

# Development Services

## From Concept to Construction

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### APPEAL SUMMARY

**Status:** Decision Rendered - Reconsideration of ID 20216

<b>Appeal ID:</b> 20501	<b>Project Address:</b> 151 SW 1st Ave
<b>Hearing Date:</b> 6/12/19	<b>Appellant Name:</b> Milena Di Tomaso
<b>Case No.:</b> B-009	<b>Appellant Phone:</b> 5038632425
<b>Appeal Type:</b> Building	<b>Plans Examiner/Inspector:</b> John Cooley
<b>Project Type:</b> commercial	<b>Stories:</b> 5 <b>Occupancy:</b> B, M ,S <b>Construction Type:</b> 3-A
<b>Building/Business Name:</b> PAE Living Building	<b>Fire Sprinklers:</b> Yes - Throughout
<b>Appeal Involves:</b> Erection of a new structure	<b>LUR or Permit Application No.:</b> 19-142823-LU
<b>Plan Submitted Option:</b> pdf [File 1]	<b>Proposed use:</b> Office, Retail

### APPEAL INFORMATION SHEET

#### Appeal item 1

**Code Section** 705.8.1, Table 705.8

**Requires** 705.8.1 Allowable area of openings. The maximum area of unprotected and protected openings permitted in an exterior wall in any story of the building shall not exceed percentages specified in Table 705.8.

Table 705.8 Maximum area of exterior wall openings based on fire separation distance and degree of opening protection.

FSD of 3'-0" to less than 5'-0" = 15% allowable area of protected openings or unprotected openings in a sprinklered building. FSD of 5'-0" to less than 10'-0" = 25% allowable area of protected openings or unprotected openings in a sprinklered building. FSD of 30' – 0" or greater = no limit on area of openings, protected or unprotected.

**Proposed Design** Proposed Design: (Describe the alternate methods or materials of construction to be used or that exist. Be as specific as possible)

Please refer to appeal number 20216. We previously submitted an appeal for a design with less windows on the North and West elevations and the no-build easement was granted for 3'-0" distance. The building owners are requesting to add additional unprotected window openings on the North and West and a larger no-build easement will need to be established. The following is the new appeal:

The proposed building is a new 5-story "Living Building Challenge" certified building, adjacent to an existing 3 story building at 126 SW 2nd Ave (Pine Street Market) to the west and a surface parking lot to the north. The exterior wall construction will meet the requirements of Table 602 as indicated on the attached Life Safety Plans (AP-1.6), additionally glazed openings exist as follows.

The proposed design locates a total of twenty (20) glazed openings, including both fixed and operable functions, on the second to fifth stories; built on the wall 8" off of the north property line facing the parking lot. A total of twelve (12) glazed openings on the fourth and fifth stories are proposed to be built at the wall located 4" off the west property line. All the openings on the west are proposed to be fixed non-operable windows. Per 705.8.6.2, the west window openings on level 4 are below the 15' vertical distance from the adjacent roof and will require 3/4-hour protection. We are proposing to use a sprinkler head, which is included in a separate appeal with this application.

No-build easements will be established between the north parking lot property, the west Pine Street Market property, and the west Kell's Restaurant property that will prevent any future developments on those lots to occur within the code required fire separation distance. Per Table 705.8, the fire separation distance shall be between 3'-0" and up to 5'-0" when there is up to 15% of unprotected opening area and 5'-0" and up to 10'-0" when there is up to 25% of unprotected opening area in the exterior wall of a sprinklered building. We have less than 25% unprotected openings on both the North and West elevations at Pine Street Market and are proposing a 5'-0" no-build easement as shown on the attached site plan. We have less than 15% unprotected openings on the West elevation at Kell's Restaurant and are proposing a 3'-0" no-build easement as shown on the attached site plan. In addition, a covenant will be established between each of the adjoining properties to state that in the event of a proposed development on those lots, the windows will be removed, and the openings will be infilled with wall construction equivalent to the fire rating of the exterior wall. At that point the no-build easement can be removed to allow the adjacent development.

Note: Three separate easements will be established with the three adjacent property owners. The opening percentage calculations on the west elevation were calculated individually per each shared property line length.

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**Reason for alternative** The intent of 705.8.1 is to prevent fire, heat and smoke from moving from an adjacent building and impacting the safety of the new building by limiting the amount of protected and unprotected openings based on fire separation distance.

There are no existing structures to the north of the proposed building and no structure above three stories to the west of the proposed project. By establishing a no-build easement, we are preserving the fire separation distance in front of the openings. In the future, if a new building is proposed to be developed to the north and/or the west within the no build easement, the covenant agreement would require the windows on the property line to be filled in with rated exterior wall construction. This set of requirements will ensure the fire separation distance is preserved and allow a trigger for the city to be notified in the event of a planned development.

This proposed alternate is required for the project to meet its targeted certification under the Living Building Challenge. The "Civilized Environment" Imperative requires all workspaces (at the time of certification) to be within 30' of a window and/or manually operable mechanism to provide fresh air and daylight. Without the proposed windows, the building would not be economically viable as an office, as too much of the floor plate could not be regularly occupied as workspace; the project is already being zoned and designed with circulation, mechanical and office support spaces in "non-daylit" zones on the first, second, and third floors. As well, skylights are considered on the fifth floor, but they are limited in area so not to conflict with the necessity to maximize PV placement and renewable energy production to achieve the required net-zero energy performance under LBC, as well the necessity to provide fire department access and circulation around the perimeter of the roof.

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## Appeal item 2

**Code Section** 705.8.6.2

**Requires** 705.8.6.2 Vertical Exposure for buildings on separate lots - Where a new building is to be erected adjacent to an existing building, all opening in the exterior wall of the new building are required to be not less than 3/4 hour when these openings are less than 15' vertically above the roof of the existing building structure. The opening protections are required where the distance between the buildings or structure is less than 15 feet.

**Proposed Design** The proposed building is a new 5-story "Living Building Challenge" certified building, adjacent to an existing 3 story building at 126 SW 2nd Ave (Pine Street Market) to the west and a surface parking lot to the north. The exterior wall construction will meet the requirements of Table 602 as indicated on the attached Life Safety Plans (AP-1.6), additionally glazed openings exist as follows:

On the west elevation a total of twelve (12) glazed openings on the fourth and fifth stories are proposed to be built at the wall located 4" off the west property line. All windows on the 4th floor are within the 15'-0" vertical dimension from the rooftop of the existing adjacent building to the west. All the openings are proposed to be fixed non-operable windows, and no horizontal mullions exist.

Per 705.8.6.2, the west window openings are within the 15' dimension from the adjacent roof and will require a 45 min protective rating. We are proposing to provide a sprinkler on the interior face at the head of each window spaced a minimum of 6" and maximum of 12" from face of glazing. The windows are 4'-4" in width and will each have one sprinkler head centered on the window.

**Reason for alternative** The intent of 705.8.6.2 is to prevent fire, heat and smoke from moving from an adjacent building and impacting the safety of the new building. The code requires any opening with 15' vertical to be protected for 3/4 hour.

