

CONTACT INFORMATION

DESIGN CONSULTANT:

STEAMBOAT ENGINEERING & ARCHITECTURAL DESIGN, INC.  
2740 ACRE LANE, SUITE 'E'  
STEAMBOAT SPRINGS, CO. 80487

PHONE: 970-871-9101  
EMAIL: Sam@seadinc.com

CONTRACTOR:

Jonathan Aldrich  
956 Confluence Ct.  
STEAMBOAT SPRINGS, CO 80487

EMAIL: jonathan@aldrichbuilt.com

RENOVATION PLANS

FOR:

LOT 18 MOUNT WERNER MEADOWS  
AMENDED SUBD

ALSO KNOW AS:  
3367 APRES SKI WAY

SHEET SCHEDULE	
SHEET	CONTENTS
A-0	COVER SHEET
A-0.1	ARCHITECTURAL NOTES & CODE STUDY
C-1	VICINITY MAP & SITE PLAN
A-1	EXISTING, DEMO, & PROPOSED LOWER LEVEL FLOOR PLANS

REVIEWED  
FOR  
CODE  
COMPLIANCE  
11/30/2023



MARNO DUPLEX

RENOVATION



SEAD

STEAMBOAT ENGINEERING AND DESIGN, INC.  
2740 Acre Lane Suite 'E' Steamboat Springs, CO 80487  
Phone: 970-871-9101 Fax: 970-871-9089  
E-mail: Jake@seadinc.com

MARNO SDU RENOVATION

3367 APRES SKI WAY  
STEAMBOAT SPRINGS, COLORADO

A NEW RENOVATION FOR:  
ANN MARNO

ISSUE DATES	
10 . 26 . 23	REVIEW SET
11 . 9 . 23	PERMIT SET
11 . 20 . 23	PERMIT SET

DRAWN BY: SWS  
REVIEWED BY: CWM  
PROJECT # 23103

COVER SHEET

A-0



ARCHITECTURAL NOTES

GENERAL  
All work must comply with state and local codes, based on the local Zoning Regulations, the 2018 International Building Code, the 2018 International Residential Code, the 2018 International Plumbing Code, 2018 the International Mechanical Code, the 2018 Energy Conservation Code and the 2023 National 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 drawings.

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 construction. Verify changes with the designer and engineer.

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

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 and code standards.

DIMENSIONS  
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 drawings.

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".

Attic access shall be provided w/ a min. clear opening of 22"x30" and min. 30" head height.

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

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

Exterior roofs, flashing, ledges, concrete & other surfaces shall slope min. 1/4"12 to prevent water ponding. Landings shall also slope max. 1/4"12 to prevent slipping. Covered garages or carports floor surface shall slope min. 1/8"12 to provide positive drainage to drain.

WALLS  
Per local code adoptions section R402.1.2, 2x6 walls may be insulated with:  
1) R20 in the cavity of the wall and R5 continuous (R20/5)  
2) R22 in the cavity of the wall and R3 continuous (R22/3)  
3) R27 in the cavity of the wall (R27/0)

Exterior walls open to the outside air must have a class II Vapor retarder ("smart vapor retarder" or kraft faced batt with .1 – 1.0 perm) on the inside of the framed wall (IRC R702.7). However, if min. R-15 spray foam is used in the exterior wall, Class III vapor retarder (latex or enamel paint) can be used w/o a class II vapor retarder on the inside of the wall (IRC, Section R702.7.1). Basement or exterior walls below grade shall only have a Class III vapor retarder on the interior of the wall to allow drying to the interior.

CRAWL SPACE  
Unvented crawl spaces shall have Class I vapor retarder (sheet polyethylene, or material w/ perm rating less than .1) covering exposed earth per R408.3. Overlap vapor retarder joints min. 6" and seal or tape seams. Extend & seal edges min. 6" up stem walls

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

If mechanical equipment is provided in a crawlspace, the min. access provided shall be large enough to remove the largest appliance but not smaller than 30"x22".

