Development Services

From Concept to Construction

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APPEAL SUMMARY

Status: Decision Rendered - Held over from 24425 12/9/20) for additional information

Appeal ID: 24858	**Project Address:** 700 N Buffalo St
Hearing Date: 5/12/21	**Appellant Name:** Jeff Reynoldson
Case No.: B-001	**Appellant Phone:** 19712581569
Appeal Type: Building	**Plans Examiner/Inspector:** Jason Buerkle
Project Type: residential	**Stories:** 2 **Occupancy:** Accessory Building **Construction Type:** Wood construction
Building/Business Name:	**Fire Sprinklers:** No
Appeal Involves: Reconsideration of appeal	**LUR or Permit Application No.:** 21-003390-RS
Plan Submitted Option: pdf [File 1] [File 2]	**Proposed use:** Accessory Use

APPEAL INFORMATION SHEET

Appeal item 1

Code Section	R302.1
Requires	R302.1 (Oregon Residential Specialty Code). Exterior Walls. Construction, projections, openings and penetrations of Exterior Walls of dwellings and accessory buildings shall comply with Table R302.1. Relevant Exceptions: Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the Fire Separation Distance. Detached garages accessory to the dwelling located within 2 feet of a lot line are permitted to have roof eave projections not exceeding 4 inches. Table R302.1 requires that walls less < 3 feet and parallel from the property line be a minimum 1-hour fire-resistance rating tested in accordance with ASTM E119 or UL 263 with exposure from both sides. Table R302.1 requires that projections (eaves) equal to 2 feet or less than 3 feet be 1-hour on the underside with the exceptions of a & b below. Exception a: Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fire blocking is provided from the wall top plate to the underside of the roof sheathing. Exception b: Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.
Code Modification or Alternate Requested	We request an alternate to the fire protection for the exterior walls of a detached garage accessory structure along the east and south property line. The alternate would be to provide the required 1-hour protection from the inside only.
Proposed Design	Two existing exterior walls (east and south walls) of a detached garage accessory structure is within 3 feet of the property line. Due to the conditions of the existing construction, in lieu of

proposing one layer of Type 'X' fire-rated gypsum board be installed on each side of the wall, an alternate means for providing two layers of Type 'X' gypsum board on the inside surface over the face of wood studs is proposed. The proposed alternate is intended to meet the intent of the code and safety concerns for 1-hr fire resistance. The two layers of 5/8" Type 'X' gypsum board offers equivalence of 1-hr fire resistance from inside the structure where the source of fire could occur. The gypsum wallboard will extend from existing concrete foundation to the underside of the roof sheathing. Solid 2x blocking will be provided when the floor joists are perpendicular to the property line to allow the fastening of the (2) layers of Type 'X' gypsum board. The only interruption will be the floor sheathing of the storage space as required by the structural engineer. See drawings.
The 1-hour fire rated exterior walls would be per the following assembly (outside->in):
Noncombustible siding (Hardie Lap Siding)
Weather barrier (30# tar paper)
Existing wood ship lap boards (below 9 feet) and new 1/2 in. OSB (above 9 feet)
2x4 min studs at 24" o.c. with double top plates and a single sill plate.
(2) layers of 5/8" Type 'X' gypsum wallboard (40 min each fire rated equivalence per Gypsum Association Manual)
There will be a non-rated 3" eave as allowed by Section R302.1 exception 4 and the exception to Table 302.1(a)&(b). There will be no openings or penetrations in these two walls including vents.
The roof sheathing will be standard nonrated ½" plywood as allowed by Table 302.1 Exception 4.
No built elements including gutters will cross the property line. The stormwater will remain and be disposed of on-site.

Reason for alternative

The appeal is being requested as part of the second-floor addition of an existing detached garage structure. The structure is an unfinished garage built in 1922. This alternate would improve the existing conditions and allow the upper storage walls to align with the existing framing below without bumping out the siding on the new construction, enabling a traditional look. Applying a fire protection layer on the existing exterior of the east and south wall would require removing the existing wall siding and add unnecessary cost. There are no existing structures on the adjacent properties within 30 feet of our garage so the higher risk to safety is from within our garage.

An approval would be similar to several appeals already approved by the City of Portland. These similar appeals have been granted for converting garages to ADU's. Our garage/storage accessory structure has a lower safety risk to people than an ADU and therefore should be allowed to meet these similar appeals.
We feel the application of (2) layers of 5/8 inch Type "X" gypsum wallboard on the interior of the framing (extending from the top of the existing concrete foundation to the underside of the existing roof sheathing) provides an equivalent 1-hour fire rating from inside the structure. With the large separation from other structures, the higher risk to public safety is within the accessory structure. It would make sense to protect the adjacent properties by stopping any fire from within the interior. The existing garage was never finished within the interior. IE: no gyp board finish. Our proposal will add a significant improvement to the safety of the existing structure for the adjacent properties and will achieve a greater level of fire protection from the current condition.
The 2-foot distance from the fence to the structure is a tight space to add gyp board above 8 feet (up into the gable end). The angle of the ladder for access would be dangerous. Adding gypsum board to the inside is the safest approach. There is low risk of fire from the neighboring properties with all the structures at least 30 feet away. The double gyp on the inside would provide the most protection to these neighbors. This would also keep the existing siding aligned with the upper floor. Structurally, it would allow the best bearing of the upper 2x6 wall on top of the existing 2x4 wall by avoiding offsetting the framing to align with the existing siding.
The proposed design is requested as an alternative to the code due to access to east and south walls. The access is difficult, and passage is narrow. Gaining access and the work itself would add significant cost to the project making the project difficult to finance.
The east and south wall line of the garage is existing and less than 3feet from the property line. Further, there is siding in good condition that does not otherwise need to be altered. Applying the gypsum wallboard to the interior would save time and resources while still providing fire protection.

We are now finishing the interior of the structure and are safely able to apply (2) layers of wallboard to the interior and would have more quality control if both layers are installed within the interior. The gypsum wallboard will be extended to the bottom of roof sheathing. See details. Blocking will be used at the eaves.

