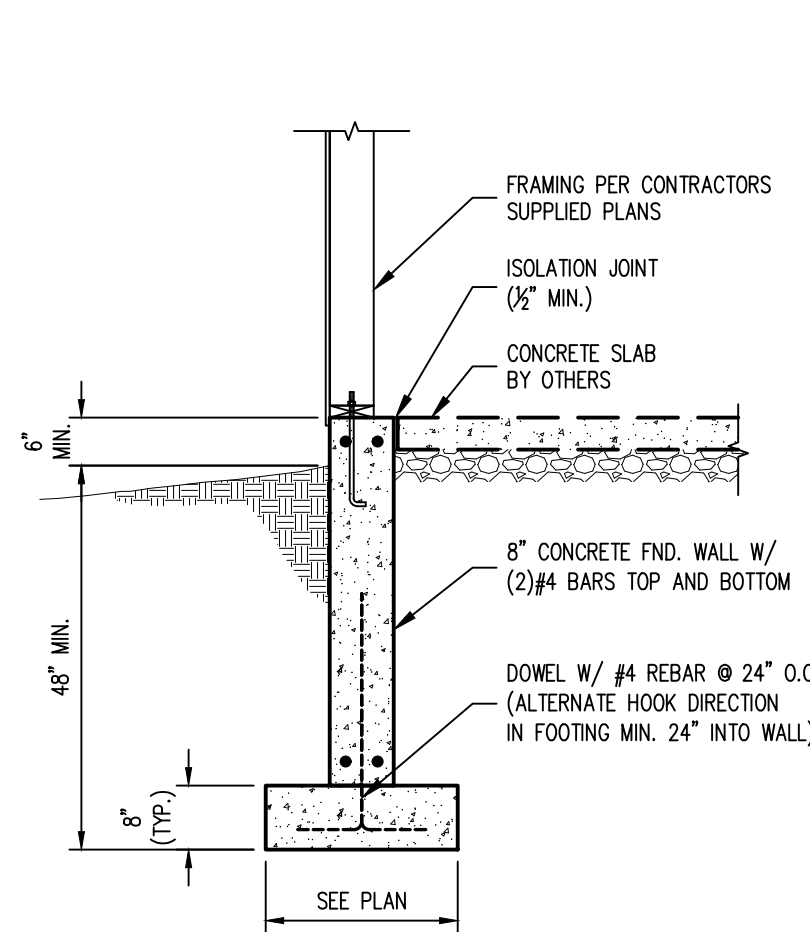
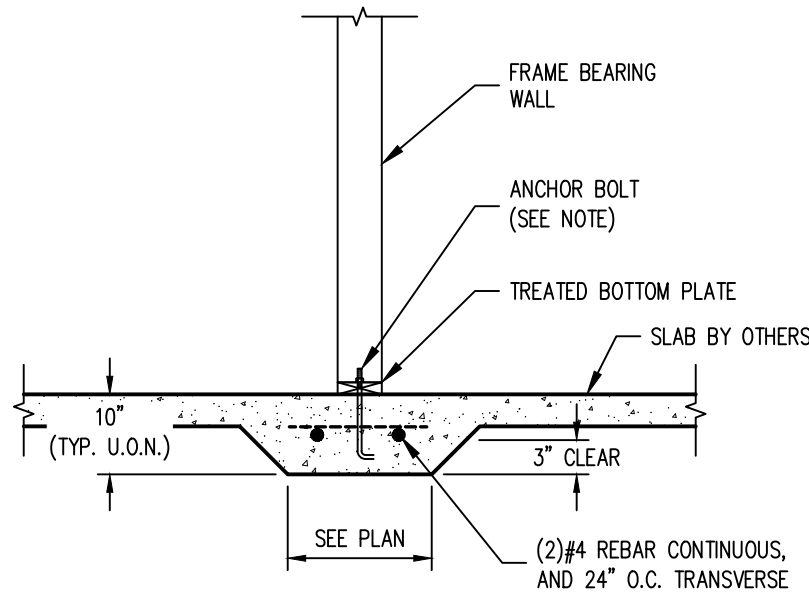