All proposed window openings on the 4th floor west elevation that are within the 15' dimension from the adjacent roof will be non-operable, they will have no horizontal mullions and will be provided with a sprinkler on the interior side at the head of each window spaced a minimum of 6" and maximum of 12" from face of glazing. The windows are 4'-4" in width and will each have one sprinkler head centered on the window. This will meet the 3/4 hour rating which provides equal protection as required by the code.

This proposed alternate is required for the project to meet its targeted certification under the Living Building Challenge. The "Civilized Environment" Imperative requires all workspaces (at the time of certification) to be within 30' of a window to provide daylight. Without the proposed windows, the building would not be economically viable as an office, as too much of the floor plate could not be regularly occupied as workspace; the project is already being zoned and designed with circulation, mechanical and office support spaces in "non-daylit" zones on the first, second, and third floors.

**Appeal item 3****Code Section** 602.3

**Requires** 602.3 – Type III. Type III construction is that type of construction in which the exterior walls are of noncombustible materials and the interior building elements are of any material permitted by this code. Fire-retardant-treated wood framing complying with Section 2303.2 shall be permitted within exterior wall assemblies of 2-hour rating or less.

**Proposed Design** The proposed project is a 5 story "Living Building Certified" Type IIIA office building with retail use on the ground floor. The primary structure is glulam column and beam with 5-ply Cross Laminated Timber (CLT) panels as the floor framing w/ 3.5" concrete topping slab at each level including the

roof. Per Table 601, floor framing is required to be 1-hour rated. The floor rating requirement is met by concrete topping over the floor framing. The floor framing is supported by glulam columns and beams and concrete shear walls. All columns are within the interior of the building and do not engage the exterior wall. The exterior wall is non-bearing and either 0 or 1 hour rated per Table 602, as indicated on the attached life safety plans (Sheet AP1.6). The proposed floor framing uses the CLT panels to extend into the exterior wall to carry the load of the non-bearing walls on all sides of the building. Refer to attached typical details (AP1.7).

The condition where the CLT panel floor framing intersects with the exterior wall, the concrete continues under the wall framing. A 12" long 6"x6" steel angle attaches to the edge of the CLT panel every 7'-6" along the full length of the façade, which supports the ledger angle for the brick veneer. Where the angle does not exist, 5/8" gypsum sheathing extends in front of the edge of the CLT panel. The CLT panel is completely encapsulated within the exterior wall with concrete slab on top, either metal angle or 5/8" gypsum sheathing on the exterior edge, and metal framing with rockwool insulation at the underside. At locations where a wall rating is required, the exterior wall will be sealed to the floor structure.

**Reason for alternative** Per 602.3, combustible material is prohibited within the exterior walls. The Cross-laminated timber floor panels are wood and by code, viewed as a combustible material. This section allows the use of wood if it is Fire-retardant treated per section 2303.2, though the CLT panels are too large to be fire-retardant treated, and thus an alternate solution is required to protect the CLT panel in the wall assembly.

We propose that the CLT floor panel is encapsulated by the wall it is located in. The edge of the CLT panel in question will be covered by the wall and limit its exposure to fire. Furthermore, the language stated in the 2015 IBC for Type IV Heavy Timber Buildings has a provision for Cross-laminated timber floors that is applicable to this project:

"602.4.2 Cross-laminated timber in exterior walls Cross-laminated timber complying with Section 2303.1.4 shall be permitted within exterior wall assemblies with a 2-hour rating or less, provided the exterior surface of the cross-laminated timber is protected by one of the following: 1) Fire-retardant-treated wood sheathing complying with Section 2303.2 and not less than 15/32 inch thick. 2) Gypsum board not less than ½ inch thick; or 3) A noncombustible material"

Using Item #2 and #3, the exterior surface of the edge of the CLT panel will be protected by a non-combustible material (steel framing and concrete) on the top and bottom, and gypsum board at the side; therefore protecting each edge of the panel within the exterior wall.

## Appeal item 4

**Code Section** Section 1027.1 Exception 1.2

**Requires** 1027.1 General – Exits shall discharge directly to the exterior of the building. The exit discharge shall be at grade or shall provide direct access to grade. The exit discharge shall not reenter the building. The combined use of Exceptions 1 and 2 shall not exceed 50 percent of the number and capacity of the required exits.

Exceptions: 1. A maximum of 50 percent of the number and capacity of interior exit stairways and ramps is permitted to egress through areas on the level of exit discharge provided all of the following are met:

- 1.1. Such enclosures egress to a free and unobstructed path of travel to an exterior exit door and such exit is readily visible and identifiable from the point of termination of the enclosure.
- 1.2. The entire area of the level of exit discharge is separated from areas below by construction conforming to the fire-resistance rating for the enclosure.
- 1.3. The egress path from the interior exit stairway and ramp on the level of exit discharge is



protected throughout by an approved automatic sprinkler system. All portions of the level of exit discharge with access to the egress path shall either be protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, or separated from the egress path in accordance with the requirements for the enclosure of interior exit stairways or ramps.

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**Proposed Design**

The proposed building is a 5 story Type IIIA construction. It will have two interior exit stairs in the central core. Stair A is a 2 hour enclosure and will exit directly to the exterior of the building via a 2 hour rated exit passageway which extends the exit from the core to the exterior of the building (refer to previously granted appeal 19095 for use of fire curtain in lobby). Stair B is a 2 hour enclosure that will exit through the ground floor lobby with direct visual access to the lobby exit door. Per 1027.1, a maximum of 50 percent of the number and capacity of interior exit stairways and ramps is permitted to egress through areas on the level of exit discharge provided all three exceptions to section 1021.1 Exception 1 are met.

Upon exit from Stair B on the level of exit discharge, the exterior door is readily visible, and a clear and unobstructed path is provided. The building is completely protected throughout with an automatic sprinkler system. Below the lobby is an unoccupied 71,000 gallon rainwater collection cistern constructed of cast in place concrete slab, walls, and ceiling; with no combustible materials present and filled with water. The primary maintenance access to the cistern is located in the mechanical room on the NW corner of the ground floor. A secondary entrance hatch is proposed within the lobby space to provide access to the overflow piping is located within the cistern at that location, primarily to be used in the case of a malfunction of the piping, but not regularly accessed. The floor access hatch is proposed to be fire rated to maintain the 2 hour rating requirement of the stair enclosure, it will be flush mounted with the adjacent floor finish so as not to obstruct the path of egress.

Please refer to drawing AP1.8.

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**Reason for alternative** Per 1027.1, a maximum of 50 percent of the number and capacity of interior exit stairways and ramps is permitted to egress through areas on the level of exit discharge provided all three exceptions to section 1021.1 Exception 1 are met.

Stair B is one of two required exits within the building, so no more than 50% of the exits discharge through the lobby on the level of exit discharge.

Exception 1.1 is met by providing a readily visible, clear, and unobstructed path to the point of exit discharge at the lobby entry doors.

Exception 1.2 is met by maintaining a 2 hour rated separation between the below grade rainwater cistern. The proposed floor hatch will have a 2 hour rating and be flush with adjacent floor finishes.

Exception 1.3 is met by the automatic sprinkler system provided throughout the building.

