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Appeal 34826

Appeal Summary

Status: Decision Rendered - Reconsideration of 34757

Appeal ID: 34826	Project Address: 5500 SE Belmont Street
Submission Date: 5/28/25 5:23 PM	Appellant Name: Jamey Reeder
Hearing Date: 6/4/25	Appellant Phone: 5037304895
Case #: B-4	LUR or Permit Application #: Preliminary
Appeal Type: Building	Stories: 2 Occupancy: R-3 Construction Type: III-B
Project Type: commercial	Fire Sprinklers: No
Building/Business Name:	Plans Examiner/Inspector: Steven Freeh
Appeal Involves: Alteration of an existing structure, Reconsideration of appeal, other: Occupancy change from R-3 to R-2	Plan Submitted Option: pdf [File 1] [File 2] [File 3]
Proposed use: 5 Residential Units	Payment Option: electronic

Appeal Information Sheet

Appeal item 1

Code Section	Portland Title 24 section 24.85 Seismic Design Requirements for Existing Buildings
Requires	<p>Portland City Code 24.85.040 Change of Occupancy or Use</p> <p>Occupancy change to a higher relative hazard classification. An occupancy change to a higher relative hazard classification will require seismic improvements. All improvements to either the OSSC or ASCE 41 improvement standard shall be made such that the entire building conforms to the appropriate standard indicated in</p> <p>Table 24.85-B. Where more than 1/3rd of the building area has a change of occupancy from R-3 (hazard 1) to R-2 (hazard 4), ASCE 41 BPOE or equivalent seismic improvement standard shall be followed.</p> <p>Portland City Code 24.85.065 Seismic Strengthening of unreinforced masonry bearing wall buildings when any building alterations or repairs occur at an unreinforced masonry bearing wall building, all seismic hazards shall be mitigated as set forth in Subsections 24.85.065 A. and B.</p>
Code Modification or Alternate Requested	The intent of this appeal is to allow change of occupancy without triggering a full seismic upgrade to the entire building. This appeal requests that this

building be approved for a change of occupancy of the entire 1st and 2nd floor from a R-3 baseline occupancy (hazard 1) (#01-140127-CO) to a R-2 occupancy (hazard 4). There are no changes to the basement occupancies.

Proposed Design

The 5500 SE Belmont building is a 2-story commercial building (w/additional basement), III-B (unreinforced masonry and heavy timber construction), non-sprinklered, RM-1 zoning (w/historical overlay), with a baseline occupancy of R-3 (live/work unit), B and S-1 occupancy (#01-140127-CO), and a total building area of roughly 9,882 s.f.. The building was constructed in 1914 for the Pacific Telephone & Telegraph Company. In 1953 they sold the building, and it was converted to the Mt. Tabor Mason's Lodge. In 1973 the basement was rented to the Mount Hood Model Engineers (club w/viewing days to the public). Tim and Patty Merrill bought the building in 1996 for use as their personal residence and for occupancy of the Merrill architectural firm - Live/work unit. (#01-140127-CO) R-3 occupancy (Based on 2022 Oregon Structural Specialty Code a live/work unit would be considered a R-2 occupancy per this latest code), B - through an appeal (Model Engineers Club – basement = 1,590 s.f.) and S-1 (remaining basement area). The building owner, Todd Moore purchased the building with the listing stating - one main living unit on the entire top floor, two residential units and one small office on the main floor (1st) which assumed a R-2 occupancy with being over 2-units. The discovery through looking at public records have found that it was never permitted for a R-2 occupancy. We are hopeful that the board will understand and appreciate the dilemma that the owner is in. The building owner is proposing these future modifications to accommodate the safety concerns and chart a path that meets the community safety objectives while making it feasible to make improvements happen to the building. It would not be economically feasible to upgrade the entire building seismically. (see attached supplemental Crux architectural drawings)

1. Fire sprinkler system: Any new units would be required to install a new sprinkler system (NFP 13R – R-2 classification). The owner proposes an upgrade to the required fire sprinkler system to a full NFPA 13 sprinkler system throughout the entire building.
2. Fire Alarm System: Propose a fire alarm system throughout the entire building per NFPA 72 – 2025 National Fire Alarm and Signaling Code.
1. Seismic upgrades: Provide out-of-plane ties at the floor levels. Remove a portion of the existing unreinforced masonry parapet and chimney to reduce the height to approximately 3'-6" above the roof deck. Reframe the roof with new structural plywood sheathing with out-of-plane ties and parapet bracing. New roof framing to be designed for code-required snow loads. (See attached Hayden Engineers - ASCE41 Tier 1 letter and check sheet and preliminary drawings) Note: Understanding that any mandated or voluntary seismic improvements will be excluded from cost of alteration trigger for a full seismic upgrade.

2. Means of egress: a. Provide a secondary direct means of egress out of the basement b. Provide (2) additional egress doors from the 1st floor directly out of units. C. The 2nd floor would have an exterior stairs added to replace the removal of existing stairs exiting out of the 1st floor.
3. A Fire & Life Safety Binder will be submitted as part of any future permits.

Reason for alternative

Our understanding of the Portland seismic code requirements and its application is that the code language was initiated to encourage seismic upgrade of buildings when the owner is looking to make improvements. This approach marries the economic concerns with the safety concerns and charts a path that meets the community safety objectives and owners economic viability

A. Improved safety of building, based on life and risk. For a building of this size with 2 stories, the proposed full NFPA 13 sprinkler system, proposed fire alarm system , and the proposed seismic upgrades (out-of-plane ties, reduction of parapet, removal of the chimney, new structural plywood sheathing and roof framing) we believe will drastically improve the safety, based on life and risk of the building and its occupants.

B. Decrease in total occupants based on the history of the building and baseline (#01-140127-CO): (1914) The Pacific Telephone & Telegraph Company (44 total occupants), (1953) Masonic Lodge (246 total occupants), (2001 Baseline) Merrill Residence and Merrill Architecture office (111 total occupants). The proposed 5-units for the Moore Residence (49 total occupants) is a 44% decrease of total occupants from the baseline (111 total occupants).

C. 2022 Oregon Structural Specialty Code Chapter 34 – Existing Buildings 3405.6 change of occupancy – 3405.6.1 Subject to the approval of the building official, changes of occupancy shall be permitted without complying with all of the requirements of this code for the new occupancy, provided that the new occupancy is not more hazardous, based on life and risk, than the existing occupancy. We believe that the new is not more hazardous, based on life and risk based on reduction of total occupants and reduction of means of egress travel distance out of the building.

D. Means of Egress (travel distance from each floor of the building) Basement: Per baseline (9-18-02 #02-140127-CO) greatest travel distance for egress – 78'-3", proposed greatest travel distance for egress – 68'-9' (reduction of 9%)
1st floor: Per baseline (9-18-02 #02-140127-CO) greatest travel distance for egress – 46'-6", proposed greatest travel distance for egress – 39'-9' (reduction of 8%)
2nd floor: Per baseline (9-18-02 #02-140127-CO) greatest travel distance for egress – 67'-9", proposed greatest travel distance for egress – 71'-6' (increase of 5%)

E. Additional housing units

The site is roughly 10,814 s.f. within a Residential Multi-Dwelling (w/historical overlay) zoning. Per zoning code a minimum density of 1 unit per 2,500 s.f. of site area = 5 units required. A provision allows a reduction of 2 units with an

existing building. This gives a total of 3 units required. Adding more units will help Portland's overall goal of providing more housing units within RM-1 zoning.

We are hopeful that the board will understand and appreciate the dilemma that the owner is in and grant this appeal based on proposed improvements to the building.

Appeal item 2

Code Section

2022 Oregon Structural Specialty Code - Allowable area of openings per story (705.8)

Requires

Per Table 705.8 Maximum area of exterior wall openings based on fire separation distance and degree of opening protection. 0 to less than 3' - allowable area of openings not permitted.

Code Modification or Alternate Requested

We are requesting allowance of existing openings to be maintained without requiring any modification or rating to a proposed replacement window system.

"Granted provided windows are replaced with fixed windows. Appellant may contact Steve Freeh (503-865-6535) with questions." 3/5/25 hearing date
Appeal ID: 33707

Proposed Design

The East façade has original windows from 1914 for the Pacific Telephone & Telegraph Company (#45475). The building owner is proposing replacing the deteriorated existing windows on the 1st and 2nd floor with new windows within the existing openings (non-rated)

1. Fire sprinkler system: The owner would upgrade to a full NFPA 13 sprinkler system throughout the entire building. In addition would provide a sprinkler head above each opening at interior on the 1st and 2nd floor at all East windows.

1. Reduction of number of openings and area: Remove basement windows on East Side and infill to match exterior wall rating per table 601 (type III-B) of 2 hour rating. This reduces opening area on the East side by a total of 18 s.f. (6 s.f. per (3) windows)
2. Replace exterior windows on 1st and 2nd: Replace existing windows on the 1st and 2nd floor within existing openings and window design to maintain historical architectural aesthetic of the building. Wall area (1,400 s.f.) divided by the area of openings on the 1st and 2nd floor (165 s.f.) = 9% of wall area. No new openings on East side.

Reason for alternative

Historically the East side building setback has been stated as being 4'-1" (#22-126904-000-00-CO). This would allow unprotected openings in a sprinklered building for up to 15% of area. The owner has found through a recent site survey with CH Survey Inc that the East setback is actually 2'-2". The adjacent site to the East has a driveway next to the property line with the house setback.

We feel that in order to maintain the historical architectural significance of the building that the windows need to be maintained on the 1st and 2nd floor of the East façade. Additionally by providing sprinkler heads over the windows and upgrading to a full 13 fire sprinkler system there would be significant improvement to life and safety to the building and its occupants.

Appeal Decision

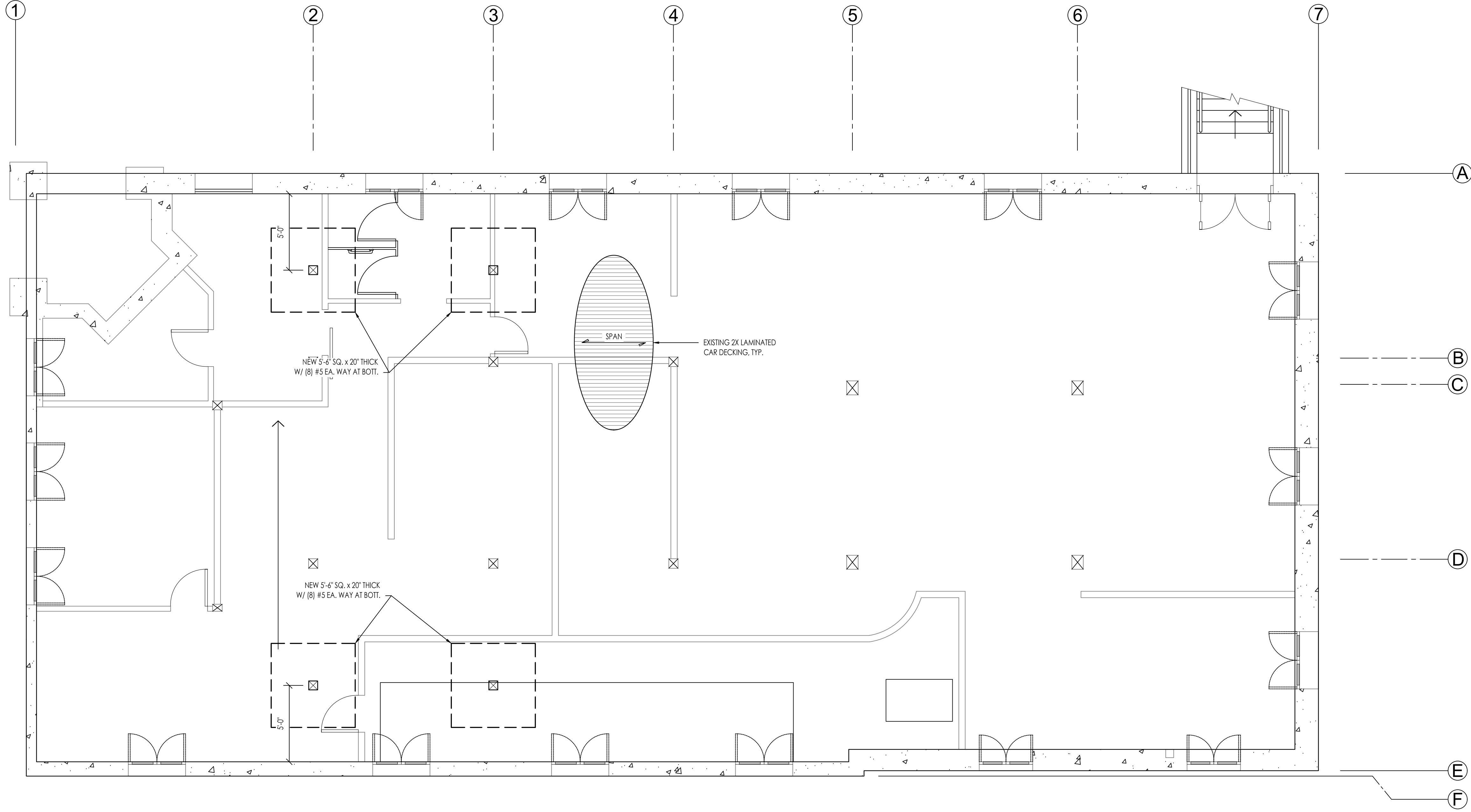
Item 1: Change occupancy from R-3 to R-2 without a full seismic upgrade: Denied. Proposal does not provide equivalent life safety.

The board recommends a phased seismic agreement. Appellant may contact Greg Wilken (503-865-6507) for more information.

Item 2: Allow existing openings to remain: Granted as proposed.

For the item granted, the Administrative Appeal Board finds 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, how to file a reconsideration, and appealing to the Building Code Board of Appeal, go to <https://www.portland.gov/ppd/file-appeal/appeal-process> or email PPDAppeals@portlandoregon.gov.



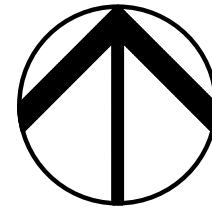
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S2.0

FOUNDATION PLAN

24290 - 5500 SE BELMONT - SHEETS.DWG

(BASEMENT WALLS SHOWN)

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



05.27.2025 - PRELIM. / NOT FOR CONSTRUCTION

SHEET CONTENT
FOUNDATION
PLAN

JOB No.

24290

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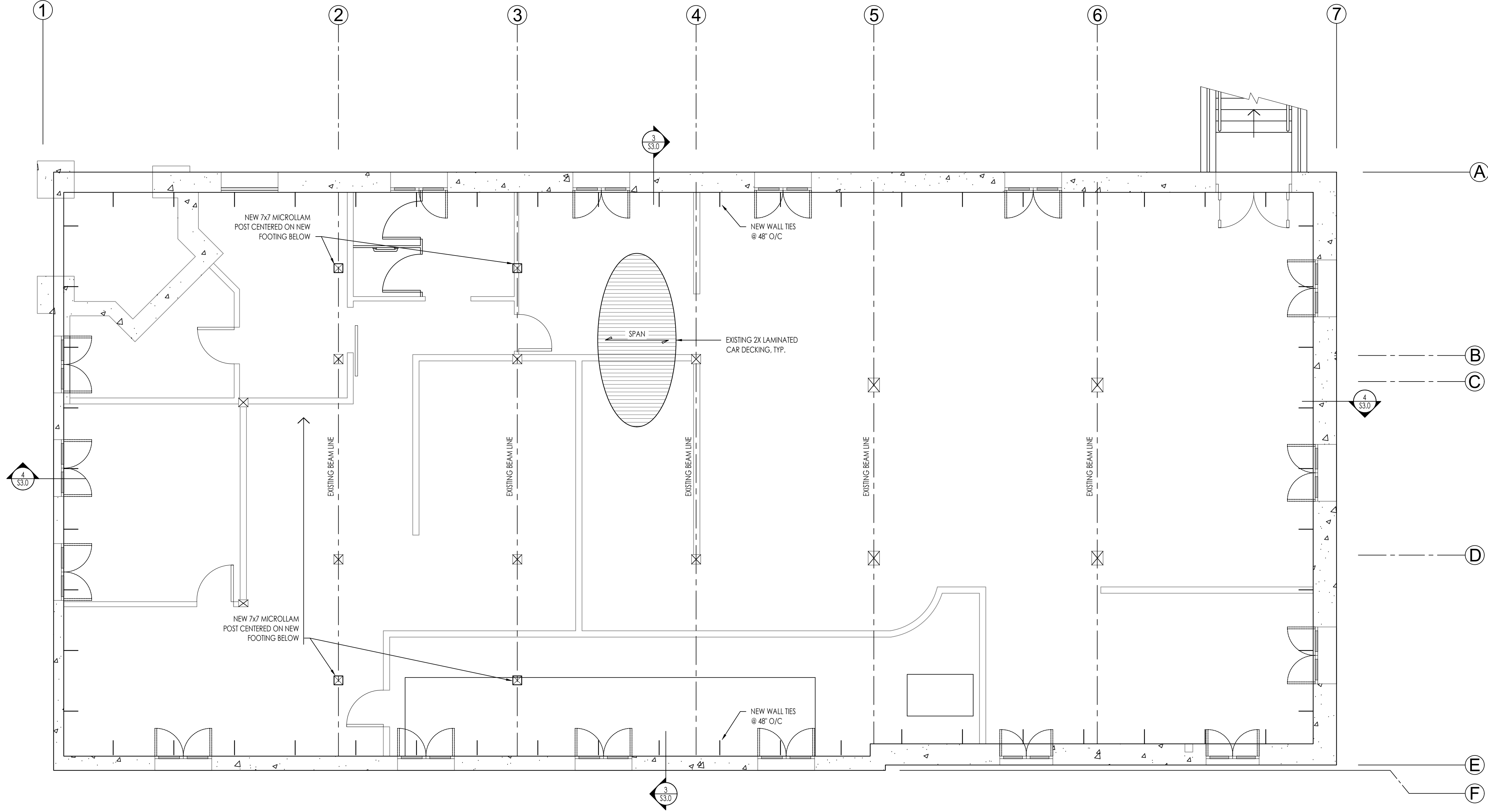
PROJECT:

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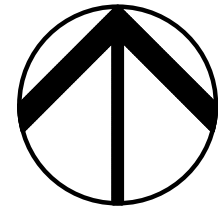
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1ST. FLOOR FRAMING PLAN

24290 - 5500 SE BELMONT - SHEETS.DWG

(BASEMENT WALLS SHOWN)

SCALE: $\frac{3}{4}$ " = 1'-0"



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SHEET CONTENT

1st. FLOOR FRAMING
PLAN

JOB No.

