STRUCTURAL NOTES

Applicable Codes and Standards:

A. 2009 International Building Code (including all local adoptions)
B. 2009 International Residential code (including all local adoptions)
C. "Minimum Design Loads for Buildings and Other Structures" - ASCE 7-10
D. "Building Code Requirements for Structural Concrete" - ACI318
E. "Steel Construction Manual" - AISC fourteenth edition
F. "National Design Specification for Wood Construction" - ANSI/AF&PA-NDS 2015

Design Live Loads:

A. Roofs: 85 psf Ground Snow (60 psf Roof Snow), 20 psf Roof Dead
B. Floors: 40 psf
C. Decks: 100 psf
D. Wind: 120 mph, Exposure B
E. Seismic Design: Category B, Soil Type D

Structural Steel:

A. Structural steel shall be detailed and fabricated in accordance with the latest version of the AISC Manual of Steel Construction.
B. All bolts, including anchor bolts, shall conform to ASTM spec. A307.
C. Structural steel rolled W shapes shall be ASTM A50. Plates and angles, shall be ASTM A36.
D. Expansion bolts called for on the drawings shall be Simpson "Wedg-All", "Strong-Bolt 2" or approved wedge type anchors with the following minimum embedments: 3/4" diameter bolts - 3⅜", 5/8" diameter bolts - 2⅜", 1/2" diameter bolts - 2¼".
E. All epoxy shall be Simpson "Set-XP" and shall be installed per the "Anchoring and fastening Systems For Concrete and Masonry" Simpson catalog #C-SAS-2012 by a qualified personnel.
F. Field welded connections must be inspected by the Engineer of Record.
G. Fillet welds indicated on the plans shall be of E70xx electrodes and shall be the minimum size specified in the AISC Manual of Steel Construction, Table J2.4.
H. All welds shall be performed by a certified welder.

Structural Wood Framing:

