

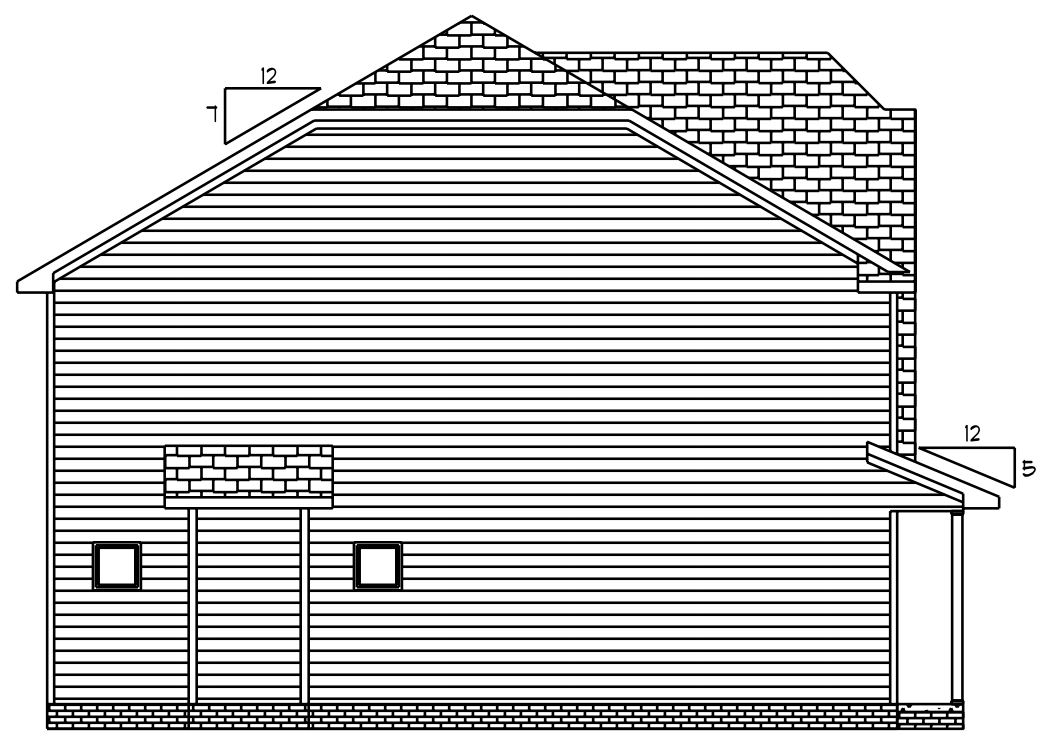
NOTICE TO CONTRACTOR:  
 All construction must comply with current NC Building Codes and is subject to field inspection and verification.