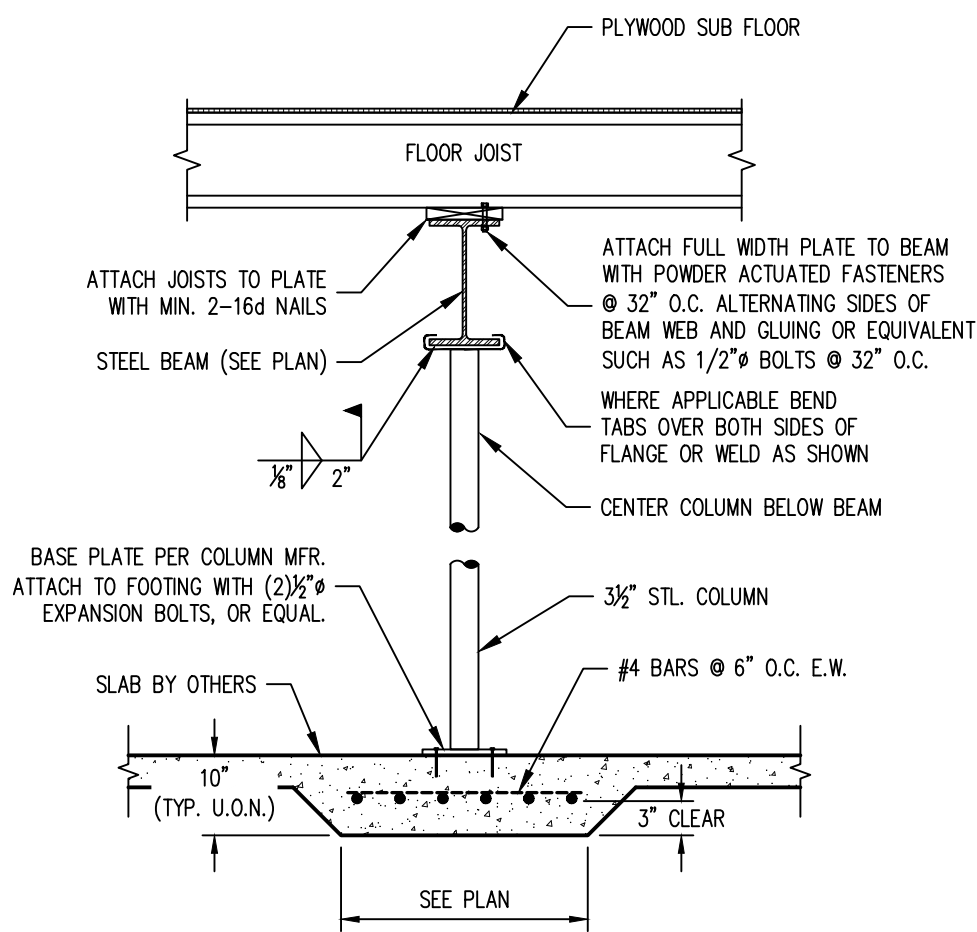
REVIEWED
FOR
CODE
COMPLIANCE
04/24/2024



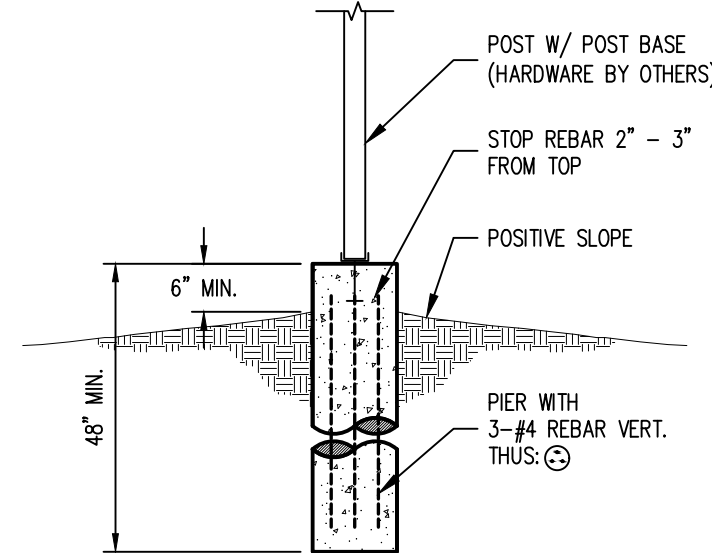
FOUNDATION WALL DETAIL
SCALE: N.T.S.



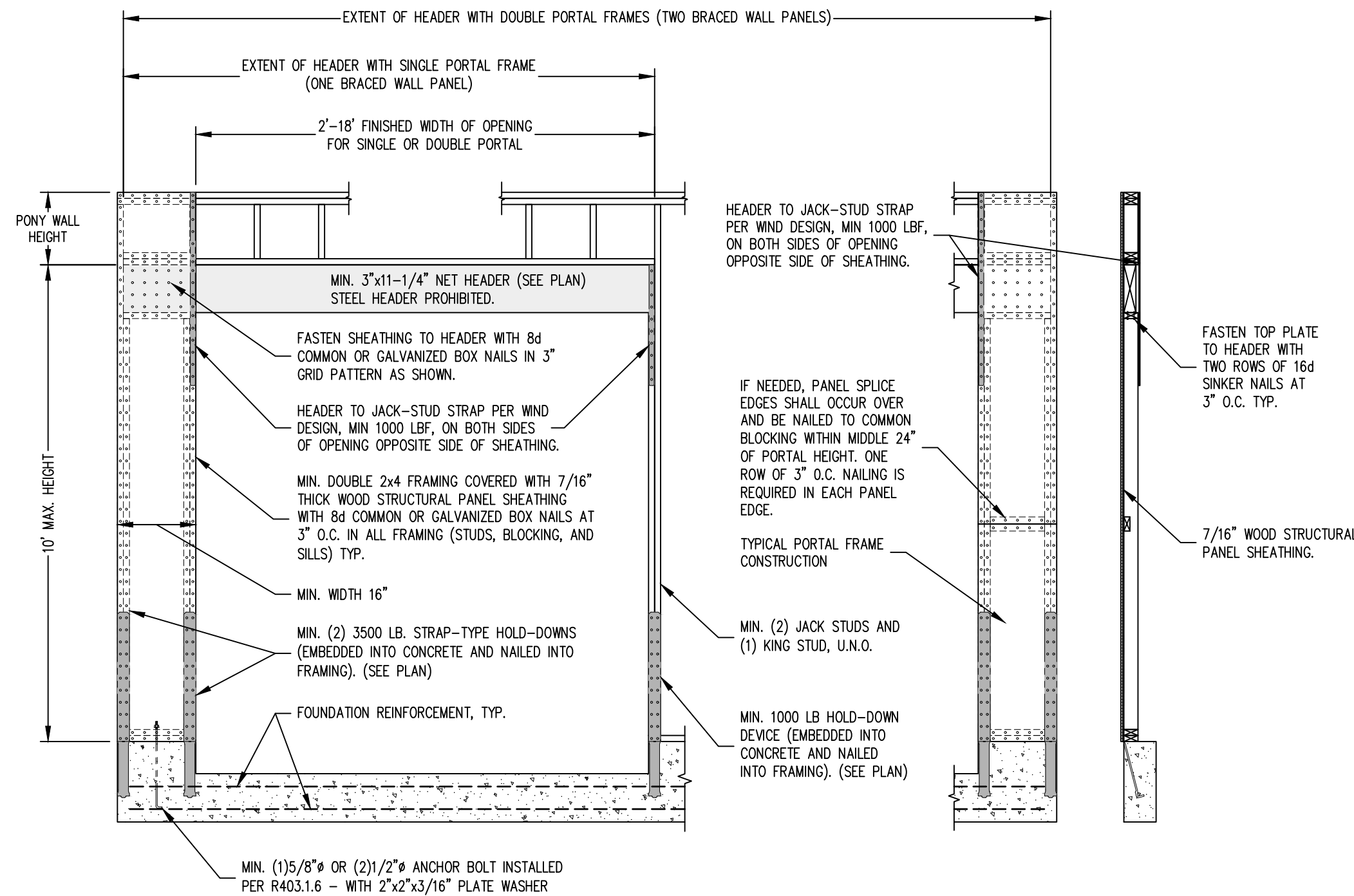
THICKENED SLAB DETAIL
SCALE: N.T.S.



INTERIOR PAD DETAIL
SCALE: N.T.S.



EXTERIOR PIER DETAIL
SCALE: N.T.S.



APA PORTAL FRAME DETAIL
SCALE: N.T.S.

GENERAL NOTES

CODES

All work shall conform to the requirements of the most recent codes and adopted amendments by local authorities. Codes included, but not limited to, are: the International Building Code (IBC); the International Residential Code (IRC); Portions of the American Concrete Institute (ACI) AC301, AC308 and AC308.2R; the American Institute of Steel Construction (AISC) Manual of Steel Construction; the American Forest and Paper Association/American Wood Council National Design Specifications (NDS); and the American Welding Society (AWS).

If shear wall information is not shown, walls are to be constructed per the braced wall section of the IRC. Code revision in use: IRC 2021 Notify engineer immediately if a different revision is in use.