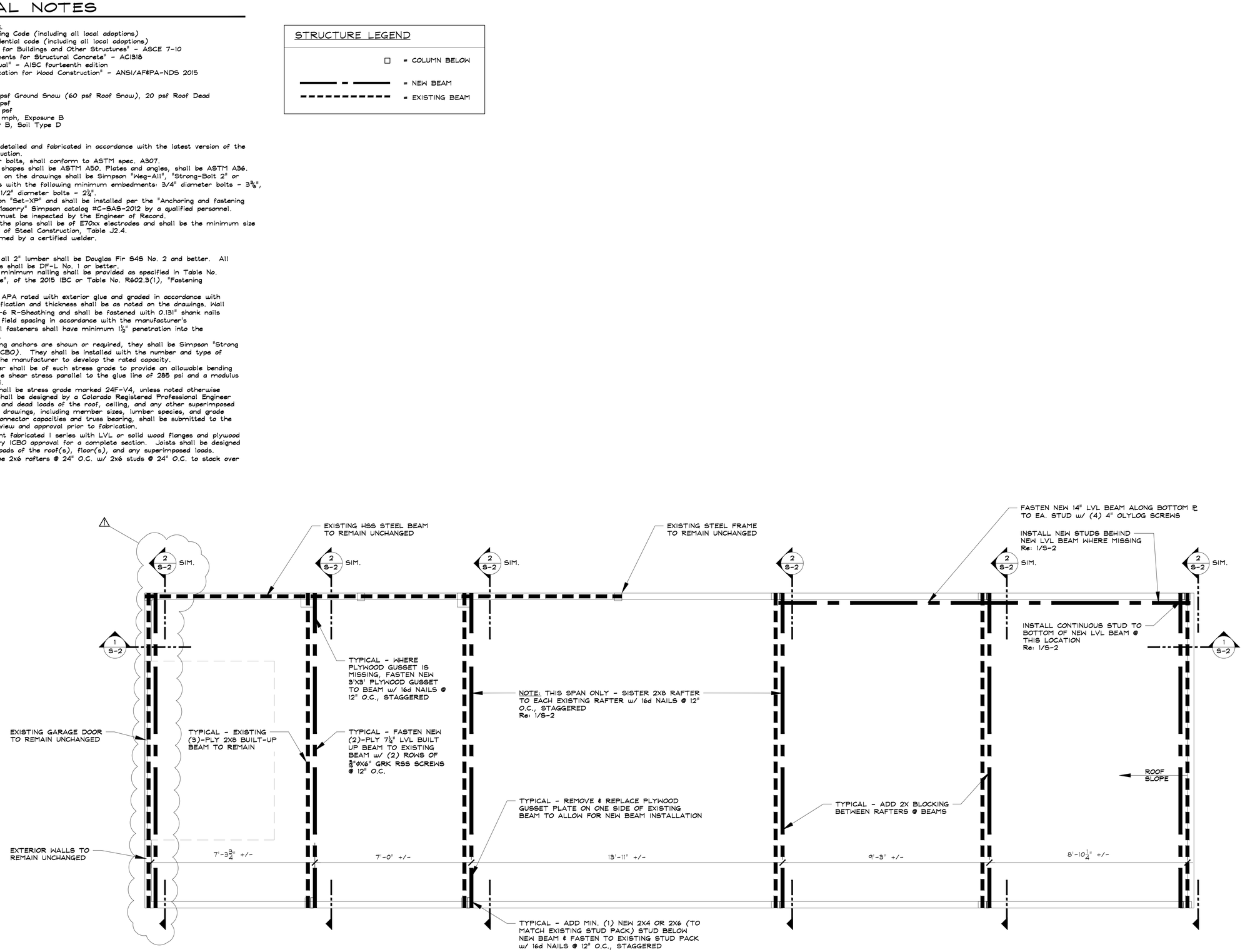
A. Unless noted otherwise, all 2" lumber shall be Douglas Fir S4S No. 2 and better. All solid timber beams and posts shall be DF-L No. 1 or better.
B. Unless noted otherwise, minimum nailing shall be provided as specified in Table No. 2304.10.1, "Fastening Schedule", of the 2015 IBC or Table No. R602.3(1), "Fastening Schedule", of the 2015 IRC.
C. Floor sheathing shall be APA rated with exterior glue and graded in accordance with APA standards. Panel identification and thickness shall be as noted on the drawings. Wall sheathing shall be 1½" Zip R-6 R-Sheathing and shall be fastened with 0.131" shank nails with 3" edge spacing and 6" field spacing in accordance with the manufacturer's specifications, U.N.O. All wall fasteners shall have minimum 1½" penetration into the supporting framing members.
D. Where light gauge framing anchors are shown or required, they shall be Simpson "Strong Tie" (or equal approved by ICBO). They shall be installed with the number and type of fasteners recommended by the manufacturer to develop the rated capacity.
E. Laminated Veneer Lumber shall be of such stress grade to provide an allowable bending stress of 2,600 psi, allowable shear stress parallel to the glue line of 285 psi and a modulus of elasticity of 1,900,000 psi.
F. Glue laminated timber shall be stress grade marked 24F-V4, unless noted otherwise
G. Roof and floor trusses shall be designed by a Colorado Registered Professional Engineer to support the full live load and dead loads of the roof, ceiling, and any other superimposed loads. Calculations and shop drawings, including member sizes, lumber species, and grade and substantiating data for connector capacities and truss bearing, shall be submitted to the Architect or Engineer for review and approval prior to fabrication.
H. Floor joists shall be plant fabricated I series with LVL or solid wood flanges and plywood or OSB webs, and shall carry ICBO approval for a complete section. Joists shall be designed to carry full live and dead loads of the roof(s), floor(s), and any superimposed loads.
J. Roof overframing shall be 2x6 rafters @ 24" O.C. w/ 2x6 studs @ 24" O.C. to stack over rafters or purlins below.

STRUCTURE LEGEND

□ = COLUMN BELOW

——— - ——— = NEW BEAM

- - - - - - - - - - = EXISTING BEAM



1 COLD-STORAGE ROOM PLAN

SCALE: ½" = 1'-0"

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HAYDEN GRANARY ROOF
198 E LINCOLN AVE
HAYDEN, COLORADO
A STRUCTURAL UPGRADE FOR:
HAYDEN GRANARY

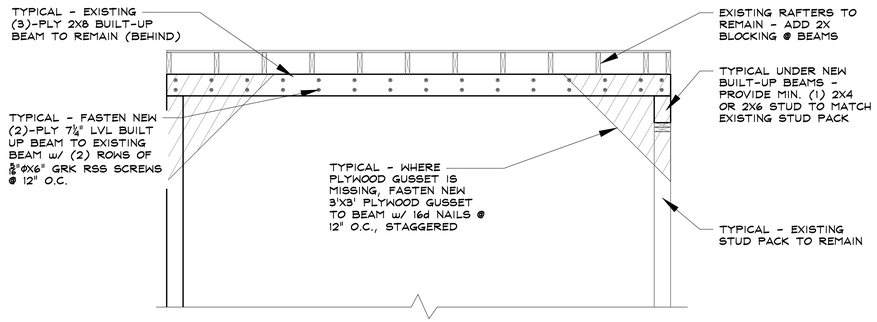
ISSUE DATES
PERMIT SET
11 . 26 . 19
⚠ 12 . 4 . 19