WINDOWS  
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 3'6"  
2) Within 24" adjacent to either side of doors if less than 60" above the walking surface  
3) Single panes where all 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) Glazing in guards and railings  
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  
8) Skylights and glazing sloped more than 15"

Sleeping rooms and basements w/ habitable space shall have min. one operable emergency escape w/ min 5.7 s.f. openable area, min. 20" clear width or min. 24" clear hgt. & max 44" sill height. (R310.2). Egress window wells shall be provided below grade and are allowed blw decks if min. 36" blw. deck

STAIRWAYS:  
Stairs shall have a minimum 36" clear width at all points above the handrail. The surface of stairs shall be slip resistant. Minimum vertical headroom is 6'-8" from the nosing. Max. riser height is 7 3/4", and min. tread depth is 10". Max. vertical rise shall be 12'-7" between landings.

Landings shall be provided at the top and bottom of each stairway with a depth no less than 36" and a width no less than the width of the stairway served. Landings are not required at the top of interior stairs provided that a door does not swing over the stairs. Max. 1 step down to landing allowed at outside of exterior doors.

The greatest riser height or nosing within a flight of stairs shall not exceed the smallest by more than 3/8". At open risers higher than 30" above the floor or grade, openings shall not be greater than 4"

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 guardrail. All guardrails 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 be rated.

FIRE PROTECTION  
Provide smoke detection per IRC section R314.

Provide carbon monoxide detection per IRC section R315.

Provide 2x Fireblocking in concealed walls at 10' max. o.c., and at dropped ceiling transitions, and at the top and bottom of concealed stair stringers per IRC section R302.11

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 that are self-closing and self-latching. Openings between garages and sleeping rooms prohibited. Habitable rooms located above garages shall be protected w/ min 3/4" Type X gypsum board on the garage ceiling.

Secondary dwelling units separated from a garage must have a 1-hr fire rated ceiling/floor and/or wall assembly per IRC, Section R302.3 to separate between the garage and dwelling spaces. Exterior wall supporting constrction must have a min. of 3/8" type x gypsum on the inside face of the wall as a RCRBD approved code modification

Provide min. 1/2" drywall on the underside of all TJI joists to protect the engineered webs in the event of a fire per IRC Sec. R302.13. If the floor is located over a crawl space not used for storage or fuel-fired or electric powered heating appliances, the drywall is not required.

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 1/60 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 1/8"- 1/4". The same venting area shall be provided between the insulation and roof sheathing.

Unvented roof assemblies shall comply with R806.5 with 1 of the 4 following prescriptive options:  
Note for all options, the roof shall dry to the inside, thus Class I vapor retarder shall NOT be installed on the ceiling.  
1. 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.  
2. A combination of air-impermeable and air-permeable insulation may be used where min. R-19 air-impermeable is applied to underside of sheathing & shall be accompanied by min. R-30 continuous rigid board insulation above the sheathing.  
3. Alternatively, R-30 air-impermeable insulation can be applied to the underside of sheathing, w/ min. R-19 air-permeable beneath.  
4. Insulation may be installed above the structural roof sheathing as Min. R-30 air-impermeable insulation (rigid board or sheet insulation)

Provide Grace 'Ice and water shield' underlayment, or equivalent product, from the edge of roof overhangs to the ridge.

Asphalt shingles when applied on 2:12 to 4:12 roof pitches shall & require double underlayment (apply a 19" strip of underlayment parallel to and starting at the eaves. Apply 36" wide sheets of underlayment, overlapping successive sheets 19") Re: R905.2

Metal panel roofing shall have min. 1/4:12 slope & comply w/ R905.10. Apply underlayment in accordance w/ manufacturer's instructions

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

Snow guards shall be provided at the eave of all metal roofs, U.N.O

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 floor.

If appliances are located in the crawl space, an ignition barrier shall be provided per IRC section R316.5.4 on all ceilings/walls of mechanical room in crawl space.

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 M1501 and M1502 w/ min. 36" clearance to building openings or soffit vents.

All bathrooms shall be vented per IRC section 303.3.

Dishwashers shall be connected to a separate stand pipe or approved air gap prior to connection to sanitary drainage.

Heating and Cooling equipment appliances shall 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 Routt County (w/ the exception of the Town of Hayden), 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 efficiency 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 not install or inspect mechanical equipment or HVAC until submitted to RCRBD and approved.