**APPROVED**  
 Limited building only review  
 Permit holder responsible for full compliance with the code

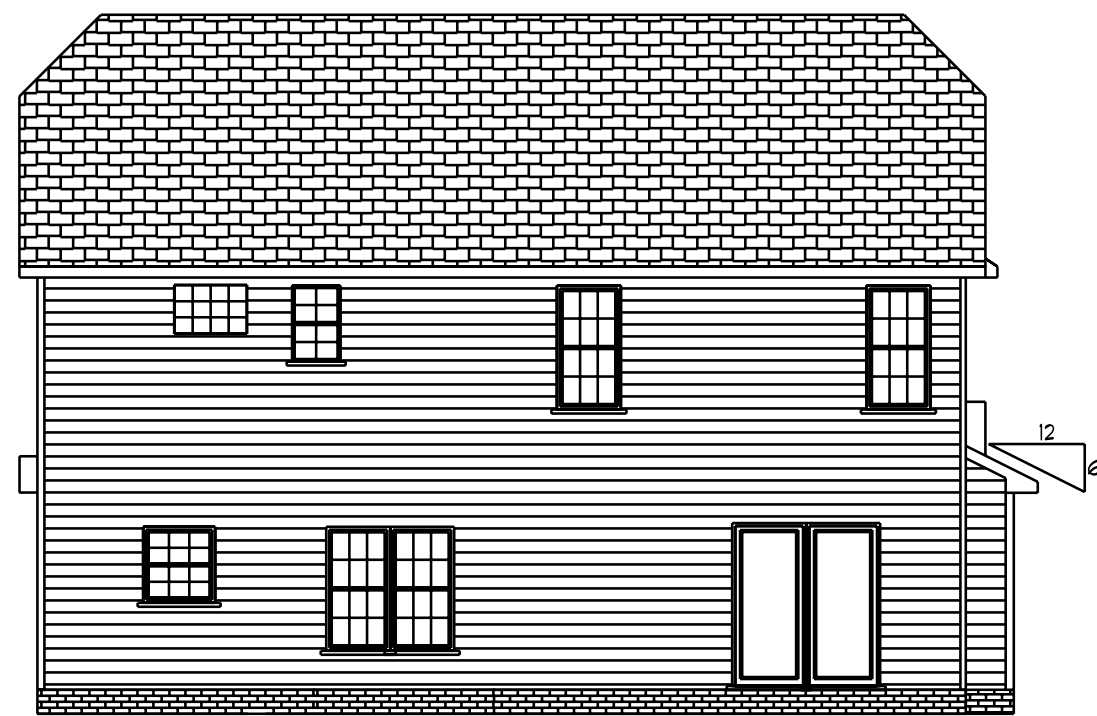
06/01/2021



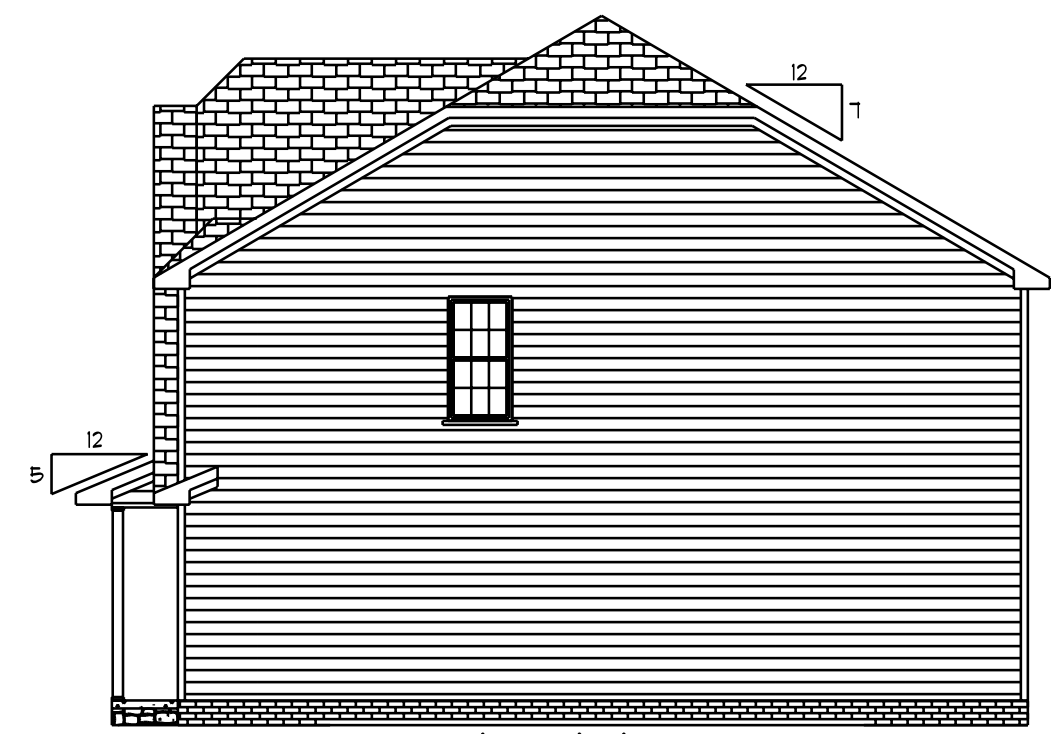

**Front Elevation**  
 Scale: 1/4" = 1'0"



**Left Elevation**  
 Scale: 1/4" = 1'0"



**Rear Elevation**  
 Scale: 1/4" = 1'0"

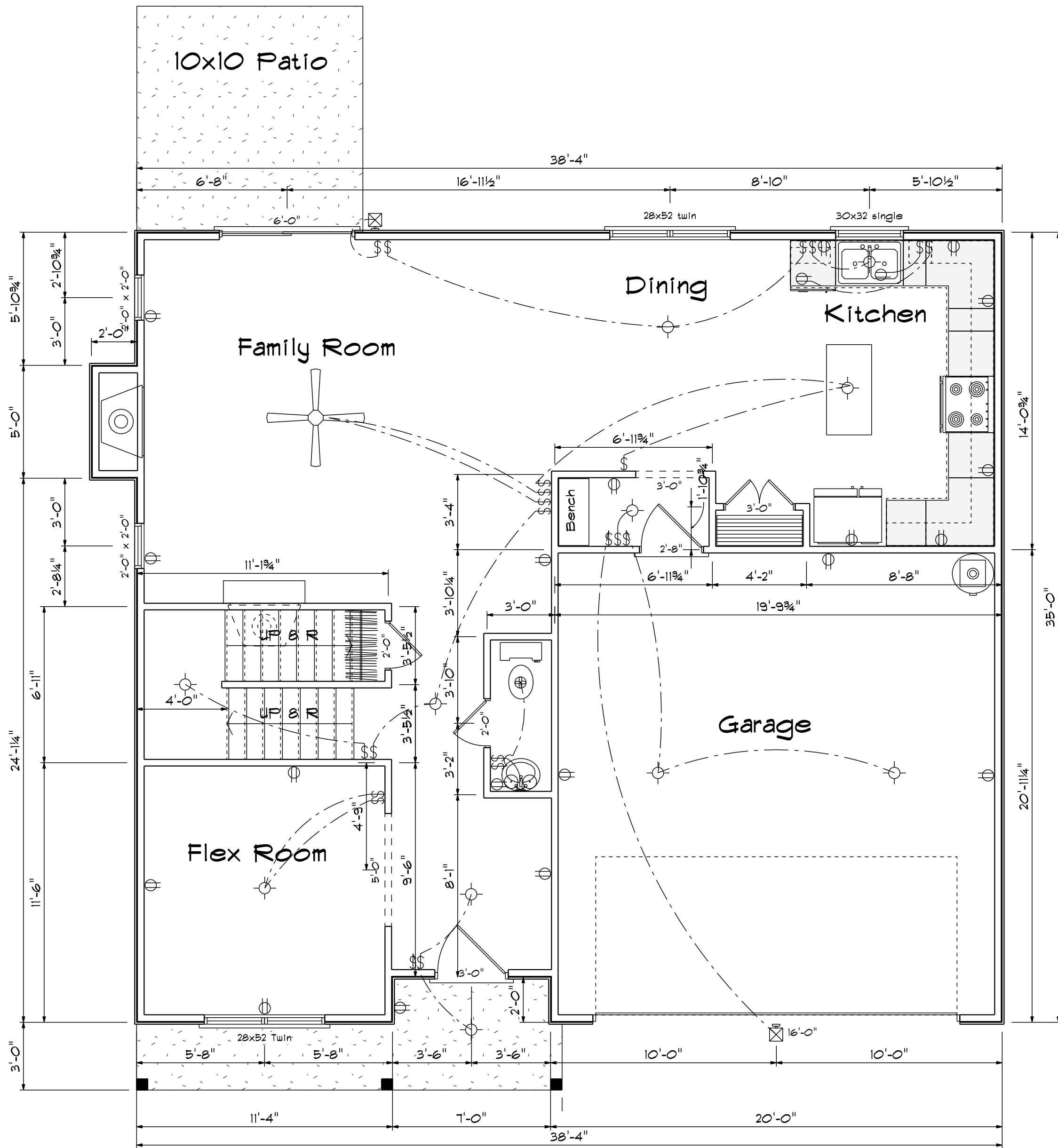


**Right Elevation**  
 Scale: 1/4" = 1'0"

BBH-2052

**The Cypress**

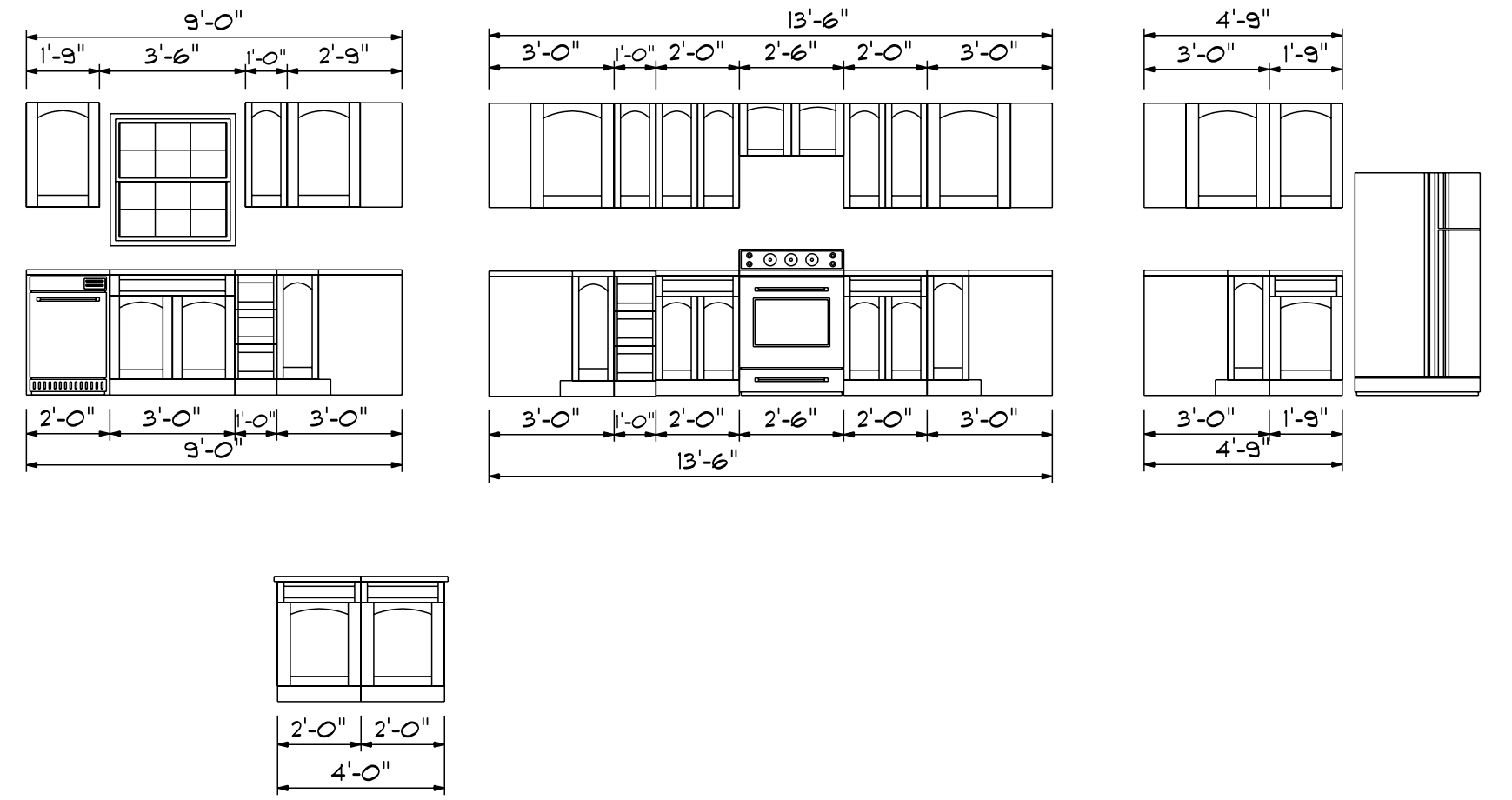
SCALE: 1/4"	DATE: Tuesday, May 12, 2020	Base Designs
DRAWN BY	REVISED	2121 Chimney Pt.
APPROVED	DRAWING#	Linden, N.C. 28356
		910-864-9310



