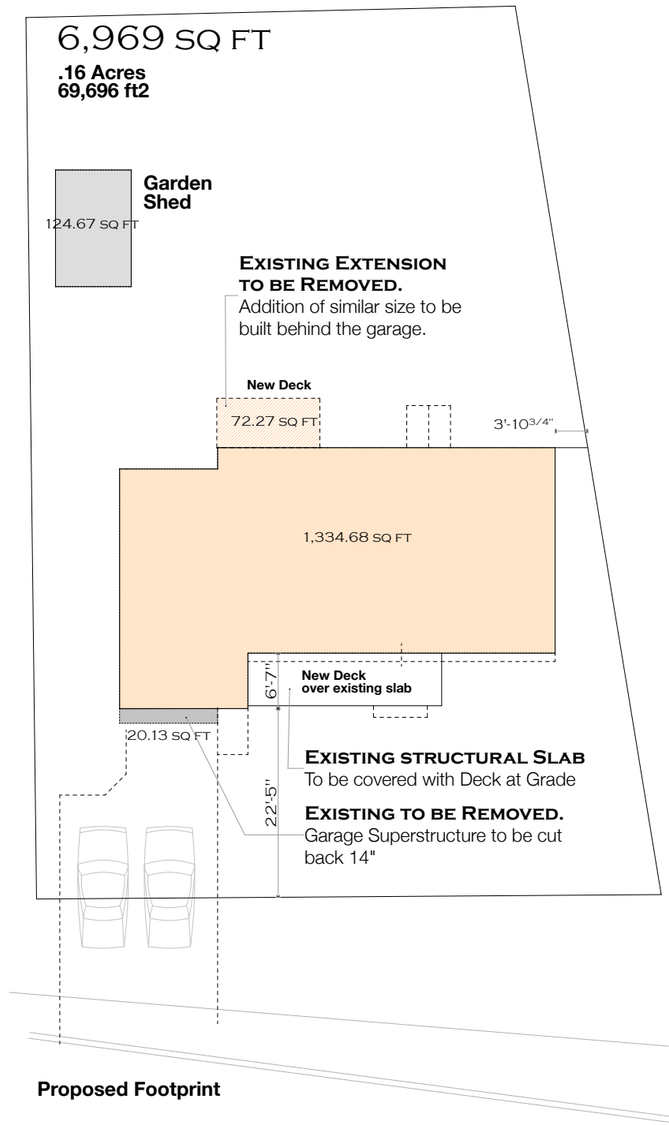
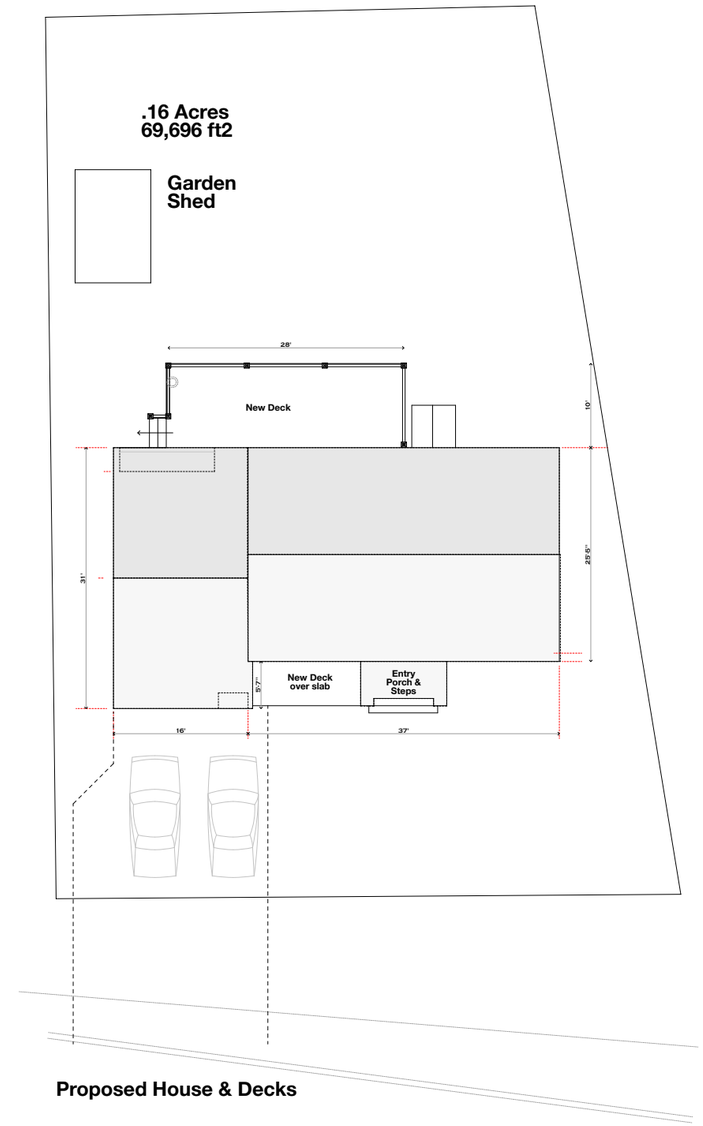
G.I.S. Map Updated to Currently Existing



Proposed Footprint



Proposed House & Decks

1 Site Plan - Footprint and Proposed Changes
SCALE: 1/8" = 1'-0"

Issue Date
12/31/18

Revisions

Site Plan

Scale (s)
1/8" = 1'-0"

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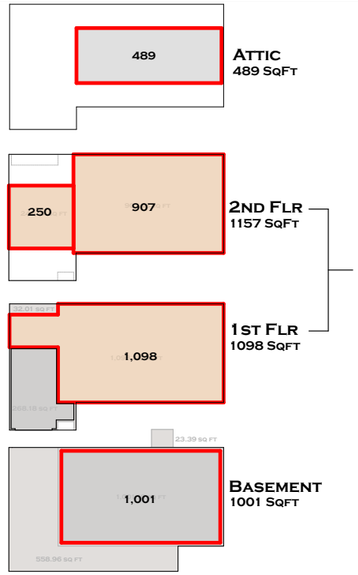
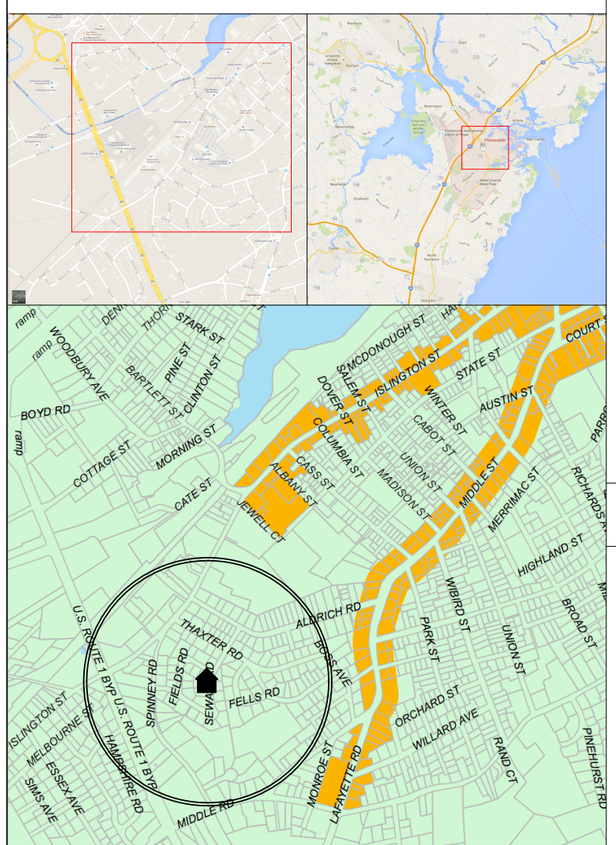
17 Fields Road
Portsmouth, NH

Byron & Sophie Matto and Family



House Foot Print - 1,584 SqFt



Property Location Map

Additions & Alterations

17 FIELDS ROAD

PORTSMOUTH - NEW HAMPSHIRE

Proposed

Exisiting

Existing Front Elevation

Byron & Sophie Matto

2nd Floor Addition

Architectural Drawings Index

These Drawings are "An Instrument of Service"provided to The Client for several purposes. They are used for documenting the Design Process between the Client and the Architect, Defining the Scope of Work to be built, obtaining Estimates & Bids, and for Obtaining Building Permits and Approvals as may be required for Construction of this Project.
Any other use is prohibited by law unless written permission is obtained from BOTH The Client and The Architect.

NOTE: Drawings Issued as Progress Drawings or Bid Documents are not to be used for Obtaining Permits or for Constructing the Project. Only Drawings that are Sealed and Signed by The Architect my be used for Obtaining the Building Permit.

Schedule of Drawings		1st Issue Date:	Revisions:
S-01	Site Plan		
A-01	Title Page		
A-02	Existing Conditions		
A-03	Foundation Plan		
A-04	Elevations		
A-05	1st Floor Plan Layout		
A-06	2nd Floor Plan		
A-07	Attic Plan		
A-08	Window & Door Schedules & Data		
A-09	Section A - Through Garage & Pantry		
A-10	Section B - Thru Stairs & Kitchen		
A-11	Section C - Thru Kitchen & Stairs		
A-12	Section D - Thru Laundry, Aurora's Rm, Half-Bath & Foyer		
A-13	Section E - Living Room & MAster Bedroom/Bath		
A-14	Existing 1st Floor Deck Structure & Ext. Decks/Steps		
A-15	2nd Floor Deck Framing		
A-16	Attic Floor Deck Framing		
A-17	HVAC - 2nd Floor Ceiling		
A-18	HVAC - 1st Floor		
A-19	Rafter Framing & Eaves Detail		
E-01	Electrical Plan - 1st Floor		
E-02	Electrical Plan - 2nd Floor		
SK-01	Elevations - Shingles vs Clapboard		

Accuracy of Drawings
All dimensions & conditions depicted in these drawings are for the purpose of defining the Scope of Work and the Design Intention of the Owner and Architect. Any discrepancies between these drawings and actual field conditions or measurements must be reported promptly to the Architect prior to proceeding with construction. Any field changes to the design while under construction must also be reported to the Architect so that the Record Drawings can be updated and the changes reviewed for code compliance and possible design conflicts.

Please DO NOT SCALE Drawings for critical dimensions….contact architect for clarification or resolution.

Use of Documents
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Notes:

Building Code References

Applicable Codes and Regulations for this Project Are;

THE ZONING REGULATIONS of the Town of Portsmouth
New Hamsphire
And
THE NEW HAMPSHIRE STATE BUILDING CODE
Inclusive of the following references & documents:

Current State Building Code	
State Building Code - 2005 CT Supplement	2003 International Building Code
2009 Amendments	2003 International Existing Building Code
2011 Amendment	2003 International Plumbing Code
2013 Amendment	2003 International Mechanical Code
Wind Load Errata	2009 International Residential Code
	2009 International Energy Conservation Code
Prior Codes	2011 National Electrical Code (NFPA 70)

Use Group R-3

Construction Type 5B

General Building Design Criteria

Design Loads: Max Deflection L/360

1st Floor - 45 PSF Live Load, 15 PSF Dead Load
2nd Floor - 35 PSF Live Load, 15 PSF Dead Load
3rd Floor - 35 PSF Live Load, 15 PSF Dead Load
Roof - 30 PSF Snow Load, 15 PSF Dead Load

ResCheck - IECC (International Energy Code Compliance)

Energy Code Compliance will be confirmed by the General Contractor and Insulation Sub-Contractor using most current version of ResCheck and will be appended to the Building Permit Application.

Reminder - Call Before You Dig! 1-800-922-4445

The Presence & Location of all underground utilities & structures must be determined prior to construction and verified by the appropriate Utility Company or regulatory agency.

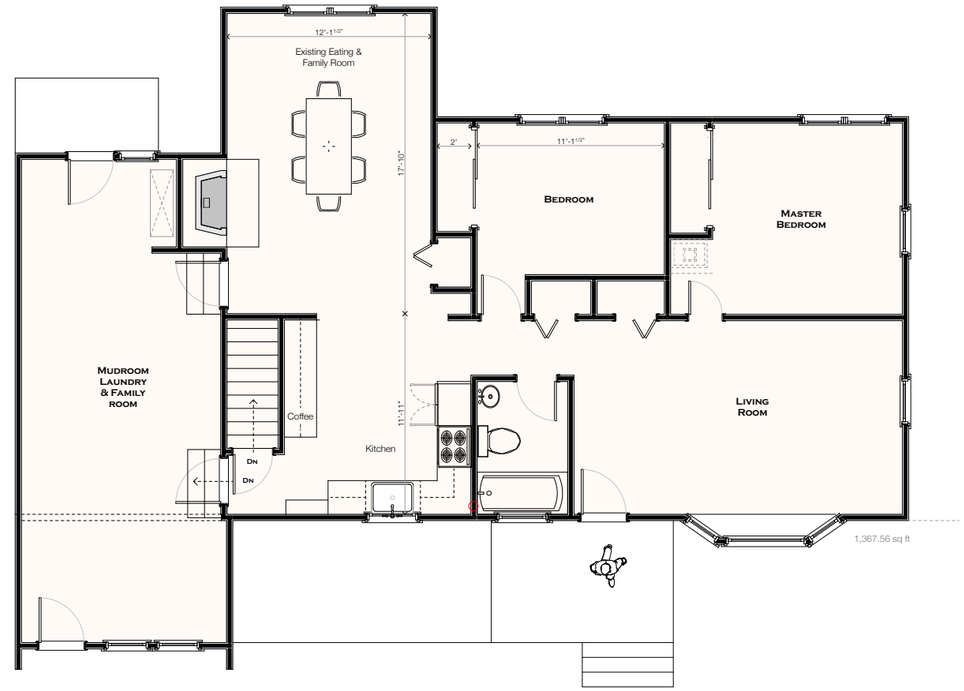
Joseph Matto Architect
AIA
Member of the American Institute of Architects
(475) 282-4183
JoeMattoArchitects.com