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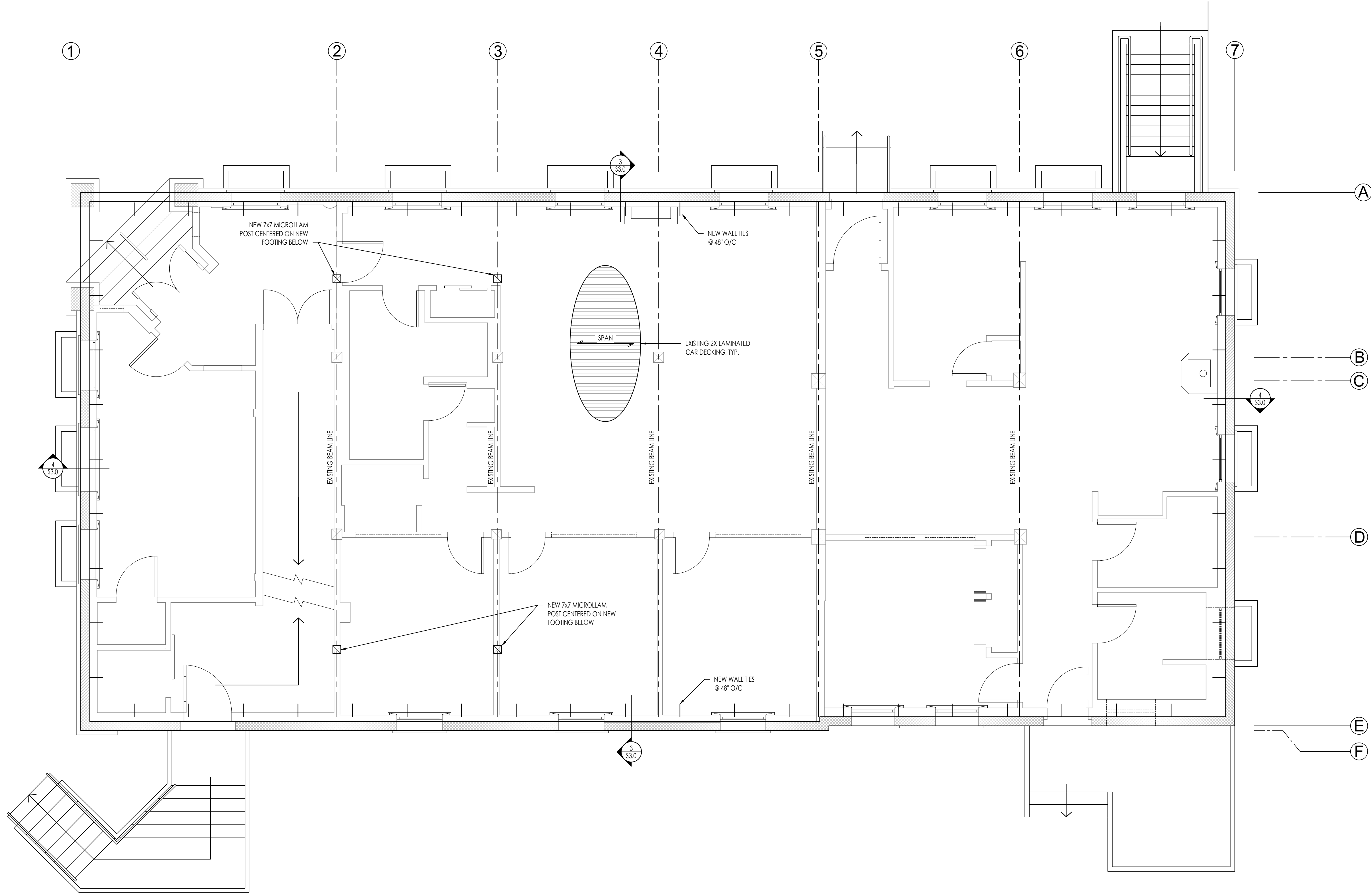
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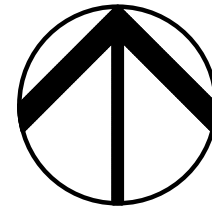
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2ND. FLOOR FRAMING PLAN

24290 - 5500 SE BELMONT - SHEETS.DWG

(1ST. FLOOR WALLS SHOWN)

SCALE: $\frac{3}{4}$ " = 1'-0"



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SHEET CONTENT

2nd FLOOR FRAMING
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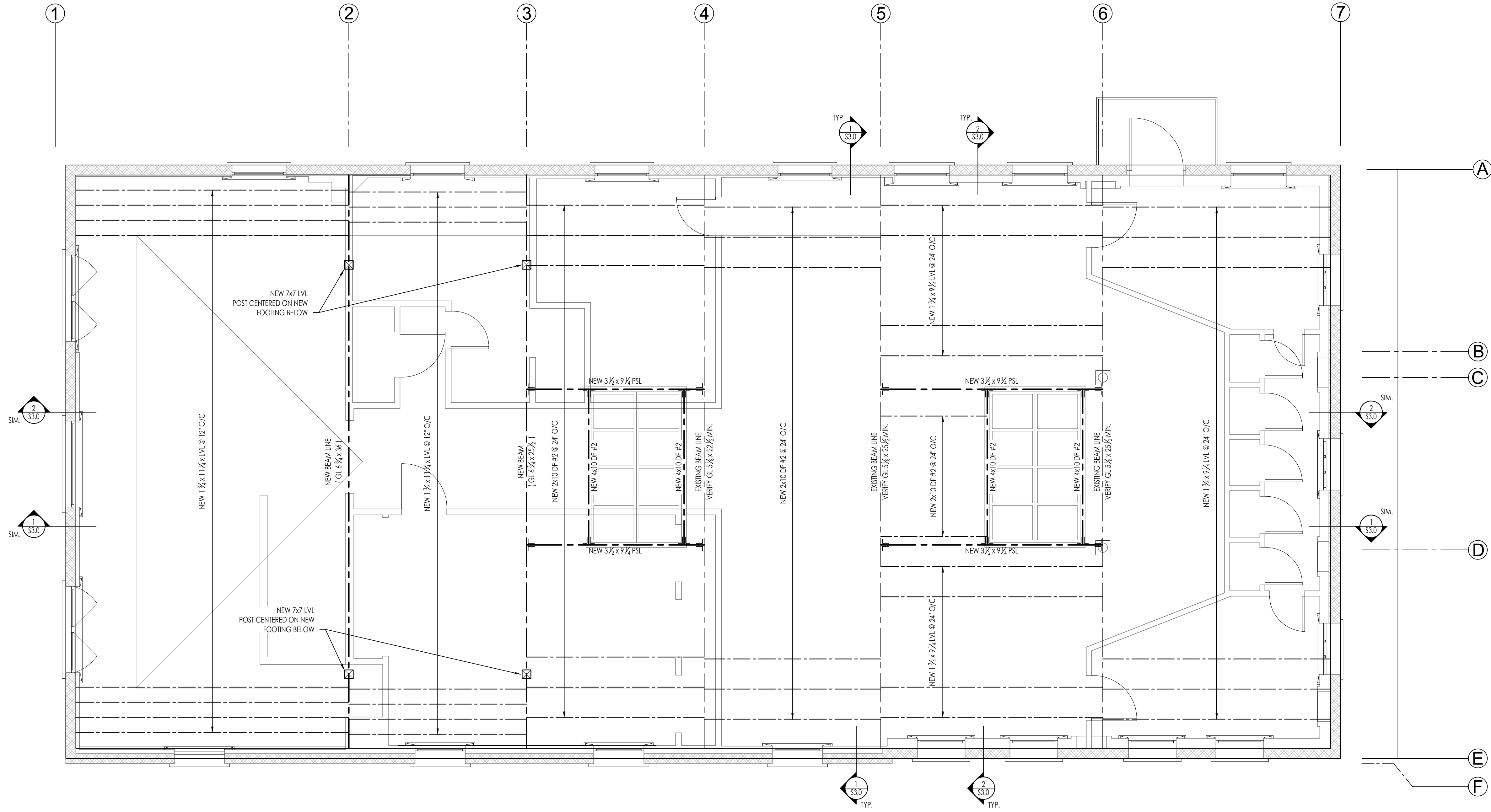
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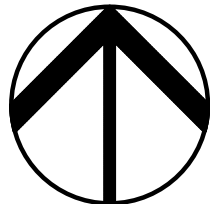
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ROOF FRAMING

24290 - 5500 SE BELMONT - SHEETS.DWG

(2ND FLOOR WALLS SHOWN)

