

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

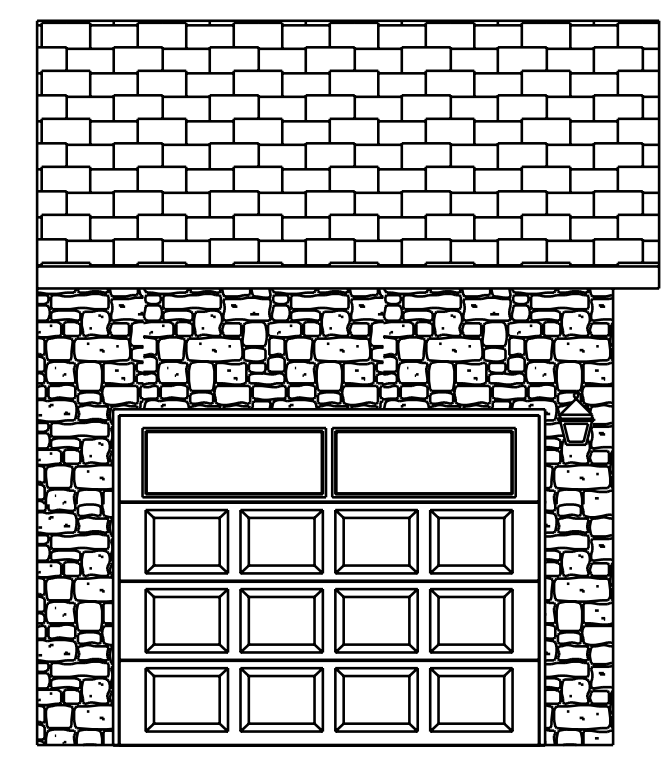
APPROVED
 Limited liability only review
 Permit holder responsible for
 full compliance with the code

05/07/2021

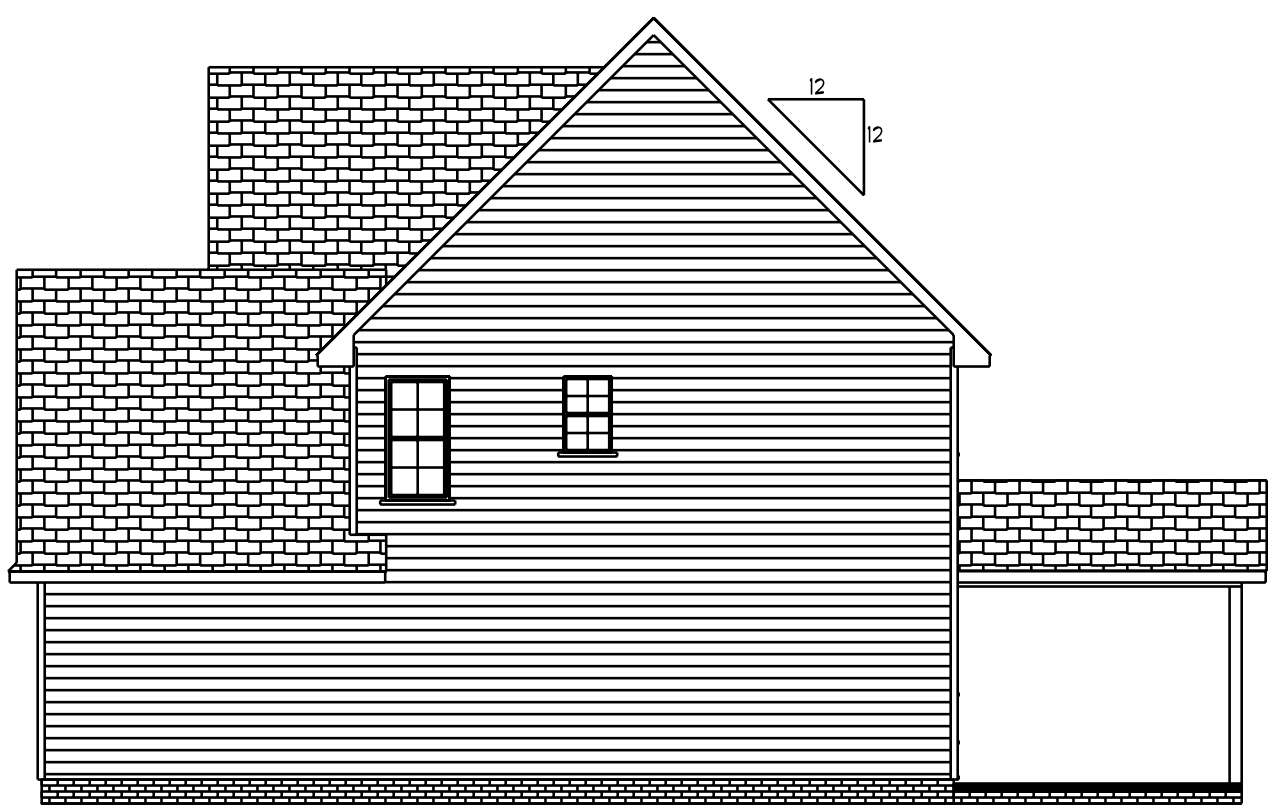




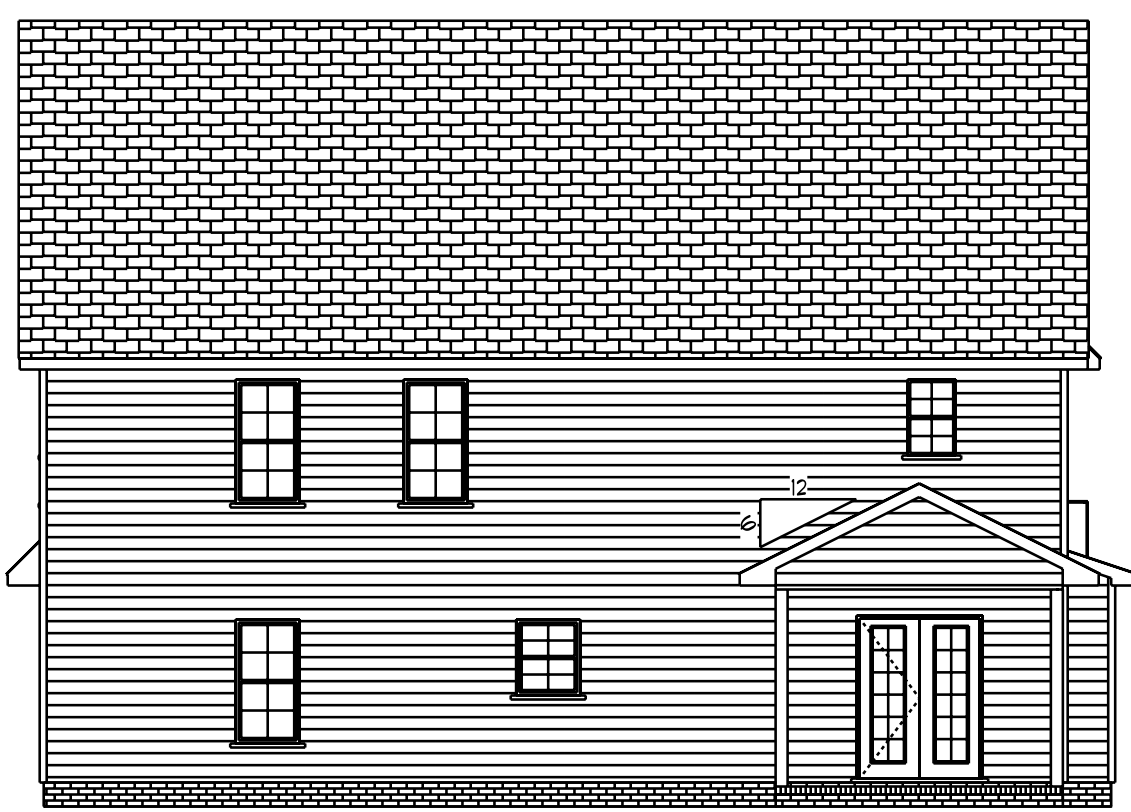
Front Elevation
 Scale: 1/4" = 1'0"