LEGAL DESCRIPTION

LOT 18 MOUNT WERNER MEADOWS  
AMENDED SUBD

PROJECT SUMMARY

2018 IBC, 2018 IEBC, 2018 IRC, CODE

OCCUPANCY CLASSIFICATION GROUP  
R-3  
CONSTRUCTION TYPE V-B

S.S. COMMUNITY DEVELOPMENT CODE

ZONING	RN-3 (RESIDENTIAL NEIGHBORHOOD - THREE)	
PRIMARY USE	RESIDENTIAL	
ACCESSORY USE	RESIDENTIAL	
GROSS FLOOR AREA	2,568 S.F.	(AREA EXTERIOR OF WALLS)
LOT AREA	0.14 AC. (6,098.4 SQ. FT.)	

ZONING DIMENSIONAL STANDARDS

STANDARD	ZONE REQ.	PROPOSED
LOT COVERAGE MAX.	35%	16.8% (UNCHANGED)
FLOOR AREA RATIO MAX.	NO MAX	UNCHANGED
BUILDING HEIGHT MAX.	40 FT.	UNCHANGED
AVG. E HEIGHT MAX.	28 FT.	UNCHANGED
FRONT SETBACK MIN. PRINCIPAL: ACCESSORY:	15 FT. 20 FT.	UNCHANGED
SIDE SETBACK MIN. PRINCIPAL: ACCESSORY:	10 FT. 5 FT.	UNCHANGED
REAR SETBACK MIN. PRINCIPAL: ACCESSORY:	10 FT. 5 FT.	UNCHANGED

NOTE:

THE PURPOSE OF THIS PROJECT IS TO ADD A SECONDARY DWELLING UNIT (SDU) IN WHAT IS NOW THE EXISTING BASEMENT. NO SHORT TERM RENTALS ARE PERMITTED IN THE PROPOSED SDU. LONG TERM RENTALS ARE PERMITTED

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:

- ALL JOINTS, SEAMS, AND PENETRATIONS
- SITE-BUILT WINDOWS, DOORS, & SKYLIGHTS
- OPENINGS BETWEEN WINDOW & DOOR ASSEMBLIES
- UTILITY PENETRATIONS
- DROPPED CEILINGS & CHASES ADJACENT TO THE THERMAL ENVELOPE
- KNEE WALLS
- WALLS & CEILING SEPARATING A GARAGE FROM CONDITIONED SPACES
- BEHIND TUBS & SHOWERS OF EXTERIOR WALLS
- BEHIND FIREPLACE INSERTS
- 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.

RESIDENTIAL PRESCRIPTIVE ENERGY CODE STANDARDS

Re: 2018 International Energy Conservation Code Table R402.1.2

Insulation & Fenestration Requirements By Component <sup>a</sup>										
Climate Zone	Fenestration U-factor <sup>b</sup>	Skylight <sup>b</sup> U-factor <sup>b</sup>	Glazed Fenestration SHGC <sup>b,c</sup>	Ceiling R-Value	Wall Wood <sup>d</sup> Framing R-Value	Mass Wall R-Value	Floor <sup>e</sup> R-Value	Basement <sup>f</sup> Wall R-Value	Slab <sup>g</sup> Perimeter R-Value & Depth	Crawl <sup>h</sup> Space R-Value
7 & 8	0.30	0.55	NR	R-49 w/	R-27 cavity or R-20+5c.i.	19/21	38	15/19	R-10, 4 ft. deep	15/19
a	R-Values are minimums. U-factors & SHGC 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.									
b	The Fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.									
c	<sup>1</sup> 15/19 <sup>1</sup> 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. <sup>1</sup> 15/19 <sup>1</sup> 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.									
d	R-5 shall be provided under the full slab area of a heated slab in addition to the required slab edge insulation R-value for slabs as indicated in the table. The slab edge insulation for heated slabs shall not be required to extend below the slab.									
e	Or insulation sufficient to fill the framing cavity, R-19 minimum.									
h	<sup>1</sup> Cavity <sup>1</sup> insulation shall be entirely within the wall cavity, <sup>1</sup> 20+5 <sup>1</sup> means R-20 cavity insulation plus R-5 continuous insulation									
i	The second R-Value applies when more than half the insulation is on the interior of the wall mass.									