APPEAL DECISION

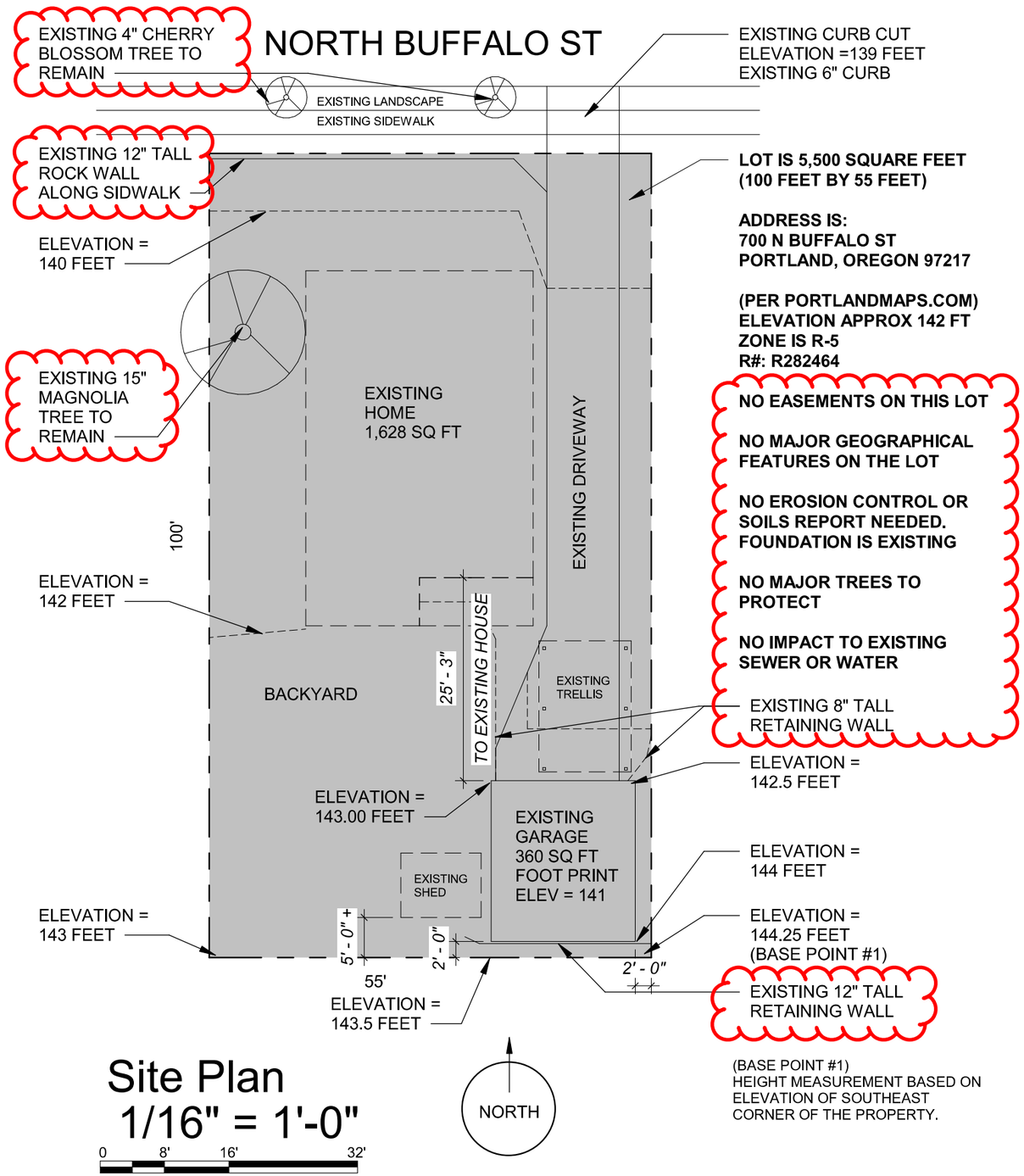
Alternate one hour assembly for South and East walls of existing garage within three feet of property line: Granted provided:
a. Two layers of Type X gypsum are installed on the interior side of the wall continuous to the top of the double top plate.
b. Two layers of 2x blocking are provided between the top of the double top plate and underside of the roof sheathing, beveled where required, to fit tight against the sheathing.
c. No openings including eave vents may be installed in the soffit and no openings including windows, roof vents or skylights may be installed in that portion of the wall or roof that is within three feet of the property line.
d. The roof sheathing adjacent to the property line is fire resistant treated for a minimum distance of 4 feet from the roof edge.
e. No built elements including gutters and footings may cross the property line and stormwater must remain and be disposed of on site.

The Administrative Appeal Board finds with the conditions noted, that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 90 calendar days of the date this decision is published. For information on the appeals process, go to www.portlandoregon.gov/bds/appealsinfo, call (503) 823-7300 or come in to the Development Services Center.

PROJECT DESCRIPTION: ADD UNCONDITIONED ACCESSORY SPACE ABOVE EXISTING DETACHED GARAGE

PERMIT # 21-003390-RS



Zoning Summary:
Using the Detached Covered Accessory Structures Worksheet, the following steps will prevent the accessory structure from becoming the predominant element of the site.

Step 1: *Are the minimum requirements for all covered detached accessory structures met?* (33.110.250& 33.120.280)

Calculated Building Coverage

Building the addition over the existing garage will not increase the building coverage of the site.

Identify the Maximum Height

Proposed project will not exceed 15 feet tall based on the defined measurements of a gable roof per 33.930.050. See Site Plan for Base Point #1.

Determine your Minimum Setback Requirements.

Per Step 3 below, the existing building is allowed in the rear and side setback.

Ensure compliance with existing standards is preserved with new development.

- *Meets Title 11 Tree protection:* The only significant tree is an invasive Cherry tree on the adjacent southern property . We have already worked with the neighbor and hired an arborist to trim back the tree and review its health. The arborist deemed that our proposed structure will not harm the tree. All other trees are far away from the existing structure foot print and will not be impacted.
- *Does not eliminate or encroach upon a required onsite parking space.* No impact to any existing parking spaces
- *Preserves the minimum required outdoor area.* Adding the addition on top of the existing garage will not impact the outdoor space versus the alternative of adding a new structure along the south property line.

Step2: *Is the structure more than 15 feet tall?* (33.110.250 & 33.120.280)

No. proceed to Step 3.

Step 3: *Do you want to locate the structure within a Setback?* (33.110.250 & 33.120.280)

The zoning code provides an option to locate a detached covered accessory structure within the side or rear setback when the development complies with specific limitations.

- *Is the Structure more than 40 feet from a front lot line?*
  The portion of the existing garage meets the following requirements and is set back more than 70 feet.
- *Footprint of Structure 24 feet or less?*
  The foot print of the existing garage is 18 feet by 20 feet and complies with this.
- *Combined length of all structures in the setback adjacent to each property line is less than 24 feet?*
  This is the only existing structure in the setback so there is no additional (combined) length. The 18 by 20 foot will be maintained and is less than 24 feet.
- *Overall height of structure is less than 15 feet and the walls of the structure are less than 10 feet high, excluding the portion of the wall within a gable.*
  Proposed project will not exceed 15 feet tall based on the defined measurements of a gable roof per 33.930.050. The walls are 10 feet tall except at the gable ends as allowed.
- *Unenclosed portions of structure must be screened from adjoining lots by a fence or landscaping.*
  Unenclosed portions of the structure is screened by a fence and/or landscaping along sides of the adjacent property.
- *Walls located within the setback cannot have door or windows facing the adjacent lot line.*
  No windows or doors will be located along the lot line.
- *The structure cannot have a rooftop deck or patio.*
  The structure will not have a roof top deck or patio
- *Dormers must be set back 5 feet or less from the side and rear lot lines.*
  No dormers will be within the 5 feet of the setback.

Step 4: What standards apply based on the use proposed?

The requirements outlined in Steps 1 though 3 above apply to all detached covered accessory structures. Additional requirements may be triggered based on the use proposed within the structure.

- *Additional Sink Requirements:*
  No plumbing will be provided in this structure.
- *Accessory Dwelling Unit (ADU):*
  This structure will not be used as a dwelling unit.
- *Accessory Short-Term Rental (ASTR):*
  This structure will not be used as an ASTR.
- *Garage/Carport:* The proposed project will not obstruct the legal parking space.
  The existing driveway is paved and has an existing connection to the street.
  These will remain as-is.