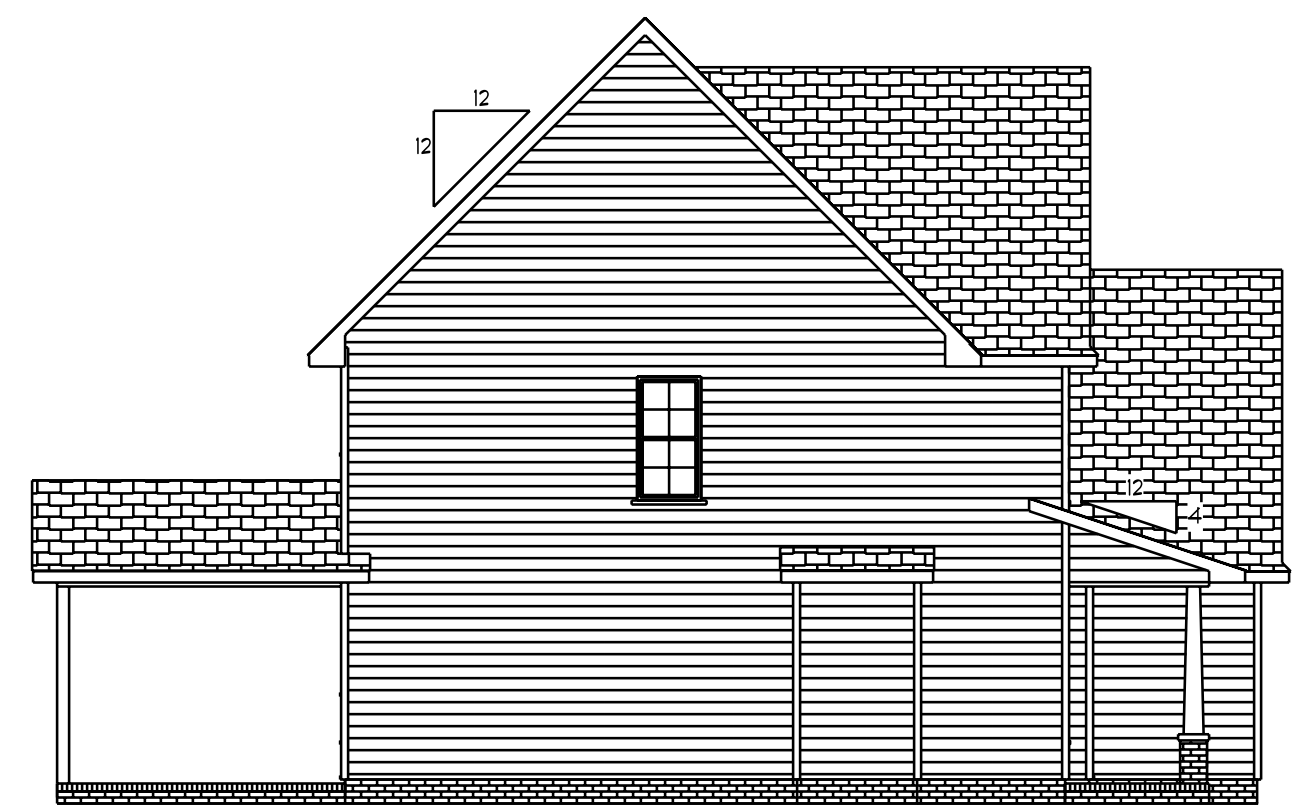
Optional Garage



Right Elevation
 Scale: 1/8" = 1'0"



Rear Elevation
 Scale: 1/8" = 1'0"

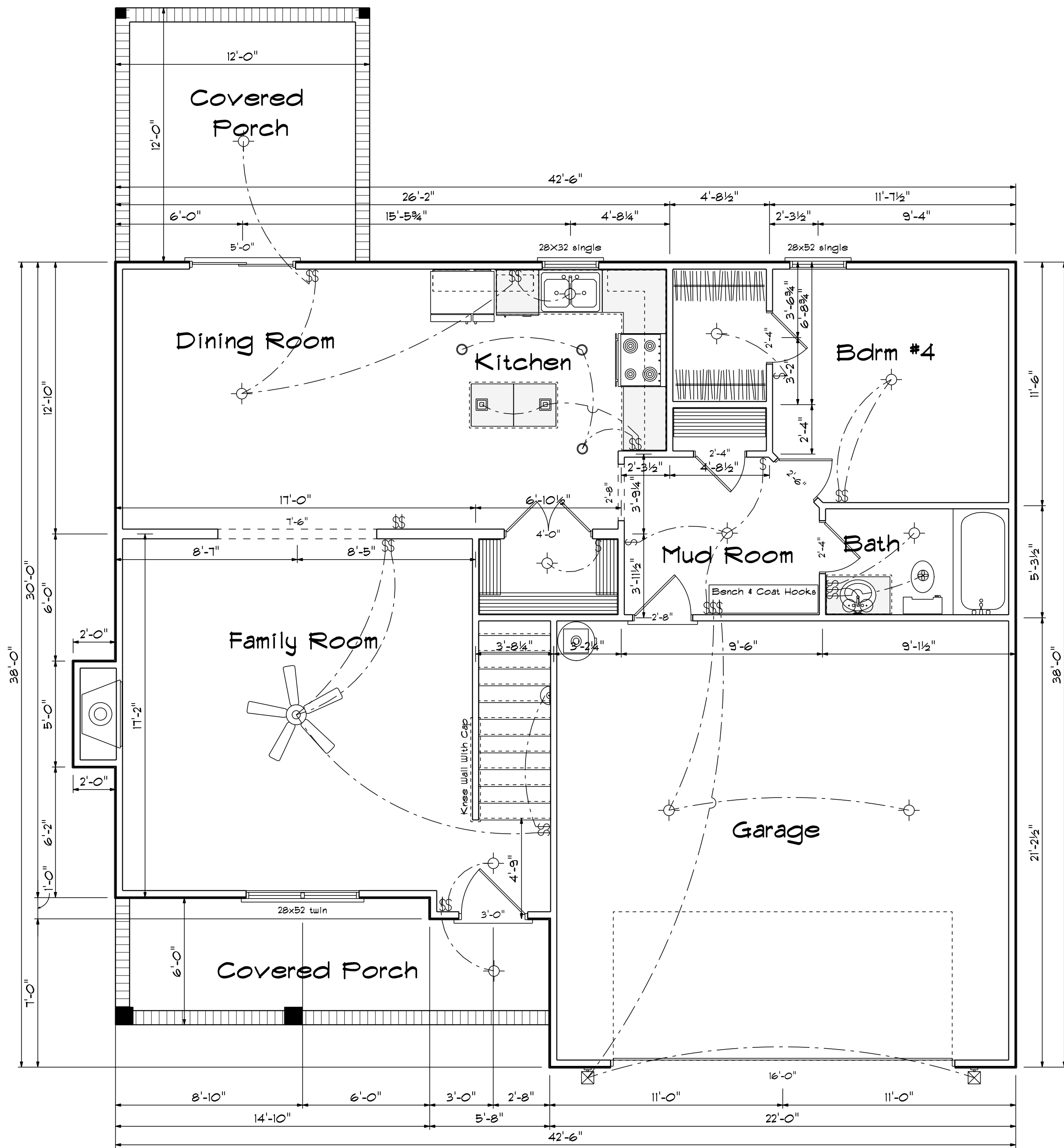


Left Elevation
 Scale: 1/8" = 1'0"