SOILS

Report By: Western Slope Geotech, Inc. #22-1036

Spread Footing Recommendations

Upper Soils: Max. 2500 psf
Min. N/A psf
Lower Soils: Max. N/A psf
Min. N/A psf

Drilled Pier Recommendations

Max. End Bearing Capacity: N/A ksf
Side Shear: N/A psf
Minimum total length: N/A ft

Equivalent Fluid Density: 40 pcf (active)

It is the contractors responsibility to read and understand all portions of the referenced soil report. Contact the geotechnical engineer, prior to construction, with questions regarding the soil report.

An open hole observation is required and shall be performed by, or under the direct supervision of, a qualified geotechnical engineer. It is the contractor/owners responsibility to contact the geotechnical engineer, a minimum of 24 hours in advance, to schedule the open hole observation. Soil conditions which are inconsistent with the soil report may require additional evaluation or a foundation re-design. The owner/contractor is responsible for reporting any inconsistencies to the foundation engineer. All foundation elements shall bear a minimum of 48" below grade, or per local code, and shall bear upon undisturbed, native soils or on structural fill acceptable to the geotechnical engineer and compacted per specifications set forth by approved testing methods. The bottom of foundations shall be placed at least 2 feet above the maximum seasonal groundwater level unless noted otherwise by the geotechnical engineer. Footing and foundation wall forms and reinforcement will be observed upon the contractor/owners request, prior to the placement of concrete. All construction observations are an additional cost.

LOADS

Roof: Live Load = 95 psf Dead Load = 15 psf
Floor: Live Load = 40 psf Dead Load = 10 psf
Snow: Ground Snow Load = 124 psf
Wind: Ultimate Wind Speed (Vult) = 115 mph, Exposure C
Seismic: Zone C

MATERIALS

Concrete: All concrete shall use Type II cement, an air content of 6% +/- 1%, and a minimum 28-day strength (f'c) of 3000 psi, unless otherwise specified. Concrete shall be proportioned, placed and cured in accordance with all applicable sections of the current ACI codes.

Concrete Reinforcement: Shall be deformed Grade 60, or better with the exception of #3 ties or stirrups which could be Grade 40. All reinforcing steel shall conform to ASTM A615. Reinforcement shall not be welded, where welding is specified, the steel shall conform to ASTM A706. Minimum concrete cover over reinforcing steel cast against and permanently exposed to earth is 3 inches. Minimum concrete cover over reinforcing steel exposed to earth or weather is 1 1/2 inches.

Anchor Bolts: Shall be Grade 36 J-type bolt with a minimum 1/2" diameter, with 1" diameter washer (unless otherwise noted), and a minimum embedment into concrete or masonry of 7 inches. Projections above the concrete shall be such that a washer and nut can be placed and tightened over the sill plate. There shall be a minimum of 2 bolts per sill plate section with one bolt located not more than 12 inches from the end of a plate section or corner and spaced no more than 48" apart. Additional anchor bolt details shall be in accordance with the drawing.

Structural Steel: Structural steel plates, angles, channels, wide flange and miscellaneous shapes shall conform to ASTM A36. Square and rectangular tube shapes shall conform to ASTM A500, Grade B. Standard and Adjustable steel pipe columns shall conform to ASTM A53, Grade B, Schedule 40. Pipe columns shall be 3" or 3 1/2" nominal diameter, unless noted otherwise (U.N.O.). Adjustable pipe columns shall have the threads exposed; 1" minimum and 3" maximum.

Wood Products: Dimensional lumber shall be Hem Fir #2 or better unless noted otherwise on this plan. Laminated Veneer Lumber shall have a minimum allowable flexural stress (Fb) of 2,600 psi and a minimum modulus of elasticity (E) of 1,900,000 psi. Glue Laminated Lumber shall have a minimum allowable flexural stress (Fb) of 2,400 psi and a minimum modulus of elasticity (E) of 1,500,000 psi.

Installation: Minimum beam bearing at wood framed walls or concrete walls shall be the full beam width by 3 inches unless noted otherwise on the plans. Minimum beam bearings shall be in accordance with applicable codes and/or manufacturer's recommendations. Lumber in contact with concrete or earth shall be pressure treated or foundation grade redwood. Install LVL beams in the longest practical lengths available, lap beams as needed per the manufacturer's specifications. Do not notch or bore beams, columns, joists, rafters or trusses unless shown on the drawings or approved in writing by the engineer. All bolts used in wood framing shall be installed with steel washers. Floor sheathing connections per the building code.

SLABS-ON-GRADE

A slab on grade, if shown on this plan or in the details, shall not be mistaken as a recommendation to construct a slab on grade for this project. Slabs on grade, placed upon expansive soils, are not recommended for habitable spaces. Soils that are expansive may cause vertical slab movement resulting in damage to structural and/or non-structural items. Alternate methods of floor construction, and the potential risks, should be discussed between the contractor/owner and the geotechnical engineer. If slabs on grade are constructed, appropriate precautions shall be taken to minimize the risk of damage caused by slab movement. Slabs shall be free floating and isolated from grade beams, columns, plumbing or other support structures by use of a 1/2" isolation strip, minimum. All partition walls on slabs shall have a minimum 2" void space to allow for some vertical slab movement. The void space could be eliminated for suspended (structural) concrete slabs. Any areas with slab on grade construction, placed over expansive soils, should not be finished for a minimum of 3 years after substantial completion. Exterior slabs should not be doweled to the foundation when placed over expansive soils. Slabs on grade are not structural and are not designed unless otherwise noted.

BACKFILL

The engineer does not have control or knowledge of specific site grading or backfill procedures. The engineer has not performed a lateral load analysis of foundation walls and will not be responsible for damage caused by earth and hydraulic pressures or improper backfill procedures. It is recommended that the first floor system be installed prior to backfilling to help support the foundation wall. The backfill shall be compacted and graded per the above referenced soils report. At minimum, the slope shall meet the requirements of the governing building code. Backfill may settle over time and should be maintained to ensure positive drainage away from the foundation walls.

GENERAL

The dimensions shown on this plan are from building plans submitted to the engineer and shall be verified by the contractor/owner prior to construction. The contractor/owner shall carefully study and compare all dimensions and elevations indicated on this plan with the contract documents. The engineer shall be notified immediately of any discrepancy between the drawings, or in the layout, of any error, inconsistency, or omission he may discover. The engineer shall not be liable to the contractor/owner for any damages resulting from such errors, inconsistencies, or omissions in the contract documents nor shall the contractor/owner take advantage of any error or omission in the drawings or the contract documents. Architectural portion of the plan is by the owner. Owner/contractor shall verify that this drawing conforms to the final architectural version. The contractor is responsible for the location of all utilities on the site, both horizontally and vertically. All superstructure framing is to be constructed in accordance with the current International Residential Code requirements for Braced Wall Framing (Chapter 6, IRC) unless otherwise noted. Lateral Load Resisting Elements that are not in accordance with the Braced Wall Framing standards and Moment Frames designed by the Engineer are shown on the drawings in Tabular form or construction details. The above reference to the seismic loading are for informational purposes only. Calculations are performed with assumed truss bearing conditions. A final truss design shall be provided to and reviewed by CDS Engineering Corporation prior to construction. Any load carrying member not shown on this plan or any other framing requirements not shown on this plan shall be the responsibility of the contractor/owner. All framing and connections shall be in accordance with the conventional construction requirements of the IBC, IRC, applicable regulatory agencies, and adopted standards. Brick ledges, foundation steps, beam pockets, basement windows, etc. may not be shown. Any crawl space or structural floor cavity shown on this plan does not include provisions for the control of mold growth or moisture levels. Environmental control provisions for these or other applicable areas is the responsibility of the contractor/owner. These plans and all associated work performed by CDS Engineering Corporation (ENGINEER) shall remain the property of the ENGINEER and may not be used by any other entity for any other endeavor without the written consent of the ENGINEER.

