construction. Verify changes with the designer and engineer.

GENERAL

All work must comply with state and local codes, based on the Routt County Zoning Regulations, the 2015 International Building Code, the 2015 International Residential Code, the International Plumbing Code, the International Mechanical Code, the Energy Conservation Code and the International Electric code. The contractor shall comply with all laws, ordinances, rules and regulations of any public authority bearing on the performance of the work, including O.S.H.A.

Location of the utilities (electrical, telephone, cable TV, gas, water, sewer) shall be verified before construction begins

All on site construction safety and construction means and methods are the responsibility of the contractor. There is no implication of the construction safety requirements or building methods contained in these drawinas.

Actual site conditions may require that some of the components of the work should be done differently than shown on these drawings. All dimensions and conditions to be verified by the contractor prior to

These drawings represent a simplified builder's set of plans. Additional detailing may be required of the engineer during construction.

Any variation which requires a physical change from these plans must be brought to the attention of the designer and engineer in order to maintain the design intent of the project.

All work connected with this project by any trade involved shall be of the highest quality attainable in accordance with the professional practice of the trade.

All interior and exterior dimensions are to face of stud or face of concrete. U.N.O.

All exterior walls are nominal 2x6 stud construction, U.N.O. All interior walls are nominal 2x4 stud construction, U.N.O.

Do not scale drawinas

Climate Fenestration Skylight^b

Whichever is greater.

R-5 continuous insulation

0.32

7 **&** 8

u-factor

0.55

The water closet stool shall be located in a clear space of not less than 30" in width. The clear space in front of the water closet stool shall be not less than 21".

Crawl space access shall be provided w/ min. 18"x24" through the floor \$ min. 16"x24" through the wall.

Minimum clear ceiling height is 7ft for habitable space \$ hallways \$ 6'-8" for bathrooms, laundry rooms \$ stairs. Exceptions apply for sloped ceilings and basements per R305

ENERGY CODE STANDARDS

Re: 2015 International Energy Conservation Code Table 402.1.2 Insulation & Fenestration Requirements By Component

R-Values are minimums. U-factors \$ SGHC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.

"15/19" means R-15 continuous insulated sheathing on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulated sheathing on the interior or exterior of the home. "10/13" means R-10 continuous insulated sheathing on

R-5 shall be added to the required edge R-Values of heated slabs. Insulation depth shall be the depth of the footing, or 2 feet.

The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus

Framing

R-Value

20+5 (2X6 WALL

13+10 (2X4 WALL

The fenestration U-factor column excludes skylights. The SGHC column applies to all glazed fenestration.

the interior or exterior of the home or R-13 cavity insulation at the interior basement wall

The second R-Value applies when more than half the insulation is on the interior of the wall mass

If any discrepancies are found in these drawings notify engineer and/or designer immediately.

Ceiling

R-Value

enestration

SHGC b, e

NR

Or insulation sufficient to fill the framing cavity, R-19 minimum.

Habitable spaces within dwelling units shall have natural light provided by exterior openings equal to 8% of the floor area. Natural ventilation shall be provided by means of operable exterior openings equal to 4% of the floor area. Laundry rooms, toilet rooms and bathrooms shall either have an operable window or be mechanically ventilated

Safety glazing shall be provided in the following hazardous locations: 1) In doors where glazed opening is greater than $3^{"}\phi$

2) Within 24" adjacent to doors if less than 60" above the walking surface

3) Single panes where <u>all</u> following conditions exist: greater than 9 sq.ft., less than 18" above the floor, top edge higher than 36" above the floor and within 36" horizontal distance of walking surface.

4) Glazina in avards and railinas

8) Skylights and glazing sloped more than 15°

5) Glazing containing wet surfaces of bathtubs, showers, pools, etc. if less than 60" to walking surface.

6) Adjacent to the bottom stair landing w/in 60" arc length if less than 36" above landing 7) Site-built Windows

Sleeping rooms and basements w/ habitable space shall have min. one operable emergency escape w/ min 5.7 sq. ft. openable

area, min. 20"x41" clear or min. 34"x24" clear \$ max 44" sill height. (R310.2) STAIRWAYS:

Stairs shall have a minimum 36" clear width on interior stairs and 48" on exterior stairs. The surface of stairs shall be slip

resistant. Minimum vertical headroom is 6'-8'' from the nosing. Maximum riser height is $7\frac{3}{4}''$, and minimum tread depth is 10''. Landings shall be provided at the top and bottom of each stairway with a length no less than the width of the stiairway served.

Landings are not required at the top of interior stairs provided that a door does not swing over the stairs. Handrails shall be provided on at least one side of each continuous stair flight with four or more risers, and shall be 34"-38" tall, measured vertically from the sloped plane of the tread nosings. Handrails shall comply with R311.7.8.

Open sides of stairways, landings, ramps, balconies and porches which are more than 30" above grade shall be protected by a quardrail. All quardrails must be 36" above finished floor and shall allow no more than a 4" diameter sphere to pass through any portion of the railing per IRC R312.

Walls and ceilings of enclosed usable space under stairs requires 1/2" gypsum wallboard. The door to access such spaces need not

FIRE PROTECTION

R-Value

\$ Depth

10.4 ft.

Basement°

Wall

R-Value

Provide smoke detection per IRC section R314.