DRAWN BY: GDK
REVIEWED BY: JEM
PROJECT # 19001hhh

PLAN VIEW & STRUCTURAL NOTES

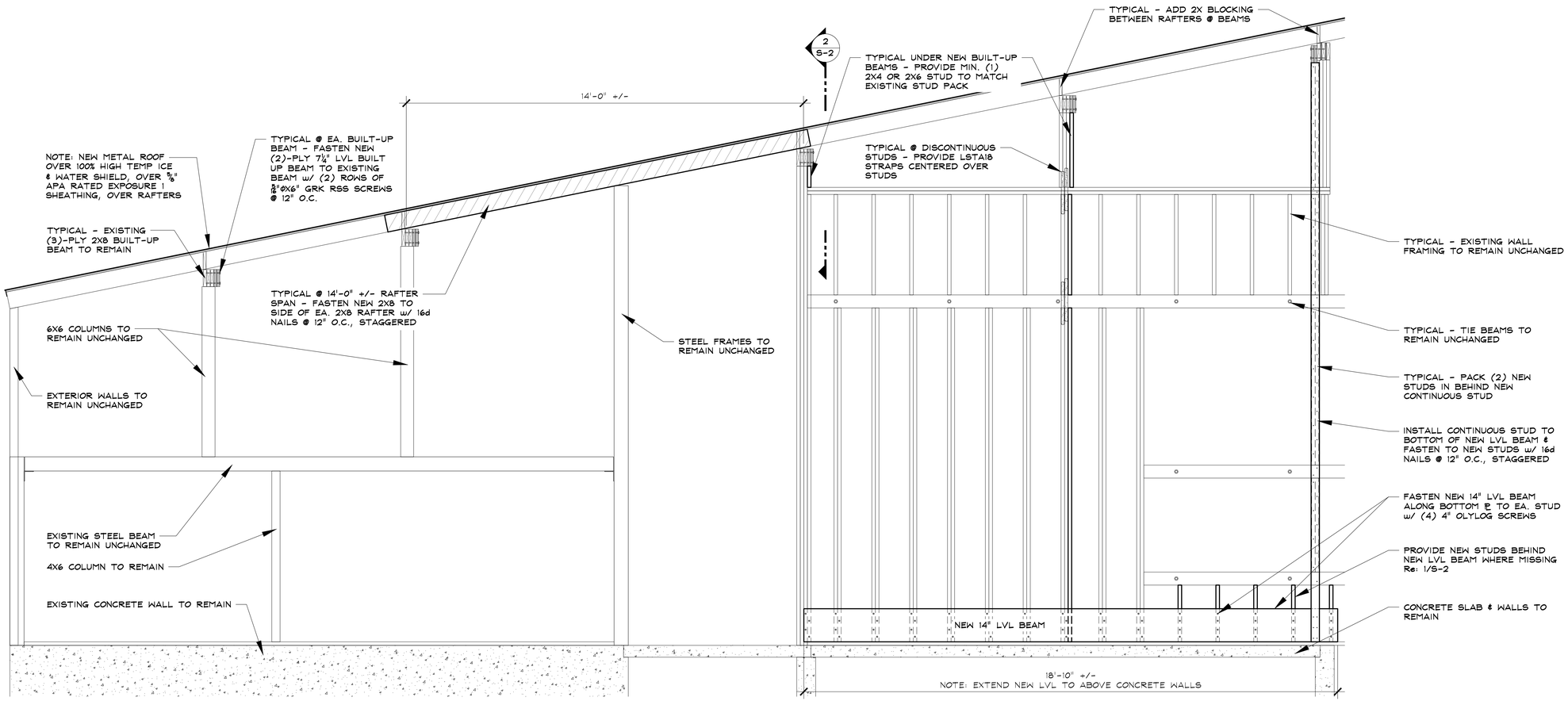
S-1

SHEET 1 of 2



2 TYPICAL BUILT-UP BEAM SECTION

SCALE: ½" = 1'-0"



1 NORTH WALL SECTION

SCALE: ½" = 1'-0"

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SECTION VIEWS

S-2

SHEET 2 of 2