GENERAL:

- 1. Dimensions: The structural drawings shall be considered as a part of the complete set of Contract drawings, including the drawings of all disciplines. It is intended that the Structural drawings will provide sufficient dimensions to locate the primary structural elements and members. Location of secondary members which are affected by systems detailed by others may require reference to the drawings of other disciplines and layout and coordination by the contractor. If direct conflict between dimensions of two or more disciplines is encountered. such conflicts shall be resolved by the Architect. Do not use scaled dimensions. Use written dimensions or where dimensions are not provided. consult the architect for clarifications before proceeding with the work in auestion.
- 2. Omissions or conflicts between various elements of the drawings, specifications, notes, and details shall be brought to the attention of the structural engineer and resolved before proceeding with the work. The contractor must submit in writing any requests for modifications to the plans and specifications. Shop drawings submitted to the structural engineer for review do not constitute "in writing" unless it is clearly noted that specific changes are being requested.
- 3. Deferred Submittals: Where Structural components are fully or partially designed and detailed by the supplier or fabricator. complete shop drawings and calculations, signed and sealed by a professional engineer registered in the state where the project is located, shall be submitted to the structural engineer for review. In addition, a copy of these documents shall be submitted to the Building Official for approval in accordance with IBC Section 107.3.4.1.
- 4. The Contract drawings and specifications represent the finished structure. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include but not be limited to bracing and shoring for loads due to construction equipment and materials.

DESTON-CRITERIA:

1. Used 2021 International Building Code.

(2. ASD Design Loads:

A. Roof: D.L. = 5#/SF., L.L. = 80#/SF. Snow.

B. Loft: D.L. = 15#/SF., L.L. = 40#/SF. Accessible Access

3. Wind load = 90 MPH (nominal), 115 MPH (ultimate), exposure C, lw = 1.0.

4. Seismic: Equivalent Static Force Design Procedure. Seismic Design Category D, Site Class D.

Ss = 0.598 SDS = 0.527S1 = 0.165 SD1 = 0.180

R = 2.5 - Light framed walls w/ shear panels all other materials.le = 1.0

**Per ICC Commentary:

"Wind speeds are designated as "ultimate design" or "nominal design" wind speeds and are used for either strength design or allowable stress designs respectively. The ultimate design wind speeds are indicated in Figures 1609A, B & C, and vary based on the building's risk category and location. The ultimate design for wind speeds for a Risk Category II building vary from 110 mph on the West Coast to 180 mph in hurricane-prone areas in southern Florida. These wind speeds would convert to a nominal design wind speed, or what was previously called the "basic wind speed" 85 mph for the West Coast and 139 mph for southern Florida when using allowable stress design."

QUALITY ASSURANCE:

FOUNDATIONS:

1. Maximum foundation soil bearing pressure used = 1500#/SF.

MATERIALS:

CONCRETE:

- 1. Mix design shall be established in accordance to Chapter 5 of ACI 318.
- 2. Minimum cement content = 376 #/YD.
- 3. Maximum slump = 4".
- 4. 28 day strenath f'c = 2500 PSI. Special inspection not required per IBC 1704.4, exception 2.

STRUCTURAL AND MISCELLANEOUS STEEL:

- 1. All steel work shall conform with AISC specifications.
- 2. Bolts ASTM A307 for connections to concrete. Bolts ASTM A325 for steel to steel connections. Bolts to be snug tight except bolts indicated as S.C. to be fully tightened.
- 3. Roof Steel shall be painted 29 Ga, ribbed steel and shall be attached to framing with 1 $\frac{1}{2}$ " x #9 screws with neoprene washers at 9" o.c.
- 4. Wall Steel shall be painted 29 Ga, ribbed steel and shall be attached to framing with 1 $\frac{1}{2}$ " x #9 screws with neoprene washers at 9" o.c.

LUMBER:

- 1. Sawn lumber for studs, joists, etc.(2x6 or larger) = No.2 Doug Fir larch or SPF 1250 PSI or better.
- 2. 2x4's = Standard Doug Fir larch.
- 3. Posts = So. Pine #1 Nail-Lam.
- 4. Loft sheathing = 3/4", minimum, T&G.
- 5. Loft nailing = 10d(.148 "dia. Shank x 3" long) at 6" o.c. all supported edges. 12" o.c. in field.
- 6. All nails are to be common nails unless noted otherwise.
- 7. For connections of "SIMPSON" hardware or equivalent follow manufacturers recommendations.
- 8. Trus—Joist products:
 - A. Roof joists shown as TJI etc. shall be designed for the loads specified and shall conform to Trus-Joist specification.
 - B. Joists exceeding 24' in length shall be cambered to a standard radius of R = 2250.
 - C. Any alternate joist system(s) shall be the same depth and load Carrying capacity as the Trus-Joist system show on the drawings.
 - D. Micro Lam (LVL) E-1,900,000 psi.

