



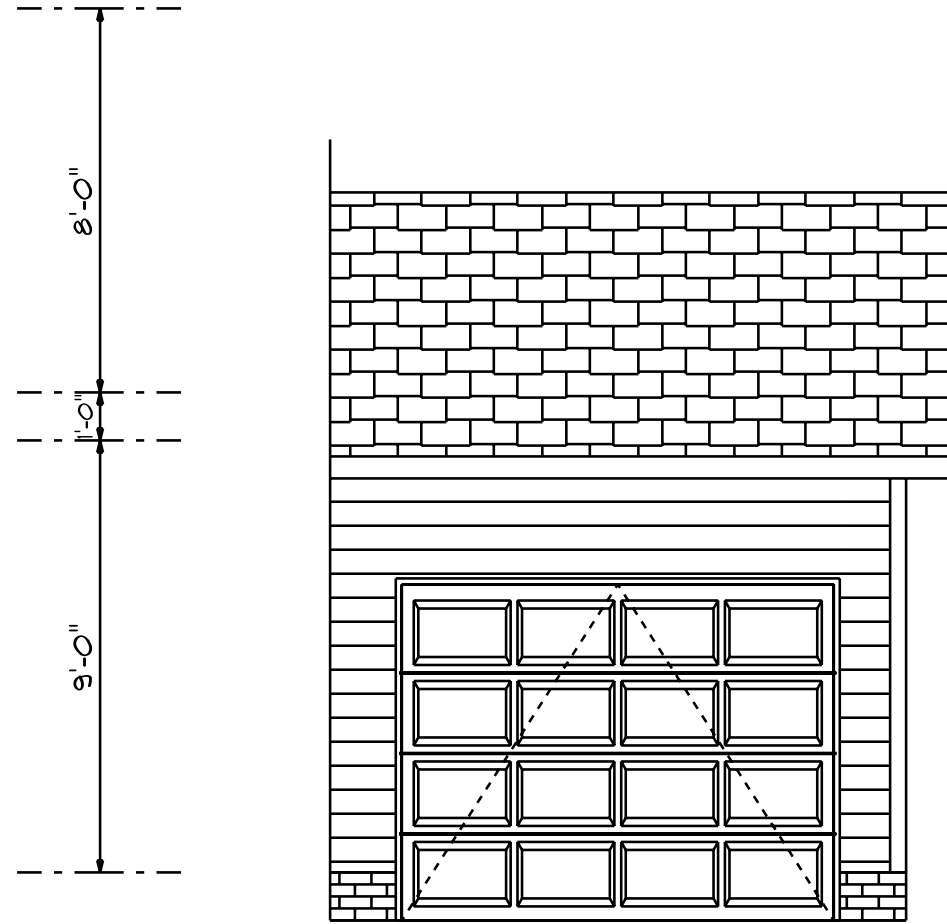
Front Elevation
Scale: 1/4" = 1'0"

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

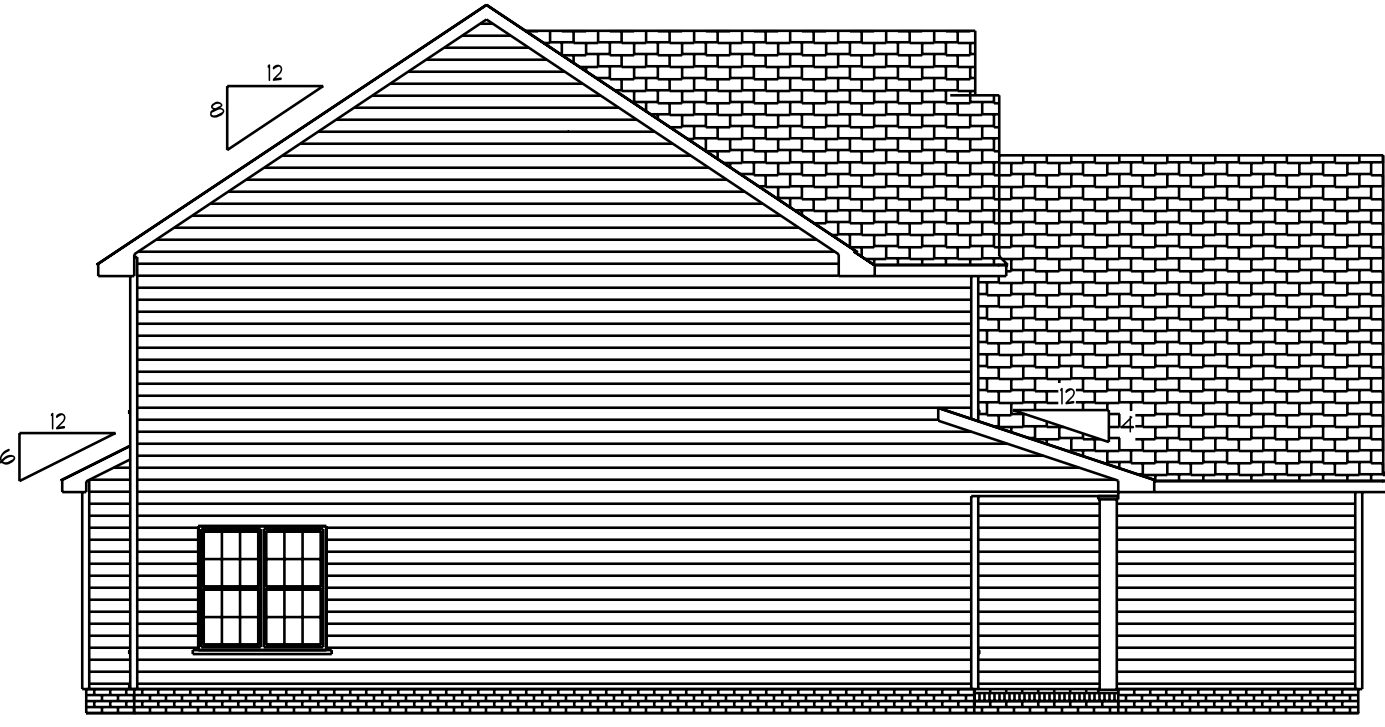
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