DATE: 4/24/2021
 REVISED
 DRAWING#

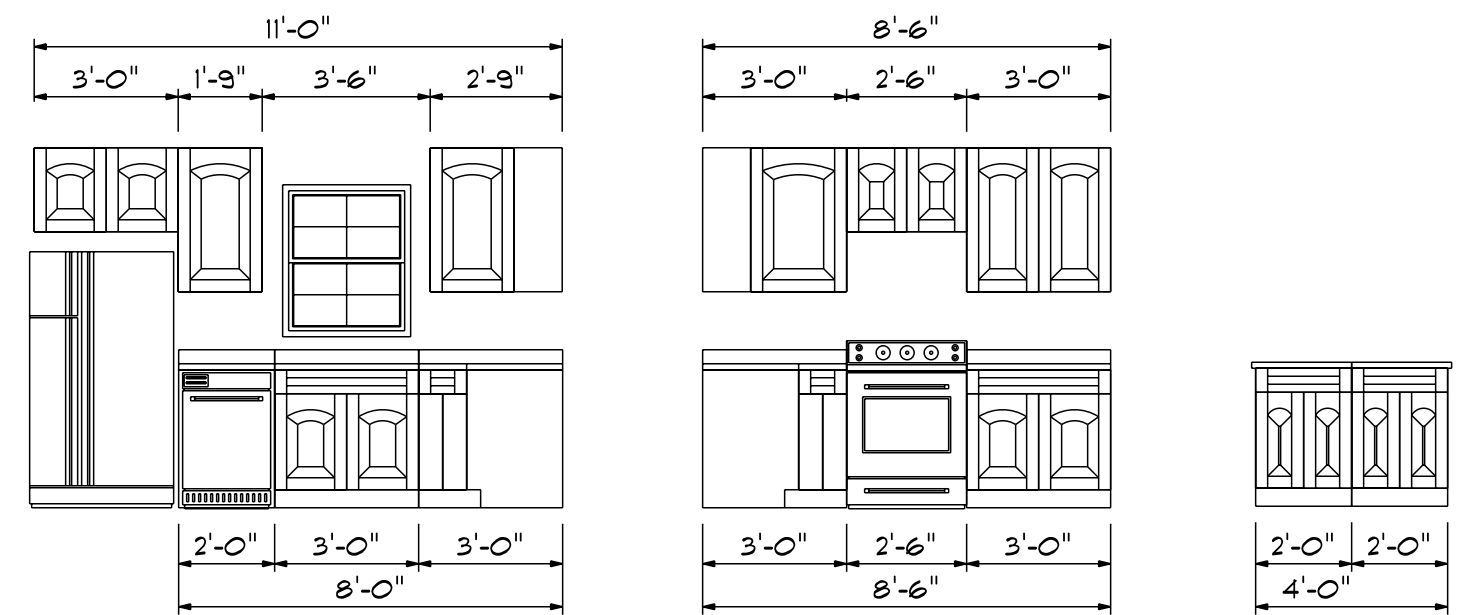
SCALE: 1/4"
 DRAWN BY
 APPROVED

The Fawnbrook

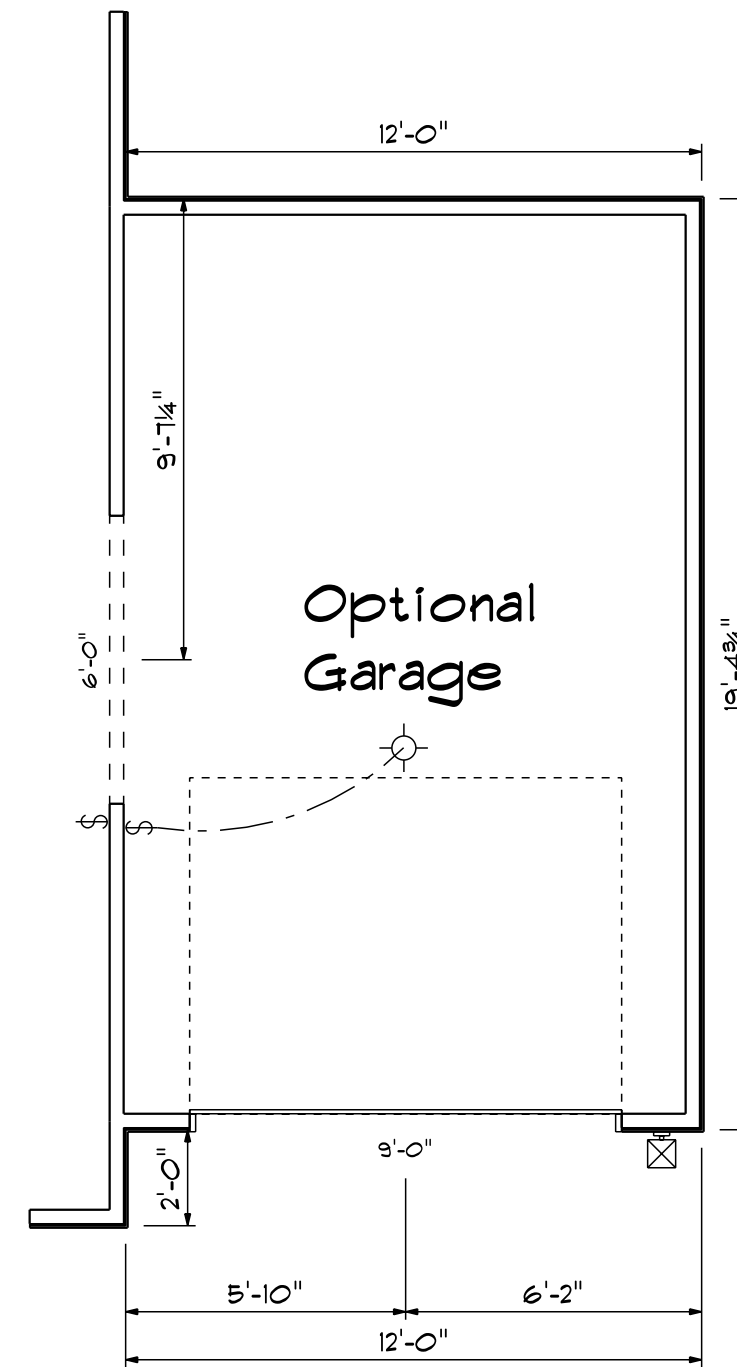


First Floor Plan

Kitchen Cabinets



FIRST FLOOR OPENING SCHEDULE			
PRODUCT CODE	SIZE	HINGE	COUNT
36X80 COLONIAL A 1	3'-0"	R	1
60X80 FRENCH PATIO DOOR	5'-0"	RN	1
192X84 - 8 PANEL - 4 WINDOW	16'-0"	U	1
2-4 Door Unit	2'-4"	R	1
2-4 Door Unit	2'-4"	L	2
2-6 Door Unit	2'-6"	L	1
2-8 Door Unit	2'-8"	L	1
4-0 Doublehung Door Unit	4'-0"	LR	1
28X32 single	2'-8" x 3'-2"	N	1
28X52 single	2'-8" x 5'-2"	N	1
28X52 twin	5'-4" x 5'-2"	NN	1



Areas

First Floor	1003
Second Floor	1285

Total Heated	2288
Garage	461
Front Porch	116
Covered Porch	144
Optional Garage	235

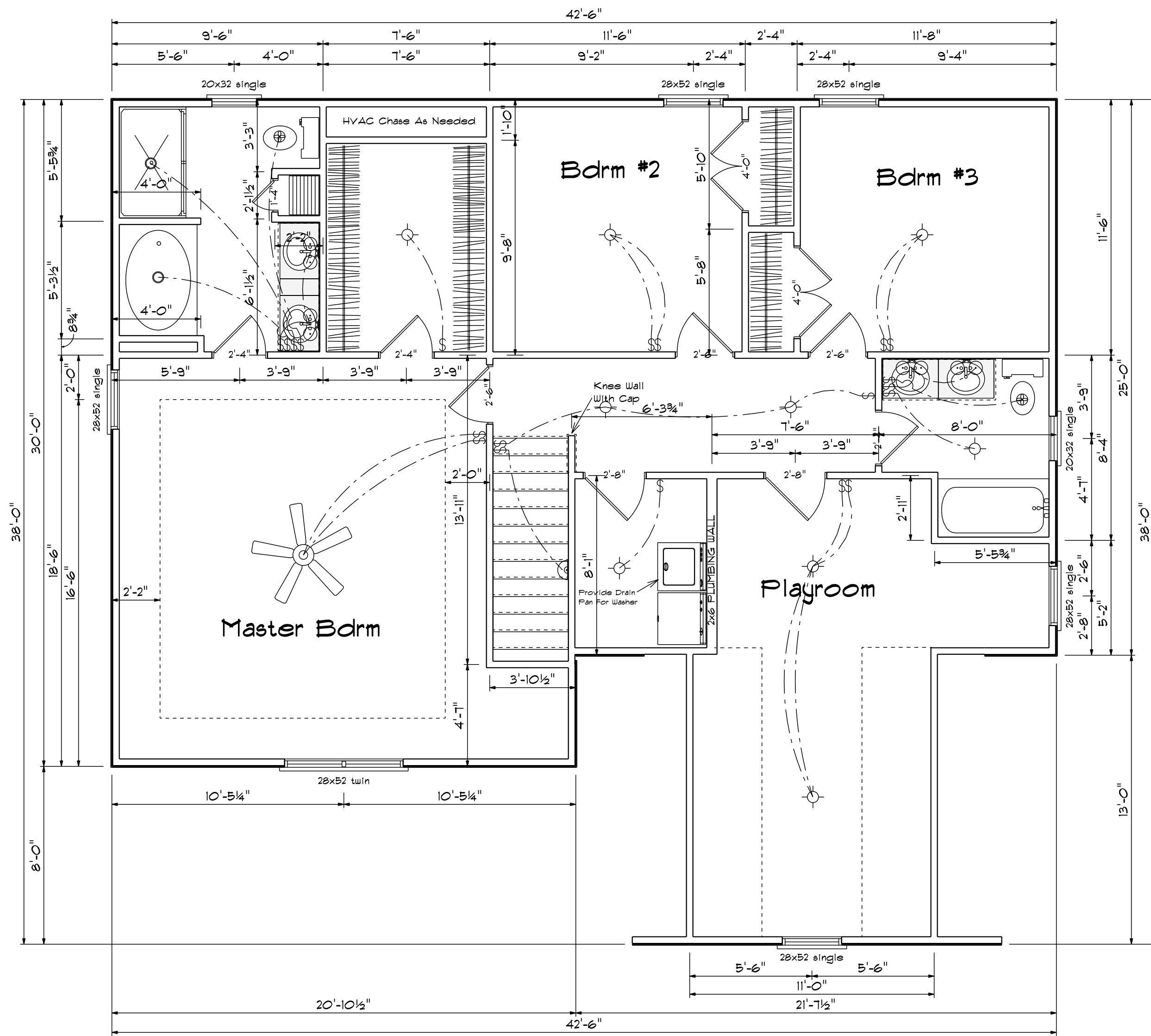
DATE: 4/24/2021

REVISED
DRAWING*

SCALE: 1/4"

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APPROVED

The Fawnbrook



Second Floor Plan

SECOND FLOOR OPENING SCHEDULE			
PRODUCT CODE	SIZE	HINGE	COUNT
1-6 Door Unit	1'-4"	R	1
2-4 Door Unit	2'-4"	R	1
2-4 Door Unit	2'-4"	L	2
2-6 Door Unit	2'-6"	R	2
2-6 Door Unit	2'-6"	L	1
2-8 Door Unit	2'-8"	R	2
4-0 Doublehung Door Unit	4'-0"	LR	2
20x32 single	2'-0" x 3'-2"	N	2
28x52 single	2'-8" x 5'-2"	N	5
28x52 twin	5'-4" x 5'-2"	NN	1