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## APPEAL DECISION

**1a. Openings in the North wall within 3 feet of the property line with no build easement: Granted provided the easement is a minimum of 4 feet, 4 inches wide for the full width of the building.**

**Appellant must contact Nancy Thorington (503-823-7023) for more information prior to writing the no build easement.**

**The easement must include language that establishes the edge of the easement on the adjacent lot as the implied property line for the purpose of determining fire separation distance for future development on the adjacent lot.**

**The unrecorded easement must be reviewed and approved by BDS prior to recording. A copy of the**

recorded easement must then be provided to BDS prior to plan review approval.

**1b. Openings in the West wall within 3 feet of the property line with no build easement above the roof of the adjacent buildings:** Granted provided the easement is a minimum of 4 feet, 8 inches wide x 100 feet in length for the full length of the adjacent Pine Street Market building and 2 feet 8 inches x 17 feet long adjacent to the Glisan building.

**Appellant must contact Nancy Thorington (503-823-7023) for more information prior to writing the no build easement.**

**The easement must include language that establishes the edge of the easement on the adjacent lot as the implied property line for the purpose of determining fire separation distance for future development on the adjacent lot.**

**The unrecorded easement must be reviewed and approved by BDS prior to recording. A copy of the recorded easement must then be provided to BDS prior to plan review approval.**

**2. Type 13 water curtain sprinkler protection at non-fire rated openings in buildings with vertical exposure on separate lots:** Granted provided windows are non-operable and sprinklers are spaced not more than 6 feet apart and placed a minimum of 6 inches and a maximum of 12 inches from the opening (s) and a maximum of 12 inches below the ceiling. Sprinklers are to be installed on the occupied side of the openings. A separate permit from the Fire Marshal's Office is required.

**Note: This decision doesn't grant any mechanical openings.**

**3. Combustible material within Type III exterior non-bearing walls:** Granted provided Code Guide Condition #17 details are verified as part of permit plan review.

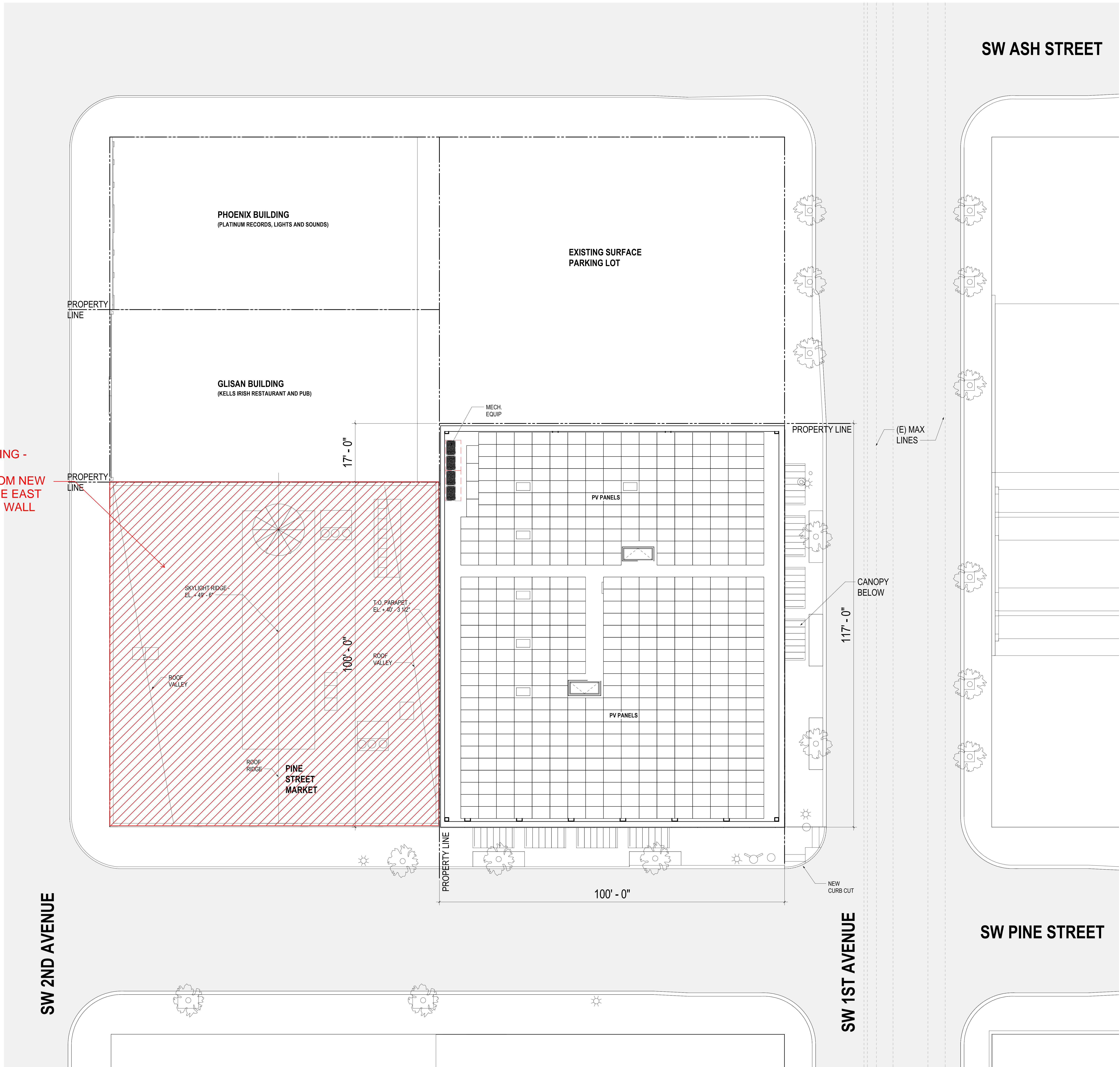
**4. Second exit through lobby with 2 hour flush mounted access hatch:** Granted as proposed.

**Appellant may contact John Butler (503 823-7339) with questions.**

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 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to [www.portlandoregon.gov/bds/appealsinfo](http://www.portlandoregon.gov/bds/appealsinfo), call (503) 823-7300 or come in to the Development Services Center.