03/29/2021





Optional Garage



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



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

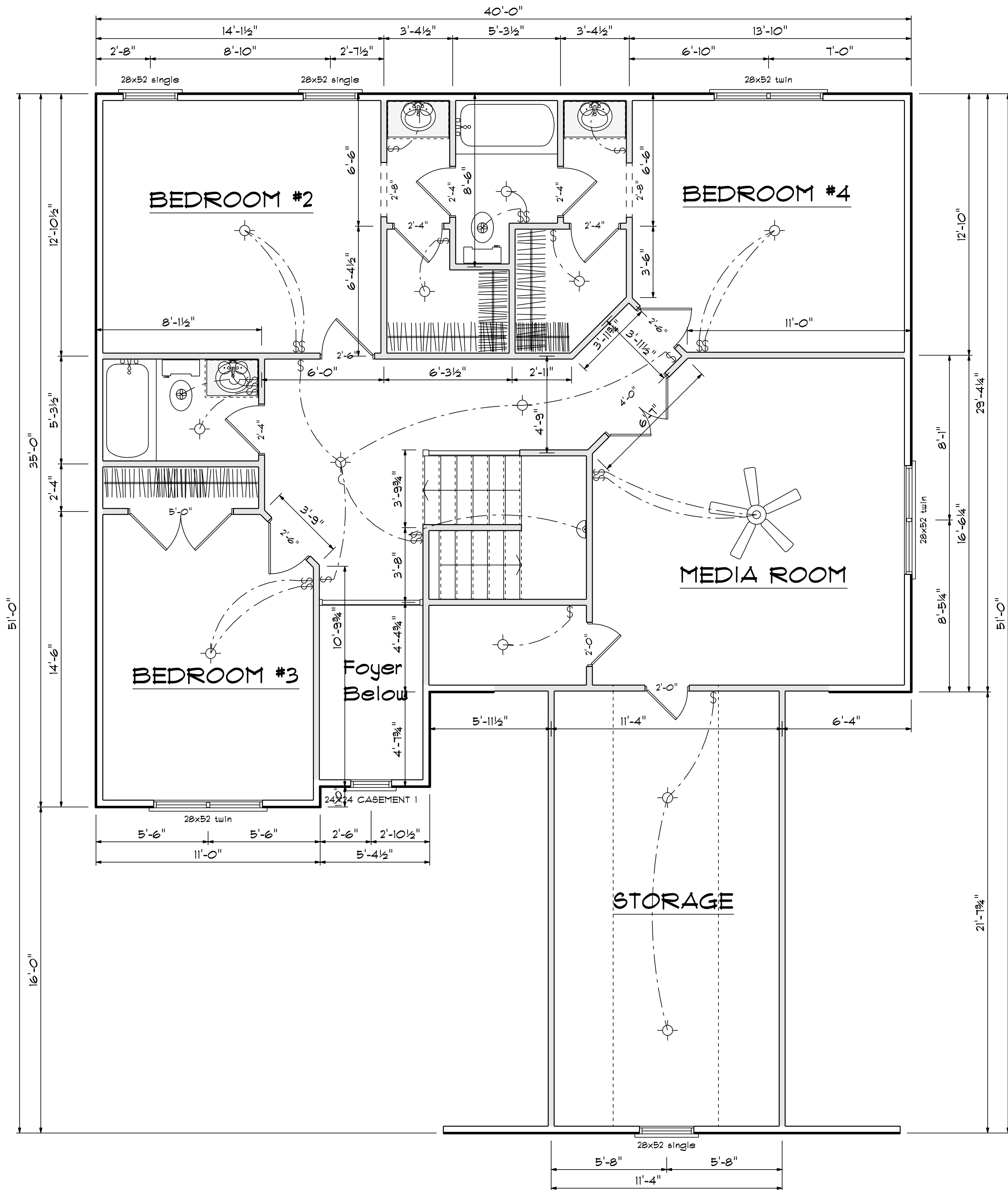


Right Elevation
Scale: 1/8" = 1'0"

DATE: 4/11/2020
REVISED
DRAWING#

SCALE: 1/4"
DRAWN BY
APPROVED

The Williams



SECOND FLOOR OPENING SCHEDULE			
PRODUCT CODE	SIZE	HINGE	COUNT
2-0 Door Unit	2'-0"	R	2
2-4 Door Unit	2'-4"	R	2
2-4 Door Unit	2'-4"	L	3
2-6 Door Unit	2'-6"	R	2
2-6 Door Unit	2'-6"	L	1
4-0 Doublehung Door Unit	4'-0"	LR	1
5-0 Doublehung Door Unit	5'-0"	LR	1
24X24 CASEMENT 1	2'-0" x 2'-0"	N	1
28x52 single	2'-8" x 5'-2"	N	3
28x52 twin	5'-4" x 5'-2"	NN	3

Second Floor Plan

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

DATE: 4/11/2020

REVISED

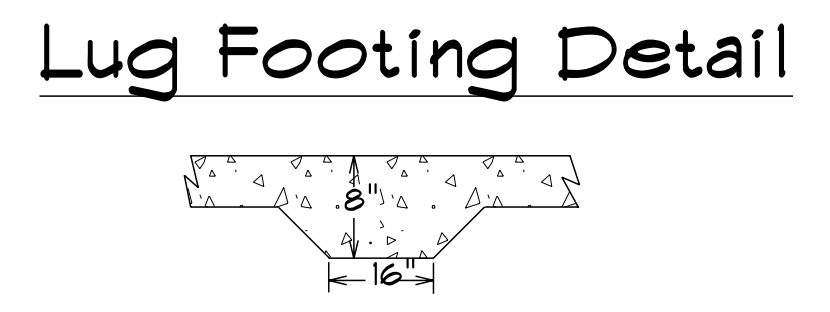
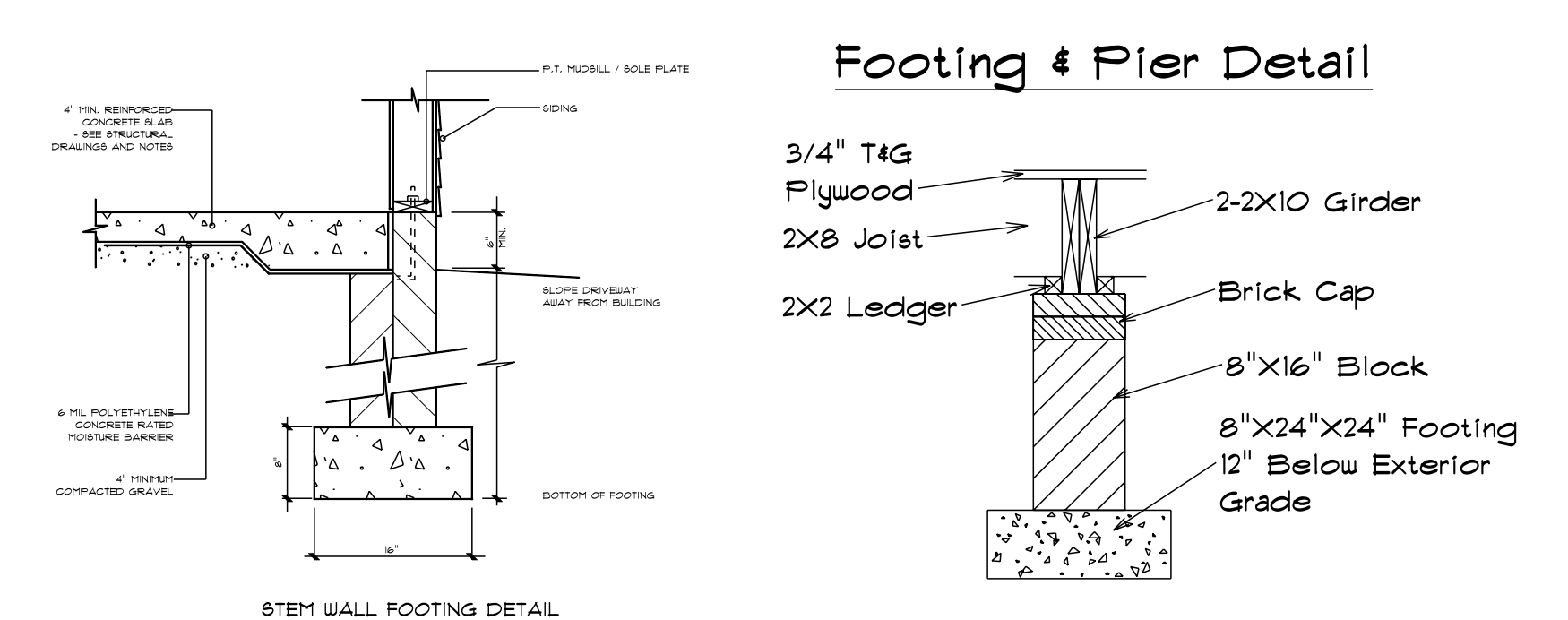
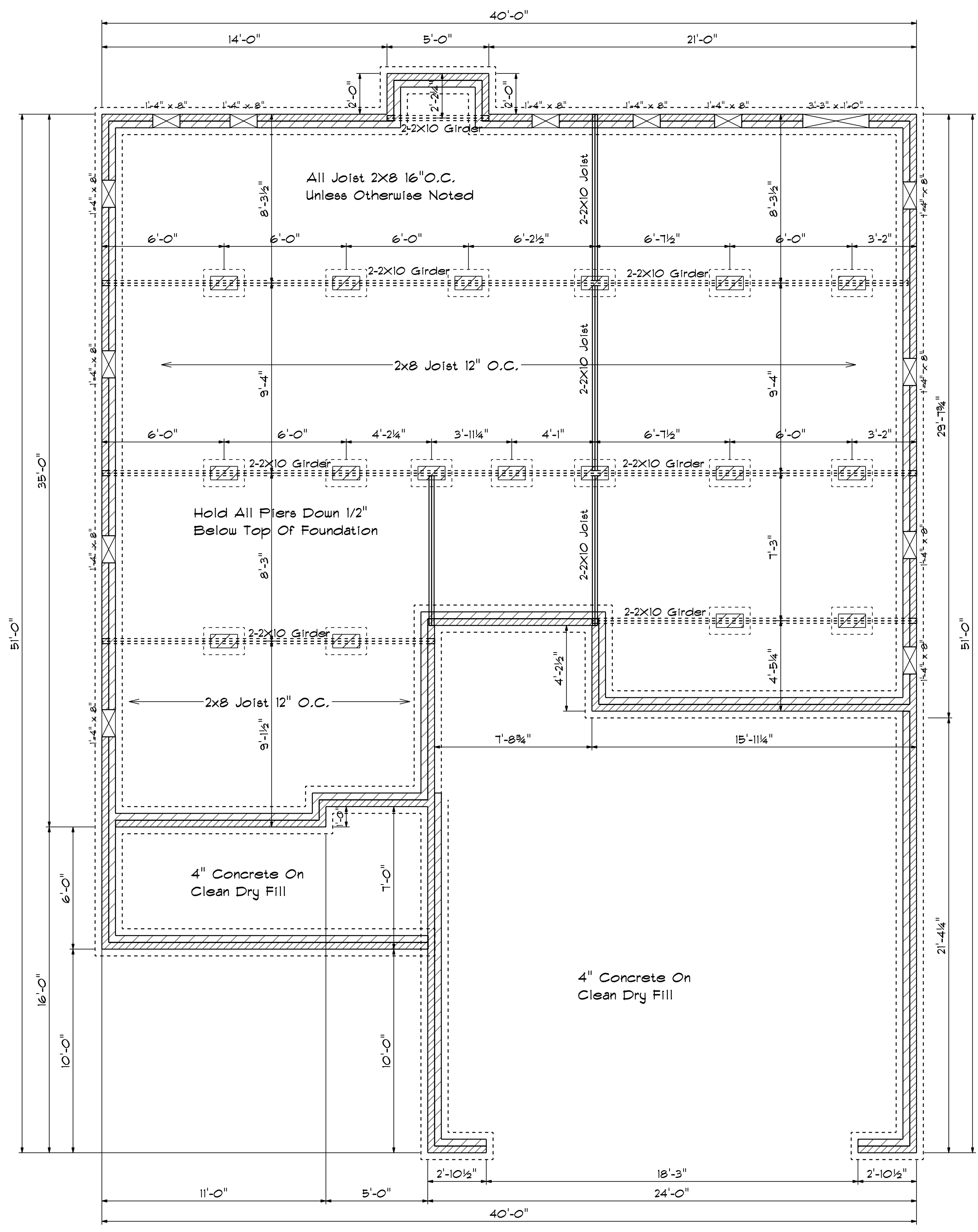
DRAWING#

