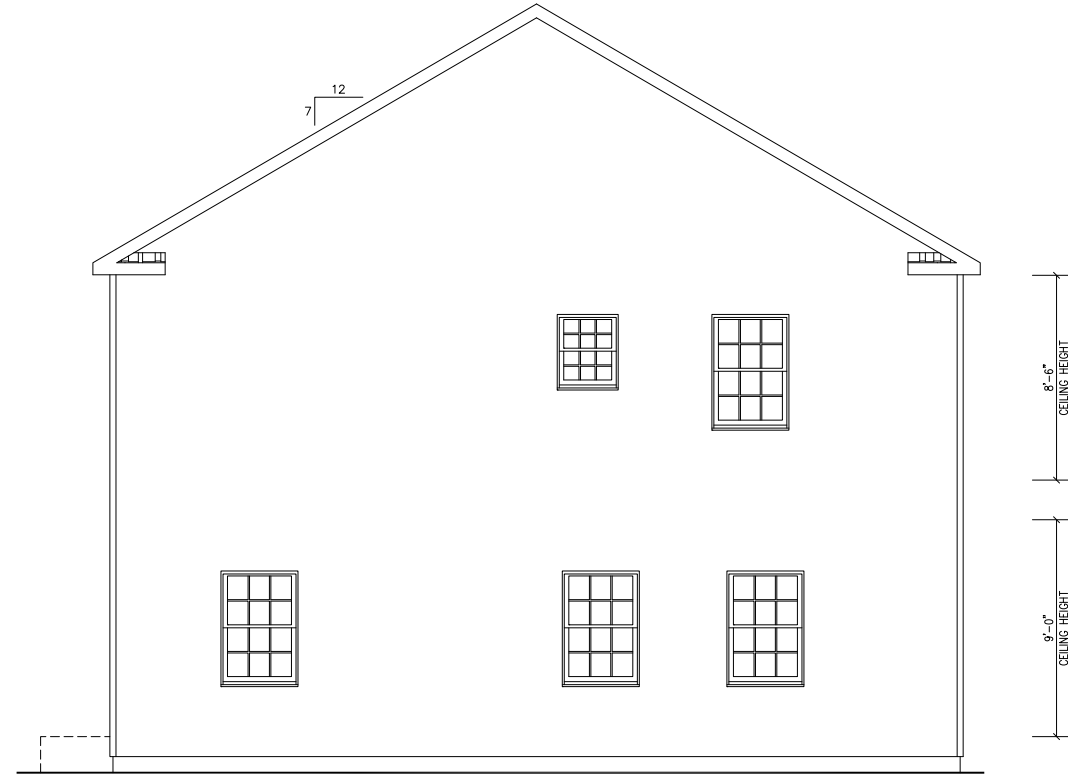
THIS BUILDING HAS BEEN
 CONSIDERED AND APPROVED
 SUBJECT OF THE LOCAL APPROVAL

SERIAL #/ ORDER #
0#7575

PAGE #
EV2

[Handwritten signature]

LIVING UNIT #1



DECK ON-SITE BY OTHERS

LEFT ELEVATION

ACCESS TO GRADE ON-SITE BY OTHERS

SIDING & DECORATIVE TRIM ON-SITE BY OTHERS

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

246 SAND HILL ROAD
 SELINGSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER		AVALON BUILDING SYSTEMS	
ADDRESS		25 NORMANDY TERRACE	
CITY	STATE	ZIP	
CAMBRIDGE	MA	02138	
COUNTY	SNOW LOAD (LBS)	WIND SPEED (MPH)	
MIDDLESEX	40	128 VULT	
ORDER NO.	SQ FT	TYPE	
7/27/18	2,576	DUPLEX	
REV.	PLAN NO.		
	0#7575		

LEFT ELEVATION

THIS BUILDING HAS BEEN
 ENGINEERED AND APPROVED
 SUBJECT TO THE LOCAL ADOPTION
 OF THE IBC

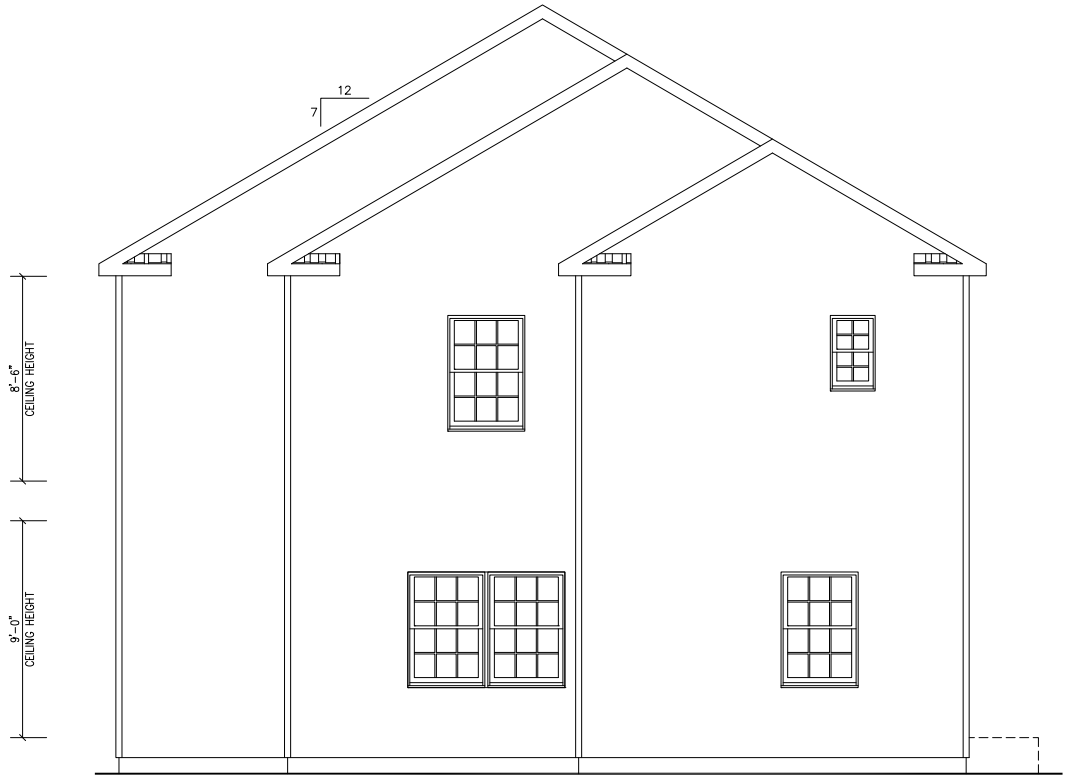
JEA

SERIAL #/ ORDER #
0#7575

PAGE #
EV3

JEA

LIVING UNIT #2



RIGHT ELEVATION

ACCESS TO GRADE ON-SITE BY OTHERS

SIDING & DECORATIVE TRIM ON-SITE BY OTHERS

DECK ON-SITE BY OTHERS

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

246 SAND HILL ROAD
 SELINGSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VUL T
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLEX
COUNTY	SERIAL NO	
MIDDLESEX		
ORDER NO	REV	
7575	0#7575	

RIGHT ELEVATION

THIS BUILDING HAS BEEN
 ENGINEERED FROM AN APPROVED
 SET OF PLANS.

SERIAL #/ ORDER #
0#7575

PAGE #
EV4

JEA

A 48 HOUR NOTIFICATION IS REQUIRED PRIOR TO THE SET. THE CSL ON RECORD WILL RELAY THIS TO THE LOCAL BUILDING AUTHORITY. IF ANY CONNECTIONS HAVE BEEN CONCEALED PRIOR TO INSPECTION, THE BUILDING OFFICIAL MAY REQUEST HAVING THE REMOVAL OF ELEMENTS THAT CONCEAL THE CONNECTIONS TO PROVIDE ACCESS. THIS WOULD NOT CONSTITUTE 'DESTRUCTIVE DISASSEMBLY'. ALL CONNECTIONS ON SITE MUST BE INSPECTED BY THE LOCAL AUTHORITY.

THIS HOUSE IS IN A STRETCH ENERGY CODE AREA:
 INDEPENDANT BUILDER IS RESPONSIBLE TO MEET OR EXCEED STRETCH ENERGY CODE COMPLIANCE
 ALL CEILING GYP MUST BE MECHANICALLY FASTENED

REPLACING AN EXISTING HOUSE ON LOT
 NO LOT LINE FIRE SEPARATION REQUIRED

*TEMPERATURE CONTROL VALVE TO BE INSTALLED TO ALL TUBS AND SHOWERS

*BUILDER IS RESPONSIBLE TO COMPLY WITH R312 (WINDOW SILLS) OF THE 2015 IRC (DONE ON-SITE IF APPLICABLE)

-WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR SURFACE BELOW

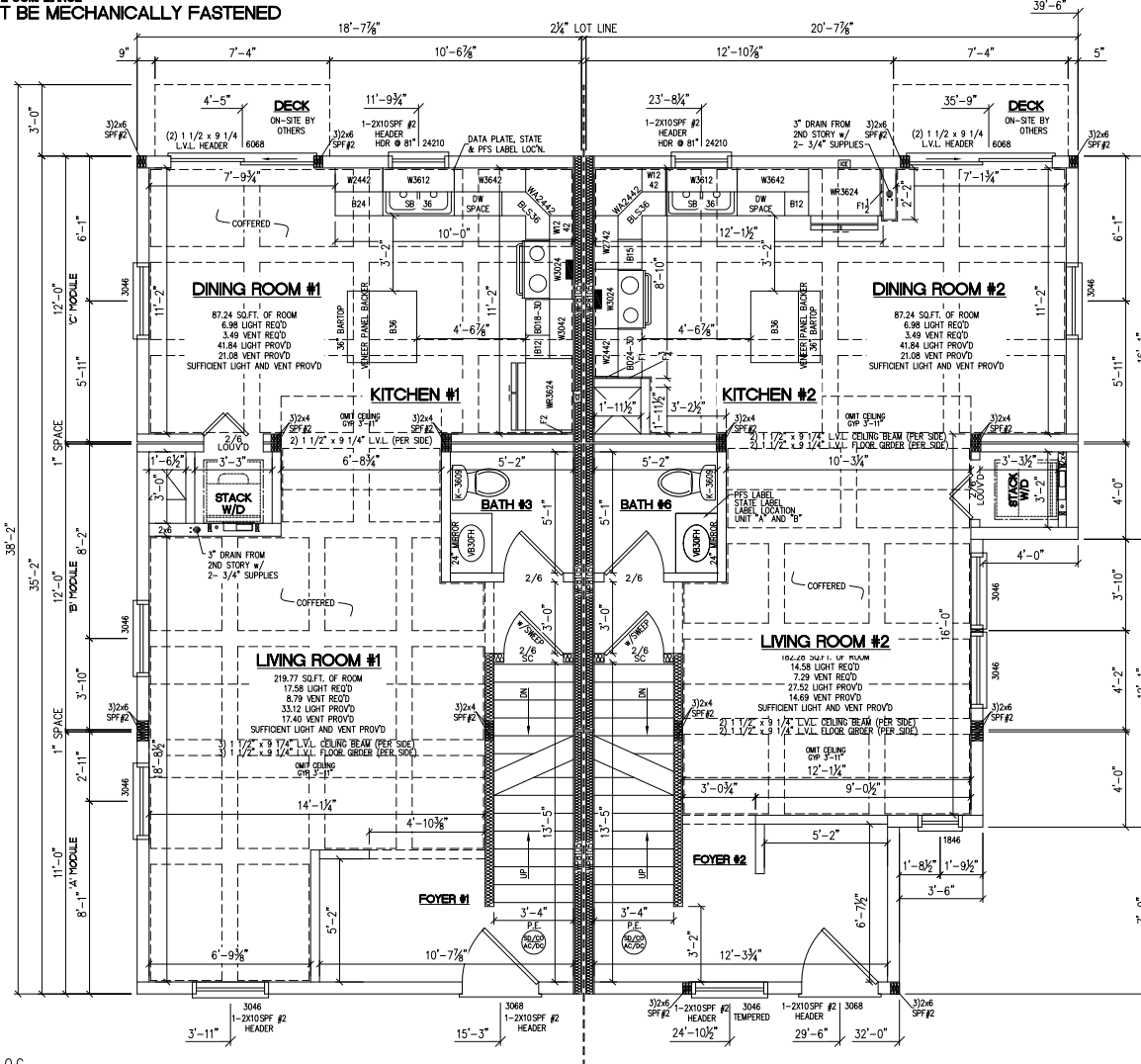
-WHERE THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED

-OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED WITHIN 24 INCHES OF THE FINISHED FLOOR

SITE ADDRESS
 25 NORMANDY TERRACE
 CAMBRIDGE, MA 02138

BUILDER:
 560 TURNPIKE STREET
 CANTON, MA 02021

246 SAND HILL ROAD
 SELINGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



PFS Corporation
 Northeast Region
APPROVED
 H Raup - 3
 3/28/18
 Approval limited to
 Factory Built Portion

- NOTES:
- 2x6 EXTERIOR WALLS @ 16 O.C.
 - 2x4 MARRIAGE WALLS @ 16 O.C.
 - CEILING HEIGHTS:
 - 9'-0" CEILING HEIGHT 1ST FLOOR
 - 8'-6" CEILING HEIGHT 2ND FLOOR
 - SILVERLINE 3000 SERIES DOUBLE HUNG WINDOWS
 - 102,000 TOTAL BTU HEAT LOSS
 - 7/12 NON-STORAGE RAFTER @ 16 O.C.
 - 8 1/4" X 9" STAIR GEOMETRY

LIVING UNIT #1

LIVING UNIT #2



SERIAL # / ORDER #
O#7575

PAGE #
FP1

DATE	REVISION	BY
2/1/2018 <td>PRELIM <td>PIF</td> </td>	PRELIM <td>PIF</td>	PIF
2/9/18 <td>REV. PRELIM <td>BLS</td> </td>	REV. PRELIM <td>BLS</td>	BLS
3/2/18 <td>FINAL <td>PIF</td> </td>	FINAL <td>PIF</td>	PIF

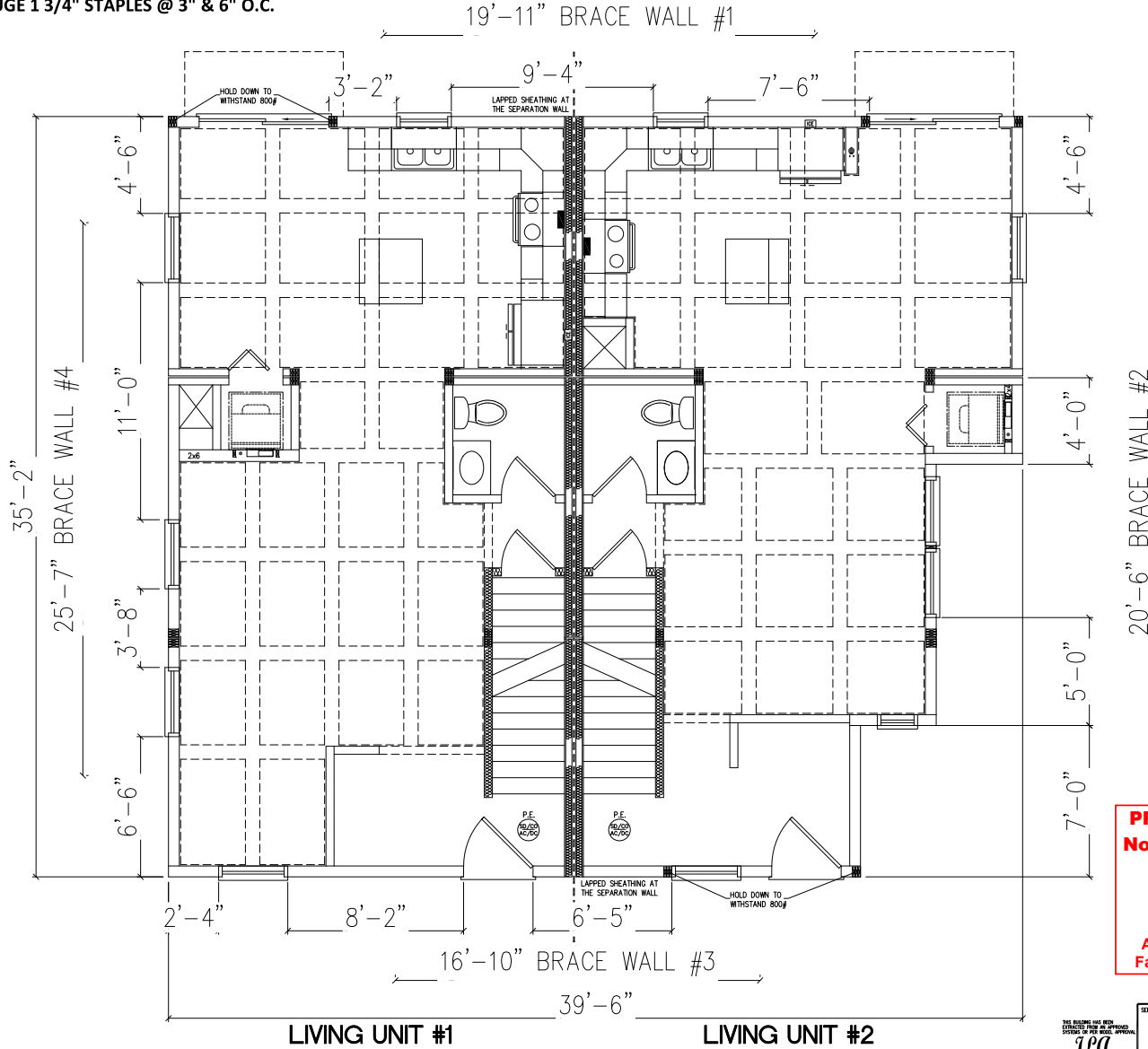
INDEPENDANT BUILDER	AVALON BUILDING SYSTEMS
ADDRESS	25 NORMANDY TERRACE
CITY	CAMBRIDGE
COUNTY	MIDDLESEX
STATE	MA
ZIP	02138
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	128 VUL1
TYPE	DUPLICATION
ORDER NO	7575
SERIAL NO	2-576
FILE #	O#7575

1ST STORY FLOOR PLAN

JEA

METHOD TYPE	BRACE WALL LINE	WIND SPEED <130	BRACE WALL LINE SPACING	CONTINUOUS SHEATHING REQUIRED R602.10.3(1)	EXPOSURE/HEIGHT FACTORS		ROOF EAVE TO RIDGE		NUMBER OF BRACE WALL LINES	WALL REDUCTION FACTOR	LENGTH REQUIREMENTS FOR BRACE WALL PANELS WITH CONTINUOUS SHEATHING	FULL HEIGHT SHEATHING PROVIDED		
					EXPOSURE B	R301.2(2)	HEIGHT	10.8 FT R602.10.3(2)						
CS-WSP	39.5	BRACE WALL #1	35.167	13.308	13.308 X 1.0 =	13.308	13.308 X 1.0 =	13.707	13.707 X 1.00 =	13.707	13.707 X 0.95 =	13.022	35 "	19.92 Feet
CS-WSP	35.167	BRACE WALL #2	39.5	14.825	14.825 X 1.0 =	14.825	14.825 X 1.0 =	15.270	15.270 X 1.00 =	15.270	15.270 X 0.95 =	14.506	24 "	20.50 Feet
CS-WSP	39.5	BRACE WALL #3	35.167	13.308	13.308 X 1.0 =	13.308	13.308 X 1.0 =	13.707	13.707 X 1.00 =	13.707	13.707 X 0.95 =	13.022	35 "	16.83 Feet
CS-WSP	35.167	BRACE WALL #4	39.5	14.825	14.825 X 1.0 =	14.825	14.825 X 1.0 =	15.270	15.270 X 1.00 =	15.270	15.270 X 0.95 =	14.506	24 "	25.58 Feet

16 GAUGE 1 3/4" STAPLES @ 3" & 6" O.C.



PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

246 SAND HILL ROAD
 SELINSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP	WIND SPEED (MPH)
AVALON BUILDING SYSTEMS	MA	02138	128 VULT
ADDRESS	SNOW LOAD (LBS)	SF	TYPE
25 NORMANDY TERRACE	40	2,576	DUPLEX
CITY	COUNTY	ORDER NO.	PROJECT NO.
CAMBRIDGE	MIDDLESEX	75730	0#7575
SERIAL NO.	DATE		
	3/28/18		