Crawl

Space

R-Value

15/19

Opening between a private garage and residence shall be min. 1-3/8" thick, of solid wood, or solid honeycomb core steel doors or 20-min fire rated. Openings between garages and sleeping rooms prohibited. Habitable rooms located above garages shall be protected w/ min %" Type X gypsum board

ROOF ASSEMBLIES (IRC CHAPTER 8 \$ 9)

Roof ventilation of enclosed roof assemblies shall comply with R806 and shall provide min. net free ventilating area of 1/200 of the area of the vented space. Provide 40%-50% of the ventilators no more than 3ft, below the highest point of the roof, and the remainder at the eave. All vents shall be protected against entrance of rain or snow and shall have openings between $\frac{1}{16}$ " - $\frac{1}{2}$ ". Min. 1" air flow space shall be provided between the insulation and roof sheathing.

Unvented roof assemblies shall comply with R806.5 and shall be completely within the thermal envelope. The roof shall dry to the inside, thus Class I vapor retarder shall NOT be installed on the ceiling. If air-impermeable insulation is used, it shall be Class II vapor retarder, min. R-49, and be applied directly to the underside of sheathing. If air-permeable insulation is used in the cavity, it shall be min. R-19 applied to underside of sheathing \$ shall be accompanied by min. R-30 continuous rigid board insulation above the sheathing. Alternatively, R-30 air-impermeable insulation can be applied to the underside of sheathing, w/min. R-19 air-permeable

Provide Grace lice and water shield, or equivalent product, from the edge of roof overhands to the ridge,

Asphalt shingles shall comply with R905.2 \$ require double underlayment when applied on 2:12 to 4:12 roof pitches. Standing seam metal roofing shall have min. ½:12 slope \$ comply w/ R905.10

Attic access shall be provided if attic is more than 30" tall (measured from top of ceiling framing to underside of roof framing mebers for more than 30 sq. ft. Access shall have a rough-framed opening of min. 22"x30" with min. 30" clear headroom.

CHIMNEYS & FIREPLACES (IRC CHAPTER 10)

Wood or other combustible materials shall not be placed within 2" from the front face and sides and not less than 4" from the back of masonry fireplaces

All masonry chimneys shall extend 2ft, higher than any portion of a building within 10' \$ min. 3ft, above the highest point where the chimney penetrates the roof

MECHANICAL/ENERGY SYSTEMS:

Appliances located in garages and having an ignition source shall be elevated such that the source of ignition less than 18" above the

Dryer exhaust systems shall be independent of all other systems, shall transport the moisture to the outdoors and shall terminate on the outside of the building in accordance with MI501 and MI502

Heating and Cooling equipment appliances hall be installed per manufacturers instructions and in accordance with IRC, Chapter 14

Meter location must be approved by an Atmos Energy Corporation employee during a mandatory site visit to be scheduled after foundation is in place. Meters will not be allowed under a shedding roofline or where overhanging snow is a danger to the meter set

If located within city limits of Steamboat Springs, the building or dwelling unit shall be tested with a blower door test by a certified 3rd party and verified as having an air leakage rate not exceeding three air changes per hour as per R402.4.1.2 testing. A certificate of completion must be submitted to the Routt County Building Department prior to a TCO or CO being issued.

Provide whole-house mechanical ventilation in accordance with Section M1507.3 and mechanical ventilation system fans shall meet the efficacy requirements of Table R403.6.4

Heating load calculations and equipment sizing shall be submitted for review and approval when applying for a mechanical permit. Do



THERMAL ENVELOPE NOTES

THE BUILDING ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED, OR OTHERWISE SEALED WITH A BARRIER MATERIAL, SUITABLE FILM, OR SOLID MATERIAL:

- 1. ALL JOINTS, SEAMS, AND PENETRATIONS
- 2. SITE-BUILT WINDOWS, DOORS, & SKYLIGHTS 3. OPENINGS BETWEEN WINDOW & DOOR ASSEMBLIES
- 4. UTILITY PENETRATIONS 5. DROPPED CEILINGS & CHASES ADJACENT TO THE
- THERMAL ENVELOPE 6. KNEE WALLS
- 7. WALLS & CEILING SEPARATING A GARAGE FROM CONDITIONED SPACES
- 8. BEHIND TUBS & SHOWERS OF EXTERIOR WALLS 9. BEHIND FIREPLACE INSERTS 10. ANY OTHER SOURCE OF INFILTRATION

WINDOWS, SKYLIGHTS, & SLIDING DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.3 cfm PER SQUARE FOOT. SWINGING DOORS SHALL HAVE AN AIR INFILTRATION RATE OF NO MORE THAN 0.5 cfm PER SQUARE FOOT.

RECESSED LUMINARIES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED & UNCONDITIONED SPACES BY BEING:

IC RATED \$ LABELED WITH ENCLOSURES THAT ARE SEALED OR GASKETED TO PREVENT AIR LEAKAGE TO THE CEILING CAVITY OR UNCONDITIONED SPACE

ABOVE GRADE FRAME WALLS, FLOORS, & CEILINGS NOT VENTILATED TO ALLOW MOISTURE TO ESCAPE SHALL BE PROTECTED WITH LATEX PAINT OR 6 MIL. POLY OVERLAPPED \$ TAPERED AT ALL JOINTS. THE VAPOR RETARDER SHALL BE INSTALLED ON THE WARM-IN-WINTER SIDE OF THE THERMAL ENVELOPE.