SCALE: 1/4"

DRAWN BY

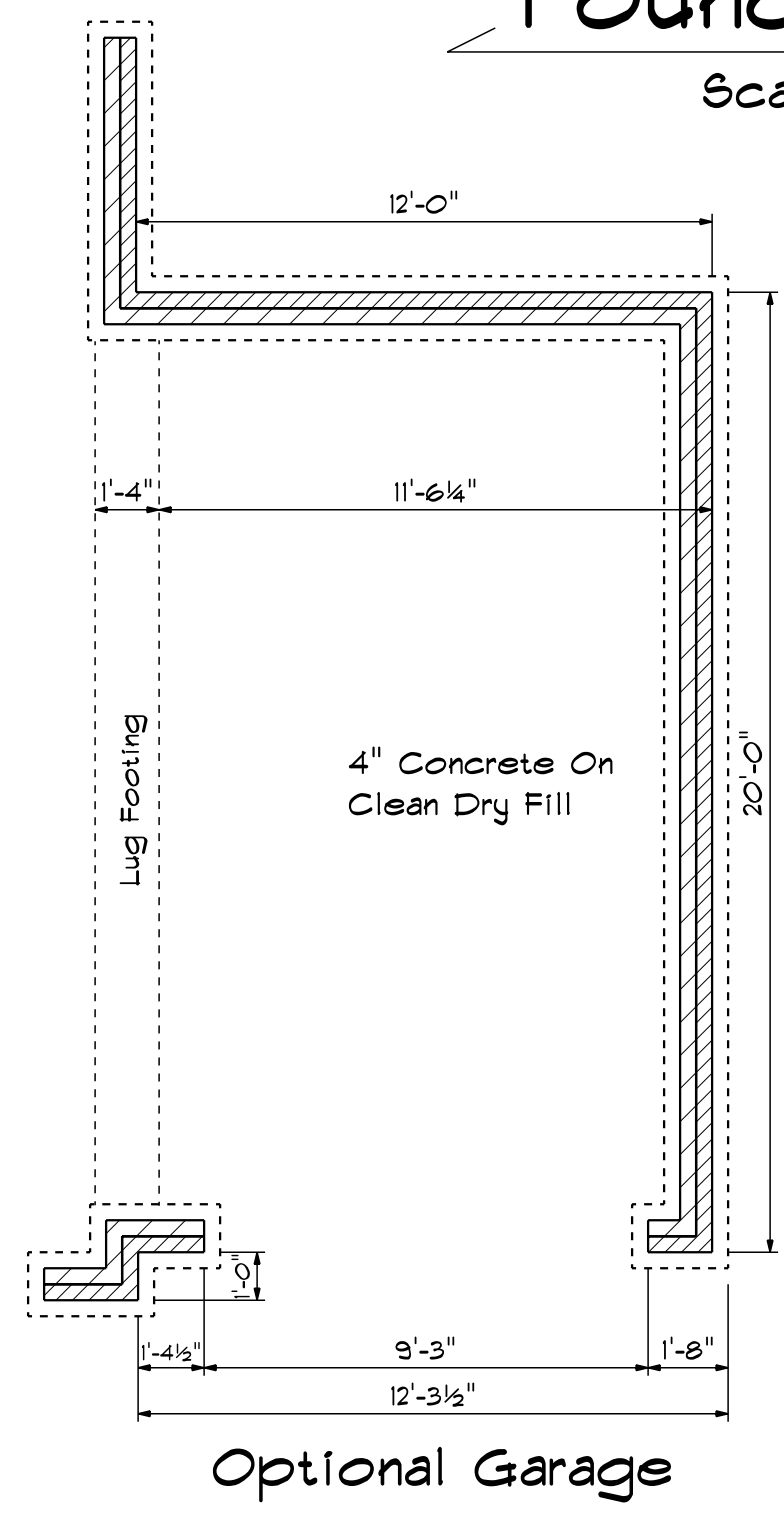
APPROVED

The Williams



Foundation Plan

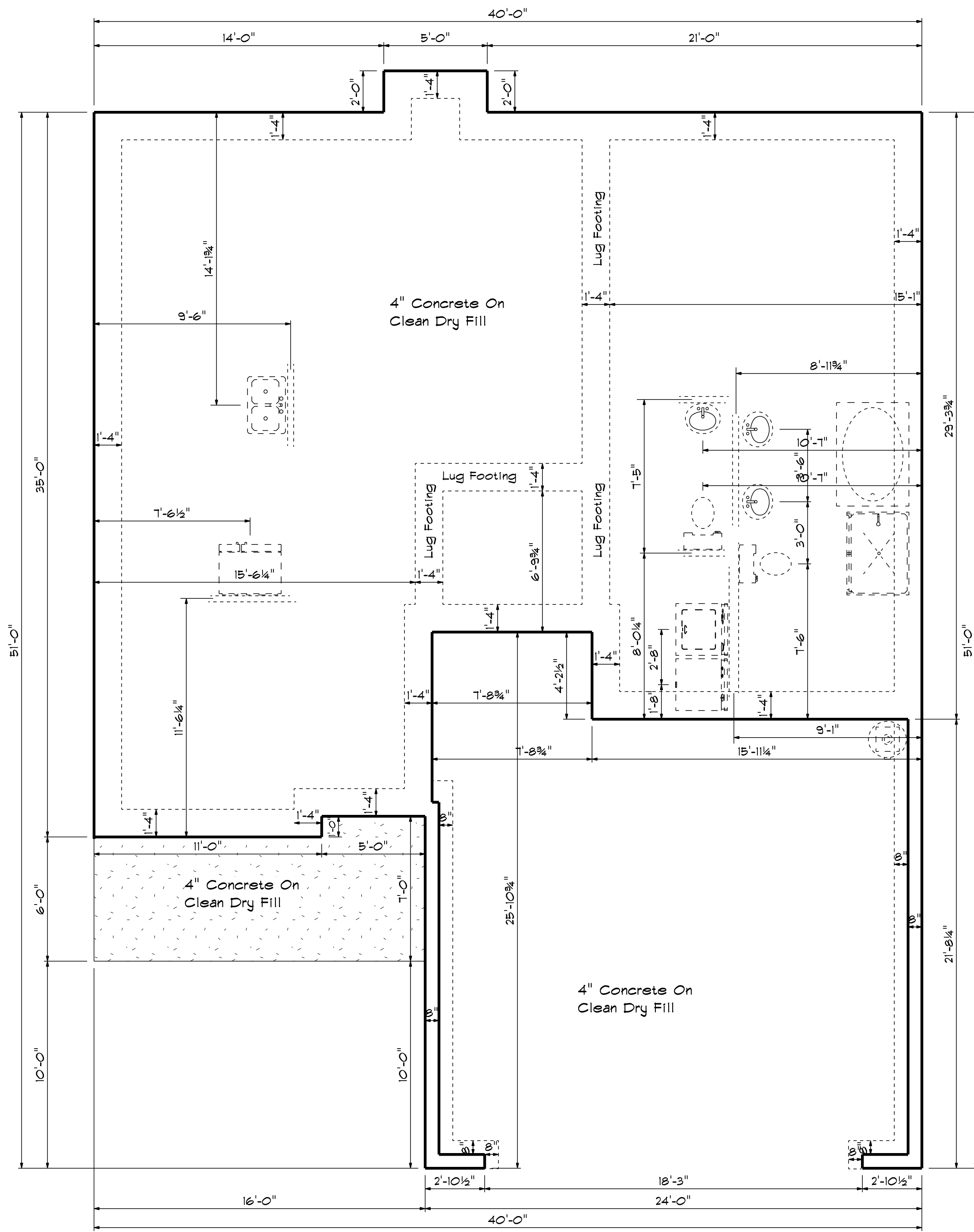
Scale: 1/4" = 1'-0"