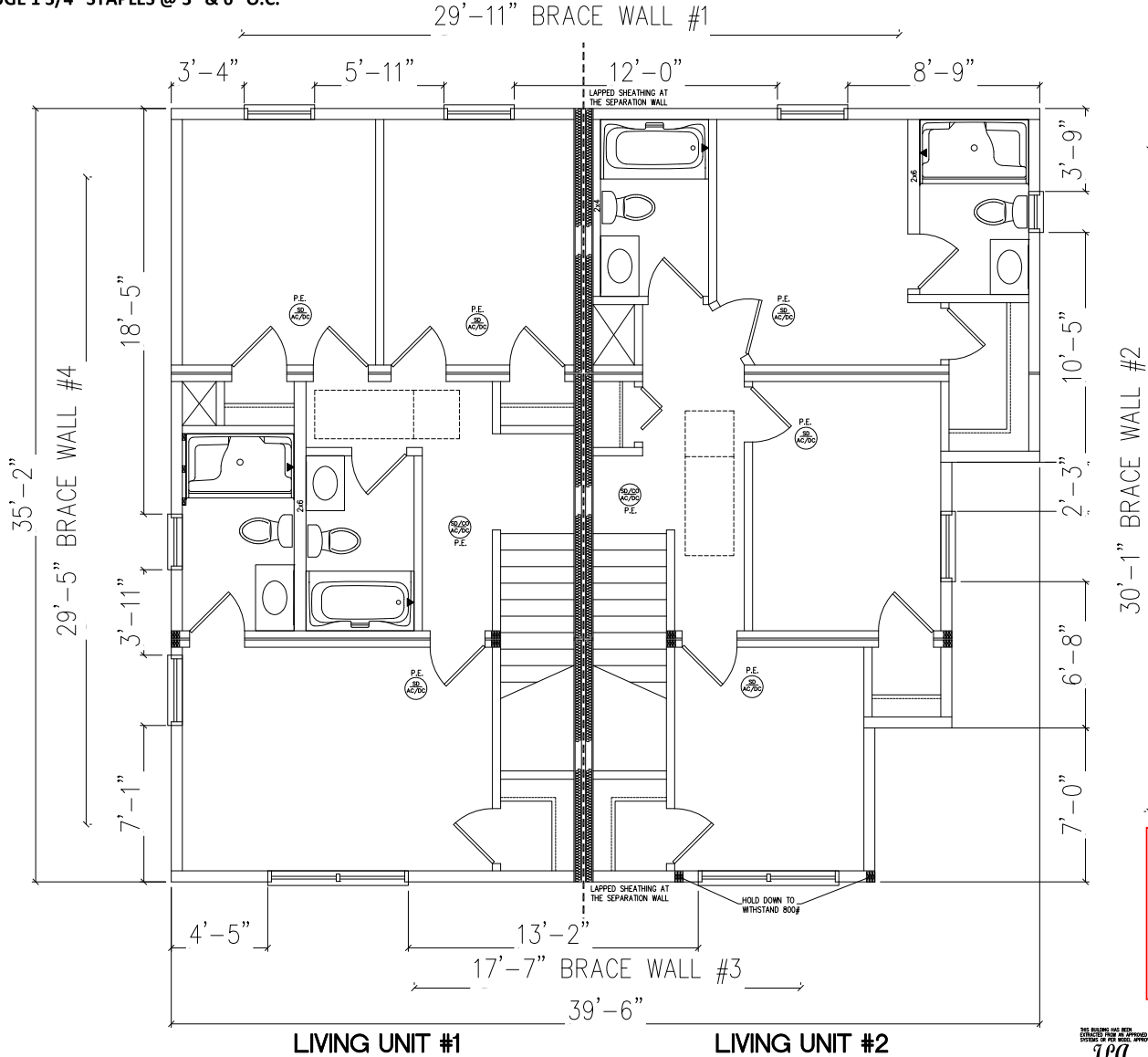
1ST STORY SHEAR WALLS
 SERIAL #/ ORDER #
 O#7575
 PAGE #
 SW1



Jea

METHOD	BRACE	WIND SPEED	BRACE WALL	CONTINUOUS SHEATHING	EXPOSURE/HEIGHT FACTORS	ROOF EAVE TO RIDGE	NUMBER OF BRACE	WALL REDUCTION	LENGTH REQUIREMENTS FOR	FULL HEIGHT
TYPE	WALL	<130	LINE SPACING	REQUIRED R602.10.3(1)	EXPOSURE B R301.2(2)	HEIGHT 10.8 FT R602.10.3(2)	WALL LINES	FACTOR	BRACE WALL PANELS WITH	SHEATHING PROVIDED
	LINE				1.0	1.1		0.95	CONTINUOUS SHEATHING	
CS-WSP	39.5	BRACE WALL #1	35.167	6.775	6.775 X 1.0 = 6.775	6.775 X 1.1 = 7.182	7.182 X 1.00 = 7.182	7.182 X 0.95 = 6.822	24 "	29.92 Feet
CS-WSP	35.167	BRACE WALL #2	39.5	7.425	7.425 X 1.0 = 7.425	7.425 X 1.1 = 7.871	7.871 X 1.00 = 7.871	7.871 X 0.95 = 7.477	24 "	30.08 Feet
CS-WSP	39.5	BRACE WALL #3	35.167	6.775	6.775 X 1.0 = 6.775	6.775 X 1.1 = 7.182	7.182 X 1.00 = 7.182	7.182 X 0.95 = 6.822	24 "	17.58 Feet
CS-WSP	35.167	BRACE WALL #4	39.5	7.425	7.425 X 1.0 = 7.425	7.425 X 1.1 = 7.871	7.871 X 1.00 = 7.871	7.871 X 0.95 = 7.477	24 "	29.42 Feet

16 GAUGE 1 3/4" STAPLES @ 3" & 6" O.C.



PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

THIS BUILDING HAS BEEN
 DESIGNED AND APPROVED
 UNDER THE SUPERVISION
 OF THE ENGINEER
 JEA

INDEPENDENT BUILDER
 AVALON BUILDING SYSTEMS
 ADDRESS 25 NORMANDY TERRACE
 CITY CAMBRIDGE
 COUNTY MIDDLESEX
 ORDER NO 7/27/18
 SERIAL NO 2-576
 FILE NO 0#7575

2ND STORY SHEAR WALLS

SERIAL #/ ORDER # O#7575

PAGE # SW2

246 SAND HILL ROAD
 SELINSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

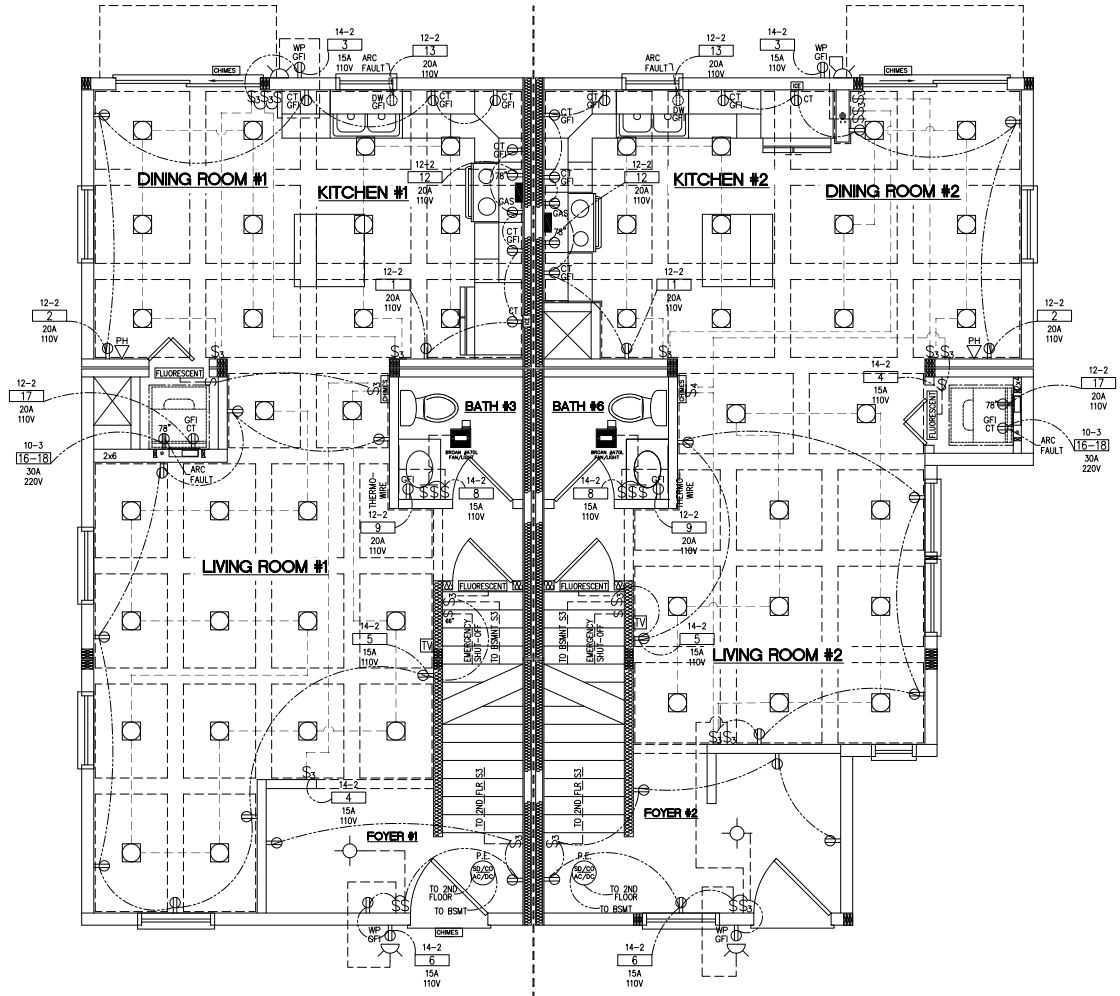
STATE	MA	ZIP	02138
COUNTY	MIDDLESEX	WIND SPEED (MPH)	128 VULT
SF	2,576	TYPE	DUPLEX
FILE NO	0#7575		

JEA

ALL BRANCH CIRCUITS SUPPLYING 15 AND 20 AMPERE OUTLETS ARE TO BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER IN ACCORDANCE WITH THE 2017 NEC

ALL 125-VOLT, 15-20 AMPERE RECEPTS INSTALLED IN AREAS SPECIFIED BY 210.52 SHALL BE LISTED TAMPER-RESISTANT TYPE.

50# LIGHT BOXES REQUIRED



- NOTES:
1. INSULATED STAPLES ARE REQUIRED TO SUPPORT ALL WIRING
 2. 1288 SQ. FT. PER FLOOR (SMOKE DETECTORS REQUIRED EVERY 1,200 SQ. FT.)
 3. SMOKE DETECTOR TYPE: PHOTOELECTRIC
 4. SMOKE DETECTOR MUST BE INTERCONNECTED BETWEEN FLOORS.

LIVING UNIT #1

LIVING UNIT #2

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion



SERIAL # / ORDER #
O#7575

1ST STORY ELECTRICAL PLAN

PAGE #
EL1

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VOLT
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLICATION
COUNTY	SERIAL NO	
MIDDLESEX		
ORDER NO		
7/27/18		
DATE		
03/28/18		

246 SAND HILL ROAD
 SELINGS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM

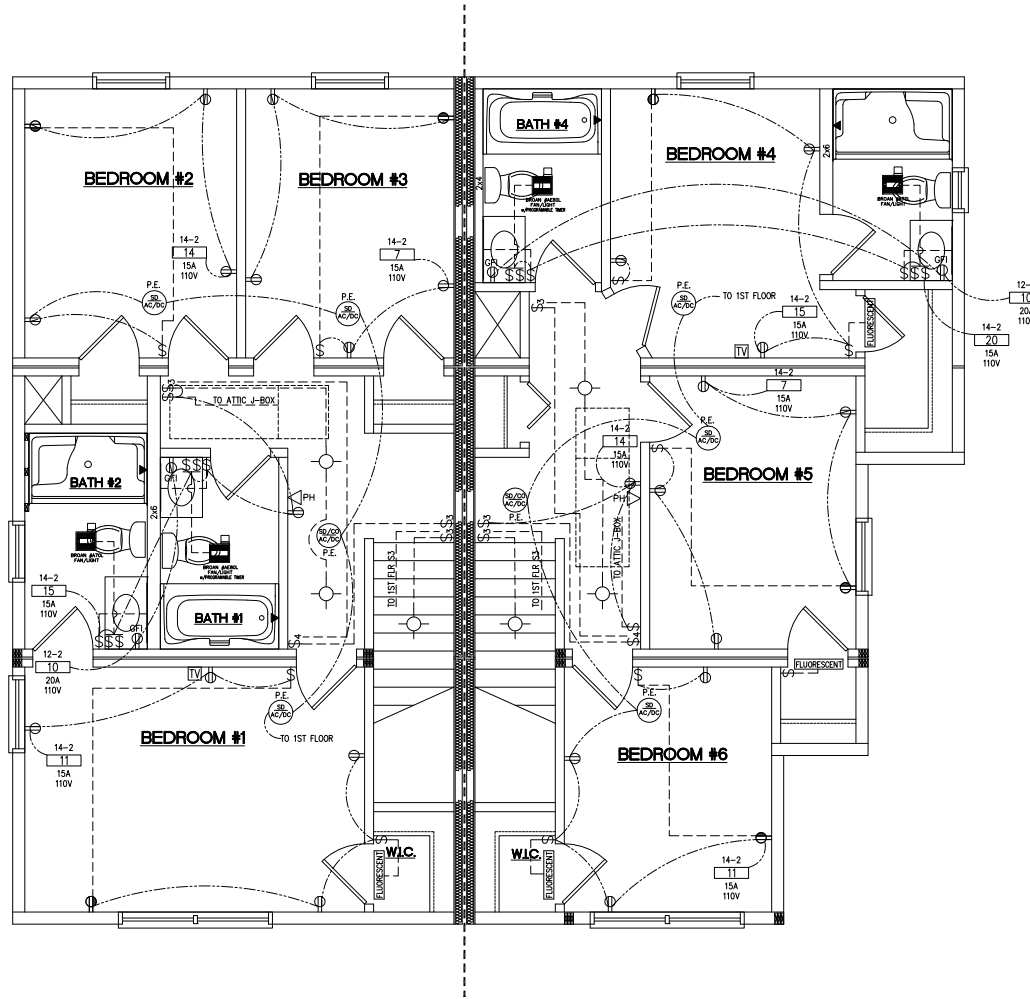


[Handwritten signature]

ALL BRANCH CIRCUITS SUPPLYING 15 AND 20 AMPERE OUTLETS ARE TO BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER IN ACCORDANCE WITH THE 2017 NEC

ALL 125-VOLT, 15-20 AMPERE RECEPTS INSTALLED IN AREAS SPECIFIED BY 210.52 SHALL BE LISTED TAMPER-RESISTANT TYPE.

50# LIGHT BOXES REQUIRED



- NOTES:
1. INSULATED STAPLES ARE REQUIRED TO SUPPORT ALL WIRING
 2. 1288 SQ. FT. PER FLOOR (SMOKE DETECTORS REQUIRED EVERY 1,200 SQ. FT.)
 3. SMOKE DETECTOR TYPE: PHOTOELECTRIC
 4. SMOKE DETECTOR MUST BE INTERCONNECTED BETWEEN FLOORS.

LIVING UNIT #1

LIVING UNIT #2

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

THIS BUILDING HAS BEEN
 ENGINEERED BY THE
 OFFICE OF THE REGISTERED PROFESSIONAL
 ENGINEER OF THE MASS. APPROVAL

SERIAL # / ORDER #
O#7575

PAGE #
EL2

2ND STORY ELECTRICAL PLAN

INDEPENDENT BUILDER	AVALON BUILDING SYSTEMS
ADDRESS	25 NORMANDY TERRACE
CITY	CAMBRIDGE
COUNTY	MIDDLESEX
ORDER NO.	7/27/18
REV.	0#7575
STATE	MA
ZIP	02138
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	128 VOLT
TYPE	DUPLICATION
SNOW LOAD (LBS)	2,576
TYPE	DUPLICATION

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF



246 SAND HILL ROAD
 SELINGS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM

PER LIVING UNIT

ELECTRICAL LOAD CALCULATION FOR ON#7575-MA

HOUSE SQFT:	1,312		
AIR CONDITIONING AND HEAT			
AIR CONDITIONING:	0 WATTS		0 WATTS
CENTRAL ELECTRIC SPACING HEATING:	0 WATTS (X 0.65)		0 WATTS
LESS THAN FOUR SEPARATELY CONTROLLED ELECTRIC SPACE HEATING UNITS:	0 WATTS (X 0.65)		0 WATTS
FOUR OR MORE SEPARATELY CONTROLLED ELECTRIC SPACE HEATING UNITS:	0 WATTS (X 0.45)		0 WATTS
*NOTE: USE THE LARGER OF THE AIR CONDITIONING OR THE DIVERSIFIED DEMAND OF THE HEATING LOAD.			
OTHER LOADS			
		WATTS OR VOLT-AMPS	CIRCUIT AMPACITY
GENERAL LIGHTING:	(1,312 x 3)	3,936	15A
SMALL APPLIANCES:	(2 X 1,500)	3,000	20A
RANGE:		11,400	50A
DISHWASHER:		1,200	20A
GARBAGE DISPOSAL:		750	15A
WASHER:		1,500	20A
DRYER:		5,800	30A
FURNACE:		0	N/A
WATER HEATER:		5,500	30A
		33,086	
FIRST 10kW OF OTHER LOADS @ 100%:		=	10,000
REMAINDER OF OTHER LOADS @ 40%:	(23,086 x 0.40)	=	9,234
AIR CONDITIONING OR HEAT FROM ABOVE:		=	0
TOTAL CALCULATED LOAD::		=	19,234
REQUIRED SERVICE SIZE:	(19,234 / 240)	=	80 AMPS
INSTALLED PANEL SIZE:		=	200 AMPS

246 SAND HILL ROAD
SELINGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



DATE	REVISION	BY

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VOLT
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLEX
COUNTY		
MIDDLESEX		
ORDER NO	SERIAL NO	
7575		
REV		
0#7575		

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

ELECTRICAL LOAD CALC

THIS BILLING HAS BEEN
GENERATED FROM AN APPROVED
SERIES OF THE MODEL APPROVAL
lea

SERIAL #/ ORDER #
0#7575

PAGE #
ELC

JR

LIVING UNIT #1

CIRCUIT SCHEDULE

*WIRE WITH GROUND ALL CIRCUITS

CRT	BRK	WIRE	LOCATION	VOLT	CRT	BRK	WIRE	LOCATION	VOLT
1	20A	12-2	SMALL APPLIANCE (AFI)	110	2	20A	12-2	SMALL APPLIANCE (AFI)	110
3	15A	14-2	GENERAL LIGHTING (AFI)	110	4	15A	14-2	GENERAL LIGHTING (AFI)	110
5	15A	14-2	LIVING ROOM (AFI)	110	6	15A	14-2	FOYER (AFI)	110
7	15A	14-2	BEDROOM#3 (AFI)	110	8	15A	14-2	GENERAL LIGHTING (AFI)	110
9	20A	12-2	BATH GFI	110	10	20A	12-2	BATH GFI	110
11	15A	14-2	BEDROOM#1 (AFI)	110	12	20A	12-2	RANGE HOOD (AFI)	110
13	20A	12-2	DISHSAHER (AFI)	110	14	15A	14-2	BEDROOM#2 (AFI)	110
15	15A	14-2	GENERAL LIGHTING (AFI)	110	16				
17	20A	12-2	WASHER (AFI)	110	18	30A	10-3	DRYER	220
19					20				
21					22				
23					24				
25					26				
27					28				
29					30				
31					32				
33					34				
35					36				
37					38				
39					40				

LIVING UNIT #2

CIRCUIT SCHEDULE

*WIRE WITH GROUND ALL CIRCUITS

CRT	BRK	WIRE	LOCATION	VOLT	CRT	BRK	WIRE	LOCATION	VOLT
1	20A	12-2	SMALL APPLIANCE (AFI)	110	2	20A	12-2	SMALL APPLIANCE (AFI)	110
3	15A	14-2	GENERAL LIGHTING (AFI)	110	4	15A	14-2	GENERAL LIGHTING (AFI)	110
5	15A	14-2	LIVING ROOM (AFI)	110	6	15A	14-2	FOYER (AFI)	110
7	15A	14-2	BEDROOM#3 (AFI)	110	8	15A	14-2	GENERAL LIGHTING (AFI)	110
9	20A	12-2	BATH GFI	110	10	20A	12-2	BATH GFI	110
11	15A	14-2	BEDROOM#1 (AFI)	110	12	20A	12-2	RANGE HOOD (AFI)	110
13	20A	12-2	DISHSAHER (AFI)	110	14	15A	14-2	BEDROOM#2 (AFI)	110
15	15A	14-2	GENERAL LIGHTING (AFI)	110	16				
17	20A	12-2	WASHER (AFI)	110	18	30A	10-3	DRYER	220
19					20	15A	14-2	GENERAL LIGHTING (AFI)	110
21					22				
23					24				
25					26				
27					28				
29					30				
31					32				
33					34				
35					36				
37					38				
39					40				

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

246 SAND HILL ROAD
 SELINGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VOLT
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLEX
COUNTY		
MIDDLESEX		
ORDER NO	SERIAL NO	
7/27/18		
REV		
0#7575		

CIRCUIT SCHEDULE

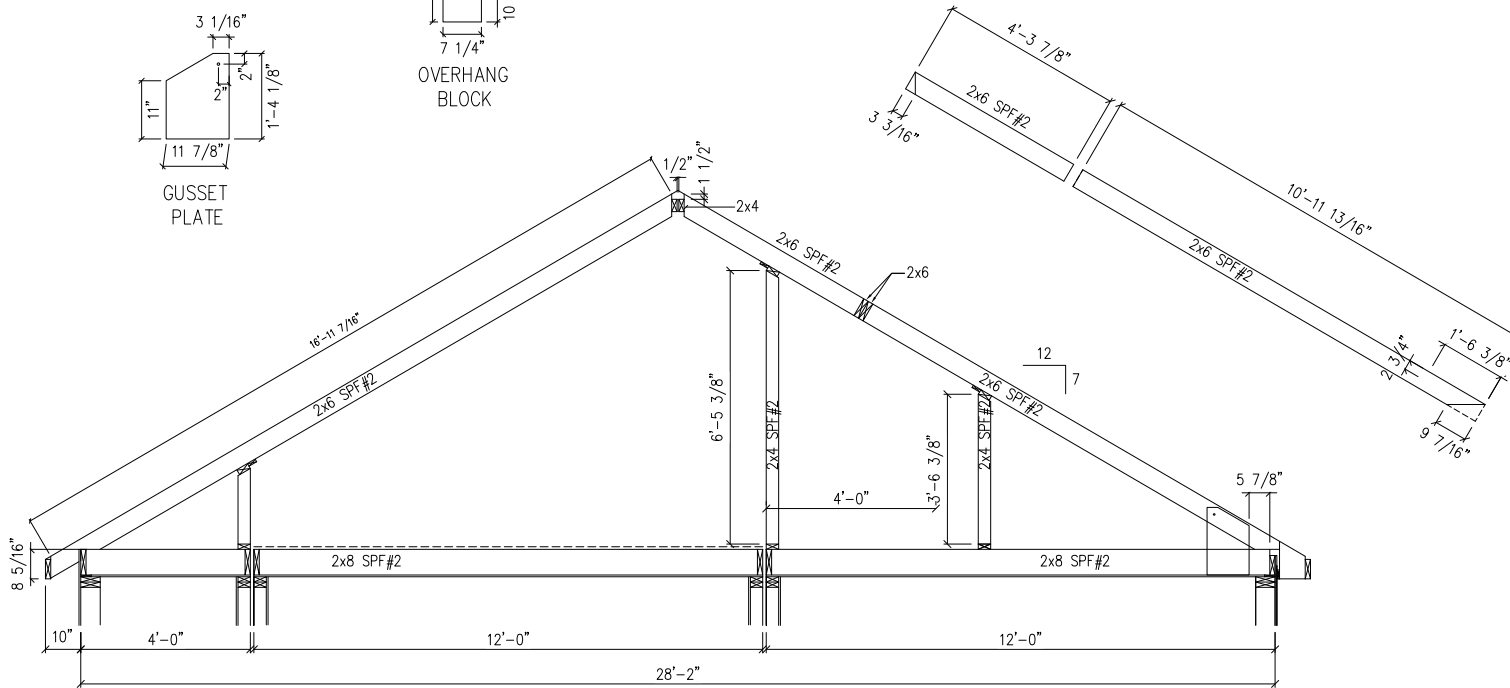
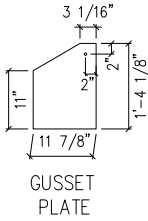


SERIAL #/ ORDER #
0#7575

PAGE #
CS

JEA

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion



7/12 - 28'-2" WIDE - 40#GSL - 16" O.C.
STORAGE RAFTER

THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED
 NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.