EXISTING BUILDING -  
SEPARATED FROM NEW  
BUILDING TO THE EAST  
BY 2-HOUR FIRE WALL





WEST ELEVATION AT KELL'S RESTAURANT, 112-118 SW 2ND AVE

LEVEL 4 - 6.9% GLAZING  
PROTECTED OPENINGS

LEVEL 5 - 6.9% GLAZING  
UNPROTECTED OPENINGS

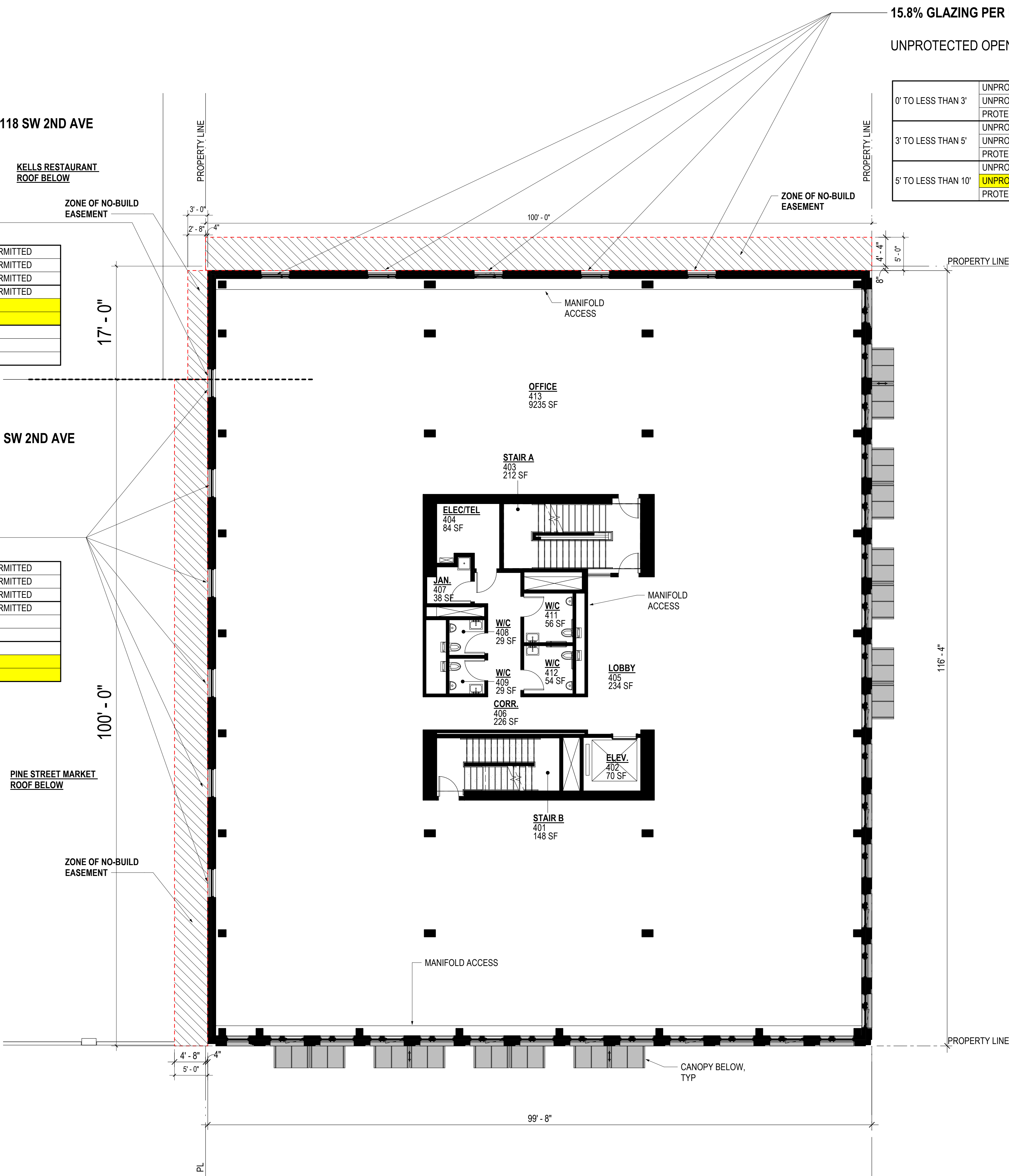
0' TO LESS THAN 3'	UNPROTECTED, NONSPRINKLERED	NOT PERMITTED
	UNPROTECTED, SPRINKLERED	NOT PERMITTED
	PROTECTED	NOT PERMITTED
3' TO LESS THAN 5'	UNPROTECTED, NONSPRINKLERED	NOT PERMITTED
	UNPROTECTED, SPRINKLERED	15%
	PROTECTED	15%
5' TO LESS THAN 10'	UNPROTECTED, NONSPRINKLERED	10%
	UNPROTECTED, SPRINKLERED	25%
	PROTECTED	25%

WEST ELEVATION AT PINE STREET MARKET, 126 SW 2ND AVE

LEVEL 4 - 17.8% GLAZING  
PROTECTED OPENINGS

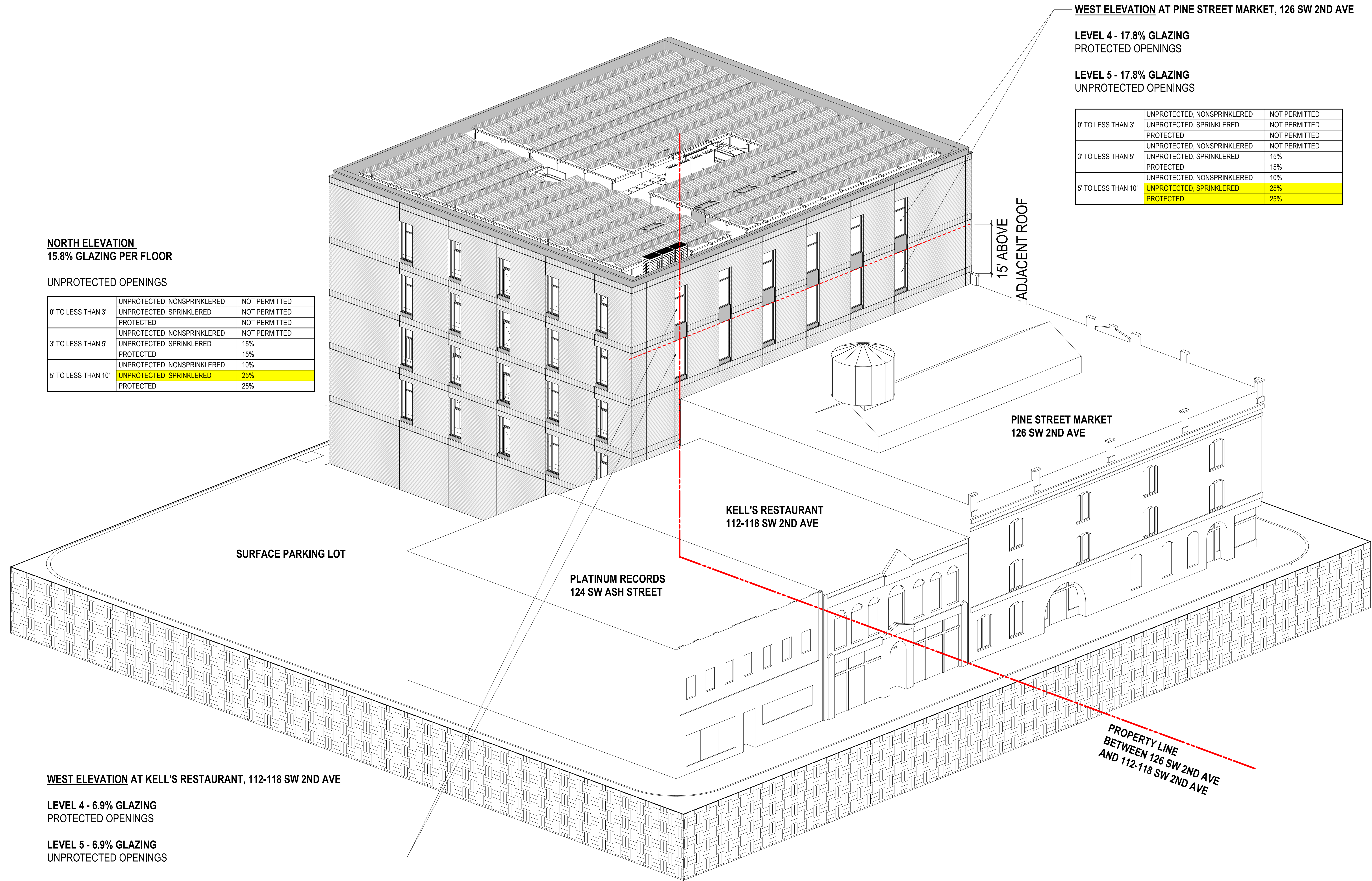
LEVEL 5 - 17.8% GLAZING  
UNPROTECTED OPENINGS