FOUNDATION VENTILATION

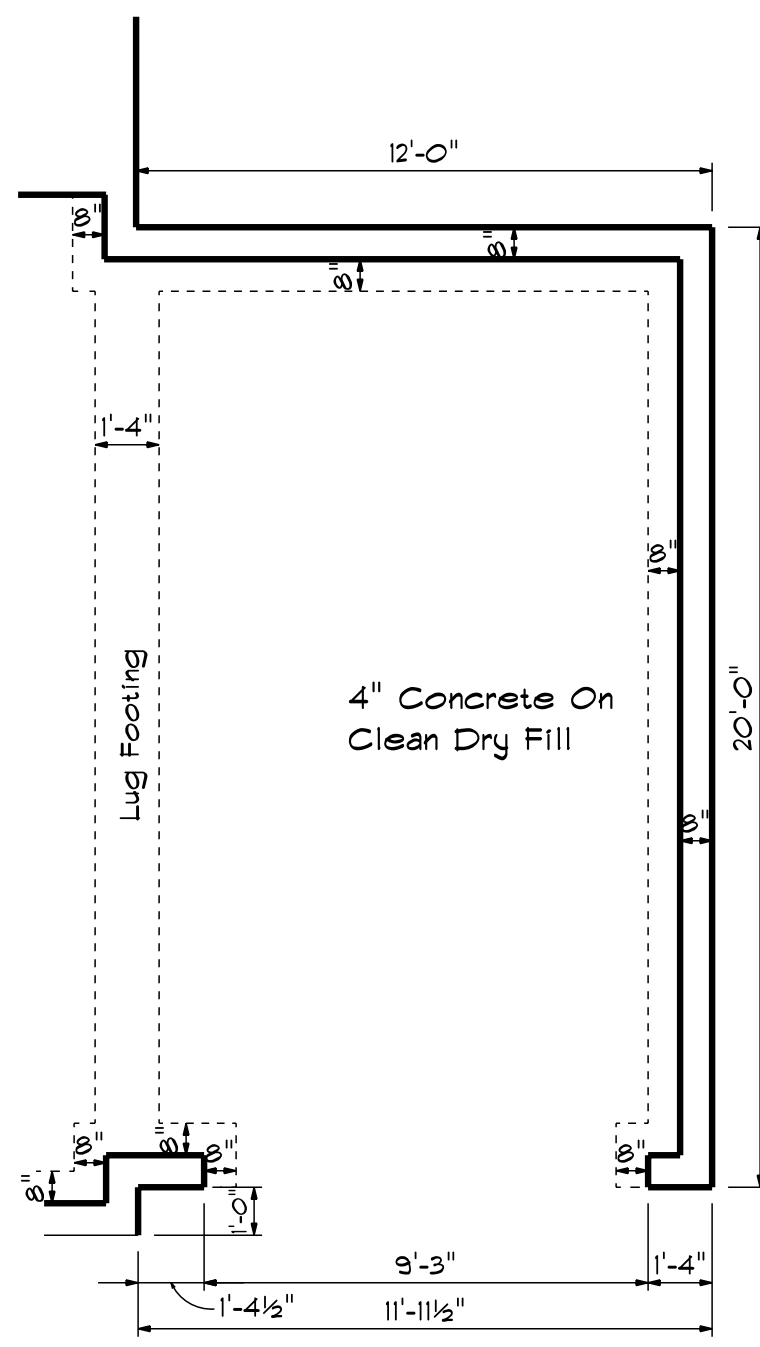
1233 Sq.Ft. Foundation Area
Requires 8.22 Sq.Ft. Ventilation.
With 6 Mil. Poly, Plans Indicate
Vents For Adequate Cross
Ventilation.

DATE: 4/11/2020	REVISIONS	DRAWING#
SCALE: 1/4"	DRAWN BY	APPROVED
The Williams		

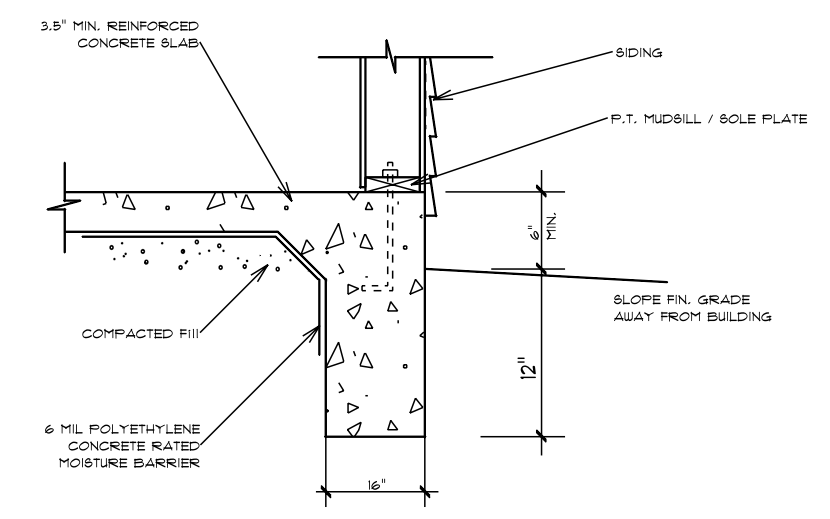


Foundation Plan

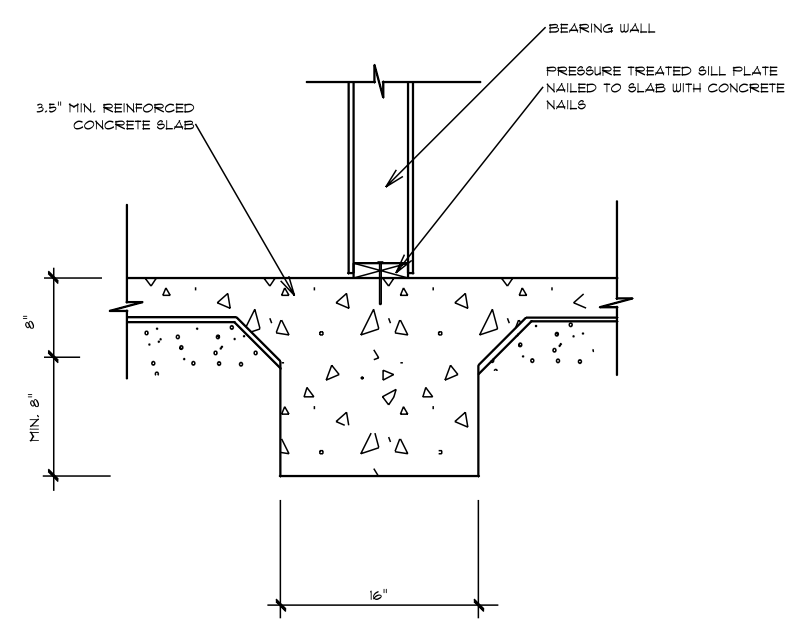
Scale: 1/4" = 1'-0"