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



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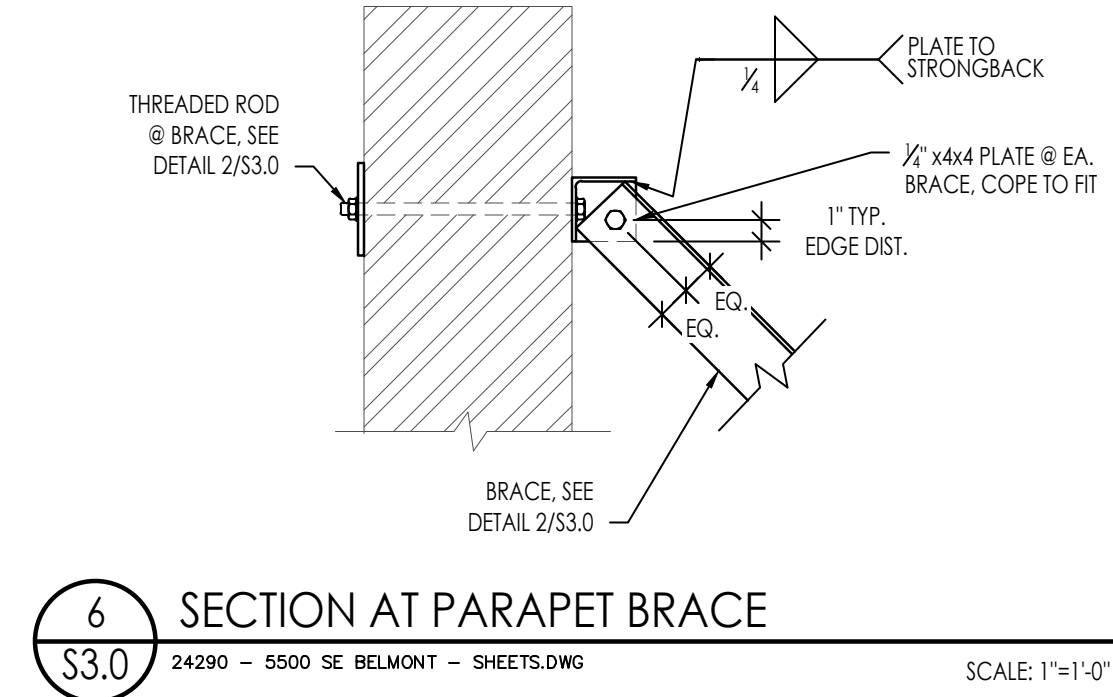
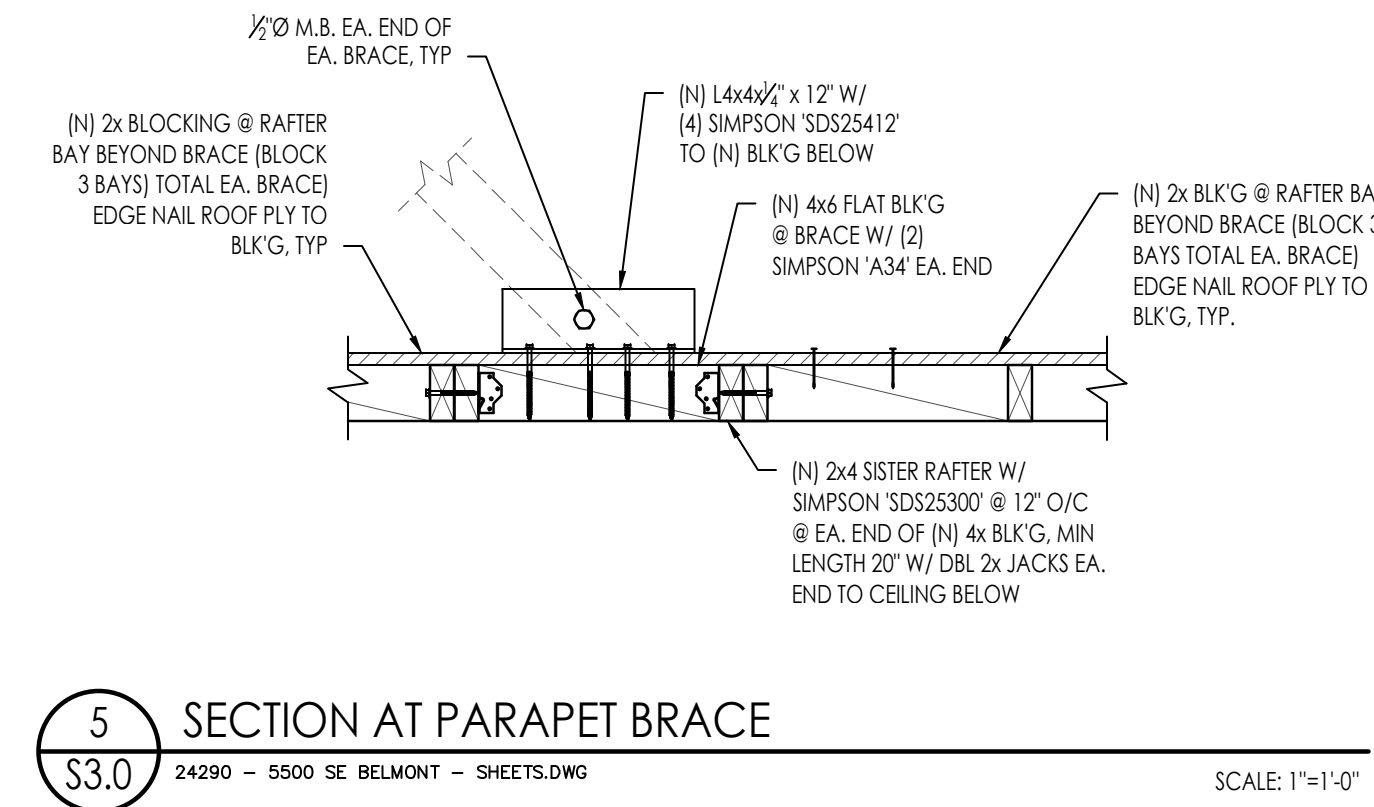
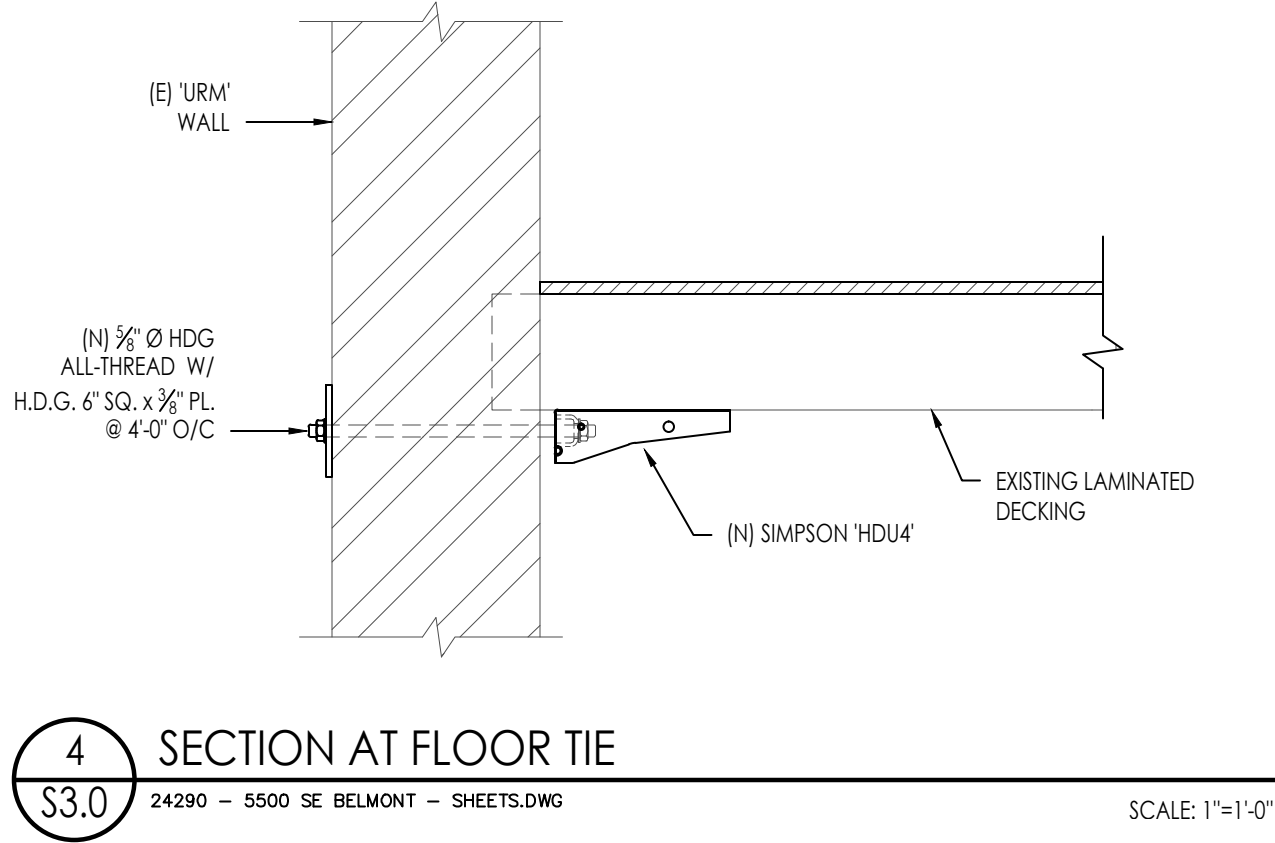
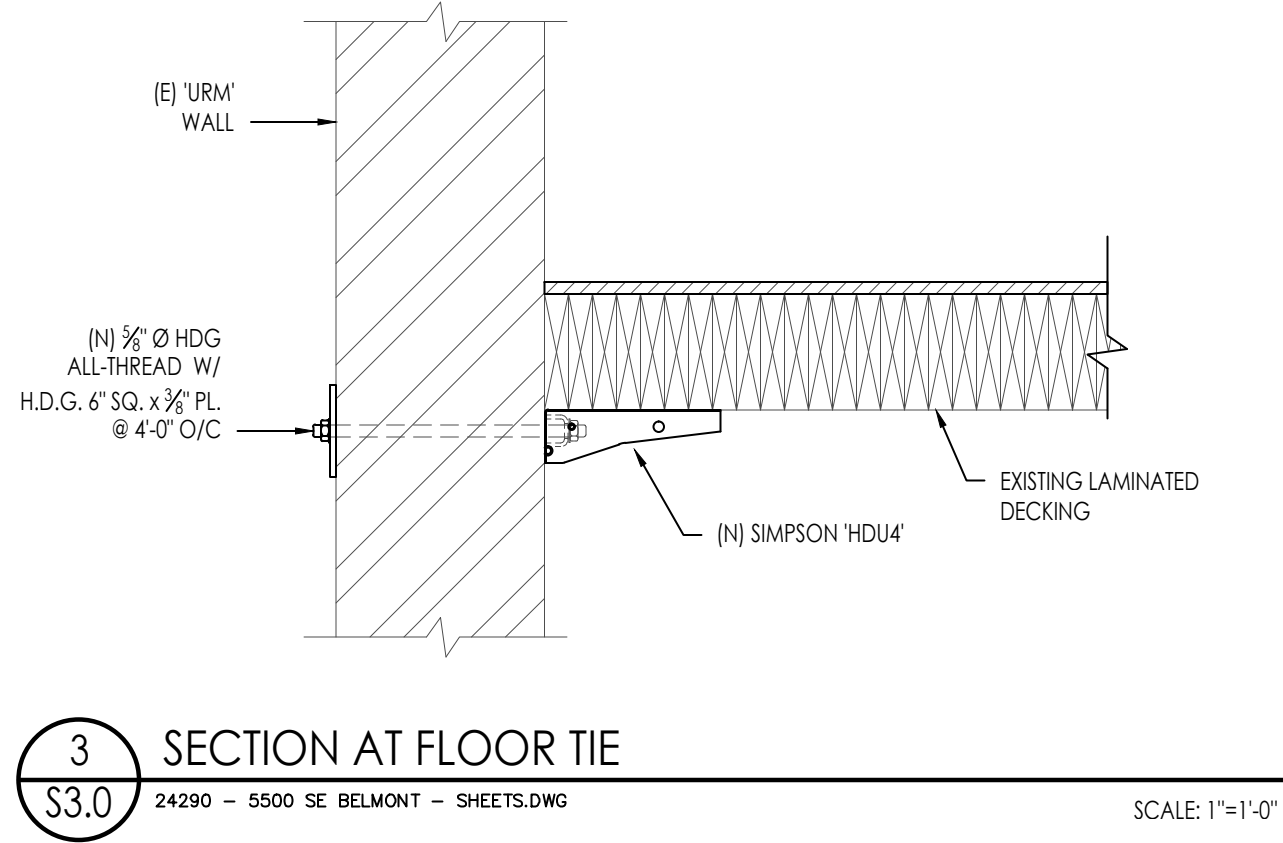
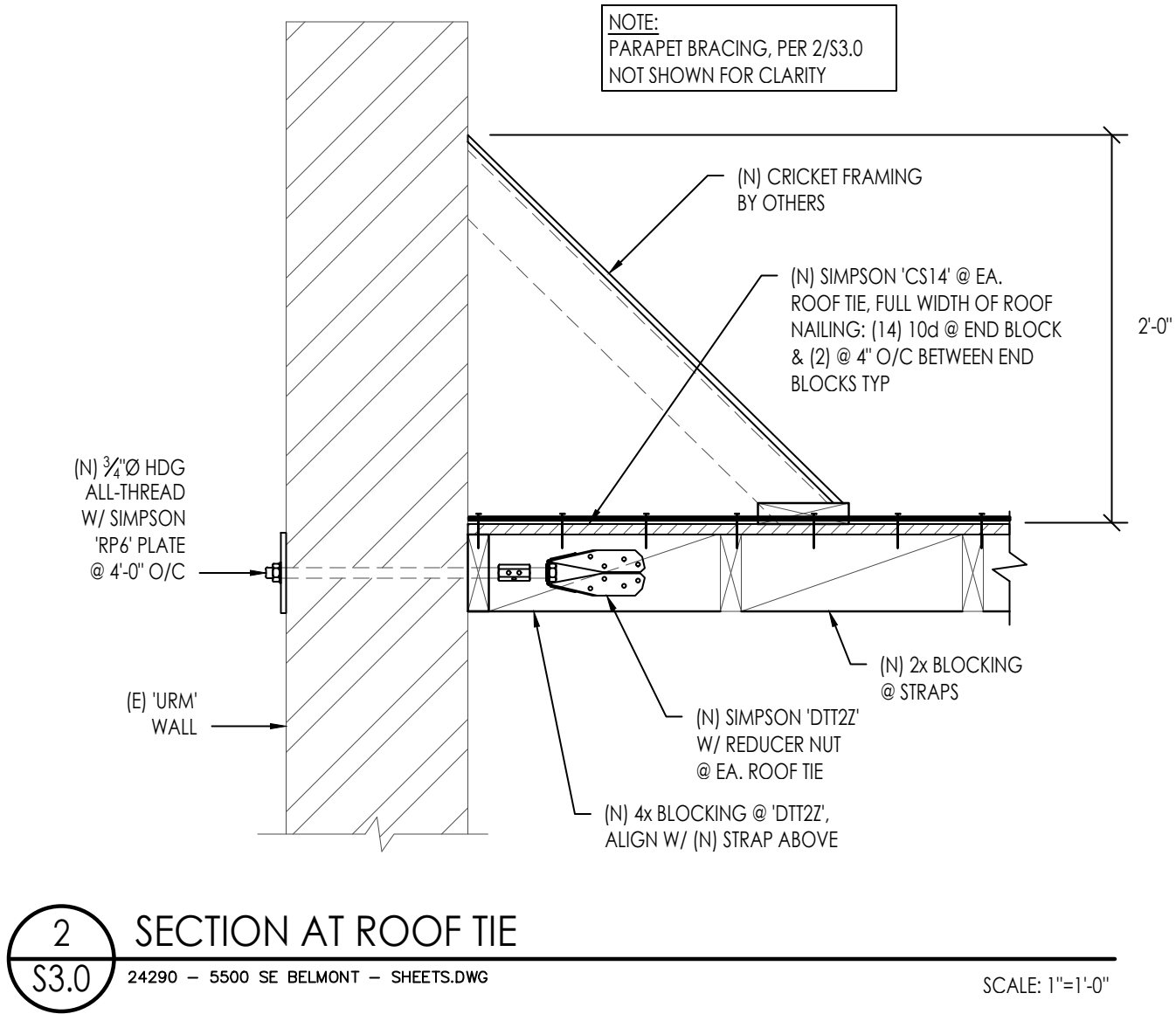
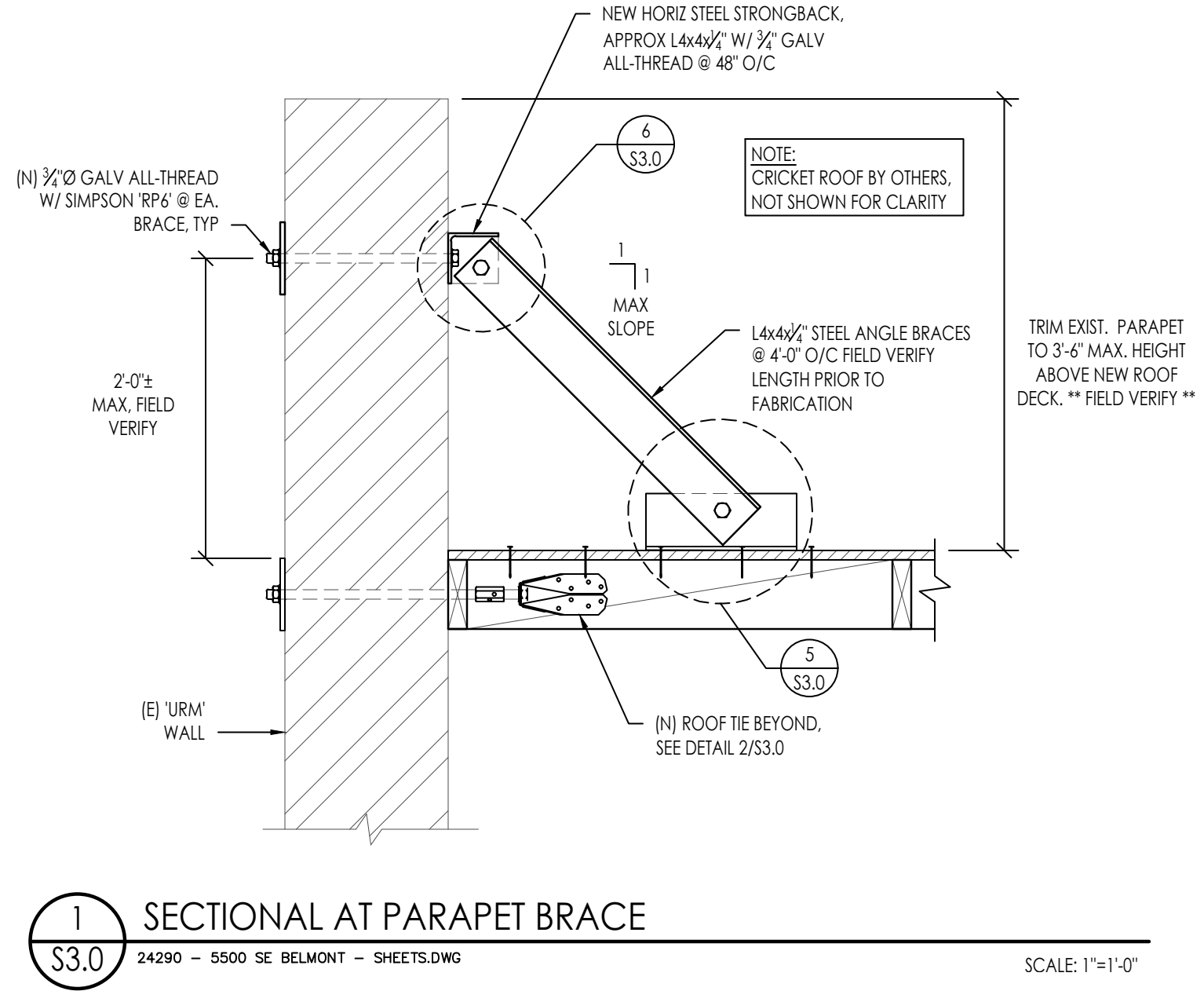
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SHEET CONTENT
DETAILS

JOB No.
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April 8, 2025

Todd Moore
5500 SE Belmont
Portland, OR 97215

Re: ASCE41-17 Tier 1
5500 SE Belmont
Project #24290

Dear Todd –

At your request, Hayden Engineers has performed a visual observation of the property address above. The purpose of this observation was to perform a Tier 1 Checklist Evaluation of the building under ASCE41-17.

The building was observed as a two-story unreinforced masonry (URM) building, with wood-framed floors and roof over a basement. According to the City of Portland's website, "Portlandmaps.com" the building is believed to date to 1921, and is approximately 10,000 square feet across two (2) floors and basement. The roof structure was observed as straight wood decking, and the floors appear to be laminated 2x8 "car-deck" spanning between beams. Our understanding from you is that this building originally served as a phone company building, so we do not anticipate any major strength-related issues with the floor framing serving the proposed use.

While this letter does not encompass a full Tier 1 or Tier 2 evaluation of the building, the following is a brief summary of the findings of the Tier 1 Checklist.

SUMMARY OF DEFICIENCIES

Generally speaking, buildings of this age and construction type share common deficiencies. The most significant deficiencies are as follows:

- Lack of Roof and Floor Perimeter Ties
- Lack of Parapet Bracing
- Possible Out-of-Plane issue with 2nd floor walls
- Poor In-Plane Performance of Walls – shear strength at east/west ends comes up as at-capacity at the lower level under the "Quick Check" procedure, so this appears to be a marginal issue.
- Poor Overturning Performance of Walls – narrow wall piers
- Poor Load Path Continuity – particularly with shear load transfer between diaphragms to walls

Summary of Deficiencies, continued

- Poor Bracing of Walls at Exterior Stairwell
- Straight-Decking Diaphragm at roof
- Inadequate Cross Ties at Roof
- No Secondary Support of Beams at Perimeter Walls
- Unbraced Masonry Chimney at Roof

PROPOSED CHANGES

While not representing a complete ASCE41-17 upgrade, we suggest the following items be included in the proposed remodel in order to mitigate some of the most significant hazards identified:

- Reduce Parapet Height to approximately 3' tall (currently upwards of 6'+ in places)
- Add Perimeter Roof Ties and Parapet Bracing
- Add Perimeter Ties at 1st and 2nd Floor

These changes would be proposed to be made on a voluntary basis, in conformance with the greater of ASCE41-17 BSE-1E or 75% of Seismic Forces under the 2022 Oregon Structural Specialty Code. This would be subject to approval by the City of Portland, and may end up being changed or revised based on their requirements.

If you have any questions, please do not hesitate to call.

Sincerely,

Hayden Consulting Engineers, Inc.