RESUBMITTED
DATE: 4/02/2021

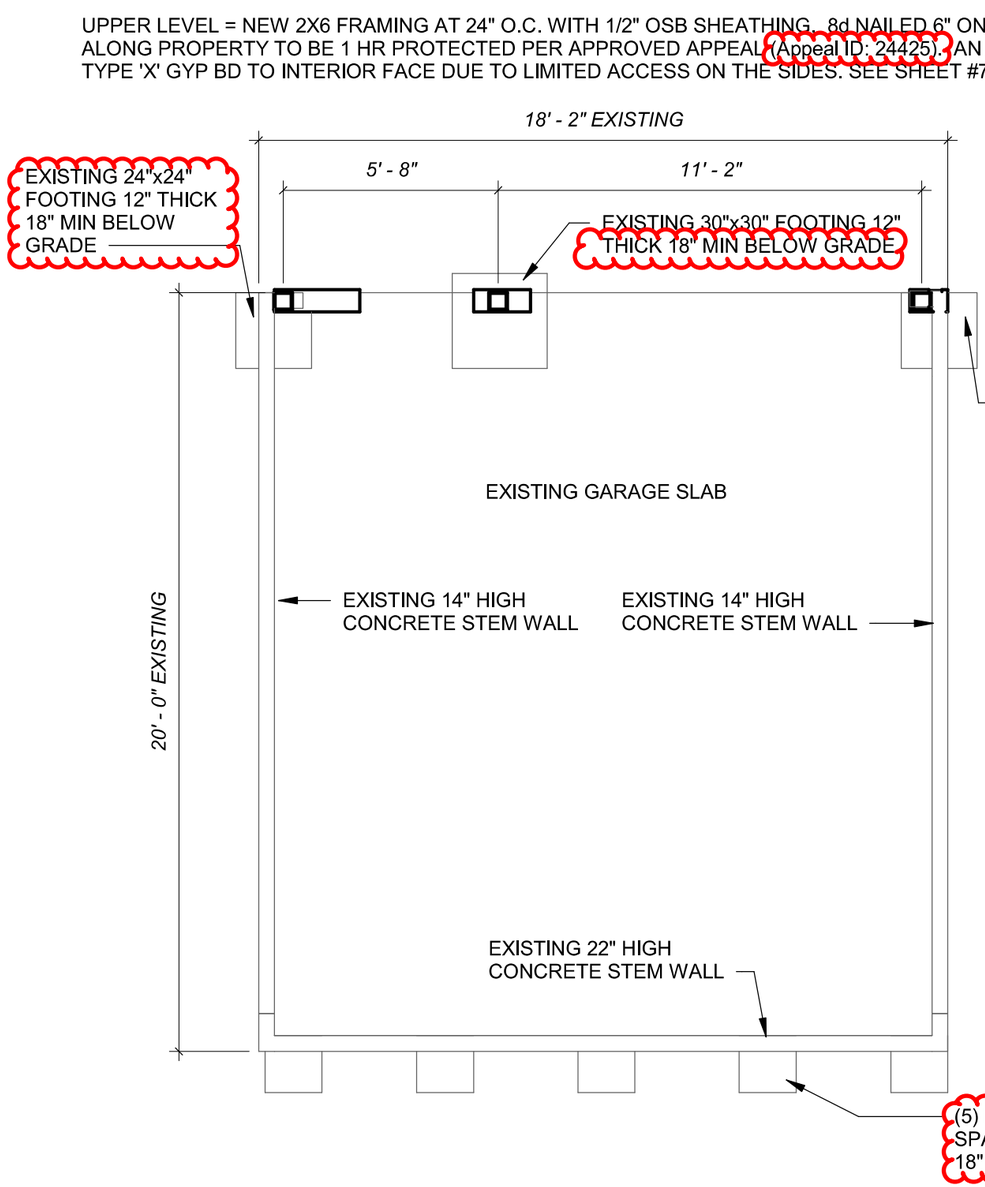
SHEET #1

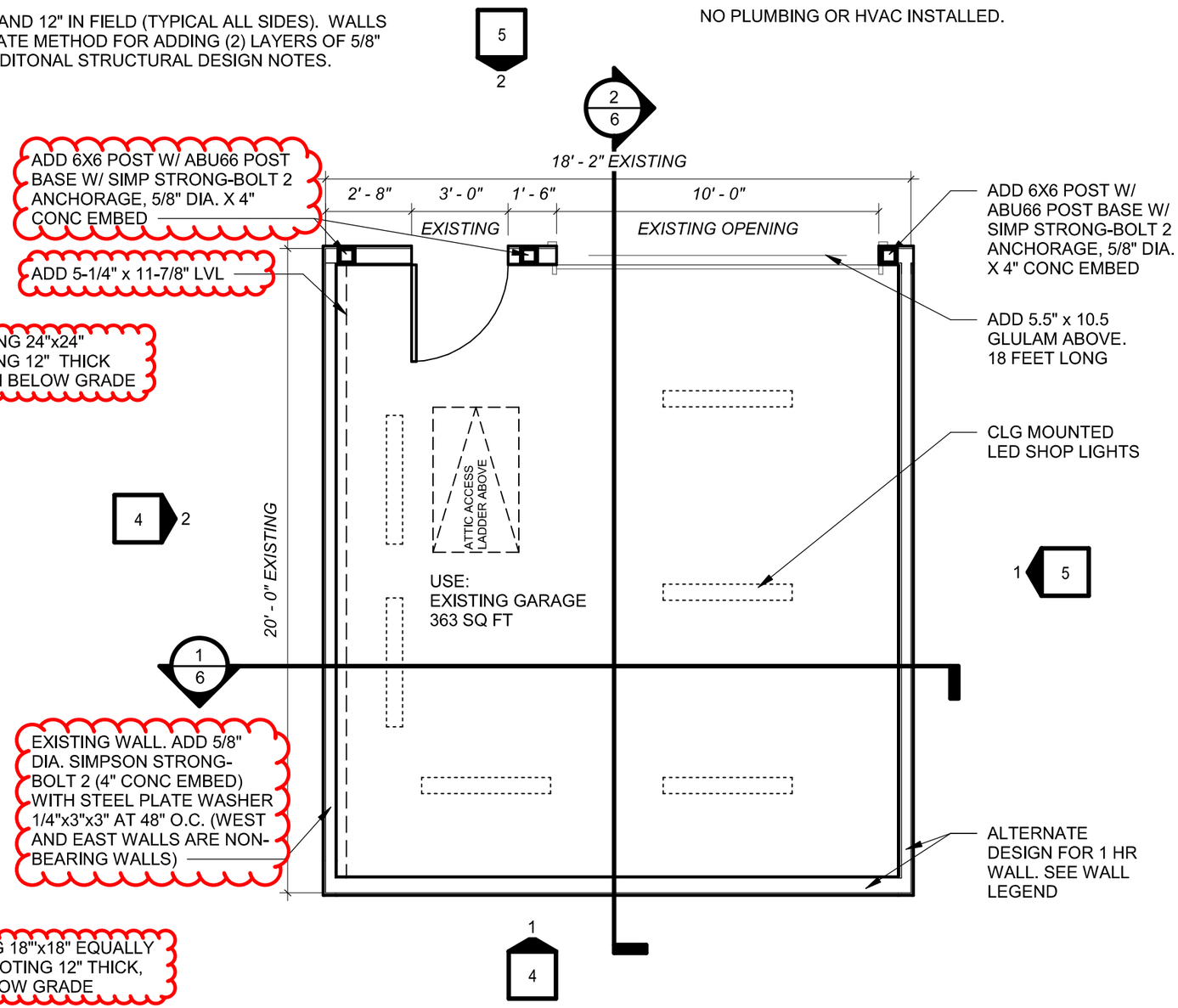
WALL LEGEND:
GARAGE LEVEL = EXISTING 2x4 FRAMING AT 24" O.C. WALLS ALONG PROPERTY TO BE 1 HR PROTECTED. AN ALTERNATE METHOD REQUEST WILL BE SUBMITTED FOR ADDING (2) LAYERS OF 5/8" TYPE 'X' GYP BD TO INTERIOR FACE DUE TO LIMITED ACCESS ON THE SIDES. SEE SHEET #7 FOR ADDITONAL STRUCTURAL DESIGN NOTES.

UPPER LEVEL = NEW 2X6 FRAMING AT 24" O.C. WITH 1/2" OSB SHEATHING, 8d NAILED 6" ON EDGES AND 12" IN FIELD (TYPICAL ALL SIDES). WALLS ALONG PROPERTY TO BE 1 HR PROTECTED PER APPROVED APPEAL (Appeal ID: 24425). AN ALTERNATE METHOD FOR ADDING (2) LAYERS OF 5/8" TYPE 'X' GYP BD TO INTERIOR FACE DUE TO LIMITED ACCESS ON THE SIDES. SEE SHEET #7 FOR ADDITONAL STRUCTURAL DESIGN NOTES.

ELECTRICAL SERVICE IS FROM THE EXISTING PANEL AT THE HOUSE. NEW GFI OUTLETS AND LIGHTING TO BE ADDED.

NO PLUMBING OR HVAC INSTALLED.





FOUNDATION
1/4" = 1'-0"

0 2' 4' 8'