Optional Garage



TURN-DOWN FOOTING DETAIL

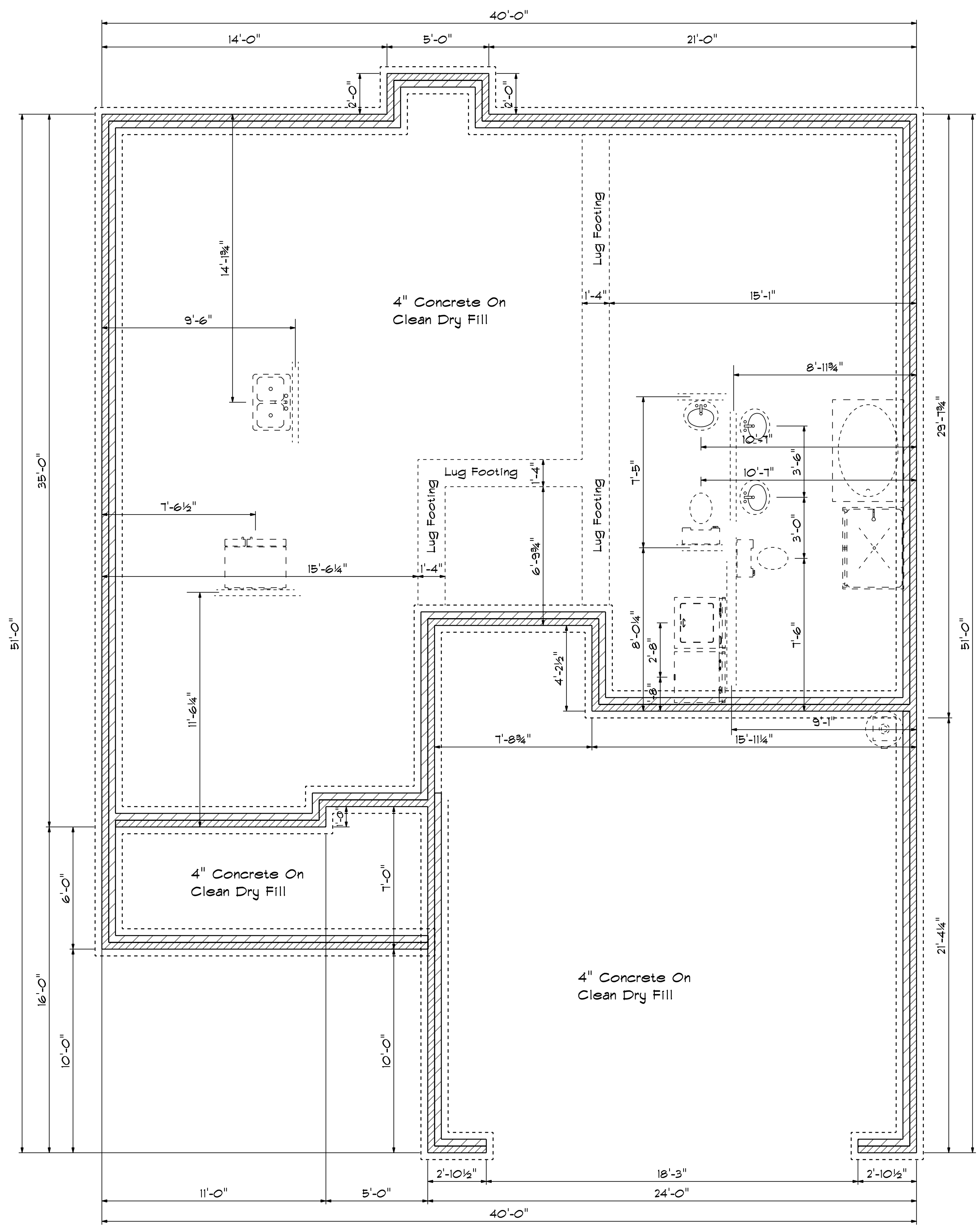


INTEGRAL SLAB FOOTING DETAIL AT BEARING WALL

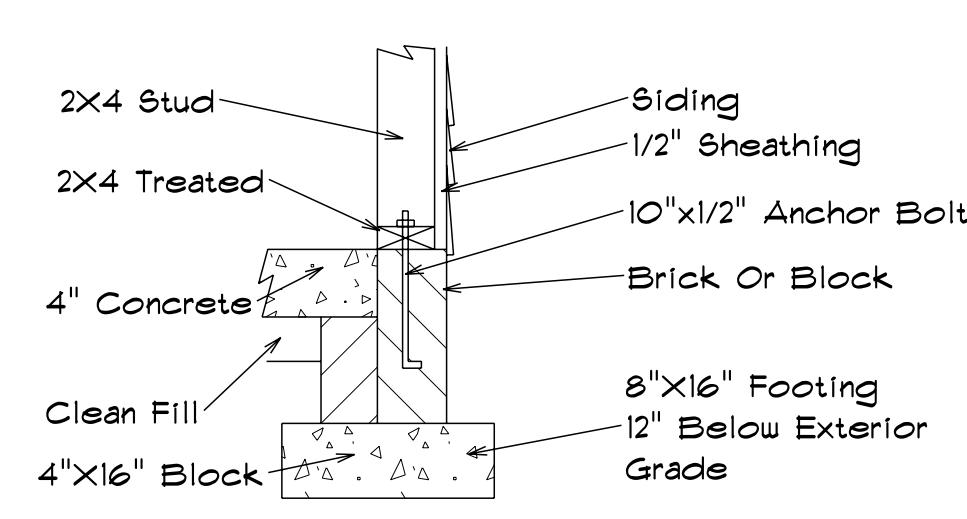
DATE: 4/11/2020
REVISED
DRAWING#

SCALE: 1/4"
DRAWN BY
APPROVED

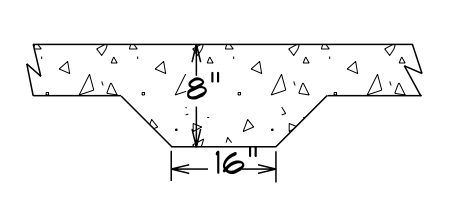
The Williams



Foundation Detail Siding

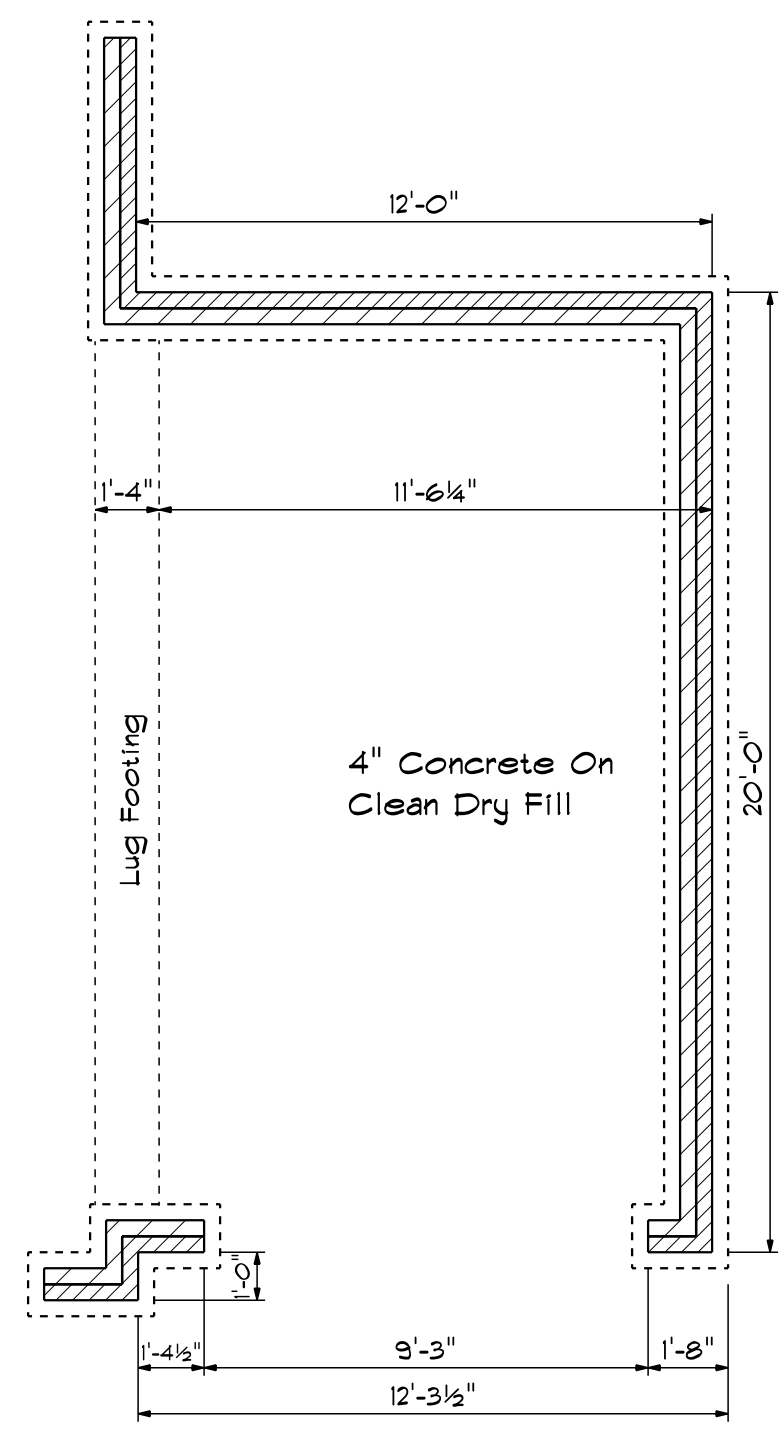


Lug Footing Detail



Foundation Plan

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



DATE: 4/11/2020
REVISI
DRAWING#

SCALE: 1/4"
DRAWN BY
APPROVED

The Williams



ROOF & FLOOR TRUSSES & BEAMS

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

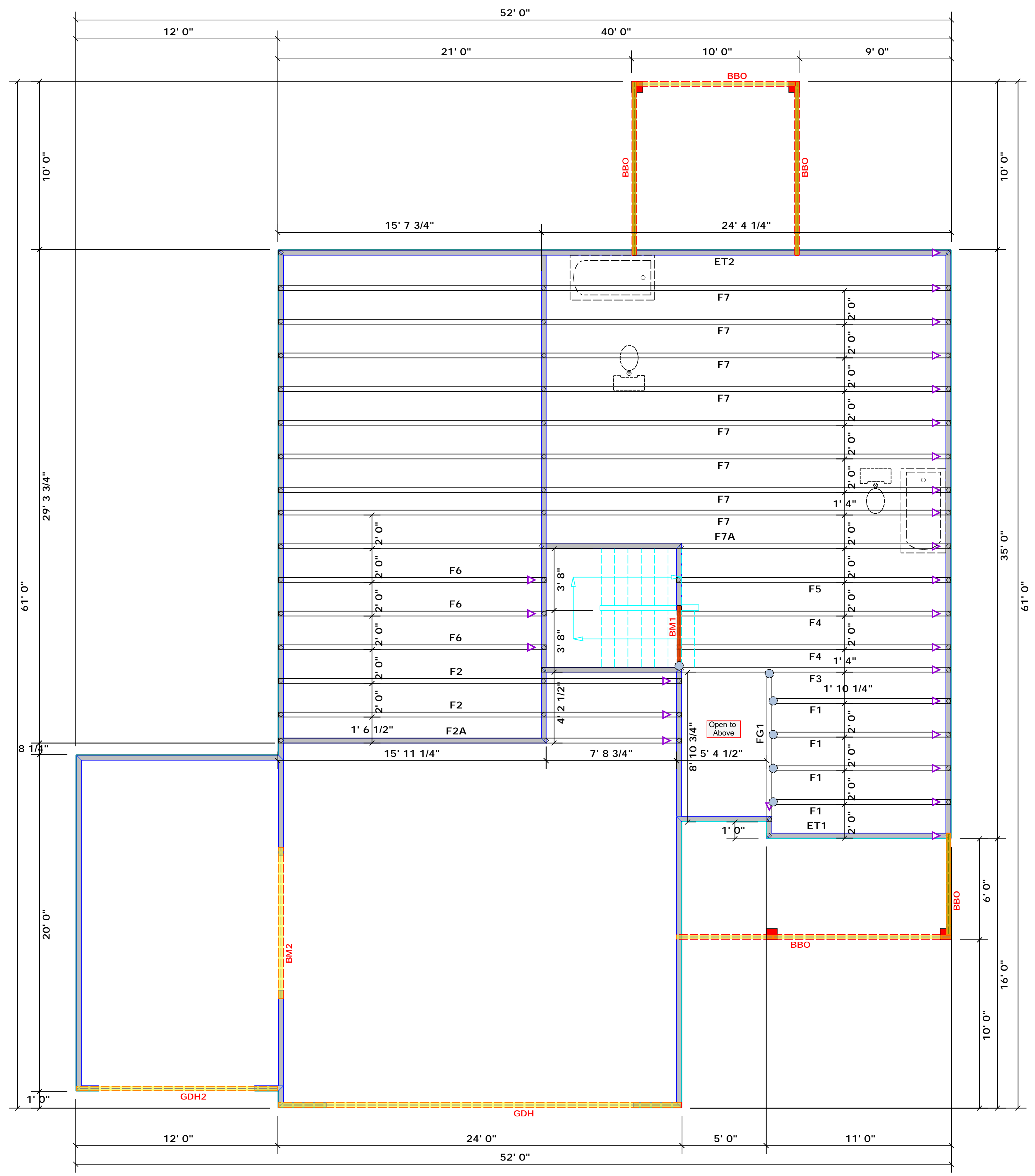
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions 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 ROU1011 & 1012)
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADERS/GIRDERS

END REACTION (IP TO)	REQ'D STUDS FOR JOIST/FLOOR	END REACTION (IP TO)	REQ'D STUDS FOR JOIST/FLOOR	END REACTION (IP TO)	REQ'D STUDS FOR JOIST/FLOOR
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				



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

All Walls Shown Are Considered Load Bearing

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
●	MSH422	USP	6	Varies	10d/3"	10d/3"

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	4' 0"	2x10 SPF No.2	2	2
BM2	9' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	24' 0"	1-3/4"x 14" LVL Kerto-S	2	2
GDH2	12' 0"	2x12 SPF No.2	2	2

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

COUNTY	ADDRESS	MODEL	DATE REV.	DRAWN BY	SALESMAN
Harnett	Tanna Place	Floor	01/07/21	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 ROUMLIC & DUB)