Builder & General Contractor	Chris Martin - Martin Construction Co.,LLC
Project Consultants	

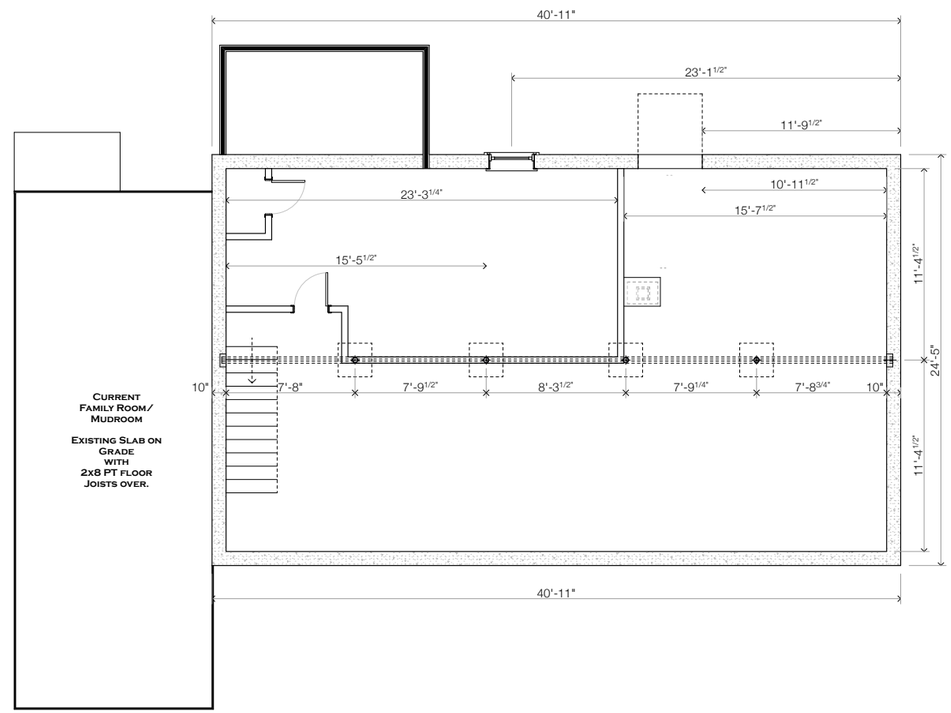
Project Data	Clients: Byron, Sophie, Ethan & Aurora Matto	Project Year 2018
	17 Fields Road Portsmouth, NH	Phone: Email:

3 Existing Conditions Photos - March 2018

4 Neighborhood Map
SCALE: 1" = 40'



1 Existing 1st Floor Plan
SCALE: 1/4" = 1'-0"



2 Existing Basement & Foundation
SCALE: 1/4" = 1'-0"

Issue Date
12/31/18

Revisions

Existing Conditions

Scale (s)
1:91.2, 1" = 40',
1/4" = 1'-0"

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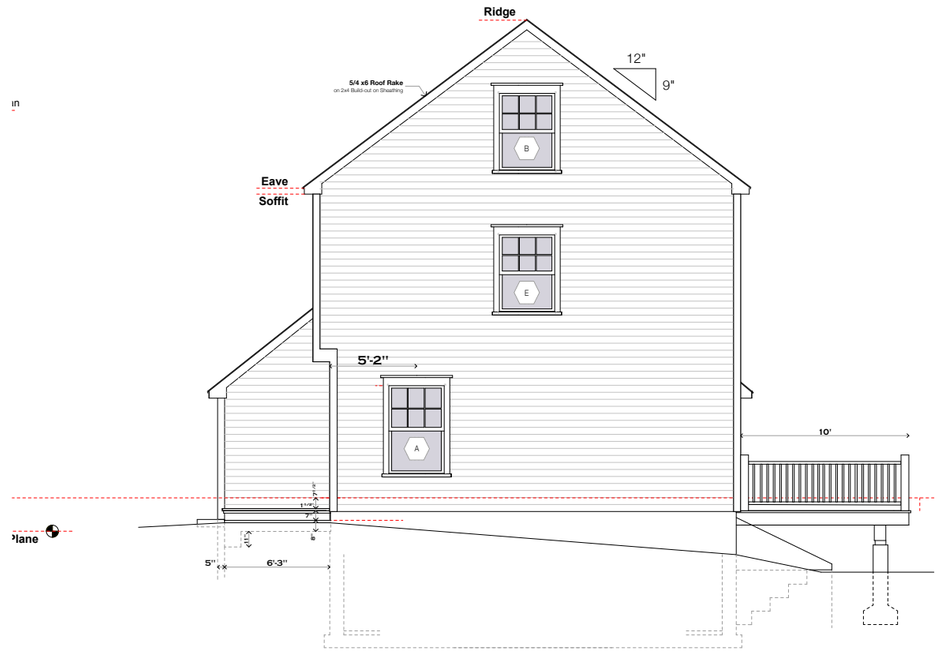
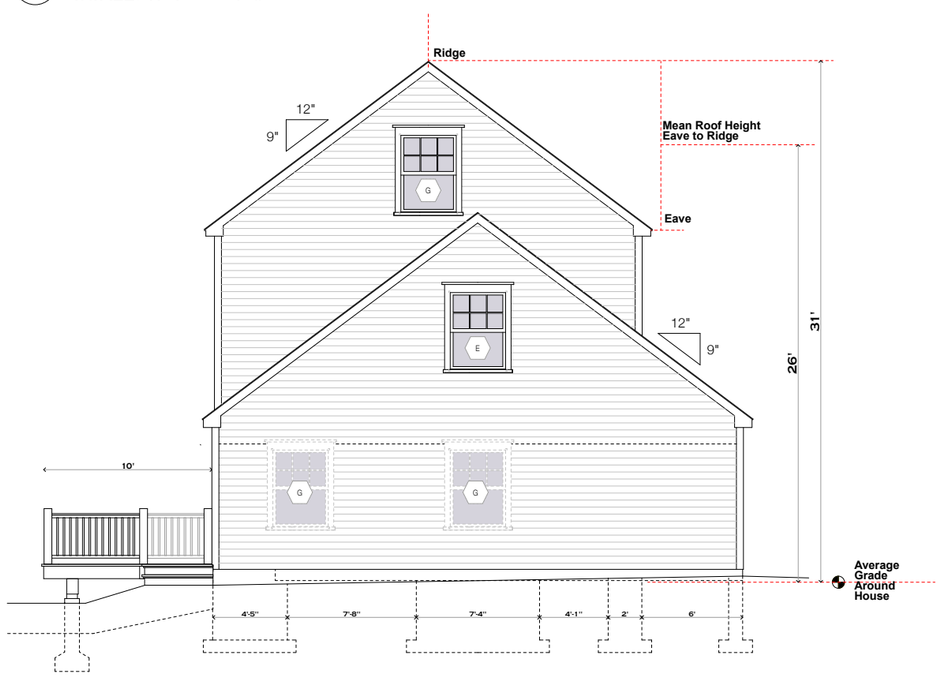
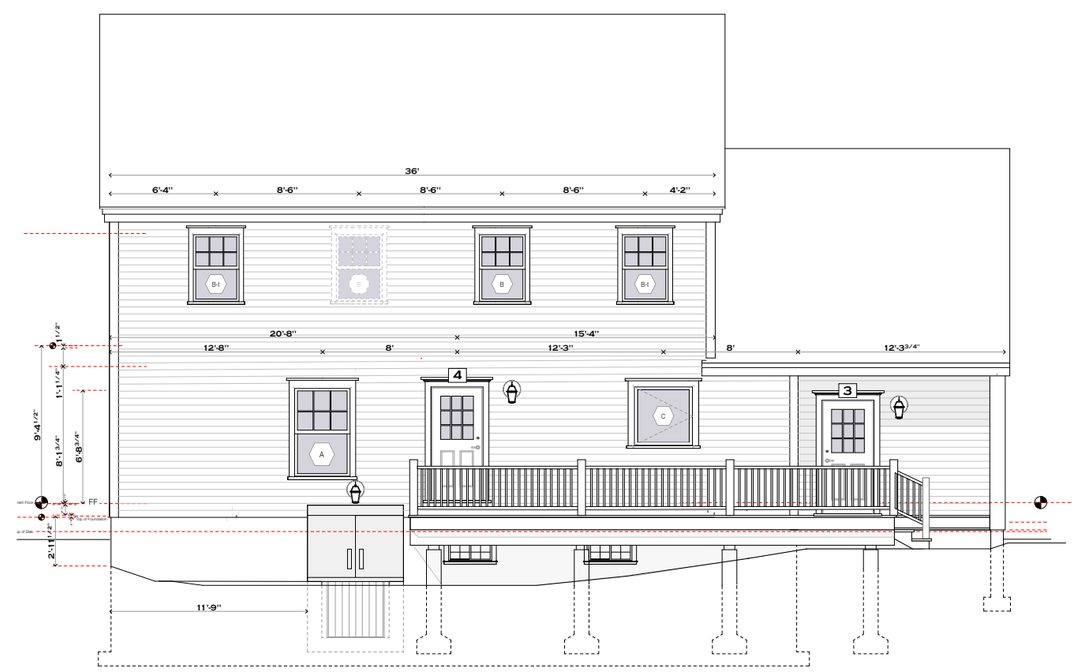


3 South Elevation (Right Side)
SCALE: 1/4" = 1'-0"

1 West Elevation (Front)
SCALE: 1/4" = 1'-0"



4 North Elevation (Left Side)
SCALE: 1/4" = 1'-0"



2 South Elevation (Right Side)
SCALE: 1/4" = 1'-0"

Issue Date
12/31/18

Revisions

Elevations

Scale (s)
1/4" = 1'-0"

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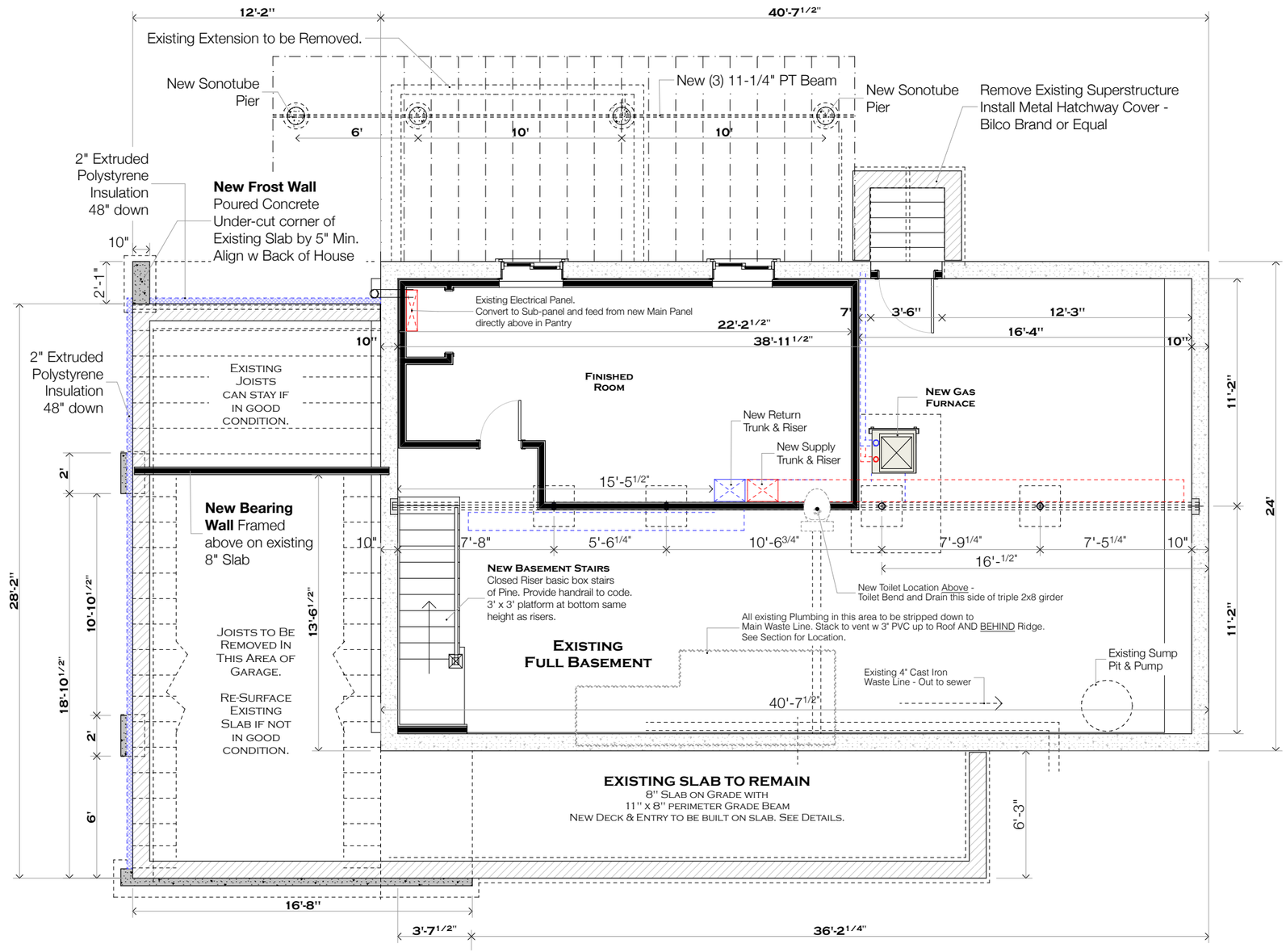

1 Basement Level & Existing Foundation & Slabs
SCALE: 3/8" = 1'-0"

Issue Date
12/31/18

Revisions

Foundation Plan

Scale (s)
3/8" = 1'-0"