9. Premanufactured Trusses

A. Truss Loading:

Top Chord D.L. = 5 PSF.

Bottom Chord D.L. = 7 PSF.

Top Chord L.L. = 80 PSF.

Bottom Chord L.L. = 2 PSF. Does not act concurrently with top chord L.L.

B. Member Properties:

Chords shall be #2 Douglas Fir or better.

Webs shall have "minimum Modulus of Elasticity of 1,500,000 psi.

- C. All truss blocking shall be provided by the truss manufacturer and constructed with approved plates.
- D. Truss Manufacturer shall verify all truss dimensions, accounting for tolerances, connections, and splice requirements.
- E. Truss profiles shown are representations of possible configurations of Web locations and member sizes. Truss manufacturer shall submit shop drawings for approval. All trusses shall be designed by a registered professional engineer and all shop drawings shall be stamped and signed by a registered professional engineer.
- F. Truss manufacturer shall provide proof of approved third party I inspection as required by IBC chapter 2303.4.
- G. Truss manufacturer shall design all truss to truss connections and shall indicate said connections on the shop drawings.
- H. Each truss shall be marked with the following information:

ROOF SNOW LOAD FACTORS

= 7239 ft.

= 102 psf. min.

= 80.00

= -

= 1.0

= 1.2

= 0.9

Pf = 0.7(Ce)(Ct)(I)Pg

Elevation NGSL

Ground snow

Thermal (Ct)

Exposure (Ce)

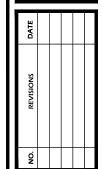
Roof Snow (Pf)

Importance

- 1. Manufacturers identity.
- 2. Design Load.
- 3. Truss spacing.
- 10. All lumber in contact with concrete, masonry, or ground shall be preservative treated wood in accordance with AWPA standards. Posts embedded in the ground shall comply with UC4B .60 treatment or greater.

FOR CODE COMPLIANCE 06/12/2024

STRUCTURAL NOTES





NOC

TEPHEN

cw 5/15/24 13921

SO

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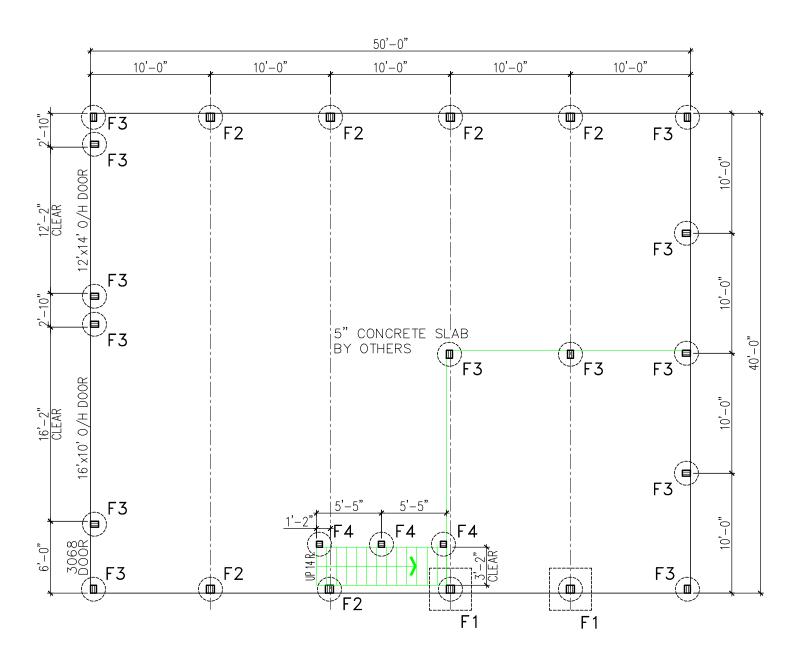
REEK, COLORADO

STEPHEN JONES

RAME BLDG FOR:

DRAWN CW DATE 4/03/24 JOB NO. 13921

MERICA, INC.
13921
SHEET
SAHO
1997
3597



FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

FOUNDATION NOTES:

1 STAIR STRINGERS SHALL BE 1 3/4"x 11 1/4" LVL TYP.

MIN. RUN = 10"

MAX RISE = 7 3/4"

FOOTING SCHEDULE					
MARK	"D"	DEPTH	POST	DETAIL	
F1	2'-0"ø	4'-0"	(4)2x8 So. Pine #1 Nail-lam	2/S3	
F2	2'-0"ø	4'-0"	(4)2x8 So. Pine #1 Nail-lam	5/S4.1	
F3	2'-0"ø	4'-0"	(3)2x8 So. Pine #1 Nail-lam	5/S4.1	
F4	2'-0"ø	4'-0"	(3)2x8 So. Pine #1 Nail-lam	5/S4.1	

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SDATE

4/03/24

JOB NO.
13921

SHEET

S2.1

LOFT FRAMING NOTES:

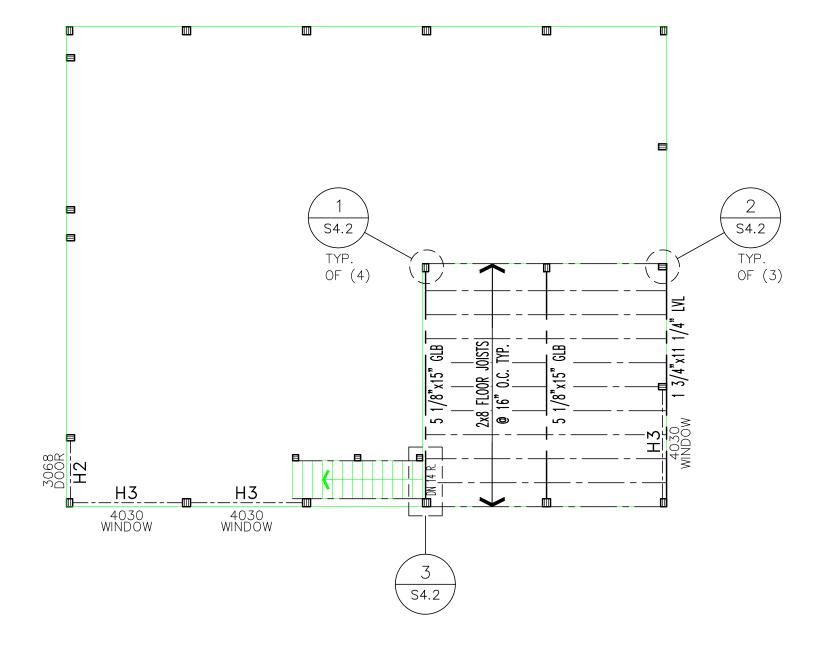
- 1 ATTACH 2x8 JOISTS TO RIM JOIST W/LU28 HANGER TYP.
- STAIR STRINGERS SHALL BE 1 3/4"x 11 1/4" LVL TYP.

 MIN. RUN = 10"

 MAX RISE = 7 3/4"
- SEE DETAIL 4/S4.2 FOR HANDRAIL DETAIL

HEADER SCHEDULE				
MARK	MEMBER	SUPPORT		
H1	(1) 2x10 DF#2 V; (1) 2x8 DF#2 H	(1) 2×8 TRIMMER		
H2	(1) 2x6 DF#2 V; (1) 2x6 DF#2 H	_		
Н3	(1) 2x6 DF#2 V	_		

NOTE: REFER TO DETAILS 2, 3 & 4/S4.1 FOR HEADER FRAMING CONDITIONS.



LOFT FRAMING PLAN

SCALE: 1/8" = 1'-0"