SERIAL #/ ORDER #

0#7575

DATE

TR2

246 SAND HILL ROAD
 SELINGS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



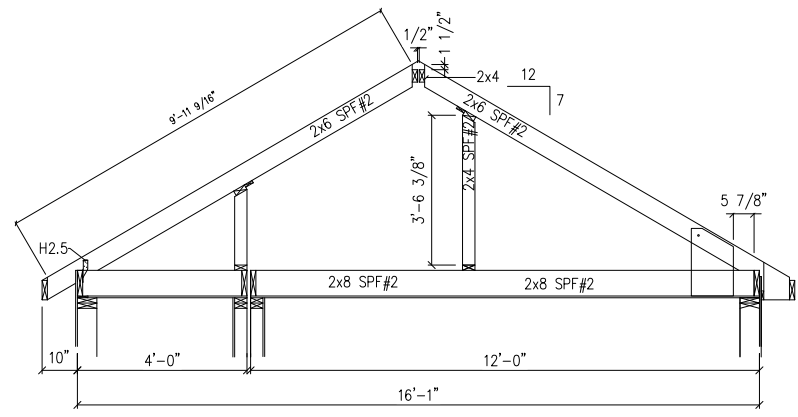
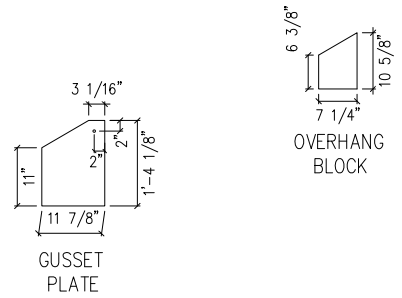
DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VULT
CITY	ORDER NO	TYPE
CAMBRIDGE	7575	DUPLEX
COUNTY	SERIAL NO	
MIDDLESEX	0#7575	
ORDER NO		
7575		
REV		
0#7575		

28'-2" 7/12 RAFTER

JEA

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion



7/12 - 16-1" WIDE - 40#GSL - 16" O.C.
 STORAGE RAFTER

THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED
 NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.



SERIAL #/ ORDER #
0#7575

16'-1" 7/12 RAFTER
TR3

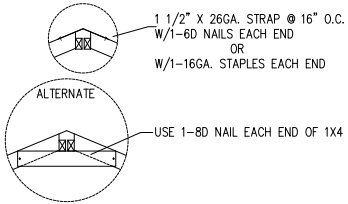
246 SAND HILL ROAD
 SELINGS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

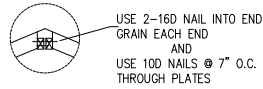
INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VULT
CITY	SPF	TYPE
CAMBRIDGE	2-576	DUPLEX
COUNTY	REP	
MIDDLESEX	0#7575	
ORDER NO		
7/27/18		
REP		
0#7575		

JEA

CONNECTION: A-2

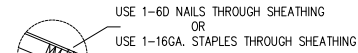


CONNECTION: A-1

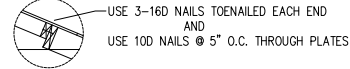


PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

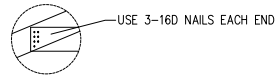
CONNECTION: B-1



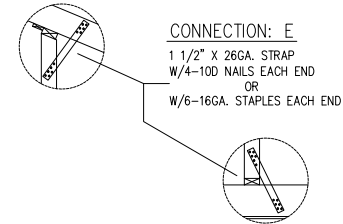
CONNECTION: B-2



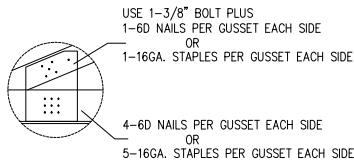
CONNECTION: C



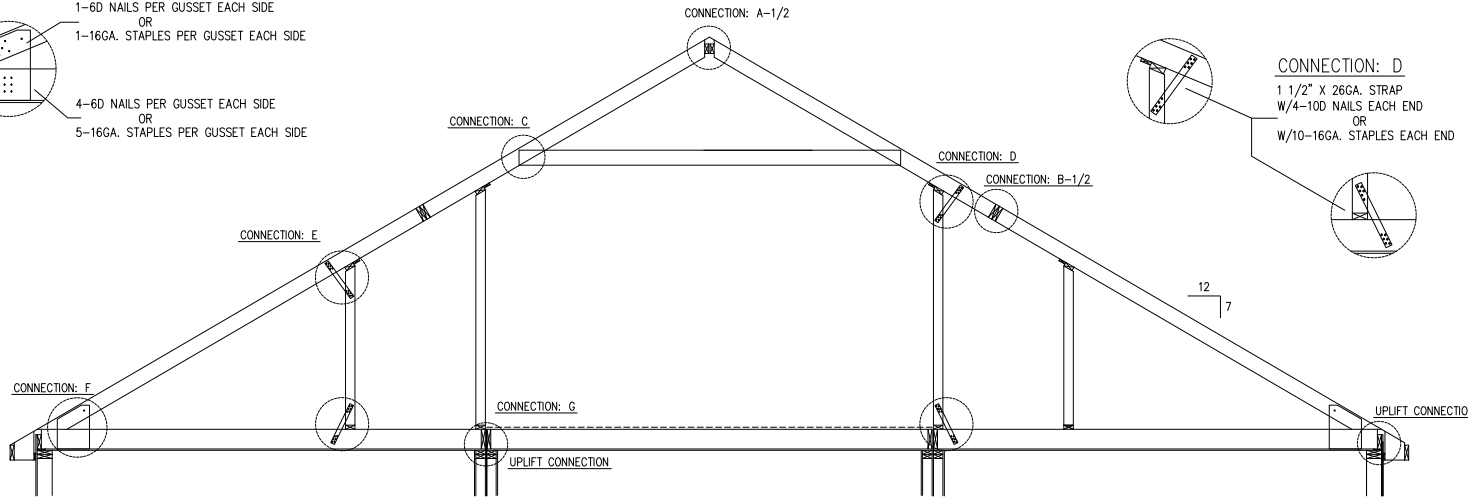
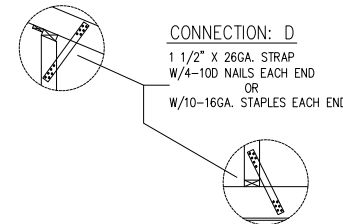
CONNECTION: E



CONNECTION: F

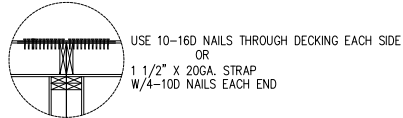


CONNECTION: D

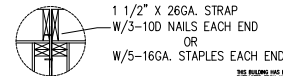
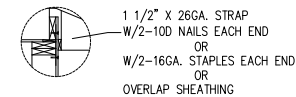


7/12 - 35'-2" WIDE - 40#GSL - 16" O.C.
STORAGE RAFTER
GOOD TO 150 MPH WIND SPEED

CONNECTION: G



UPLIFT CONNECTIONS



SERIAL #/ORDER #

O#7575



246 SAND HILL ROAD
SELINSGROVE, PA 17870
PHONE: (570) 374-3280
FAX: (570) 374-1122
WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VULT
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLEX
COUNTY	PERMIT NO.	
MIDDLESEX	07575	
ORDER NO.	PERMIT NO.	
7/27/18	07575	

7/12 RAFTER CONNECTIONS

PAGE #

TR4

**THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED
NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.**

SEE PAGES TR2, SW1, SW2 AND FND FOR ON-SITE CONNECTIONS

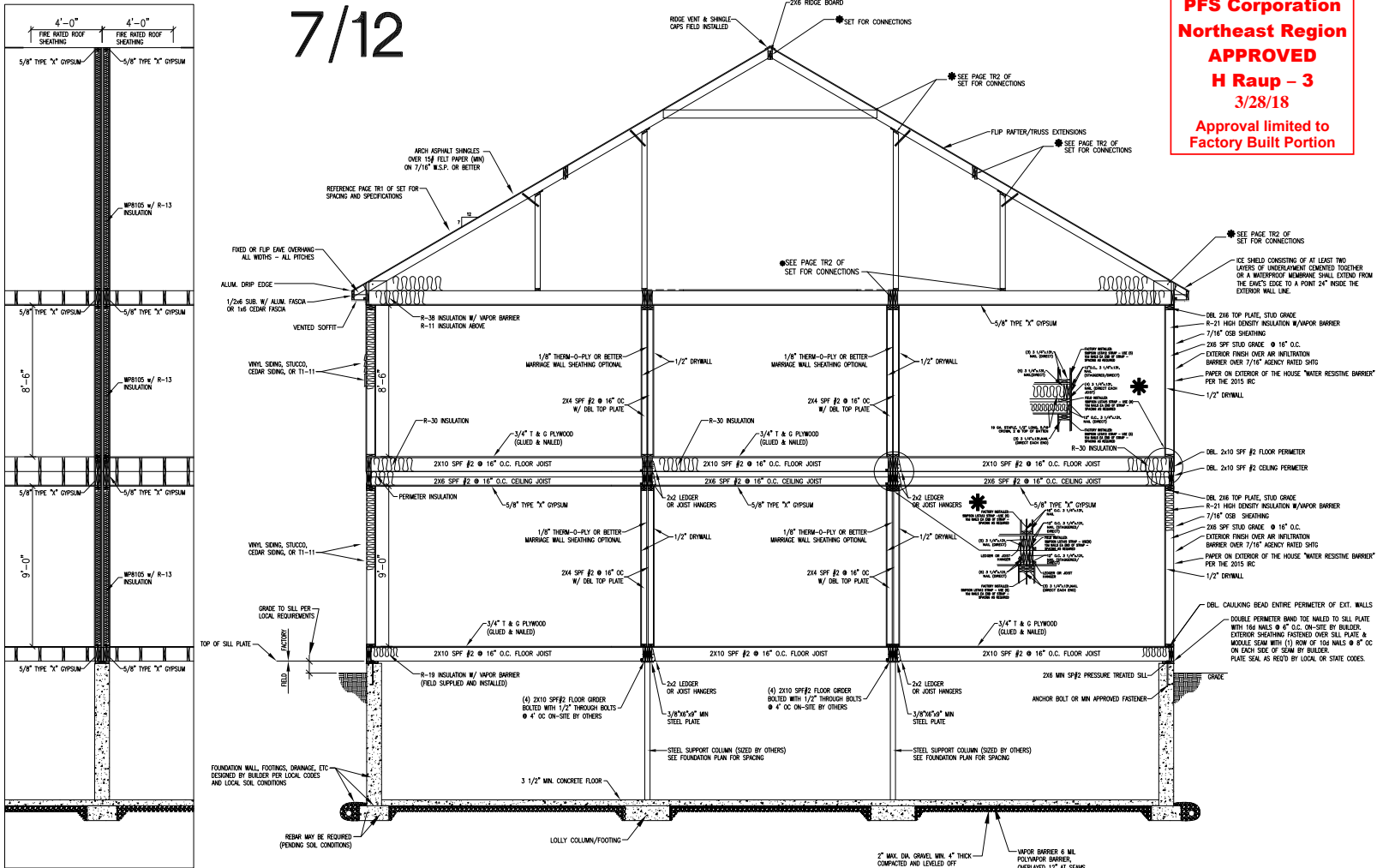
* ON-SITE CONNECTION REQUIRED

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

246 SAND HILL ROAD
 SELINS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



7/12



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	AVALON BUILDING SYSTEMS
ADDRESS	25 NORMANDY TERRACE
CITY	CAMBRIDGE
COUNTY	MIDDLESEX
ORDER NO.	7/575
PROJECT NO.	0#7575
STATE	MA
ZIP	02138
SNOW LOAD (LBS)	40
WIND SPEED (MPH)	128 VUL-T
TYPE	DUPLEX

CROSS SECTION / DETAIL #1



0#7575

SE1

Jea

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
Approval limited to
Factory Built Portion

246 SAND HILL ROAD
 SELINS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DOOR AND WINDOW SCHEDULE

WINDOWS	ROUGH OPENING	AREA	LIGHT	CLEAR OPENING WIDTH (EACH)	CLEAR OPENING HEIGHT (EACH)	VENT	U-FACTOR	QTY	TOTAL AREA
DESCRIPTION									
7D 7700 SERIES DOUBLE HUNG DH7718210	22 1/8" X 37 1/2"	5.76	3.4	17.563	14.563	1.78	0.29	1	5.76
7D 7700 SERIES DOUBLE HUNG DH773046	38 1/8" X 57 1/2"	15.22	11.2	33.563	24.563	5.72	0.29	1	15.22
SILVERLINE 3000 SERIES DOUBLE HUNG 1846DH	22 1/4" X 57 1/4"	8.85	5.4	18.188	24.438	3.09	0.30	1	8.85
SILVERLINE 3000 SERIES DOUBLE HUNG 24210DH	30 1/4" X 37 1/4"	7.83	5.0	26.188	14.438	2.63	0.30	3	23.49
SILVERLINE 3000 SERIES DOUBLE HUNG 3046DH	38 1/4" X 57 1/4"	15.21	11.0	34.188	24.438	5.80	0.30	12	182.52
SILVERLINE 3000 SERIES DOUBLE HUNG 3046DH-2	76" X 57 1/4"	30.22	22.1	34.188	24.438	11.60	0.30	2	60.44
									TOTAL AREA: 296.28

EXTERIOR DOORS	ROUGH OPENING	AREA	LIGHT	CLEAR OPENING WIDTH (EACH)	CLEAR OPENING HEIGHT (EACH)	VENT	U-FACTOR	QTY	TOTAL AREA
DESCRIPTION									
PLY GEM PRO SERIES CLASSIC SLIDING PATIO DOOR CLSPDR6068	72" X 80"	40.00	30.8	29.031	75.772	15.28	0.25	2	80.00
THERMA-TRU 3068 (< 50% GLASS)	38 1/2" X 82 1/8"	21.96	0.0	0.000	0.000	20.00	0.17	2	43.92
									TOTAL AREA: 123.92

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VUL1
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLEX
COUNTY		
MIDDLESEX		
ORDER NO.	SERIAL NO.	
7/27/18		
REV.		
0#7575		

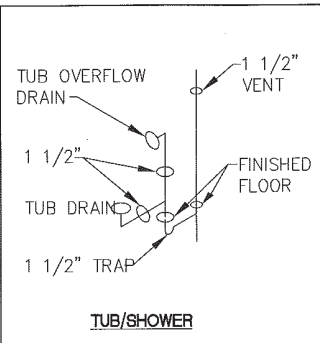
DOOR & WINDOW SCHEDULE



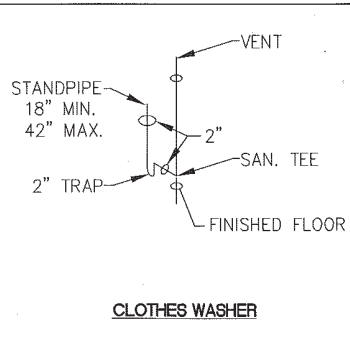
SERIAL #/ ORDER #
0#7575

PAGE #
DWS

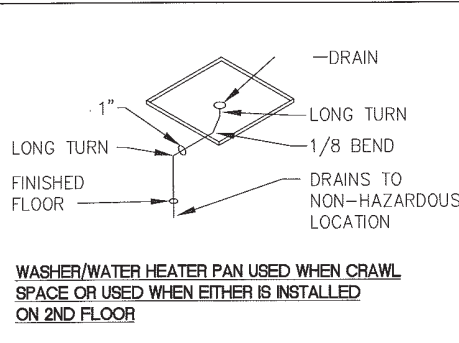
JR



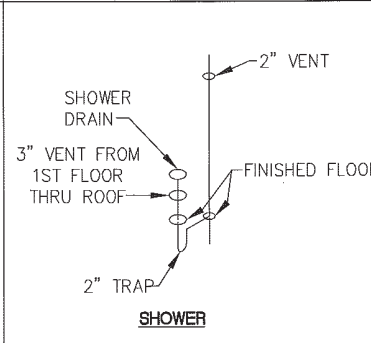
TUB/SHOWER



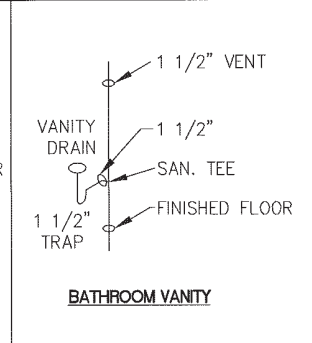
CLOTHES WASHER



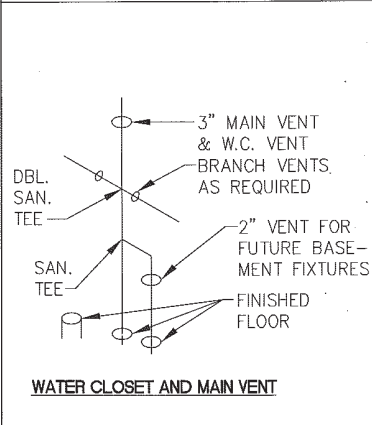
WASHER/WATER HEATER PAN USED WHEN CRAWL SPACE OR USED WHEN EITHER IS INSTALLED ON 2ND FLOOR



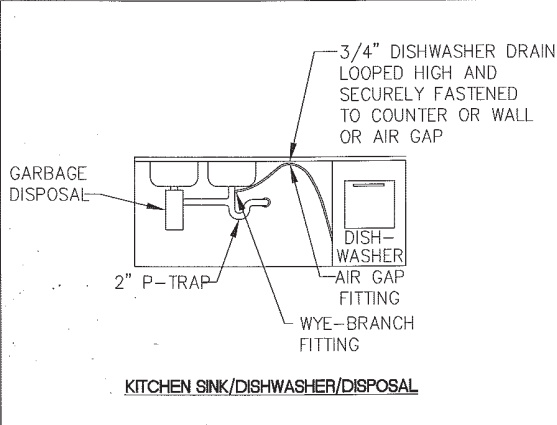
SHOWER



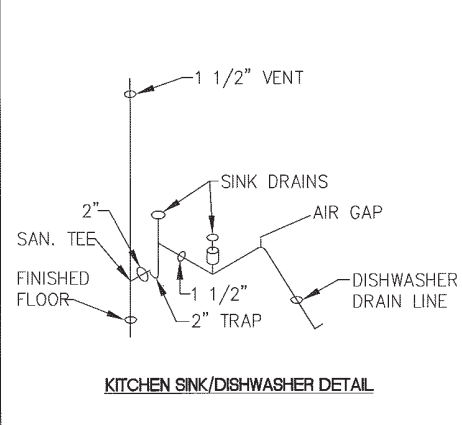
BATHROOM VANITY



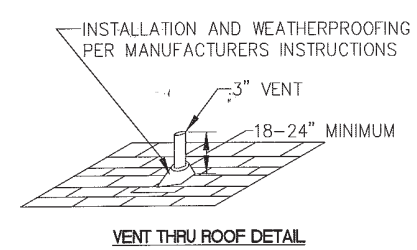
WATER CLOSET AND MAIN VENT



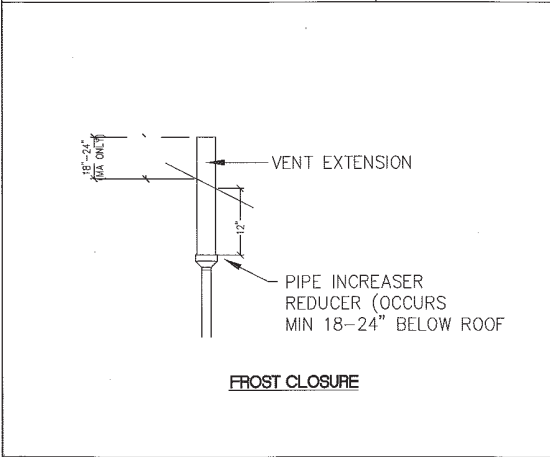
KITCHEN SINK/DISHWASHER/DISPOSAL



KITCHEN SINK/DISHWASHER DETAIL



VENT THRU ROOF DETAIL



FROST CLOSURE

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

Icon - Legacy Custom Modular Homes, LLC
146 SANDHILL ROAD
SPRINGFIELD, VA 22150
PHONE 570-344-2880
WWW.ICONLEGACY.COM

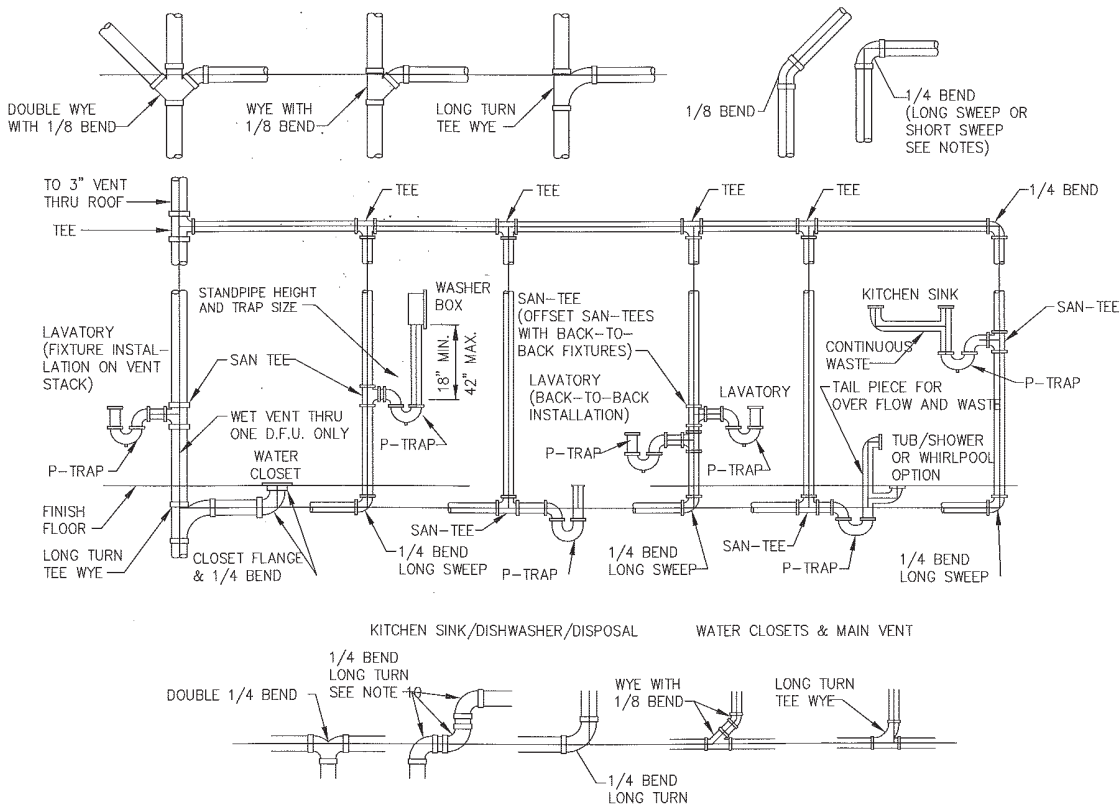
COPYRIGHT © 2008
THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED HEREIN IS PROPRIETARY AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF Icon-Legacy Custom Modular Homes, LLC.