MARNO SDU RENOVATION  
3367 APRÈS SKI WAY  
STEAMBOAT SPRINGS, COLORADO  
A NEW RENOVATION FOR:  
ANN MARNO

ISSUE DATES

10 . 26 . 23 REVIEW SET  
11 . 3 . 23 PERMIT SET  
11 . 20 . 23 PERMIT SET

DRAWN BY: SWS  
REVIEWED BY: CIM  
PROJECT # 23103

ARCHITECTURAL  
NOTES & CODE  
STUDY

A-0.1



NOTE:

TYPICAL AT ALL EXTERIOR WALLS AND LOAD BEARING STRUCTURE ON LOWER LEVEL - 1-SIDED, 1-HR FIRE RATED WALL WILL BE A CALCULATED TYPE ASSEMBLY CONSISTING (2) LAYERS OF 5/8" TYPE X GYPSUM STAGGERED 24" AT SEAMS EA. LAYER PER IBC TABLE 722.2.1.4(2) - CONFIRM EXISTING WALL COVERINGS AND REPORT TO E.O.R - IF THERE IS AN EXISTING LAYER OF 5/8" GYPSUM DRYWALL, ONLY (1) ADDITIONAL LAYER OF 5/8" TYPE-X DRYWALL REQUIRED

USE HILTI FS ONE FIRESTOP SEALANT ON ALL PENETRATIONS THROUGH FIRE ASSEMBLIES (WALLS AND CEILINGS) INCLUDING, BUT NOT LIMITED TO, VENTS, MECHANICAL DUCTS, ELECTRICAL CONDUIT, AND PLUMBING. INSTALL PER MANUFACTURERS RECOMENDATIONS

WALL KEY	
	= EXISTING WALLS TO REMAIN
	= PROPOSED WOOD FRAMED BEARING WALLS
	= PROPOSED WOOD FRAMED NON-BEARING WALLS
	= EXISTING WALLS TO BE REMOVED
	= 1-HR FIRE ASSEMBLY

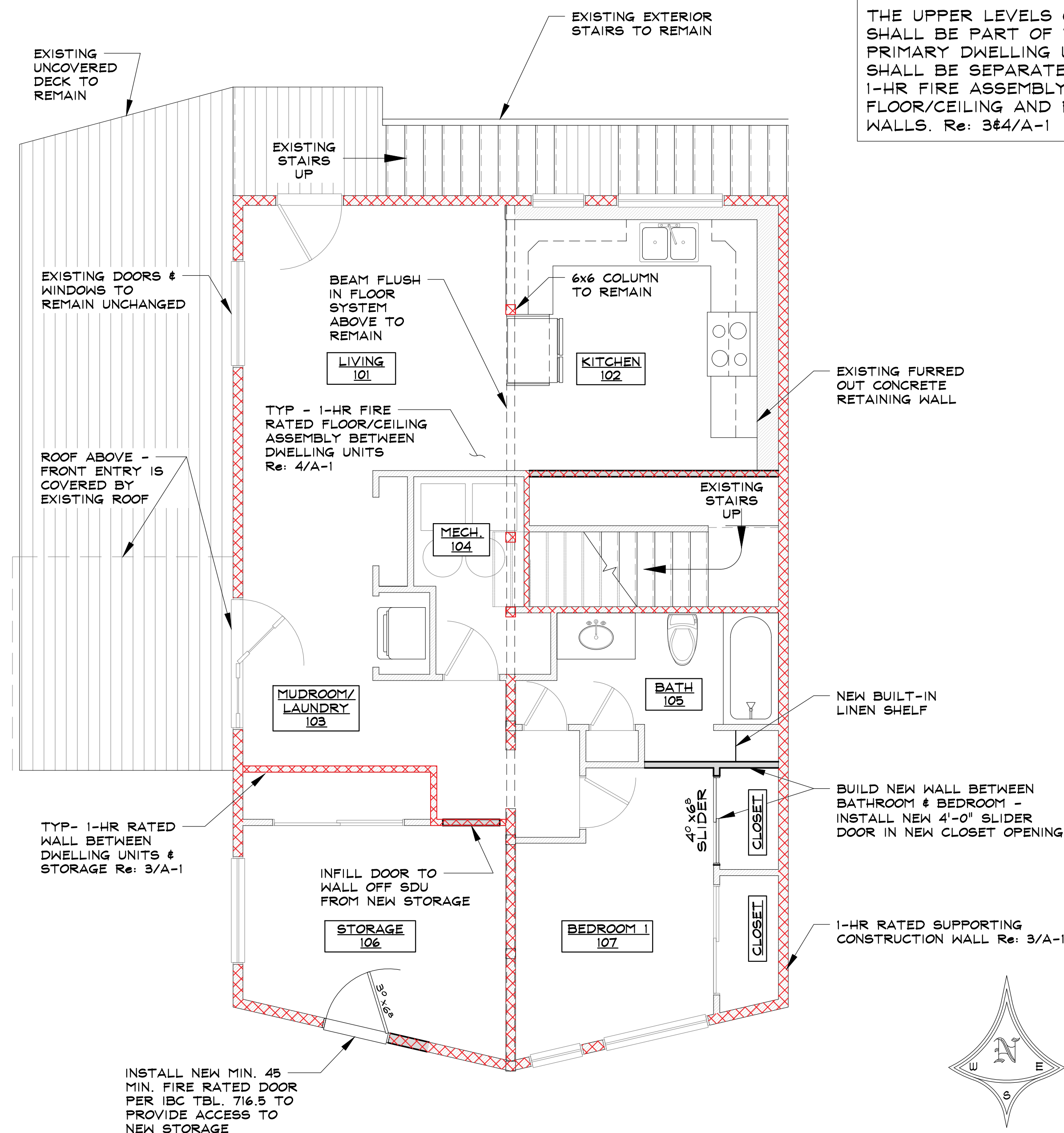
GA FILE NO. FC 5529	GENERIC	1 HOUR FIRE
<b>WOOD JOISTS, GYPSUM WALLBOARD</b> Base layer 5/8" type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1-1/4" Type W or S drywall screws 24" o.c. Face layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1-7/8" Type W or S drywall screws 12" o.c. at joints and intermediate joists and 1-1/2" Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood joists supporting 1/2" plywood with exterior glue applied at right angles to joists with 8d nails. Ceiling provides one-hour fire-resistance protection for framing, including trusses.		
		Approx. Ceiling Weight: 5 psf Fire Test: FM FC 172, 2-25-72; ITS, 8-6-98