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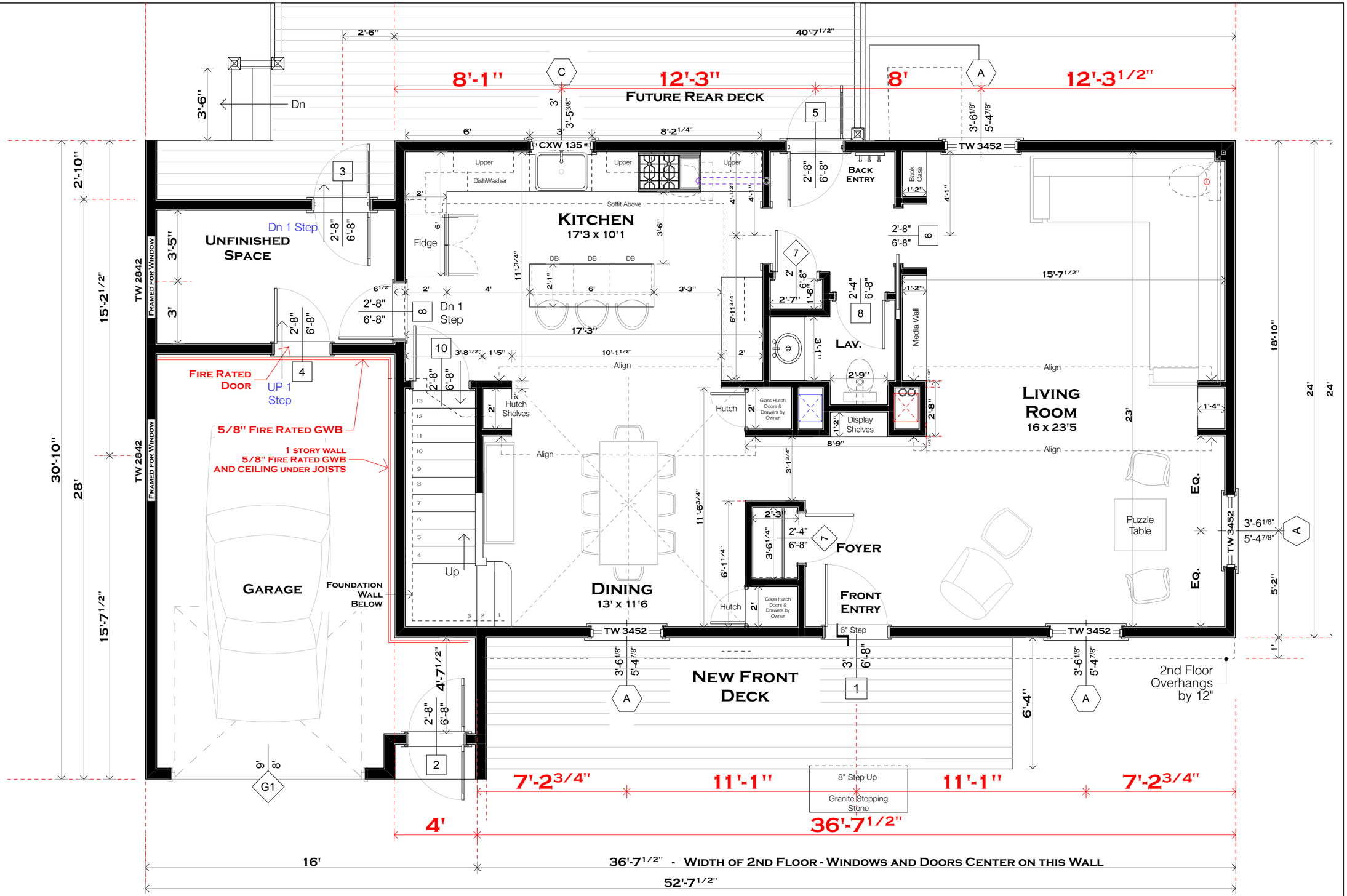

1 1st Floor Plan
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

1st Floor Plan Layout

Scale (s)
1/2" = 1'-0"

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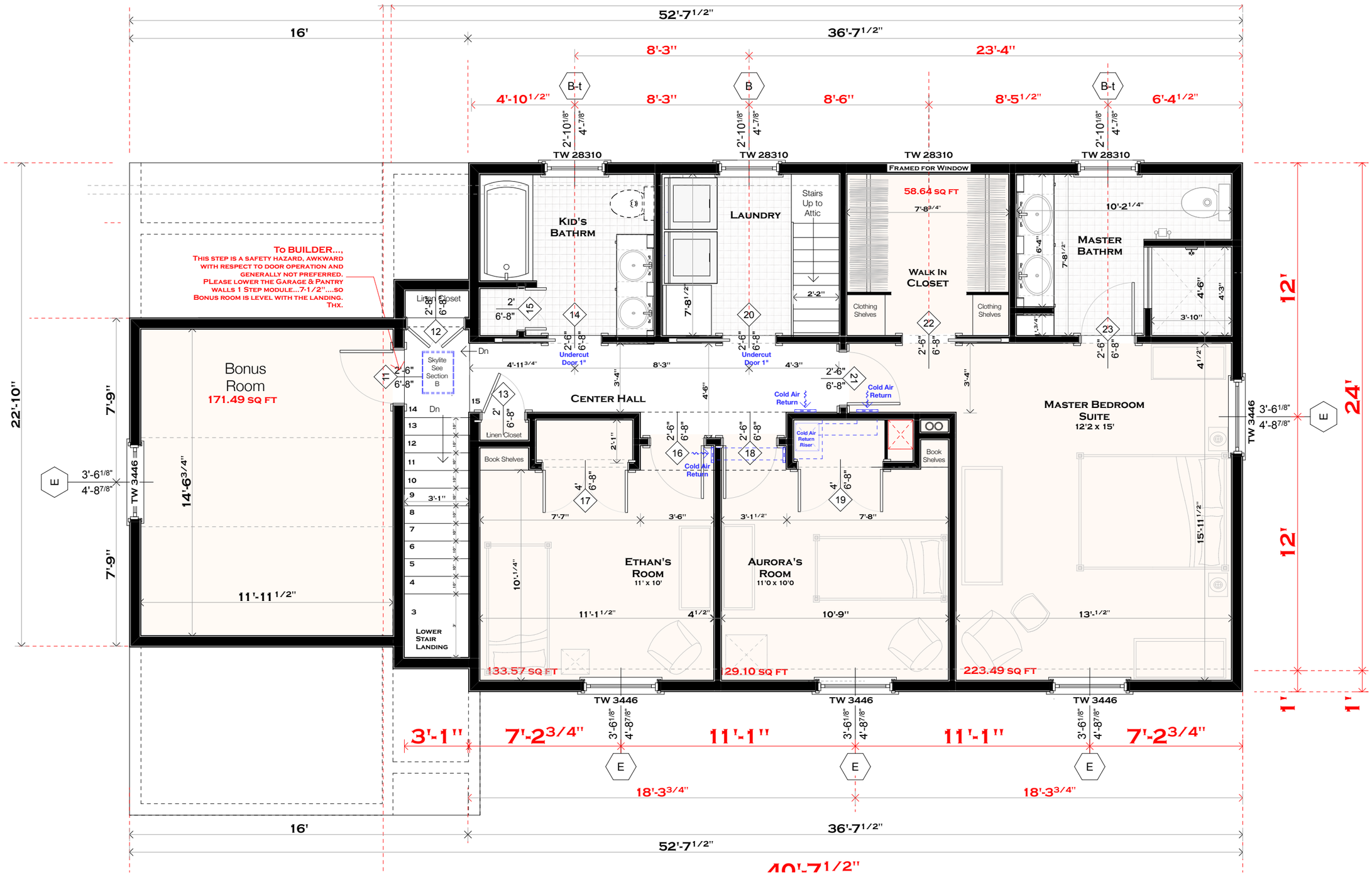

1 1st Floor Plan
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

2nd Floor Plan

Scale (s)
1/2" = 1'-0"

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Insulation Quantity Comparisons for 2 Methods of Installation

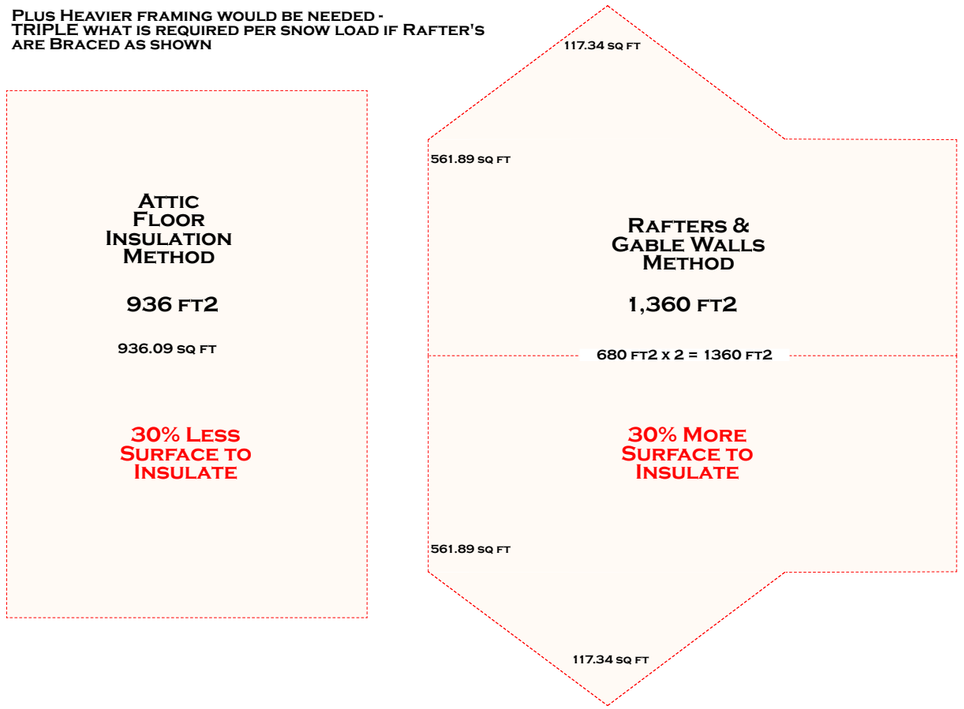
30% MORE to Insulate Rafters and Gables vs Attic Floor

424 ft2 Less surface area... if Attic Floor is insulated

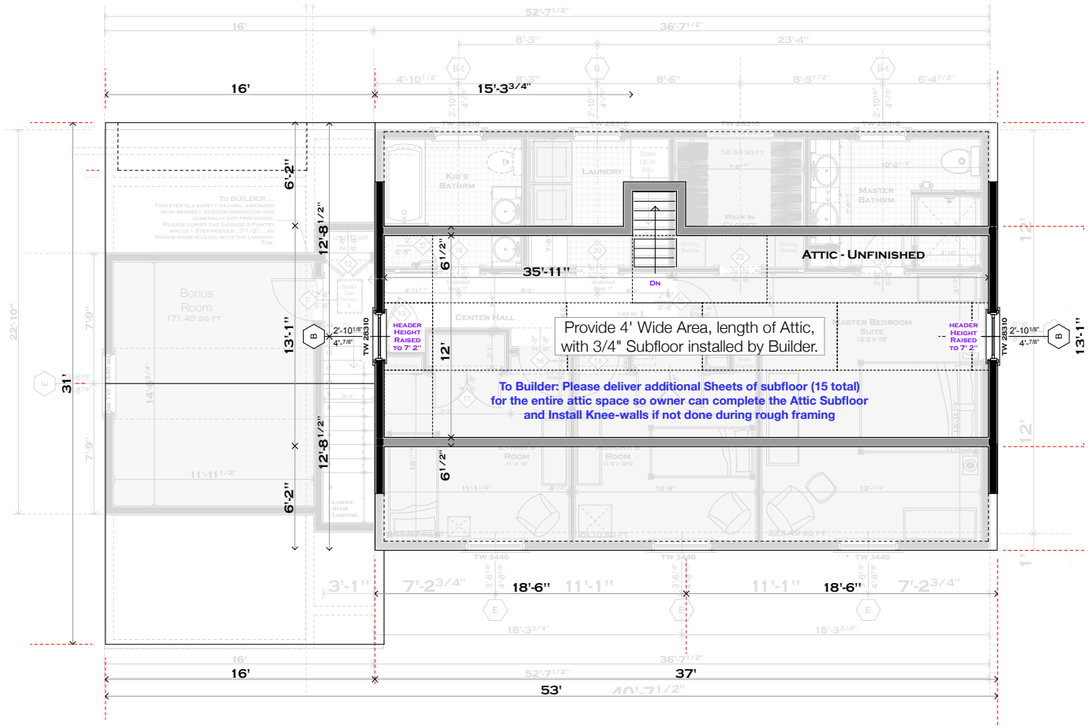
Plus:

1. Attic Floor insulation requires simple batts laid flat....easy install whereas roof rafter would require that all surfaces be Sheet-rocked for Fire Code (no exposed FG batts allowed).