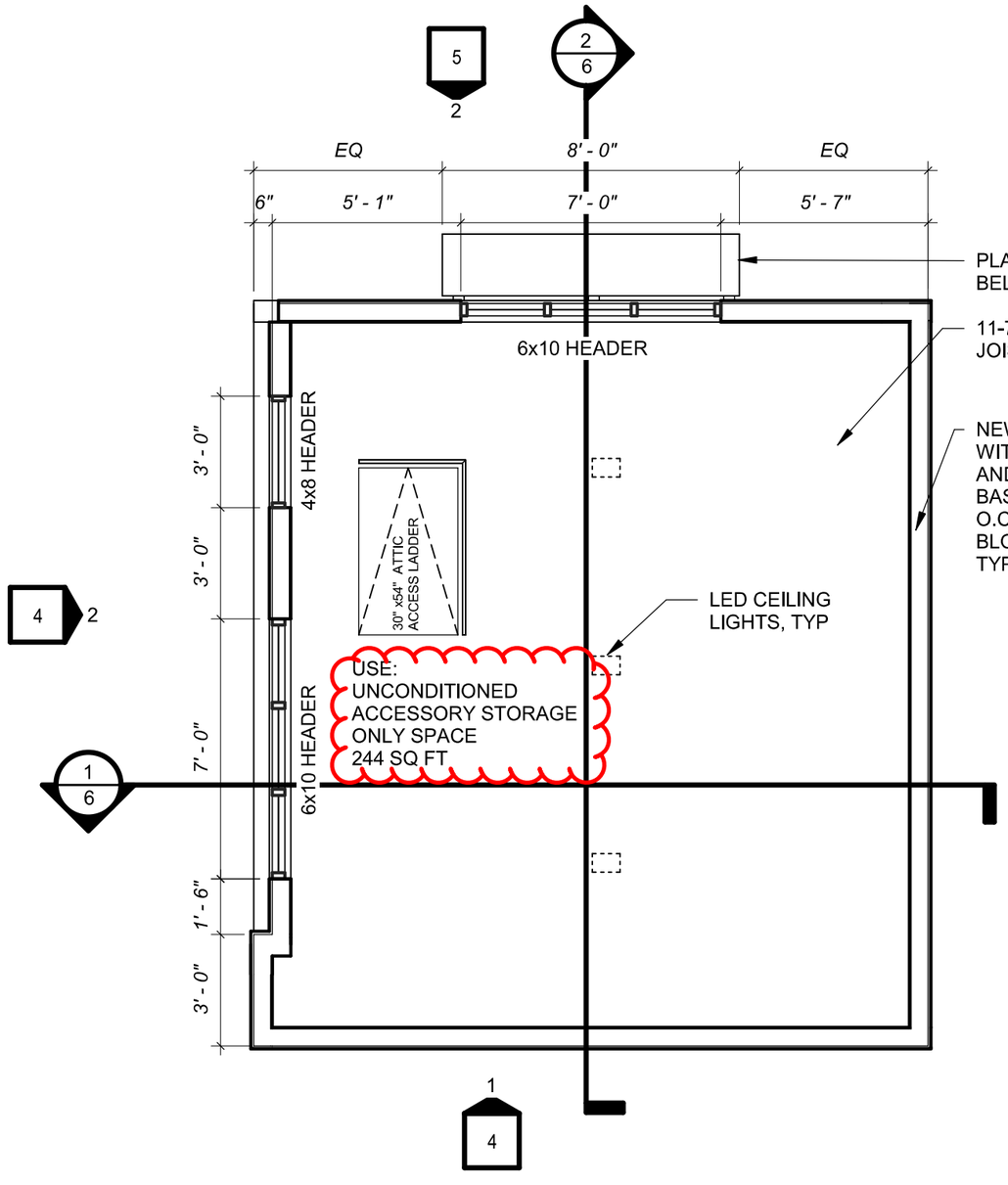
NORTH

GARAGE LEVEL
1/4" = 1'-0"

0 2' 4' 8'

RESUBMITTED
DATE: 4/02/2021

SHEET #2

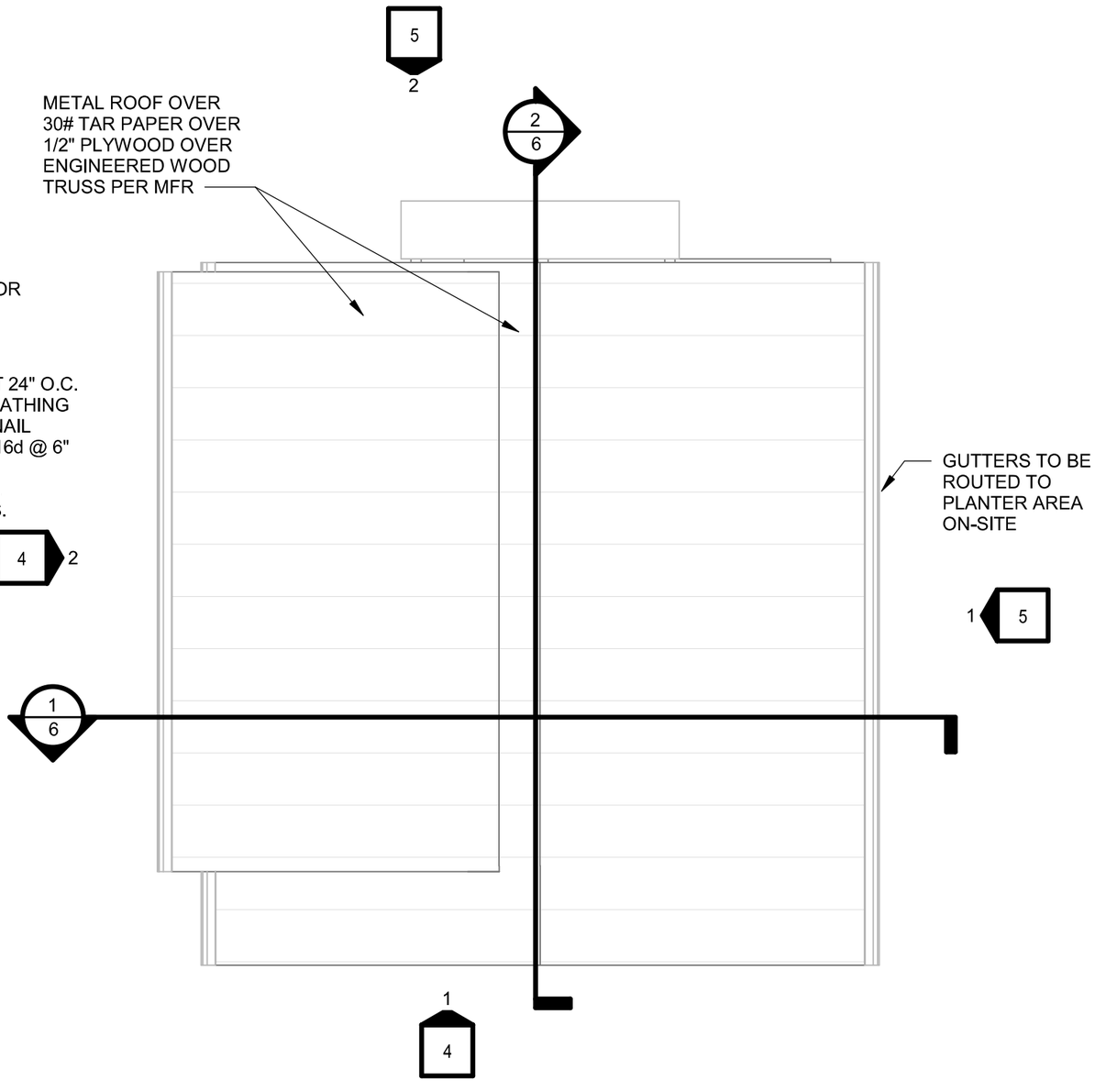


UPPER FLOOR

1/4" = 1'-0"

0 2' 4' 8'