DATE: 4/24/2021

REVISED

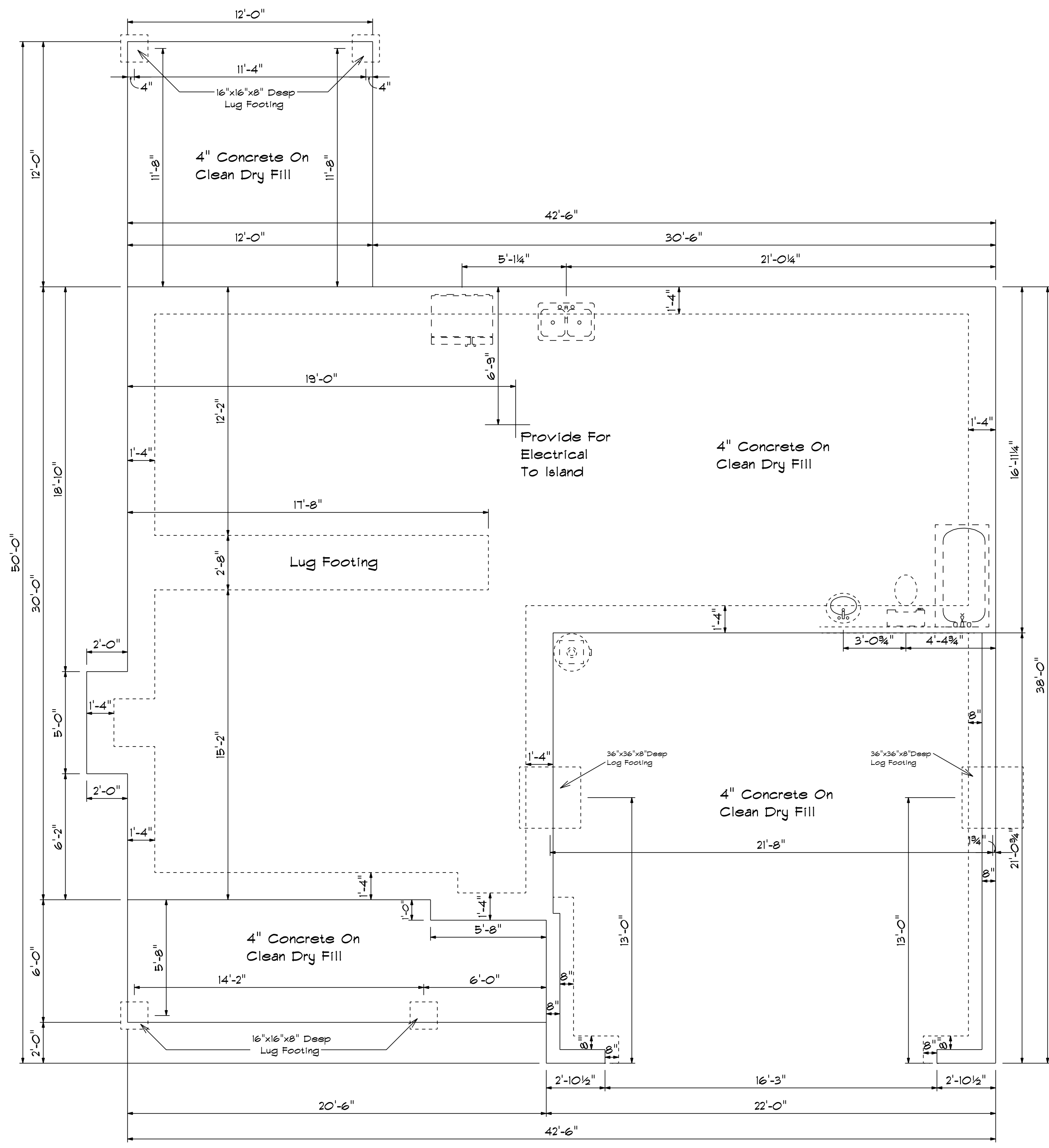
DRAWING#

SCALE: 1/4"

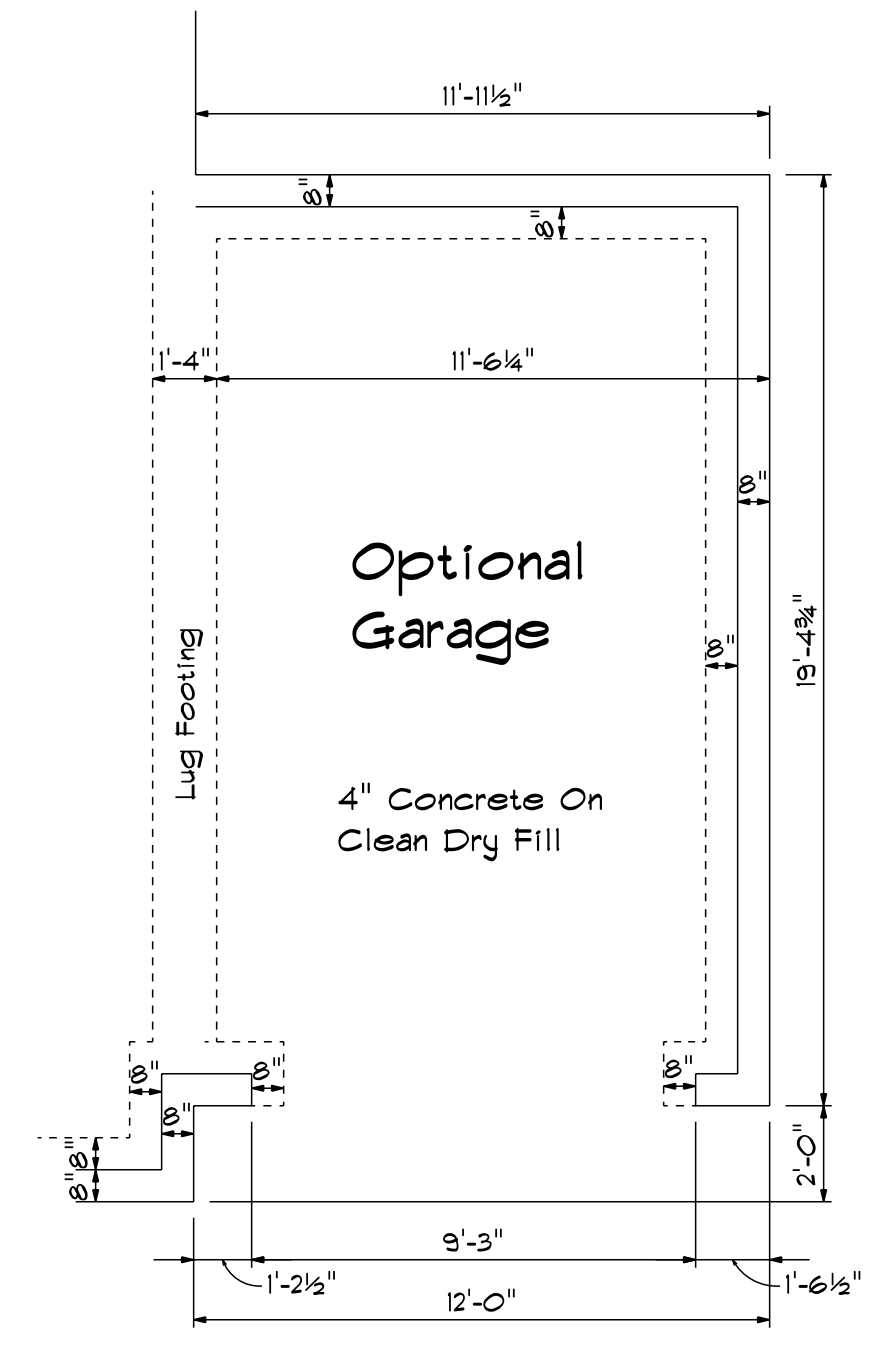
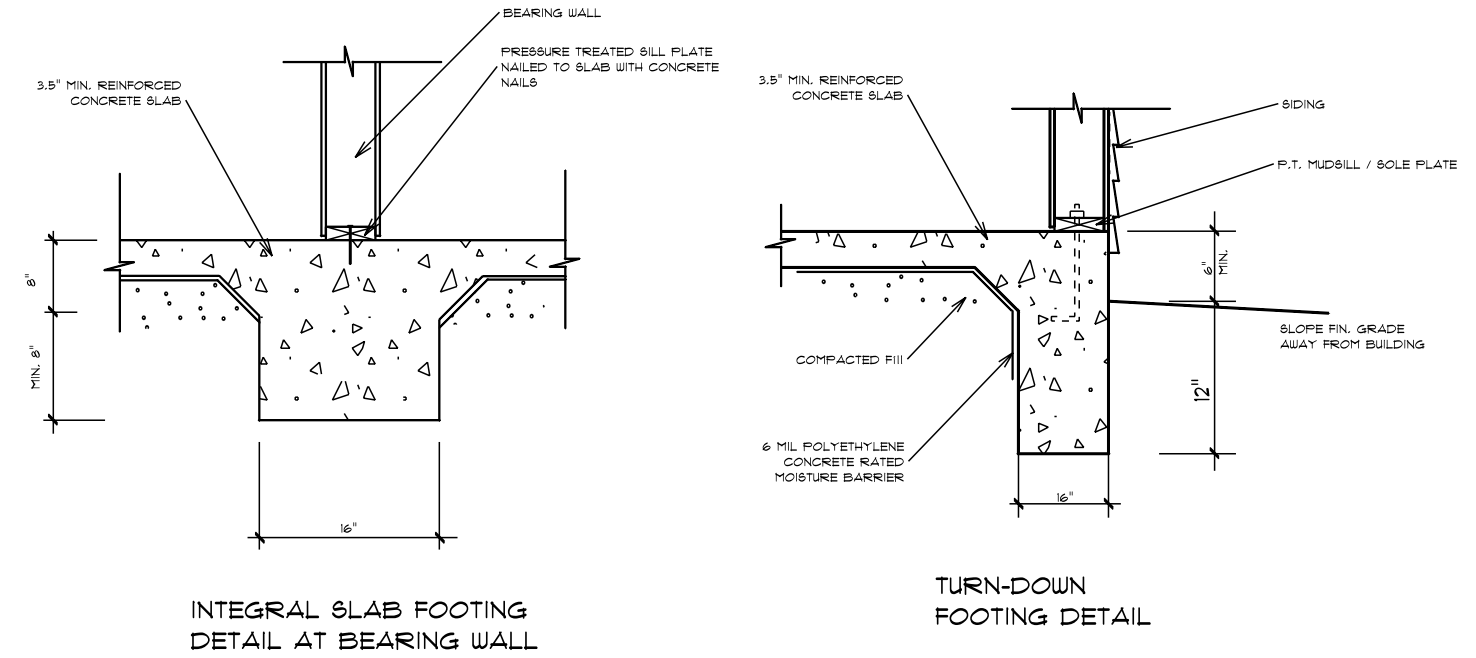
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The Fawnbrook