EXP: 6/30/2025

By:

Andrew Roe, P.E.
Sr. Project Manager

By:

Darron R. Hayden, P.E., S.E.
Principal

17.2 COLLAPSE PREVENTION BASIC CONFIGURATION CHECKLIST

Low Seismicity

Building System – General

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	LOAD PATH: The structure contains a complete, well-defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation Tier 2: 5.4.1.1 Commentary: A.2.1.1	Poor shear transfer detailing assumed based on age of building
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 0.25% of the height of the shorter building in low seismicity, 0.5% in moderate, and 1.5% in high seismicity. Tier 2: 5.4.1.2 Commentary: A.2.1.2	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic force-resisting elements of the main structure. Tier 2: 5.4.1.3 Commentary: A.2.1.3	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Low Seismicity, continued

Building System – Building Configuration

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	WEAK STORY:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The sum of the shear strengths of the seismic force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above.</p> <p>Tier 2: 5.4.2.1 Commentary: A.2.2.2</p>	
C	NC	N/A	U	SOFT STORY:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The stiffness of the seismic force-resisting system in any story is not less than 70% of the stiffness in an adjacent story above, or less than 80% of the average stiffness of the three (3) stories above.</p> <p>Tier 2: 5.4.2.2 Commentary: A.2.2.3</p>	
C	NC	N/A	U	VERTICAL IRREGULARITIES:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>All vertical elements in the seismic force-resisting system are continuous to the foundation.</p> <p>Tier 2: 5.4.2.3 Commentary: A.2.2.4</p>	Some discontinuity at NW corner

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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High Seismicity

BY ar DATE 4/3/25

REV _____ DATE _____

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Low Seismicity, continued

Building System – Building Configuration, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	GEOMETRY:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There are no changes in the net horizontal dimension of the seismic force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. Tier 2: 5.4.2.4 Commentary: A.2.2.5	
C	NC	N/A	U	MASS:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There are no changes in the effective mass of more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. Tier 2: 5.4.2.5 Commentary: A.2.2.6	
C	NC	N/A	U	TORSION:	Center rigidity assumed, but not calculated at this time.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. Tier 2: 5.4.2.6 Commentary: A.2.2.7	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Moderate Seismicity (Complete the Following in Addition to Items for Low Seismicity)

Geologic Site Hazards

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	LIQUEFACTION:	"Low" liquefaction susceptibility per DOGAMI map
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance do not exist in foundation soils within 50 ft under the building. Tier 2: 5.4.3.1 Commentary: A.6.1.1	
C	NC	N/A	U	SLOPE FAILURE:	Unknown, but assumed compliant based on relatively low slope profile
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The building site is located away from potential earthquake-induced slope failures or rockfalls so that it is unaffected by such failures or is capable of accommodating any predicted movements without failure. Tier 2: 5.4.3.1 Commentary: A.6.1.2	
C	NC	N/A	U	SURFACE FAULT RUPTURE:	No nearby active faults per DOGAMI map
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Surface fault rupture and surface displacement at the building site are not anticipated. Tier 2: 5.4.3.1 Commentary: A.6.1.3	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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High Seismicity

BY ar DATE 4/3/25

REV _____ DATE _____

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High Seismicity (Complete the Following in Addition to Items for Low and Moderate Seismicity)

Foundation Configuration

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	OVERTURNING:	0.6 Sa h =
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The ratio of the least horizontal dimension of the seismic force-resisting system at the foundation level to the building height (base / height) is greater than 0.6Sa. Tier 2: 5.4.3.3 Commentary: A.6.2.1	0.6 (0.384) (32) = 7.37 ft Multiple wall piers present < this value
C	NC	N/A	U	TIES BETWEEN FOUNDATION ELEMENTS:	Basement slab present
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. Tier 2: 5.4.3.4 Commentary: A.6.2.2	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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High Seismicity

BY ar DATE 4/3/25

REV _____ DATE _____

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17.36 COLLAPSE PREVENTION STRUCTURAL CHECKLIST (URM AND URMA)

Low and Moderate Seismicity

Seismic Force Resisting System

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	REDUNDANCY:	(2) Walls each direction (i.e. exterior walls)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The number of shear walls in each principal direction is greater than or equal to 2. Tier 2: 5.5.1.1 Commentary: A.3.2.1.1	
C	NC	N/A	U	SHEAR STRESS CHECK:	East/West Walls Marginal per Quick Check Procedure (30psi at bottom)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The shear stress in the unreinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.4.3.3. is less than 30 psi for clay units and 70 psi for concrete units. Tier 2: 5.5.3.1.1 Commentary: A.3.2.5.1	North/South Walls at 12.6psi per Quick Check


Connections

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	WALL ANCHORAGE:	No anchorage visible / assumed
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7. Tier 2: 5.7.1.1 Commentary: A.5.1.1	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Low and Moderate Seismicity, continued

Connections, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	WOOD LEDGERS:	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers. Tier 2: 5.7.1.3 Commentary: A.5.1.2	
C	NC	N/A	U	TRANSFER TO SHEAR WALLS:	Minimal Shear Transfer connection assumed per age of building
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Diaphragms are connected for transfer of seismic forces to the shear walls. Tier 2: 5.7.2 Commentary: A.5.2.1	
C	NC	N/A	U	GIRDER-COLUMN CONNECTION:	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is positive connection using plates, connection hardware, or straps between the girder and column support. Tier 2: 5.7.4.1 Commentary: A.5.4.1	 <p>Connector plates present at basement level, unknown other levels</p>

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

High Seismicity (Complete the Following in Addition to L/M Seismicity)

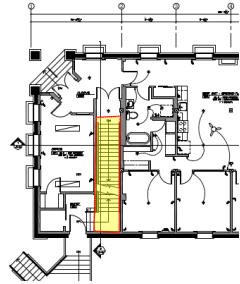
Seismic Force Resisting System

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	PROPORTIONS: The height-to-thickness ratio of the shear walls at each story is less than: Top story of multi-story bldg. 9 First story of multi-story bldg. 15 All other conditions 13 Tier 2: 5.5.3.1.2 Commentary: A.3.2.5.2	2nd Floor: 14 1st Floor: 10.5
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	MASONRY LAYUP: Filled collar joints of multi-wythe masonry walls have negligible voids. Tier 2: 5.5.3.4.1 Commentary: A.3.2.5.3	Layup mostly obscured
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

High Seismicity, continued


Diaphragms (Stiff or Flexible)

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	<p>OPENINGS AT SHEAR WALLS:</p> <p>Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length.</p> <p>Tier 2: 5.6.1.3 Commentary: A.4.1.4</p>	 <p>Possible issue at Gridline (2)</p>
C	NC	N/A	U	<p>OPENINGS AT EXTERIOR MASONRY SHEAR WALLS:</p> <p>Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long.</p> <p>Tier 2: 5.6.1.3 Commentary: A.4.1.6</p>	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

High Seismicity, continued

Flexible Diaphragms

RATING				DESCRIPTION	COMMENTS
C <input type="checkbox"/>	NC <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	<p>CROSS TIES:</p> <p>There are continuous cross ties between diaphragm chords.</p> <p>Tier 2: 5.6.1.2 Commentary: A.4.1.2</p>	Assumed n/c due to age of building and discontinuities at roof level
C <input checked="" type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	<p>STRAIGHT SHEATHING:</p> <p>All straight-sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered.</p> <p>Tier 2: 5.6.2 Commentary: A.4.2.1</p>	
C <input type="checkbox"/>	NC <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	<p>SPANS:</p> <p>All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing.</p> <p>Tier 2: 5.6.2 Commentary: A.4.2.2</p>	 <p>Straight Decking at Roof</p>
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	U <input type="checkbox"/>	<p>DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS:</p> <p>All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans < 40 ft and aspect ratios less than or equal to 4-to-1.</p> <p>Tier 2: 5.6.2 Commentary: A.4.2.3</p>	


Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

High Seismicity, continued

Flexible Diaphragms, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	OTHER DIAPHRAGMS:	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The diaphragms do not consist of a system other than wood, metal deck, concrete, or horizontal bracing. Tier 2: 5.6.5 Commentary: A.4.7.1	

Connections

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	STIFFNESS OF WALL ANCHORS:	Wall anchors not found / assumed not present due to age of building
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. before engagement of the anchors. Tier 2: 5.7.1.2 Commentary: A.5.1.4	
C	NC	N/A	U	BEAM, GIRDER, AND TRUSS SUPPORTS:	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Beams, girders, and trusses supported by URM walls or pilasters have independent secondary columns for support of vertical loads. Tier 2: 5.7.4.4 Commentary: A.5.4.5	 Lacking independent support at exterior walls

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

17.38 NON-STRUCTURAL CHECKLIST

The Performance Level is designated HR for Hazards Reduced, LS for Life Safety, or PR for Position Retention. Level of seismicity is designated as "not required", or by L, M, or H, for Low, Moderate, and High.

All Seismicity Levels

Life Safety Systems

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	No Sprinklers
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance w/ NFPA-13 Tier 2: 13.7.4 Commentary: A.7.13.1	
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance w/ NFPA-13 Tier 2: 13.7.4 Commentary: A.7.13.2	
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. Tier 2: 13.7.7 Commentary: A.7.12.1	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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Life Safety Systems, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. Tier 2: 13.7.6 Commentary: A.7.14.1	
C	NC	N/A	U	HR – not required; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13 Tier 2: 13.7.4 Commentary: A.7.13.3	
C	NC	N/A	U	HR – not required; LS – not required; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. Tier 2: 13.7.9 Commentary: A.7.3.1	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Hazardous Materials

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. Tier 2: 13.7.1 Commentary: A.7.12.2	
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods Tier 2: 13.8.3 Commentary: A.7.15.1	
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. Tier 2: 13.7.3, 13.7.5 Commentary: A.7.13.4	
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. Tier 2: 13.7.3, 13.7.5 Commentary: A.7.13.3	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Hazardous Materials, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>FLEXIBLE COUPLINGS:</p> <p>Hazardous material ductwork and piping, including natural gas piping, has flexible couplings.</p> <p>Tier 2: 13.7.3, 13.7.5 Commentary: A.7.15.4</p>	
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>PIPE/DUCTS CROSSING SEISMIC JOINTS:</p> <p>Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements.</p> <p>Tier 2: 13.7.3, 13.7.5, 13.7.6 Commentary: A.7.13.6</p>	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Partitions

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity Tier 2: 13.6.2 Commentary: A.7.1.1	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. Tier 2: 13.6.2 Commentary: A.7.2.1	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – MH; PR – MH DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005 Tier 2: 13.6.2 Commentary: A.7.1.2	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – MH LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. Tier 2: 13.6.2 Commentary: A.7.2.1	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Partitions, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. Tier 2: 13.6.2 Commentary: A.7.1.3	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. Tier 2: 13.6.2 Commentary: A.7.1.4	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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Ceilings

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – H; LS – MH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>SUSPENDED LATH AND PLASTER:</p> <p>Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 sq. ft of area.</p> <p>Tier 2: 13.6.4 Commentary: A.7.2.3</p>	
C	NC	N/A	U	HR – not required; LS – MH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>SUSPENDED GYPSUM BOARD:</p> <p>Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 sq. ft of area.</p> <p>Tier 2: 13.6.4 Commentary: A.7.2.3</p>	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>INTEGRATED CEILINGS:</p> <p>Integrated suspended ceilings with continuous areas greater than 144 sq. ft. and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above.</p> <p>Each restraint location has a minimum of four (4) diagonal wires and compression struts, or diagonal members capable of resisting compression.</p> <p>Tier 2: 13.6.4 Commentary: A.7.2.2</p>	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Ceilings, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 sq. ft have clearances from the enclosing wall or partition of at least ½" in Moderate Seismicity, ¾" in High Seismicity. Tier 2: 13.6.4 Commentary: A.7.2.4	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. Tier 2: 13.6.4 Commentary: A.7.2.5	
C	NC	N/A	U	HR – not required; LS – not required; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 sq. ft are supported by closure angles or channels not less than 2" wide. Tier 2: 13.6.4 Commentary: A.7.2.6	
C	NC	N/A	U	HR – not required; LS – not required; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of ceiling is no more than 2,500 sq. ft and has a ratio of long-to-short dimension no more than 4:1 Tier 2: 13.6.4 Commentary: A.7.2.7	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Light Fixtures

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>INDEPENDENT SUPPORT:</p> <p>Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture</p> <p>Tier 2: 13.6.4, 13.7.9 Commentary: A.7.3.2</p>	
C	NC	N/A	U	<p>HR – not required; LS – not required; PR – H</p> <p>PENDANT SUPPORTS:</p> <p>Light fixtures on pendant supports are attached at a spacing equal to or less than 6ft. Unbraced suspended fixtures are free to allow a 360-degree range of motion at an angle not less than 45 degrees from horizontal w/o contacting adjacent components.</p> <p>Alternatively, if rigidly supported and/or braced, they are free to move with the structure to which they are attached w/o damaging adj. components.</p> <p>Additionally, the connection to the structure is capable of accommodating the movement w/o failure.</p> <p>Tier 2: 13.7.9 Commentary: A.7.3.3</p>	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Light Fixtures, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – not required; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LENS COVERS: Lens covers on light fixtures are attached with safety devices. Tier 2: 13.7.9 Commentary: A.7.3.4	

Cladding and Glazing

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	CLADDING ANCHORS: Cladding components weighing more than 10 psf are mechanically anchored to the structure at spacing equal to or less than 6ft o/c (LS-M), 4ft o/c (LS-H or PR-LMH) Tier 2: 13.6.1 Commentary: A.7.4.1	Unknown if areas of stucco are not directly adhered to underlying wall
C	NC	N/A	U	HR – not required; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: 0.01 (LS-M), 0.02 (LS-H or PR-LMH), and the rods have a length-to-diameter ratio of 4.0 or less. Tier 2: 13.6.1 Commentary: A.7.4.3	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Cladding and Glazing, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>MULTI-STORY PANELS:</p> <p>For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: 0.01 (LS-M), 0.02 (LS-H or PR-LMH), and the rods have a length-to-diameter ratio of 4.0 or less.</p> <p>Tier 2: 13.6.1 Commentary: A.7.4.4</p>	
C	NC	N/A	U	HR – not required; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>THREADED RODS:</p> <p>Threaded rods for panel connections detailed to accommodate drift by bending of the rod have a length-to-diameter ratio greater than 0.06 times the story height in inches for LS-M and 0.12 times the story height in inches for LS-H and PR-LMH.</p> <p>Tier 2: 13.6.1 Commentary: A.7.4.9</p>	
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>PANEL CONNECTIONS:</p> <p>Cladding panels are anchored out-of-plane with a minimum # of connections for each wall panel as follows: LS-M, (2) connections LS-H or PR-LMH, (4) connections</p> <p>Tier 2: 13.6.1.4 Commentary: A.7.4.5</p>	Unknown attachment of cladding at upper parapet areas

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Cladding and Glazing, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two (2) bearing connections for each cladding panel Tier 2: 13.6.1.4 Commentary: A.7.4.6	
C	NC	N/A	U	HR – MH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. Tier 2: 13.6.1.4 Commentary: A.7.4.7	
C	NC	N/A	U	HR – not required ; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 sq. ft in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. Tier 2: 13.6.1.5 Commentary: A.7.4.8	Some areas of glass are tempered, others do not appear to be

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Masonry Veneer

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TIES:</p> <p>Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of (1) tie for every 2.67 sq. ft, and the ties have spacing no greater than the following:</p> <p>36" (LS-LM)</p> <p>24" (LS-H, PR-LMH)</p> <p>Tier 2: 13.6.1.2</p> <p>Commentary: A.7.5.1</p>	
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>SHELF ANGLES:</p> <p>Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor.</p> <p>Tier 2: 13.6.1.2</p> <p>Commentary: A.7.5.2</p>	
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>WEAKENED PLANES:</p> <p>Masonry veneer is anchored to the backup adjacent to weakened planes, such as at flashing locations.</p> <p>Tier 2: 13.6.1.2</p> <p>Commentary: A.7.5.3</p>	
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>UNREINFORCED MASONRY BACKUP:</p> <p>There is no unreinforced masonry backup.</p> <p>Tier 2: 13.6.1.1, 13.6.1.2</p> <p>Commentary: A.7.7.2</p>	


Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Masonry Veneer, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>STUD TRACKS:</p> <p>For veneer with cold-formed steel stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24" o/c.</p> <p>Tier 2: 13.6.1.1, 13.6.1.2 Commentary: A.7.6.1</p>	
C	NC	N/A	U	HR – not required; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>ANCHORAGE:</p> <p>For veneer with concrete block or masonry backup, the backup is positively anchored to the structure fastened to the structure at a horizontal spacing equal to or less than 4 ft. along the floors and roof.</p> <p>Tier 2: 13.6.1.1, 13.6.1.2 Commentary: A.7.7.1</p>	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>WEEP HOLES:</p> <p>In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing.</p> <p>Tier 2: 13.6.1.2 Commentary: A.7.5.6</p>	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>OPENINGS:</p> <p>For veneer with cold-formed steel stud backup, steel studs frame window and door openings.</p> <p>Tier 2: 13.6.1.1, 13.6.1.2 Commentary: A.7.6.2</p>	


Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Parapets, Cornices, Ornamentation, and Appendages



RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	Parapet ratio up to / exceeds 6:1 
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	URM PARAPETS OR CORNICES: Laterally unsupported URM parapets or cornices have height-to-thickness ratios no greater than: 2.5 (LS-LM) 1.5 (LS-H, PR-LMH) Tier 2: 13.6.5 Commentary: A.7.8.1	
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: 10ft (LS-LM) 6ft (LS-H, PR_LMH) Tier 2: 13.6.6 Commentary: A.7.8.2	
C	NC	N/A	U	HR – H; LS – MH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement Tier 2: 13.6.5 Commentary: A.7.8.3	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Parapets, Cornices, Ornamentation, and Appendages, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – MH; LS – MH; PR – LMH	Unknown anchorage of ornamentation at front entry 
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage or cantilever from components are reinforced and anchored at 6' o/c max. Item does not include parapets or cornices covered elsewhere. Tier 2: 13.6.6 Commentary: A.7.8.4	