Plus Heavier framing would be needed - TRIPLE what is required per snow load if Rafter's are Braced as shown



1 Insulation Areas - Comparison



2 2nd Floor Trace Underlay
SCALE: 1/4" = 1'-0"

1 Attic Floor Plan
SCALE: 1/4" = 1'-0"

Issue Date
12/31/18

Revisions

Attic Plan

Scale (s)
1:56.7, 1/4" = 1'-0"

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Door Schedule

Door Schedule								
ID	QTY	Leaf Size	RO Width	RO Height	Operation	Symbol	Jamb	Notes
1	1	3'×6'-8"						
2	1	2'-8"×6'-8"						
3	1	2'-8"×6'-8"						
4	1	2'-8"×6'-8"						
5	1	2'-8"×6'-8"						
6	1	2'-8"×6'-8"						
7	1	2'-4"×6'-8"						
7	1	2'×6'-8"						
8	1	2'-4"×6'-8"						
8	1	2'-8"×6'-8"						
10	1	2'-8"×6'-8"						
11	1	2'-6"×6'-8"						
12	1	2'-8"×6'-8"						
13	1	2'×6'-8"						
14	1	2'-6"×6'-8"						
15	1	2'×6'-8"						
16	1	2'-6"×6'-8"						
16	1	2'-6"×6'-8"						
17	1	4'×6'-8"						
18	1	2'-6"×6'-8"						
18	1	2'-6"×6'-8"						
19	1	4'×6'-8"						
19	1	4'×6'-8"						
20	1	2'-6"×6'-8"						
20	1	2'-6"×6'-8"						
21	1	2'-6"×6'-8"						
21	1	2'-6"×6'-8"						
22	1	2'-6"×6'-8"						
22	1	2'-6"×6'-8"						
23	1	2'-6"×6'-8"						
23	1	2'-6"×6'-8"						
G1	1	9'×8'						Garage ...
...	1	2'-8"×6'-8"						
...	1	2'-8"×6'-8"						
...	1	2'-8"×6'-8"						
	35							

Window Schedule

Andersen 400 Series .....OR EQUAL

Double Glazed w Low E
with Screens
Hardware - White

Exterior Trim - 5/4 x 4 Legs & Head
Historic Sill (No Apron)
Head Drip Cap w metal flashing

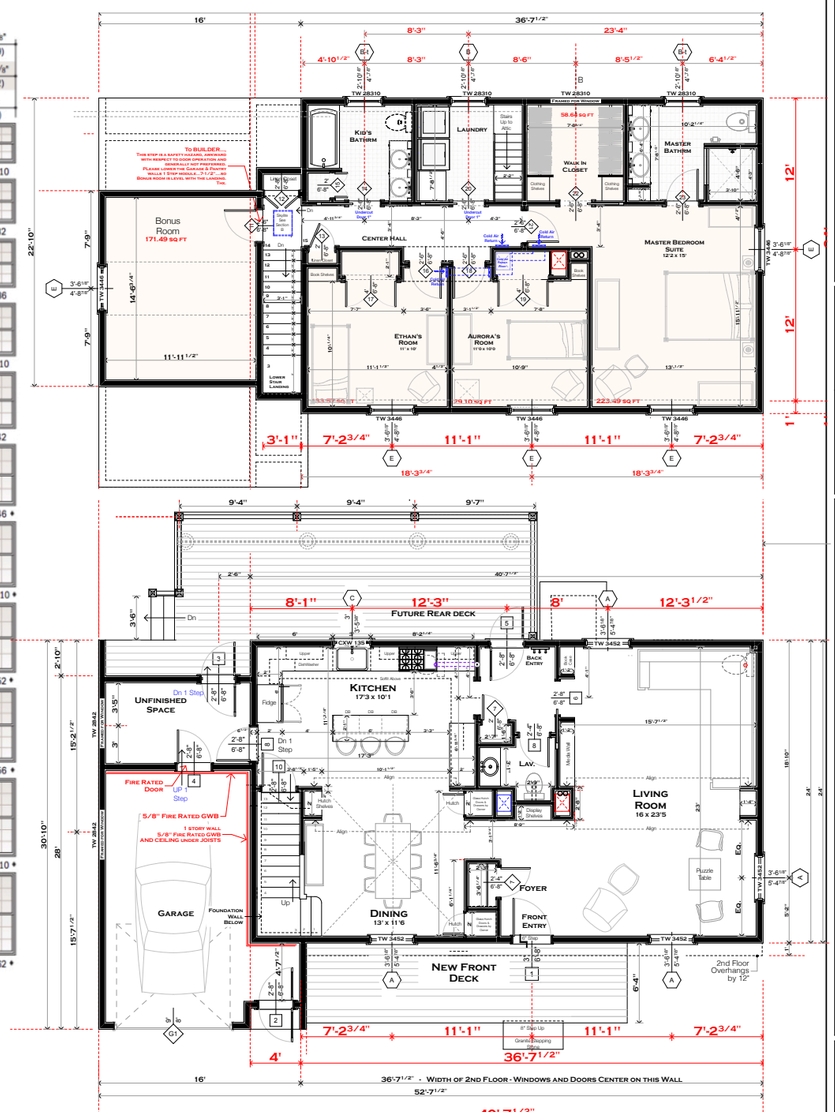
Provide Opening Wrap & Flashing

ID	A	B	B-t	C	E
View from Outside					
Plan Symbol					
	W Double Hung 10	W Double Hung 10	W Double Hung 10	W1 Casement 10	W Double Hung 10
Rough Opening	3'-6 1/4"×5'-5"	2'-10 1/4"×4'-1"	2'-10 1/4"×4'-1"	3'×3'-5 1/2"	3'-6 1/4"×4'-9"
Egress Unit			Tempered Glass in Bathrooms		Egress Units
Quantity	4	4	3	1	8

400 SERIES TILT-WASH DOUBLE-HUNG WINDOWS

Table of Basic Unit Sizes Scale 1/8" = 1'-0" (1:96)

Unit Dimension	1'-9 5/8" (549)	2'-1 5/8" (651)	2'-5 5/8" (752)	2'-7 5/8" (803)	2'-9 5/8" (854)	2'-11 5/8" (905)	3'-1 5/8" (956)	3'-5 5/8" (1057)	3'-9 5/8" (1159)
Minimum Rough Opening	1'-10 1/8" (562)	2'-2 1/8" (664)	2'-6 1/8" (765)	2'-8 1/8" (816)	2'-10 1/8" (867)	3'-0 1/8" (917)	3'-2 1/8" (968)	3'-6 1/8" (1070)	3'-10 1/8" (1172)
Unobstructed Glass*	15" (381)	19" (483)	23" (584)	25" (635)	27" (686)	29" (737)	31" (787)	35" (889)	39" (991)
3'-0 1/8" (937) / 3'-0 1/8" (937) / 13 5/16" (354)	TW18210	TW20210	TW24210	TW26210	TW28210	TW210210	TW30210	TW34210	TW38210
3'-4 1/8" (1038) / 3'-4 1/8" (1038) / 15 5/16" (405)	TW1832	TW2032	TW2432	TW2632	TW2832	TW21032	TW3032	TW3432	TW3832
3'-8 1/8" (1140) / 3'-8 1/8" (1140) / 17 5/16" (456)	TW1836	TW2036	TW2436	TW2636	TW2836	TW21036	TW3036	TW3436	TW3836
4'-0 1/8" (1241) / 4'-0 1/8" (1241) / 19 5/16" (506)	TW18310	TW20310	TW24310	TW26310	TW28310	TW210310	TW30310	TW34310	TW38310
4'-4 1/8" (1343) / 4'-4 1/8" (1343) / 21 5/16" (557)	TW1842	TW2042	TW2442	TW2642	TW2842	TW21042	TW3042	TW3442	TW3842
4'-8 1/8" (1445) / 4'-8 1/8" (1445) / 23 15/16" (608)	TW1846	TW2046	TW2446	TW2646	TW2846	TW21046	TW3046 *	TW3446 *	TW3846 *
5'-0 1/8" (1546) / 5'-0 1/8" (1546) / 25 5/16" (659)	TW18410	TW20410	TW24410	TW26410	TW28410	TW210410 *	TW30410 *	TW34410 *	TW38410 *
5'-4 1/8" (1648) / 5'-4 1/8" (1648) / 27 15/16" (710)	TW1852	TW2052	TW2452	TW2652	TW2852 *	TW21052 *	TW3052 *	TW3452 *	TW3852 *
5'-8 1/8" (1749) / 5'-8 1/8" (1749) / 29 15/16" (760)	TW1856	TW2056	TW2456	TW2656 *	TW2856 *	TW21056 *	TW3056 *	TW3456 *	TW3856 *
6'-0 1/8" (1851) / 6'-0 1/8" (1851) / 31 15/16" (811)	TW18510	TW20510	TW24510 *	TW26510 *	TW28510 *	TW210510 *	TW30510 *	TW34510 *	TW38510 *
6'-4 1/8" (1953) / 6'-4 1/8" (1953) / 33 15/16" (862)	TW1862	TW2062	TW2462 *	TW2662 *	TW2862 *	TW21062 *	TW3062 *	TW3462 *	TW3862 *



Issue Date
12/31/18

Revisions

Window & Door Schedules & Data

Scale (s)
1:0.7, 1:0.6, 3/16" = 1'-0", 1:1.1

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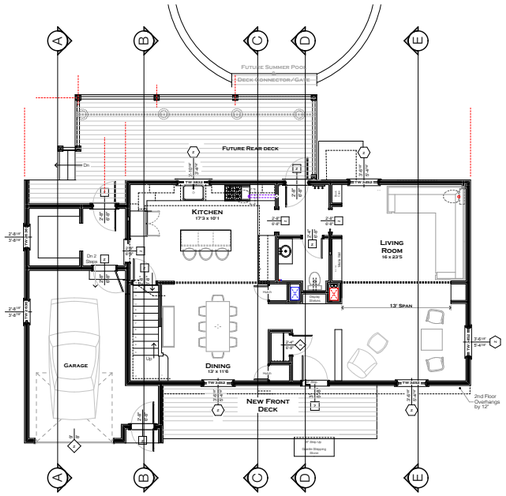
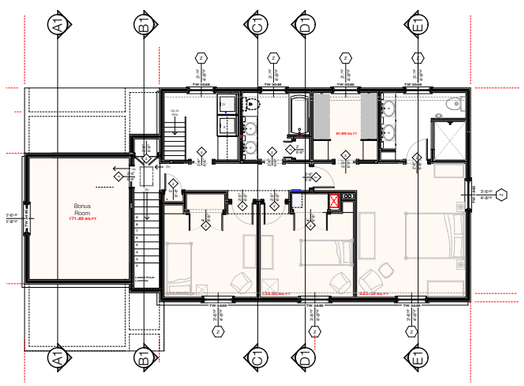
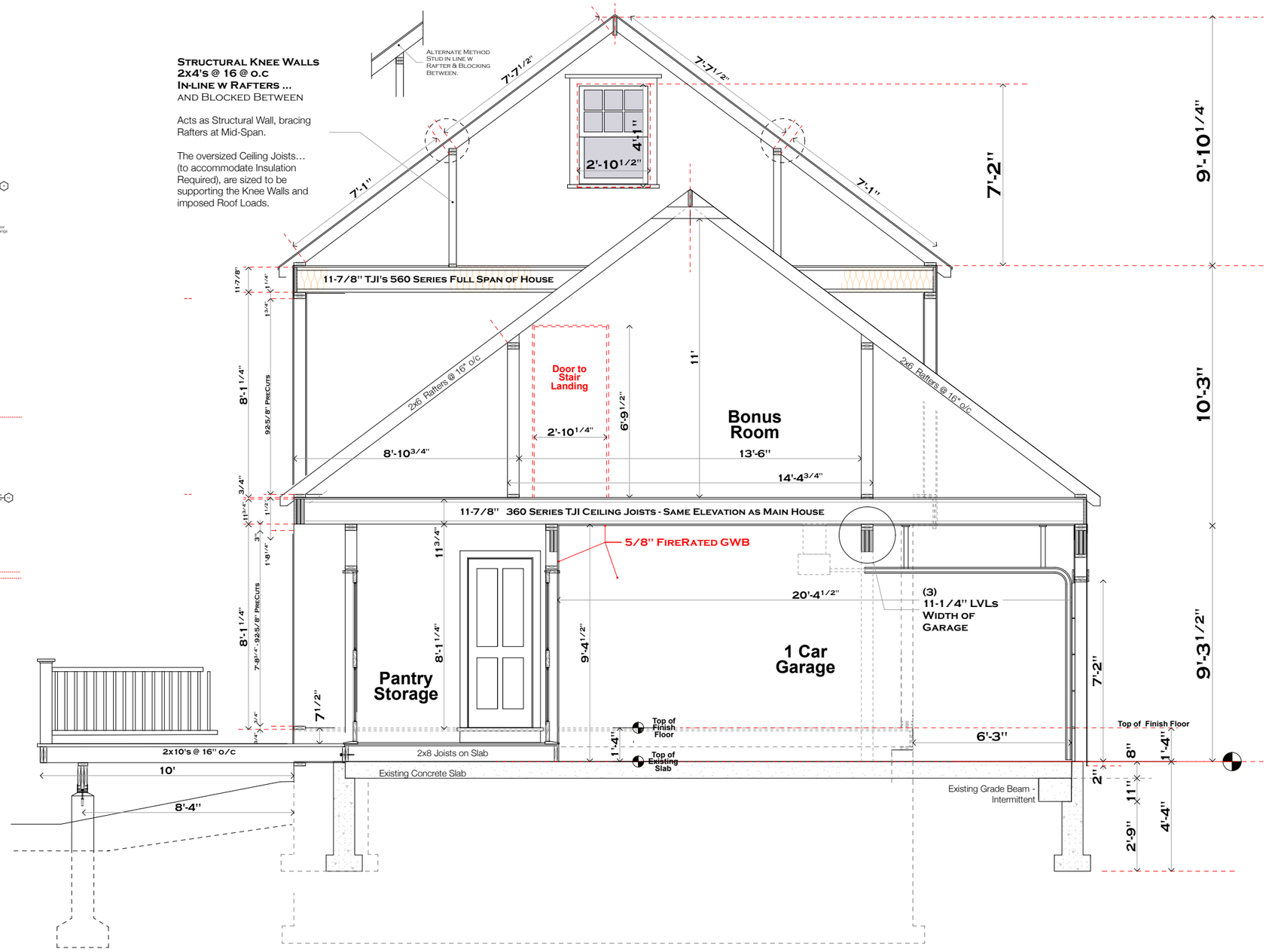




Structural Knee Walls
2x4's @ 16 @ o.c
In-line w Rafters ...
and Blocked Between

Acts as Structural Wall, bracing Rafters at Mid-Span.

The oversized Ceiling Joists… (to accommodate Insulation Required), are sized to be supporting the Knee Walls and imposed Roof Loads.