– AK CREEK, COLORADC

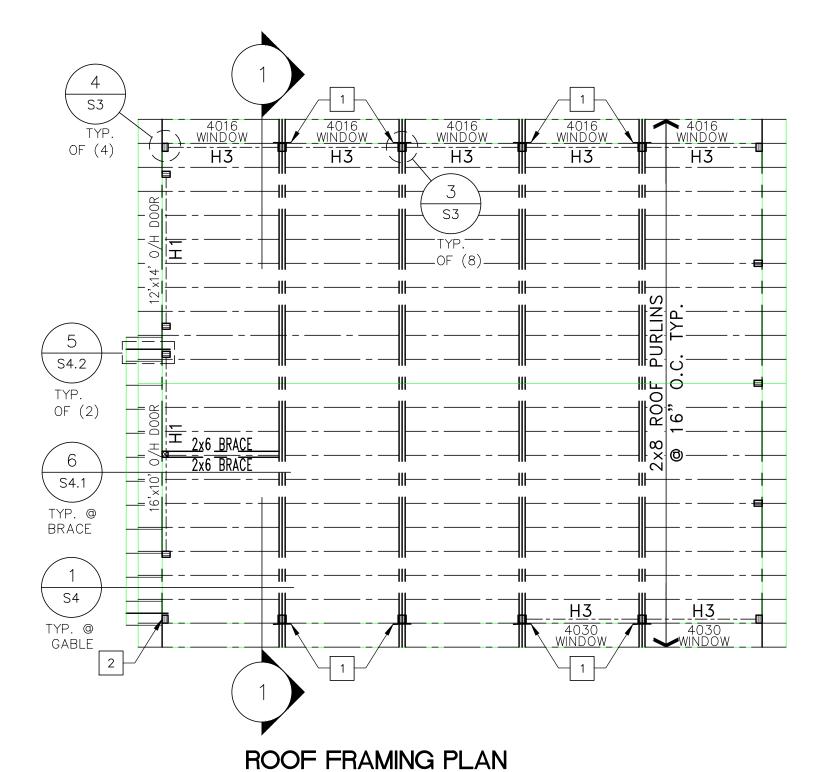
STEPHEN JONES

OST FRAME BLDG FOR:

DRAWN CW
DATE 4/03/24
JOB NO. 13921

S2.2

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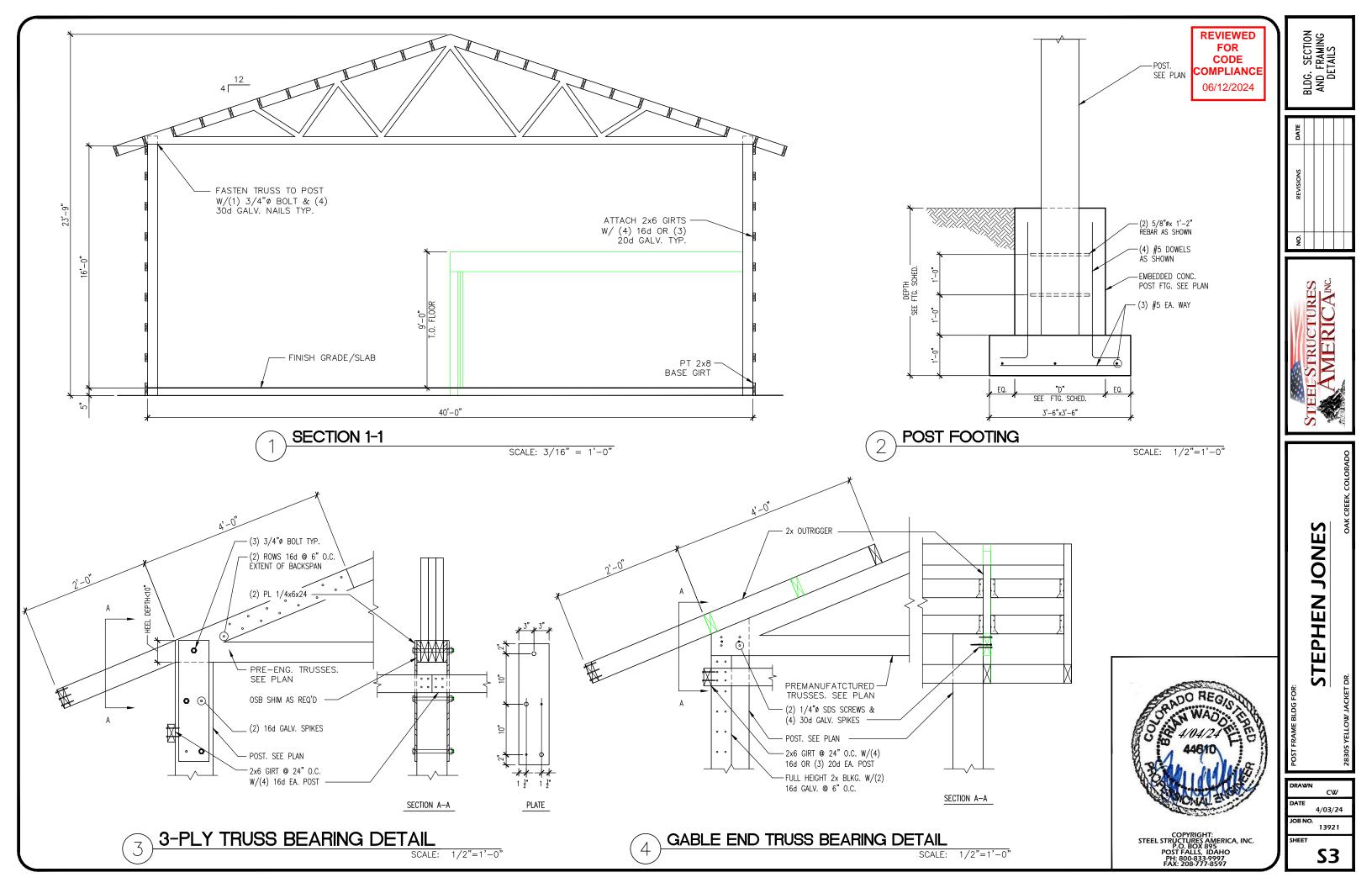
ROOF FRAMING NOTES:

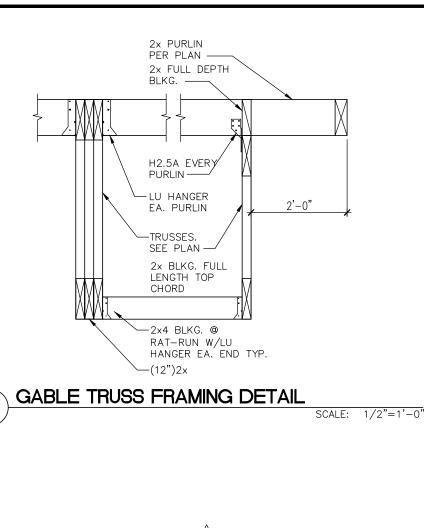
- LSTA18 STRAP- PLACE AT INSIDE OF FASCIA BOARD IF NO OVERHANGS. PLACE AT INSIDE FACE OF TOP WALL GIRT IF OVERHANGS
- 2 INSTALL (2) SDS SCREWS ABOVE & BELOW EA. SIDE OF LAG BOLT PERPENDICULAR TO POST PLYS.

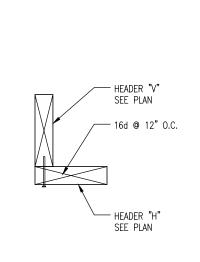
HEADER SCHEDULE				
MARK	MEMBER	SUPPORT		
H1	(1) 2x10 DF#2 V; (1) 2x8 DF#2 H	(1) 2×8 TRIMMER		
H2	(1) 2x6 DF#2 V; (1) 2x6 DF#2 H	_		
Н3	(1) 2x6 DF#2 V	_		

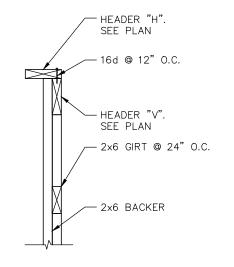
NOTE: REFER TO DETAILS 2, 3 & 4/S4.1 FOR HEADER FRAMING CONDITIONS.

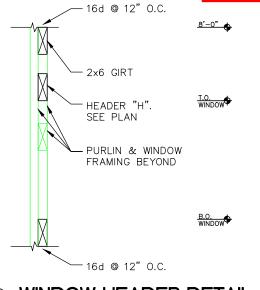
SCALE: 1/8" = 1'-0"