NORTH



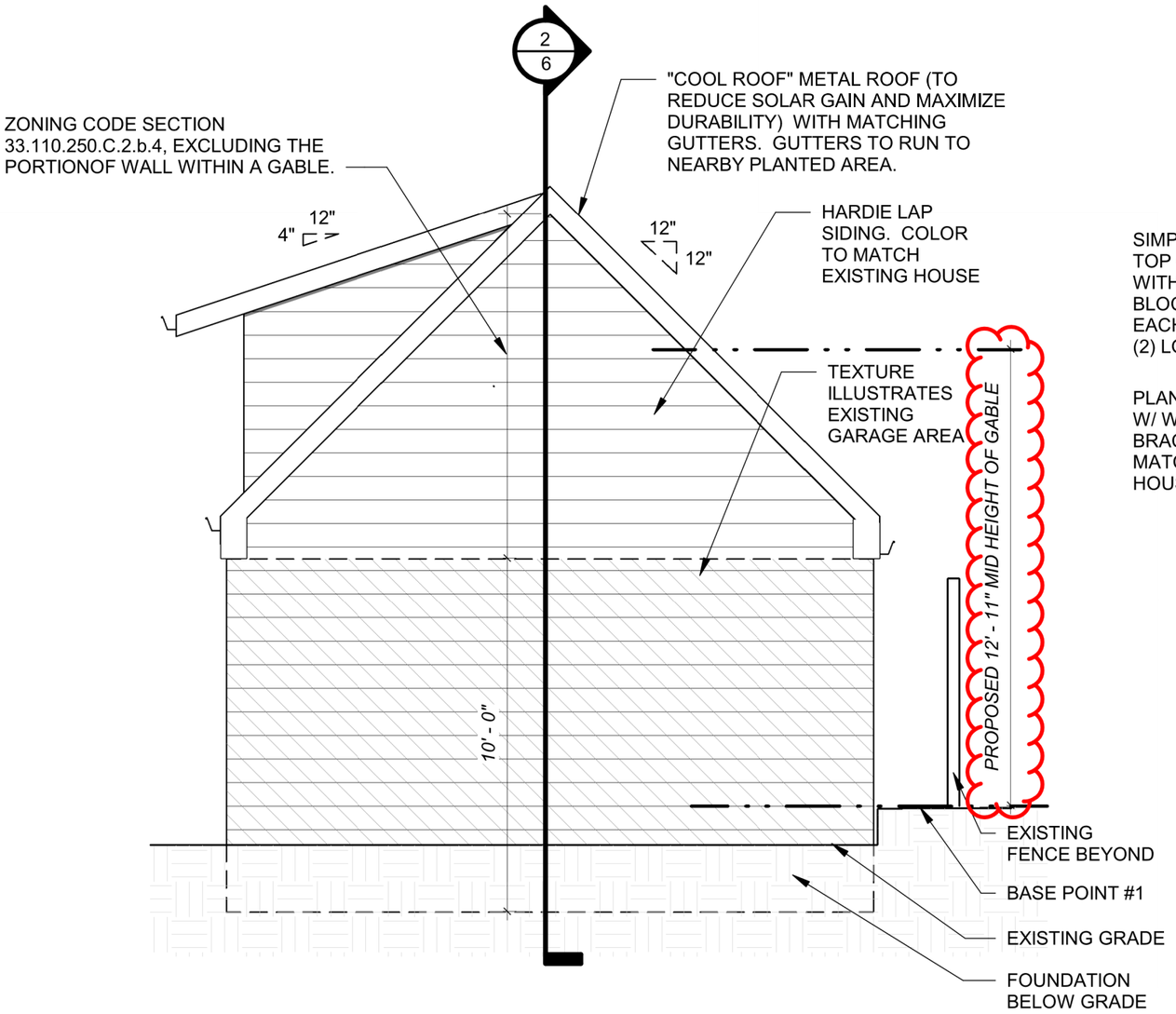
ROOF PLAN

1/4" = 1'-0"

0 2' 4' 8'

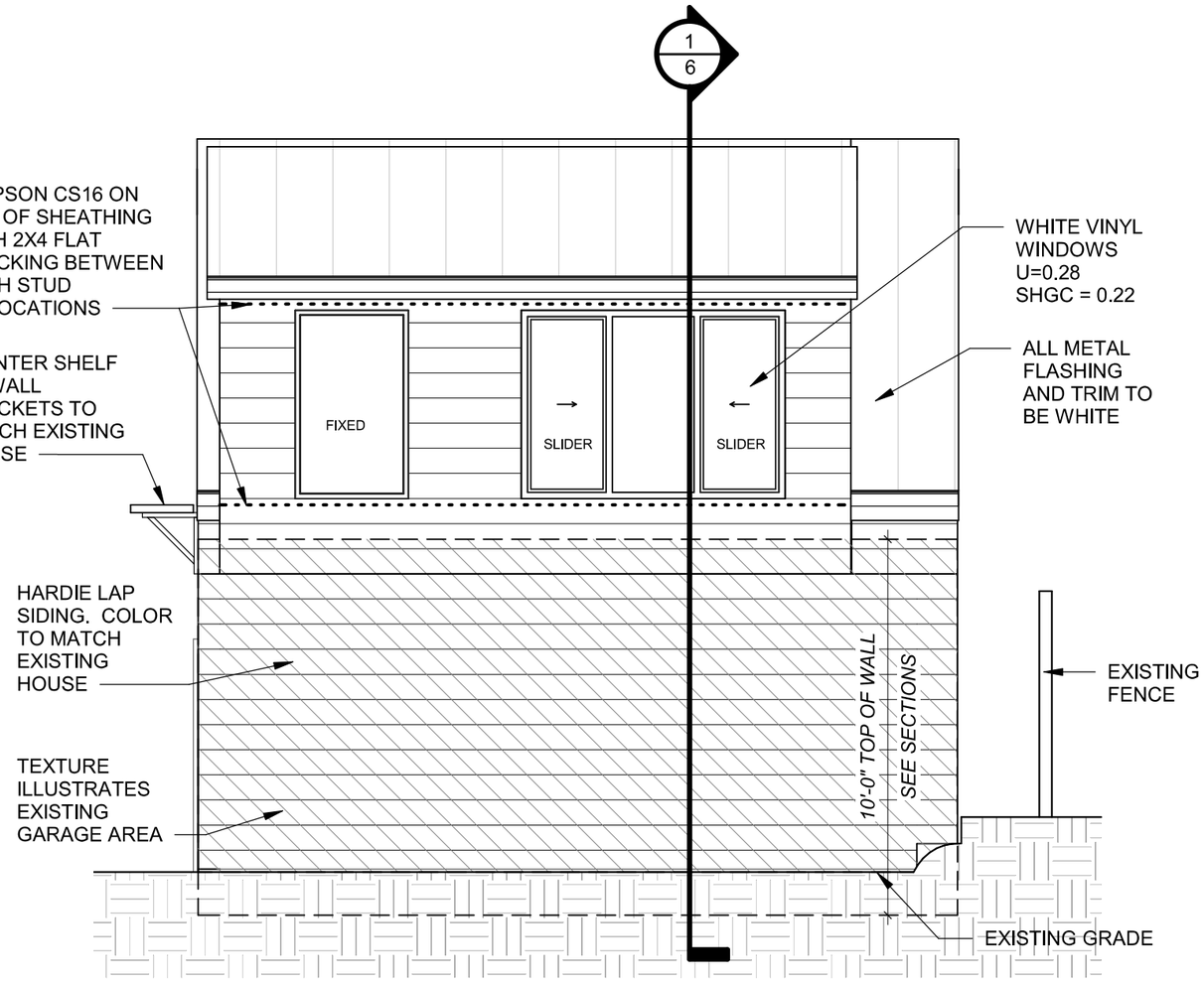
RESUBMITTED
DATE: 4/02/2021

SHEET #3



SOUTH
1/4" = 1'-0"

0 2' 4' 8'



WEST
1/4" = 1'-0"

0 2' 4' 8'