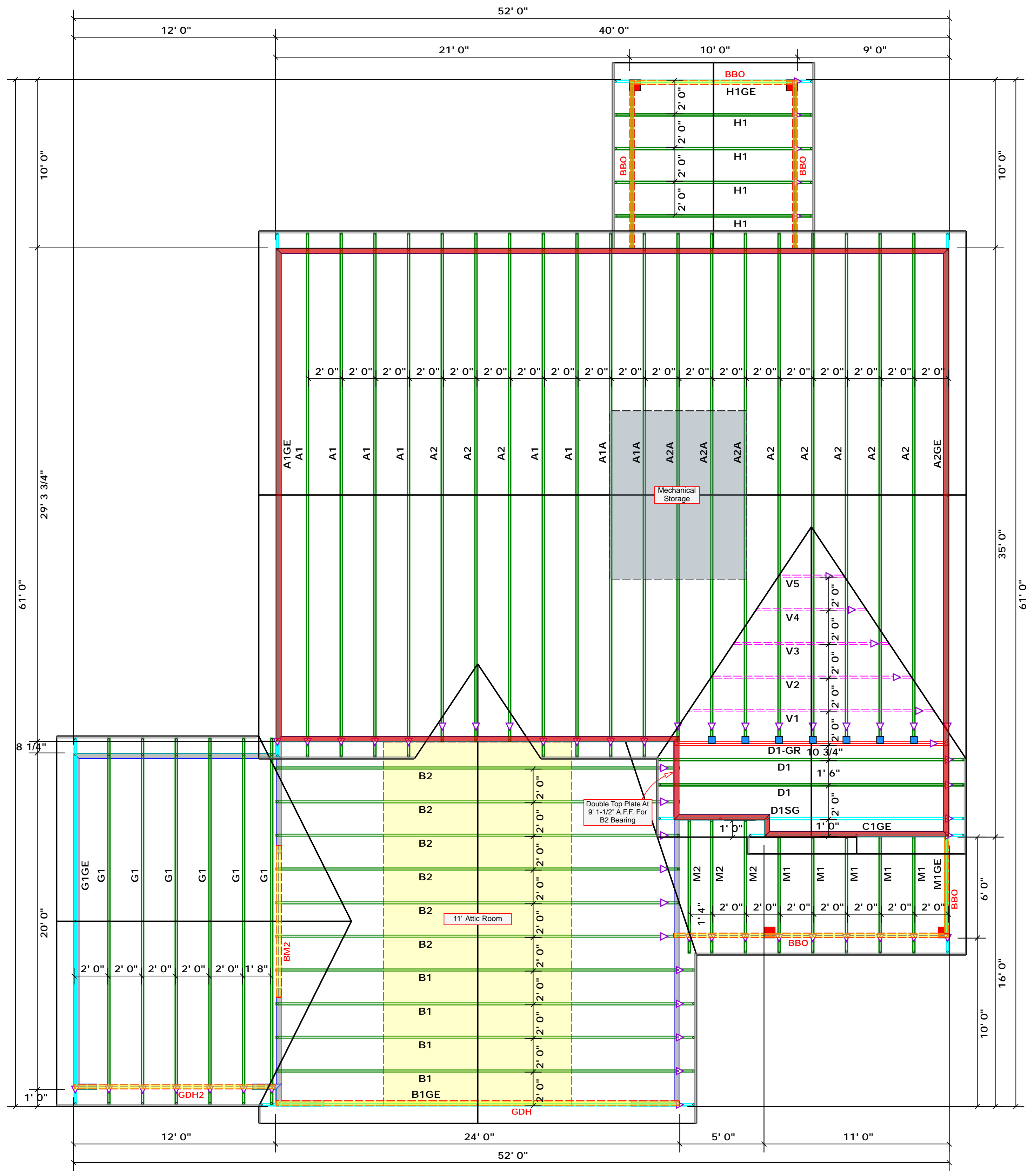
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADERS/GIRDERS

END REACTION (IP-TON)	REQ'D STUDS FOR 10' BY BEAM	END REACTION (IP-TON)	REQ'D STUDS FOR 10' BY BEAM
1700	1	2550	1
3400	2	5100	2
5100	3	7650	3
6800	4	10200	4
8500	5	12750	5
10200	6	15300	6
11900	7		
13600	8		
15300	9		

COUNTY	Harnett
ADDRESS	Tanna Place
MODEL	Roof
DATE REV.	01/07/21
DRAWN BY	David Landry
SALESMAN	Marshall Naylor

BUILDER	Ben Stout Real Estate
JOB NAME	Lot 12 Forest Ridge
PLAN	The Williams
SEAL DATE	N/A
QUOTE #	Quote #
JOB #	J1220-5666

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



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

All Walls Shown Are Considered Load Bearing

Roof Area = 3101.12 sq.ft.
Ridge Line = 117.25 ft.
Hip Line = 0 ft.
Horiz. OH = 143.52 ft.
Raked OH = 212.11 ft.
Decking = 107 sheets

Hatch Legend

- Drop Beam
- Second Floor Walls
- Padded HVAC

Connector Information

Sym	Product	Manuf	Qty	Supported Member	Header	Truss
■	HUS26	USP	7	Varies	16d/3-1/2"	16d/3-1/2"

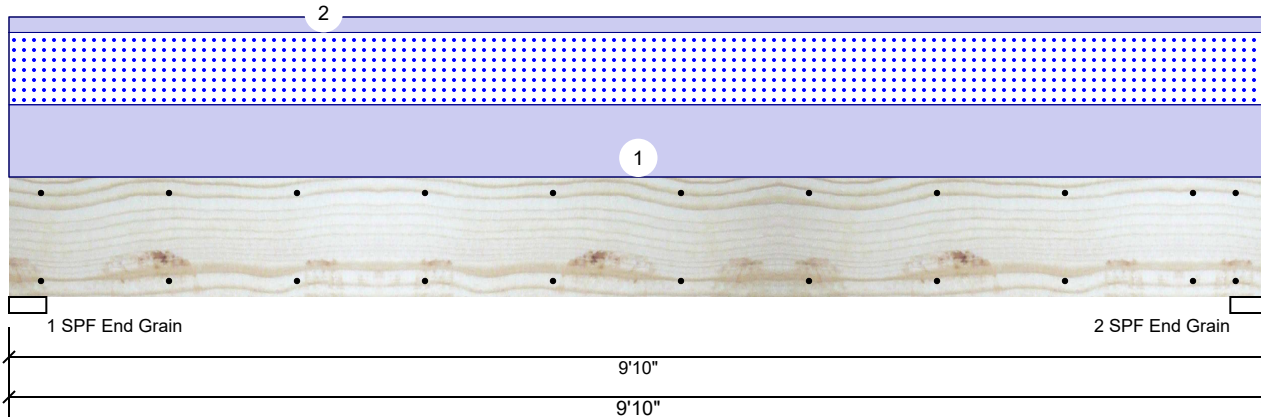
Products

PlotID	Length	Product	Plies	Net Qty
BM1	4' 0"	2x10 SPF No.2	2	2
BM2	9' 0"	1-3/4" x 9-1/4" LVL Kerto-S	2	2
GDH	24' 0"	1-3/4" x 14" LVL Kerto-S	2	2
GDH2	12' 0"	2x12 SPF No.2	2	2

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

GDH2 S-P-F #2 2.000" X 12.000" 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	0	1254	1033	0	0
2	0	1254	1033	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	51%	1254 / 1033	2286	L	D+S
2 - SPF End Grain	3.500"	51%	1254 / 1033	2286	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5109 ft-lb	4'11"	5306 ft-lb	0.963 (96%)	D+S	L
Unbraced	5109 ft-lb	4'11"	5110 ft-lb	1.000 (100%)	D+S	L
Shear	1744 lb	1'2"	3493 lb	0.499 (50%)	D+S	L
LL Defl inch	0.073 (L/1536)	4'11"	0.234 (L/480)	0.310 (31%)	S	L
TL Defl inch	0.162 (L/694)	4'11"	0.312 (L/360)	0.520 (52%)	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 laterally braced at a maximum of 3'1 1/8" o.c.
- 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	210 PLF	0 PLF	210 PLF	0 PLF	0 PLF	G1
2	Uniform			Top	45 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above

Manufacturer Info

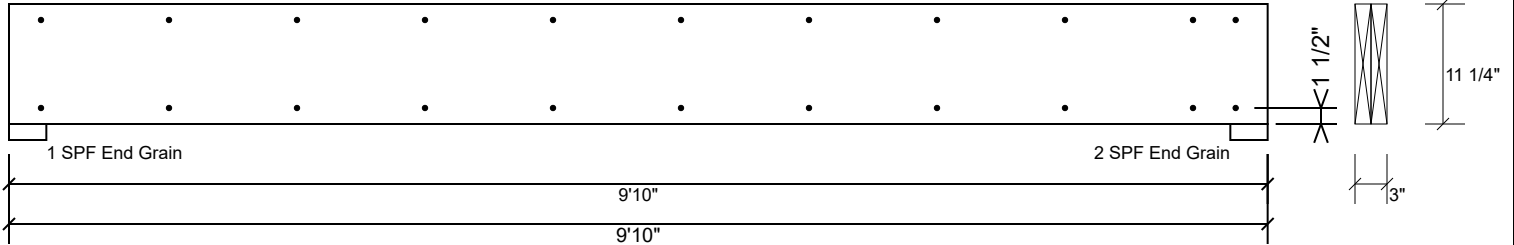
Comtech, Inc.
 1001 S. Reilly Road, Suite #639
 Fayetteville, NC
 USA
 28314
 910-864-TRUS