Masonry Chimneys

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	URM CHIMNEYS: URM Chimneys extend above the roof surface no more than: 3x least dimension (LS-LM) 2x least dimension (LS-H, PR-LMH) Tier 2: 13.6.7 Commentary: A.7.9.1	
C	NC	N/A	U	HR – LMH; LS – LMH; PR – LMH	Chimney assumed minimal or no anchorage based on age of building 
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. Tier 2: 13.6.7 Commentary: A.7.9.2	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Stairs

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	Unrestrained at exterior wall, SW corner
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	STAIR ENCLOSURES: Hollow-clay tile or URM walls around stair enclosures are restrained out-of-plane and have height thickness ratios no greater than: 15 to 1 (LS-LM), 12 to 1 (LS-H, PR-LMH) Tier 2: 13.6.2, 13.6.8 Commentary: A.7.10.1	
C	NC	N/A	U	HR – not required; LS – LMH; PR – LMH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	STAIR DETAILS: Connection between stairs and structure does not rely on post-installed anchors in concrete/masonry, and stair details are capable of accommodating the drift calculated using Quick Check procedure of Sect. 4.4.3.1 for moment frame structures, or 0.5" for all other structures without inducing any lateral stiffness contribution from the stairs. Tier 2: 13.6.8 Commentary: A.7.10.2	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Contents and Furnishings

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – LMH; LS – MH; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	INDUSTRIAL STORAGE RACKS: Industrial storage or pallet racks more than 12 ft high meet the requirements of ANSI/RMI MH 16.1 as modified by ASCE 7, Chapter 15 Tier 2: 13.8.1 Commentary: A.7.11.1	
C	NC	N/A	U	HR – not required; LS – H; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth (or width) ratio greater than 3:1 are anchored to the structure or to each other. Tier 2: 13.8.2 Commentary: A.7.11.2	
C	NC	N/A	U	HR – not required; LS – H; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FALL PRONE CONTENTS: Equipment, stored items or other contents weighing more than 20lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. Tier 2: 13.8.2 Commentary: A.7.11.3	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ACCESS FLOORS: Access floors more than 9 in. high are braced. Tier 2: 13.6.10 Commentary: A.7.11.4	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Contents and Furnishings, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. Tier 2: 13.7.7, 13.6.10 Commentary: A.7.11.5	
C	NC	N/A	U	HR – not required; LS – not required; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components Tier 2: 13.8.2 Commentary: A.7.11.6	

Mechanical and Electrical Equipment

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – H; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FALL PRONE EQUIPMENT: Equipment weighing more than 20lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment are braced or otherwise restrained. Tier 2: 13.7.1, 13.7.7 Commentary: A.7.12.4	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Mechanical and Electrical Equipment, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – H; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IN-LINE EQUIPMENT: Equipment installed in line with a duct or piping system, with an operating weight > 75lbs is supported and laterally braced independent of the duct or piping. Tier 2: 13.7.1 Commentary: A.7.12.5	
C	NC	N/A	U	HR – not required; LS – H; PR – MH	Unknown anchorage of water heaters
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth (or width) ratio greater than 3:1 is anchored to the floor slab or adjacent structural walls. Tier 2: 13.7.1, 13.7.7 Commentary: A.7.12.6	
C	NC	N/A	U	HR – not required; LS – not required; PR – MH	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. Tier 2: 13.6.9 Commentary: A.7.12.7	
C	NC	N/A	U	HR – not required; LS – not required; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended w/o damaging itself or adjoining components. Tier 2: 13.7.1, 13.7.7 Commentary: A.7.12.8	

NOT REQUIRED

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Mechanical and Electrical Equipment, continued

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – not required; PR – H VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. Tier 2: 13.7.1 Commentary: A.7.12.9	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – H HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lbs is anchored to the structure. Tier 2: 13.7.1, 13.7.7 Commentary: A.7.12.10	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – H ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. Tier 2: 13.7.7 Commentary: A.7.12.11	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – H CONDUIT COUPLINGS: Conduit greater than 2.5 in trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connectors. Tier 2: 13.7.8 Commentary: A.7.12.12	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

NOT REQUIRED

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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SHEET _____ OF _____

Piping

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – not required; PR – H FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings Tier 2: 13.7.3, 13.7.5 Commentary: A.7.13.2	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – H FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. Tier 2: 13.7.3, 13.7.5 Commentary: A.7.13.4	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – H C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in in diameter are restrained. Tier 2: 13.7.3, 13.7.5 Commentary: A.7.13.5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C	NC	N/A	U	HR – not required; LS – not required; PR – H PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes, or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. Tier 2: 13.7.3, 13.7.5 Commentary: A.7.13.6	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

NOT REQUIRED

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Ducts

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	<p>HR – not required; LS – not required; PR – H</p> <p>DUCT BRACING:</p> <p>Rectangular ductwork larger than 6 sq ft in cross-sectional area and round ducts larger than 28 in. in diameter are braced.</p> <p>Max spacing of transverse bracing does not exceed 30 ft. Max spacing of longitudinal bracing does not exceed 60 ft.</p> <p>Tier 2: 13.7.6 Commentary: A.7.14.2</p>	
C	NC	N/A	U	<p>HR – not required; LS – not required; PR – H</p> <p>DUCT SUPPORT:</p> <p>NOT REQUIRED</p> <p>Ducts are not supported by piping or electrical conduit.</p> <p>Tier 2: 13.7.6 Commentary: A.7.14.3</p>	
C	NC	N/A	U	<p>HR – not required; LS – not required; PR – H</p> <p>DUCTS CROSSING SEISMIC JOINTS:</p> <p>Ducts that crosses seismic joints or isolation planes or are connected to independent structures has couplings or other details to accommodate the relative seismic displacements.</p> <p>Tier 2: 13.7.6 Commentary: A.7.14.4</p>	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Elevators

RATING				DESCRIPTION	COMMENTS
C	NC	N/A	U	HR – not required; LS – H; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RETAINER GUARDS: Sheaves and drums have cable retainer guards. Tier 2: 13.7.11 Commentary: A.7.16.1	
C	NC	N/A	U	HR – not required; LS – H; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RETAINER PLATE: A retainer plate is present to the top and bottom of both car and counterweight. Tier 2: 13.7.11 Commentary: A.7.16.2	
C	NC	N/A	U	HR – not required; LS – not required; PR – H	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. Tier 2: 13.7.11 Commentary: A.7.16.3	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Elevators, continued

RATING				DESCRIPTION	COMMENTS
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	HR – not required; LS – not required; PR – H SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet ASME A17.1 or have trigger levels set to 20% gravity at the base of the structure and 50% of the acceleration of gravity in other locations. Tier 2: 13.7.11 Commentary: A.7.16.4	
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	HR – not required; LS – not required; PR – H SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. Tier 2: 13.7.11 Commentary: A.7.16.5	
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	HR – not required; LS – not required; PR – H COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1 Tier 2: 13.7.11 Commentary: A.7.16.6	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown



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Elevators, continued

RATING				DESCRIPTION	COMMENTS
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	HR – not required; LS – not required; PR – H BRACKETS: The brackets that tie the car rails and counterweight rail to the structure are sized in accordance with ASME A17.1 Tier 2: 13.7.11 Commentary: A.7.16.7	
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	HR – not required; LS – not required; PR – H SPREADER BRACKET: Spreader brackets are not used to resist seismic forces Tier 2: 13.7.11 Commentary: A.7.16.8	
C <input type="checkbox"/>	NC <input type="checkbox"/>	N/A <input type="checkbox"/>	U <input type="checkbox"/>	HR – not required; LS – not required; PR – H GO-SLOW ELEVATORS: The building has a go-slow elevator system. Tier 2: 13.7.11 Commentary: A.7.16.9	

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

ASCE 41-17 Quick Check**Determine T** (4.4.2.4)

$$T = C_t h_n^b$$

$C_t = 0.02$ "All other framing systems"
 $b = 0.75$ "All other framing systems"
 $h_n = 36$ feet

0.29 Seconds**Determine S_a** (4.4.2.3)

$$S_a = S_{x1} / T$$

(Not greater than S_{xs})

$S_{x1} = 0.21$ Per SEAOC, BSE-1E
 $S_{xs} = 0.384$ Per SEAOC, BSE-1E

0.384 g**Determine Seismic Weight (W)**

Level	Area	Wall Length	Floor Wt.	Wall Wt	Wall Fctr Total	kips
Roof	3400	250	15	1122	0.85	289
2nd	3400	250	15	1666	0.75	363
1st	3400	250	15	1904	0.85	456
			psf	plf		

W = 1,108 kips**Pseudo Lateral Force** (4.4.2.1)

$$V = C S_a W$$

$C = 1.0$ (Table 4-7)
2-story URM

426 kips (Total)

ASCE 41-17 Quick Check

Assign Story Shears (4.4.2.2)

Total Mass 1,108 kips
V 426 kips

Story Factor	1	2	R	
w_x	456	363	289	Seismic Mass Per Level
h_x	4	18	32	Height from Base to Floor Level
h_x^k	2.83	8.74	13.45	
$w_i h_i^k$	1,289	3,175	3,894	
			k =	0.75

Story Force

F_x 65.62 161.71 198.30

V_j	425.63	360.00	198.30 kips
-------	--------	--------	-------------

Story Shears

Level	V_j	Area of Wall (in ²)				Shear Check (psi)	
		East	West	North	South	E/W	N/S
2nd	198 kips	2,962	3,240	7,740	7,272	21.3	8.8
1st	360 kips	6,129	3,888	9,231	11,664	24.0	11.5
Bsmt	426 kips	5,391	4,080	10,608	12,048	30.0	12.5

$M_s =$ 1.5 (URM, table 4-8)



DRAWINGS FOR LIFE SAFETY PRELIMINARY MEETING
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BUILDING HISTORY

THIS ICONIC AND UNMISTAKEABLE ARCHITECTURAL BUILDING, STANDING PROMINENTLY ON THE CORNER OF SE BELMONT AND 55TH AVENUE IN THE MT. TABOR NEIGHBORHOOD, THE BUILDING WAS CONSTRUCTED IN 1914 BY THE PACIFIC TELEPHONE AND TELEGRAPH COMPANY AND HELD VITAL CITY INFRASTRUCTURE (ROBUST STRUCTURAL OVER-BUILD/DESIGNED TO SUPPORT INDUSTRIAL NEEDS - FAR EXCEEDS RESIDENTIAL LOADS). THE COMPANY PLACED ITS GENERATING EQUIPMENT IN THE BASEMENT, SWITCH GEARS ON THE 1ST FLOOR AND THE OPERATORS ON THE SECOND FLOOR. SOMETIME BETWEEN 1914 AND 1920 THEY ADDED A TWO STORY ADDITION TO THE BUILDING ON THE EAST SIDE. THE PHONE COMPANY OWNED THE BUILDING UNTIL 1953, WHEN THEY SOLD IT TO THE MT. TABOR MASON'S LODGE #42. IN 1972 THE MASON'S RENTED THE SPACE IN THE BASEMENT TO THE MT. HOOD MODEL RAILROAD CLUB. TIM AND PATTY HERRILL BOUGHT THE BUILDING IN 1996 FOR USE AS THEIR PERSONAL RESIDENCE AND AS THE OFFICE FOR HIS ARCHITECTURAL FIRM. SEE BUILDING PERMIT HISTORY ON SHEET A-2

THE NEWEST OWNER TODD MOORE IS LOOKING TO MAINTAIN THE CHARACTER OF THIS UNIQUE ARCHITECTURAL STRUCTURE, WHILE ADDING NEEDED HOUSING UNITS TO THIS VIBRANT NEIGHBORHOOD.

PROPOSED WORK

1. SPRINKLER SYSTEM + FIRE ALARM SYSTEM
PROVIDE NEW NFPA FULL 13 SPRINKLER SYSTEM (100% COVERAGE) AND NEW FIRE ALARM SYSTEM
2. ZONING (ADDING ADDITIONAL HOUSING UNITS)
MINIMUM DENSITY (1 UNIT PER 2,500 S.F. OF SITE AREA - 5 UNITS)
PROPOSE A TOTAL OF (5) LIVING UNITS
3. REPLACEMENT OF ALL WINDOW ASSEMBLIES (EXISTING SINGLE-PANE)
REPLACE ALL WINDOW ASSEMBLIES (DOUBLE-PANE GLASS) EXCEPT FOR THE EAST SIDE BASEMENT WINDOWS
4. SEISMIC UPGRADES
PROVIDE OUT-OF-PLANE TIES AT THE FLOOR LEVELS. REMOVE A PORTION OF THE EXISTING URM PARAPET AND CHIMNEY TO REDUCE THE HEIGHT TO APPROXIMATELY 3'-6" ABOVE THE ROOF DECK. REFRAME THE ROOF WITH NEW STRUCTURAL PLYWOOD SHEATHING WITH OUT-OF-PLANE TIES AND PARAPET BRACING. NEW ROOF FRAMING TO BE DESIGNED FOR CODE-REQUIRED ROOF SNOW LOADS.
5. FIRE & LIFE SAFETY BINDER
A FIRE & LIFE SAFETY BINDER WILL BE SUBMITTED AS PART OF ANY FUTURE PERMITS.

BASELINE OCCUPANCY BEFORE CHAPTER 24 (2004)
SEISMIC DESIGN REQUIREMENTS FOR EXISTING BUILDINGS

2ND FLOOR: R-3 (LIVE/WORK)
2-BEDROOM RESIDENCE WITH WORK SPACE
1ST FLOOR: R-3 (LIVE/WORK)
ACCESSORY DWELLING UNIT AND ARCHITECTURAL PRACTICE OFFICE, WORKSPACE & CONF. ROOM
BASEMENT: B & S-1
MT. HOOD RAILROAD CLUB AND STORAGE

PROPOSED BUILDING OCCUPANCY
2ND FLOOR (R-2)

EXISTING: LIVE/WORK UNIT
DEMO ALL EXISTING PARTITION WALLS, CASEWORK AND PLUMBING.

PROPOSED: BUILD-OUT OF 1-UNIT (WILL NOT BE LIVE/WORK)
PROVIDE NEW KITCHEN, (2) BATH ROOMS, LIBRARY, 1-BEDROOM (NEW MEZZANINE), NEW ELEVATOR AND NEW FIRE STAIR ON THE SOUTH SIDE OF THE BUILDING

1ST FLOOR (R-2)
EXISTING: LIVE/WORK UNIT
DEMO ALL EXISTING PARTITION WALLS, CASEWORK AND PLUMBING (EXCEPT FOR REMODELING EXISTING BATHROOM ON EAST SIDE)

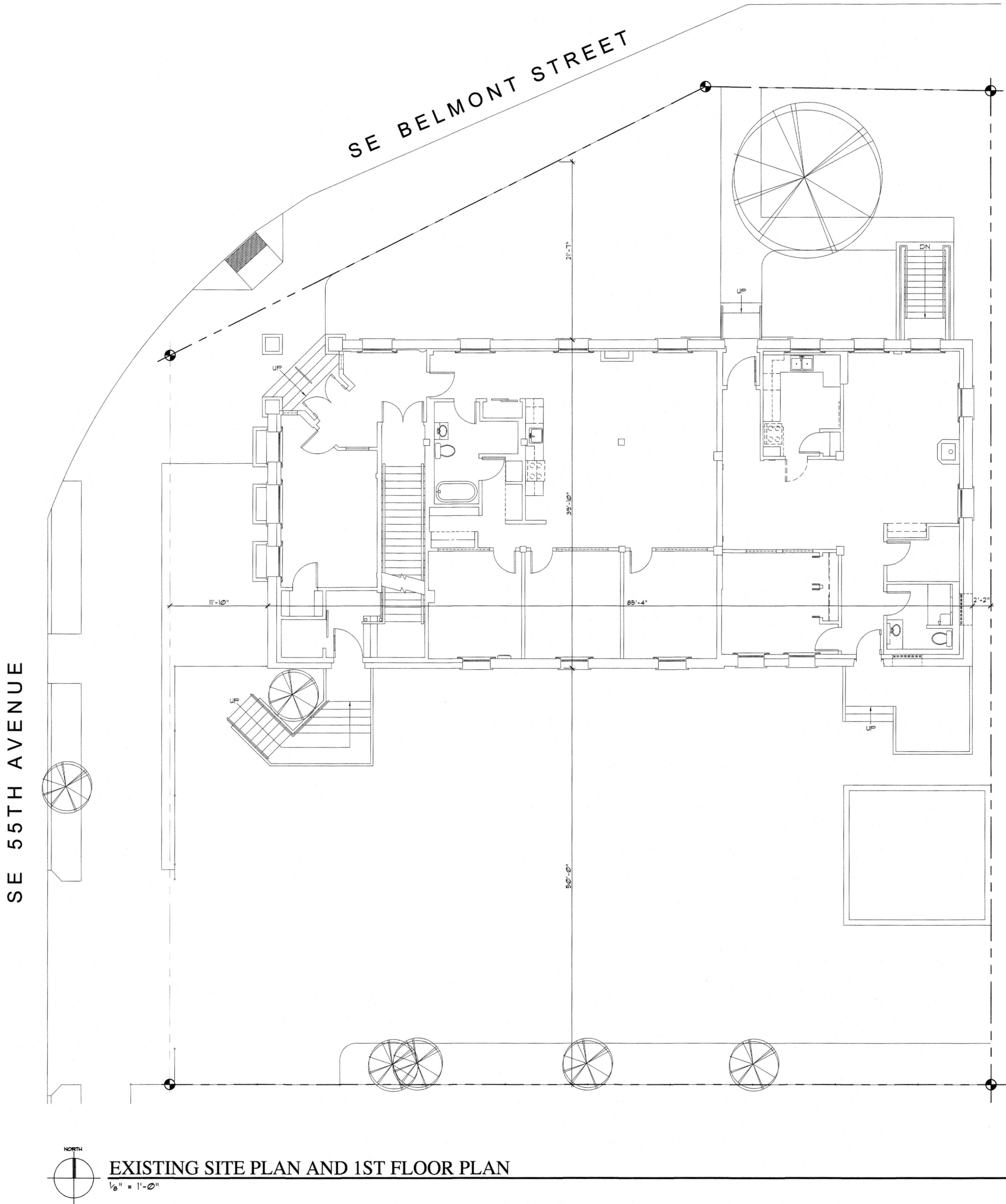
PROPOSED: BUILD-OUT OF 4-UNITS (WILL NOT BE LIVE/WORK)
PROVIDE NEW KITCHEN, BATH ROOMS (EXCEPT EAST UNIT), BEDROOM AT EACH UNIT AND (2) NEW ENTRIES (NORTH & SOUTH SIDE)

BASEMENT (R-2 & S-2)
EXISTING: ASSEMBLY/STORAGE
DEMO ALL EXISTING PARTITION WALLS AND PLUMBING
PROPOSED: BUILD-OUT 2-UNITS (DECREASE HAZARD FROM LEVEL-B ASSEMBLY TO LEVEL-4 R-2)
PROVIDE NEW KITCHEN, BATH ROOM, BEDROOM AT EACH UNIT AND NEW ENTRY ON SOUTH SIDE.