1 SECTION A - Looking South
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

Section A - Through Garage & Pantry

Scale (s)
1/2" = 1'-0", 1/8" = 1'-0"

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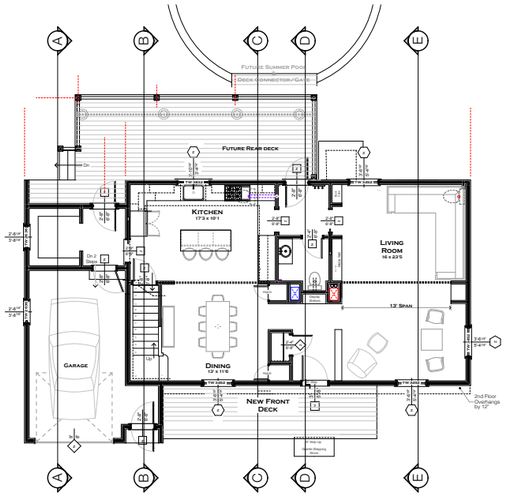

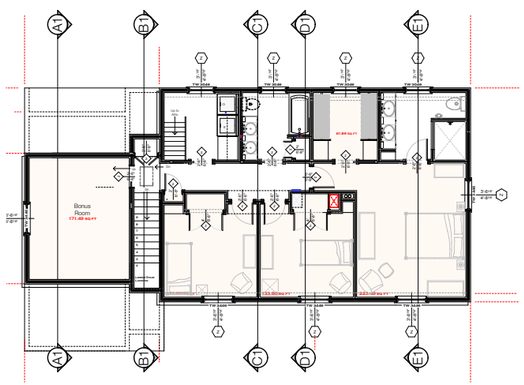

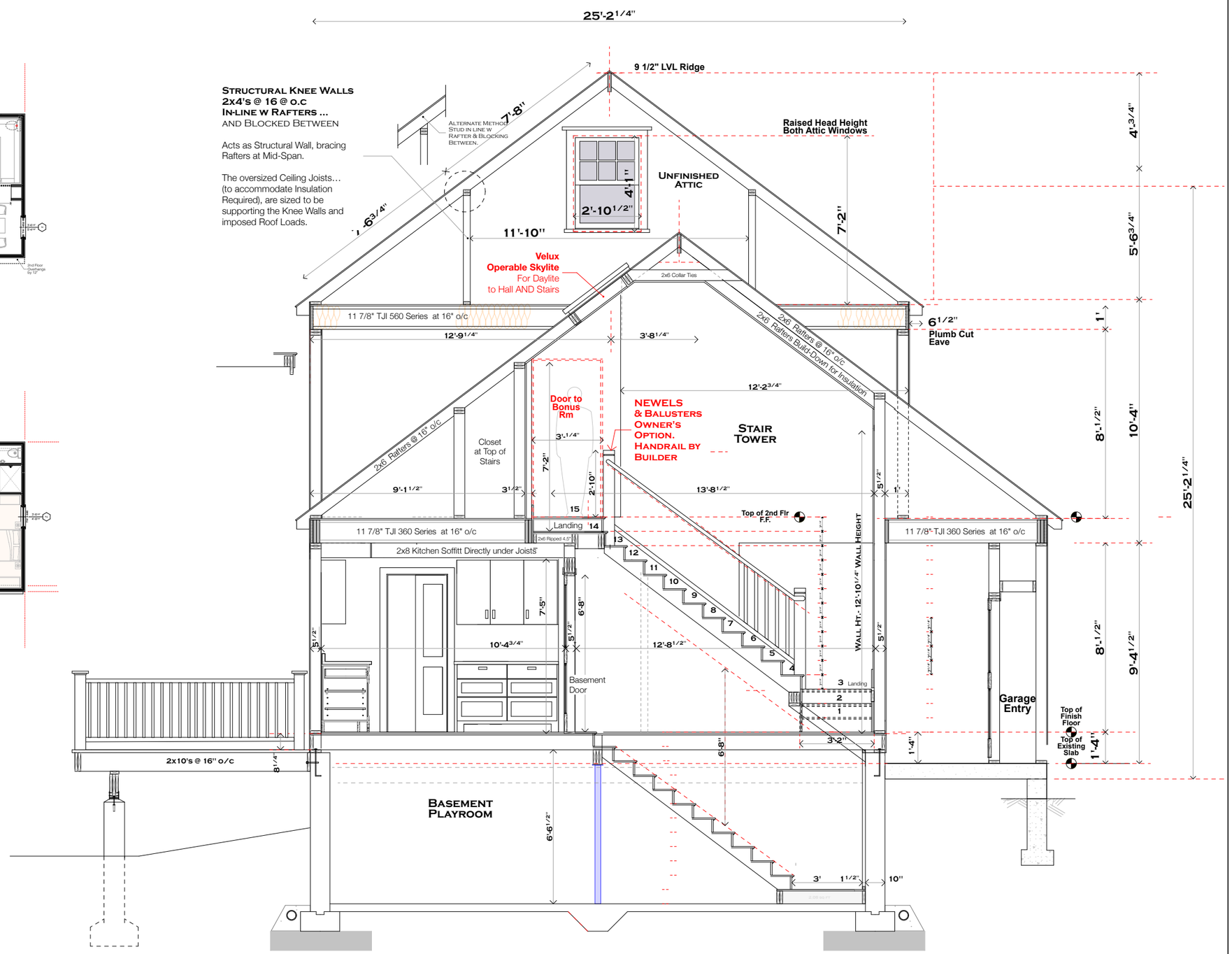

1 SECTION B - Looking South
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

Section B - Thru Stairs & Kitchen

Scale (s)
1/2" = 1'-0", 1/8" = 1'-0"

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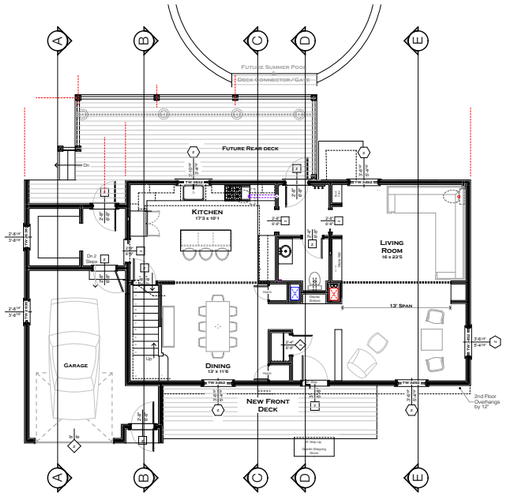

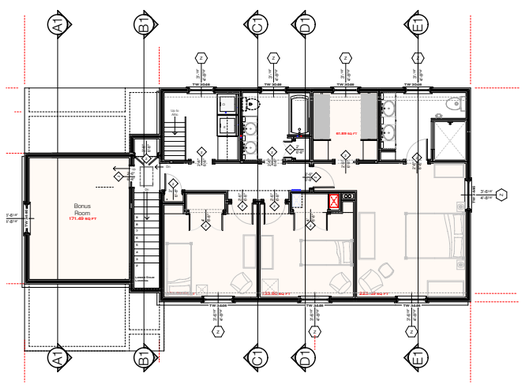

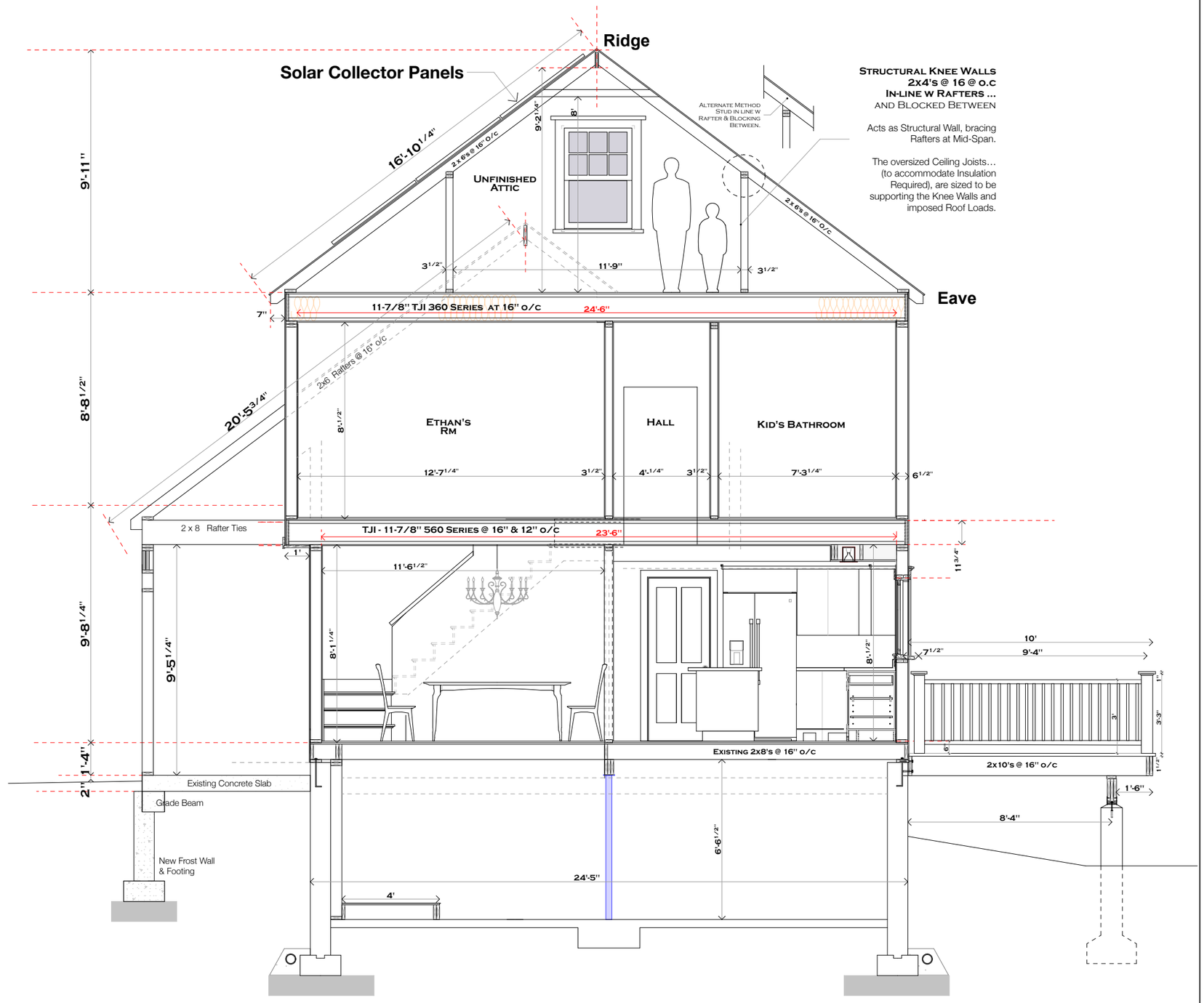

1 SECTION C - Looking North
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

Section C - Thru Kitchen & Stairs

Scale (s)
1/2" = 1'-0", 1/8" = 1'-0"

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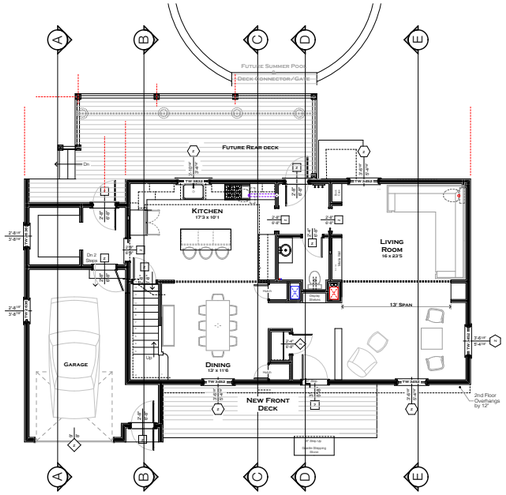