④ 1-HR. FIRE RATED FLOOR/CEILING

SCALE: N.T.S.

NOTE:

THE UPPER LEVELS OF THIS HOME SHALL BE PART OF THE PROPOSED PRIMARY DWELLING UNIT AND SHALL BE SEPARATED BY MINIMUM 1-HR FIRE ASSEMBLY ON THE FLOOR/CEILING AND PARTITION WALLS. Re: 3&4/A-1



② PROPOSED LOWER LEVEL FLOOR PLAN (SDU)

650 SQ. FT. SDU THIS PLAN

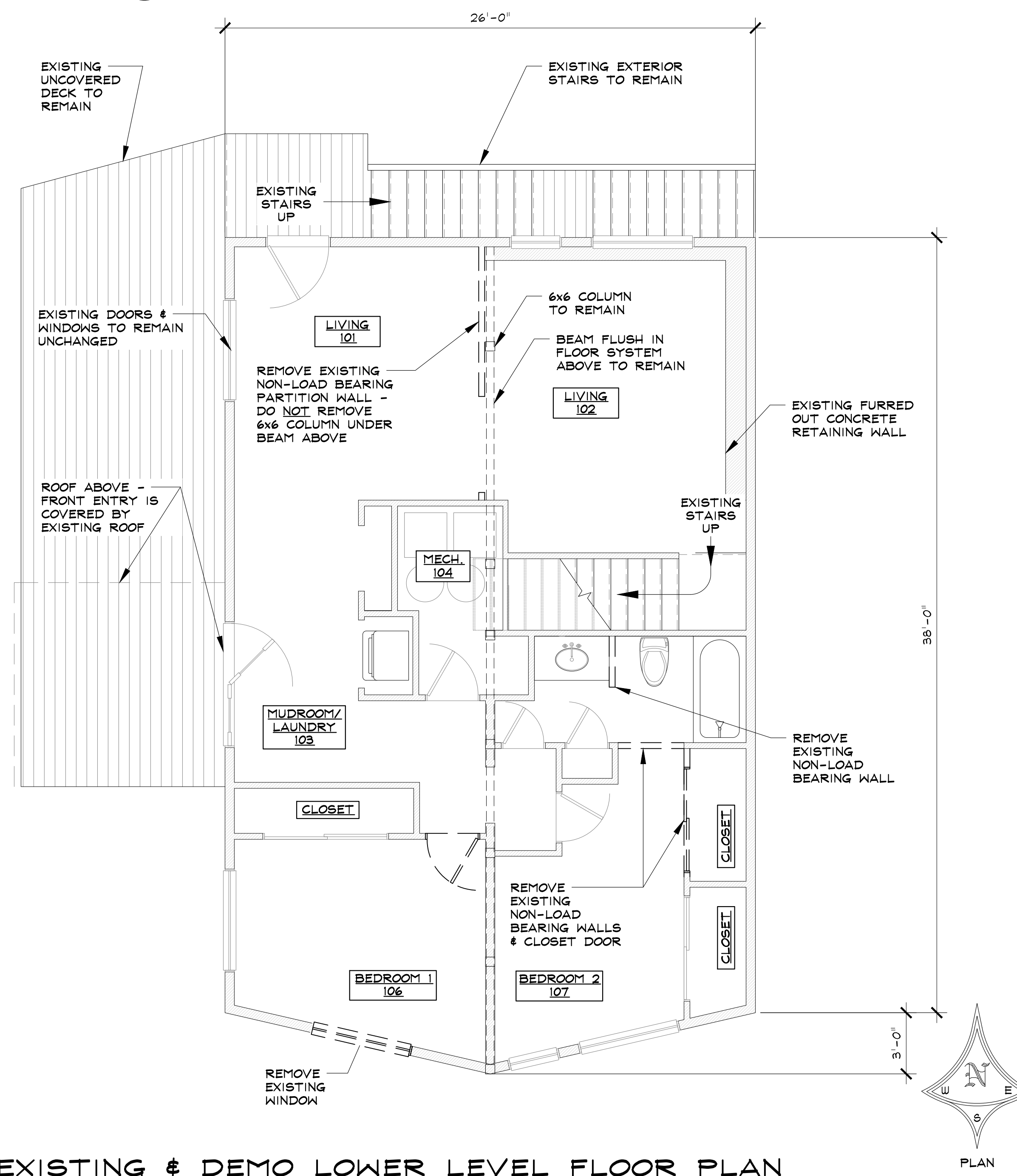
SCALE: 1/4" = 1'-0"

OR

GA FILE NO. WP 3510	GENERIC	1 HOUR FIRE	35 to 39 STC SOUND
<b>WALLS AND INTERIOR PARTITIONS, WOOD FRAMED</b> <b>GYPSUM WALLBOARD, WOOD STUDS</b> One layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 2 x 4 wood studs 24" o.c. with 6d coated nails, 1-7/8" long, 0.0915" shank, 1/4" heads, 7" o.c. Joints staggered 24" on opposite sides. (LOAD-BEARING)			