# First Floor Plan

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

## Kitchen Cabinets



FIRST FLOOR OPENING SCHEDULE			
PRODUCT CODE	SIZE	HINGE	COUNT
36X80 COLONIAL A	3'-0"	R	1
7X16 GARAGE DOOR	16'-0"	U	1
72X80 SLIDING FRENCH 2	6'-0"	NL	1
20 colonial	2'-0"	L	1
20 colonial	2'-0"	R	1
30 doublehung colonial	3'-0"	LR	1
32X80 COLONIAL A 1	2'-8"	R	1
24X24 CASEMENT 1	2'-0" x 2'-0"	N	2
28x52 Twin	5'-4" x 5'-2"	NA	1
28x52 twin	5'-4" x 5'-2"	NA	1
30x32 single	3'-0" x 3'-2"	N	1

## Areas

First Floor	942
Second Floor	1270
=====	
Total Heated	2212
Garage	413
Porch	70

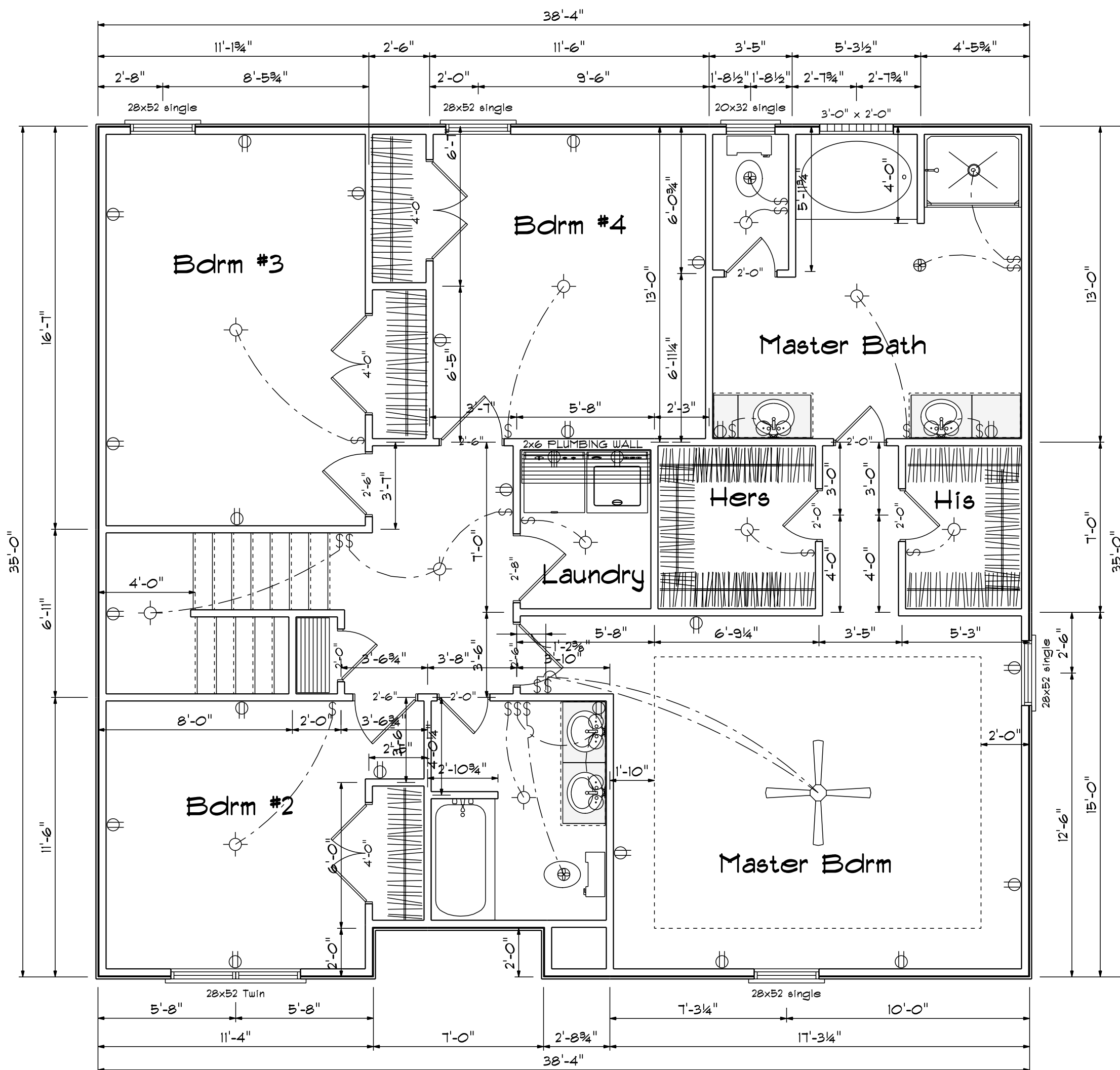
Base Designs  
2121 Chimney Pt.  
Linden, N.C. 28356  
910-864-9310