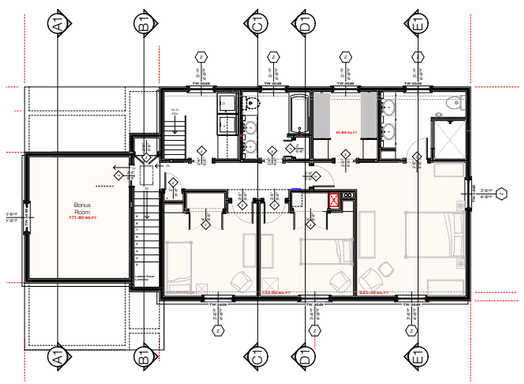

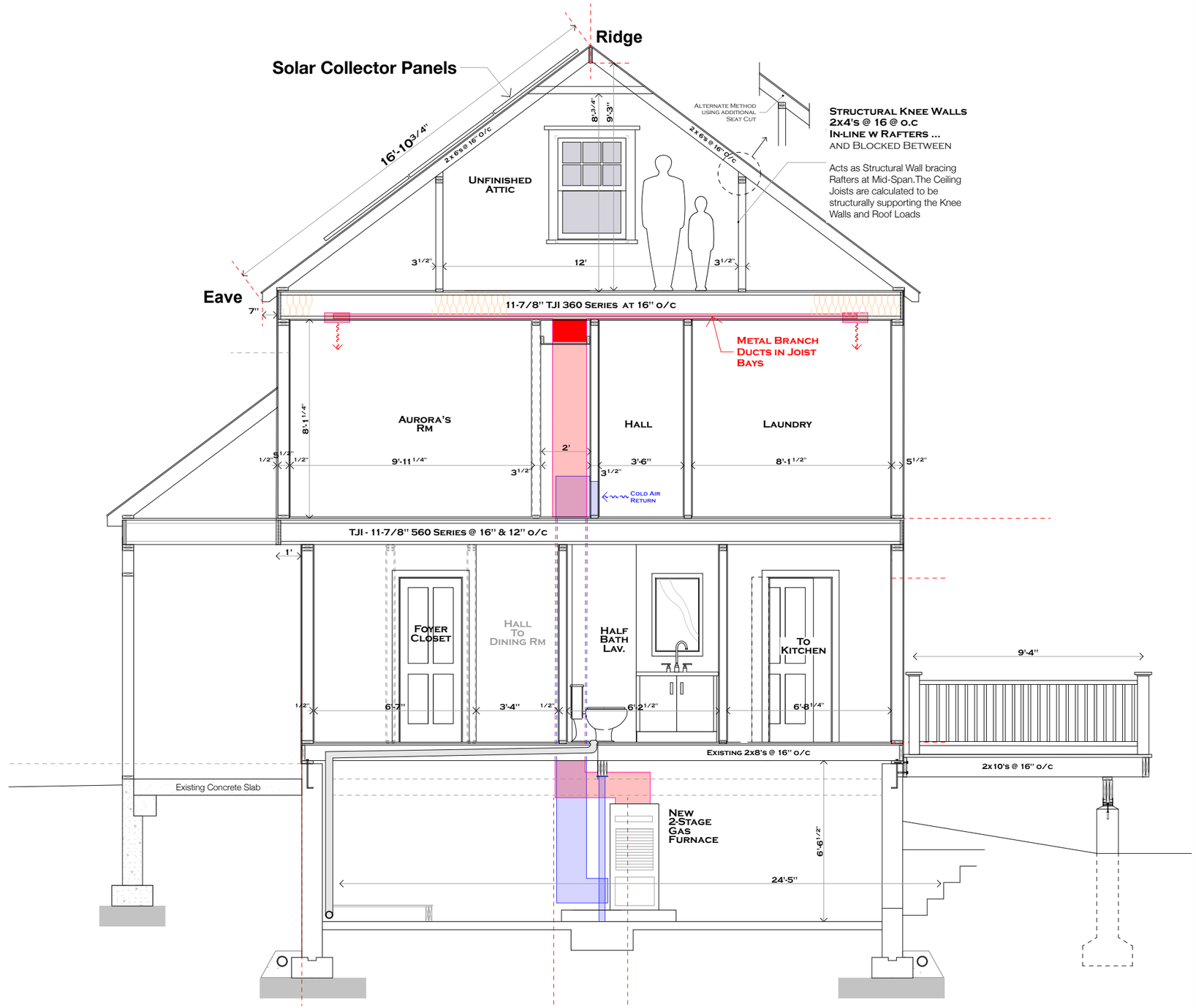

1 SECTION D - Looking North
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

Section D - Thru Laundry, Aurora's Rm, Half-Bath & Foyer

Scale (s)
1/2" = 1'-0", 1/8" = 1'-0"

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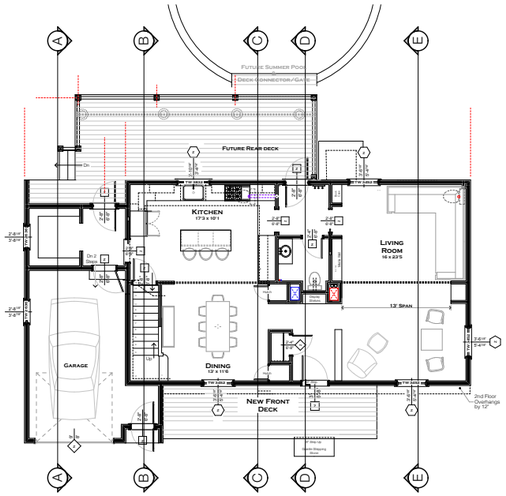

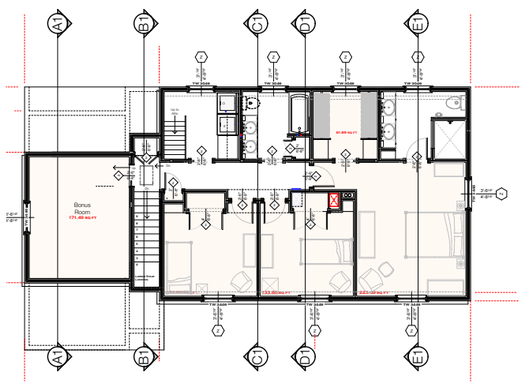

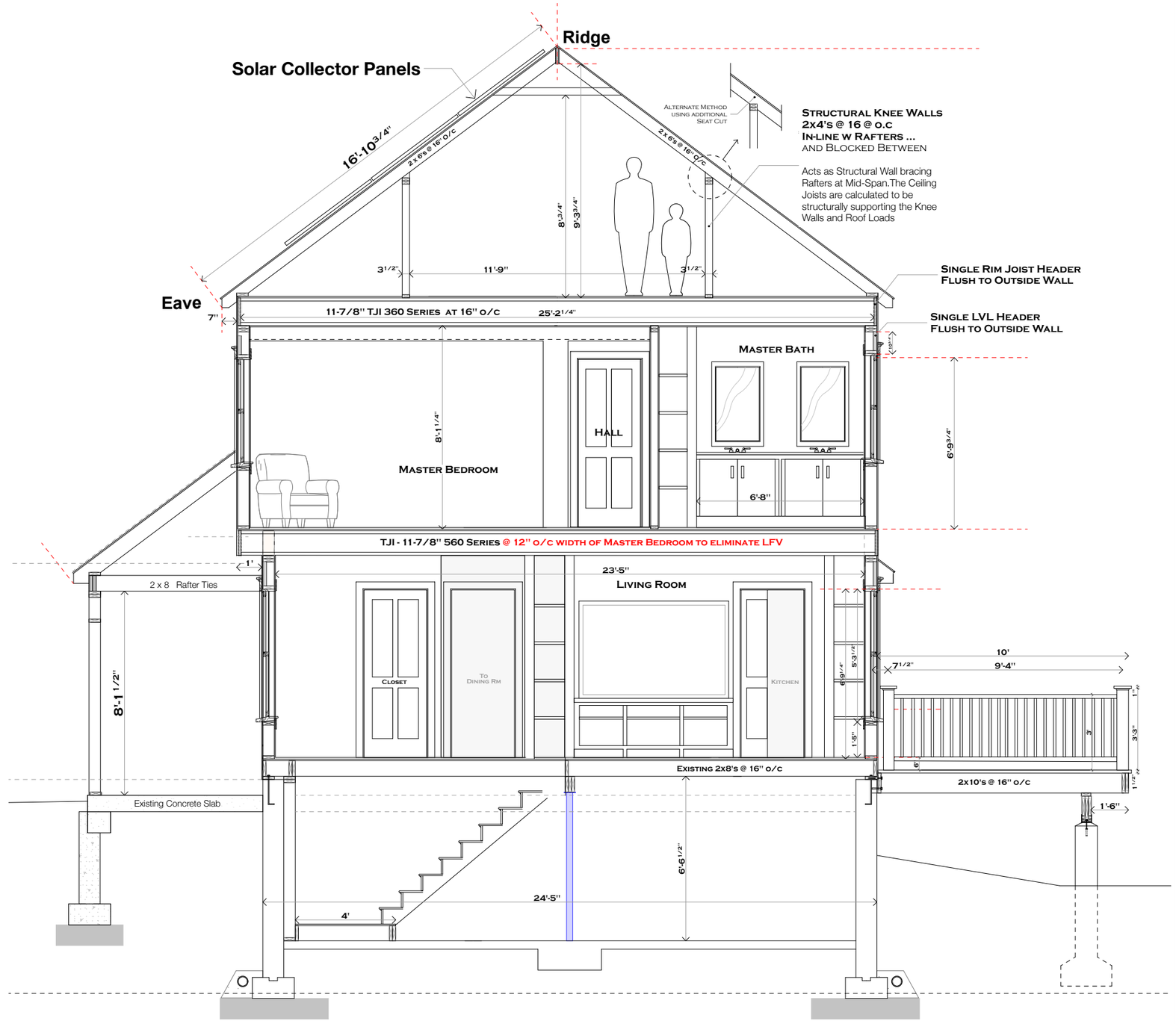

1 Section E - Looking North

Issue Date

12/31/18

Revisions

Section E - Living Room & MAster Bedroom/Bath

Scale (s)

1/2" = 1'-0", 1/8" = 1'-0"

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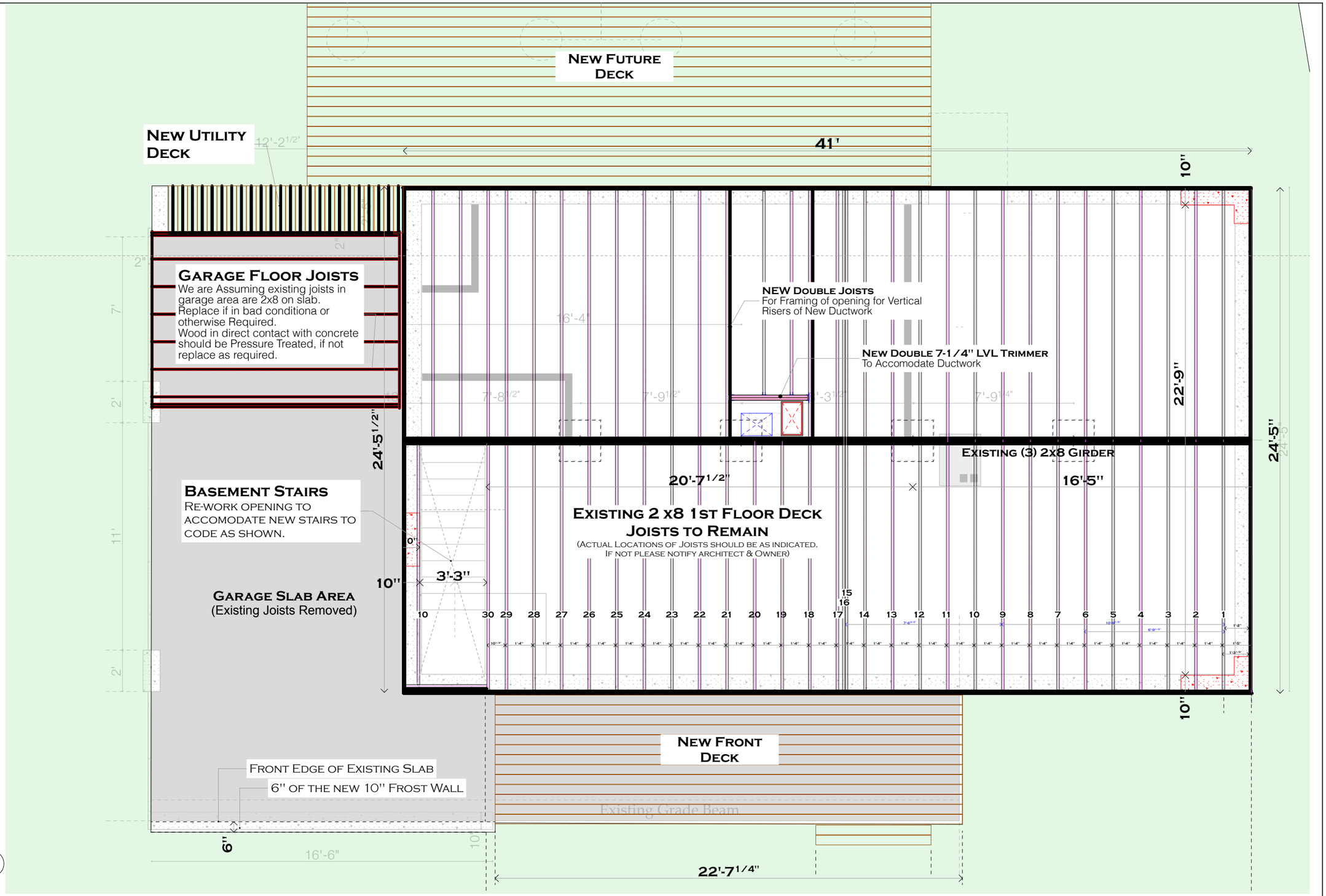

2 Basement & Foundation Underlay
SCALE: 1/2" = 1'-0"

1 Existing 1st Floor Deck Framing - Some Modifications for Ductwork
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

Existing 1st Floor Deck Structure & Ext. Decks/ Steps

Scale (s)
1/2" = 1'-0"

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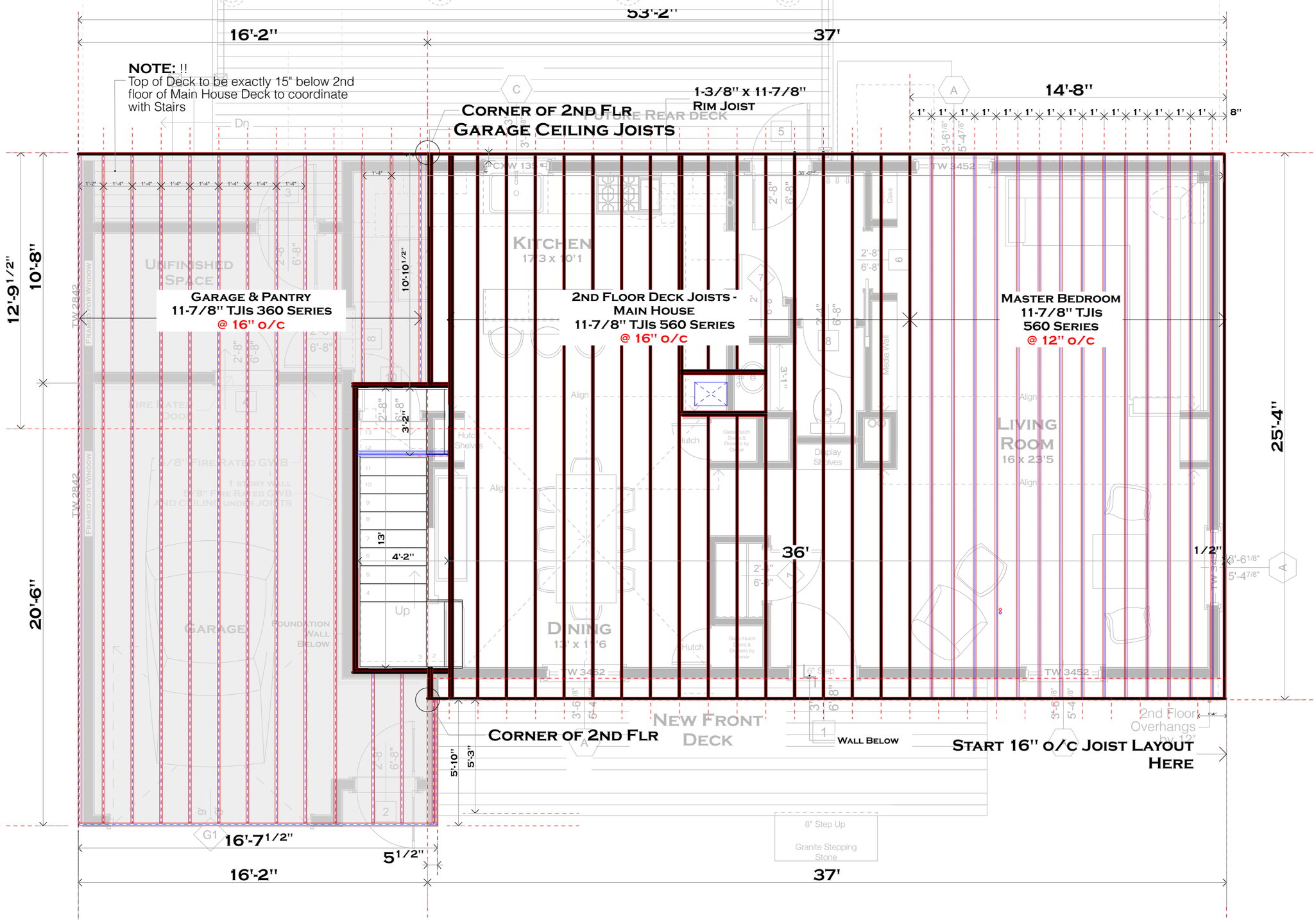