This design is valid until 2/26/2023

GDH2 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

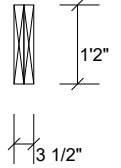
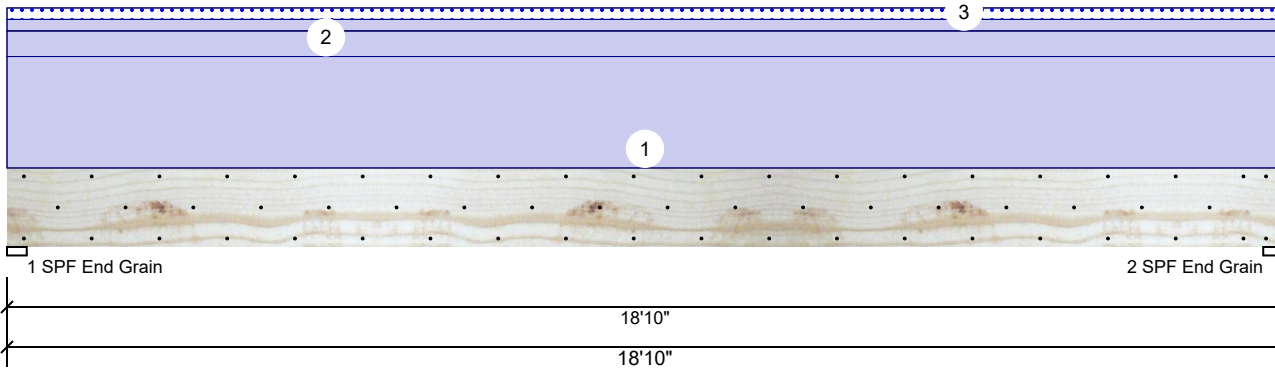
Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS
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This design is valid until 2/26/2023

GDH 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	0	2551	188	0	0
2	0	2551	188	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	26%	2551 / 188	2739	L	D+S
2 - SPF End Grain	3.500"	26%	2551 / 188	2739	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11433 ft-lb	9'5"	24299 ft-lb	0.471 (47%)	D	Uniform
Unbraced	12277 ft-lb	9'5"	12280 ft-lb	1.000 (100%)	D+S	L
Shear	2173 lb	1'4 3/4"	9408 lb	0.231 (23%)	D	Uniform
LL Defl inch	0.034 (L/6479)	9'5 1/16"	0.459 (L/480)	0.070 (7%)	S	L
TL Defl inch	0.495 (L/445)	9'5 1/16"	0.612 (L/360)	0.810 (81%)	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 8'6" o.c.
- 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	195 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
2	Uniform			Top	45 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
3	Tie-In	0-0-0 to 18-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	
	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

This design is valid until 2/26/2023

Manufacturer Info

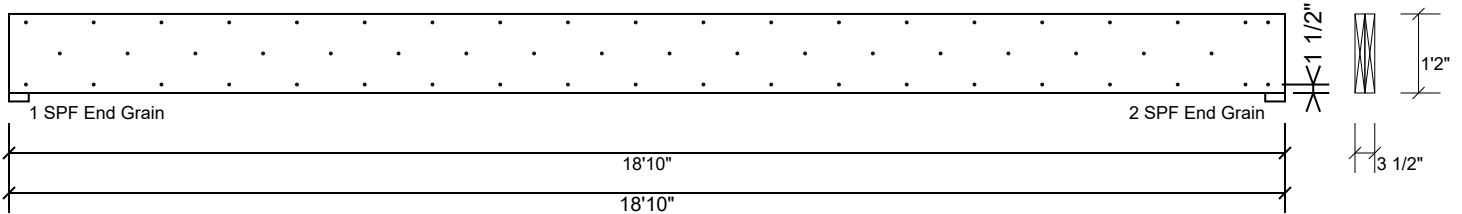
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
 www.metsawood.com/us
 ICC-ES: ESR-3633

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



GDH Kerto-S LVL 1.750" X 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	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

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6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

Manufacturer Info

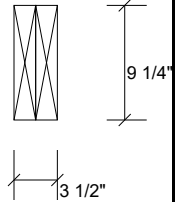
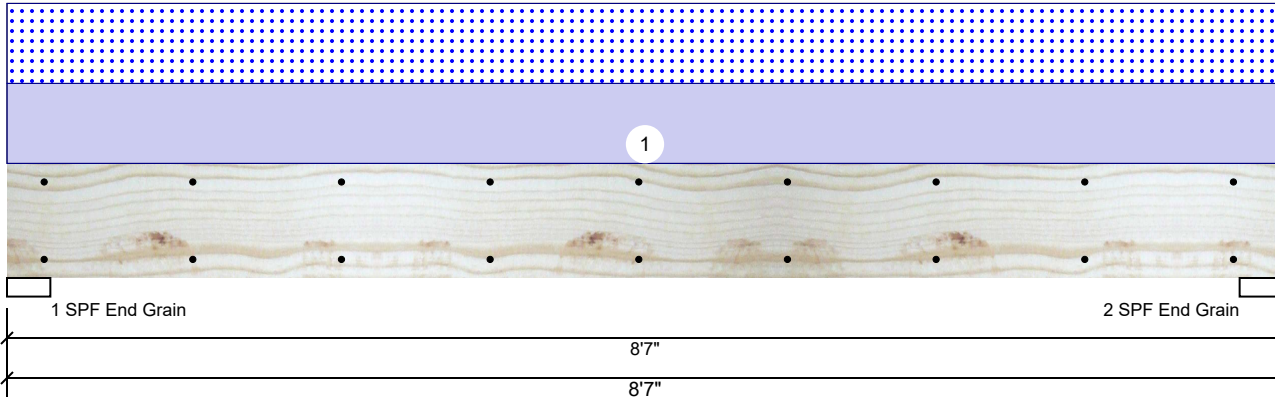
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
 www.metsawood.com/us
 ICC-ES: ESR-3633

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:	360	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1636	1605	0	0
2	0	1636	1605	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	30%	1636 / 1605	3241	L	D+S
2 - SPF End Grain	3.500"	30%	1636 / 1605	3241	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6232 ft-lb	4'3 1/2"	14423 ft-lb	0.432 (43%)	D+S	L
Unbraced	6232 ft-lb	4'3 1/2"	8689 ft-lb	0.717 (72%)	D+S	L
Shear	2486 lb	7'7"	7943 lb	0.313 (31%)	D+S	L
LL Defl inch	0.090 (L/1078)	4'3 9/16"	0.203 (L/480)	0.450 (45%)	S	L
TL Defl inch	0.183 (L/534)	4'3 9/16"	0.271 (L/360)	0.670 (67%)	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 braced at bearings.
- 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	374 PLF	0 PLF	374 PLF	0 PLF	0 PLF	B2
	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

chemicals

Handling & Installation

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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

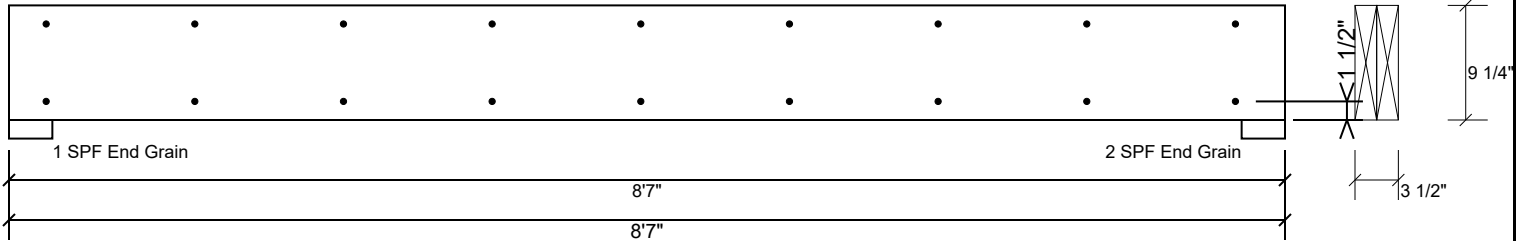
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
www.metsawood.com/us
 ICC-ES: ESR-3633

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



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

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
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