FOR

CODE

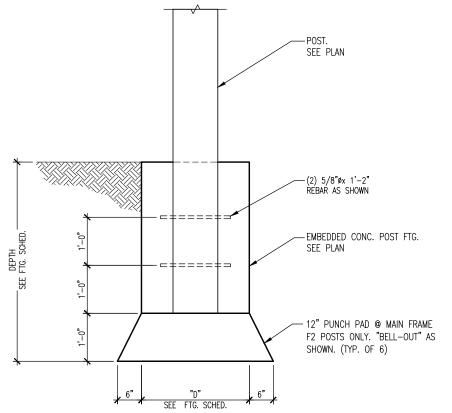
COMPLIANCE

06/12/2024

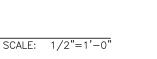


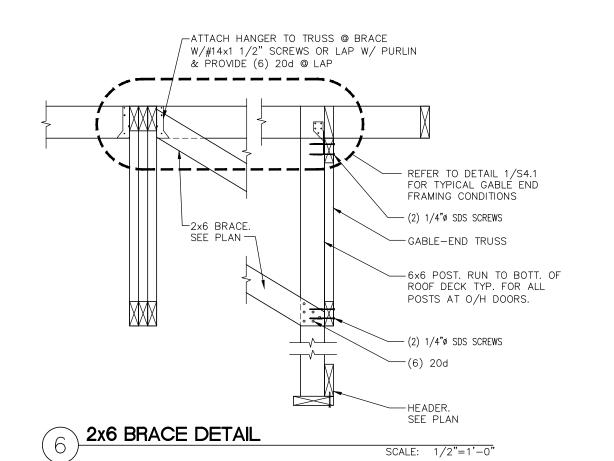
MAN DOOR HEADER DETAIL

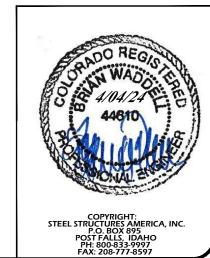




POST FOOTING







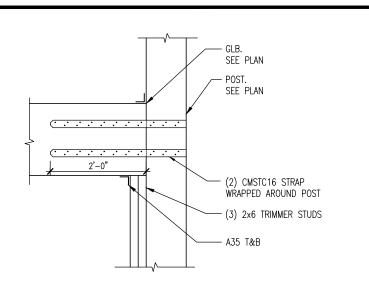
TEPHEN

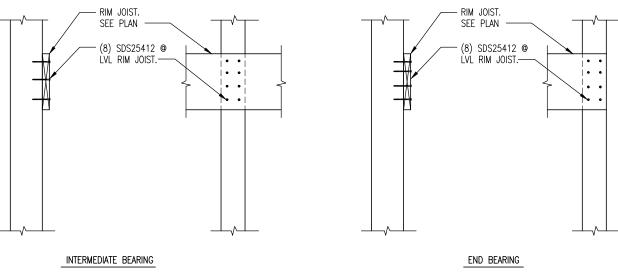
4/03/24 13921

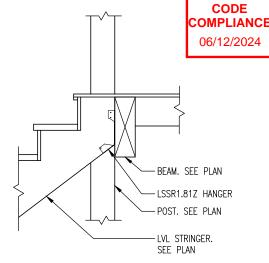
STRUCTURES AMERICAINC

NOS

S4.1







STAIR FRAMING DETAIL

SCALE: 1/2"=1'-0"

FOR

GLB TO POST DETAIL

SCALE: 1/2"=1'-0"

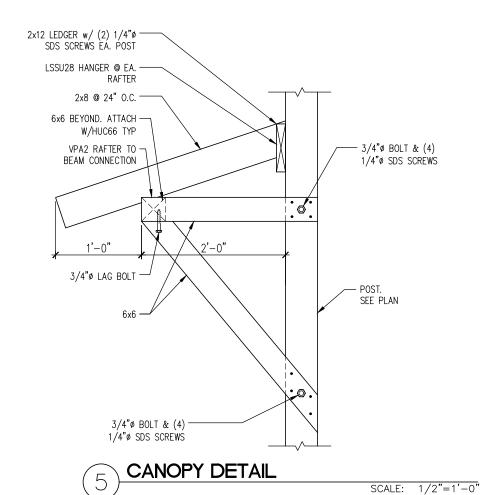
LOFT RIM JOIST DETAIL

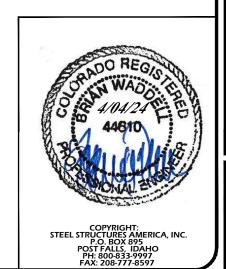
SCALE: 1/2"=1'-0"

- 2x8x CONT. GRASPABLE RAIL @ STAIRS -EXTEND POST FOR RAIL -- (3) 16d EA. POST 3/4" T&G -FLOOR JOIST. — 2x4 KICK PL SEE PLAN — SEE PLAN

LOFT RAILING DETAIL

SCALE: 1/2"=1'-0"





4/03/24 13921

JONES STEPHEN

S4.2