1 2nd Floor Deck Frame - 14" TJI's & 2x8's as Shown
SCALE: 1/2" = 1'-0"

2 South Elevation (Right Side)
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

2nd Floor Deck Framing

Scale (s)
1/2" = 1'-0"

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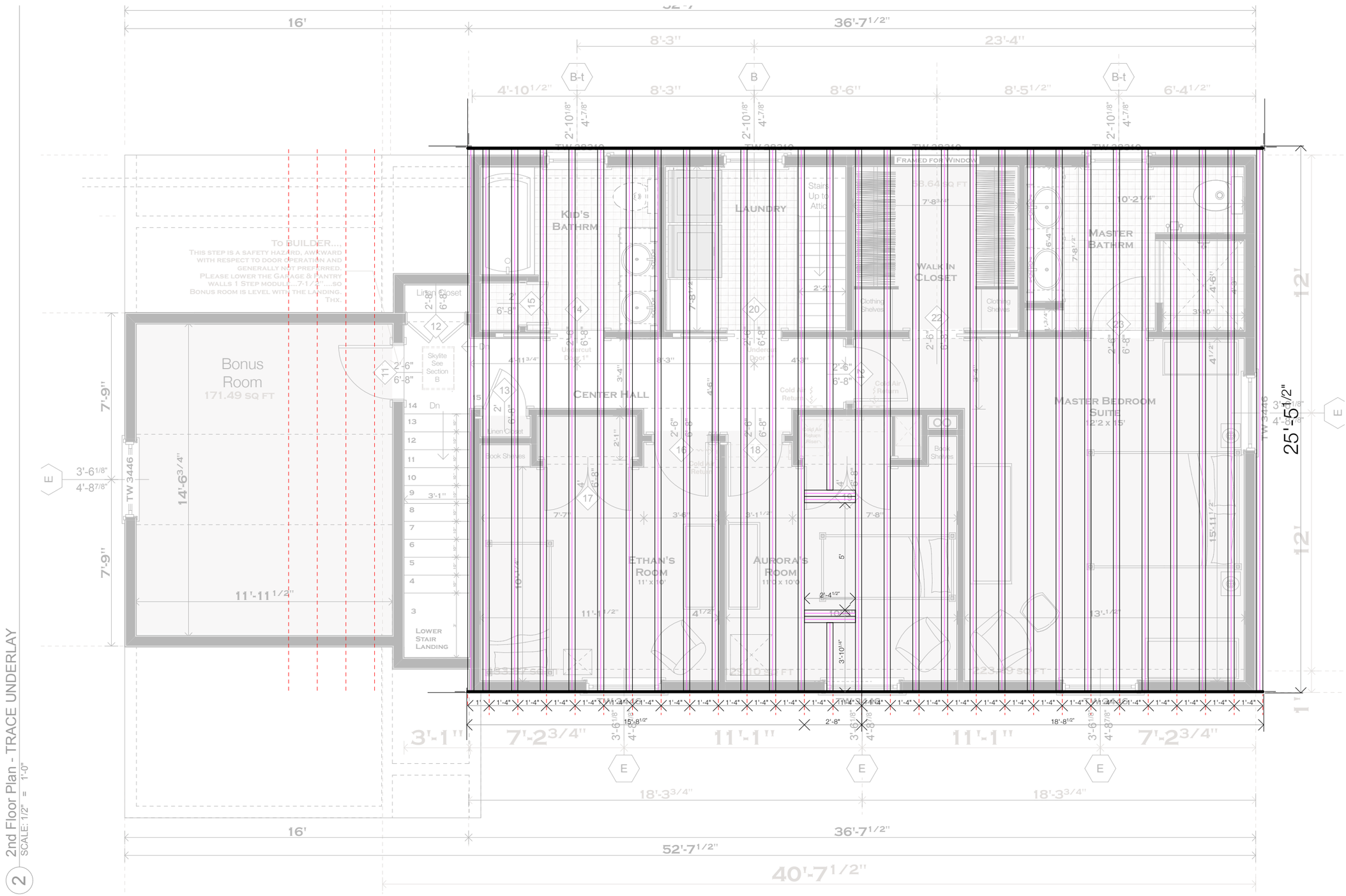
Rim Joi
14" TJI



2 2nd Floor Plan - TRACE UNDERLAY
SCALE: 1/2" = 1'-0"

1 ATTIC Floor - TJI Deck Framing
SCALE: 1/2" = 1'-0"

Issue Date
12/31/18

Revisions

Attic Floor Deck Framing

Scale (s)
1/2" = 1'-0"

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Electrical & Lighting Schedule

Floor	ID	...	Device	Room	Install/Mo...	Wat...	Am...	Volts	Color	notes:
1st Flo...	A		Ceiling Light - Sm...	DR Chandelier	Ceiling Surface					
1st Flo...	A	1	Recessed Light - ...	Garage Front Entry	Recessed					
1st Flo...	C		Ceiling Light - Sm...	Center Back Entry	Ceiling Surface					
1st Flo...	D		Ceiling Light - Sm...	Garage Left	Ceiling Surface					
1st Flo...	D		Ceiling Light - Sm...	Mudroom	Ceiling Surface					
1st Flo...	D		Ceiling Light - Sm...	Pantry	Ceiling Surface					
1st Flo...	D		Ceiling Light - Sm...	garage Right	Ceiling Surface					
1st Flo...	DR	1	Recessed Light - ...	Dining Rm Left	Recessed					
1st Flo...	DR	1	Recessed Light - ...	Dining Rm Right	Recessed					
1st Flo...	DR	1	Recessed Light - ...	Dining Rm Right	Recessed					
1st Flo...	DR	1	Recessed Light - ...	Dining Rm Right	Recessed					
1st Flo...	K	1	Recessed Light - ...	Island	Recessed					
1st Flo...	K	1	Recessed Light - ...	Island	Recessed					
1st Flo...	K	1	Recessed Light - ...	Kitchen Counter	Recessed					
1st Flo...	K	1	Recessed Light - ...	Kitchen Counter	Recessed					
1st Flo...	K	1	Recessed Light - ...	Kitchen Counter	Recessed					
1st Flo...	K	1	Recessed Light - ...	Kitchen Counter	Recessed					
1st Flo...	K	1	Recessed Light - ...	Kitchen Counter	Recessed					
1st Flo...	K	1	Recessed Light - ...	Kitchen Counter	Recessed					
1st Flo...	L	1	Ceiling Light - Sm...	Legend	--------					
1st Flo...	L	1	Recessed Light - ...	Legend	--------					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	LR	1	Recessed Light - ...	Living Rm	Recessed					
1st Flo...	Ob...	1	Vanity Strip - Sma...	Half Bath	Recessed					
1st Flo...	P		Ceiling Light - Sm...	Island Pendant	Ceiling Surface					
1st Flo...	P		Ceiling Light - Sm...	Island Pendant	Ceiling Surface					
1st Flo...	P		Ceiling Light - Sm...	Island Pendant	Ceiling Surface					

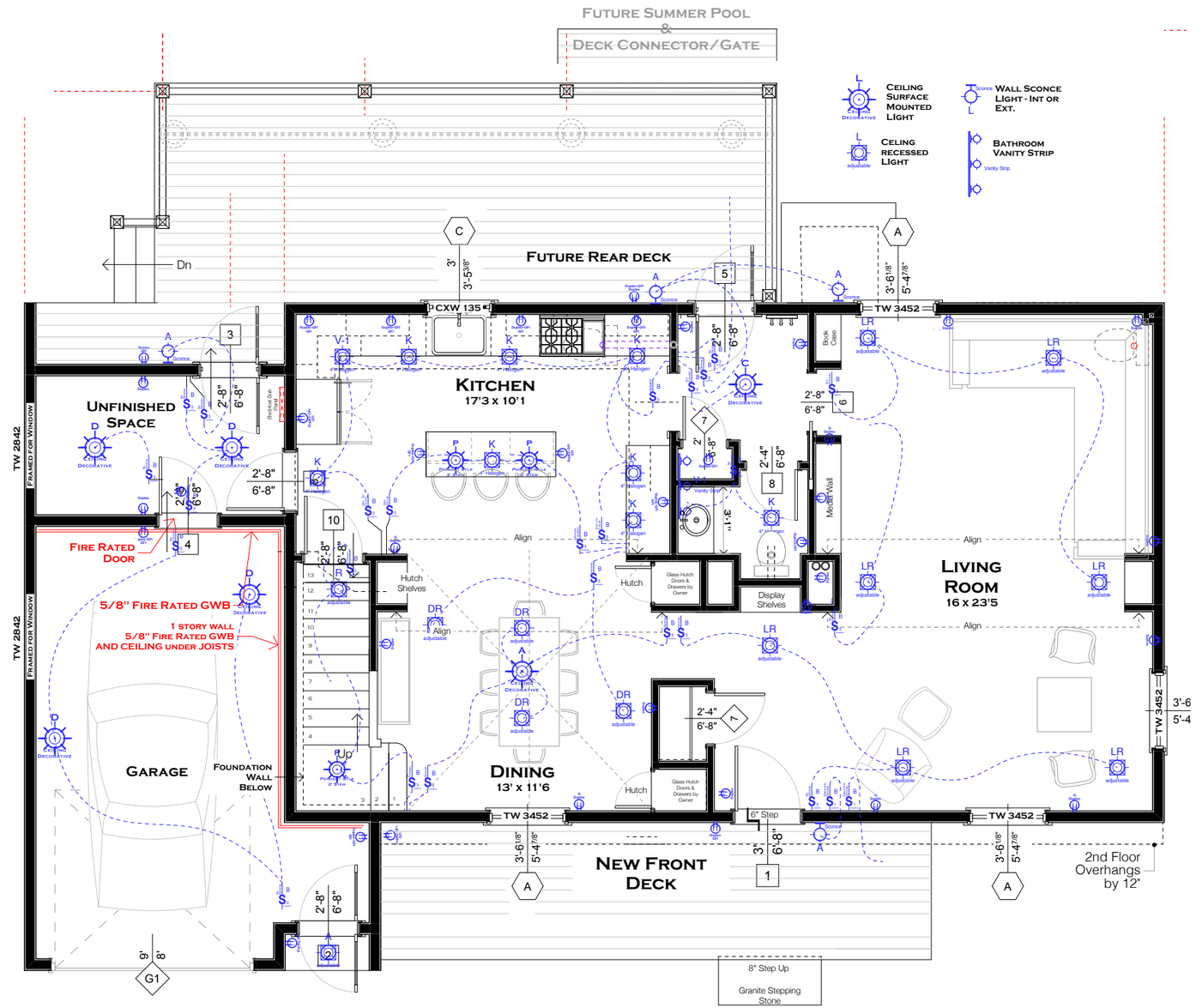
Outlets Schedule

Switch Schedule				
Floor	Description	Qty	Location	Color
1st Floor Plan - FINAL	Duplex	15	As Shown	White
1st Floor Plan - FINAL	Duplex-GFI	14	As Shown	White
29		29		
2nd Floor - FINAL	Duples-WM-110	1	Laundry	White
2nd Floor - FINAL	Duplex	6	As Shown	White
2nd Floor - FINAL	LK	1	As Shown	
8		8		
37		37		

1 2nd Floor Ductwork
SCALE: 1' = 1'-0"

Switch Schedule

Floor	Description	Qty	Location	Color
1st Floor Plan - FINAL	Duplex	15	As Shown	White
1st Floor Plan - FINAL	Duplex-GFI	14	As Shown	White
29		29		
2nd Floor - FINAL	Duples-WM-110	1	Laundry	White
2nd Floor - FINAL	Duplex	6	As Shown	White
2nd Floor - FINAL	LK	1	As Shown	
8		8		
37		37		



1 Electrical Plan
SCALE: 3/8" = 1'-0"

Issue Date
12/31/18

Revisions

Electrical Plan - 1st Floor

Scale (s)
1:1.3, 3/8" = 1'-0", 1:0.8, 1' = 1'-0"