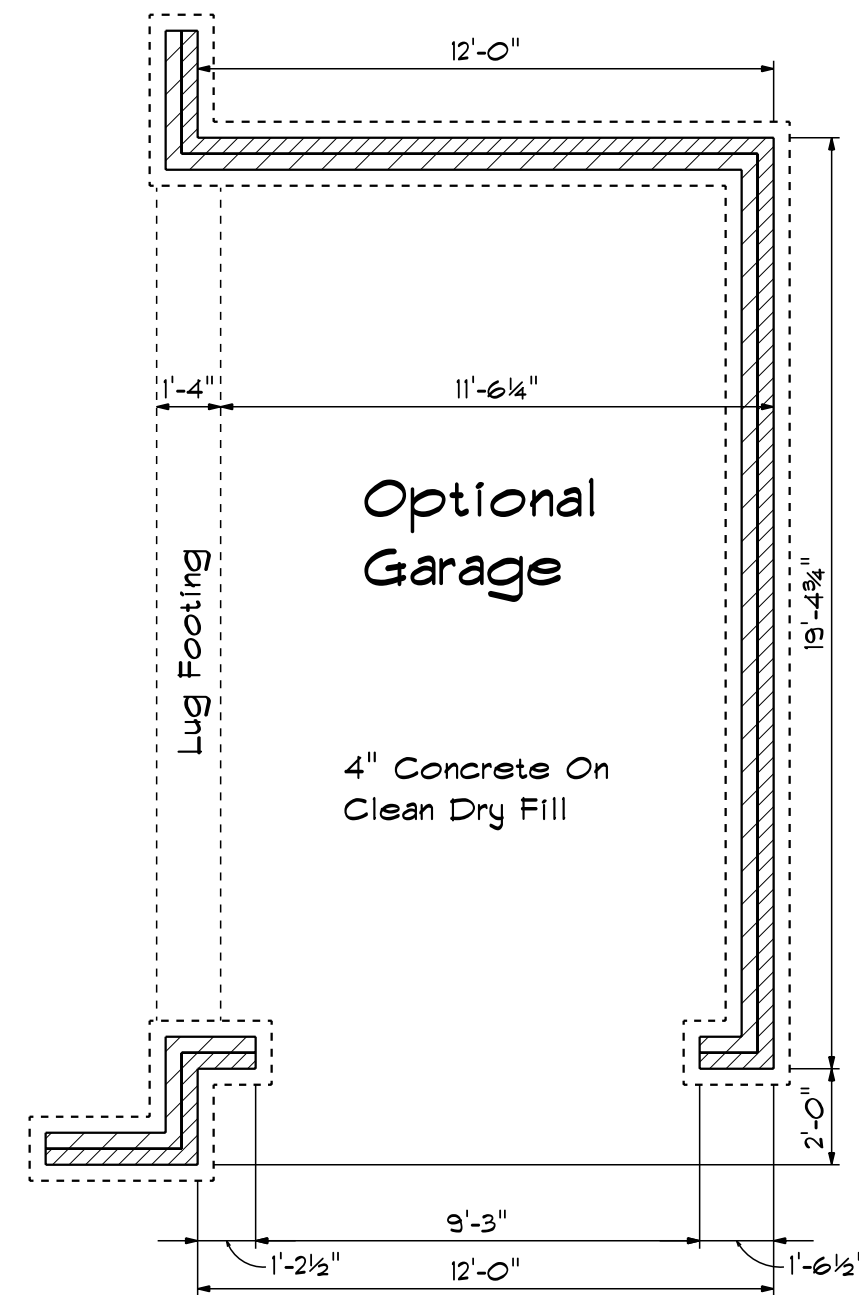
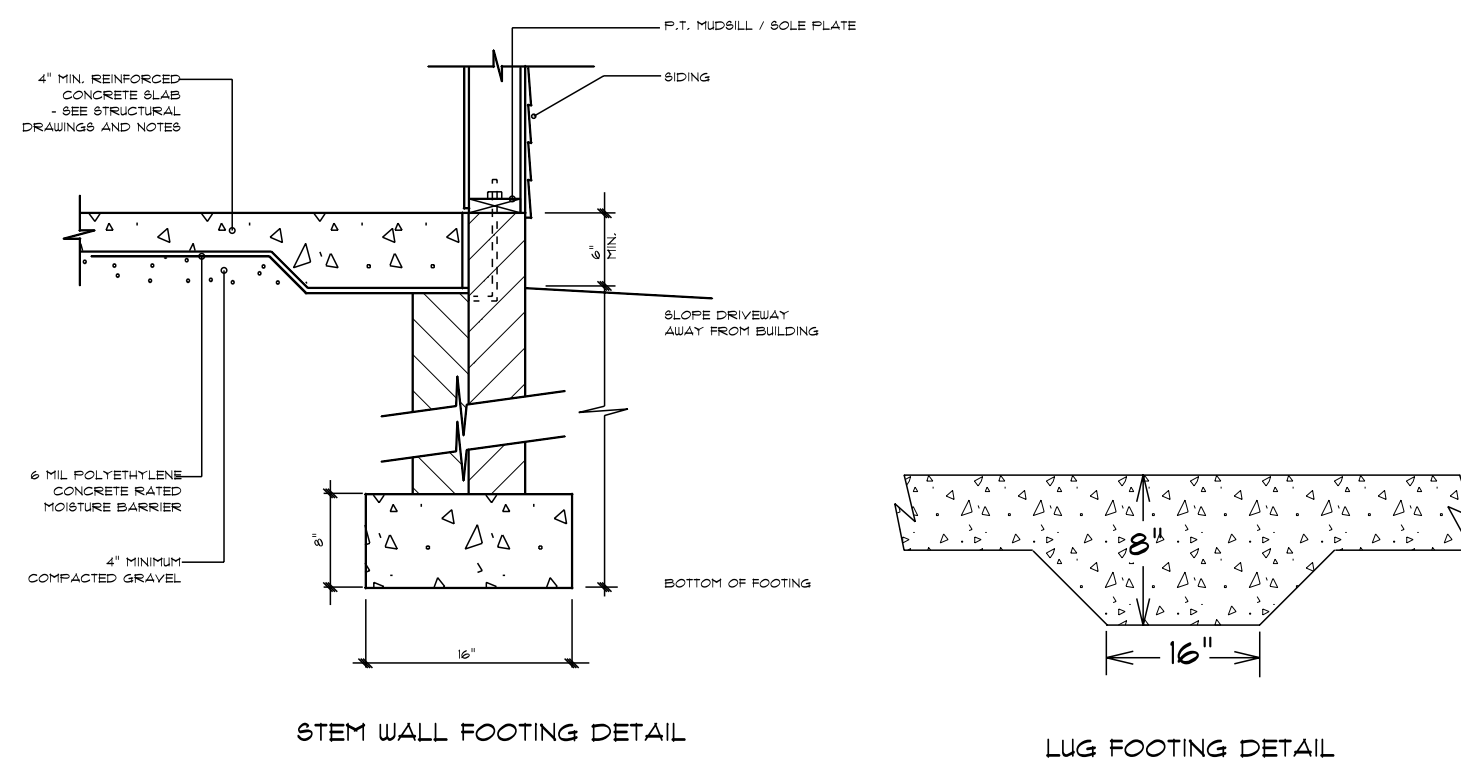
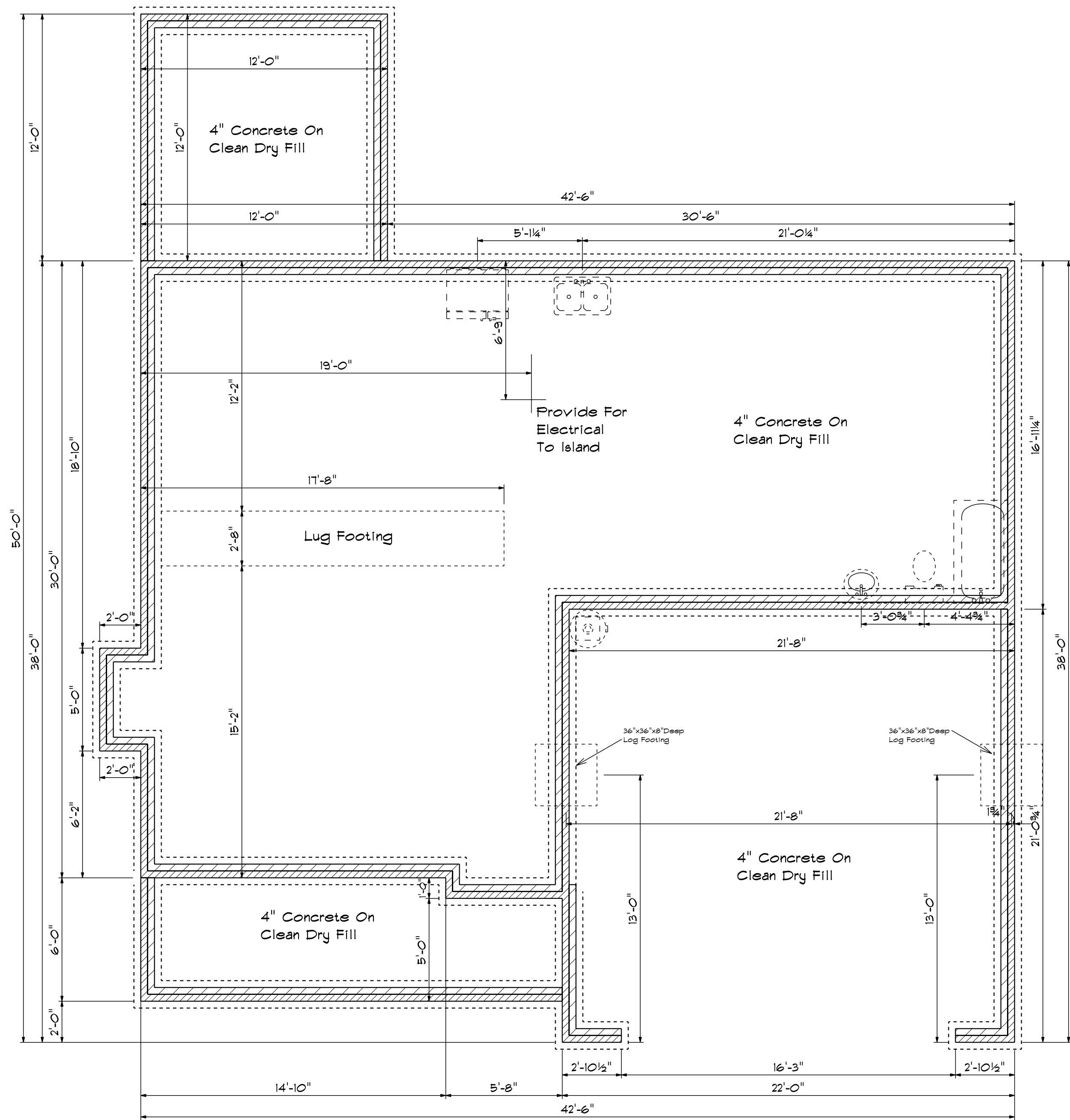
Foundation Plan