DATE: Tuesday, May 12, 2020  
REVISED  
DRAWING#

SCALE: 1/4"  
DRAWN BY  
APPROVED

# The Cypress

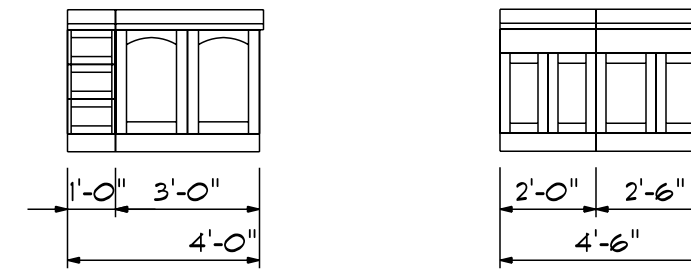
BBH-2052



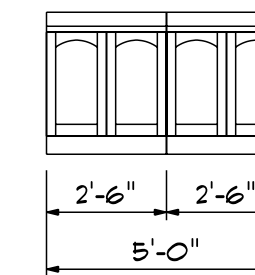
## Second Floor Plan

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

### Master Bath Cabinets

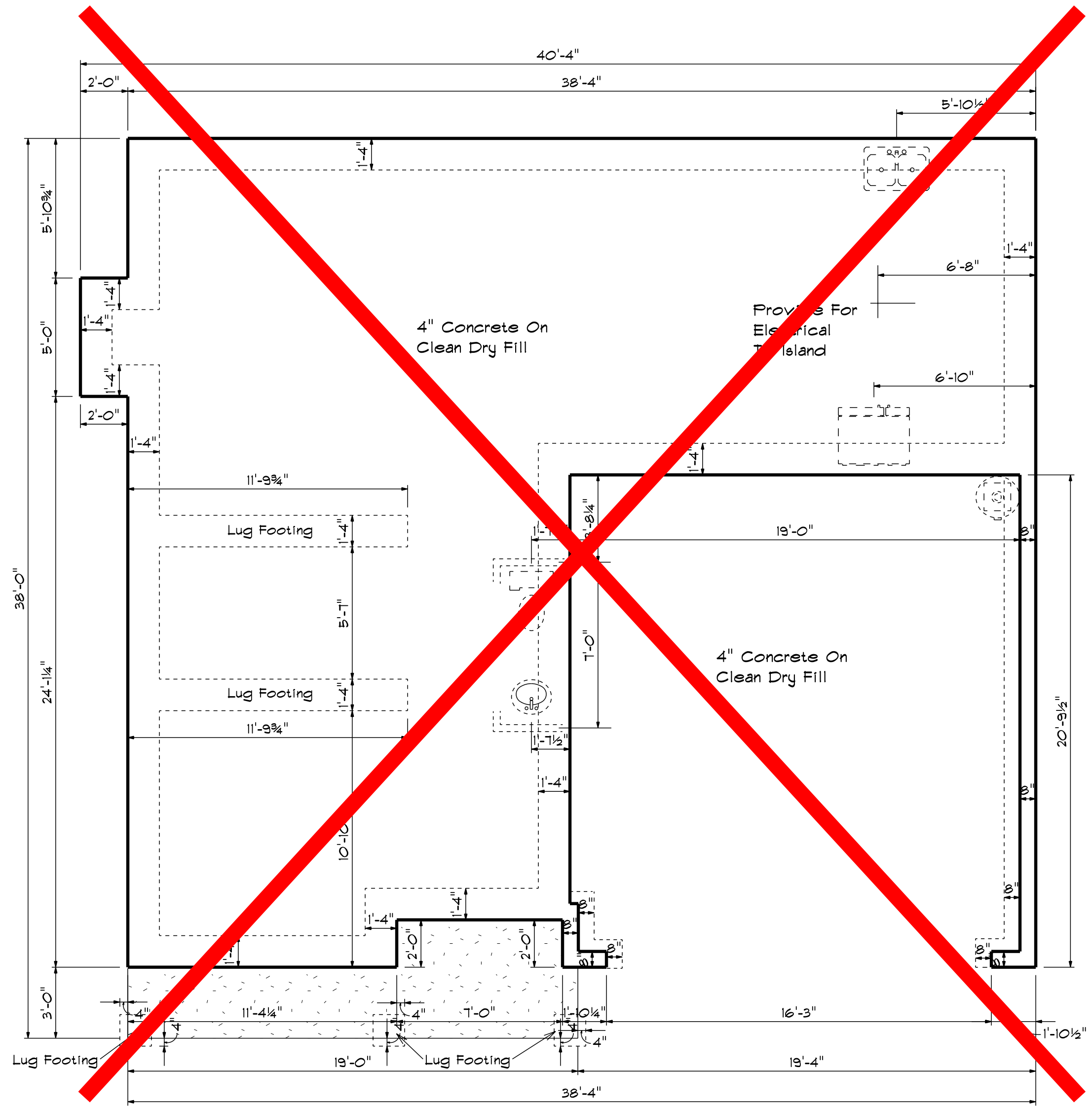


### Hall Bath Cabinets



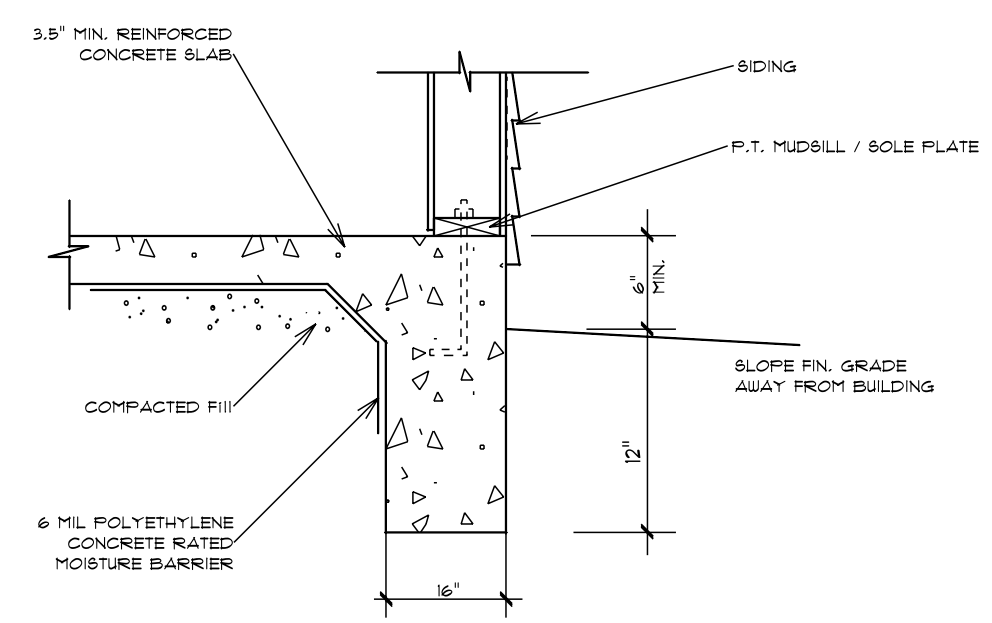
#### SECOND FLOOR OPENING SCHEDULE

PRODUCT CODE	SIZE	HINGE	COUNT
2-0 Door Unit	2'-0"	R	1
20 colonial	2'-0"	L	2
20 colonial	2'-0"	R	3
26 colonial	2'-6"	L	4
4-0 Doublehung Door Unit	4'-0"	LR	1
40 doublehung colonial	4'-0"	LR	2
32X80 COLONIAL A 1	2'-8"	R	1
20x32 single	2'-0" x 3'-2"	N	1
28x52 Twin	5'-4" x 5'-2"	NA	1
28x52 single	2'-8" x 5'-2"	N	4
6X6 GLASS BLOCK	3'-0" x 2'-0"	N	1