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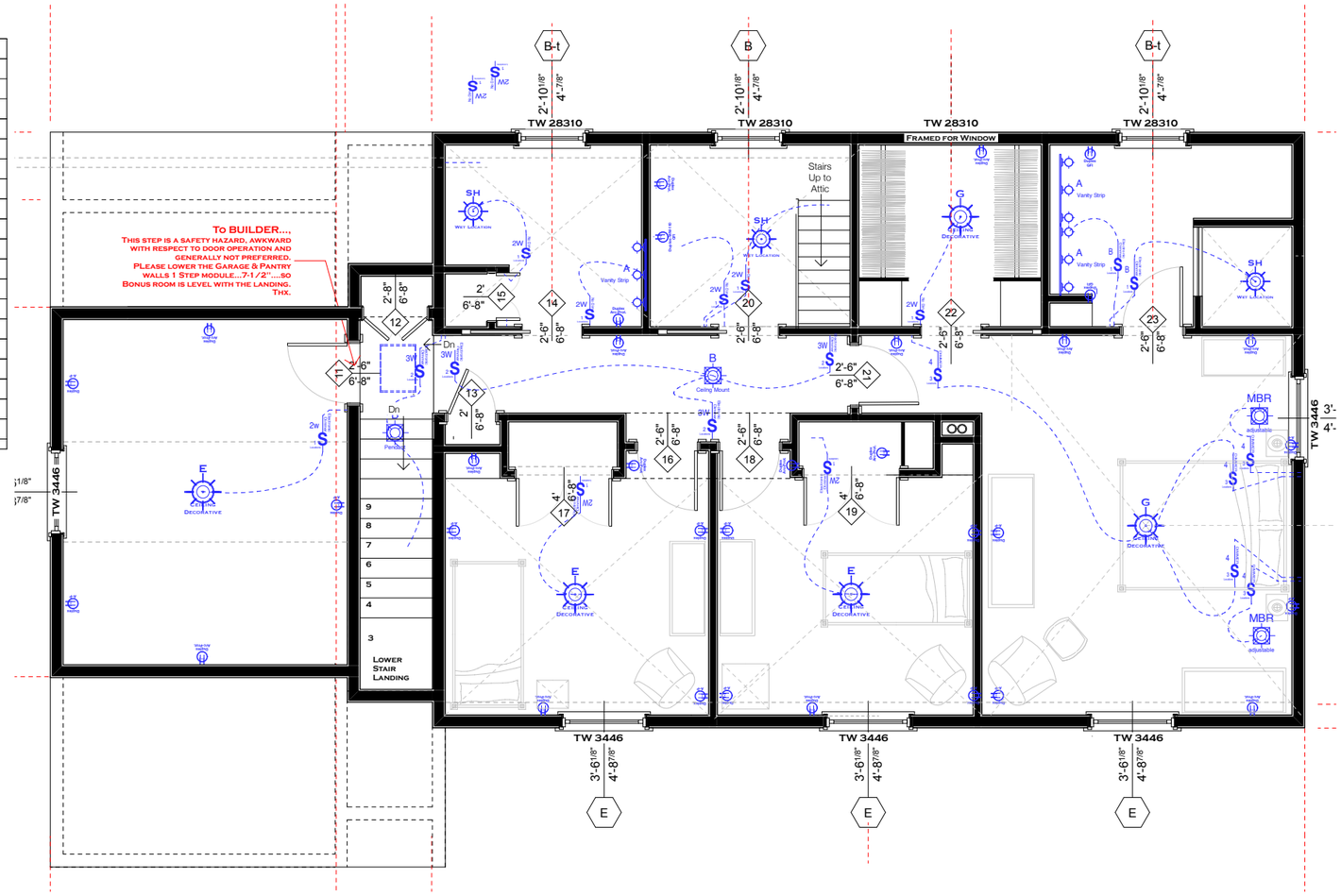
Electrical & Lighting Schedule

1st Flo...	R	1	Recessed Light - ...	Stair Landing 1-B	Recessed					
1st Flo...	V-1	1	Recessed Light - ...	Kitchen Counter	Recessed					
34			34							
2nd Flo...	A	1	Ceiling Light - Sm...	Legend	--------					
2nd Flo...	A	1	Recessed Light - ...	Legend	--------					
2nd Flo...	B	1	Recessed Light - ...	Hall @ Linen Closet	Recessed					
2nd Flo...	B	1	Recessed Light - ...	Hall @ Linen Closet	Recessed					
2nd Flo...	E	1	Ceiling Light - Sm...	Aurora's Center	Ceiling Surface					
2nd Flo...	E	1	Ceiling Light - Sm...	Ethans Center	Ceiling Surface					
2nd Flo...	E	1	Ceiling Light - Sm...	Ethans Center	Ceiling Surface					
2nd Flo...	G	1	Ceiling Light - Sm...	MBR Closet	Ceiling Surface					
2nd Flo...	G	1	Ceiling Light - Sm...	MBR over Bed	Ceiling Surface					
2nd Flo...	MBR	1	Recessed Light - ...	Living Rm	Recessed					
2nd Flo...	MBR	1	Recessed Light - ...	Living Rm	Recessed					
2nd Flo...	Ob...	1	Vanity Strip - Sma...	Kid's Bathrm	Wall over Mirror					
2nd Flo...	Ob...	1	Vanity Strip - Sma...	Legend	--------					
2nd Flo...	Ob...	1	Vanity Strip - Sma...	Master Bathrm	Wall over Mirror					
2nd Flo...	Ob...	1	Vanity Strip - Sma...	Master Bathrm	Wall over Mirror					
2nd Flo...	SH		Ceiling Light - Sm...	Master Bathrm	Ceiling Surface					
2nd Flo...	SH		Ceiling Light - Sm...	Master Bathrm	Ceiling Surface					

Outlets Schedule

2nd Floor - FINAL	Duples-WM-110	1	Laundry	White
2nd Floor - FINAL	Duplex	6	As Shown	White
2nd Floor - FINAL	LK	1	As Shown	
8		8		
37		37		



1 2nd Floor Electrical & Lighting Plan
SCALE: 3/8" = 1'-0"

Issue Date
12/31/18

Revisions

Electrical Plan - 2nd Floor

Scale (s)
3/8" = 1'-0", 1:1.3, 1:0.8

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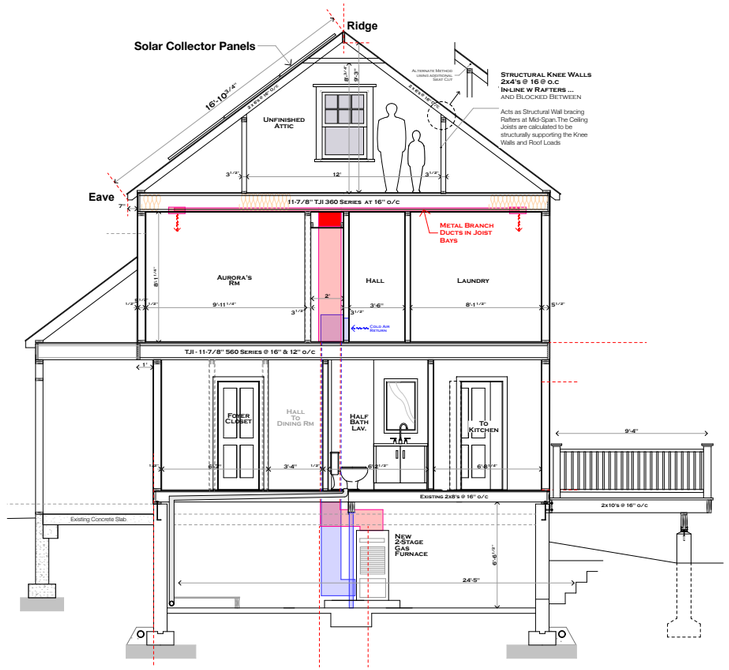


2 Section B - Looking South
SCALE: 1:49.9

HVAC DESIGN MODULE - Duct Sizing — September 7, 2018

Byron & Sophie Matto House

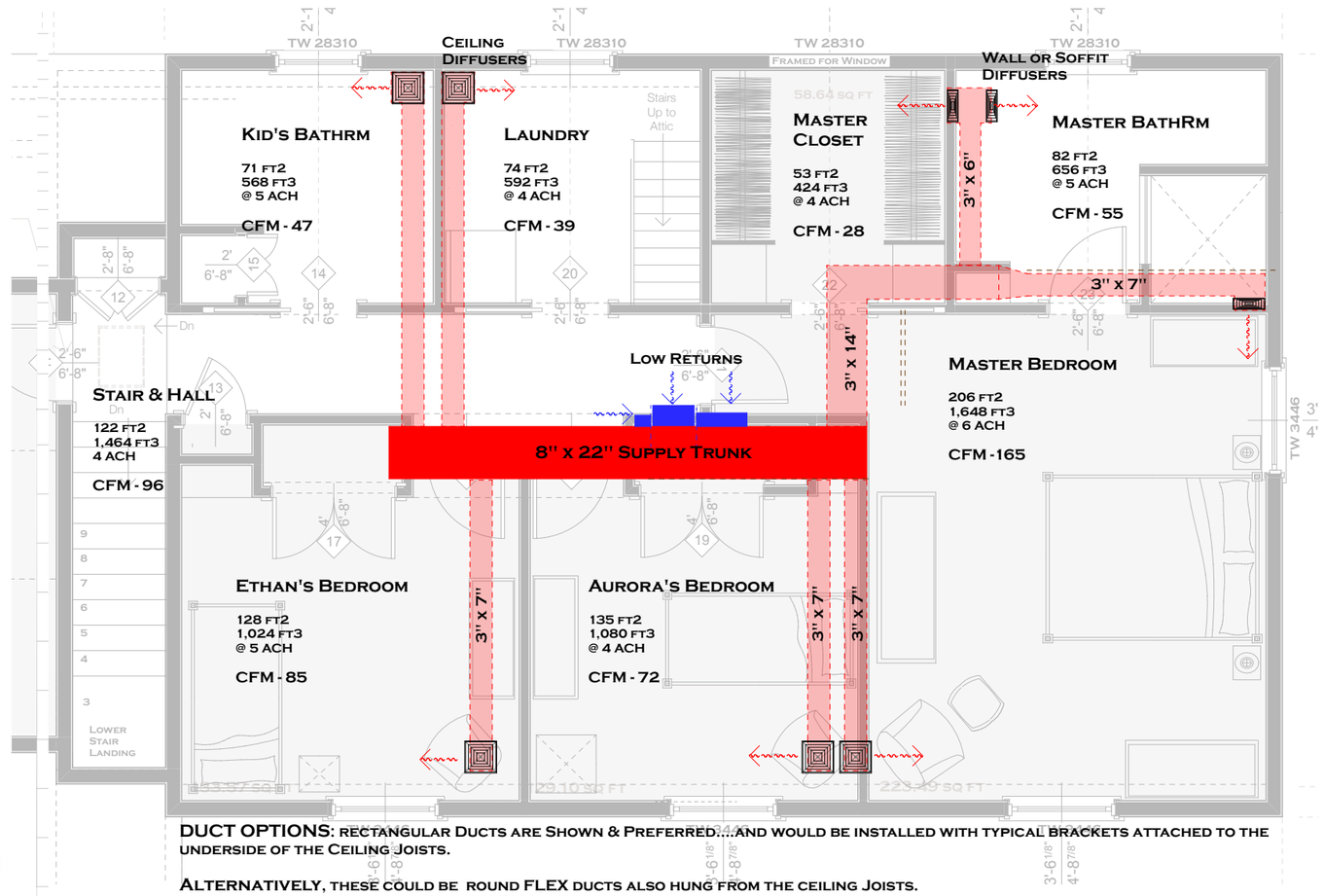
Assumptions: Windows at least R-3 and Tight
House either foamed or 2x6 with High Density FG batts & propoerly installedHouse Wrap
Basement walls Insulated OR Ceiling Joists of Basement OR

ACH - Air Changes per Hour based on standard well insulated house.
Friction Loss in Ducts =.1 CFM per 100ft of duct
Duct Velocity - Main Supply 1,000 FPM
Duct Velocity - Main Return 1,000 FPM
Duct Velocity - Branch Supply 600 FPM

2nd Floor

Room/Space	Area	Height	Volume	ACH	Total	CFM Req.	Duct Sizes Inches: Rnd. Diam.	Rnd. Cross Sectional Area	Rnd. # of Branch Ducts	Rect. Ht.	Rect. Width
Ethan's Bedroom	128	8	1,024	5	5,120	85	5.5	23.8	1	3.0	8
Aurora's Bedroom	135	8	1,080	4	4,320	72	5.3	22.1	1	3.0	7
Master Bedroom	206	8	1,648	6	9,888	165	~~7.3~~	~~41.3~~	~~1~~	~~3.0~~	~~14~~
							7.3	41.3	2	3.0	7
Master Bathroom	82	8	656	5	3,280	55	4.8	17.7	1	3.0	6
Master Closet	53	8	424	4	1,696	28	4.0	12.6	1	3.0	4
Laundry	74	8	592	4	2,368	39	4.0	12.6	1	3.0	4
Kid's Bathroom	71	8	568	5	2,840	47	4.0	12.6	1	3.0	4
Stairs & Hall	122	12	1,464	4	5,856	98	6.0	28.3	1	3.0	9
2nd Floor - Trunk Line								170.8		8.0	21.35

1.1 2nd Floor Ductwork - Trace Underlay
SCALE: 1:25.7



DUCT OPTIONS: Rectangular Ducts are Shown & Preferred....and would be installed with typical brackets attached to the underside of the Ceiling Joists.

Alternatively, these could be round FLEX ducts also hung from the ceiling Joists.
In both cases, the duct runs both MAIN and BRANCH would be soffited with simple 3/4" plywood enclosures, that then get sheetrocked.

NOTE: All 2nd Floor Doors to be Undercut 1" for Return Air Flow

1 2nd Floor Ductwork
SCALE: 1:25.7

Issue Date
12/31/18

Revisions

HVAC - 2nd Floor Ceiling

Scale (s)
1:25.7, 1:49.9, 1:32.5

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1 Clapboard, Vinyl or other Harsh Horizontal Siding
SCALE: 1:36

2 Shingle - Warm & Fuzzy Style
SCALE: 1:36

Issue Date
12/31/18

Revisions

Elevations - Shingles vs Clapboard

Scale (s)
1:36

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Issue Date

12/31/18

Revisions

HVAC - 1st Floor

Scale (s)

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Issue Date

12/31/18

Revisions

Rafter Framing & Eaves Detail

Scale (s)

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