Kevin F. Becker, Kevin F. Becker, P.E.
P.E.

2024.04.03 08:12:42-06'00'

CDS
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Corporation

165 2nd St. S.W.,
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TESTING AND FIELD INSPECTION



04/03/2024

For and on behalf of
CDS Engineering, Corp.

RECORD OF ISSUE	DATE	BY	APP.
INITIAL ISSUE	03/21/24	TSS	KFB
REVISED PR COUNTY COMMENTS	04/03/24	TSS	KFB

DETAIL PLAN

DRAWING TITLE	CLIENT NAME	LEGAL DESCRIPTION
	JLJ CUSTOM HOMES, LLC	FEATHERED ELK RANCH 26105 COUNTY ROAD 37B, ROUITT COUNTY, COLORADO

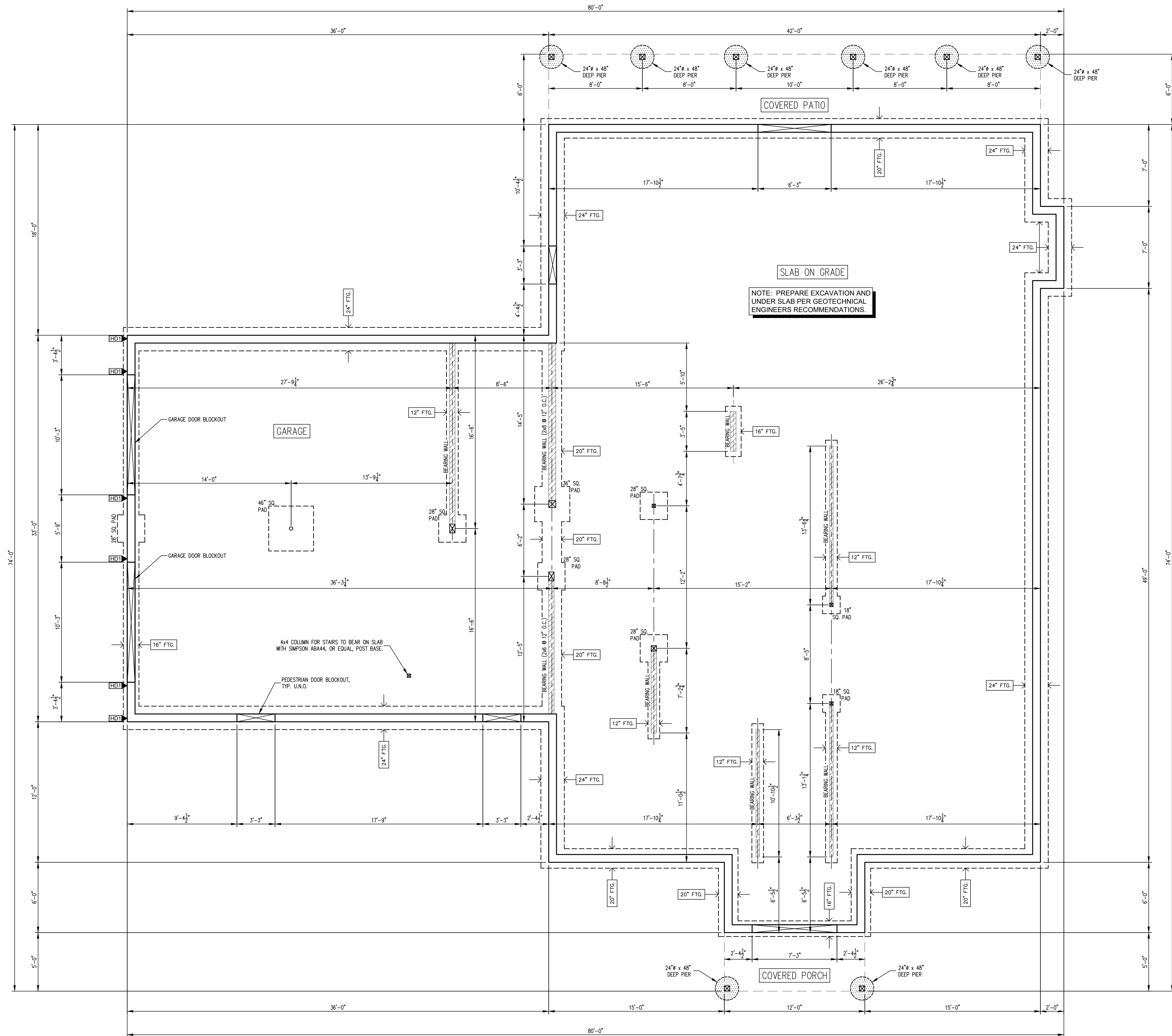
DESIGNED BY	KFB
DRAWN BY	TSS
CHECKED BY	RR
DATE ISSUED	03/21/2024
SCALE	N.T.S.

MODEL NO.

PROJECT NO.

24-2324

SHEET 1 OF 4 TOTAL SHEET



REVIEWED
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04/24/2024



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For and on behalf of
CDS Engineering, Corp.

RECORD OF ISSUE	DATE	BY	APP.
INITIAL ISSUE	03/21/24	TSS	KFB
1.			
2.			
3.			
4.			
5.			
6.			

FOUNDATION PLAN

JLJ CUSTOM HOMES, LLC
FEATHERED ELK RANCH
26105 COUNTY ROAD 37B,
ROUTT COUNTY, COLORADO

DRAWING TITLE	CLIENT NAME	LEGEND DESCRIPTION

DESIGNED BY	KFB
DRAWN BY	TSS
CHECKED BY	RR
DATE ISSUED	03/21/2024
SCALE	1/4" = 1'-0"

MODEL NO.

PROJECT NO.