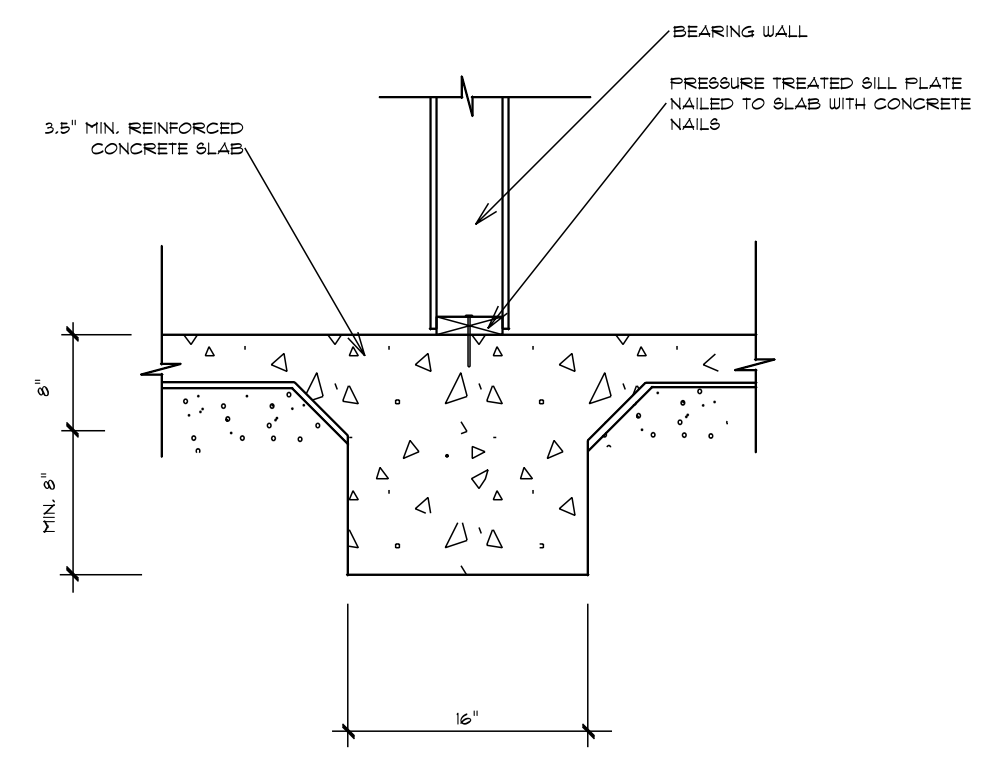


### Foundation Plan

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



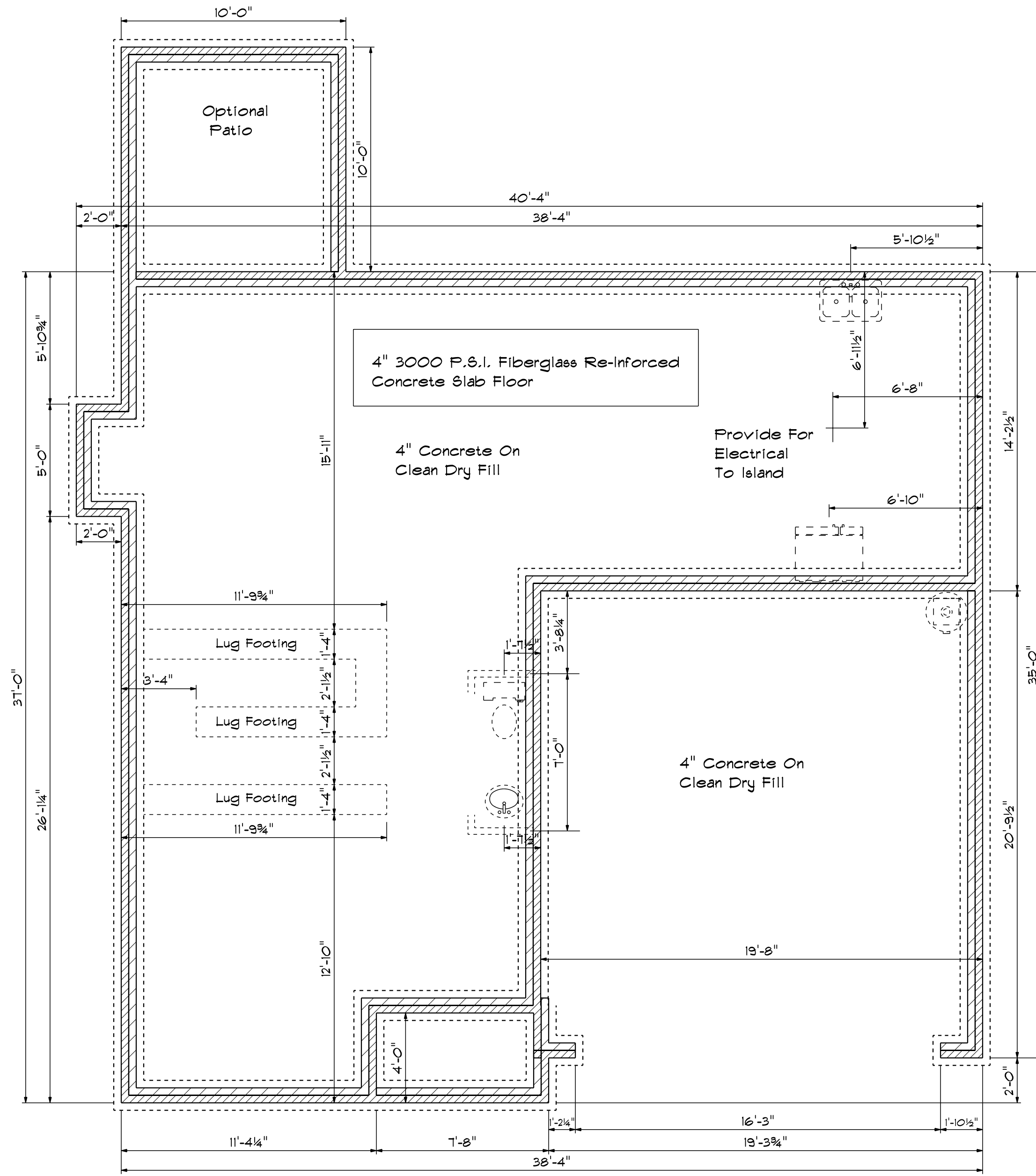
TURN-DOWN FOOTING DETAIL



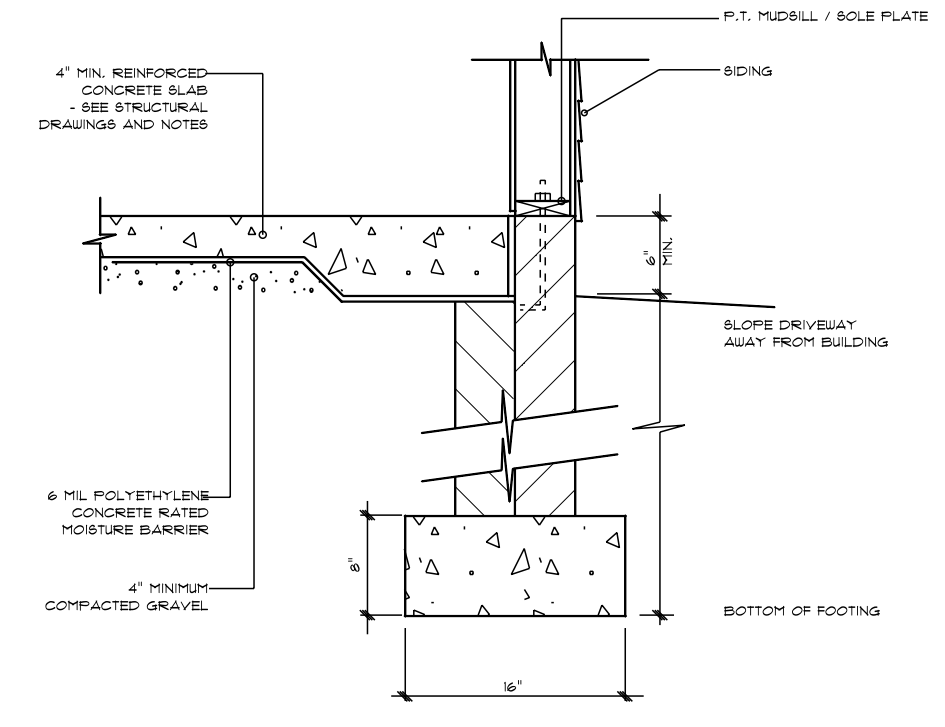
INTEGRAL SLAB FOOTING DETAIL AT BEARING WALL

SEE UPDATED FOUNDATION PLAN

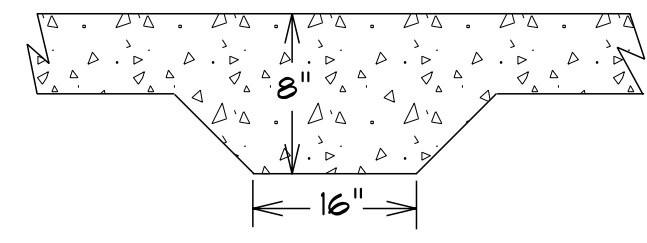
BBH-2052	The Cypress			Bass Design 2727 Chimney Pt. Linden, N.C. 28356 910-864-9310
	SCALE: 1/4"	DRAWN BY	APPROVED	