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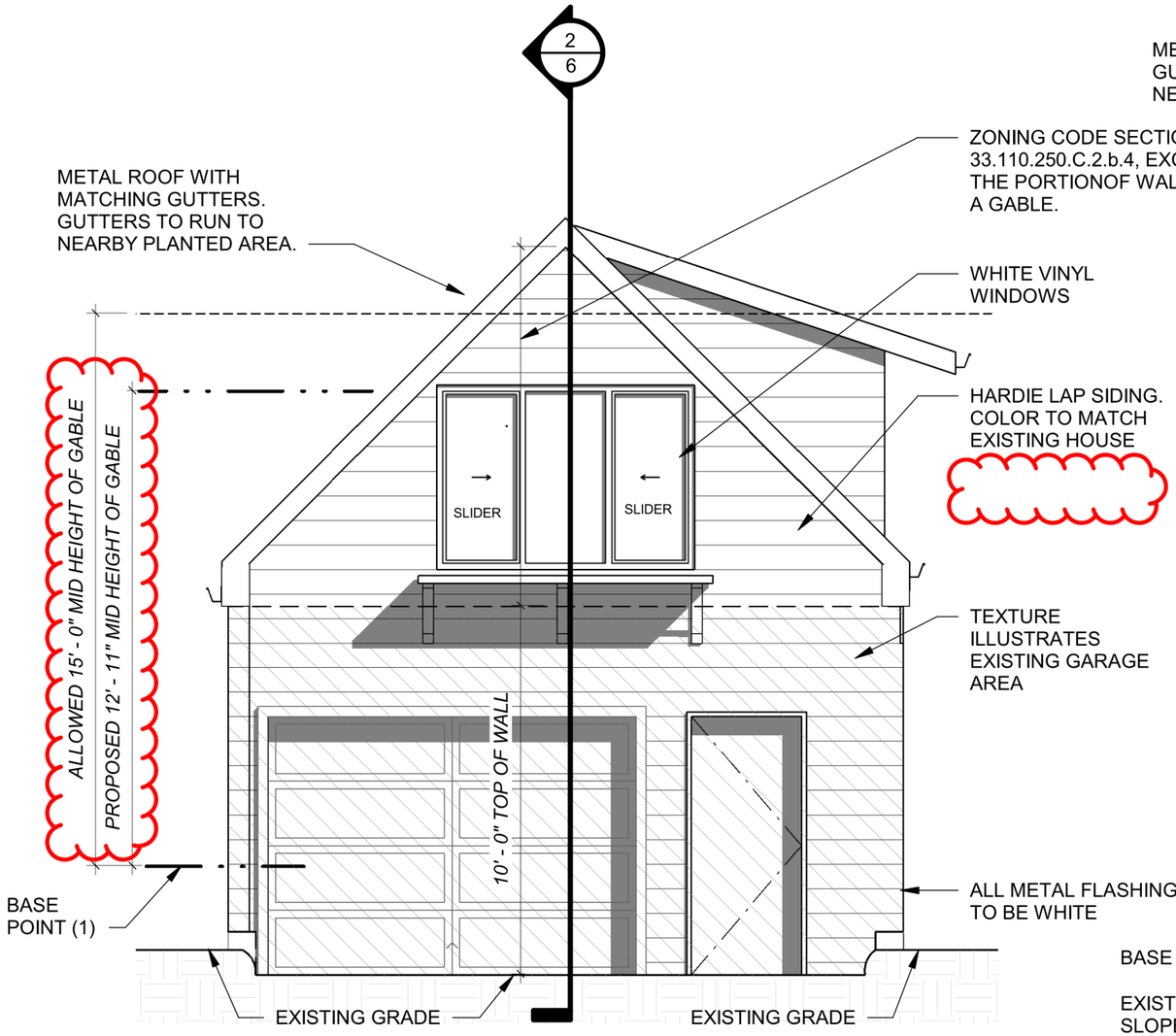
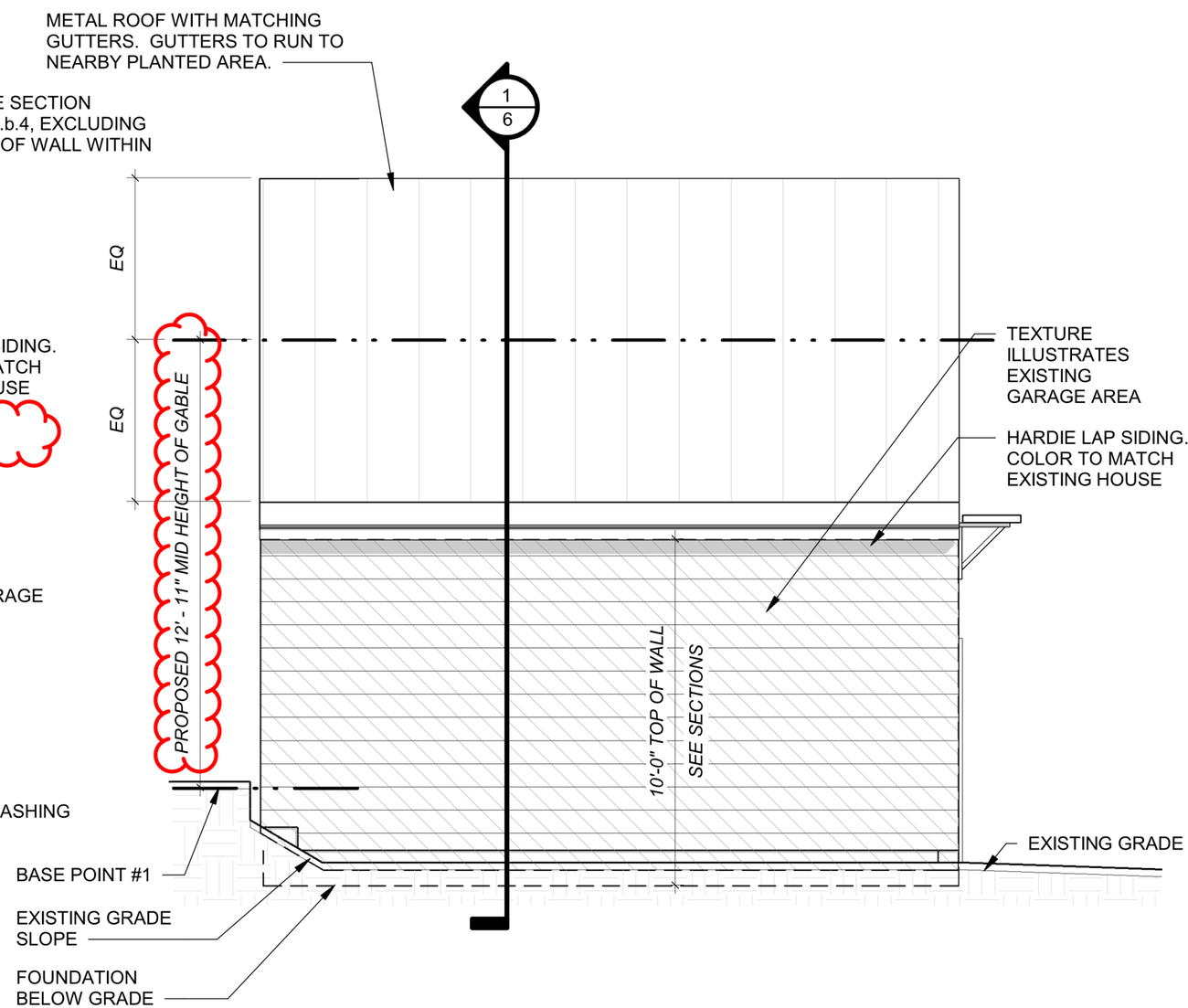
DATE: 4/30/2021

SHEET #4



NORTH
1/4" = 1'-0"

0 2' 4' 8'