24-2324

SHEET 2 OF 4 TOTAL SHEET

PAD SIZE	# OF BARS, E.W.
13" - 18"	3 - #4 REBAR
19" - 24"	4 - #4 REBAR
25" - 30"	5 - #4 REBAR
31" - 36"	6 - #4 REBAR
37" - 42"	7 - #4 REBAR
43" - 48"	8 - #4 REBAR

NOTE: CONTRACTOR TO VERIFY
ALL DIMENSIONS PRIOR TO
CONSTRUCTION. AN OPEN HOLE
OBSERVATION IS REQUIRED.

SIMPSON CONNECTORS

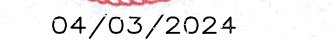
[HDT] = STHD14 STRAP-TIE HOLDOWN
SHOWN AT APPROXIMATE LOCATION



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TESTING AND FIELD INSPECTION



for and on behalf of
DS Engineering, Corp.

	INITIAL	ISSUE	03/21/24	TSS	KFB
1.					
2.			---	---	---
3.			---	---	---
4.			---	---	---
5.			---	---	---
6.			---	---	---

LOWER ROOF FRAMING

JLC CUSTOM HOMES, LLC

FEATHERED ELK RANCH
26105 COUNTY ROAD 37B,
ROUTT COUNTY, COLORADO

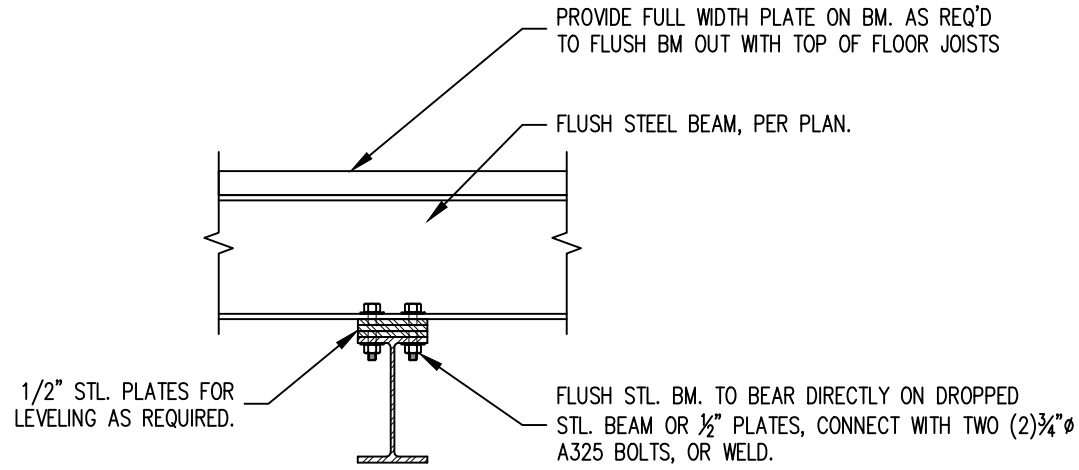
STAFF TITLE	CLIENT NAME	LEGAL DESCRIPTION
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DRAWN BY	TSS
CHECKED BY	RR
DATE ISSUED	03/21/2024
SCALE	1/4"=1'-0"

SUBJECT NO. _____

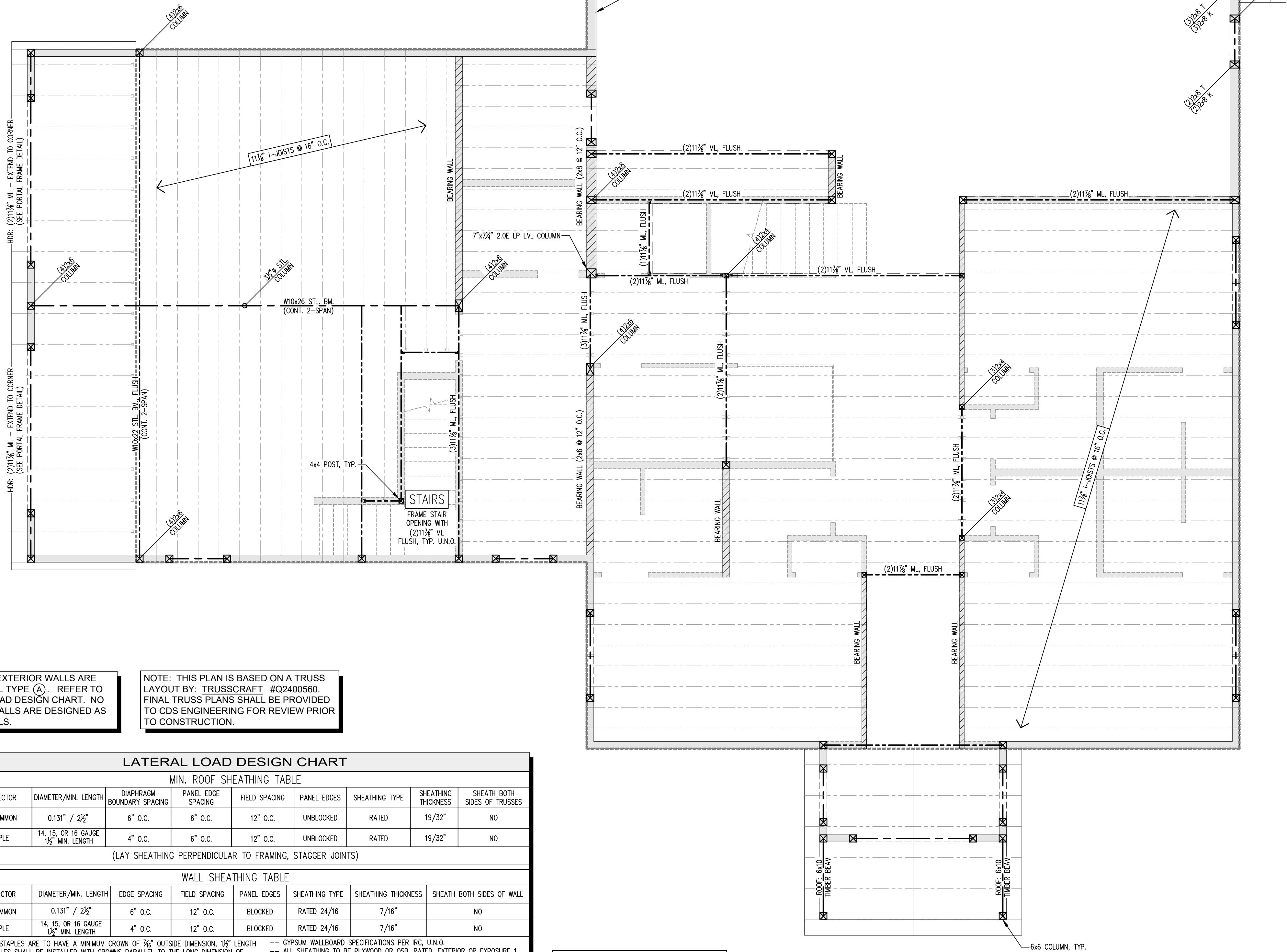
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SHEET 3 OF 4 TOTAL SHEET