DATE: Tuesday, May 12, 2020	REVISED	DRAWING#		



**Foundation Plan**  
 Scale: 1/4" = 1'-0"



STEM WALL FOOTING DETAIL



LUG FOOTING DETAIL

Base Designs  
 2121 Chimney Pt.  
 Linden, N.C. 28356  
 910-864-9310

DATE: Monday, April 5, 2021  
 REVISED  
 DRAWING#

SCALE: 1/4"  
 DRAWN BY  
 APPROVED

BBH-2052



# ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

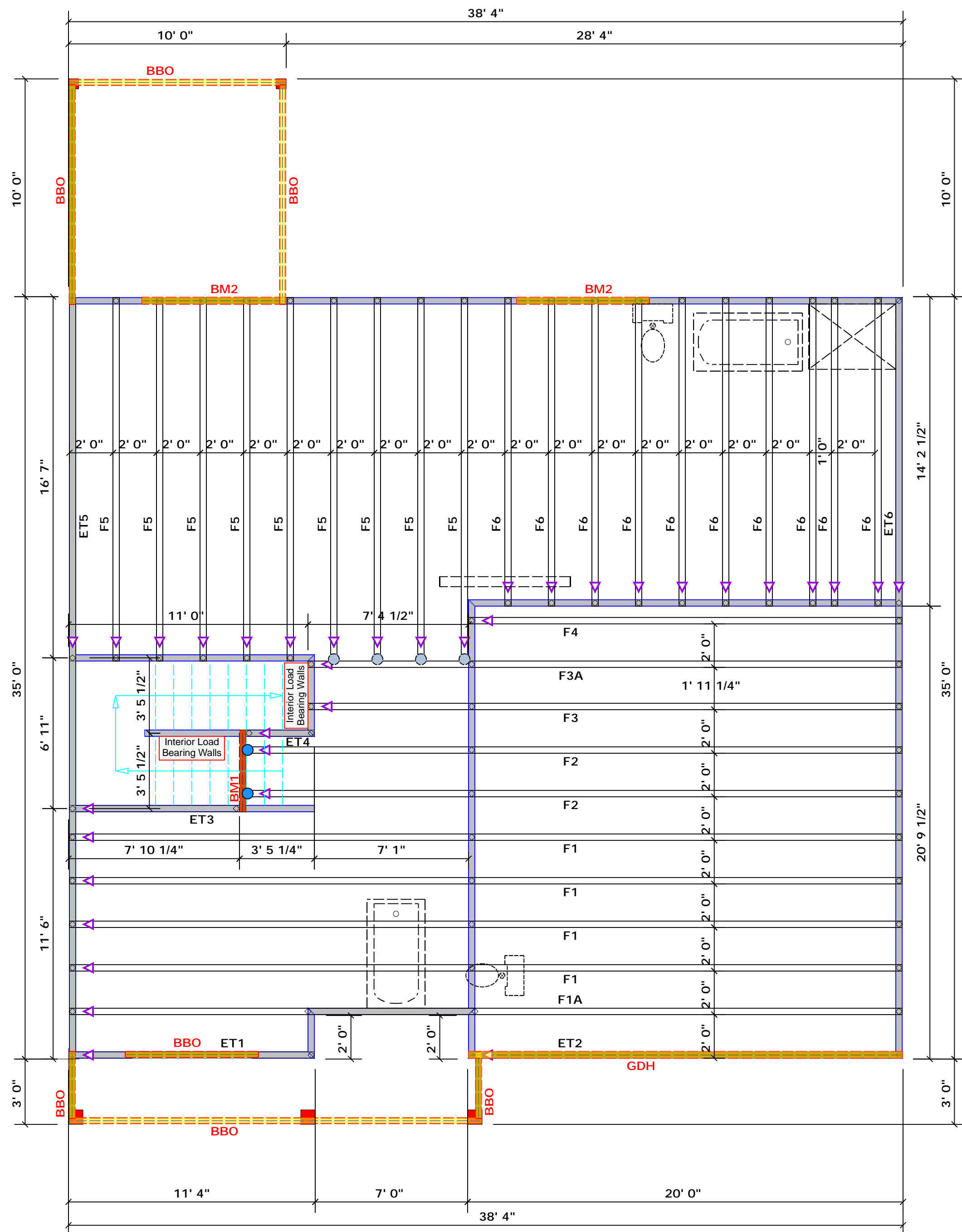
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry  
David Landry