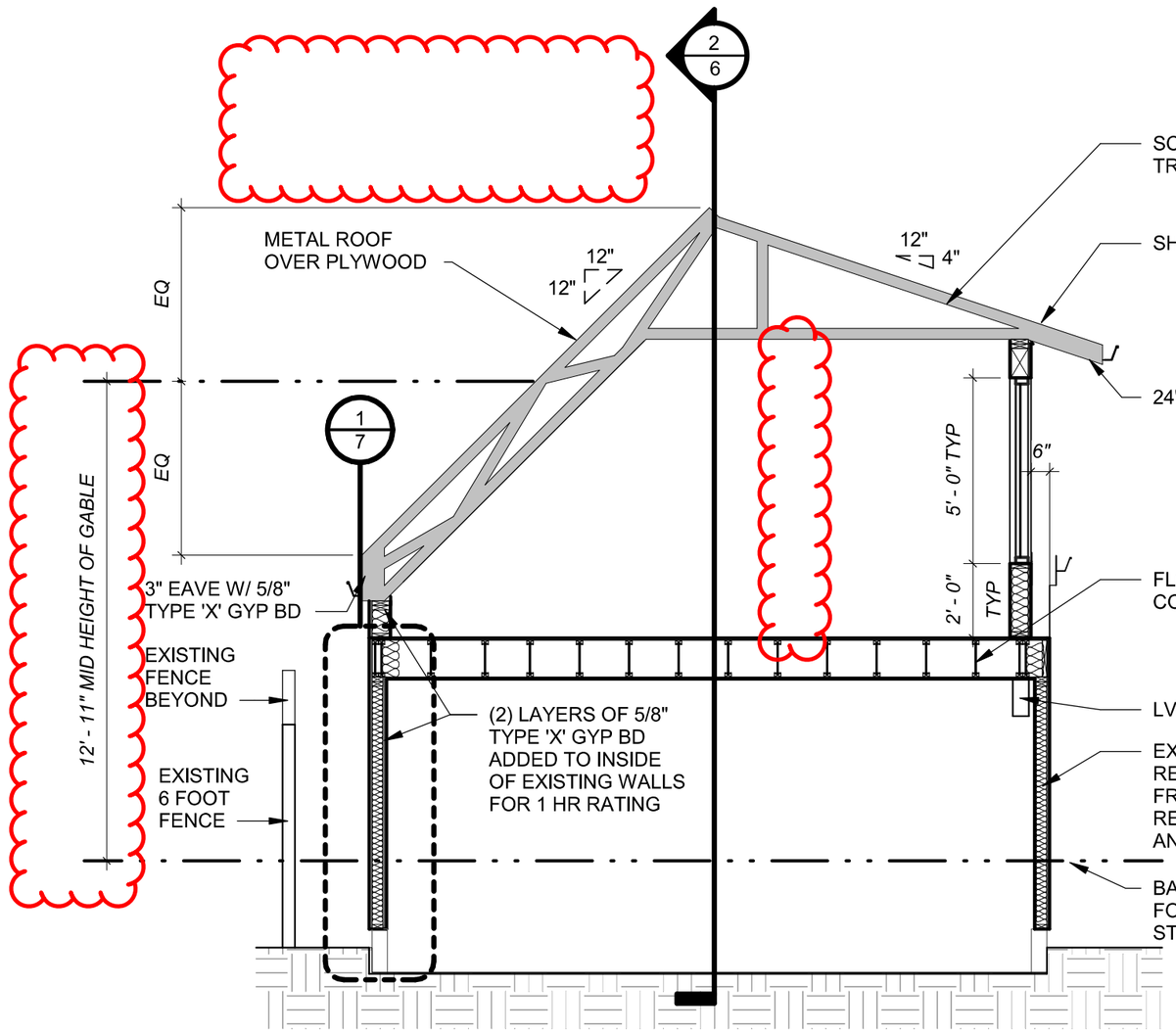


EAST
1/4" = 1'-0"

0 2' 4' 8'

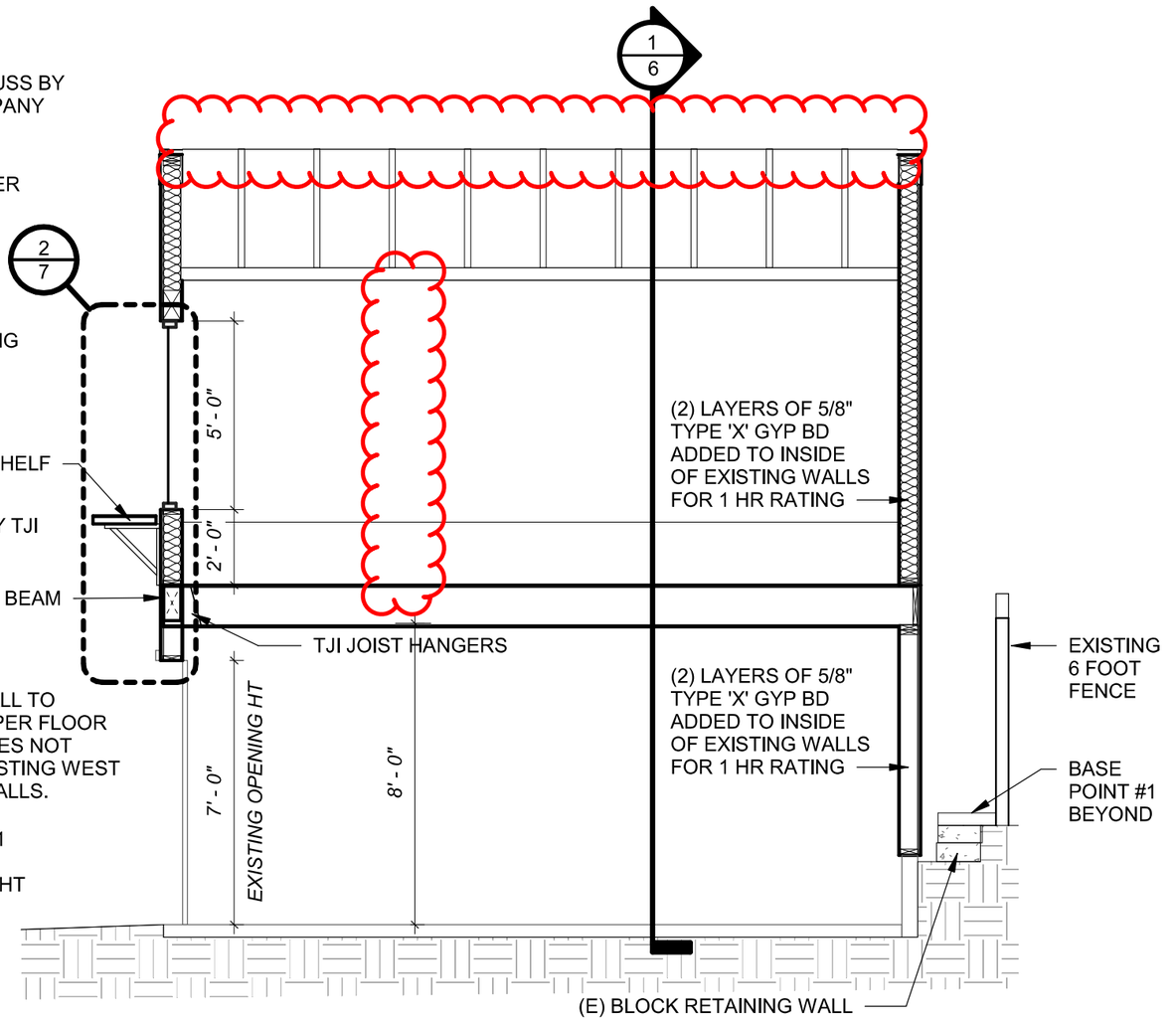
RESUBMITTED
DATE: 4/30/2021

SHEET #5



EAST/WEST SECTION
1/4" = 1'-0"

0 2' 4' 8'

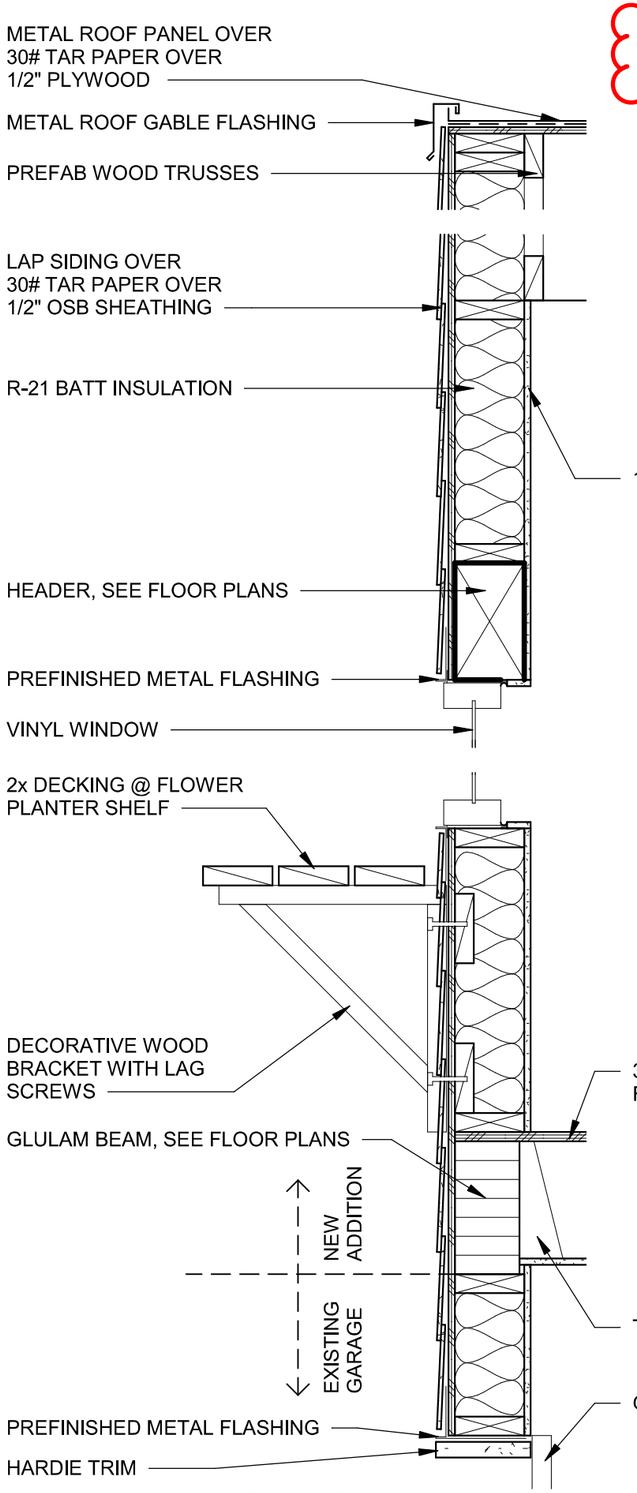


NORTH/SOUTH SECTION
1/4" = 1'-0"