DATE: 4/24/2021
 REVISIONS
 DRAWING#

SCALE: 1/4"
 DRAWN BY
 APPROVED

The Fawnbrook



DATE: 4/24/2021

REVISED

DRAWING#

SCALE: 1/4"

DRAWN BY

APPROVED

The Fawnbrook



ROOF & FLOOR TRUSSES & BEAMS

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

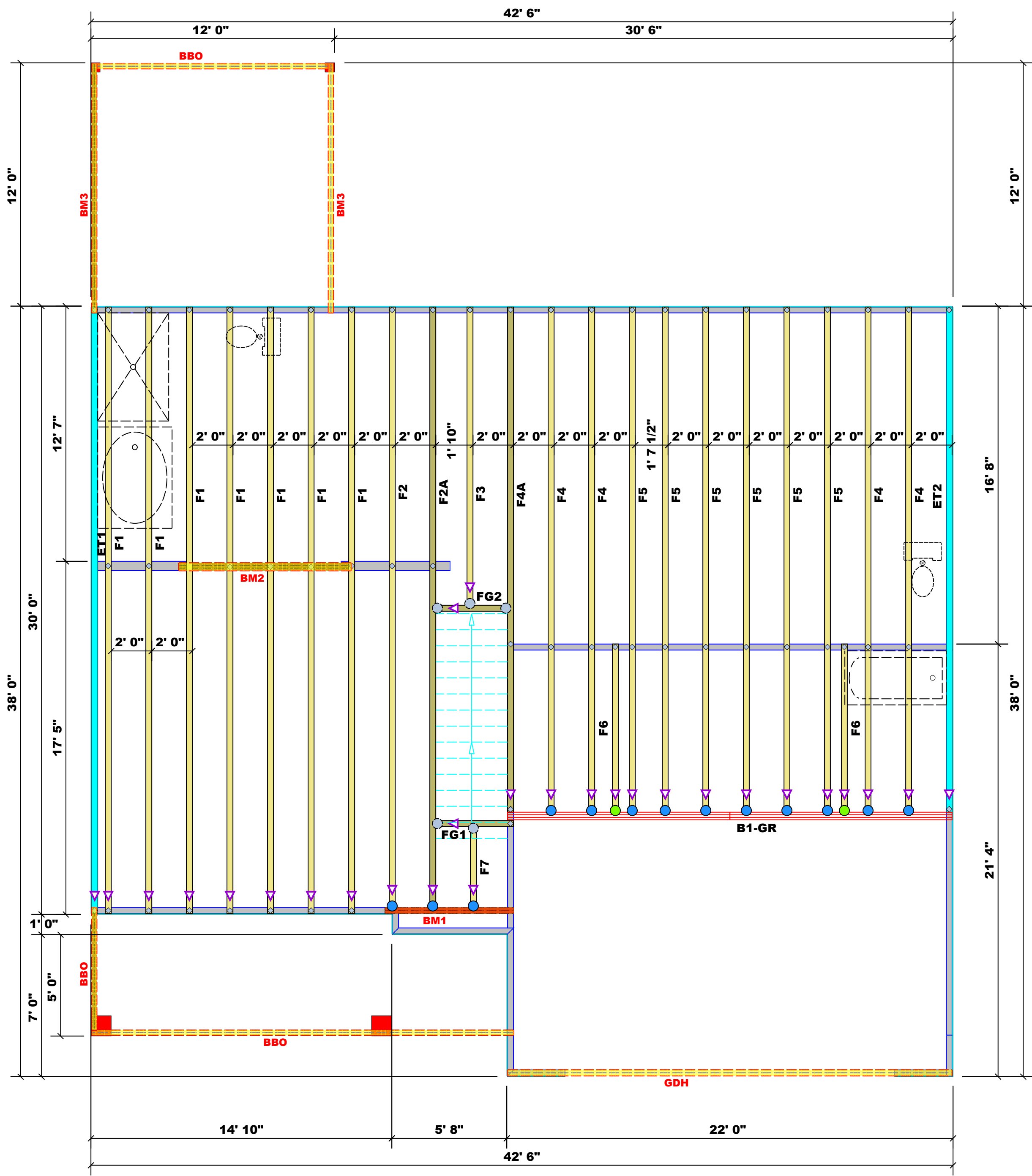
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions 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

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ. STUDS FOR (1)PLY HEADER	END REACTION (UP TO)	REQ. STUDS FOR (1)PLY HEADER	END REACTION (UP TO)	REQ. STUDS FOR (1)PLY HEADER
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				



Products				
PlotID	Length	Product	Plies	Net Qty
BM1	7' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM2	10' 0"	2x12 SPF No.2	3	3
BM3	14' 0"	2x10 SPF No.2	2	4
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

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

Dimension Notes

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

Plumbing Drop Notes

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

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	13	Varies	16d/3-1/2"	16d/3-1/2"
○	MSH422	USP	5	Varies	10d/3"	10d/3"
●	THD410	USP	2	Varies	16d/3-1/2"	10d/3"

BUILDER	JOB NAME	PLAN	SEAL DATE	QUOTE #	JOB #
Ben Stout Real Estate	Lot 151 forest Oaks	The Fawnbrook	N/A	Quote #	J0321-1338
COUNTY	ADDRESS	MODEL	DATE REV.	DRAWN BY	SALESMAN
Cumberland	71 Basket Oak Dr.	Floor	/ /	David Landry	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



ROOF & FLOOR TRUSSES & BEAMS

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

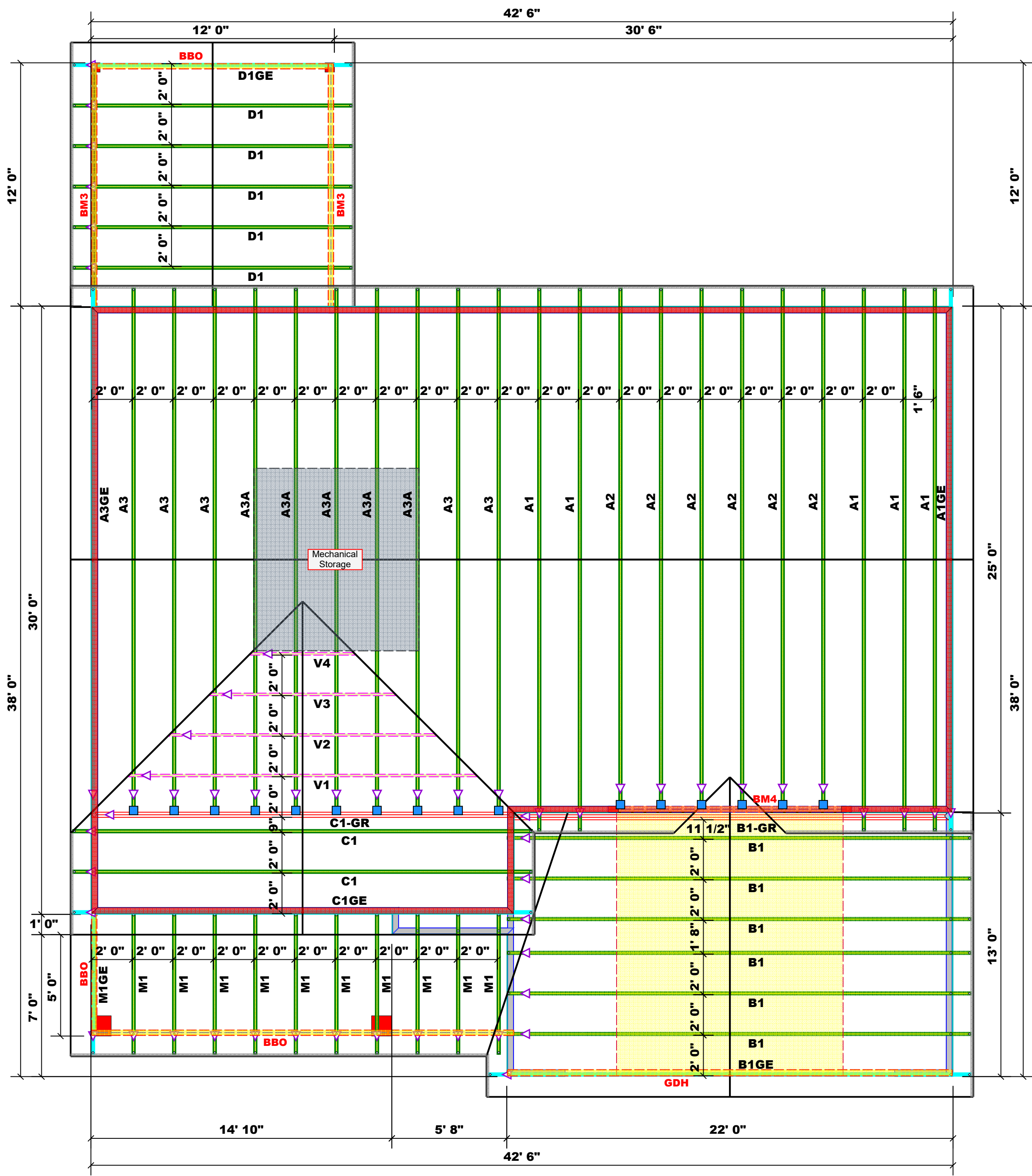
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Signature _____
David Landry