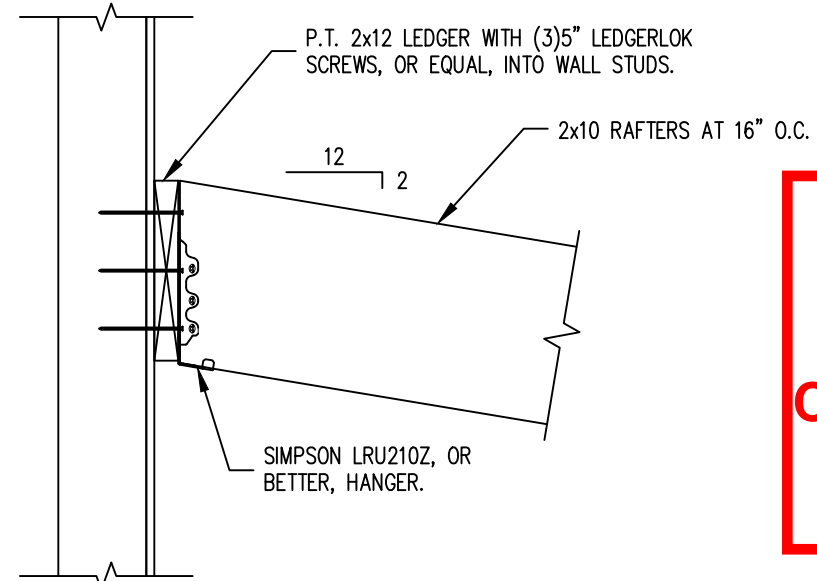


STEEL BEAM CONNECTION DETAIL

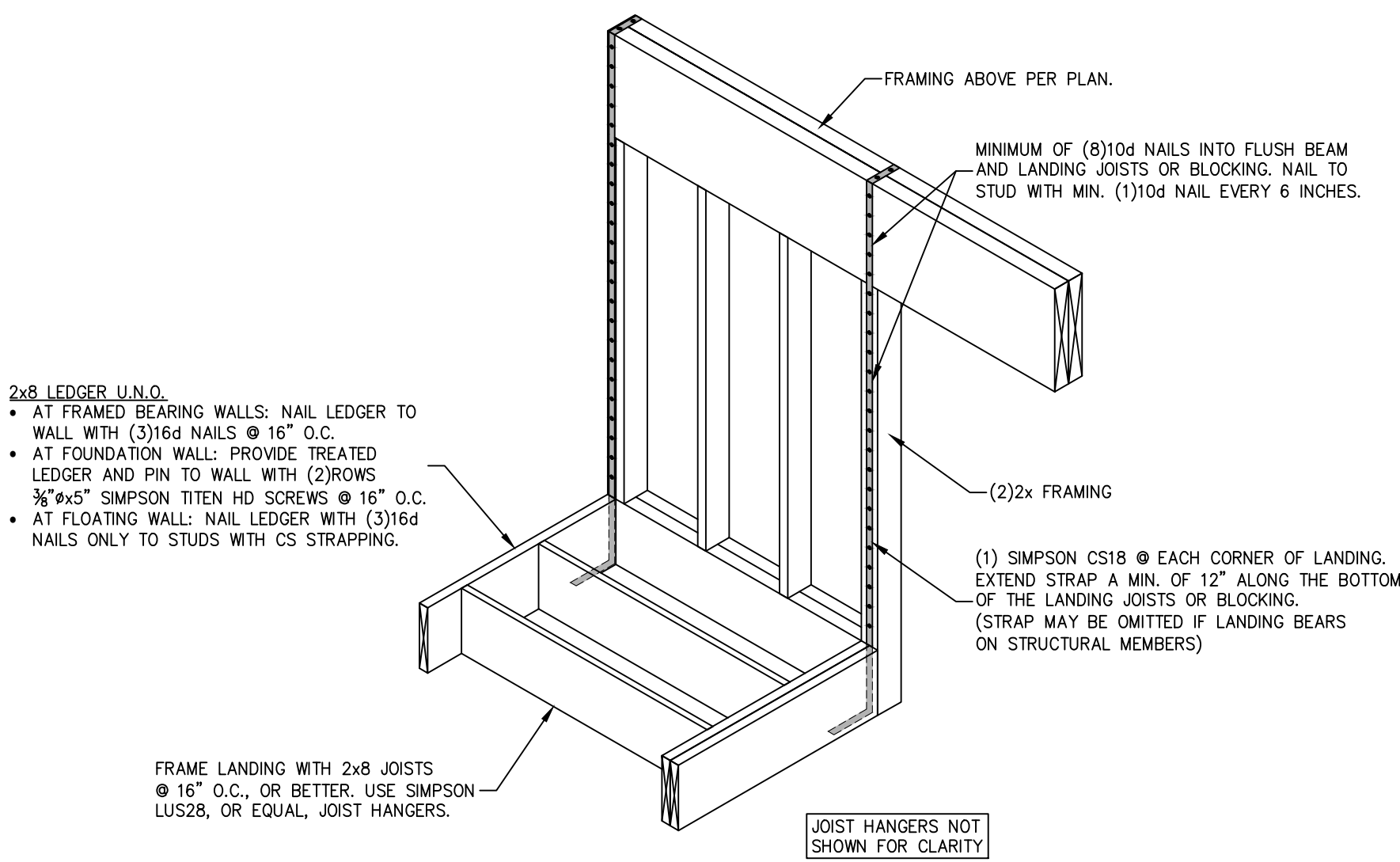
SCALE: N.T.S.