Mass Wall

R-Value

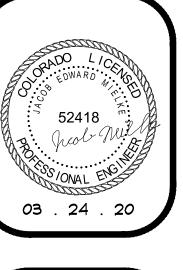
Floor

R-Value

ALL WORK IS WITHIN THE EXISTING BUILDING FOOTPRINT. NO CHANGES WILL BE MADE TO THE SITE

POGERS PESIDENCE







ATIO

RCRBD Record Set

T.A.

04/10/2020

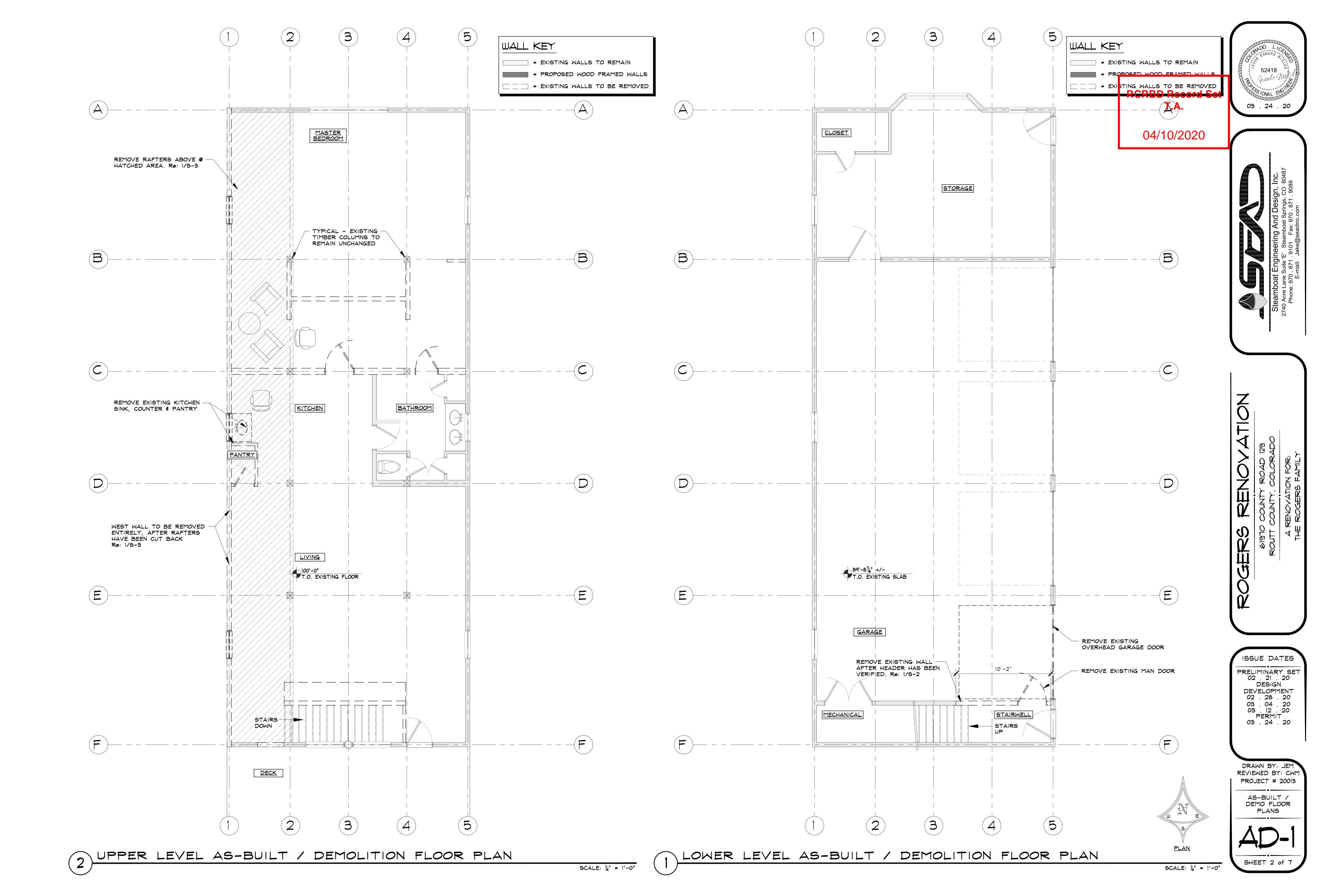
ISSUE DATES PRELIMINARY SET 02 . 21 . 20 DESIGN DEVELOPMENT 02 . 28 . 20 03 . 04 . 20