0' TO LESS THAN 3'	UNPROTECTED, NONSPRINKLERED	NOT PERMITTED
	UNPROTECTED, SPRINKLERED	NOT PERMITTED
	PROTECTED	NOT PERMITTED
3' TO LESS THAN 5'	UNPROTECTED, NONSPRINKLERED	NOT PERMITTED
	UNPROTECTED, SPRINKLERED	15%
	PROTECTED	15%
5' TO LESS THAN 10'	UNPROTECTED, NONSPRINKLERED	10%
	UNPROTECTED, SPRINKLERED	25%
	PROTECTED	25%

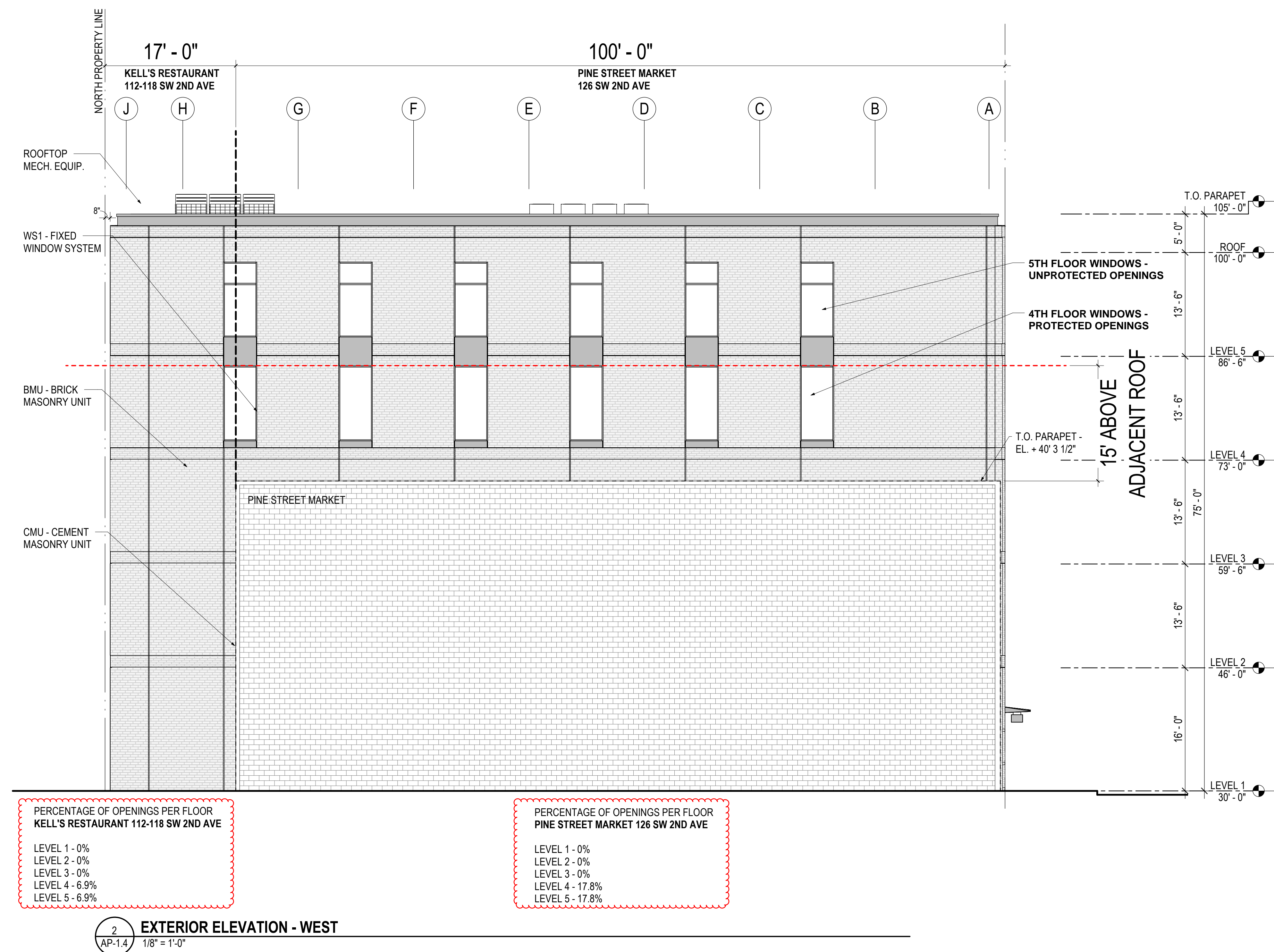
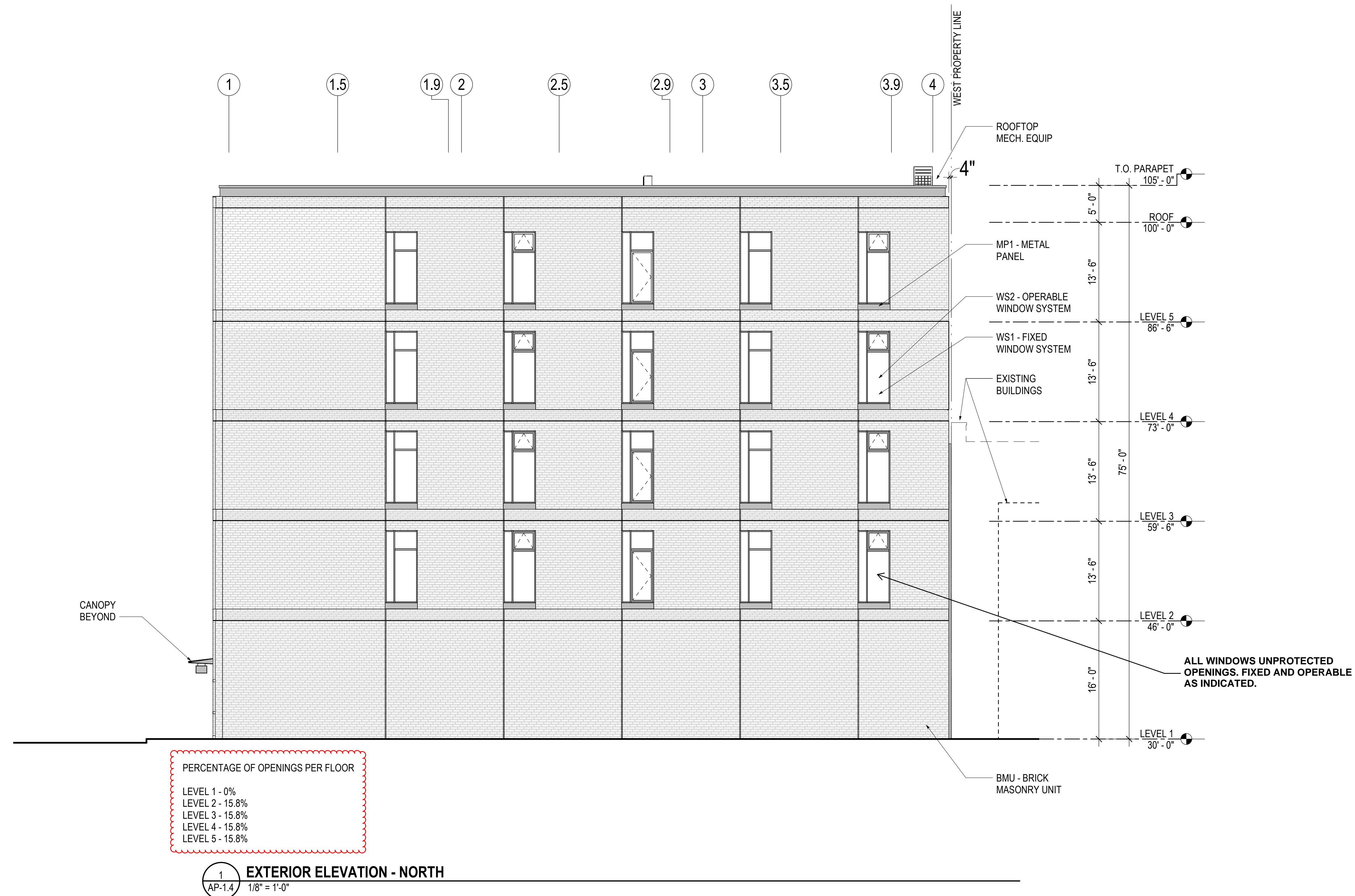