CUSTOMER/PROJECT: SYSTEMS DRAWINGS
DRAWN BY:
CHECKED BY:

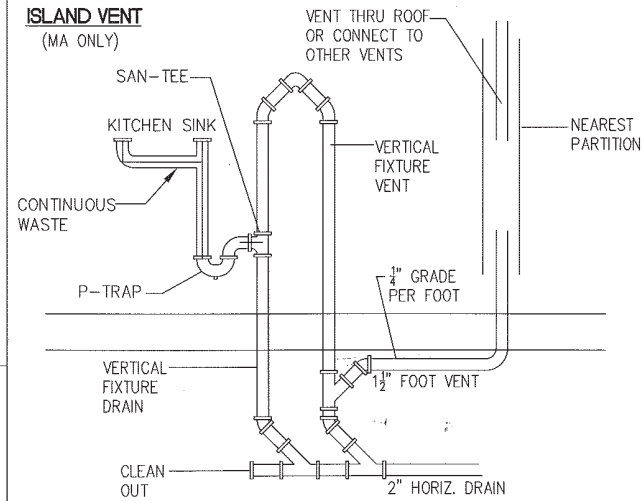
REV.	DATE	REVISIONS	BY	CHKD	DATE
1	12/14/08	CODE UPDATES	BRH		
2	12/19/10	MA CODE UPDATE	SW		
4	1/10/11	Code up-2010 PL, VA, NJ	SP		

DRAWN BY: DATE: SCALE: CHECKED BY: NTS
GLENCO/TH/03/14/08

FILE:
SQ. FT.:
STATE:
TYPE:
MODEL:
DRAWING: PLUMBING DETAILS
SHEET: PL1



**ISLAND VENT
(MA ONLY)**



**PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion**

Icon - Legacy Custom
Modular Homes, LLC
246 SAND HILL ROAD
SAND HILL, PA 17075
PHONE 870-574-9280
FAX 870-574-1122
WWW.ICONLEGACY.COM
Custom Modular Homes, LLC

COPYRIGHT © 2008
THIS DOCUMENT AND THE
SUBJECT MATTER CONTAINED
HEREIN IS PROPRIETARY AND
MAY NOT BE REPRODUCED
WITHOUT THE WRITTEN
PERMISSION OF
Icon-Legacy Custom
Modular Homes, LLC

CUSTOMER/PROJECT:
SYSTEMS DRAWINGS

BUILDER:

REV#	DATE	REVISIONS	BY	CHKD
1	12/14/08	CODE UPDATES	BJP	
2	12/20/08	REVISED SYSTEMS	SNW	
3	7/12/2011	REVISED SYSTEMS	SNW	
4	7/12/2011	Code Up-date R.I. V.A. N.L.	SNW	

DRAWN BY: DATE: SCALE: CHECKED BY:
SLENGCO/TH 03/14/08 NTS

FILE:

SQ.FT.:

STATE:

TYPE:

MODEL:

DRAWING:
PLUMBING
DETAILS

SHEET:
PL2

architect seal

PLUMBING NOTES:

1. ALL PLUMBING CONSTRUCTION AND MATERIAL BELOW THE MODULAR FLOOR AND BETWEEN FLOORS IS THE RESPONSIBILITY OF THE BUILDER/CONTRACTOR AND IS TO BE DONE IN ACCORDANCE W/STATE AND LOCAL CODES.
2. CONCEALED PIPING IN UNHEATED AREAS, INCLUDING OUTSIDE WALLS, SHALL BE PROTECTED AGAINST FREEZING IN PLANT. PIPING SHALL BE KEPT OUT OF UNHEATED AREAS WHERE POSSIBLE.
3. ALL WASTE AND VENT LINES IN MODULES ARE ABS OR PVC PIPE. ALL SUPPLY LINES IN MODULES ARE COPPER, PEX, OR CPVC.
4. PITCH ON HORIZONTAL WASTE LINES IS $\frac{1}{8}$ " PER FOOT FOR GREATER THAN 3" DIAMETER PIPE, $\frac{1}{4}$ " PER FOOT FOR 3" DIAMETER PIPE OR LESS.
5. WASTE LINES: INSTALL WYE WITH CLEANOUT PRIOR TO EXITING WALL FOR CONNECTION TO DISPOSAL SYSTEM. 4" MINIMUM WASTE LINE TO SEPTIC (BY BUILDER IN FIELD).
6. WASHER SHALL HAVE MINIMUM 2" TRAP.
7. REMOVABLE TRAPS UNDER ALL SINKS TO PROVIDE CLEANOUT ACCESS.
8. GARBAGE DISPOSAL MUST HAVE SEPARATE TRAP. DISHWASHER CANNOT DISCHARGE INTO GARBAGE DISPOSAL.
9. KITCHEN SINK SHALL HAVE 2" DRAIN WHEN A GARBAGE DISPOSAL OR DISHWASHER ARE CONNECTED.
10. HORIZONTAL TO HORIZONTAL AND VERTICAL TO HORIZONTAL DRAIN CHANGES IN DIRECTION SHALL BE 45° WYES, LONG SWEEP 90° ELBOWS, LONG SEEP TY'S, 6TH, 8TH, OR 16TH BENDS, APPROVED COMBINATIONS OF THESE OR EQUIVALENT LONG SWEEP FITTINGS. SHORT SWEEPS ARE PERMITTED IN SINGLE BRANCH HORIZONTAL TO VERTICAL CHANGES IN DIRECTION ON 3" PIPE AND LARGER.
11. ALL HORIZONTAL VENT BRANCH PIPING SHALL BE LOCATED A MINIMUM OF 6" ABOVE THE FLOOD LEVEL OF THE HIGHEST FIXTURE IN THAT BRANCH.
12. PVC-DWV PIPE SUPPORTS: AT BRANCHES, CHANGES IN DIRECTION, AND AT THE BASE, EACH FLOOR AND MID STORY (VERTICAL) MAXIMUM EVERY 4'-0" AT THE END OF BRANCHES, AND CHANGE OF DIRECTIONS OR ELEVATION,
13. PIPE PENETRATING FIRE RATED ASSEMBLIES INCLUDING FLOOR/CEILING SHALL BE FIRE STOPPED WHERE REQUIRED BY ALL CODES WITH MATERIAL EQUIVALENT TO CONSTRUCTION THROUGH WHICH IT PENETRATES AND BE SUITABLE TO PIPE MATERIAL, OR USE METAL PIPE FROM A MINIMUM OF ABOVE THE FIRE RATED ASSEMBLY AND DOWN.
14. FIRE STOPPING SHALL BE PROVIDED AND VERIFIED BEFORE IT IS COVERED OR CONCEALED IN THE CONSTRUCTION PROCESS.
15. ANY STRUCTURAL MEMBER SUBJECT TO HOLE DRILLING, CUTTING, OR NOTHCING SHALL BE LEFT IN A SAFE STRUCTURAL CONDITION BY BEING REINFORCED, REPAIRED, OR REPLACED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE CODE.
16. FIELD INSTALLED (ON-SITE) PIPING SHALL BE APPROVED BY THE LOCAL BUILDING CODE ENFORCEMENT OFFICER. PIPING SHALL BE FIELD TESTED FOR LEAKS.
17. BATH TUBS, INCLUDING GARDEN TUBS, HYDRO-MASSAGE, AND HOT TUBS SHALL HAVE A 1 $\frac{1}{2}$ " MIN OVERFLOW.
18. JOINTS AROUND PLUMBING FIXTURES SHALL BE MADE WATERPROOF AT FLOORS, WALLS, & COUNTERTOPS.
19. EACH FIXTURE SHALL BE INDIVIDUALLY DIRECT OR WET VENTED.
20. EACH DWELLING UNIT SHALL HAVE ONE MAIN 3" STACK FROM BUILDING DRAIN.
21. ALL VENTS THROUGH ROOF TO BE 3" MIN DIAMETER AND SHALL TERMINATE 18"-24" ABOVE THE ROOF.
22. BASEMENT MODELS SHALL BE PROVIDED IN FACTORY WITH A 2" VENT TO BASEMENT STUBBED BELOW THE FIRST FLOOR, THEN CAPPED AND LABELED. BASEMENT VENT MAY BE DELETED WHEN CLOTHES WASHER IS ON THE FIRST OR SECOND FLOOR.

23. ALL TRAP ARMS MUST BE SUPPORTED WITH $\frac{3}{4}$ " MINIMUM BEARING.(MA ONLY)
24. ALL PLASTIC PIPE MUST BE SUPPORTED AT INTERVALS IN ACCORDANCE WITH APPLICABLE PLUMBING CODES.
25. TRAPS SHALL BE PLACED AS CLOSE AS POSSIBLE TO FIXTURE OUTLET. MAXIMUM VERTICAL DROP FROM FIXTURE OUTLET TO TRAP WEIR IS 24".
26. INACCESSIBLE TRAPS SHALL NOT HAVE UNIONS, CLEANOUTS OR SLIPJOINTS. ACCESSIBLE TRAPS SHALL BE REMOVABLE WITH UNION IN TRAP SEAL OR HAVE CLEANOUT OPENING SIZED THE SAME AS THE TRAP.
27. MAXIMUM DISTANCE OF FIXTURE TRAP WEIR TO VENT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE PLUMBING CODES.
28. PLASTIC PIPING SHALL BE PROTECTED WITH $\frac{1}{8}$ " STEEL PLATE WHEN PIPE PASSES THROUGH WOOD MEMBERS LESS THAN 1 $\frac{1}{4}$ " FROM EDGE OF MEMBER.
29. FIRST FLOOR FIXTURES SHALL CONNECT INTO HORIZONTAL BUILDING DRAIN MORE THAN 10 PIPE DIAMETERS DOWNSTREAM OF STACK BASE AND NOT CONNECT INTO SECOND FLOOR DRAIN STACK.
30. POTABLE WATER SYSTEM SHALL BE DISINFECTED ON SITE BY BUILDER IN ACCORDANCE WITH APPLICABLE STATE PLUMBING CODES.
31. ISLAND FIXTURE VENTING SHALL NOT BE PERMITTED FOR FIXTURES OTHER THAN SINKS AND LAVATURES. (SEE ISLAND DETAILS).
32. ANTI-SIPHONING DEVICE, VACUUM BREAKERS, AND AIR GAPS: FOR WATER DISTRICTUION SYSTEMS "PROTECTION OF POTABLE WATER SUPPLY".
 - 32.1. WATER HEATER LOCATED AT OR ON LIVING SPACE LEVEL MUST HAVE AN ANTI-SIPHONING DEVICE INSTALLED.
 - 32.2. CLOTHES WASHER MUST HAVE AN ANTI-SIPHONING DEVICE INSTALLED (IF NOT BUILT INTO THE APPLIANCE).
33. WATER HAMMER ARRESTORS SHALL BE INSTALLED WHERE QUICK CLOSING VALVES ARE UTILIZED. (I.E. WASHING MACHINES AND DISHWASHERS).
34. PIPE INSTALLED DOWNSTREAM OF THE POINT OF POINT OF DELIVERY SHALL NOT EXTEND THROUGH ANY TOWNHOUSE UNIT OTHER THAN THE UNIT SERVED BY SUCH PIPING.

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

stale approval stamps

architect seal



Icon - Legacy Custom Modular Homes, LLC
 274 SAND HILL ROAD
 SPANGLER, VA 22969
 PHONE 870-374-3280
 WWW.ICONLEGACY.COM

COPYRIGHT © 2009

THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED HEREIN IS PROPRIETARY AND MAY NOT BE REPRODUCED WITHOUT THE WRITTEN PERMISSION OF Icon-Legacy Custom Modular Homes, LLC.

CUSTOMER/PROJECT: SYSTEMS DRAWINGS

REV#	DATE	REVISIONS	BY	CHECKED BY:
1	12/17/08	CODE UPDATES	SR	
2	1/14/09	VA CODE 12-DATE	SR	
3	1/14/2011	VA CODE 12-DATE	SR	
4	3/10/2011	Code 12-date RI, VA, NJ	SR	
DRAWN BY: DATE:			SCALE: CHECKED BY:	
GLENCO TH			03/14/08 NTS	

FILE:

SQ.FT.:

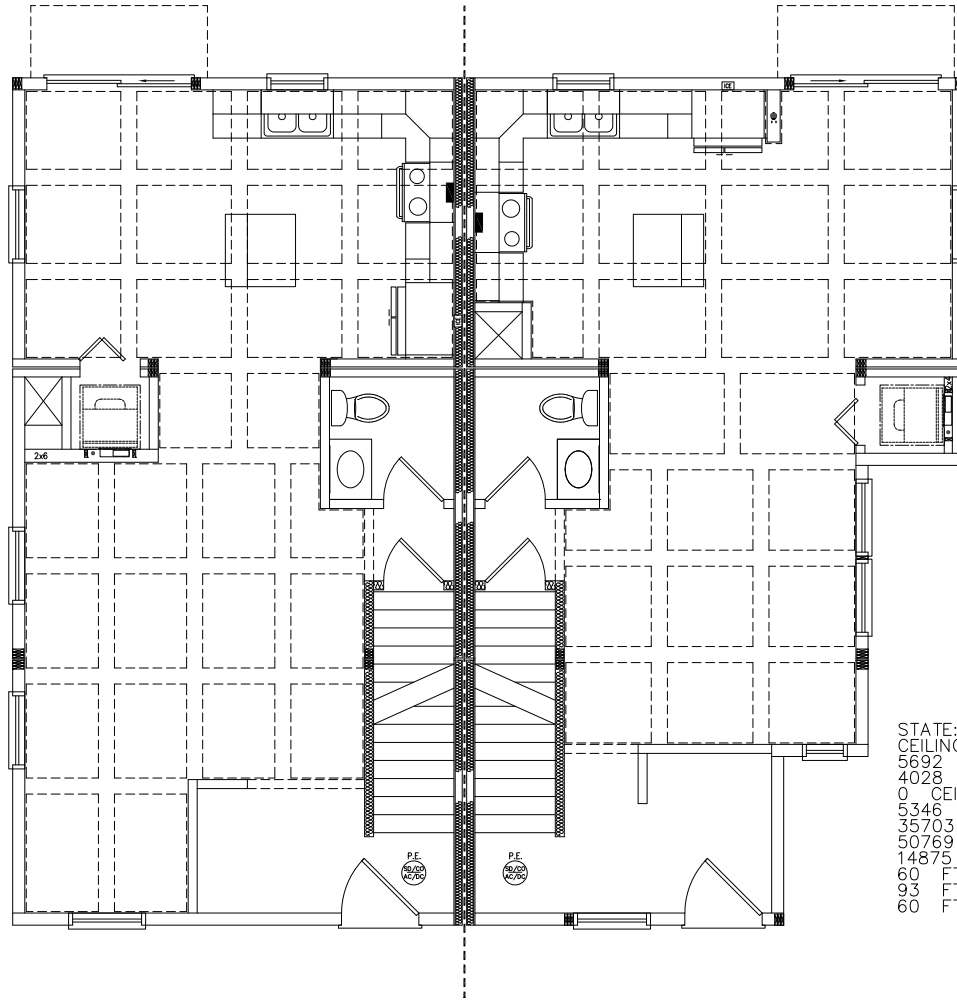
STATE:

TYPE:

MODEL:

DRAWING: PLUMBING NOTES

SHEET: PL3



PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

246 SAND HILL ROAD
 SELINSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VUL I
CITY	SNOW	TYPE
CAMBRIDGE	2.576	DUPLEX
COUNTY	SERIAL NO	
MIDDLESEX		
ORDER NO		
7/27/18		
REV		
0#7575		

STATE: MA - MASSACHUSETTS
 CEILING HEIGHT: 9 FT
 5692 WINDOW AND DOOR BTU/H LOSS
 4028 WALL BTU/H LOSS
 0 CEILING BTU/H LOSS
 5346 FLOOR BTU/H LOSS
 35703 INFILTRATION BTU/H LOSS
 50769 TOTAL BTU/H LOSS
 14875 TOTAL WATT LOSS
 60 FT. RADIATION
 93 FT. HWBB
 60 FT. HI CAPACITY HWBB

1ST STORY HEAT LOSS

LIVING UNIT #1

LIVING UNIT #2



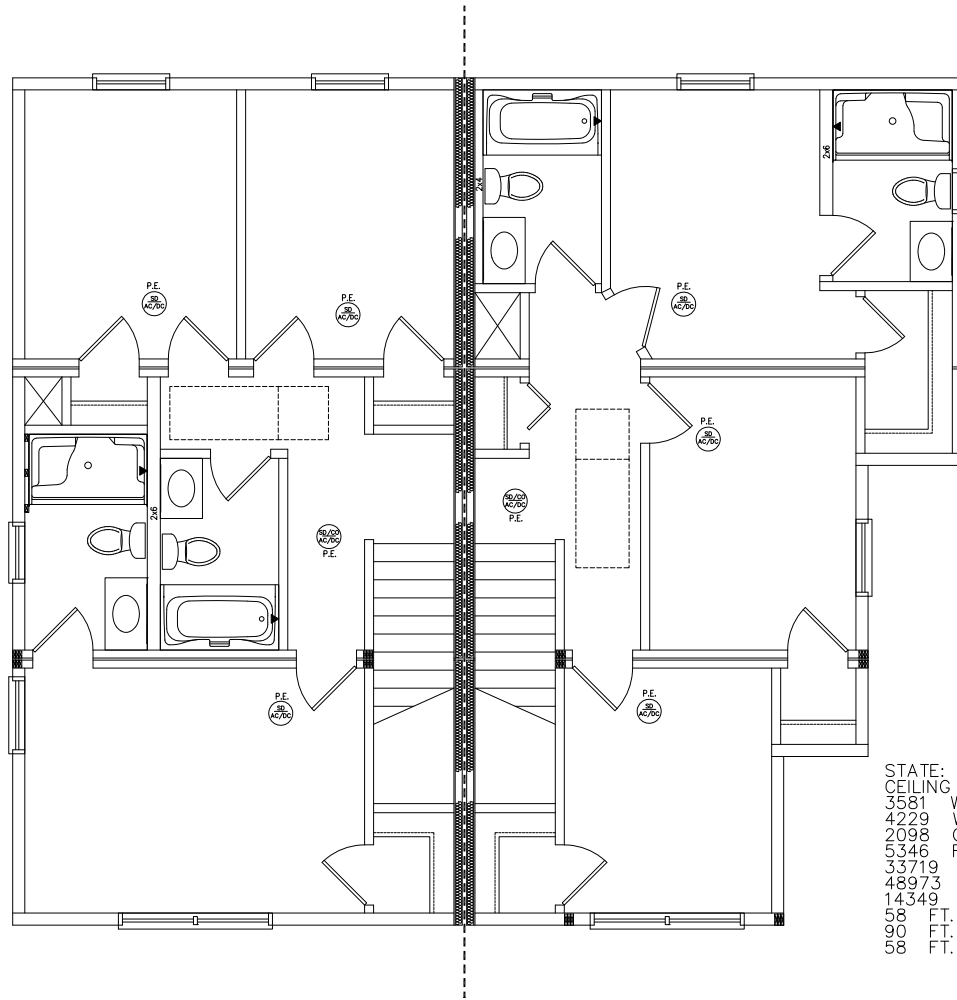
SERIAL #/ ORDER #

0#7575

PAGE #

HL1

Handwritten initials



LIVING UNIT #1

LIVING UNIT #2

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
 Approval limited to
 Factory Built Portion

STATE: MA - MASSACHUSETTS
 CEILING HEIGHT: 8.5 FT
 3581 WINDOW AND DOOR BTU/H LOSS
 4229 WALL BTU/H LOSS
 2098 CEILING BTU/H LOSS
 5346 FLOOR BTU/H LOSS
 33719 INFILTRATION BTU/H LOSS
 48973 TOTAL BTU/H LOSS
 14349 TOTAL WATT LOSS
 58 FT. RADIATION
 100 FT. HWBB
 58 FT. HI CAPACITY HWBB

246 SAND HILL ROAD
 SELINGSGROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	AVALON BUILDING SYSTEMS	
ADDRESS	25 NORMANDY TERRACE	
CITY	CAMBRIDGE	ZIP 02138
COUNTY	MIDDLESEX	WIND SPEED (MPH) 128 VULT
ORDER NO	7/5757	TYPE DUPLEX
REV	0#7575	

2ND STORY HEAT LOSS



SERIAL # / ORDER #
0#7575

PAGE #
HL2

Jea

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
3/28/18
Approval limited to
Factory Built Portion

246 SAND HILL ROAD
 SELINS GROVE, PA 17870
 PHONE: (570) 374-3280
 FAX: (570) 374-1122
 WWW.ICONLEGACY.COM



EXTERIOR WALLS

GA FILE NO. WP 8105

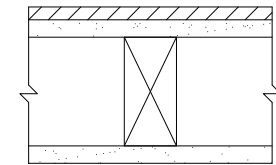
GENERIC

**1 HOUR
FIRE**

GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS

EXTERIOR SIDE: One layer 48" wide 5/8" type X gypsum sheathing applied parallel to 2 x 4 wood studs 24" o.c. with 1 3/4" galvanized roofing nails 4" o.c. at vertical joints and 7" o.c. at intermediate studs and top and bottom plates . Joints of gypsum sheathing may be left untreated. Exterior cladding to be attached through sheathing to studs.