03 . 12 . 20

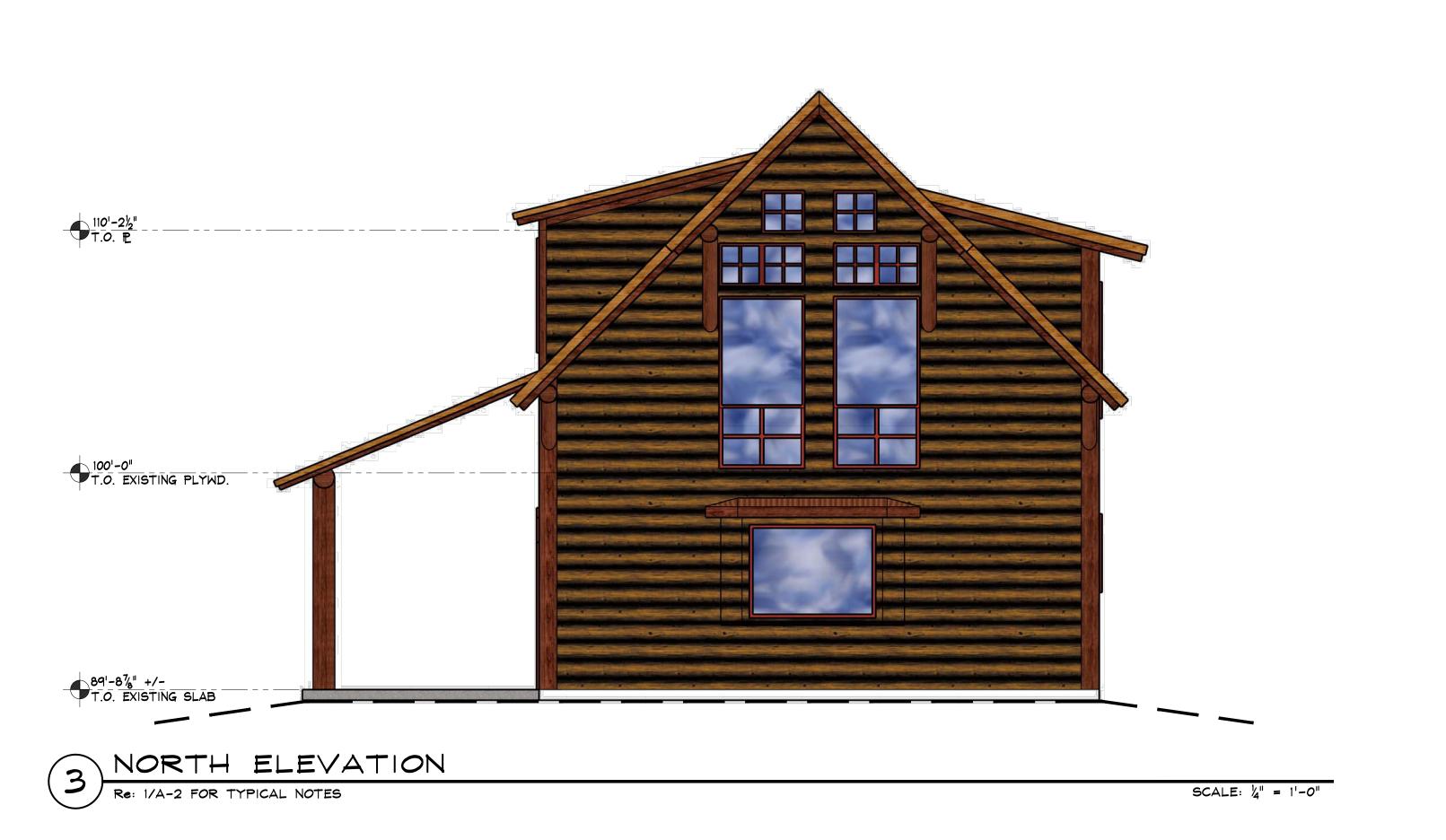
PERMIT

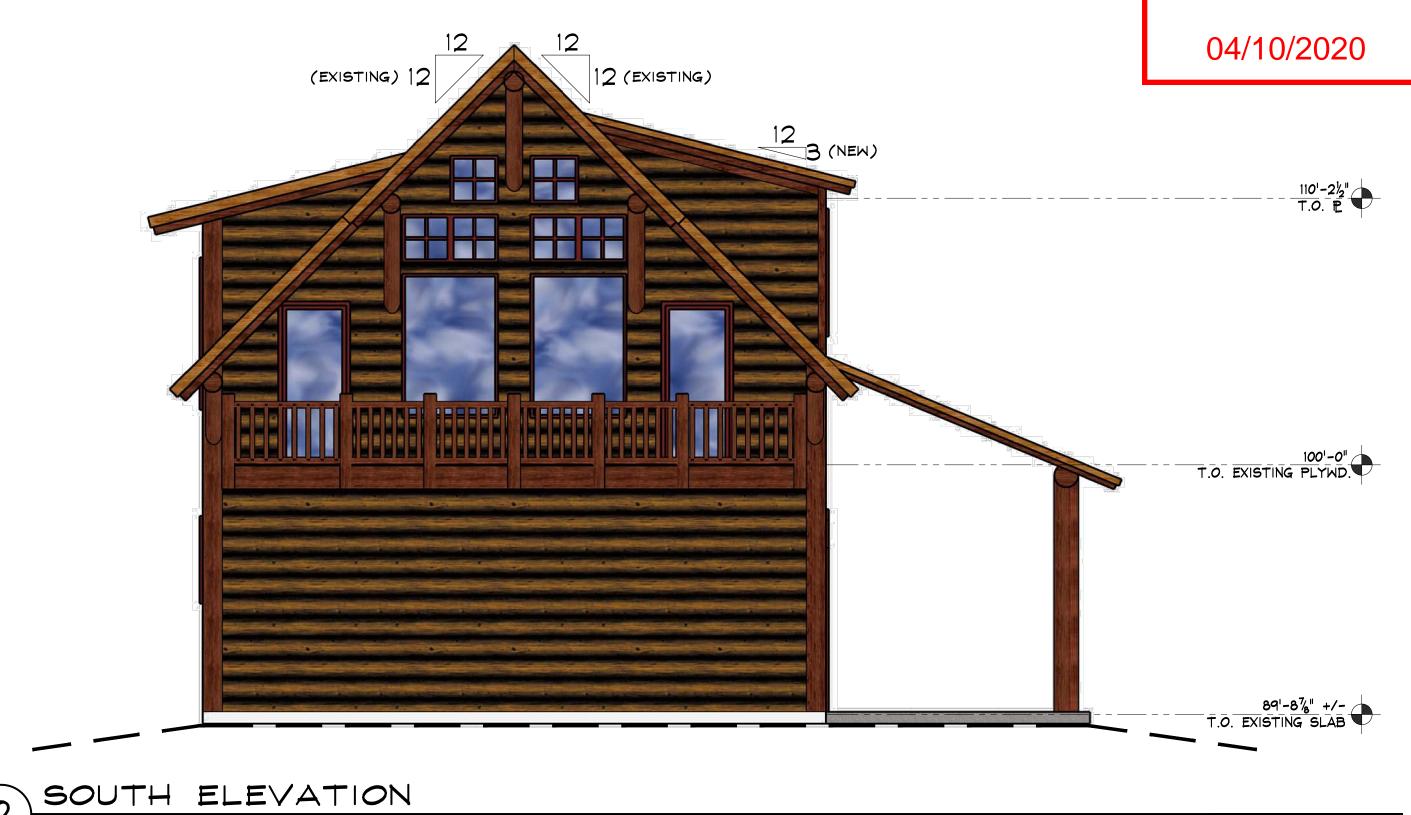
03 . 24 . 20

DRAWN BY: JEM REVIEWED BY: CW1 PROJECT # 20013 COVER SHEET









RCRBD Record Set

T.A.

ROUTT COUNTY, COLOR

PRELIMINARY SET

02 . 21 . 20

DESIGN

DEVELOPMENT

02 . 28 . 20

03 . 04 . 20

03 . 12 . 20

PERMIT

03 . 24 . 20

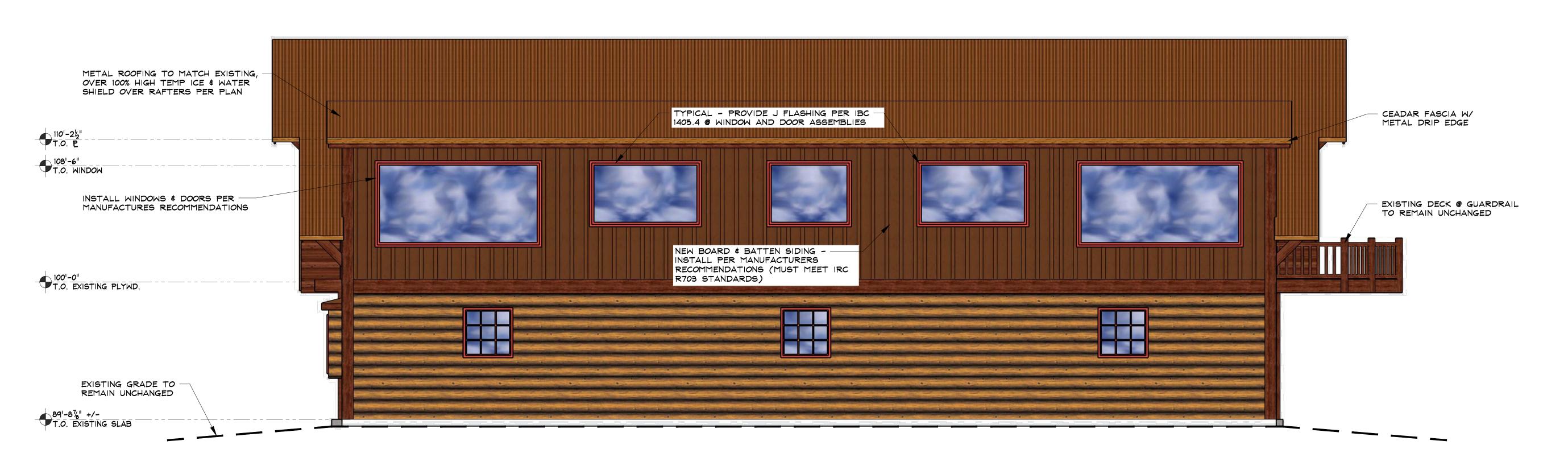
DRAWN BY: JEM
REVIEWED BY: CWM
PROJECT # 20013

ELEVATIONS

SHEET 4 of 7

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

NOTE: EAST ELEVATION WILL REMAIN UNCHANGED



STRUCTURAL NOTES

Applicable Codes and Standards:

A. 2015 International Building Code (including all local adoptions)

B. 2015 International Residential code (including all local adoptions)

C. Routt County Zoning Regulations

D. "Minimum Design Loads for Buildings and Other Structures" - ASCE 7-10

E. "Building Code Requirements for Structural Concrete" - ACI318 "Steel Construction Manual" - AISC fourteenth edition

G. "National Design Specification for Wood Construction" - ANSI/AF&PA-NDS 2015

Design Live Loads: 152 psf Ground Snow Load, 110 psf Roof Snow Load A. Roofs:

B. Floors: 40 psf C. Decks: 100 psf

115 mph, Exposure B Category B, Soil Type D D. Wind: E. Seismic Design:

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. 2304.9.1, "Fastening

Schedule", of the 2015 IBC or Table No. R602.3(1), "Fastener Schedule For Structural Members", of the 2015

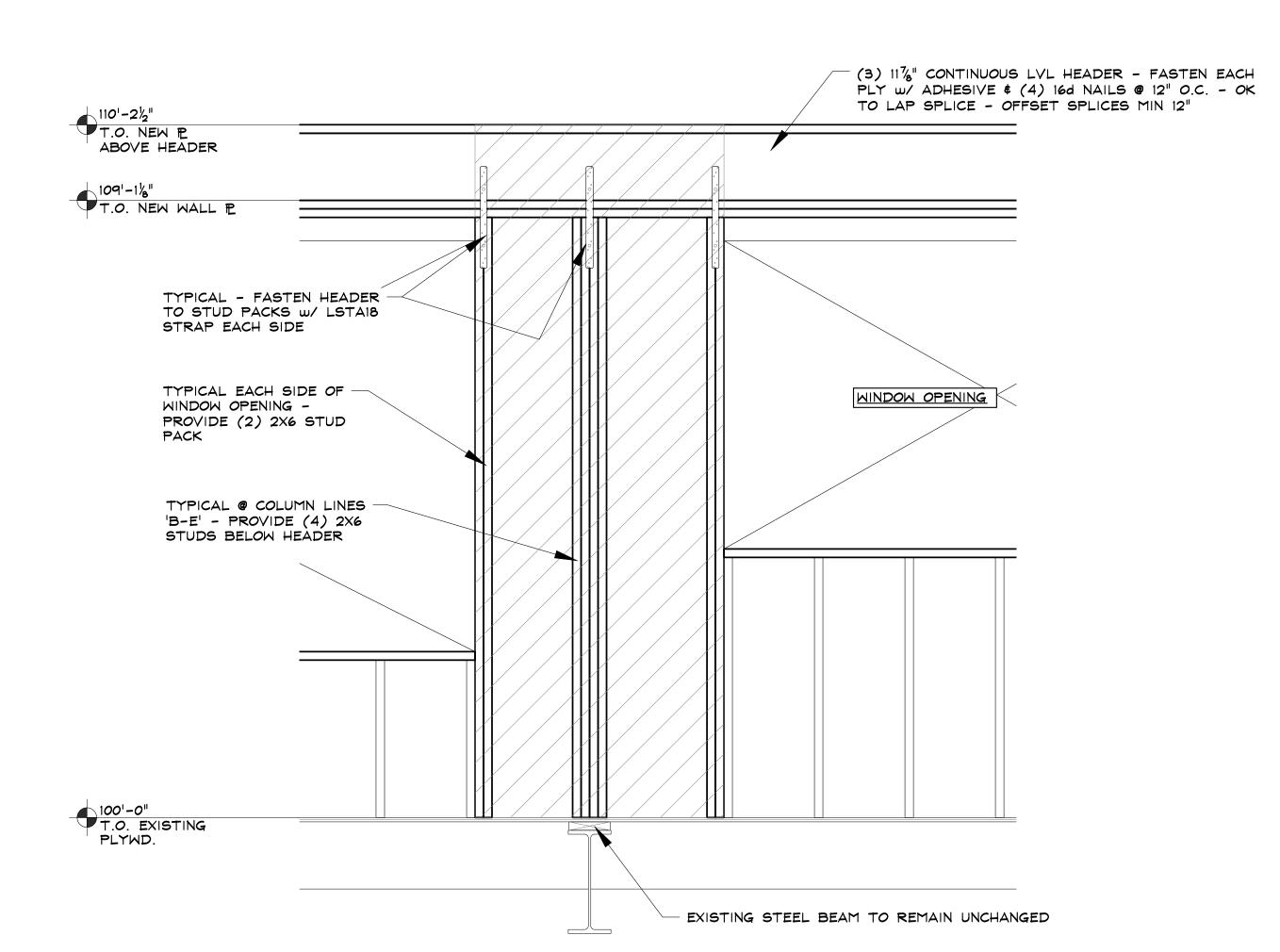
C. Wall and floor sheathing shall be APA rated with exterior glue and graded in accordance with APA standards. Panel identification and thickness shall be as noted on the drawings.

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.