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ. STUDS FOR (1)PLY HEADER	END REACTION (UP TO)	REQ. STUDS FOR (1)PLY HEADER	END REACTION (UP TO)	REQ. STUDS FOR (1)PLY HEADER
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				



Products				
PlotID	Length	Product	Pieces	Net Qty
BM4	12' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2

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

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	16	Varies	16d/3-1/2"	16d/3-1/2"

Roof Area = 2671.45 sq.ft.
Ridge Line = 89.75 ft.
Hip Line = 0 ft.
Horiz. OH = 134.25 ft.
Raked OH = 180.47 ft.
Decking = 92 sheets

- Dimension Notes**
- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
 - All interior wall dimensions are to face of frame wall unless noted otherwise
 - All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

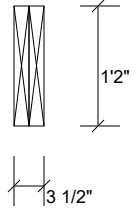
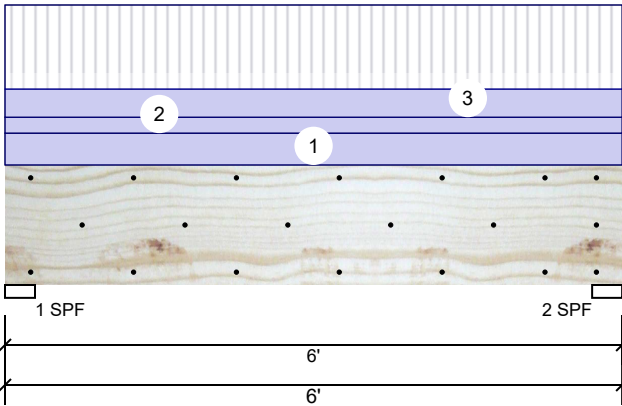
Hatch Legend	
	Drop Beam
	Second Floor Walls
	Padded HVAC

BUILDER	Ben Stout Real Estate
JOB NAME	Lot 151 Forest Oaks
PLAN	The Fawnbrook
SEAL DATE	N/A
QUOTE #	Quote #
JOB #	J0321-1337
COUNTY	Cumberland
ADDRESS	71 Basket Oak Dr.
MODEL	Roof
DATE REV.	/ /
DRAWN BY	David Landry
SALESMAN	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

BM1 Kerto-S LVL 1.750" X 14.000" 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		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	951	891	0	0	0
2	951	891	0	0	0

Bearings

Bearing	Length	Cap.	React D/L	Ib	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	35%	891 / 951	1842	L	D+L	
2 - SPF	3.500"	35%	891 / 951	1842	L	D+L	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2357 ft-lb	3'	26999 ft-lb	0.087 (9%)	D+L	L
Unbraced	2357 ft-lb	3'	26999 ft-lb	0.087 (9%)	D+L	L
Shear	1478 lb	4'7 1/4"	10453 lb	0.141 (14%)	D+L	L
LL Defl inch	0.007 (L/9415)	3'	0.139 (L/480)	0.050 (5%)	L	L
TL Defl inch	0.014 (L/4862)	3'	0.185 (L/360)	0.070 (7%)	D+L	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 continuously braced.
- 6 Bottom braced at bearings.
- 7 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 Above
2	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	C1GE
3	Uniform			Far Face	106 PLF	317 PLF	0 PLF	0 PLF	0 PLF	F2
	Self Weight				11 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

Manufacturer Info

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

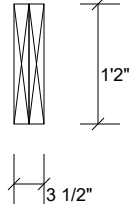
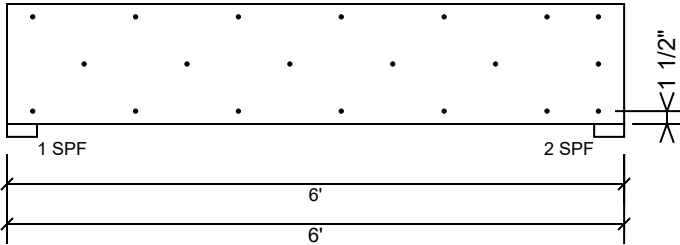
Comtech, Inc.
 1001 S. Reilly Road, Suite #639
 Fayetteville, NC
 USA
 28314
 910-864-TRUS



This design is valid until 2/26/2023

BM1 Kerto-S LVL 1.750" X 14.000" 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	86.1 %
Load	211.5 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	D+L
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

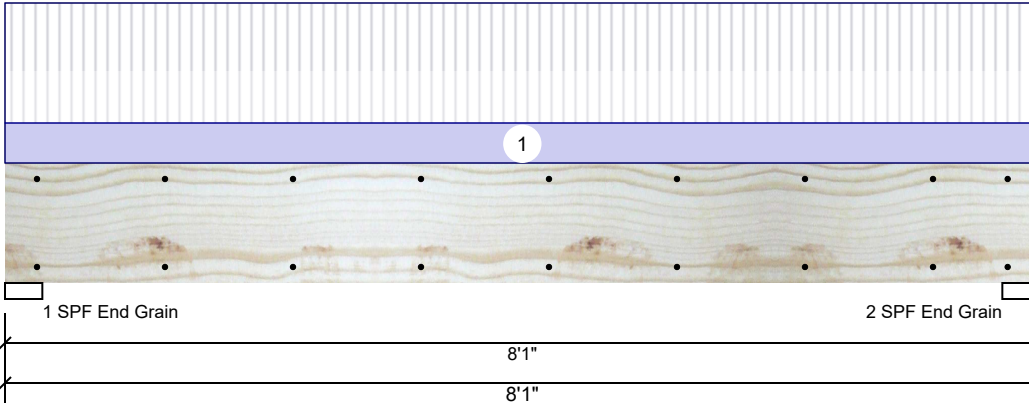
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
 www.metsawood.com/us
 ICC-ES: ESR-3633

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



BM2 S-P-F #2 2.000" X 12.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	Yes
Deck:	Not Checked

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	2837	946	0	0	0
2	2837	946	0	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	57%	946 / 2837	3783	L	D+L
2 - SPF End Grain	3.500"	57%	946 / 2837	3783	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6802 ft-lb	4' 1/2"	7960 ft-lb	0.855 (85%)	D+L	L
Unbraced	6802 ft-lb	4' 1/2"	7960 ft-lb	0.855 (85%)	D+L	L
Shear	2691 lb	1'2"	4556 lb	0.591 (59%)	D+L	L
LL Defl inch	0.071 (L/1281)	4' 9/16"	0.254 (L/360)	0.280 (28%)	L	L
TL Defl inch	0.095 (L/961)	4' 9/16"	0.381 (L/240)	0.250 (25%)	D+L	L

Design Notes

- 1 Fasten all plies using 2 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 continuously braced.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

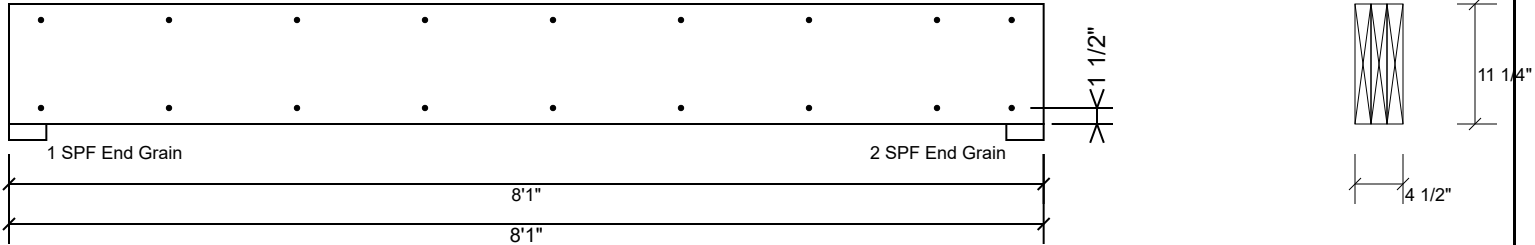
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	234 PLF	702 PLF	0 PLF	0 PLF	0 PLF	F1

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

BM2 S-P-F #2 2.000" X 12.000" 3-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6"

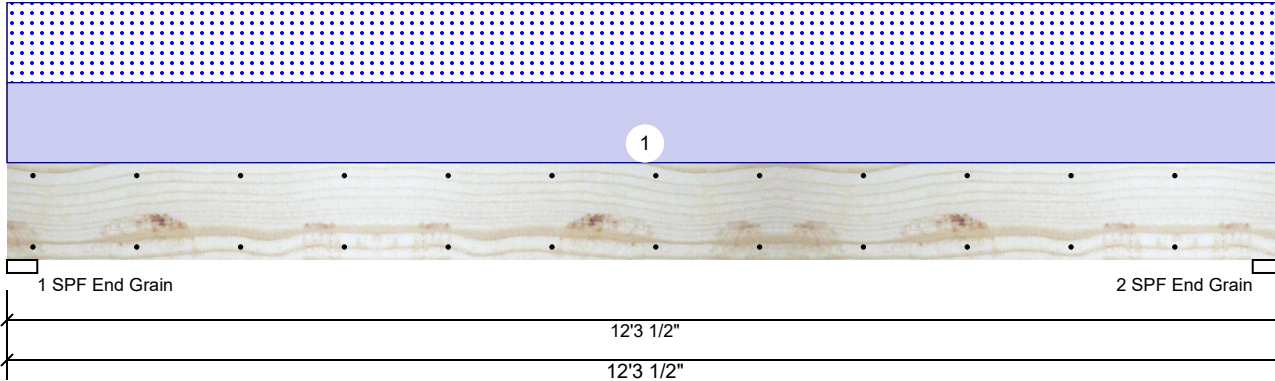
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