INTERIOR SIDE: One layer 5/8" type X gypsum wallboard, water-resistant gypsum backing board, or gypsum veneer base applied parallel or at right angles to studs with 6d coated nails 1 7/8" long, 0.0915" shank, 1/4" heads 7" o.c. **(LOAD-BEARING)**



Thickness: Varies
 Approx. Weight: 7 psf
 Fire Test: See WP 3510
 (UL R3501-47, -48, 9-17-65,
 UL Design U309;
 UL R1319-129, 7-22-70,
 UL Design U314)

DATE	REVISION	BY
2/1/2018	PRELIM	PIF
2/9/18	REV. PRELIM	BLS
3/2/18	FINAL	PIF

INDEPENDENT BUILDER	STATE	ZIP
AVALON BUILDING SYSTEMS	MA	02138
ADDRESS	SNOW LOAD (LBS)	WIND SPEED (MPH)
25 NORMANDY TERRACE	40	128 VUL1
CITY	SF	TYPE
CAMBRIDGE	2,576	DUPLEX
COUNTY	REP	
MIDDLESEX		
ORDER NO.		
7/27/18		
REP		

FIRE SEPARATION DETAILS



SERIAL #/ ORDER #
0#7575

PAGE #
FS1

JEA



REScheck Software Version 4.6.4 Compliance Certificate

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
Approval limited to
Factory Built Portion

Project O#7575

Energy Code: **2015 IECC**
Location: **Cambridge, Massachusetts**
Construction Type: **Single-family**
Project Type: **New Construction**
Conditioned Floor Area: **2,576 ft2**
Glazing Area **13%**
Climate Zone: **5 (5641 HDD)**
Permit Date:
Permit Number:

Construction Site:
25 NORMANDY TERRACE
CAMBRIDGE, MA 02138

Owner/Agent:
AVALON BUILDING SYSTEMS
560 TURNPIKE STREET
CANTON, MA 02021

Designer/Contractor:
ICON LEGACY CMH
246 SAND HILL RD
SELINGSGROVE, PA 17870

Compliance: Passes using UA trade-off

Compliance: **1.9% Better Than Code** Maximum UA: **359** Your UA: **352**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
behind knee walls: Flat Ceiling or Scissor Truss	840	38.0	11.0	0.023	19
under sheathing: Flat Ceiling or Scissor Truss	448	27.0	0.0	0.038	17
Wall 1: Wood Frame, 16" o.c.	2,862	21.0	0.0	0.057	139
Window 1: Vinyl/Fiberglass Frame:Double Pane with Low-E	296			0.300	89
Door 1: Solid	44			0.170	7
Door 2: Glass	80			0.250	20
Floor 1: All-Wood Joist/Truss:Over Unconditioned Space	1,288	19.0	0.0	0.047	61

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2015 IECC requirements in REScheck Version 4.6.4 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Icon Legacy CMH

Brett Hebert

3/22/18

Name - Title

Signature

Date



REScheck Software Version 4.6.4 Inspection Checklist

Energy Code: 2015 IECC

Requirements: 0.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹ 	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
103.1, 103.2, 403.7 [PR3] ¹ 	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
302.1, 403.7 [PR2] ² 	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr _____ Cooling: Btu/hr _____	Heating: Btu/hr _____ Cooling: Btu/hr _____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
 Approval limited to
 Factory Built Portion










1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
------------------------	--------------------------	-----------------------

Section # & Req.ID	Foundation Inspection	Complies?	Comments/Assumptions
303.2.1 [FO11] ²	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.9 [FO12] ²	Snow- and ice-melting system controls installed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
 Approval limited to
 Factory Built Portion

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
------------------------	--------------------------	-----------------------

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1] ¹ 	Door U-factor.	U-_____	U-_____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
402.1.1, 402.3.1, 402.3.3, 402.3.6, 402.5 [FR2] ¹ 	Glazing U-factor (area-weighted average).	U-_____	U-_____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] ¹ 	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.1.1 [FR23] ¹ 	Air barrier and thermal barrier installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.3 [FR20] ¹ 	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.5 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.1 [FR12] ¹ 	Supply and return ducts in attics insulated ≥ R-8 where duct is ≥ 3 inches in diameter and ≥ R-6 where < 3 inches. Supply and return ducts in other portions of the building insulated ≥ R-6 for diameter ≥ 3 inches and R-4.2 for < 3 inches in diameter.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.3.5 [FR15] ³ 	Building cavities are not used as ducts or plenums.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4 [FR17] ² 	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥ R-3.	R-_____	R-_____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.4.1 [FR24] ¹ 	Protection of insulation on HVAC piping.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.3 [FR18] ² 	Hot water pipes are insulated to ≥ R-3.	R-_____	R-_____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.6 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
Approval limited to
Factory Built Portion

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)



Additional Comments/Assumptions:

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
Approval limited to
Factory Built Portion

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------



Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] ²	All installed insulation is labeled or the installed R-values provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.1.1, 402.2.6 [IN1] ¹	Floor insulation R-value.	R- _____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	R- _____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2, 402.2.7 [IN2] ¹	Floor insulation installed per manufacturer's instructions and in substantial contact with the underside of the subfloor, or floor framing cavity insulation is in contact with the top side of sheathing, or continuous insulation is installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.1.1, 402.2.5, 402.2.6 [IN3] ¹	Wall insulation R-value. If this is a mass wall with at least 1/2 of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R- _____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	R- _____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] ¹	Wall insulation is installed per manufacturer's instructions.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
 Approval limited to
 Factory Built Portion

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
---	----------------------	---	------------------------	---	---------------------

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2, 402.2.6 [F11] ¹	Ceiling insulation R-value.	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [F12] ¹	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft ² .			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.2.3 [F22] ²	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.2.4 [F13] ¹	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R-____	R-____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
402.4.1.2 [F117] ¹	Blower door test @ 50 Pa. <=5 ach in Climate Zones 1-2, and <=3 ach in Climate Zones 3-8.	ACH 50 = ____	ACH 50 = ____	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2.3 [F14] ¹	Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	ft ² ____ cfm/100	ft ² ____ cfm/100	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.2 [F127] ¹	Ducts are pressure tested to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure.	ft ² ____ cfm/100	ft ² ____ cfm/100	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.3.2.1 [F124] ¹	Air handler leakage designated by manufacturer at <=2% of design air flow.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.1 [F19] ²	Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.1.2 [F110] ²	Heat pump thermostat installed on heat pumps.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1 [F111] ²	Circulating service hot water systems have automatic or accessible manual controls.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
Approval limited to
Factory Built Portion

High Impact (Tier 1) Medium Impact (Tier 2) Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.6.1 [F125] ²	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.2 [F126] ²	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1.1 [F128] ²	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.1.2 [F129] ²	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.		PFS Corporation Northeast Region APPROVED H Raup – 3 3/28/18 Approval limited to Factory Built Portion	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.2 [F130] ²	Water distribution systems that have recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe have a demand recirculation water system. Pumps have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to 104°F.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
403.5.4 [F131] ²	Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.1 [F16] ¹	75% of lamps in permanent fixtures or 75% of permanent fixtures have high efficacy lamps. Does not apply to low-voltage lighting.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
404.1.1 [F123] ³	Fuel gas lighting systems have no continuous pilot light.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
401.3 [F17] ²	Compliance certificate posted.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
303.3 [F18] ³	Manufacturer manuals for mechanical and water heating systems have been provided.			<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

PFS Corporation
Northeast Region
APPROVED
H Raup – 3
3/28/18
 Approval limited to
 Factory Built Portion

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)
		3	Low Impact (Tier 3)



2015 IECC Energy Efficiency Certificate

Insulation Rating R-Value

Above-Grade Wall 21.00
Below-Grade Wall 0.00
Floor 19.00
Ceiling / Roof 49.00

Ductwork (unconditioned spaces): _____

Glass & Door Rating U-Factor SHGC

Window 0.30
Door 0.25

Heating & Cooling Equipment Efficiency

Heating System: _____
Cooling System: _____
Water Heater: _____

Name: _____ **Date:** _____

Comments

PFS Corporation
Northeast Region
APPROVED
H Raup - 3
 3/28/18
 Approval limited to
 Factory Built Portion

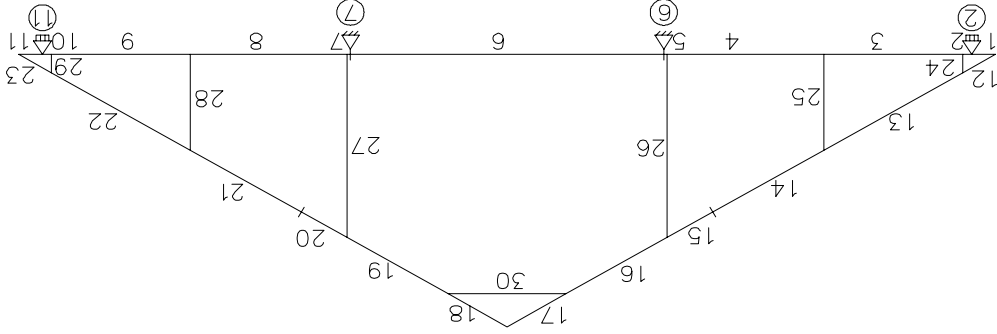
**STRUCTURAL LUMBER
INTERACTION CALCULATIONS**



TRUSS NO.: TW7-41-3
JOB NO.: 120111
PITCH: 7/12
SPAN: 41'-3"

TRUSS CENTERS FOR 115 mph WIND: 16"
TRUSS CENTERS FOR 150 mph WIND: 16"

TC DL: 10 pft
BC LL: 20 pft WHERE h ≥ 42"
BC LL: 40 pft BETWEEN INNER KNEEWALLS
BC DL: 10 pft



MEMBER INFORMATION:

MEMBER	SIZE & SPECIES
1 - 5 & 7 - 11	2 x 8 SPF #2
6	2 x 8 SPF #2
12 - 14 & 21 - 23	2 x 6 SPF #2
15 - 20	2 x 6 SPF #2
24 - 29	2 x 4 SPF #2
30	2 x 6 SPF #2

MAXIMUM SUPPORT REACTIONS (lbs):

REACTION	MEMBER 1	MEMBER 2	MEMBER 3	MEMBER 4	MEMBER 5	MEMBER 6	MEMBER 7	MEMBER 8	MEMBER 9	MEMBER 10	MEMBER 11
DEAD LOAD	20 pft	20 pft	30 pft	40 pft	40 pft	60 pft	60 pft	70 pft	949.2	N/A	N/A
SNOW LOAD	20 pft	20 pft	30 pft	40 pft	40 pft	60 pft	60 pft	70 pft	949.2	N/A	N/A
DL + LL +	DL + LL +	DL + LL +	DL + LL +	DL + LL +	DL + LL +	DL + LL +	DL + LL +	DL + LL +	949.2	N/A	N/A
EXTERIOR WALL	301.5	660.1	722	856.3	850.9	949.2	1242.8	N/A	N/A	N/A	N/A
MATING WALL	410.4	1102.6	1150.9	1266.9	1147.9	1242.8	N/A	N/A	N/A	N/A	N/A

GROUND SNOW: 20 pft 30 pft 40 pft 60 pft 70 pft 90 pft
TRUSS CENTERS: 16 16 23.1 30.8 46.2 53.9 N/A pft
BALANCED SNOW LOAD: *20.4 36.37 43.14 54.79 78.02 89.66 N/A pft
UNBALANCED SNOW LOAD: 6.12 6.93 9.24 13.86 16.17 N/A pft
OPPOSITE SIDE UNB. SNOW LOAD: 4.4 5.12 5.71 6.67 7.08 N/A pft
UNBALANCED SNOW LOAD LENGTH: 4.4 5.12 5.71 6.67 7.08 N/A ft
 * ADDITIONAL 5 pft RAIN ON SNOW SURCHARGE APPLIED

APPLIED MWFRS UPLIFT: 21.93 pft WINDWARD AT 115 mph
 12.46 pft LEeward AT 115 mph
 37.31 pft WINDWARD AT 150 mph
 21.19 pft LEeward AT 150 mph
APPLIED C & C UPLIFT: 23.33 pft AT 115 mph
 29.7 pft AT 150 mph

- NOTES:**
- MATING WALL LOADS ARE TOTAL FOR BOTH SIDES.
 - WIND PER ASCE 7-10, 115 & 150 mph, EXP. C, RISK CATEGORY II.
 - SNOW PER ASCE 7-10, Ct = 1.1, Ce = 1.0.
 - COMPONENT DESIGN IS BASED ON C & C PRESSURES.
 - TRUSS UPLIFT CONNECTIONS ARE BASED ON MWFRS PRESSURES.
 - THIS TRUSS DESIGN MAY BE USED FOR LESSER SPANS PROVIDED NO MEMBER HAS A GREATER LENGTH AND ALL CONNECTIONS ARE AS SPECIFIED.

MAXIMUM INTERACTION & DEFLECTION:

MEMBER	MAXIMUM DEFLECTION (in)	MAXIMUM INTERACTION
BOTTOM CHORD	0.88769	0.66305
TOP CHORD	0.74103	0.55474
WEB	0.44421	0.00

LEGACY CUSTOM MODULAR HOMES



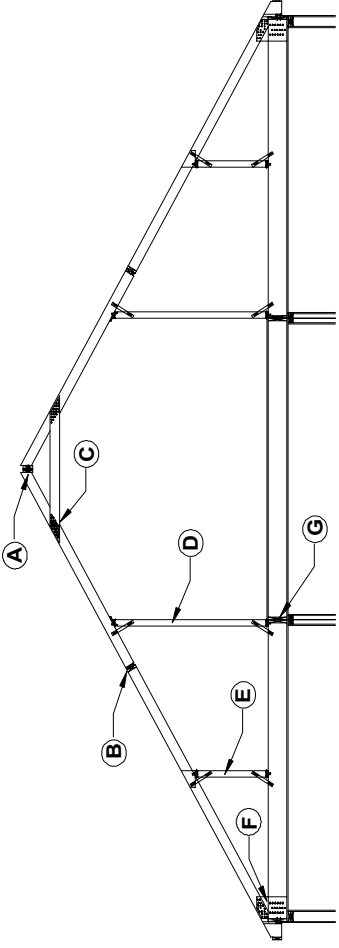
**CONNECTIONS
TRUSS FRAMING**

LEGACY CUSTOM MODULAR HOMIES



PROJECT NUMBER : 120111
 TRUSS NUMBER : TW7-41-3
 TRUSS PITCH : 7/12
 TRUSS SPACING : 16 in O.C.
 TRUSS SPAN : 41'-3"

DESIGN LOADS: 20 - 40 psf GROUND SNOW
 115 / 150 mph WIND



03/22/18

UPLIFT CONNECTIONS (MWFRS LOADS):

EXTERIOR WALL

115 mph WIND

UPLIFT DESIGN LOAD = 0 lbs
 BASED ON WIND LOAD $C_o = 1.6$
 OK FOR 1 1/2" x 26ga STRAP
 WITH 0 10 d NAILS EACH END
 OR WITH 0 16 ga STAPLE EACH END

150 mph WIND

UPLIFT DESIGN LOAD = 105.8 lbs
 BASED ON WIND LOAD $C_o = 1.6$
 OK FOR 1 1/2" x 26ga STRAP
 WITH 2 10 d NAILS EACH END
 OR WITH 2 16 ga STAPLE EACH END

MATING WALL (PER SIDE)

115 mph WIND

UPLIFT DESIGN LOAD = 96.95 lbs
 BASED ON WIND LOAD $C_o = 1.6$
 OK FOR 1 1/2" x 26ga STRAP
 WITH 2 10 d NAILS EACH END
 OR WITH 2 16 ga STAPLE EACH END

150 mph WIND

UPLIFT DESIGN LOAD = 250.95 lbs
 BASED ON WIND LOAD $C_o = 1.6$
 OK FOR 1 1/2" x 26ga STRAP
 WITH 3 10 d NAILS EACH END
 OR WITH 5 16 ga STAPLE EACH END



03/22/18

CONDITION "A" - RIDGE:

MEMBER: 18 START JOINT
MEMBER: 17 END JOINT

SHEAR CONNECTION

DL + LL & DL + 115 mph WIND

MAX SHEAR DESIGN LOAD = 139.7 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 2 16 d NAILS INTO END GRAIN EACH END
USE 10 d NAILS AT 7 " O.C. THROUGH PLATES

DL + LL & DL + 150 mph WIND

MAX SHEAR DESIGN LOAD = 139.7 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 2 16 d NAILS INTO END GRAIN EACH END
USE 10 d NAILS AT 7 " O.C. THROUGH PLATES

TENSION CONNECTION

DL + LL & DL + 115 mph WIND

MAX TENSION DESIGN LOAD = 22.1 lbs
BASED ON WIND LOAD $C_D = 1.6$
OK FOR 1 1/2" x 26ga STRAP

WITH 1 6 d NAILS EACH END
OR WITH 1 16 ga STAPLE EACH END

ALTERNATE CONNECTION: USE 1 8 d NAILS EACH END OF 1 x 4

ALTERNATE CONNECTION:

USE 1 10 d NAILS TO NAILED THROUGH RAFTER INTO RIDGE PLATE
USE 10 d NAILS AT 16 " O.C. THROUGH PLATES
*** FULL PENETRATION INTO PLATE IS REQUIRED

DL + LL & DL + 150 mph WIND

MAX TENSION DESIGN LOAD = 39.9 lbs
BASED ON WIND LOAD $C_D = 1.6$
OK FOR 1 1/2" x 26ga STRAP

WITH 1 6 d NAILS EACH END
OR WITH 1 16 ga STAPLE EACH END

ALTERNATE CONNECTION: USE 1 8 d NAILS EACH END OF 1 x 4

CONNECTIONS
TRUSS FRAMING

LEGACY CUSTOM MODULAR HOMES



CONDITION "B" - TOP CHORD FLIP:

MEMBER: 15 / 21 START JOINT
MEMBER: 14 / 20 END JOINT

TENSION CONNECTION

DL + LL & DL + 115 mph WIND
MAX TENSION DESIGN LOAD = 0 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 0 6 d NAILS THROUGH SHEATHING EACH SIDE
OR
USE 0 16 ga STAPLE THROUGH SHEATHING EACH SIDE



DL + LL & DL + 150 mph WIND
MAX TENSION DESIGN LOAD = 9.4 lbs
BASED ON WIND LOAD $C_D = 1.6$
USE 1 6 d NAILS THROUGH SHEATHING EACH SIDE
OR
USE 1 16 ga STAPLE THROUGH SHEATHING EACH SIDE

SHEAR CONNECTION

DL + LL & DL + 115 mph WIND
MAX SHEAR DESIGN LOAD = 195.9 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 3 16 d NAILS TOENAILED EACH END
OR
USE 10 d NAILS AT 5" O.C. THROUGH PLATES

03/22/18

DL + LL & DL + 150 mph WIND
MAX SHEAR DESIGN LOAD = 195.9 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 3 16 d NAILS TOENAILED EACH END
OR
USE 10 d NAILS AT 5" O.C. THROUGH PLATES

CONDITION "C" - COLLAR TIE:

MEMBER: 30 START JOINT
MEMBER: 30 END JOINT

DL + LL & DL + 115 mph WIND
DESIGN LOAD = 327.5 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 3 16 d NAILS EACH END
BEARING BLOCK NOT REQUIRED

DL + LL & DL + 150 mph WIND
DESIGN LOAD = 327.5 lbs
BASED ON SNOW LOAD $C_D = 1.15$
USE 3 16 d NAILS EACH END
BEARING BLOCK NOT REQUIRED