CODE SUMMARY

BUILDING CODE EDITION USED: 2022 OREGON STRUCTURAL SPECIALTY CODE

LOT AREA: 10,814 S.F.
ZONING: RM1 - RESIDENTIAL MULTI-DWELLING (W/HISTORICAL OVERLAY)
2ND FLOOR AREA: 3,352 S.F.
1ST FLOOR AREA: 3,265 S.F.
BASEMENT AREA: 3,265 S.F.
TOTAL BUILDING AREA: 9,882 S.F.
NUMBER OF STORIES: 2 (+ BASEMENT)
FIRE SPRINKLERS (EXISTING): NONE
FIRE SPRINKLERS (PROPOSED): FULL NFPA 13 SYSTEM
FIRE ALARM (EXISTING): NONE
FIRE ALARM (PROPOSED): PROVIDE NEW FIRE ALARM SYSTEM
CONSTRUCTION TYPE: III-B

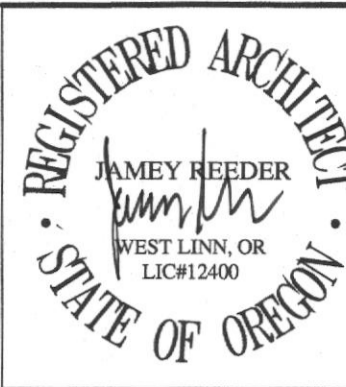


CHAPTER 34 - EXISTING BUILDINGS (2022 O.S.S.C.)
2022 OREGON STRUCTURAL SPECIALTY CODE
3405.6 CHANGE OF OCCUPANCY
3405.6.1 "SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL, CHANGES OF OCCUPANCY SHALL BE PERMITTED WITHOUT COMPLYING WITH ALL OF THE REQUIREMENTS OF THIS CODE FOR THE NEW OCCUPANCY, PROVIDED THAT THE NEW OCCUPANCY IS NOT MORE HAZARDOUS, BASED ON LIFE AND FIRE RISK, THAN THE EXISTING OCCUPANCY."

LAST RECORDED OCCUPANCY BEFORE CHAPTER 24 (2004)
SEISMIC DESIGN REQUIREMENTS FOR EXISTING BUILDINGS
PERMIT #01-140127-CO (ADD 2ND FLOOR UNIT(LIVE/WORK))
2ND FLOOR - R-3 (LIVE/WORK UNITS) 3,352 S.F.
1ST FLOOR - R-3 (LIVE/WORK & ADU) 2,857 S.F.
BASEMENT - B (MT HOOD ENGINEERS.) 1,590 S.F.
S-1 (STORAGE.) 1,181 S.F.

PROPOSED OCCUPANCIES
MOORE RESIDENCE

2ND FLOOR - R-2 (1-DWELLING UNIT) 3,352 S.F.
1ST FLOOR - R-2 (4-DWELLING UNITS) 2,857 S.F.
BASEMENT - B 1,590 S.F.
S-1 (STORAGE.) 1,181 S.F.



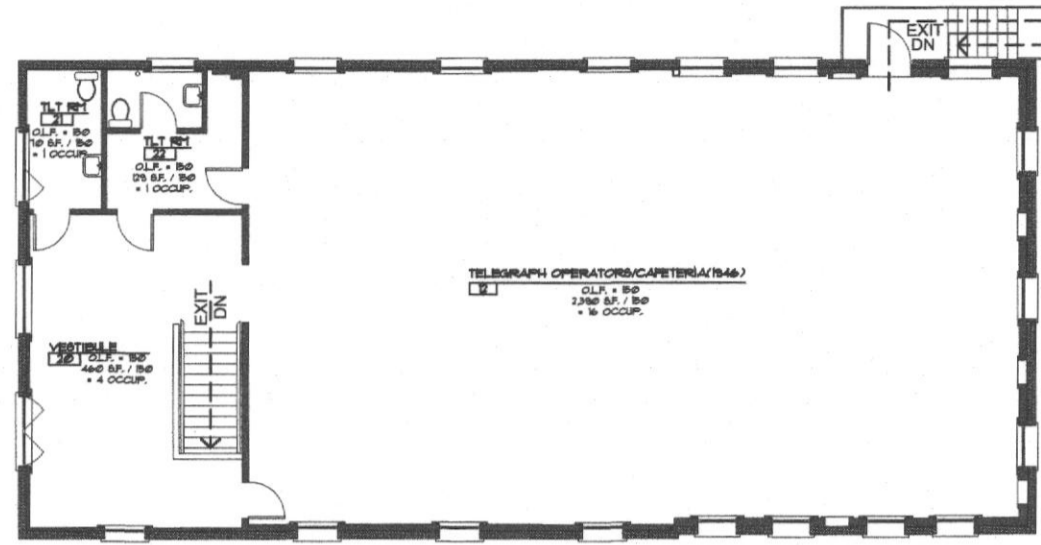
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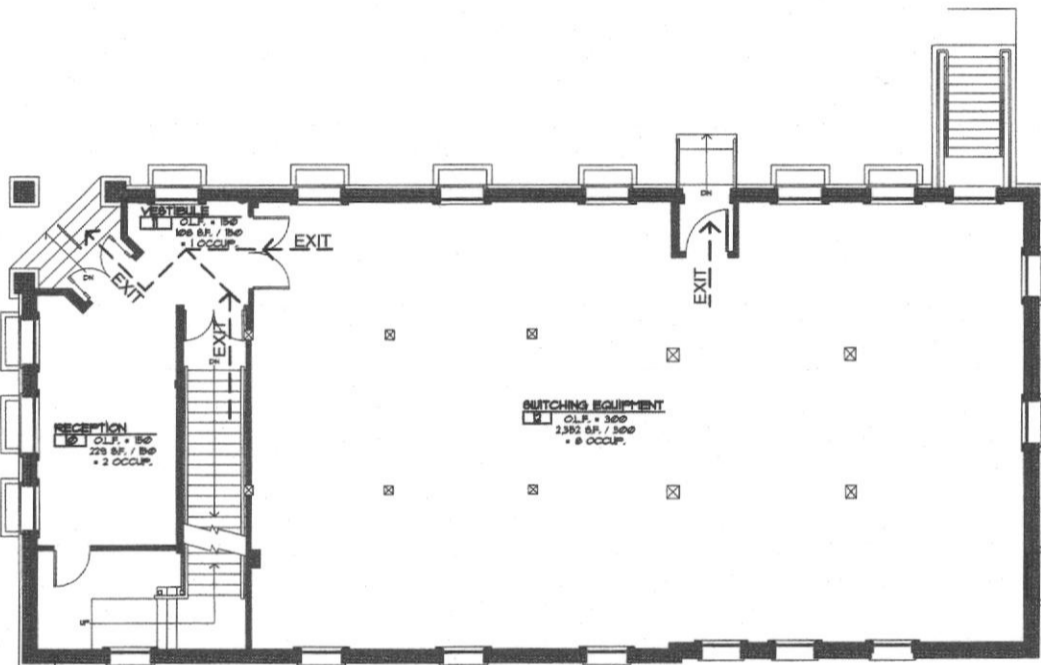
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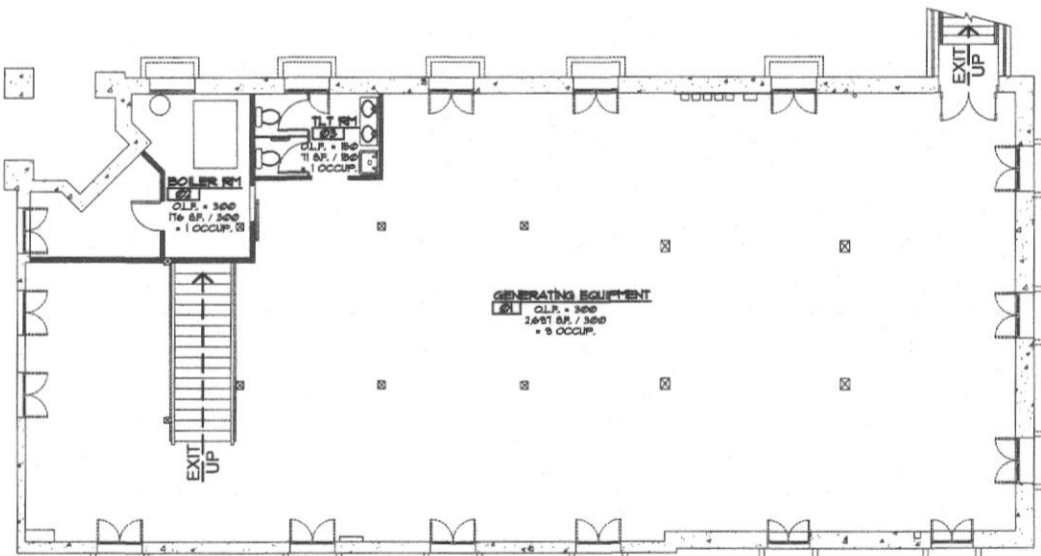
A-2



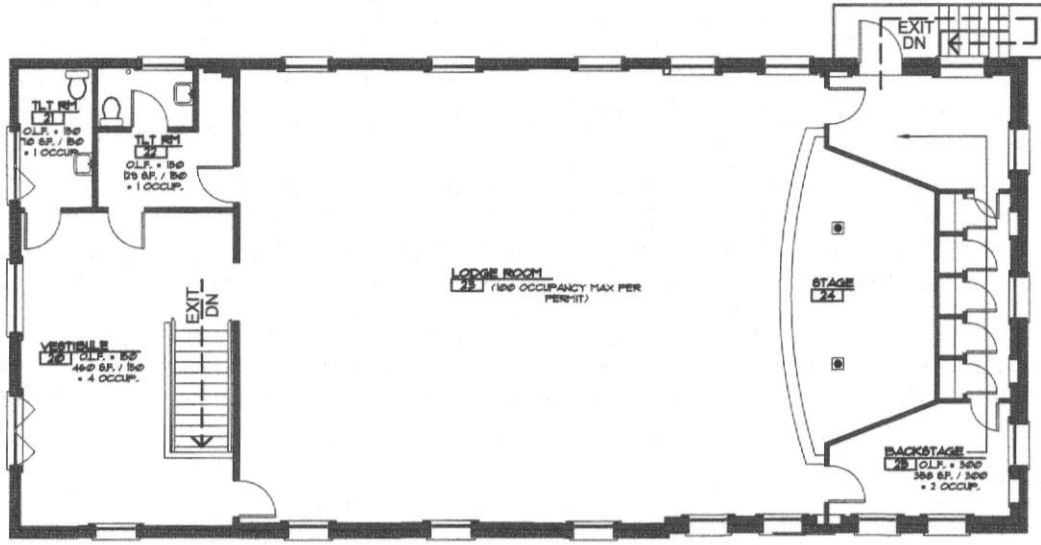
2ND FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 22



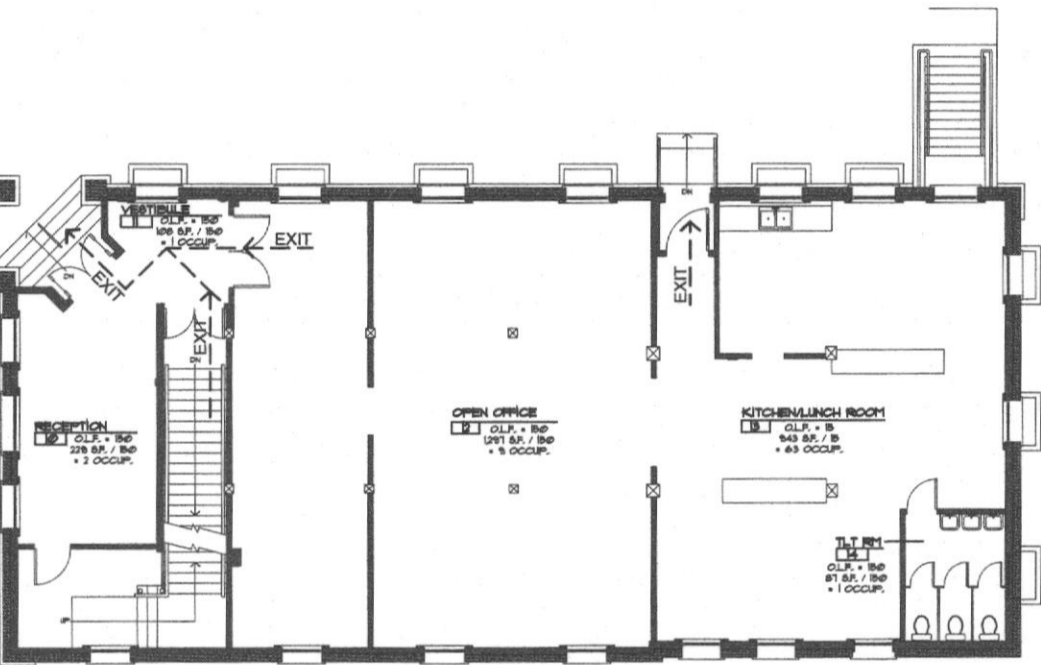
1ST FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 11



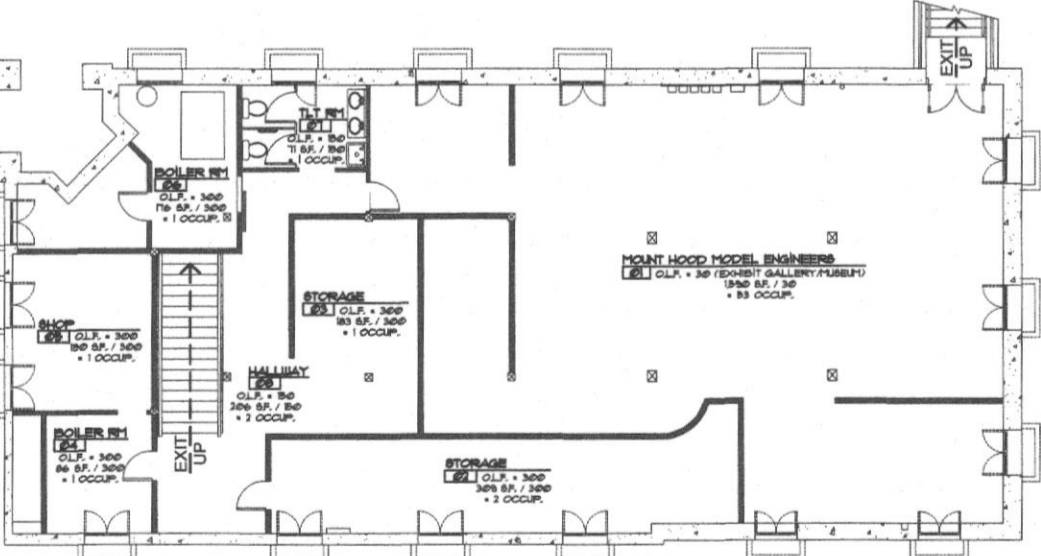
BASEMENT FLOOR PLAN
1/16" = 1'-0" TOTAL BASEMENT OCCUPANT LOAD : 11