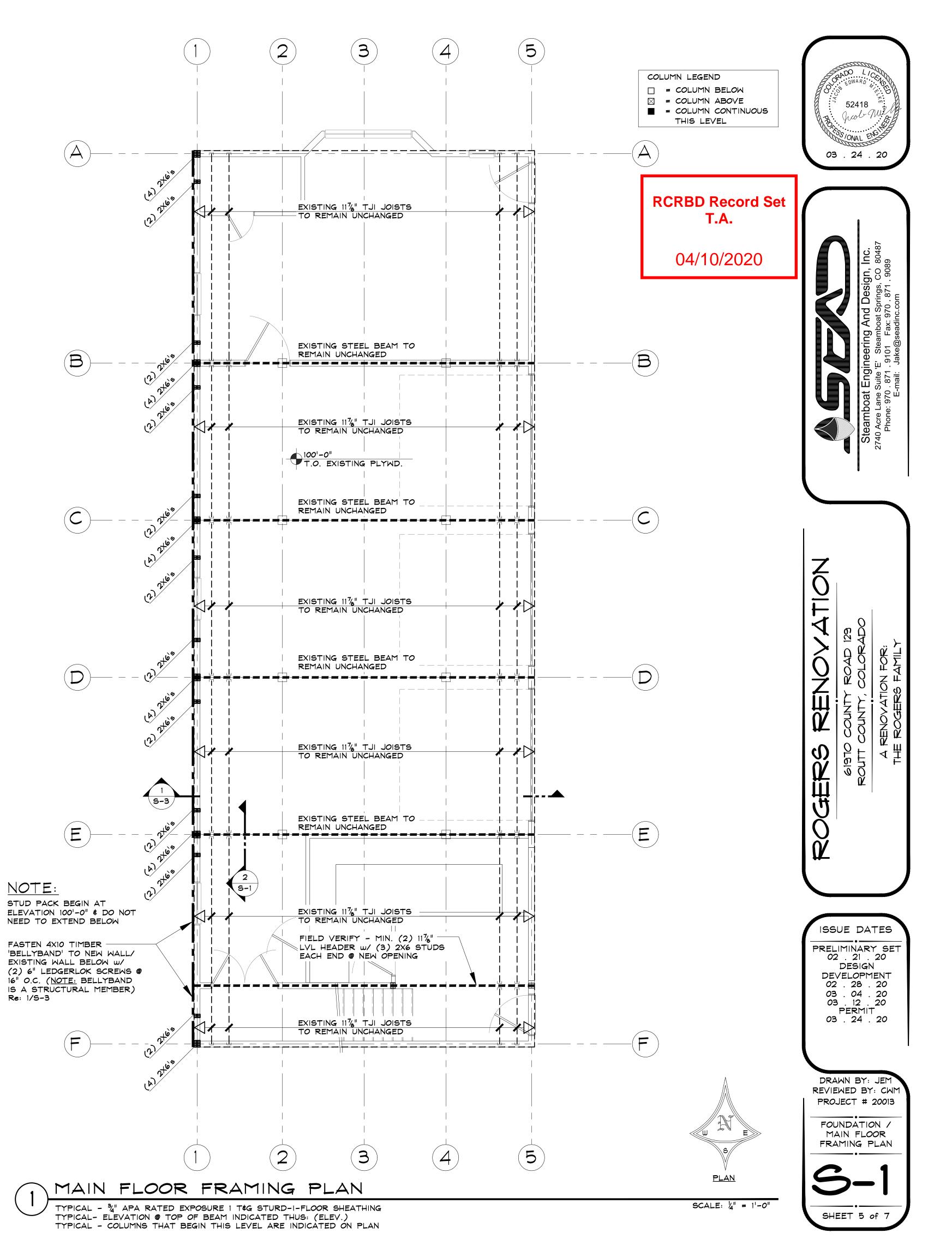
E. Laminated Veneer Lumber shall be of such stress grade to provide an allowable bending stress of 2,600 psi, allowable shear stress parallel to the glue line of 285 psi and a modulus of elasticity of 1,900,000 psi.

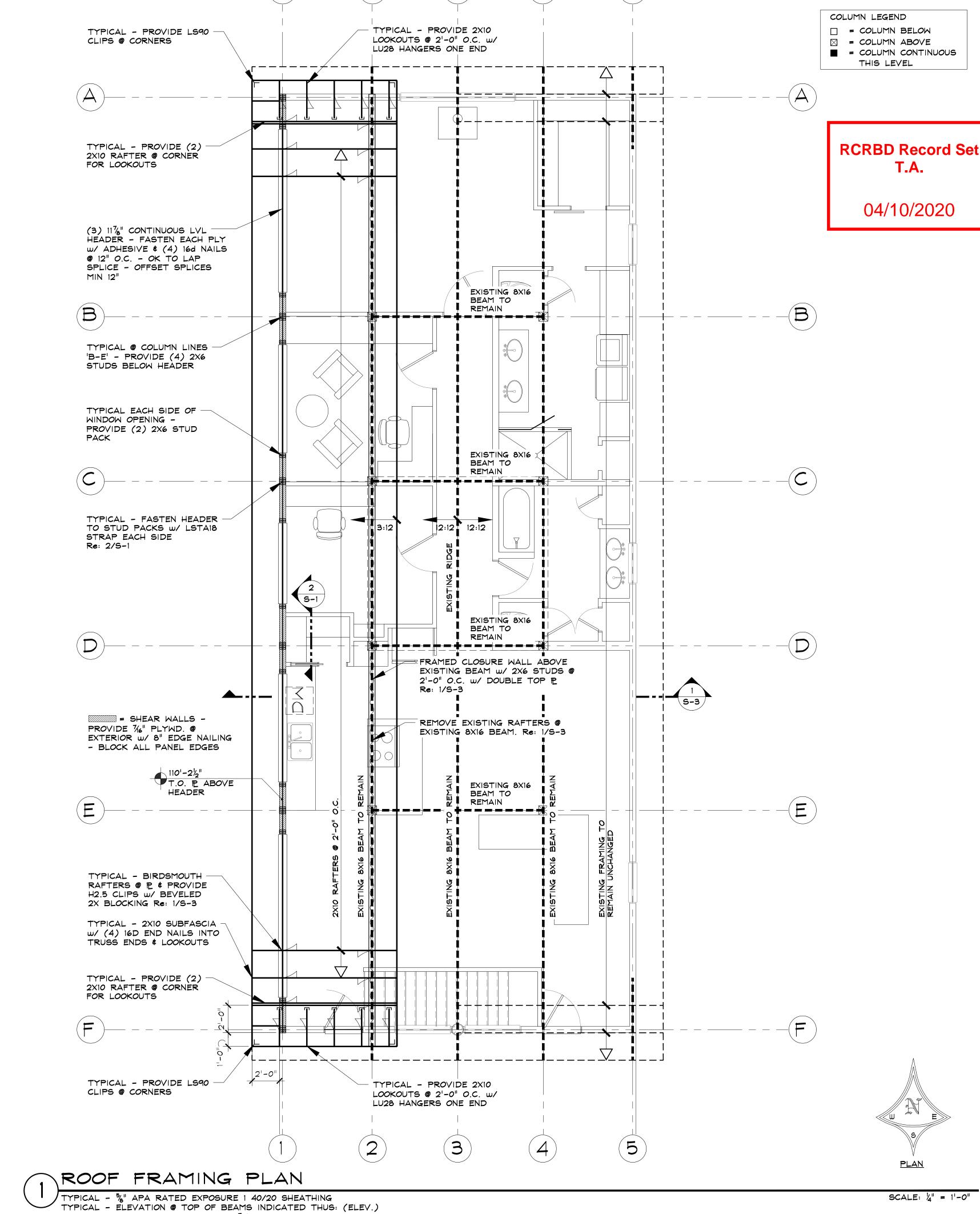
Field Verification:

A. The contractor shall thoroughly inspect and survey the existing structure to verify dimensions, elevations, framing, etc., which may affect the work shown on the drawings and report any variations or discrepancies to the Engineer.



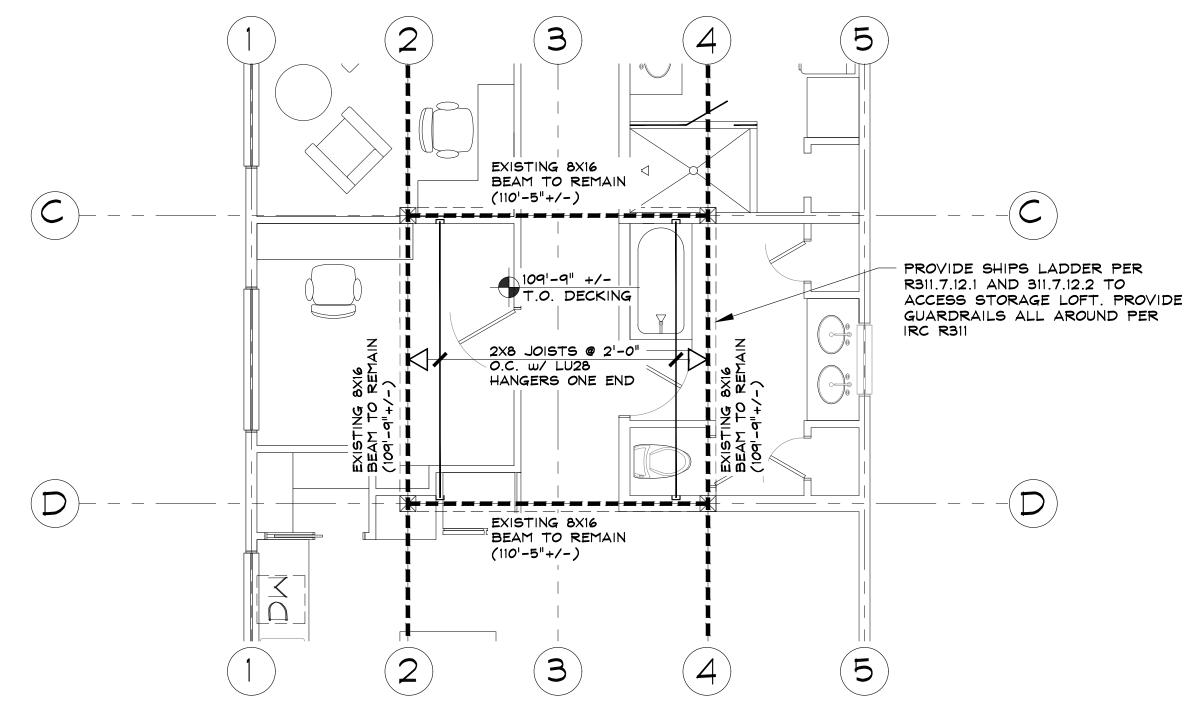






(3)

5



2 LOFT FRAMING PLAN TYPICAL - 2X6 T#G DECKING W/ CONTROLLED RANDOM LAYUP

TYPICAL- ELEVATION @ TOP OF BEAM INDICATED THUS: (ELEV.)

SCALE: $\frac{1}{4}$ = 1'-0"

TYPICAL HEADER THIS PLAN - (3) 11% LVL's, w/ (2) TRIMMERS \$ (1) KING STUD EA. END, U.N.O.

ROOF / LOFT FRAMING PLAN

PRELIMINARY SET 02 . 21 . 20 DESIGN

DEVELOPMENT 02 . 28 . 20 03 . 04 . 20 03 . 12 . 20 PERMIT 03 . 24 . 20

DRAWN BY: JEM

REVIEWED BY: CWM

PROJECT # 20013

ONTINOS COUNTY

SHEET 6 of 7



SHEET 7 of 7

04/10/2020

T.A.