CONDITION "D" - INNER KNEE WALLS:

MEMBER: 26 / 27 START JOINT
MEMBER: 26 / 27 END JOINT

TENSION CONNECTION

DL + LL & DL + 115 mph WIND
DESIGN TENSION LOAD = 254.8 lbs
BASED ON WIND LOAD $C_D = 1.6$
OK FOR 1 1/2" x 26ga STRAP
WITH 3 10 d NAILS EACH END
OR
WITH 5 16 ga STAPLE EACH END

DL + LL & DL + 150 mph WIND
DESIGN TENSION LOAD = 509.6 lbs
BASED ON WIND LOAD $C_D = 1.6$
OK FOR DBL 1 1/2" x 26ga STRAP
WITH 4 10 d NAILS EACH END
OR
WITH 10 16 ga STAPLE EACH END

JSR



03/22/18

CONDITION "E" - OUTER KNEE WALLS:

MEMBER:	25 / 28	START	JOINT
MEMBER:	25 / 28	END	JOINT
DL + LL & DL + 115 mph WIND			
DESIGN TENSION LOAD =	156.7 lbs		
BASED ON WIND LOAD	$C_o = 1.6$		
OK FOR 1 1/2" x 26ga STRAP			
WITH	2	10 d NAILS	EACH END
OR WITH	3	16 ga STAPLE	EACH END
DL + LL & DL + 150 mph WIND			
DESIGN TENSION LOAD =	276 lbs		
BASED ON WIND LOAD	$C_o = 1.6$		
OK FOR 1 1/2" x 26ga STRAP			
WITH	4	10 d NAILS	EACH END
OR WITH	6	16 ga STAPLE	EACH END

CONDITION "F" - HEEL:

MEMBER:	1 / 11	START	JOINT
MEMBER:	12 / 23	END	JOINT
DL + LL & DL + 115 mph WIND			
DESIGN LOAD =	466.3 lbs		
BASED ON SNOW LOAD	$C_o = 1.15$		
USE	1	3/8" BOLT PLUS	
	1	6 d NAILS PER GUSSETT	EACH SIDE
OR	1	16 ga STAPLE PER GUSSETT	EACH SIDE
DL + LL & DL + 150 mph WIND			
DESIGN LOAD =	466.3 lbs		
BASED ON SNOW LOAD	$C_o = 1.15$		
USE	1	3/8" BOLT PLUS	
	1	6 d NAILS PER GUSSETT	EACH SIDE
OR	1	16 ga STAPLE PER GUSSETT	EACH SIDE
BOTTOM CHORD			
DL + LL & DL + 115 mph WIND			
DESIGN LOAD =	424.3 lbs		
BASED ON SNOW LOAD	$C_o = 1.15$		
USE	4	6 d NAILS PER GUSSETT	EACH SIDE
OR USE	5	16 ga STAPLE PER GUSSETT	EACH SIDE
DL + LL & DL + 150 mph WIND			
DESIGN LOAD =	424.3 lbs		
BASED ON SNOW LOAD	$C_o = 1.15$		
USE	4	6 d NAILS PER GUSSETT	EACH SIDE
OR USE	5	16 ga STAPLE PER GUSSETT	EACH SIDE



03/22/18

CONDITION "G" BOTTOM CHORD AT CENTER:

MEMBER:	6 / 7	START	JOINT
MEMBER:	5 / 6	END	JOINT
<u>DL + LL & DL + 115 mph WIND</u>			
DESIGN LOAD =		424.3 lbs	
BASED ON SNOW LOAD		C ₀ = 1.15	
USE	5	16 d NAILS THROUGH DECKING EACH SIDE	
OR	USE	1	1 1/2" x 20ga STRAP
	WITH	4	10 d NAILS EACH END
OR	WITH	8	16 ga STAPLE EACH END
<u>DL + LL & DL + 150 mph WIND</u>			
DESIGN LOAD =		424.3 lbs	
BASED ON SNOW LOAD		C ₀ = 1.15	
USE	5	16 d NAILS THROUGH DECKING EACH SIDE	
OR	USE	1	1 1/2" x 20ga STRAP
	WITH	4	10 d NAILS EACH END
OR	WITH	8	16 ga STAPLE EACH END

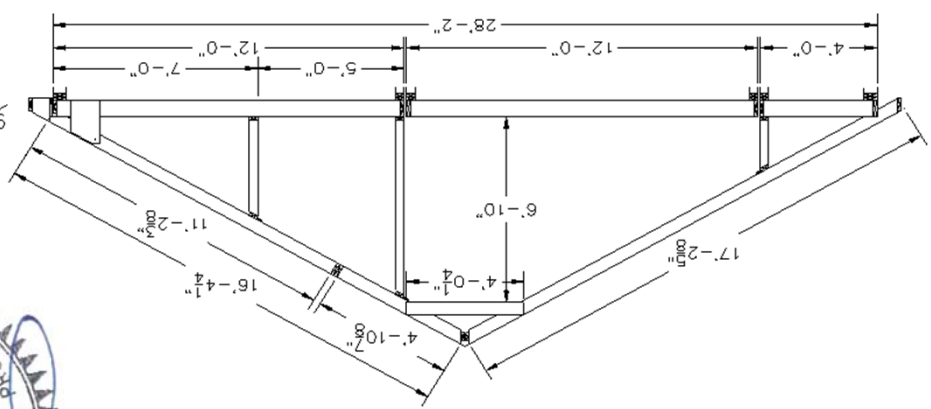


- NOTES:**
- MATING WALL REACTIONS ARE PER SIDE.
 - WIND PER ASCE 7-10, 128 mph (Vult) = 99 mph (Vasd), EXP. C.
 - SNOW PER ASCE 7-10, 40 psf GSL, Ct = 1.1, Ce = 1.0
 - COMPONENT DESIGN IS BASED ON C & C PRESSURES
 - TRUSS UPLIFT CONNECTIONS ARE BASED ON MWFRS PRESSURES.

MEMBER	SIZES & SPECIES
1 - 8	2 x 8 SPF #2
9 - 12	2 x 6 SPF #2
13 - 15	2 x 6 SPF #2
16 - 18	2 x 6 SPF #2
19 - 22	2 x 4 SPF #2
23	2 x 6 SPF #2

MEMBER INFORMATION:

TRUSS NO.: TW7-28-2-SPECIAL
 JOB NO.: 180125
 PITCH: 7/12
 SPAN: 28'-2"
 TRUSS CENTERS: 16 in O.C.



TRUSS CALCULATIONS

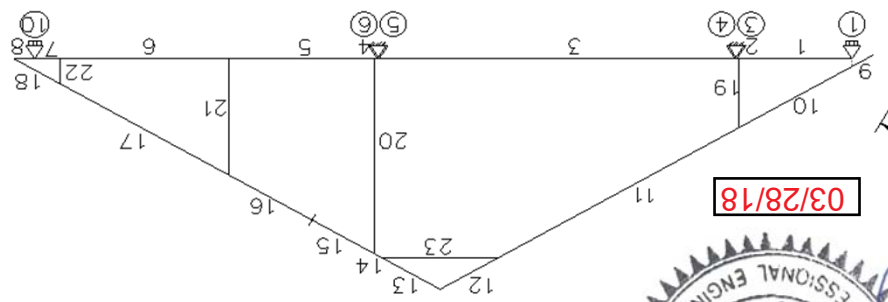


03/28/18

GROUND SNOW LOAD: 40 psf
BALANCED SNOW LOAD: 30.8 psf
UNBALANCED SNOW LOAD: 54.32 psf
OPPOSITE SIDE UNB. SNOW LOAD: 9.24 psf
UNBALANCED SNOW LOAD LENGTH: 5.6 ft

APPLIED MWFRS UPLIFT:
 26.86 psf WINDWARD AT 99/128 mph
 15.26 psf LEeward AT 99/128 mph
 28.94 psf AT 99/128 mph

APPLIED C & C UPLIFT:
 TC DL: 10 psf
 BC DL: 10 psf
 BC LL: 10 psf WHERE h < 42"
 BC LL: 10 psf WHERE h ≧ 42"
 BC LL: 20 psf BETWEEN KNEEWALLS



LEGACY CUSTOM MODULAR HOMES

MAXIMUM INTERACTION & DEFLECTION:

MAXIMUM DEFLECTION (in)	CSI	WEB
495	0.605	0.764
495	0.301	0.00
379	0.374	0.00
379	0.374	0.00

MAXIMUM INTERACTION & DEFLECTION:

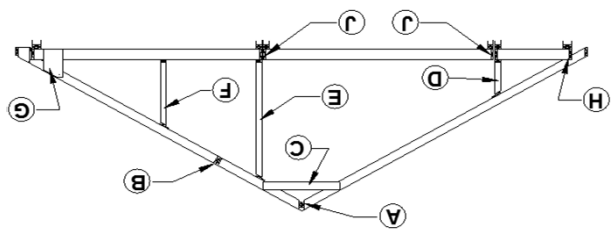
MAXIMUM SUPPORT REACTIONS (lbs):

REACTION	DL + LL +	DEAD LOAD	GSL	UPLIFT	C & C
EXTERIOR WALL (1)	159	675	-76	-94	
MATING WALL (3)	136	491	-257	-266	
MATING WALL (4)	91	250	0	0	
MATING WALL (5)	91	250	0	0	
MATING WALL (6)	186	772	-184	-76	
EXTERIOR WALL (10)	293	840	-163	-233	



99/128 mph										
EXTERIOR WALL										
UPLIFT (lbs)	CASE	CD	1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	10 d NAILS	2
163	WIND	1.6	OK	2	OK	2	OK	2	OK	2
ALTERNATE: (2) 16 d NAILS TOENAILLED THROUGH BC INTO BAND PLUS (2) 16 d NAILS THROUGH SHEATHING INTO BAND AND STUD										
MATING WALL										
UPLIFT (lbs / PER SIDE)	CASE	CD	1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	10 d NAILS	2
257	WIND	1.6	OK	2	OK	3	OK	2	OK	2
ALTERNATE: (3) 16 d NAILS TOENAILLED THROUGH BC INTO BAND PLUS (2) 16 d NAILS THROUGH SHEATHING INTO BAND AND STUD										

UPLIFT CONNECTIONS (MWFRS LOADS):



PROJECT NUMBER : 180125
TRUSS NUMBER : TW7-28-2-SPECIAL
TRUSS PITCH : 7/12
TRUSS SPAN : 28'-2"

TRUSS CONNECTIONS

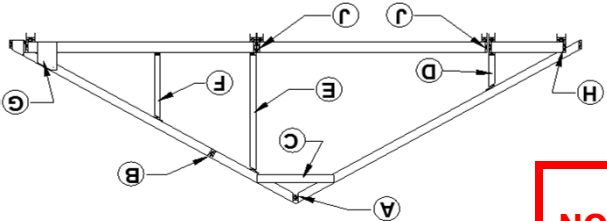
03/28/18



TRUSS CONNECTIONS



PROJECT NUMBER : 180125
TRUSS NUMBER : TW7-28-2-SPECIAL
TRUSS PITCH : 7/12
TRUSS SPAN : 28'-2"



CONDITION "D" - LEFT KNEE WALLS:										
1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	SIMPSON CS20 STRAP	10 d NAILS
OK	2	OK	3	OK	2	OK	3	OK	2	OK
1.6	292	1.6	470	1.15	470	1.15	470	1.15	470	1.15
CASE	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW
CD		CD		CD		CD		CD		CD
CONDITION "E" - CENTER KNEE WALL:										
1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	SIMPSON CS20 STRAP	10 d NAILS
OK	2	OK	2	OK	2	OK	2	OK	2	OK
1.15	201	1.15	572	1.15	572	1.15	572	1.15	572	1.15
CASE	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW
CD		CD		CD		CD		CD		CD
CONDITION "F" - RIGHT KNEE WALL:										
1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	SIMPSON CS20 STRAP	10 d NAILS
OK	2	OK	2	OK	2	OK	2	OK	2	OK
1.6	154	1.6	179	1.15	179	1.15	179	1.15	179	1.15
CASE	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW	COMPRESSION (lbs)	SNOW
CD		CD		CD		CD		CD		CD
CONDITION "G" - GUSSET HEEL:										
USE (1) 1/2" BOLT (DOUBLE SHEAR; 3/8" SIDE PLATES)	PLUS (3) 6 d NAILS OR (4) 16 ga STAPLES PER GUSSET EACH SIDE	ALTERNATE:	USE (1) 3/4" BOLT (DOUBLE SHEAR; 1/2" SIDE PLATES)	PLUS NO ADDITIONAL FASTENERS REQUIRED	BOTTOM CHORD (lbs)	TOP CHORD (lbs)	962	1.15	962	1.15
USE (8) 6 d NAILS OR (10) 16 ga STAPLES PER GUSSET EACH SIDE	CONDITION "H" - HEEL:	CASE	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW
852	83	1.15	114	1.6	114	1.6	114	1.6	114	1.6
CD		CD		CD		CD		CD		CD
CONDITION "J" - BOTTOM CHORD AT MATING LINE:										
CHECK STRAP	QTY / END	CHECK STRAP	QTY / END	CHECK STRAP	QTY / END	CHECK STRAP	QTY / END	CHECK STRAP	QTY / END	CHECK ALT. STRAP
NO GOOD	N/A	1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE
OK	N/A	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE
1.15	852	1.15	852	1.15	852	1.15	852	1.15	852	1.15
CASE	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW	TENSION (lbs)	CASE	COMPRESSION (lbs)	SNOW	TENSION (lbs)	CASE
CD		CD		CD		CD		CD		CD
ALTERNATE: USE (10) 16 d NAILS THROUGH DECKING EACH SIDE										

03/28/18



TRUSS CALCULATIONS

COMPONENT LOAD SUMMARY

EXTERIOR WALL DEAD LOAD =	12	psf	x	10	ft	=	120	psf
MATING WALL DEAD LOAD =	8	psf	x	10	ft	=	80	psf
FLOOR DEAD LOAD =	10	psf	x	4	ft / 2 =		20	psf
FLOOR LIVE LOAD =	40	psf	x	4	ft / 2 =		80	psf
CEILING DEAD LOAD =	5	psf	x	4	ft / 2 =		10	psf

LOCATIONS 1 & 6 = EXT. WALL HEADER & EXT. WALL STUD
LOCATIONS 2 - 5 = M. WALL HEADER & M. WALL STUD
LOCATIONS 7 & 12 = PERIMETER BAND
LOCATIONS 8 - 11 = CENTER GIRDER
LOCATIONS 13 & 18 = EXT. WALL HEADER & EXT. WALL STUD
LOCATIONS 14 - 17 = M. WALL HEADER & M. WALL STUD
LOCATIONS 19 & 24 = PERIMETER BAND
LOCATIONS 20 - 23 = CENTER GIRDER
LOCATIONS 25 & 30 = EXT. WALL HEADER & EXT. WALL STUD
LOCATIONS 26 - 29 = M. WALL HEADER & M. WALL STUD
LOCATIONS 31 & 36 = PERIMETER BAND
LOCATIONS 32 - 35 = CENTER GIRDER
LOCATIONS 7 - 12, 19 - 24 & 31 - 36 MAY BE USED TO GENERATE FOUNDATION LOADS

TRUSS TW7-28-2-SPECIAL, 7/12 PITCH, 28'-2" WIDTH

COMPONENT LOADS (lbs/ft)
(MATING WALL LOADS ARE PER SIDE OF LINE)

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
DEAD LOAD	119	102	68	68	220	259	202	208	208	208	280	400	269	212	238	238	310	430
LIVE LOAD	388	267	120	120	439	410	468	360	360	360	679	650	468	347	360	360	679	650
TOTAL LOAD	507	369	188	188	579	630	727	549	568	568	959	1050	737	559	598	598	989	1080

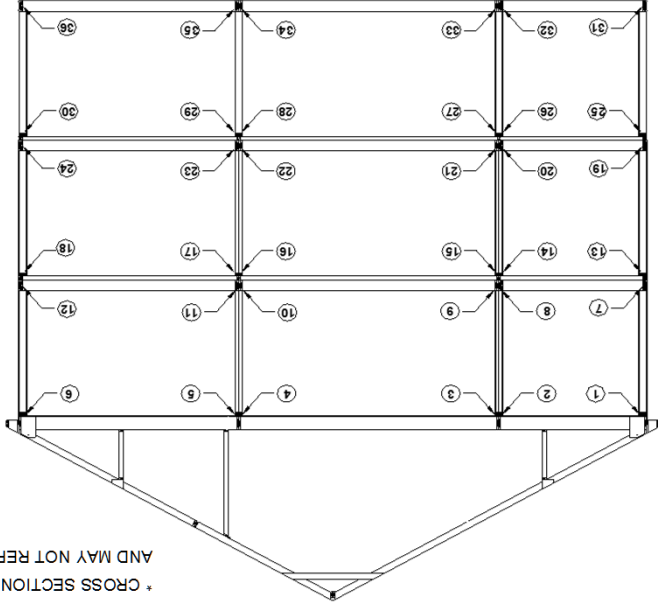
LOCATION	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
DEAD LOAD	409	312	378	378	610	419	322	408	408	480	480	640	559	422	548	548	620	820
LIVE LOAD	548	427	600	600	890	548	427	600	600	919	919	890	628	507	840	840	1159	1130
TOTAL LOAD	957	739	978	978	1500	967	749	1008	1008	1399	1399	1530	1187	929	1388	1388	1779	1950

C & C UPLIFT

LOCATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
UPLIFT (0.6) DEAD LOAD	71	61	41	41	84	132	155	121	125	125	168	240	161	127	143	143	186	258
99/128 mph UPLIFT	-71	-200	0	0	-57	-175	-	-140	-	-	-67	-	-134	-	-	-	-49	

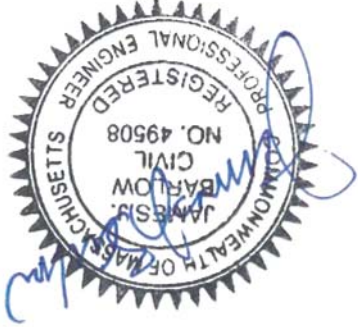
LOCATION	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
UPLIFT (0.6) DEAD LOAD	245	187	227	227	270	366	251	193	245	245	288	384	335	253	329	329	372	492
99/128 mph UPLIFT	-	-74	-	-	-	-	-	-68	-	-	-	-	-	-8	-	-	-	-

LEGACY CUSTOM MODULAR HOMES



* CROSS SECTION IS FOR REFERENCE ONLY
AND MAY NOT REFLECT ACTUAL TRUSS

60 pif	X	12	ft / 2 =
240 pif	X	12	ft / 2 =
30 pif	X	12	ft / 2 =



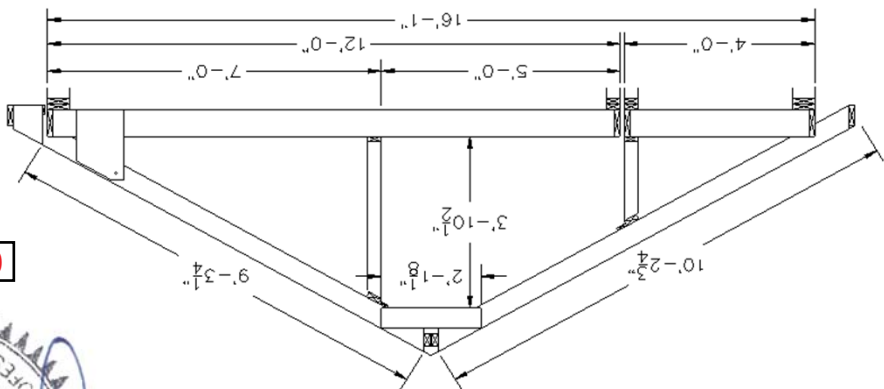


- NOTES:**
1. MATING WALL REACTIONS ARE PER SIDE.
 2. WIND PER ASCE 7-10, 128 mph (Vult) = 99 mph (Vasd), EXP. C.
 3. SNOW PER ASCE 7-10, 40 psf GSL, Ct = 1.1, Ce = 1.0
 4. COMPONENT DESIGN IS BASED ON C & C PRESSURES
DRIFTING LENGTH IS LATERAL DISTANCE FROM RIDGE.
- TRUSS UPLIFT CONNECTIONS ARE BASED ON MWFRS PRESSURES.

MEMBER	SIZE & SPECIES
1-6	2 x 8 SPF #2
7-14	2 x 6 SPF #2
15-17	2 x 4 SPF #2
18	2 x 6 SPF #2

MEMBER INFORMATION:

TRUSS NO.: TR7-16-1-SPECIAL
 JOB NO.: 180125
 PITCH: 7/12
 SPAN: 16'-1"
 TRUSS CENTERS: 16 in O.C.