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

BM3 S-P-F #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
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	799	799	0	0
2	0	799	799	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	36%	799 / 799	1598	L	D+S
2 - SPF End Grain	3.500"	36%	799 / 799	1598	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4551 ft-lb	6'1 3/4"	5306 ft-lb	0.858 (86%)	D+S	L
Unbraced	4551 ft-lb	6'1 3/4"	5306 ft-lb	0.858 (86%)	D+S	L
Shear	1295 lb	1'2"	3493 lb	0.371 (37%)	D+S	L
LL Defl inch	0.115 (L/1234)	6'1 3/4"	0.394 (L/360)	0.290 (29%)	S	L
TL Defl inch	0.230 (L/617)	6'1 3/4"	0.592 (L/240)	0.390 (39%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 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 continuously braced.
- 6 Bottom braced at bearings.
- 7 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	130 PLF	0 PLF	130 PLF	0 PLF	0 PLF	D1

Manufacturer Info

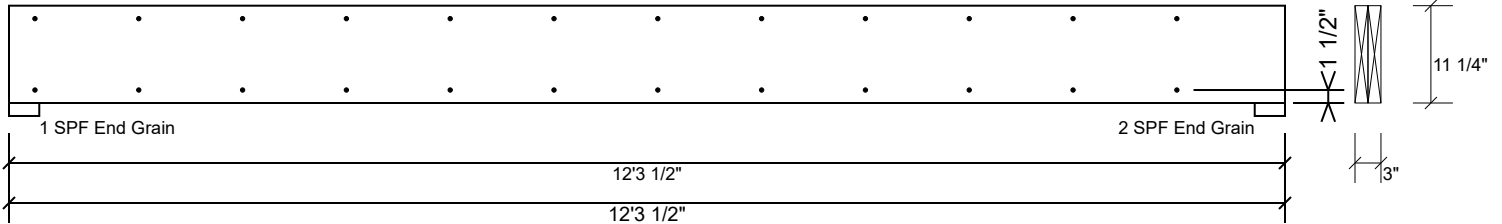
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 28314
 910-864-TRUS



This design is valid until 2/26/2023

BM3 S-P-F #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 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	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Manufacturer Info

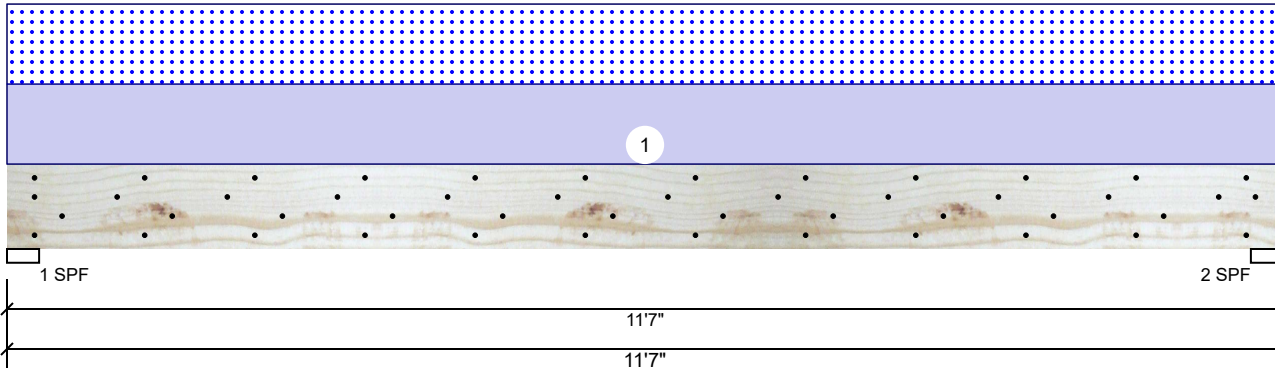
Comtech, Inc.
 1001 S. Reilly Road, Suite #639
 Fayetteville, NC
 USA
 28314
 910-864-TRUS



This design is valid until 2/26/2023

BM4 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Roof
Slope:	0/12
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	1721	1680	0	0
2	0	1721	1680	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	65%	1721 / 1680	3401	L	D+S
2 - SPF	3.500"	65%	1721 / 1680	3401	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9084 ft-lb	5'9 1/2"	14423 ft-lb	0.630 (63%)	D+S	L
Unbraced	9084 ft-lb	5'9 1/2"	14423 ft-lb	0.630 (63%)	D+S	L
Shear	3261 lb	10'7"	7943 lb	0.411 (41%)	D+S	L
LL Defl inch	0.232 (L/574)	5'9 1/2"	0.371 (L/360)	0.630 (63%)	S	L
TL Defl inch	0.471 (L/284)	5'9 1/2"	0.556 (L/240)	0.850 (85%)	D+S	L

Design Notes

- 1 Fasten all plies using 4 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 must be continuously braced.
- 5 Bottom braced at bearings.
- 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			Far Face	290 PLF	0 PLF	290 PLF	0 PLF	0 PLF	A2
	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

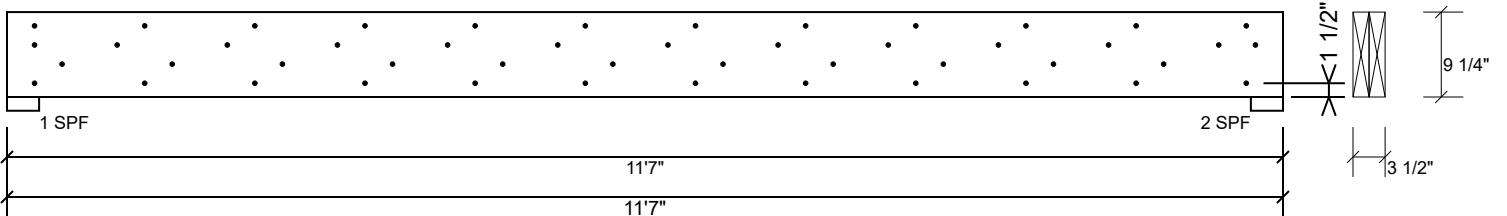
Metsä Wood
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BM4 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	77.0 %
Load	290.0 PLF
Yield Limit per Foot	376.5 PLF
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

Notes

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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

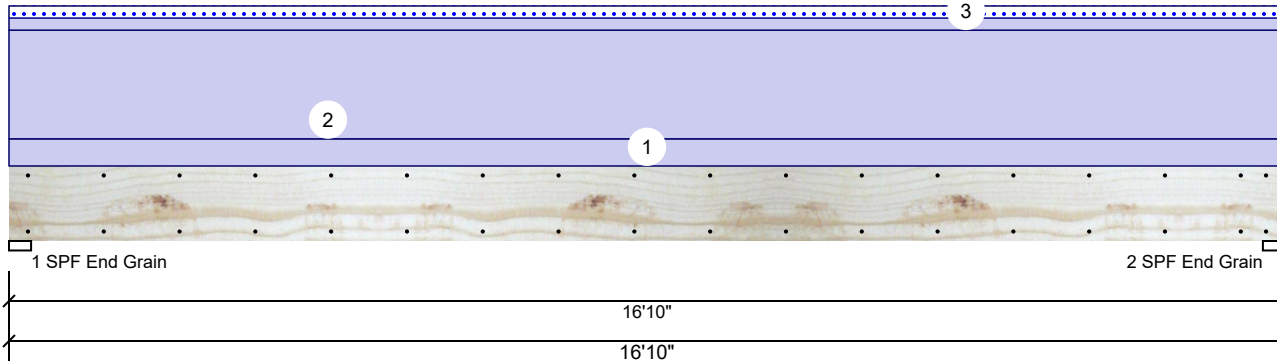
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	360	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	0	2140	168	0	0
2	0	2140	168	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	22%	2140 / 168	2308	L	D+S
2 - SPF End Grain	3.500"	22%	2140 / 168	2308	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8521 ft-lb	8'5"	17919 ft-lb	0.476 (48%)	D	Uniform
Unbraced	8521 ft-lb	8'5"	17919 ft-lb	0.476 (48%)	D	Uniform
Shear	1830 lb	15'7 3/8"	7980 lb	0.229 (23%)	D	Uniform
LL Defl inch	0.035 (L/5617)	8'5 1/16"	0.546 (L/360)	0.060 (6%)	S	L
TL Defl inch	0.480 (L/410)	8'5 1/16"	0.819 (L/240)	0.590 (59%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 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 continuously braced.
- 6 Bottom braced at bearings.
- 7 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	45 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Top	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
3	Tie-In	0-0-0 to 16-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
	Self Weight				9 PLF					

Notes

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Lumber

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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

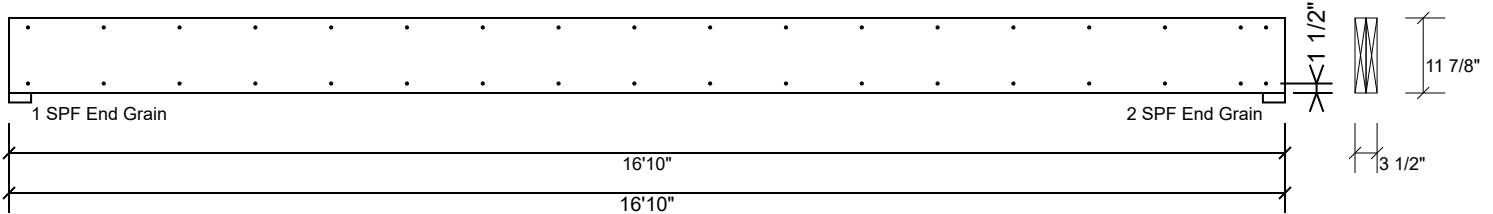
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 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	163.7 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

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