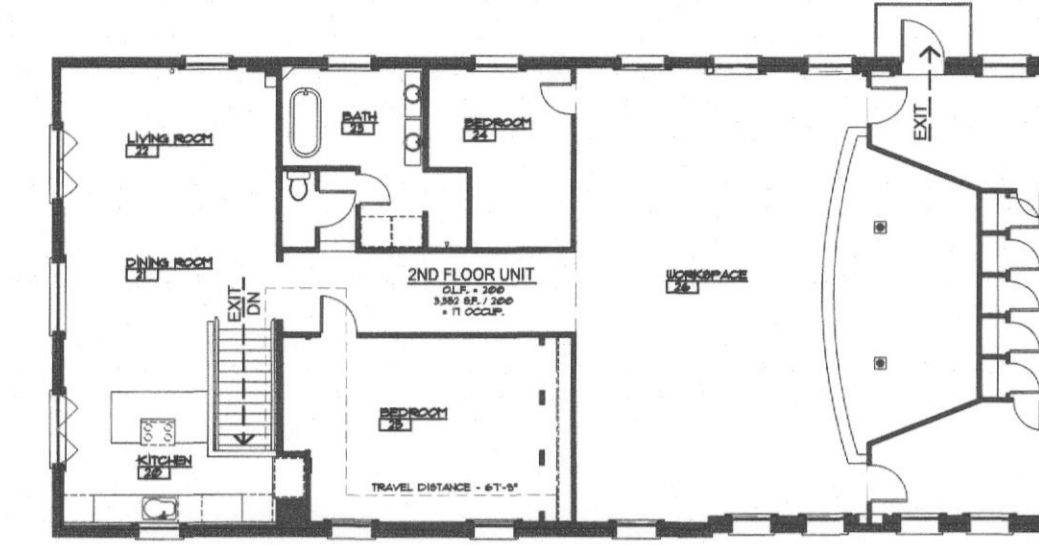
2ND FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 108



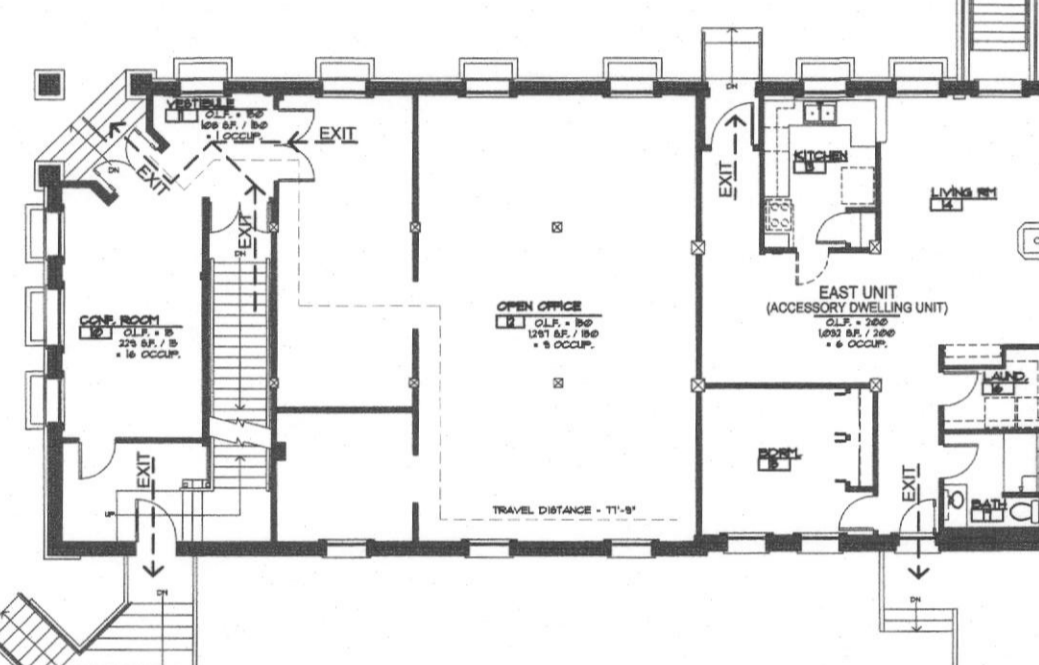
1ST FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 76



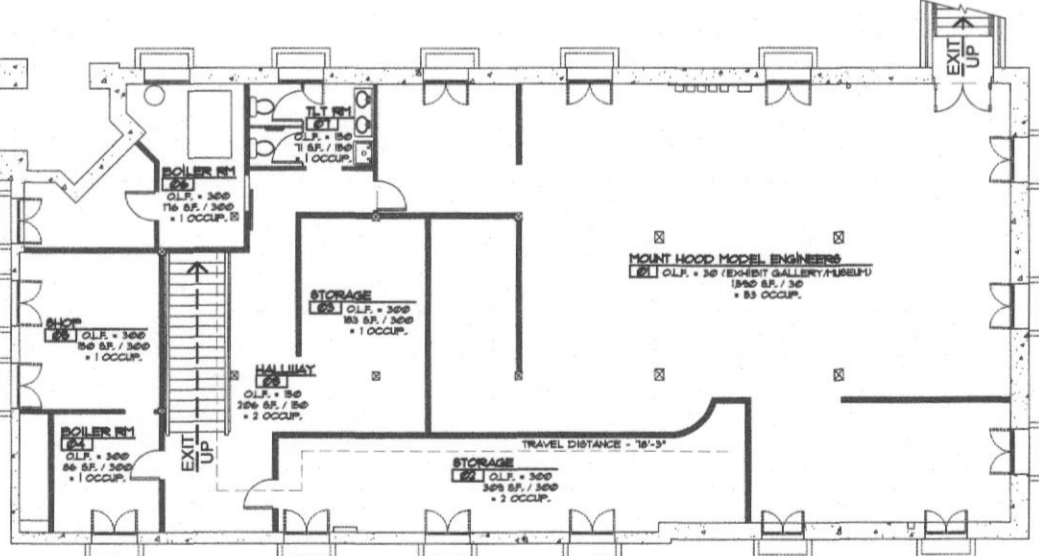
BASEMENT FLOOR PLAN
1/16" = 1'-0" TOTAL BASEMENT OCCUPANT LOAD : 62



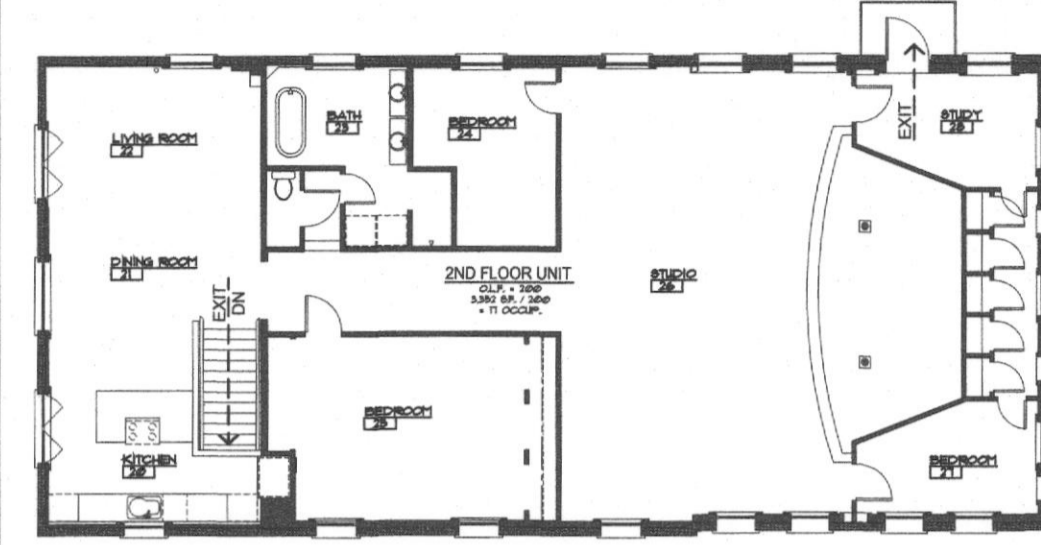
2ND FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 17



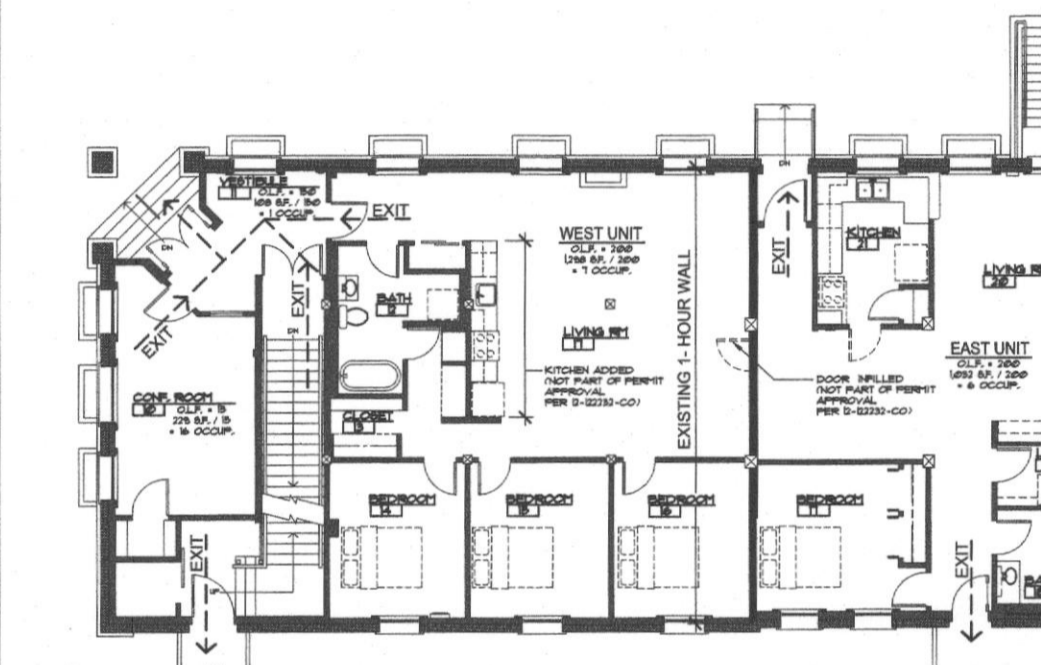
1ST FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 32



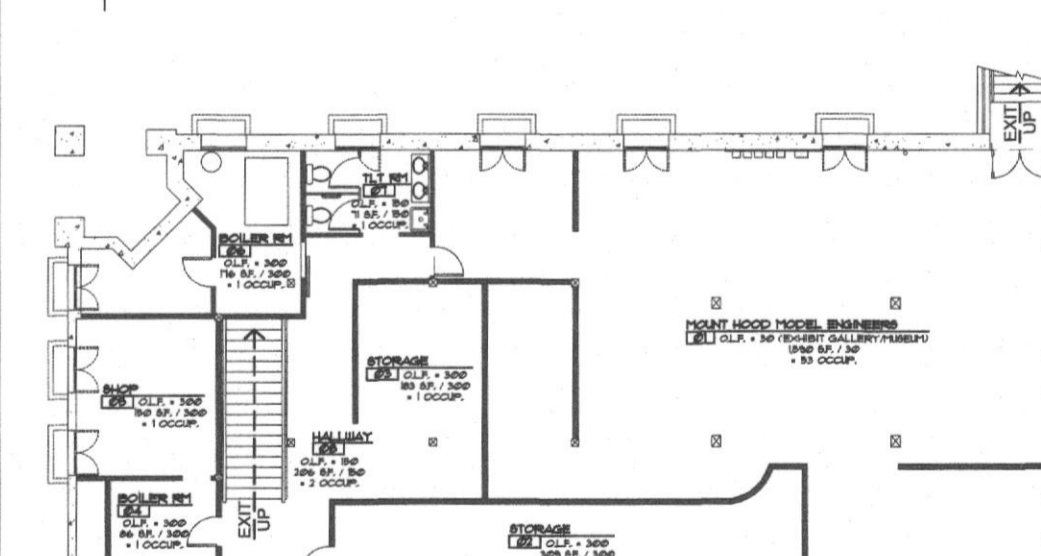
BASEMENT FLOOR PLAN
1/16" = 1'-0" TOTAL BASEMENT OCCUPANT LOAD : 62



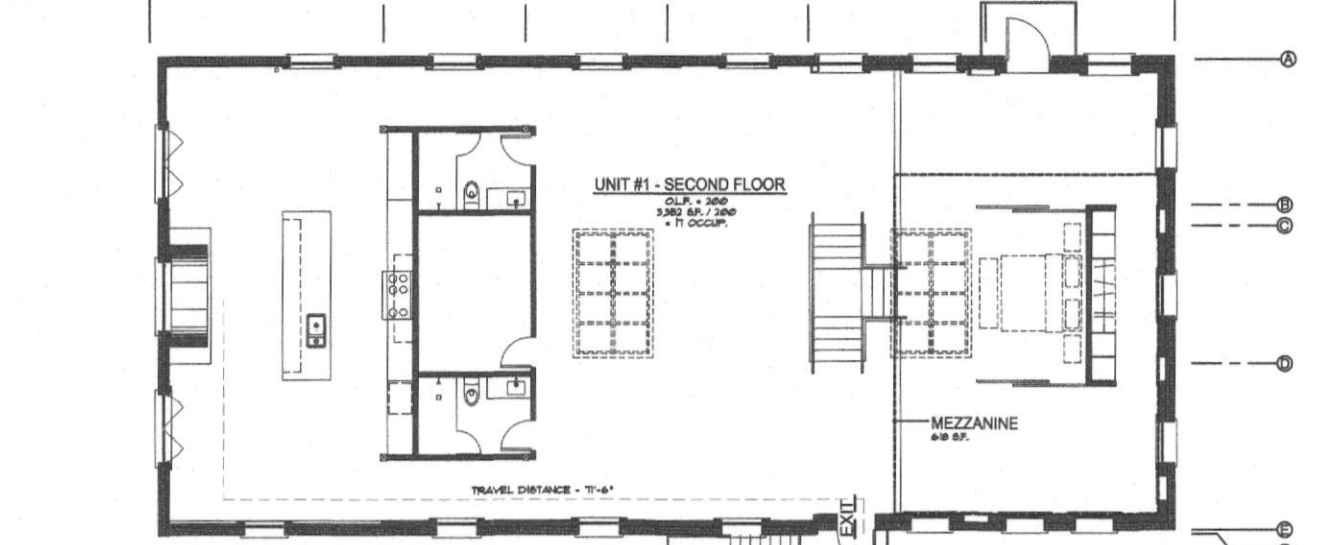
EXISTING 2ND FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 17



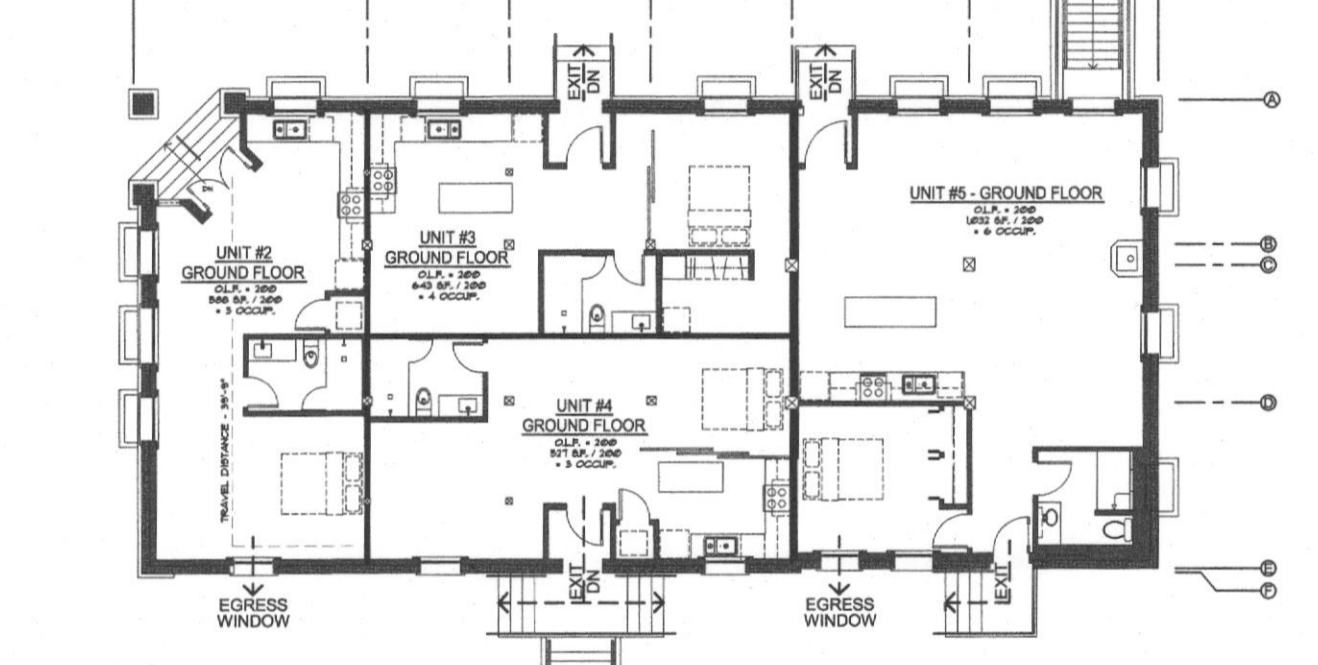
EXISTING 1ST FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 30