TRUSS CALCULATIONS

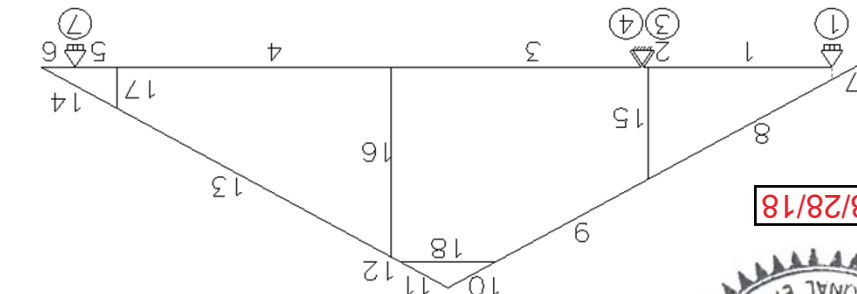


03/28/18

GROUND SNOW LOAD: 40 psf
BALANCED SNOW LOAD: 30.8 psf
UNBALANCED SNOW LOAD: 54.32 psf
OPPOSITE SIDE UNB. SNOW LOAD: 9.24 psf
UNBALANCED SNOW LOAD LENGTH: 5.6 ft

APPLIED MWFRS UPLIFT:
 TC DL: 10 psf
 BC DL: 10 psf
 BC LL: 10 psf WHERE h < 42"
 BC LL: 20 psf WHERE h ≥ 42"
 BC LL: 20 psf BETWEEN KNEEWALLS

APPLIED C & C UPLIFT:
 26.58 psf WINDWARD AT 99/128 mph
 15.10 psf LEeward AT 99/128 mph
 28.64 psf AT 99/128 mph



LEGACY CUSTOM MODULAR HOMES

MAXIMUM INTERACTION & DEFLECTION:

MEMBER	MAXIMUM DEFLECTION (in)	MAXIMUM INTERACTION
EXTERIOR WALL (1)	215	534
MATING WALL (3)	40	357
MATING WALL (4)	35	97
EXTERIOR WALL (7)	266	771
TOP CHORD	0.396	0.11
BOTTOM CHORD	0.235	0.055
WEB	0.061	0.00

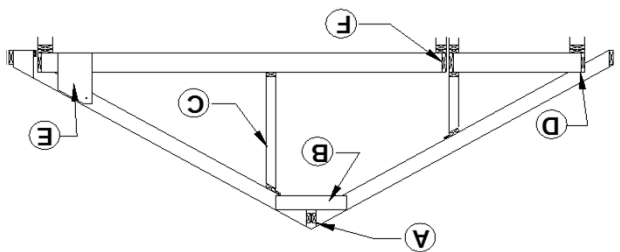
MEMBER	LOAD	REACTION
EXTERIOR WALL (1)	215	534
MATING WALL (3)	40	357
MATING WALL (4)	35	97
EXTERIOR WALL (7)	266	771
DEAD LOAD	40 psf	99/128 mph
DL + LL + UPLIFT	0.6 DL + UPLIFT	99/128 mph
C & C	MWFRS	99/128 mph

MAXIMUM SUPPORT REACTIONS (lbs):



99/128 mph										
EXTERIOR WALL										
UP/LIFT (lbs)	CASE	CD	1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	SIMPSON CS20 STRAP	10 d NAILS
99	WIND	1.6	OK	2	2	OK	2	2	OK	2
ALTERNATE: (2) 16 d NAILS TOENAILED THROUGH BC INTO BAND PLUS (2) 16 d NAILS THROUGH SHEATHING INTO BAND AND STUD										
MATING WALL										
UP/LIFT (lbs / PER SIDE)	CASE	CD	1 1/2" x 26ga STRAP	10 d NAILS	16 ga STAPLE	1 1/2" x 20 ga STRAP	10 d NAILS	16 ga STAPLE	SIMPSON CS20 STRAP	10 d NAILS
145	WIND	1.6	OK	2	2	OK	2	2	OK	2
ALTERNATE: (2) 16 d NAILS TOENAILED THROUGH BC INTO BAND PLUS (2) 16 d NAILS THROUGH SHEATHING INTO BAND AND STUD										

UPLIFT CONNECTIONS (MWFRS LOADS):



PROJECT NUMBER : 180125
TRUSS NUMBER : TR7-16-1-SPECIAL
TRUSS PITCH : 7/12
TRUSS SPAN : 16'-1"

TRUSS CONNECTIONS

TRUSS CALCULATIONS



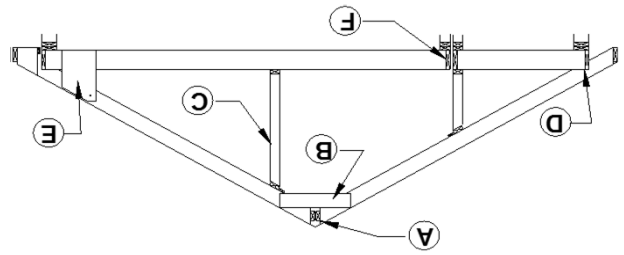
03/28/18

LEGACY CUSTOM MODULAR HOMES

Handwritten initials/signature.

MAXIMUM OF DL + LL + 40 psf GSL & 0.6 DL + 99/128 mph WIND									
CONDITION "A" - RIDGE:									
TENSION (lbs)	CASE	CD	1 1/2" x 26ga STRAP	QTY / END	OK	10 d NAILS	16 ga STRAP	SIMPSON CS20 STRAP	10 d NAILS
353	SNOW	1.15	OK	3	OK	4	16 ga STRAP	16 ga STRAP	4
ALTERNATE: USE (6) 8 d NAILS EACH END OF 1 x 4									
SHEAR (lbs)	CASE	CD	USE (4) 16 d NAILS INTO END GRAIN EACH END PLUS USE 10 d NAILS AT 6 in O.C. THROUGH PLATES						
283	SNOW	1.15	USE (4) 16 d NAILS INTO END GRAIN EACH END PLUS USE 10 d NAILS AT 6 in O.C. THROUGH PLATES						
CONDITION "B" - COLLAR TIE:									
AXIAL (lbs)	CASE	CD	USE (7) 16 d NAILS EACH END						
932	SNOW	1.15	USE (7) 16 d NAILS EACH END						
CONDITION "C" - KNEE WALLS:									
TENSION (lbs)	CASE	CD	1 1/2" x 26ga STRAP	QTY / END	OK	10 d NAILS	16 ga STRAP	SIMPSON CS20 STRAP	10 d NAILS
218	SNOW	1.15	OK	2	OK	3	16 ga STRAP	16 ga STRAP	3
COMPRESSION (lbs)	CASE	CD	USE (3) 16 d NAILS THROUGH CHORD BLOCK (WHEN USED)						
334	SNOW	1.15	USE (3) 16 d NAILS THROUGH CHORD BLOCK (WHEN USED)						
CONDITION "D" - HEEL:									
TENSION (lbs)	CASE	CD	USE (1) 1/2" BOLT (DOUBLE SHEAR; 3/8" SIDE PLATES)						
82	WIND	1.6	USE (1) 1/2" BOLT (DOUBLE SHEAR; 3/8" SIDE PLATES)						
SHEAR (lbs)	CASE	CD	USE (1) 1/2" BOLT (DOUBLE SHEAR; 1/2" SIDE PLATES)						
56	SNOW	1.15	USE (1) 1/2" BOLT (DOUBLE SHEAR; 1/2" SIDE PLATES)						
PLUS NO ADDITIONAL FASTENERS REQUIRED									
BOTTOM CHORD (lbs)	CASE	CD	USE (6) 6 d NAILS OR (8) 16 ga STAPLES PER GUSSET EACH SIDE						
602	SNOW	1.15	USE (6) 6 d NAILS OR (8) 16 ga STAPLES PER GUSSET EACH SIDE						
CONDITION "E" - BOTTOM CHORD AT MATING LINE:									
TENSION (lbs)	CASE	CD	1 1/2" x 26ga STRAP	QTY / END	N/A	10 d NAILS	16 ga STRAP	SIMPSON CS20 STRAP	10 d NAILS
602	SNOW	1.15	NO GOOD	N/A	N/A	OK	16 ga STRAP	16 ga STRAP	6
ALTERNATE: USE (10) 16 d NAILS THROUGH DECKING EACH SIDE									

03/28/18



PROJECT NUMBER : 180125
TRUSS NUMBER : TR7-16-1-SPECIAL
TRUSS PITCH : 7/12
TRUSS SPAN : 16'-1"

TRUSS CONNECTIONS



TRUSS CALCULATIONS



LEGACY CUSTOM MODULAR HOMES

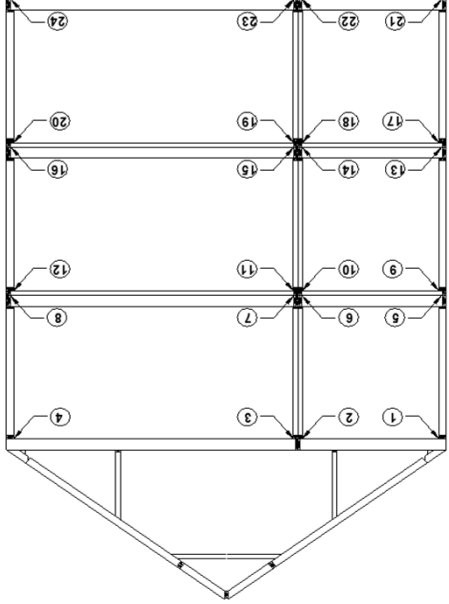
[Handwritten signature]

COMPONENT LOAD SUMMARY

EXTERIOR WALL DEAD LOAD =	12	psf	x	10	ft	=	120	psf
MATING WALL DEAD LOAD =	8	psf	x	10	ft	=	80	psf
FLOOR DEAD LOAD =	10	psf	x	4	ft / 2 =		20	psf
FLOOR LIVE LOAD =	40	psf	x	4	ft / 2 =		80	psf
CEILING DEAD LOAD =	5	psf	x	4	ft / 2 =		10	psf

x	12	ft / 2 =						
x	12	ft / 2 =						
x	30	psf						

* CROSS SECTION IS FOR REFERENCE ONLY
AND MAY NOT REFLECT ACTUAL TRUSS

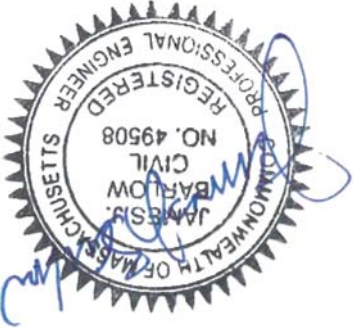


40 psf GROUND SNOW
(MATING WALL LOADS ARE PER SIDE OF LINE)
COMPONENT LOADS (lbs/ft)

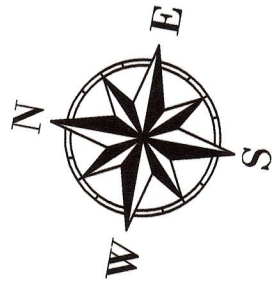
LOCATIONS 1 & 4 = EXT. WALL HEADER & EXT. WALL STUD	161	30	200	301	170	166	380
LOCATIONS 2 & 3 = M. WALL HEADER & M. WALL STUD	240	238	47	379	320	318	619
LOCATIONS 5 & 7 = CENTER GIRDER	401	268	73	579	621	488	999
LOCATIONS 9 & 12 = EXT. WALL HEADER & EXT. WALL STUD	311	180	196	410	451	320	590
LOCATIONS 13 & 16 = PERIMETER BAND	320	318	287	619	400	398	859
LOCATIONS 14 & 15 = CENTER GIRDER	631	498	483	1029	851	718	1449
LOCATIONS 17 & 20 = EXT. WALL HEADER & EXT. WALL STUD	461	330	366	620	601	470	800
LOCATIONS 18 & 19 = M. WALL HEADER & M. WALL STUD	400	398	527	859	480	478	1099
LOCATIONS 21 & 24 = PERIMETER BAND	861	728	893	1479	1081	948	1899
LOCATIONS 22 & 23 = CENTER GIRDER	461	330	366	620	601	470	800
LOCATIONS 5 - 8, 13 - 16 & 21 - 24 MAY BE USED TO GENERATE FOUNDATION LOADS							

LOCATION	1	2	3	4	5	6	7	8
DEAD LOAD	161	30	26	200	301	170	166	380
LIVE LOAD	240	238	47	379	320	318	287	619
TOTAL LOAD	401	268	73	579	621	488	453	999
LOCATION	9	10	11	12	13	14	15	16
DEAD LOAD	311	180	196	410	451	320	336	590
LIVE LOAD	320	318	287	619	400	398	527	859
TOTAL LOAD	631	498	483	1029	851	718	863	1449
LOCATION	17	18	19	20	21	22	23	24
DEAD LOAD	461	330	366	620	601	470	506	800
LIVE LOAD	400	398	527	859	480	478	767	1099
TOTAL LOAD	861	728	893	1479	1081	948	1273	1899

LOCATION	1	2	3	4	5	6	7	8
UPLIFT (0.6) DEAD LOAD	97	18	16	120	181	102	100	228
99/128 mph UPLIFT	-77	-80	0	-104	-	-	-	-
LOCATION	9	10	11	12	13	14	15	16
UPLIFT (0.6) DEAD LOAD	187	108	118	246	271	192	202	354
99/128 mph UPLIFT	-	-	-	-	-	-	-	-
LOCATION	17	18	19	20	21	22	23	24
UPLIFT (0.6) DEAD LOAD	277	198	220	372	361	282	304	480
99/128 mph UPLIFT	-	-	-	-	-	-	-	-



03/28/18



OLD WETLAND
FLAGS FOUND (2)

EDGE OF
TOPSOIL

COMMONWEALTH OF
~MASSACHUSETTS~

75.00'

LOT AREA =
5,700 S.F.

EDGE OF
TOPSOIL

CLEANOUT
(TYPICAL)

#27
NORMANDY
TERRACE
EXTENSION

#17
NORMANDY
TERRACE

WOOD DECK

B H

B H

WOOD DECK

#23-25
2 STORY
WOOD FRAME
DUPLEX

GARAGE
UNDER

OPEN
PORCH

BITUMINOUS
DRIVEWAY

RETAINING WALL
(TYPICAL)

STONE
WALL

EM (2)

30.6'
TO
CENTERLINE

NORMANDY TERRACE
(PUBLIC)

SMH #36
RIM=17.56
INV=4.34 (15")
INV=2.89 (CHAN.)

NORMANDY TERRACE
EXTENSION (PRIVATE)

U-POLE

~CONCRETE WALKWAY~

NORMANDY
AVENUE
6" PLAS. GAS

NOTES:

ALL OFFSETS & DIMENSIONS
ARE TO THE FOUNDATION
UNLESS OTHERWISE NOTED.

VERTICAL DATUM IS BASED
ON THE N.A.V.D. OF 1988.
ADD 11.71' TO N.A.V.D. TO
ESTABLISH THE CITY OF
CAMBRIDGE VERTICAL DATUM.

SEE PLAN NO. 1137 OF 1966
FOR APPROXIMATE SEWER
EASEMENT.
MIDDLESEX COUNTY
REGISTRY OF DEEDS.

EM=ELECTRIC METER
GM=GAS METER
OHW=OVERHEAD WIRES

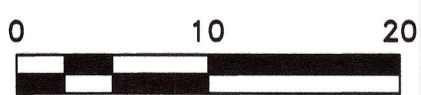
SEE PLAN BY DENNIS O'BRIEN
LAND SURVEYING DATED: 10/5/2021
FOR FOUNDATION AS-BUILT.

NOTE:

THE SEWER, WATER, DRAINAGE
& GAS LINE LOCATIONS ARE
PER THE TOWN OF CAMBRIDGE
RECORDS AND ARE APPROXIMATE.

CITY OF CAMBRIDGE ZONING
DIMENSIONAL REGULATIONS
ZONE: RESIDENTIAL B

LOT AREA: 5,000 S.F.
LOT WIDTH: 50'
FRONT YARD SETBACK: 1.5'
SIDE YARD SETBACK: 7.5'
(SUM OF 20')
REAR YARD SETBACK: 25'
MIN. OPEN SPACE 40%



Dennis O'Brien P.L.S.

D. O'BRIEN
LAND SURVEYING
480 WEST CENTRAL STREET EST 1998
FRANKLIN, MA 02038 508-541-0048

PLAN SHOWING AS-BUILT & TOPO
25 NORMANDY TERRACE EXTENSION
CAMBRIDGE, MA MIDDLESEX COUNTY

SCALE: 1:10	DATE: 2/9/2023	REVISED: -----	DRAWN BY: W.M.N.	CHECKED BY: D.O.
----------------	-------------------	-------------------	---------------------	---------------------



23

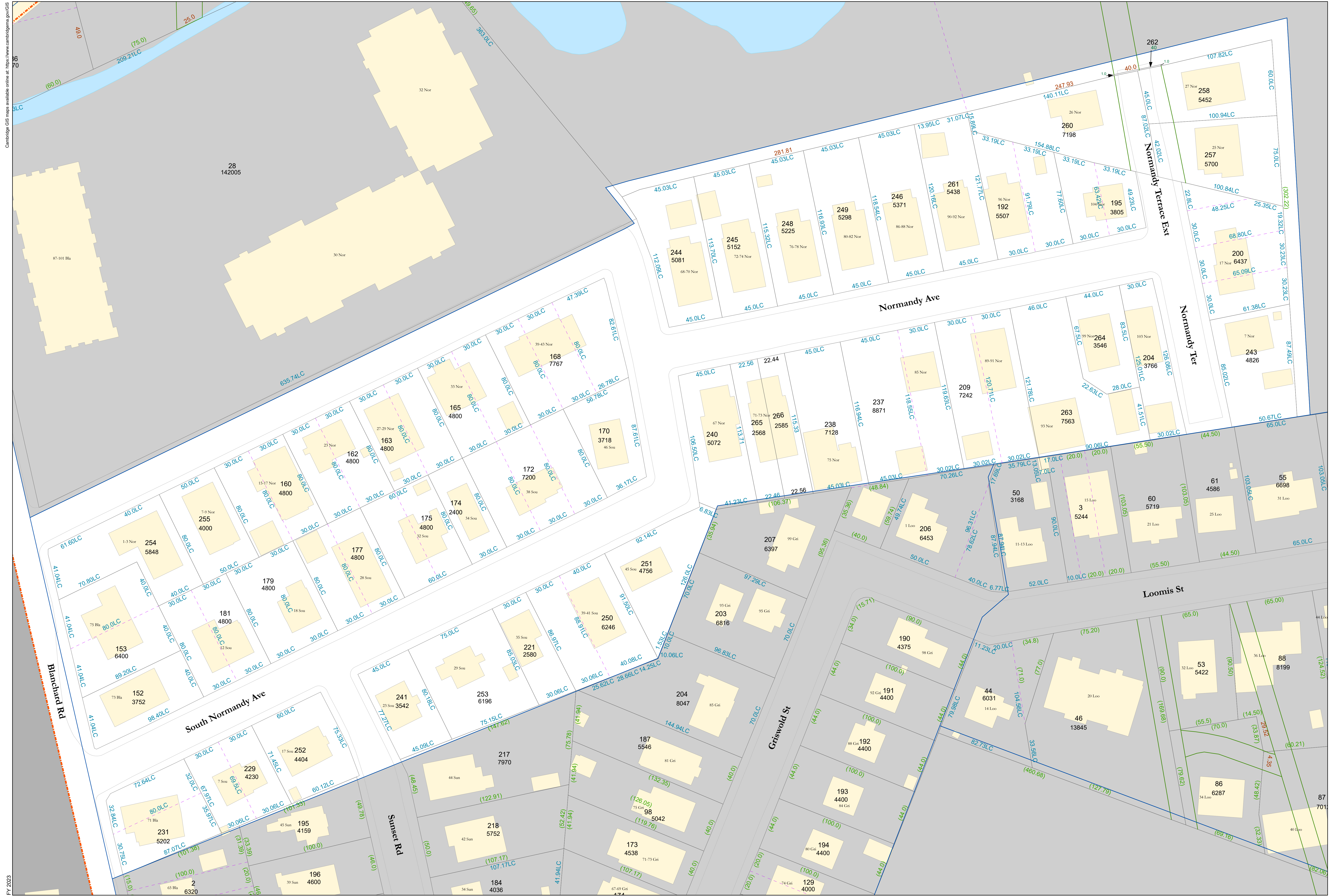




hello

BLOCK 267A

Cambridge GIS maps available online at: <https://www.cambridge.gov/GIS>



FY 2023



City of Cambridge
Assessing Department

795 Massachusetts Ave.
Cambridge, MA 02139

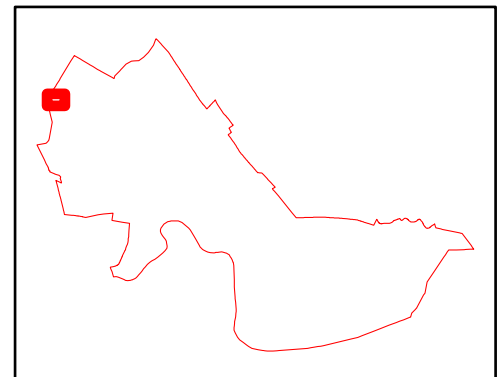
- Buildings
- Water
- Lot Line
- Sub-Parcel Line
- Block Line
- Easement
- City Boundary
- Railway

10 Lot Number 100 Parcel size in Sq. Ft.
 267A Block Number 44.0LC Land Court Dimension
 10 Cam Street Number 65.0 Survey Dimensions
 (125.0) Deed Dimension

DISCLAIMER:
 All Real Property shown on this map was compiled from existing Assessor's Tax Maps dated 1920 to 2022 and maintained by the City Assessor's Office and the Department of Public Works. Subsequent maintenance has been completed using the City of Cambridge Geographic Information System (GIS). Parcels have not been created from survey, and map is suitable for assessing purposes only.
 The City of Cambridge assumes no legal responsibility for information shown on this map.