1 FLOOR PLAN - LEVEL 04, APPEAL  
AP-1.2 1/8" = 1'-0"

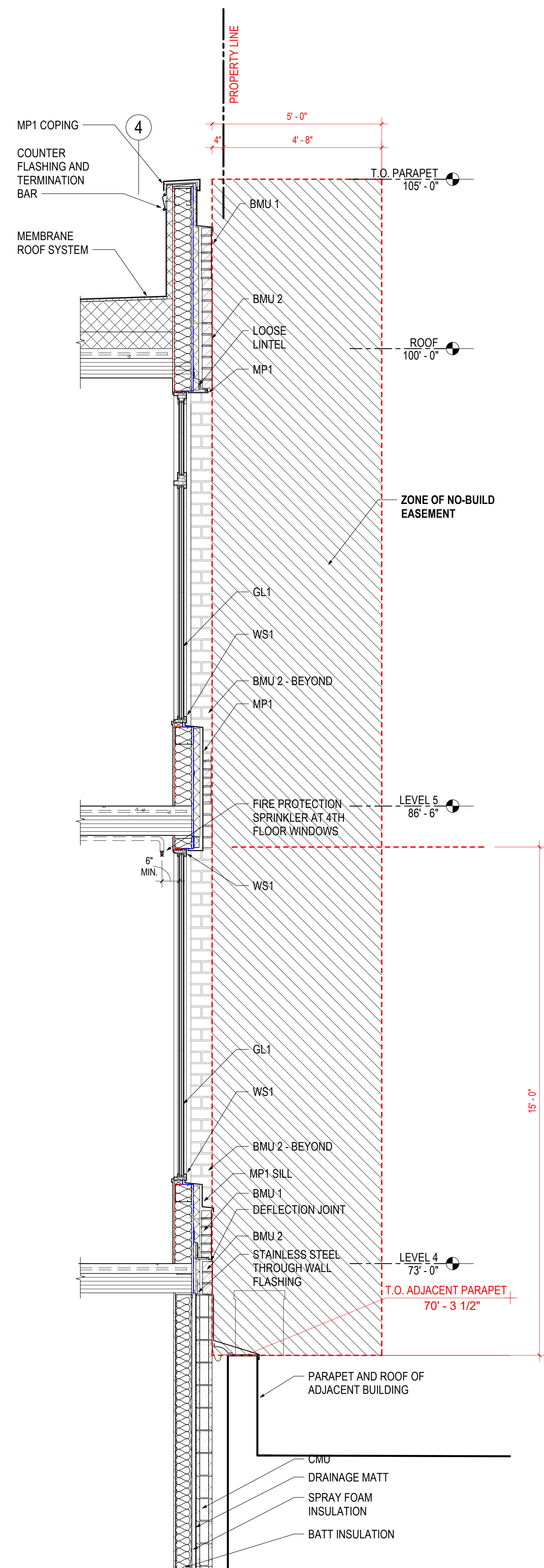




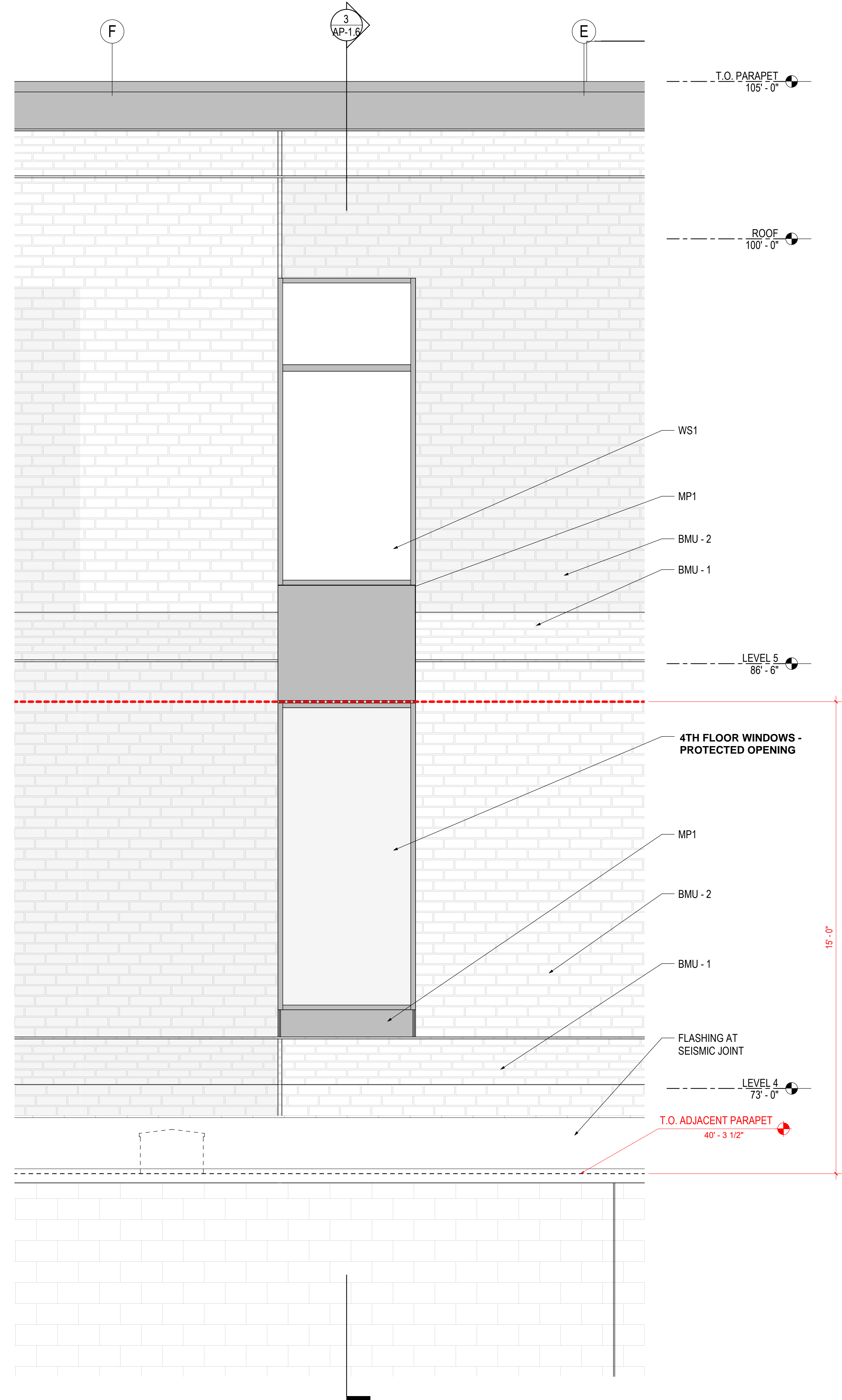




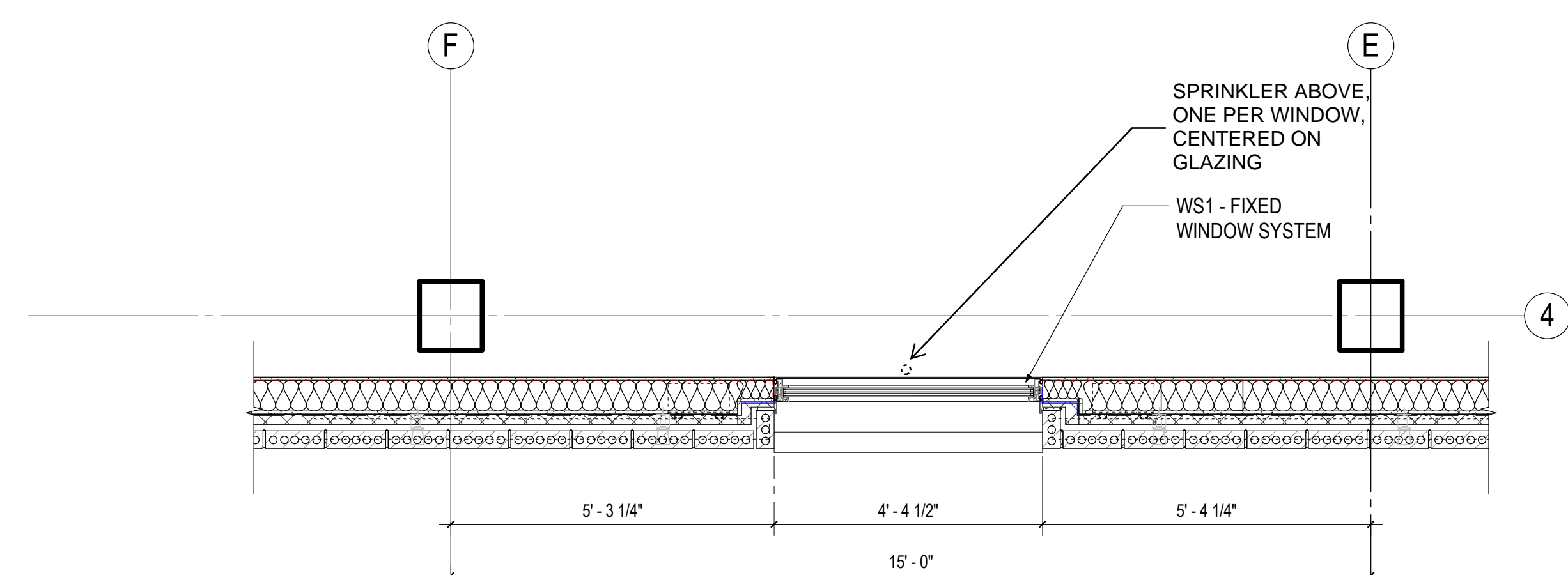




3 SECTION, WALL - WEST @ SPRINKLER  
AP-1.6 1/2" = 1'-0"

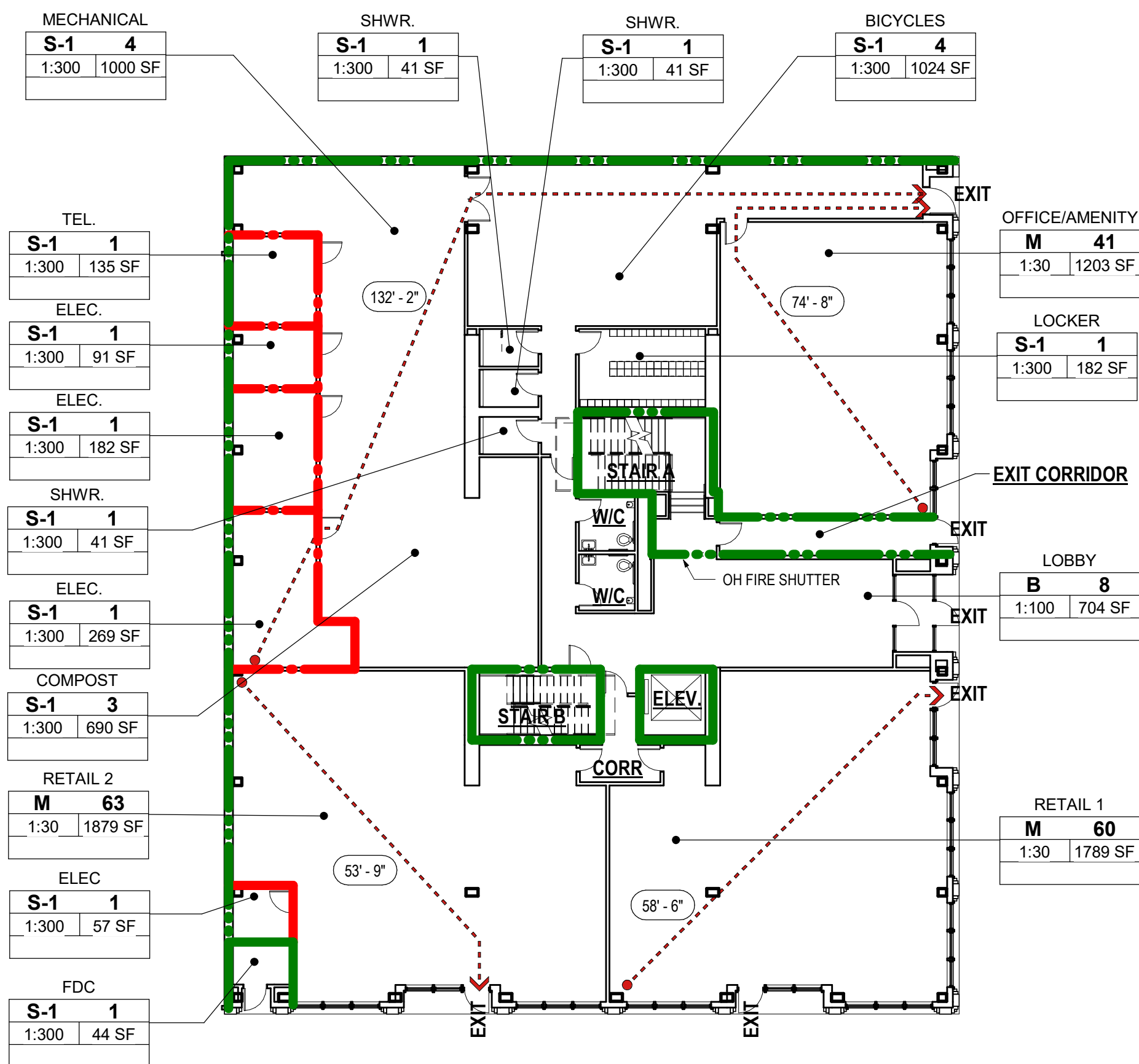


1 ELEVATION, EXTERIOR ENLARGED- WEST  
AP-1.6 1/2" = 1'-0"



2 PLAN, ENLARGED - LEVEL 5 - WEST  
AP-1.6 1/2" = 1'-0"



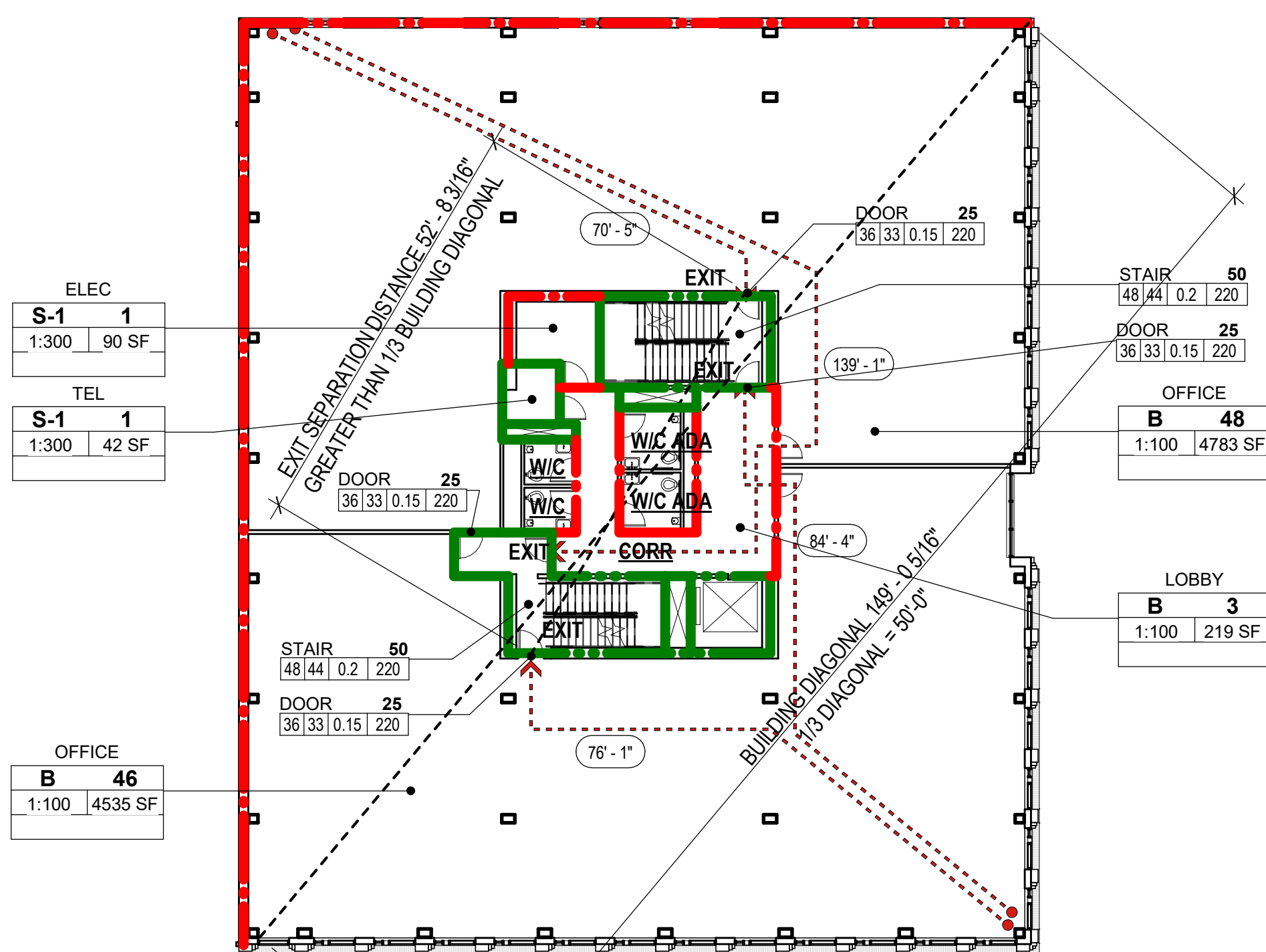