0 2' 4' 8'

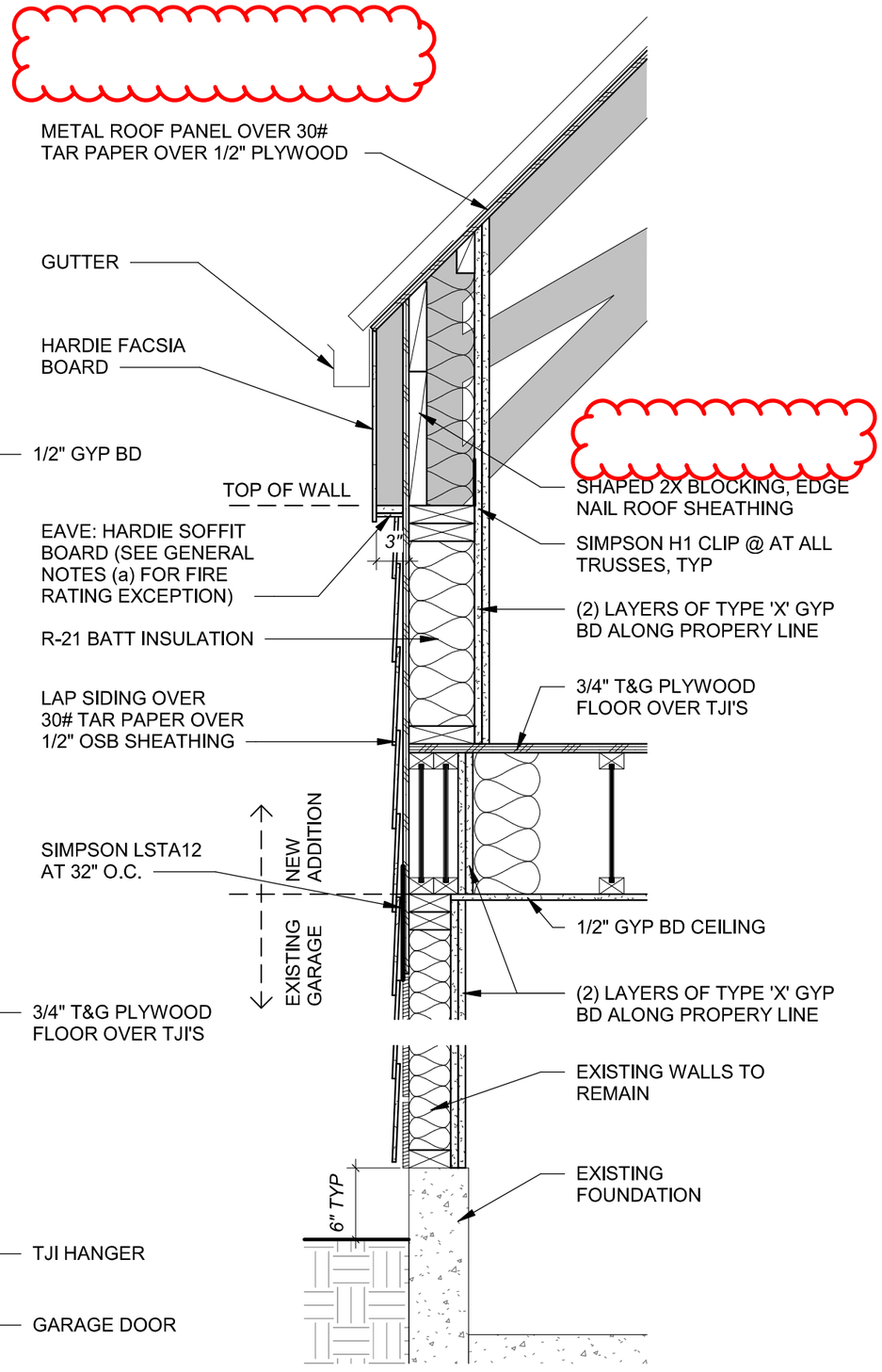
RESUBMITTED
DATE: 4/30/2021

SHEET #6



WALL SECTION AT GABLE

NTS



WALL SECTION AT GABLE

NTS

CODE NOTES:

R302.1 EXCEPTION 4 ALLOWS DETACHED GARAGES ROOF EAVE PROJECTS NOT EXCEEDING 4”

TABLE R302.1 NOTES a & b.

(a) ROOF EAVE FIRE-RESISTANCE RATING SHALL BE PERMITED TO BE REDUCED TO 0 HOURS ON UNDERSIDE OF THE EAVE IF FIRE BLOCKING IS PROVIDED FROM THE WALL TOP PLATE TO THE UNDERSIDE OF THE ROOF SHEATHING

(b) ROOF EAVE FIRE-RESISTANCE RATING SHALL BE PERMITTED TO BE REDUCED TO 0 HOURS ON THE UNDERSIDE OF THE EAVE PROVIDED THAT GABLE VENT OPENINGS ARE NOT INSTALLED.

STRUCTURAL DESIGN CODE:

1. DESIGN LOADS:
   - ALL FLOOR LOADS (LIVE LOAD). . . . 40 PSF
   - ROOF (SNOW LOAD) . . . . . .25 PSF + DRIFT
   - WIND . . . . . 98 MPH, EXPOSURE B, RISK CATEGORY II
   - SEISMIC. . . . . DESIGN CATEGORY D, SITE CLASS D
     R=6.5, S1=0.39, Sds=0.66, Sd1=0.49

NAILS & FASTENERS:

1. NAILING INDICATED ON PLANS AND DETAILS ARE "COMMON" NAILS. SEE DETAILS FOR ADDITIONAL TYPICAL NAILING REQUIREMENTS. SUBSTITUTION OF NAILS OTHER THAN "COMMON" IS NOT PERMITTED WITHOUT PRIOR APPROVAL.
2. POWER DRIVEN NAILS OTHER THAN "COMMON" IS NOT PERMITTED WITHOUT PRIOR APPROVAL.
3. PLYWOOD NAILING SHALL BE AS FOLLOWS, UNLESS INDICATED OTHERWISE IN PLAN OR SHEAR WALL SCHEDULE:
   - A) WALL SHEATHING = 8d AT 6" O.C. AT ALL PANEL EDGES
     8d AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS
   - B) FLOOR SHEATHING = 8d AT 6" O.C. AT ALL PANEL EDGES
     8d AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS
   - C) ROOF SHEATHING = 8d AT 6" O.C. AT ALL PANEL EDGES
     8d AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS
4. JOIST HANGERS, HOLDOWNS, AND OTHER FRAMING ACCESSORIES ARE REFERRED TO ON PLANS BY PARTICULAR TYPE AS MANUFACTURED BY SIMPSON COMPANY. ALL HARDWARE IS TO BE FASTENED PER MANUFACTURER'S SPECIFICATIONS, U.N.O.
5. SILLS AT WALLS SHALL BE BOLTED TO CONCRETE WITH SIMPSON STRONG-BOLT 2, 5/8" DIA. (4" CONC. EMBED) WITH 1/4" x 3" x 3" GALVANIZED PLATE WASHER BETWEEN SILL PLATE AND NUT AT 4'-0" O.C. MAXIMUM WITHIN 1'-0" OF SILL PLATE ENDS, CORNERS OR SPLICES, UNLESS DETAILED OTHERWISE.

PRESSURE TREATED (P.T.) LUMBER:

1. PROVIDE PRESSURE TREATED (P.T.) LUMBER AT ALL MEMBERS IN CONTACT WITH CONCRETE OR MASONRY.
2. ALL CONNECTORS AND FASTENERS SECURED TO PRESSURE TREATED LUMBER SHALL BE HOT-DIP GALVANIZED.

RESUBMITTED
DATE: 4/30/2021

SHEET #7