NOTE: ALL TIMBER BEAMS/COLUMNS
ARE TO BE DOUG FIR #2 OR BETTER.
NOTIFY ENGINEER IF DIFFERENT

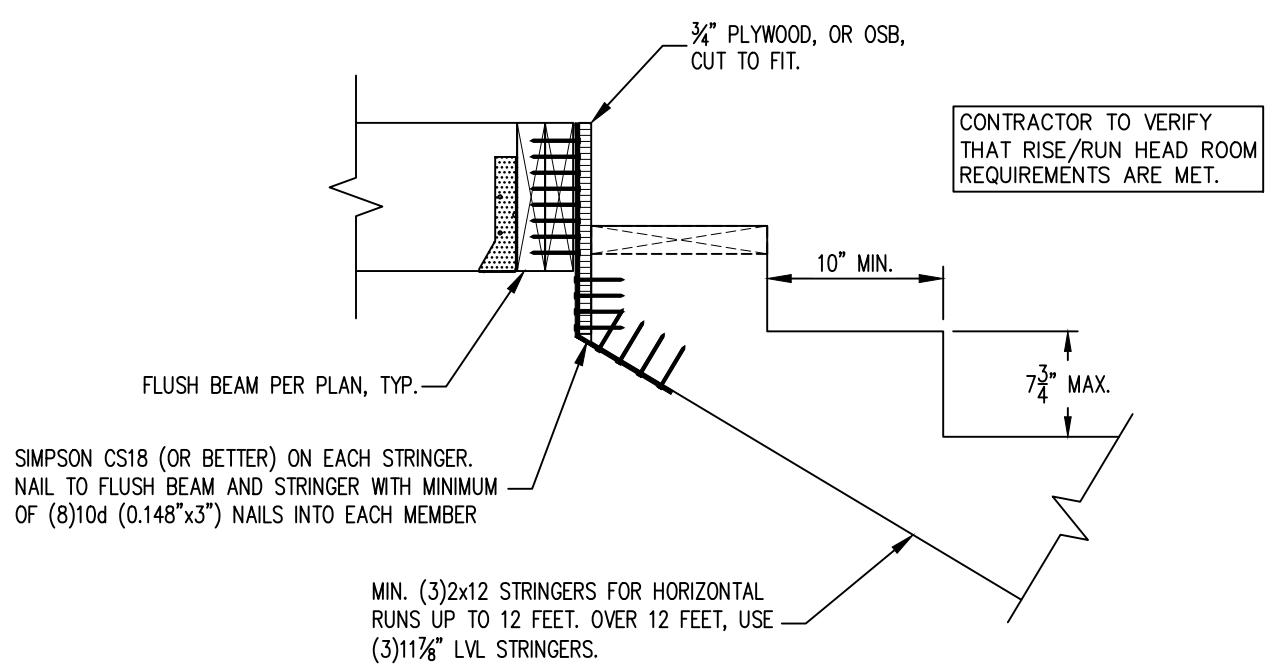


TYPICAL RAFTER LEDGER DETAIL



INTERMEDIATE STAIR LANDING DETAIL

SCALE: N.T.S.



TYP. STRINGER TO FLOOR SYSTEM CONNECTION

SCALE: N.T.S.

MAIN FLOOR HEADER CHART			
OPENING SIZE	MIN. HEADER SIZE	2x TRIMMERS	2x KINGS
UP TO 5'-0"	(3) 9½" ML OR BETTER	3	2
OVER 5'-0" UP TO 7'-6"	(3) 11½" ML OR BETTER	3	3

- ANY HEADERS OR COLUMNS SHOWN ON THIS PLAN SUPERSEDE THIS CHART.

- ANY HEADERS THAT WILL BE BEARING BEAMS OR GIRDER TRUSSES THAT ARE NOT SHOWN ON THIS PLAN SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER. HEADERS MAY NOT BE DESIGNED TO SUPPORT GIRDER TRUSS, OR OTHER, POINT LOADS.

-NON BEARING HEADERS COULD BE 2-2x10 HF, OR BETTER (1T, 1K)

LATERAL LOAD DESIGN CHART									
MIN. ROOF SHEATHING TABLE									
	CONNECTOR	DIAMETER/MIN. LENGTH	DIAPHRAGM BOUNDARY SPACING	PANEL EDGE SPACING	FIELD SPACING	PANEL EDGES	SHEATHING TYPE	SHEATHING THICKNESS	SHEATH BOTH SIDES OF TRUSSES
	8d COMMON	0.131" / 2½"	6" O.C.	6" O.C.	12" O.C.	UNBLOCKED	RATED	19/32"	NO
	STAPLE	14, 15, OR 16 GAUGE 1½" MIN. LENGTH	4" O.C.	6" O.C.	12" O.C.	UNBLOCKED	RATED	19/32"	NO
(LAY SHEATHING PERPENDICULAR TO FRAMING, STAGGER JOINTS)									
WALL SHEATHING TABLE									
	CONNECTOR	DIAMETER/MIN. LENGTH	EDGE SPACING	FIELD SPACING	PANEL EDGES	SHEATHING TYPE	SHEATHING THICKNESS	SHEATH BOTH SIDES OF WALL	
Ⓐ	8d COMMON	0.131" / 2½"	6" O.C.	12" O.C.	BLOCKED	RATED 24/16	7/16"	NO	
Ⓐ	STAPLE	14, 15, OR 16 GAUGE 1½" MIN. LENGTH	4" O.C.	12" O.C.	BLOCKED	RATED 24/16	7/16"	NO	
NOTES	-- ALL STAPLES ARE TO HAVE A MINIMUM CROWN OF ¾" OUTSIDE DIMENSION, 1½" LENGTH -- STAPLES SHALL BE INSTALLED WITH CROWNS PARALLEL TO THE LONG DIMENSION OF THE FRAMING MEMBER -- ALL WALL STUDS ARE TO BE SPACED @ 16" O.C. MAXIMUM -- ALL PANEL EDGES ARE TO BE BLOCKED					-- GYPSUM WALLBOARD SPECIFICATIONS PER IRC, U.O. -- ALL SHEATHING TO BE PLYWOOD OR OSB, RATED, EXTERIOR OR EXPOSURE 1 -- DIAPHRAGM END STUDS ARE TO BE MIN. 2x2x -- ALL CONNECTIONS NOT SHOWN ARE PER IRC			

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12/05/2024



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04/03/2024
For and on behalf of
CDS Engineering, Corp.

RECORD OF ISSUE	DATE	BY	APP.
INITIAL	03/21/24	TSS	KFB
1.	---	---	---
2.	---	---	---
3.	---	---	---
4.	---	---	---
5.	---	---	---
6.	---	---	---