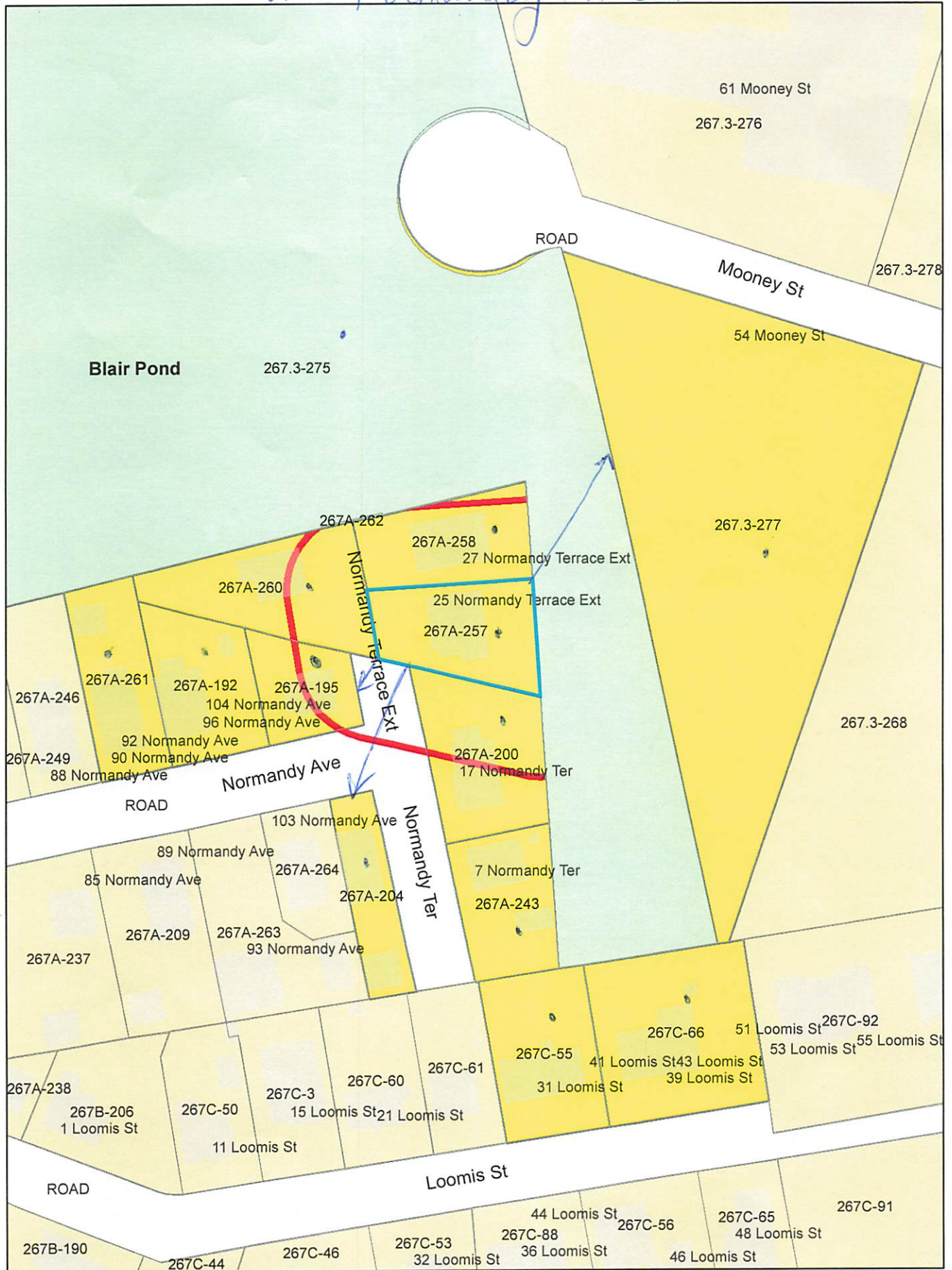


0 12.5 25 50 Feet
 1:370



Parcel Block Map
267A

25 Normandy Terr Ext.



25 Normandy Terr Ext. Petitioner

267A-195
FITTS, LAURIE J. & WILLIAM R. FITTS
104 NORMANDY AVE
CAMBRIDGE, MA 02138

267C-55
BREEN, PATRICIA A.
P.O BX 79181
WAVERLY, MA 02479

JOHN BAKER & AZILAH ISKANDAR
25 NORMANDY TERRACE
CAMBRIDGE, MA 02138

267A-200
GOLDSTEIN, MITCHELL & MARIA RANERI
17 NORMANDY TERR.
CAMBRIDGE, MA 02138-1037

267.3-275
COMMONWEALTH OF MASSACHUSETTS
STATE HOUSE
BOSTON, MA 02133

267A-204
MURPHY, SUSAN M.
103 NORMANDY AVE
CAMBRIDGE, MA 02138-1016

267A-243
KUBICEK, WILLIAM L. & NANCY A. CAMPBELL
7 NORMANDY TER
CAMBRIDGE, MA 02138-1018

267A-258
TING, YEN
27 NORMANDY TER
CAMBRIDGE, MA 02138

267A-260
ELLIS, SUSAN M.
26 NORMANDY TER
CAMBRIDGE, MA 02138-1018

267A-261
CARVELLI, FLORENCE G. &
LINDA M. DALRYMPLE TRS.
92 NORMANDY AVE REALTY TRUST
92 NORMANDY AVE.
CAMBRIDGE, MA 02138-1017

267C-66
37-43 LOOMIS STREET LLC 148
COMMONWEALTH RD
PO BOX 5138
WAYLAND, MA 01778

267A-257
SURIA LLC
700 HURON AVE UNIT 5K
CAMBRIDGE, MA 02138

267.3-277
LS ALEWIFE III LLC
1920 MAIN ST - STE 1200
IRVINE, NC 92614

267A-192
M&D NORMANDY AVE., LLC
PO BOX 823
DOVER, MA 02030



City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

831 Mass Avenue, Cambridge, MA.
(617) 349-6100

BZA

POSTING NOTICE – PICK UP SHEET

The undersigned picked up the notice board for the Board of Zoning Appeals Hearing.

Name: AZILAH ISKANODAR Date: 8/28/23
(Print)

Address: 25 Normandy Terrace Ext.

Case No. BZA-232270

Hearing Date: 9/14/23

Thank you,
Bza Members



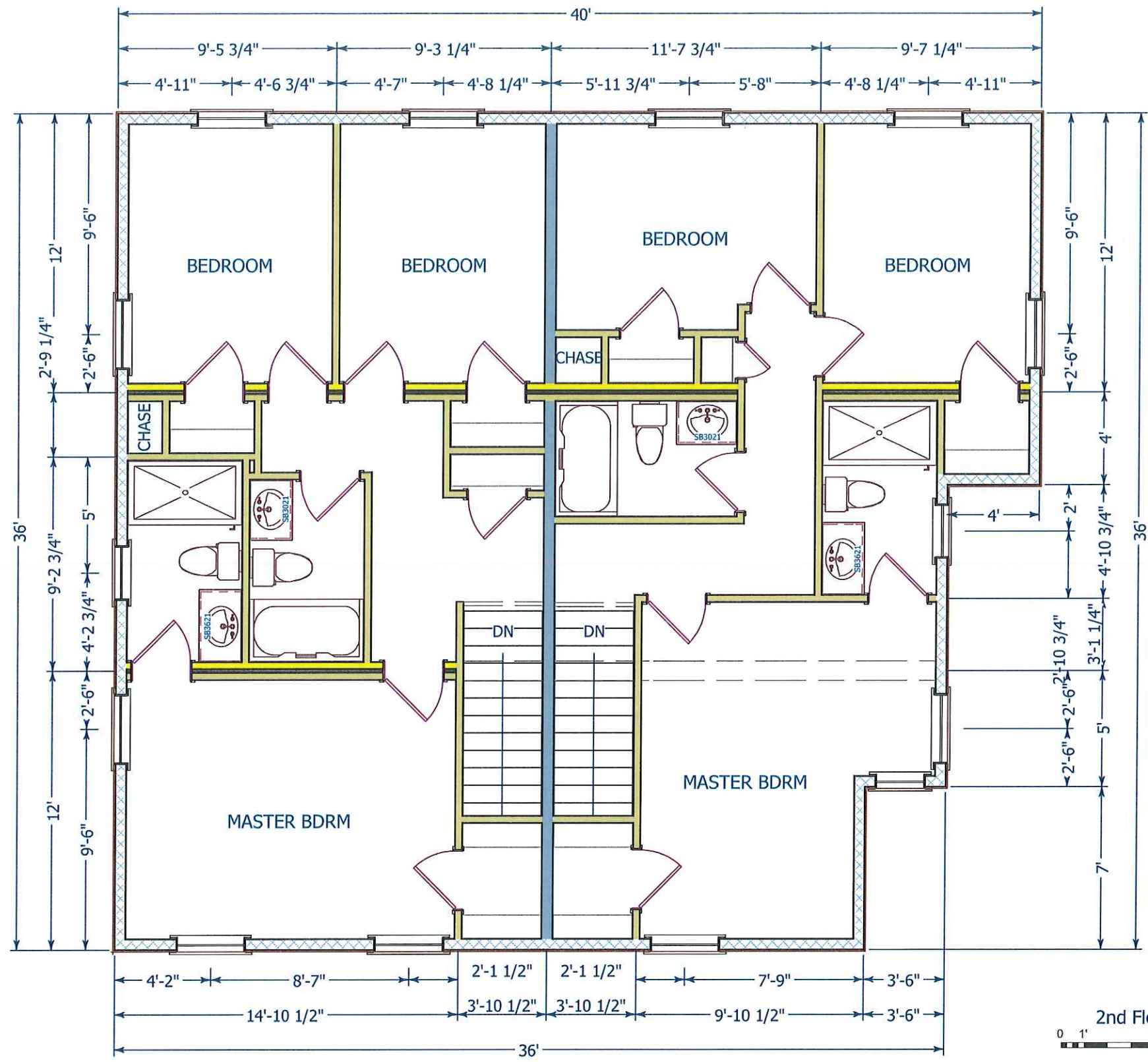
CUSTOM DUPLEX TOWNHOUSE
JOHN BAKER
25 NORMANDY TERRACE
CAMBRIDGE, MA 02138

REVISED:

DATE:
12/5/17

SCALE:

SHEET:



CUSTOM DUPLEX TOWNHOUSE
 JOHN BAKER
 25 NORMANDY TERRACE
 CAMBRIDGE, MA 02138

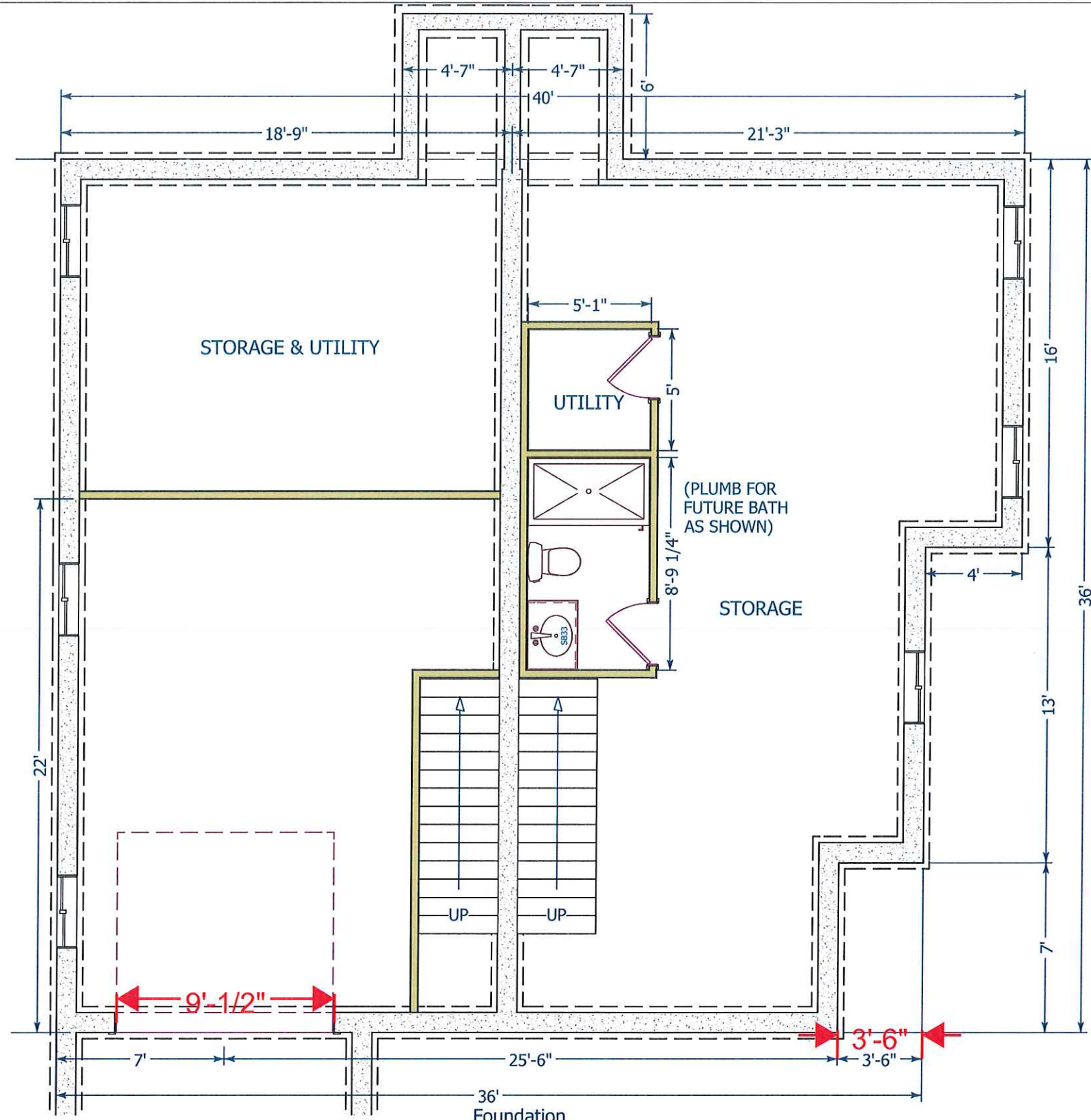
REVISED:

DATE:
 12/5/17

SCALE:
 7/32"=1'-0"

SHEET:

2nd Floor
 0 1' 5'
 SCALE



CUSTOM DUPLEX TOWNHOUSE
 JOHN BAKER
 25 NORMANDY TERRACE
 CAMBRIDGE, MA 02138

REVISED:

DATE:
 12/5/17

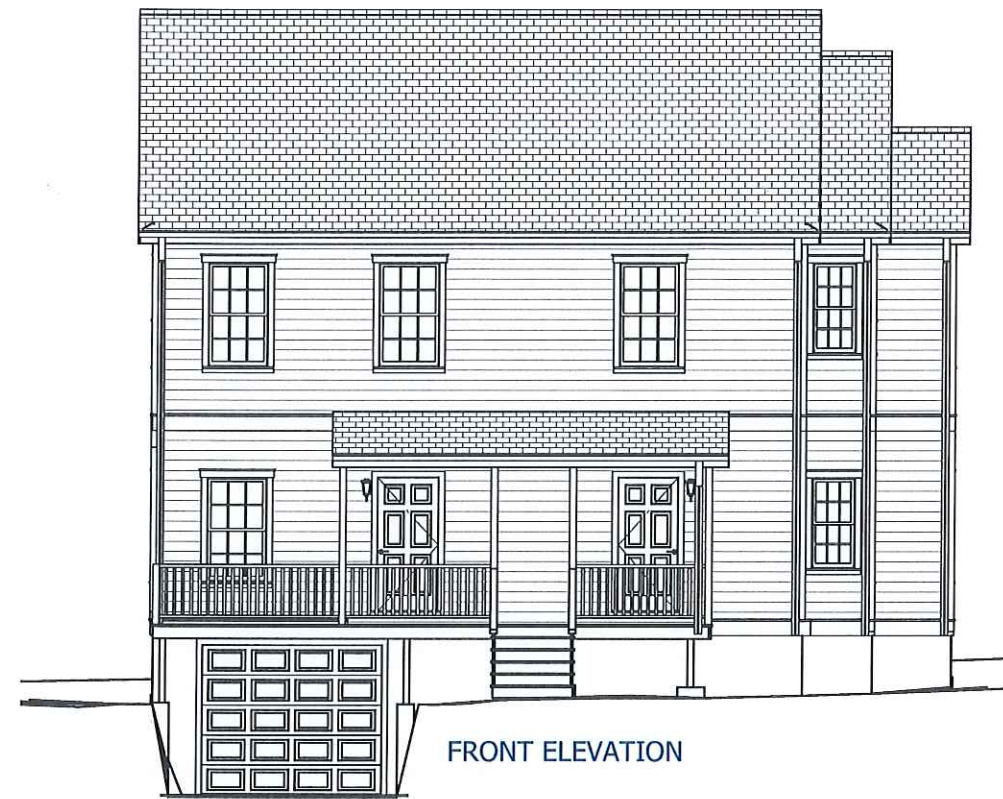
SCALE:
 7/32" = 1'-0"

SHEET:





LEFT ELEVATION



FRONT ELEVATION



RIGHT ELEVATION



REAR ELEVATION

0 1' 5' SCALE

CUSTOM DUPLEX TOWNHOUSE
 JOHN BAKER
 25 NORMANDY TERRACE
 CAMBRIDGE, MA 02138

REVISED:

DATE:
 12/5/17

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

SHEET:

1 * * * * *

2 (7:11 p.m.)

3 Sitting Members: Jim Monteverde, Steven Ng, Carol Agate,
4 Virginia Keesler, and Daniel Fernando
5 Hidalgo

6 JIM MONTEVERDE: Next case is -- are we too early?
7 Okay. I'll talk slower if I need to. Next case is 232270
8 -- 25 Normandy Terrace Extension. Is there anyone -- the
9 proponent like to speak on this matter?

10 [Pause]

11 No one's there? Shall we just move on? Oh, is
12 there?

13 STEPHEN NATOLA: Yeah, I think --

14 JIM MONTEVERDE: I'm sorry. I'm sorry. We have a
15 letter in the file from Patrick W. Barrett III, dated
16 September 13, and it requests a continuance for the above
17 case. They have just been retained by the owners and among
18 items would like time to correct the application, et cetera,
19 et cetera, et cetera. And they need a continuance.

20 So the next continuance date was November 9, was
21 it not?

22 STEPHEN NATOLA: Checking out October 12.

1 JIM MONTEVERDE: Oh. Say that date again?

2 STEPHEN NATOLA: October 12.

3 JIM MONTEVERDE: October 12. So let me make a
4 motion to continue. Let me make a motion then to continue
5 this matter to October 12, 2023 on the condition that the
6 petitioner change the posting sign to reflect the new date
7 of October 12, 2023 and the new time at 6:00 p.m.

8 Also, in furtherance that the petitioner sign a
9 waiver to the statutory requirement -- which I think they've
10 already done. Yes, they did that today. So that's all
11 done. They asked us that they sign. Yep, they've signed
12 it. they've returned it.

13 Also, that if there are any new submittals,
14 changes to the drawings, that those be on file by 5:00 p.m.
15 on the Monday prior to the October 12, 2023 hearings.

16 Also, if there are any changes to the dimensional
17 form and potentially any supporting statements, they also be
18 changed and submitted along with the new documents.

19 On the motion, then, to continue this matter,
20 Steven?

21 STEVEN NG: In favor.

22 JIM MONTEVERDE: Carol?

1 CAROL AGATE: In favor.

2 JIM MONTEVERDE: Thank you. Dan?

3 DANIEL HIDALGO: In favor.

4 JIM MONTEVERDE: Virginia?

5 VIRGINIA KEESLER: In favor.

6 JIM MONTEVERDE: Thank you. And Jim Monteverde in
7 favor.

8 [All vote YES]

9 JIM MONTEVERDE: That's five in favor. The
10 continuance is granted. Thank you.

11

12

13

14

15

16

17

18

19

20

21

22

Pacheco, Maria

From: Patrick W Barrett III <jbrealtyllc@gmail.com>
Sent: Wednesday, September 13, 2023 1:43 PM
To: Pacheco, Maria
Cc: John Baker; Azilah Iskandar
Subject: 25 Normandy Terrace (BZA-232270) Request for Continuance

Maria,

We are requesting a continuance for the above referenced case. I have just been retained by the owners and among other items we would like time to:

- Correct the application to reflect the correct hardship thresholds
- Refine the scope of the Variance now that ISD seems to be in agreement that the back two decks are compliant
- Gather the proper elevation information to confirm that the front deck is in fact in violation or through our work determine if any violation truly exists.

The continuance, if granted, will allow time for me to get my bearings on the case and facilitate a much smoother process for all involved.

Respectfully,

Patrick W. Barrett III, Esq.
617 778 3521

www.linkedin.com/in/pwbarrett/

Emails sent or received shall neither constitute acceptance of conducting transactions via electronic means nor shall create a binding contract in the absence of a fully signed written contract.



City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

831 Mass Avenue, Cambridge, MA.
(617) 349-6100

2023 SEP 14 AM 11:47

OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

Board of Zoning Appeal Waiver Form

The Board of Zoning Appeal
831 Mass Avenue
Cambridge, MA 02139

RE: Case # BZA-232270

Address: 25 Normandy Terrace

Owner, Petitioner, or Representative: Patrick Barrett, III, Esq.
(Print Name)

hereby waives the required time limits for holding a public hearing as required by Section 9 or Section 15 of the Zoning Act of the Commonwealth of Massachusetts, Massachusetts General Laws, Chapter 40A. The Owner, Petitioner, or Representative further hereby waives the Petitioner's and/or Owner's right to a Decision by the Board of Zoning Appeal on the above referenced case within the time period as required by Section 9 or Section 15 of the Zoning Act of the Commonwealth of Massachusetts, Massachusetts General Laws, Chapter 40A, and/or Section 6409 of the federal Middle Class Tax Relief and Job Creation Act of 2012, codified as 47 U.S.C. §1455(a), or any other relevant state or federal regulation or law.

Date: 9-14-23

Signature [Signature]

Pacheco, Maria

From: Patrick W Barrett III <jbrealtyllc@gmail.com>
Sent: Monday, October 9, 2023 6:58 AM
To: Pacheco, Maria
Cc: Ratay, Olivia; Azilah Iskandar; John Baker
Subject: 25 Normandy Terrace (BZA-232270) Request for Withdrawl

Maria,

My clients are working to resolve this issue with ISD and request to withdraw their application.

Regards,

Patrick W. Barrett III
617 778 3521

www.linkedin.com/in/pwbarrett/

Emails sent or received shall neither constitute acceptance of conducting transactions via electronic means nor shall create a binding contract in the absence of a fully signed written contract.