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES ROEHLIC 6 (3))  
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (IP TO)	REQ'D JACKS FOR (IP TO) HEADER	END REACTION (IP TO)	REQ'D JACKS FOR (IP TO) BEAM	END REACTION (IP TO)	REQ'D JACKS FOR (IP TO) BEAM
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				



PlotID	Length	Product	Plies	Net Qty
BM1	4' 0"	1-3/4"x 16" LVL Kerto-S	2	2
BM2	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	4
GDH	20' 0"	1-3/4"x 18" LVL Kerto-S	2	2

1 Truss Placement Plan  
Scale: 1/4"=1'

All Walls Shown Are Considered Load Bearing

**Dimension Notes**

1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	MSH422	USP	4	Varies	10d/3"	10d/3"
●	HUS410	USP	2	NA	16d/3-1/2"	16d/3-1/2"

**Plumbing Drop Notes**

1. Plumbing drop locations shown are NOT exact.
2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
3. Adjust spacing as needed not to exceed 24"oc.

BUILDER	Ben Stout Real Estate	CITY / CO.	Spring Lake / Cumberland
JOB NAME	Lot 49 Sierra Villas	ADDRESS	115 South Dakota Ct.
PLAN	Cypress	MODEL	Roof
SEAL DATE	N/A	DATE REV.	03/16/21
QUOTE #		DRAWN BY	David Landry
JOB #	J0321-1693	SALES REP.	Marshall Naylor

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

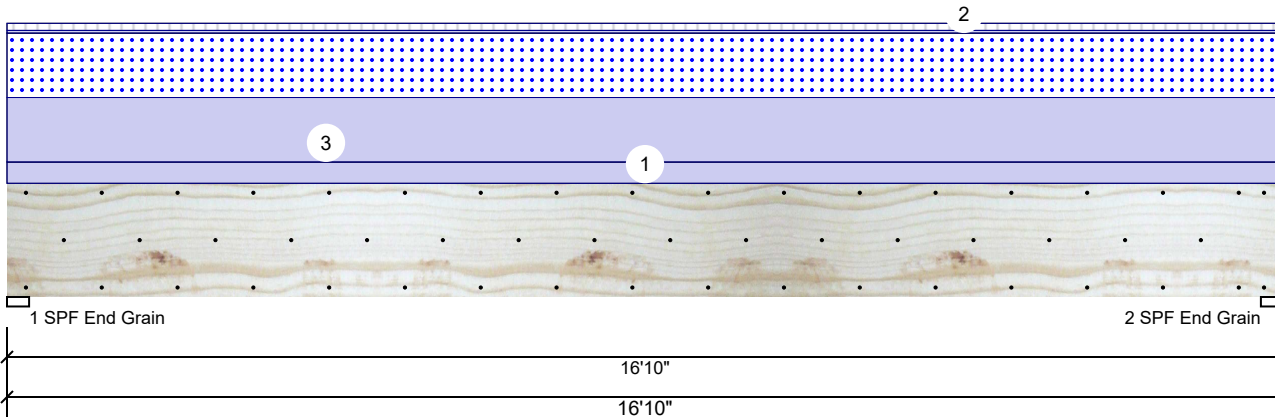
▲ = Indicates Left End of Truss  
(Reference Engineered Truss Drawing)  
Do NOT Erect Truss Backwards





**GDH Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	337	4309	3055	0	0
2	337	4309	3055	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	69%	4309 / 3055	7365	L	D+S
2 - SPF End Grain	3.500"	69%	4309 / 3055	7365	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	29403 ft-lb	8'5"	49428 ft-lb	0.595 (59%)	D+S	L
Unbraced	29403 ft-lb	8'5"	29453 ft-lb	0.998 (100%)	D+S	L
Shear	5861 lb	1'8 5/8"	15456 lb	0.379 (38%)	D+S	L
LL Defl inch	0.196 (L/1005)	8'5 1/16"	0.410 (L/480)	0.480 (48%)	S	L
TL Defl inch	0.472 (L/417)	8'5 1/16"	0.547 (L/360)	0.860 (86%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 4'4 1/8" o.c.
- 6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Tie-In	0-0-0 to 16-10-0	1-0-0	Top	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor
3	Uniform			Top	363 PLF	0 PLF	363 PLF	0 PLF	0 PLF	A1
	Self Weight				14 PLF					

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

**Manufacturer Info**

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us  
 ICC-ES: ESR-3633

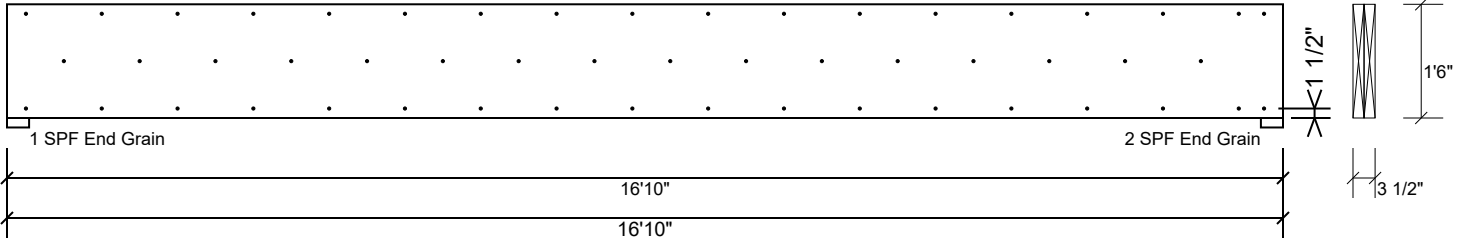
Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS





**GDH Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

**Manufacturer Info**

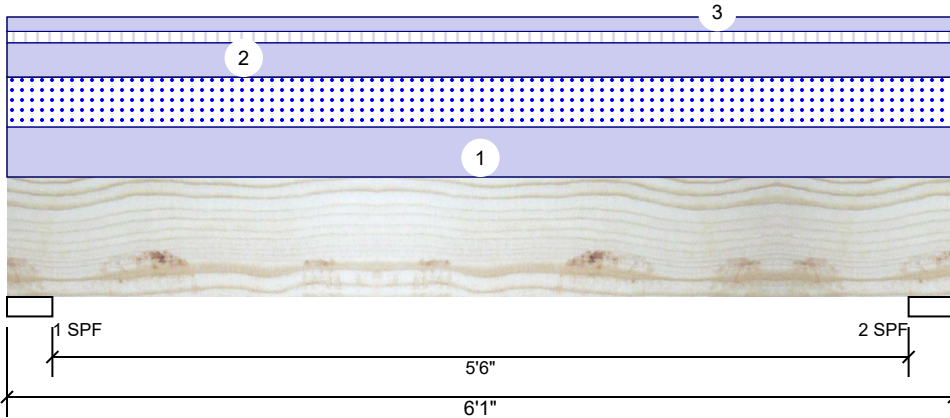
Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	289	2519	1265	0	0
2	289	2519	1265	0	0

**Bearings**

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	73%	2519 / 1265	3784	L	D+S	
2 - SPF	3.500"	73%	2519 / 1265	3784	L	D+S	

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4921 ft-lb	3' 1/2"	14423 ft-lb	0.341 (34%)	D+S	L
Unbraced	4921 ft-lb	3' 1/2"	10944 ft-lb	0.450 (45%)	D+S	L
Shear	2540 lb	1'	7943 lb	0.320 (32%)	D+S	L
LL Defl inch	0.026 (L/2581)	3' 1/2"	0.141 (L/480)	0.190 (19%)	S	L
TL Defl inch	0.078 (L/863)	3' 1/2"	0.281 (L/240)	0.280 (28%)	D+S	L

**Design Notes**

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top braced at bearings.
- Bottom braced at bearings.
- Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	416 PLF	0 PLF	416 PLF	0 PLF	0 PLF	A2/A1
2	Uniform			Top	285 PLF	95 PLF	0 PLF	0 PLF	0 PLF	F6
3	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
	Self Weight				7 PLF					

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

- Dry service conditions, unless noted otherwise
- LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

**Manufacturer Info**

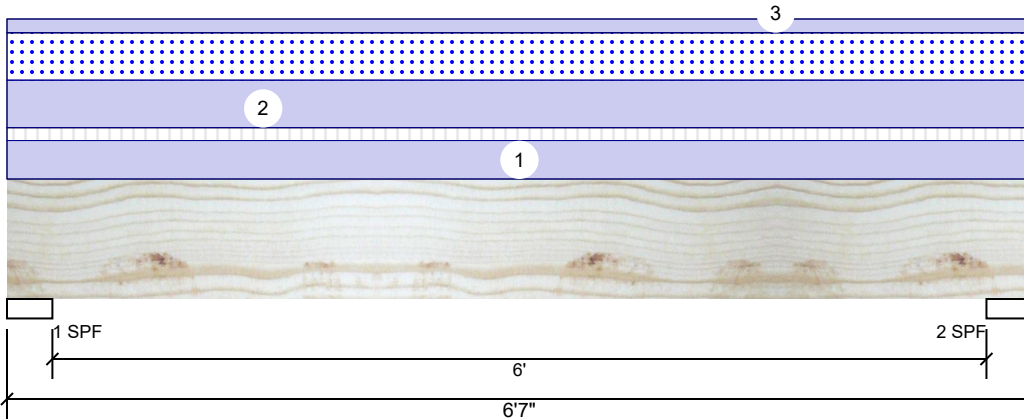
Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



**BM2x Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	372	2897	1369	0	0
2	372	2897	1369	0	0

**Bearings**

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	82%	2897 / 1369	4267	L	D+S	
2 - SPF	3.500"	82%	2897 / 1369	4267	L	D+S	

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6078 ft-lb	3'3 1/2"	14423 ft-lb	0.421 (42%)	D+S	L
Unbraced	6078 ft-lb	3'3 1/2"	10451 ft-lb	0.582 (58%)	D+S	L
Shear	2970 lb	1'	7943 lb	0.374 (37%)	D+S	L
LL Defl inch	0.035 (L/2072)	3'3 1/2"	0.153 (L/480)	0.230 (23%)	S	L
TL Defl inch	0.111 (L/665)	3'3 1/2"	0.306 (L/240)	0.360 (36%)	D+S	L

**Design Notes**

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top braced at bearings.
- Bottom braced at bearings.
- Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	337 PLF	113 PLF	0 PLF	0 PLF	0 PLF	F5
2	Uniform			Top	416 PLF	0 PLF	416 PLF	0 PLF	0 PLF	A2
3	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
	Self Weight				7 PLF					

**Notes**  
 Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**  
 1. Dry service conditions, unless noted otherwise  
 2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**  
 1. LVL beams must not be cut or drilled  
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals  
 3. Damaged Beams must not be used  
 4. Design assumes top edge is laterally restrained  
 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

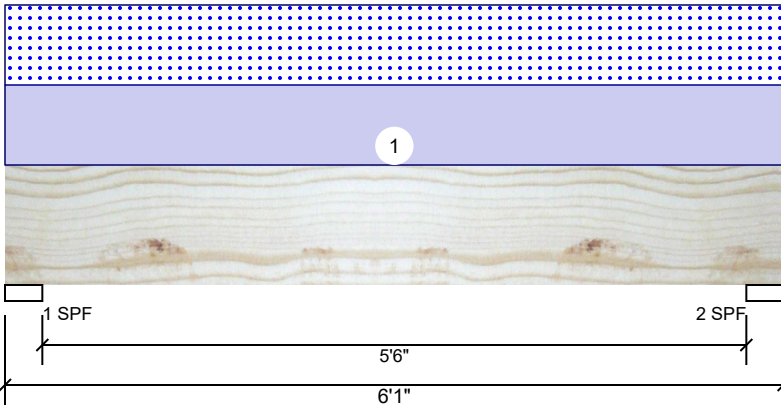
This design is valid until 2/26/2023

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
 www.metsawood.com/us  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS

**BM3 SP #2 2.000" X 12.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1265	1265	0	0
2	0	1265	1265	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	57%	1265 / 1265	2531	L	D+S
2 - SPF	3.500"	57%	1265 / 1265	2531	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3291 ft-lb	3' 1/2"	4548 ft-lb	0.723 (72%)	D+S	L
Unbraced	3291 ft-lb	3' 1/2"	4171 ft-lb	0.789 (79%)	D+S	L
Shear	1560 lb	1'2"	4528 lb	0.345 (34%)	D+S	L
LL Defl inch	0.019 (L/3590)	3' 1/2"	0.141 (L/480)	0.130 (13%)	S	L
TL Defl inch	0.038 (L/1795)	3' 1/2"	0.281 (L/240)	0.130 (13%)	D+S	L

**Design Notes**

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Top braced at bearings.
- Bottom braced at bearings.
- Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Const.	Comments
1	Uniform			Top	0.9 416 PLF	0 PLF	1.15 416 PLF	1.6 0 PLF	1.25 0 PLF	

**Manufacturer Info**

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



This design is valid until 2/26/2023