UPPER ROOF FRAMING

JLJ CUSTOM HOMES, LLC
FEATHERED ELK RANCH
26105 COUNTY ROAD 37B,
ROUTT COUNTY, COLORADO

DRAWING TITLE	CLIENT NAME	LEAD DESCRIPTION

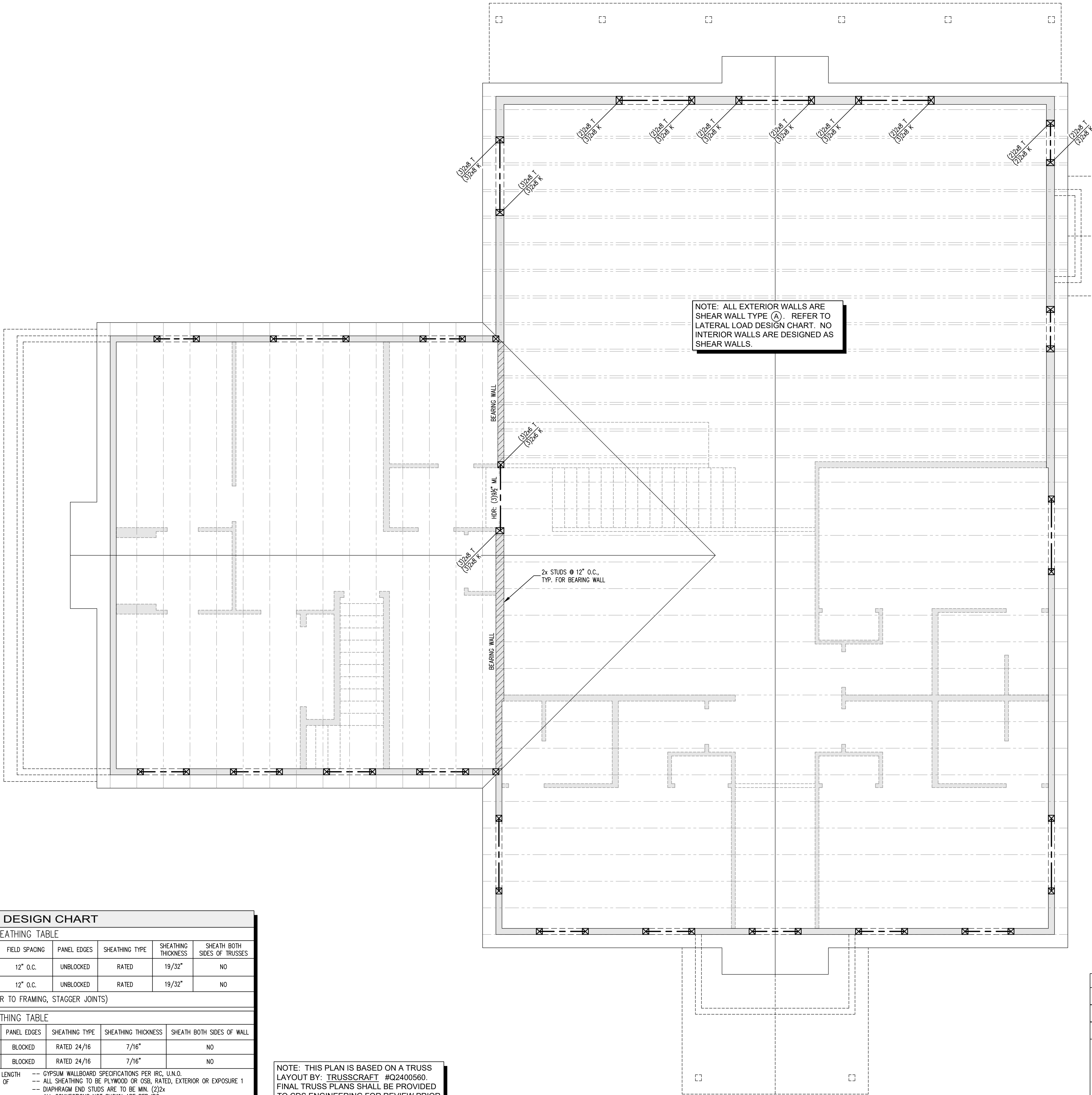
DESIGNED BY	KFB
DRAWN BY	TSS
CHECKED BY	RR
DATE ISSUED	03/21/2024
SCALE	1/4" = 1' - 0"

MODEL NO.

PROJECT NO.

24-2324

SHEET 4 OF 4 TOTAL SHEET



LATERAL LOAD DESIGN CHART

MIN. ROOF SHEATHING TABLE

	CONNECTOR	DIAMETER/MIN. LENGTH	DIAPHRAGM BOUNDARY SPACING	PANEL EDGE SPACING	FIELD SPACING	PANEL EDGES	SHEATHING TYPE	SHEATHING THICKNESS	SHEATH BOTH SIDES OF TRUSSES
	8d COMMON	0.131" / 2 1/2"	6" O.C.	6" O.C.	12" O.C.	UNBLOCKED	RATED	19/32"	NO
	STAPLE	14, 15, OR 16 GAUGE 1 1/2" MIN. LENGTH	4" O.C.	6" O.C.	12" O.C.	UNBLOCKED	RATED	19/32"	NO

(LAY SHEATHING PERPENDICULAR TO FRAMING, STAGGER JOINTS)

WALL SHEATHING TABLE

WALL	CONNECTOR	DIAMETER/MIN. LENGTH	EDGE SPACING	FIELD SPACING	PANEL EDGES	SHEATHING TYPE	SHEATHING THICKNESS	SHEATH BOTH SIDES OF WALL
(A)	8d COMMON	0.131" / 2 1/2"	6" O.C.	12" O.C.	BLOCKED	RATED 24/16	7/16"	NO
(A)	STAPLE	14, 15, OR 16 GAUGE 1 1/2" MIN. LENGTH	4" O.C.	12" O.C.	BLOCKED	RATED 24/16	7/16"	NO

NOTES -- ALL STAPLES ARE TO HAVE A MINIMUM CROWN OF 3/8" OUTSIDE DIMENSION, 1 1/2" LENGTH -- GYPSUM WALLBOARD SPECIFICATIONS PER IRC, U.N.O.
-- STAPLES SHALL BE INSTALLED WITH CROWNS PARALLEL TO THE LONG DIMENSION OF -- ALL SHEATHING TO BE PLYWOOD OR OSB, RATED, EXTERIOR OR EXPOSURE 1
-- THE FRAMING MEMBER -- DIAPHRAGM END STUDS ARE TO BE MIN. (2)x2
-- ALL WALL STUDS ARE TO BE SPACED @ 16" O.C. MAXIMUM -- ALL CONNECTIONS NOT SHOWN ARE PER IRC
-- ALL PANEL EDGES ARE TO BE BLOCKED

NOTE: THIS PLAN IS BASED ON A TRUSS
LAYOUT BY: TRUSSCRAFT #Q2400560.
FINAL TRUSS PLANS SHALL BE PROVIDED
TO CDS ENGINEERING FOR REVIEW PRIOR
TO CONSTRUCTION.

UPPER FLOOR HEADER CHART

OPENING SIZE	MIN. HEADER SIZE	2x TRIMMERS	2x KINGS
UP TO 4'-0"	(2) 9 1/2" ML OR BETTER	2	2
OVER 4'-0" UP TO 8'-0"	(3) 11 1/8" ML OR BETTER	3	2

- ANY HEADERS OR COLUMNS SHOWN ON THIS PLAN SUPERSEDE THIS CHART.

- ANY HEADERS THAT WILL BE BEARING BEAMS OR GIRDER TRUSSES THAT ARE
NOT SHOWN ON THIS PLAN SHOULD BE BROUGHT TO THE ATTENTION OF THE
ENGINEER. HEADERS MAY NOT BE DESIGNED TO SUPPORT GIRDER TRUSS, OR
OTHER, POINT LOADS.

-NON BEARING HEADERS COULD BE 2-2x10 HF, OR BETTER (1T, 1K)