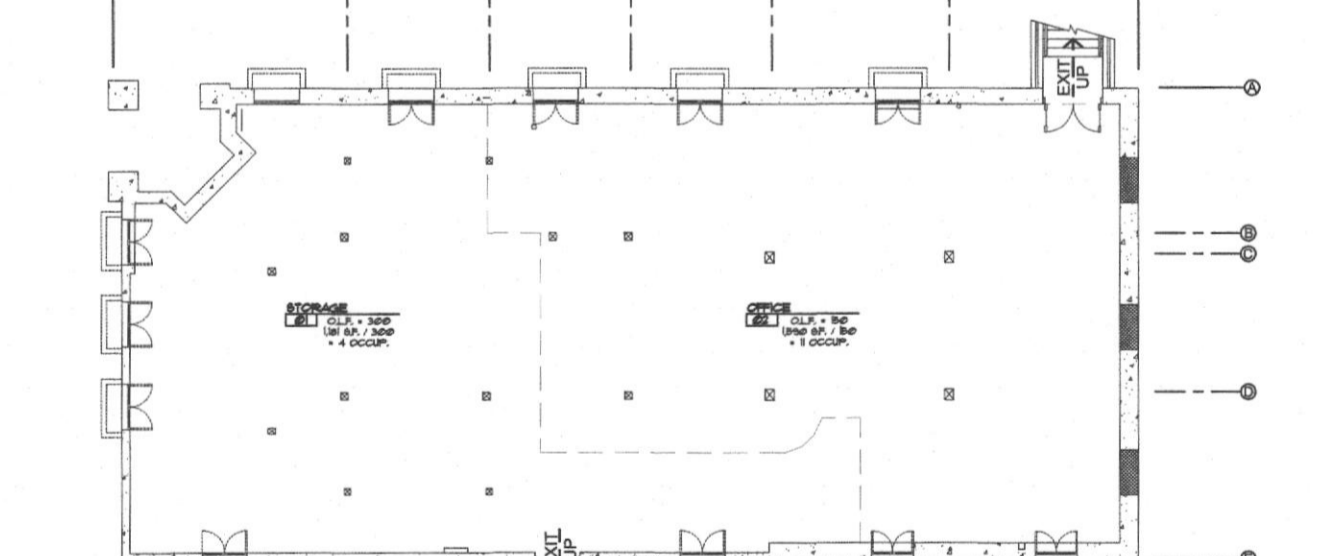
EXISTING BASEMENT FLOOR PLAN
1/16" = 1'-0" TOTAL BASEMENT OCCUPANT LOAD : 62



PROPOSED 2ND FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 17



PROPOSED 1ST FLOOR PLAN
1/16" = 1'-0" TOTAL 1ST FLOOR OCCUPANT LOAD : 17



PROPOSED BASEMENT FLOOR PLAN
1/16" = 1'-0" TOTAL BASEMENT OCCUPANT LOAD : 15

2-UNITS (LIVE/WORK) + MT. HOOD MODEL ENGINEERS
2001
111 TOTAL OCCUPANTS
MERRILL RESIDENCE
BUILDING OCCUPANCY GROUP : R-3, B & S-1

PERMIT #01-140127-CO (Groundfloor-ADU)
PERMIT #01-140127-REV01 (ESTABLISH B AND R3 OCCUPANCIES)
OCC GRP : R-3, B (BASED ON APPEAL) & S-1

2-UNITS (LIVE/WORK) + MT. HOOD MODEL ENGINEERS
2012
109 TOTAL OCCUPANTS
MERRILL RESIDENCE
BUILDING OCCUPANCY GROUP : B & R3

PERMIT #12-122232-CO (Groundfloor - West Unit) OCC GRP: R3
PERMIT #22-126904-CO (Column Replacement) OCC GRP : B & R3

5-UNITS
PROPOSED
49 TOTAL OCCUPANTS
MOORE RESIDENCE
PROPOSED BUILDING OCCUPANCY GROUP : R2, B & S-1

1914
44 TOTAL OCCUPANTS
THE PACIFIC TELEPHONE &
TELEGRAPH COMPANY
BUILDING OCCUPANCY GROUP: 2 REP TELEPHONE EXCHANGE

PERMIT #45475 (BUILDING CONST. PERMIT) OCC GRP: 2
PERMIT #154001 (BUILDING PARTITIONS IN BASEMENT) OCC GRP: 2
PERMIT #187176 (Plaster On Ceiling) OCC GRP: 2
PERMIT #281758 (OfficePartitions) OCC GRP: 2
PERMIT #286634 (Install Cafeteria Per Plan) OCC GRP: 2

1953
246 TOTAL OCCUPANTS
MASONIC LODGE
BUILDING OCCUPANCY GROUP : A-3

PERMIT #327472 (Fraternal Lodge - Capacity under 100) OCC GRP: 1D
PERMIT #347882 (Fire Escape) OCC GRP: 1D
PERMIT #373620 (Widen Exterior Stairs) OCC GRP: B3
PERMIT #382904 (Remove stairway and install new stairs) OCC GRP: B3
PERMIT #499629 (Flag Pole) (NONE STATED)
PERMIT #500530 (Pave lot and basement windows) OCC GRP: F-1
PERMIT #88-103564 (Re-roof) OCC GRP: A-3



01/31/25

02/24/25

05/26/25

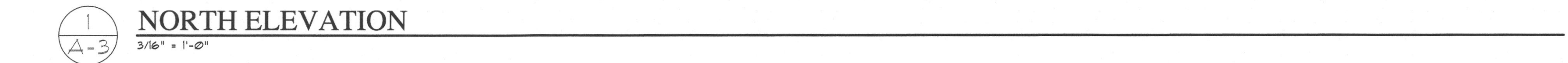
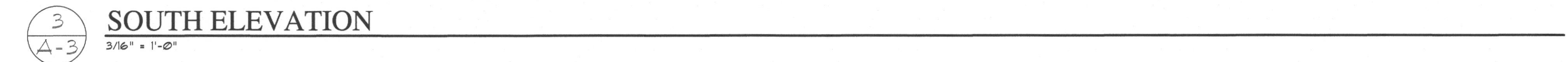
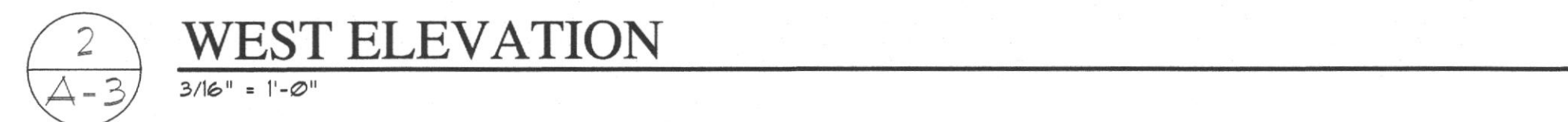
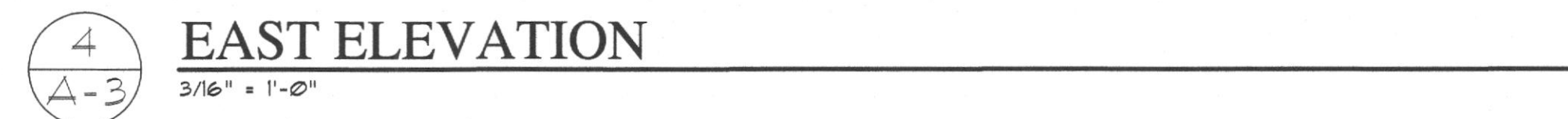
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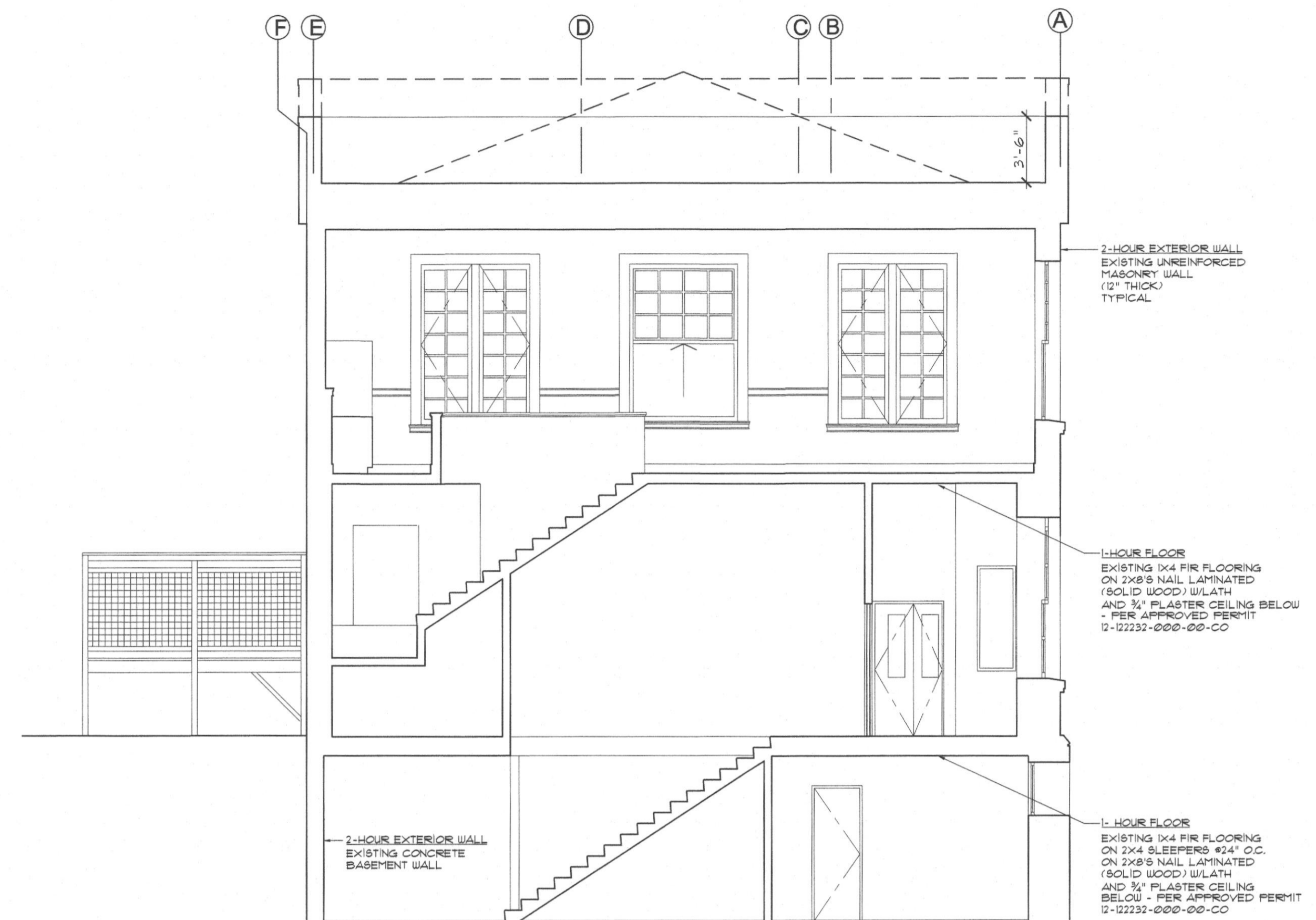
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2
Δ-4
EXISTING SECTION (NORTH-SOUTH)
1/4" = 1'-0"



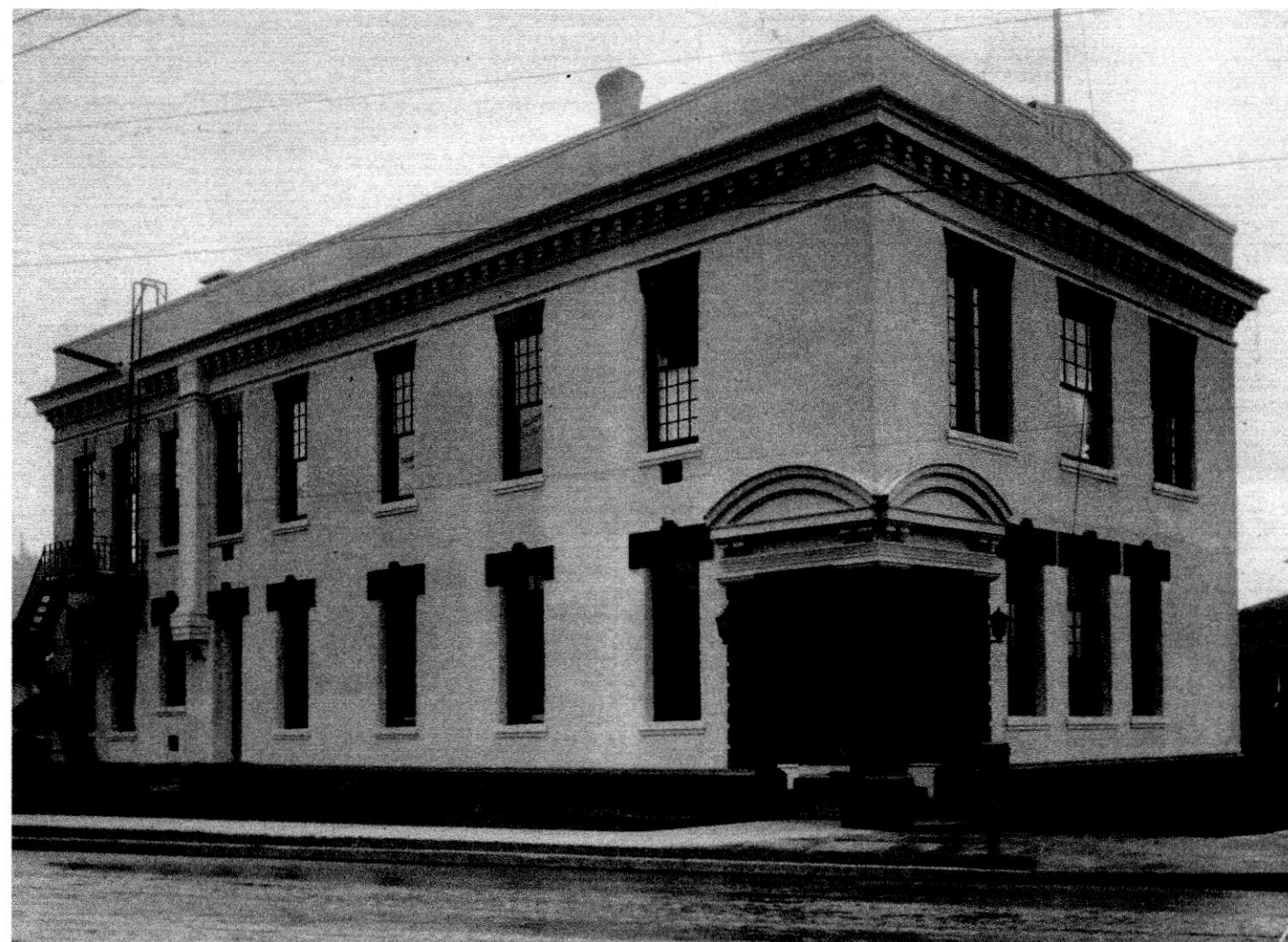
1
Δ-4
EXISTING SECTION (EAST-WEST)
3/16" = 1'-0"



EXISTING EAST SIDE



EXISTING SKY VIEW



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MERRIL RESIDENCE
2ND FLOOR UNIT



MERRIL RESIDENCE
2ND FLOOR UNIT



MERRIL RESIDENCE
BASEMENT
MT. HOOD MODEL ENGINEERS



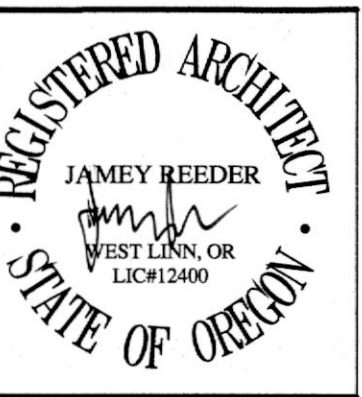
MERRIL RESIDENCE
GROUND FLOOR - EAST UNIT



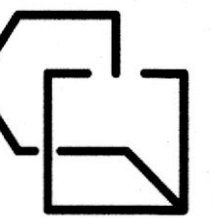
MERRIL RESIDENCE
GROUND FLOOR - WEST UNIT



MERRIL RESIDENCE
GROUND FLOOR - WEST UNIT



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