		Thickness: 4-7/8" Approx. Weight: 7 psf Fire Test: UL R3501-47, -48, 9-17-65, UL Design U309; UL R1319-129, 7-22-70, UL Design U314 Sound Test: NGC 2404, 10-14-70	

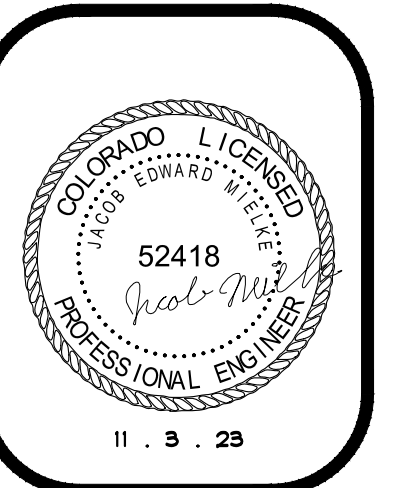
③ 1-HR. FIRE RATED WALL ASSEMBLY OPTIONS

SCALE: N.T.S.



① EXISTING & DEMO LOWER LEVEL FLOOR PLAN

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



MARNO SDU RENOVATION  
3367 APRÈS SKI WAY  
STEAMBOAT SPRINGS, COLORADO  
A NEW RENOVATION FOR:  
ANN MARNO

ISSUE DATES	
10.26.23	REVIEW SET
11.9.23	PERMIT SET
11.20.23	PERMIT SET

DRAWN BY: SMS  
REVIEWED BY: CNM  
PROJECT # 23103  
EXISTING, DEMO,  
& PROPOSED  
LOWER LEVEL  
FLOOR PLANS

A-1