1 PLAN, LIFE SAFETY - LEVEL 01  
1/16" = 1'-0"

AREA - 10,558 GSF  
OCCUPANCY CLASSIFICATION: BUSINESS W / M / S  
CONSTRUCTION TYPE: IIIA  
OCCUPANT LOAD: 200 PERSONS (100 GSF/PERSON)  
TRAVEL DISTANCE:  
COMMON PATH - 100' MAX (75' MAX AT RETAIL)  
EXIT ACCESS - 300' MAX (250' MAX AT RETAIL)  
EXIT DOOR WIDTH:  
REQUIRED - 9"  
PROVIDED - 36"

Occupant Load - Level 1				
Level	Occupancy Group	Occupant Load Factor	Area	Occupant Load
LEVEL 1	B	100	704 SF	8
LEVEL 1	B	100	87 SF	1
LEVEL 1	M	30	1203 SF	41
LEVEL 1	M	30	1789 SF	60
LEVEL 1	M	30	1879 SF	63
LEVEL 1	S-1	300	1024 SF	4
LEVEL 1	S-1	300	182 SF	1
LEVEL 1	S-1	300	41 SF	1
LEVEL 1	S-1	300	135 SF	1
LEVEL 1	S-1	300	91 SF	1
LEVEL 1	S-1	300	182 SF	1
LEVEL 1	S-1	300	269 SF	1
LEVEL 1	S-1	300	57 SF	1
LEVEL 1	S-1	300	44 SF	1
LEVEL 1	S-1	300	690 SF	3
LEVEL 1	S-1	300	1000 SF	4
LEVEL 1	S-1	300	41 SF	1

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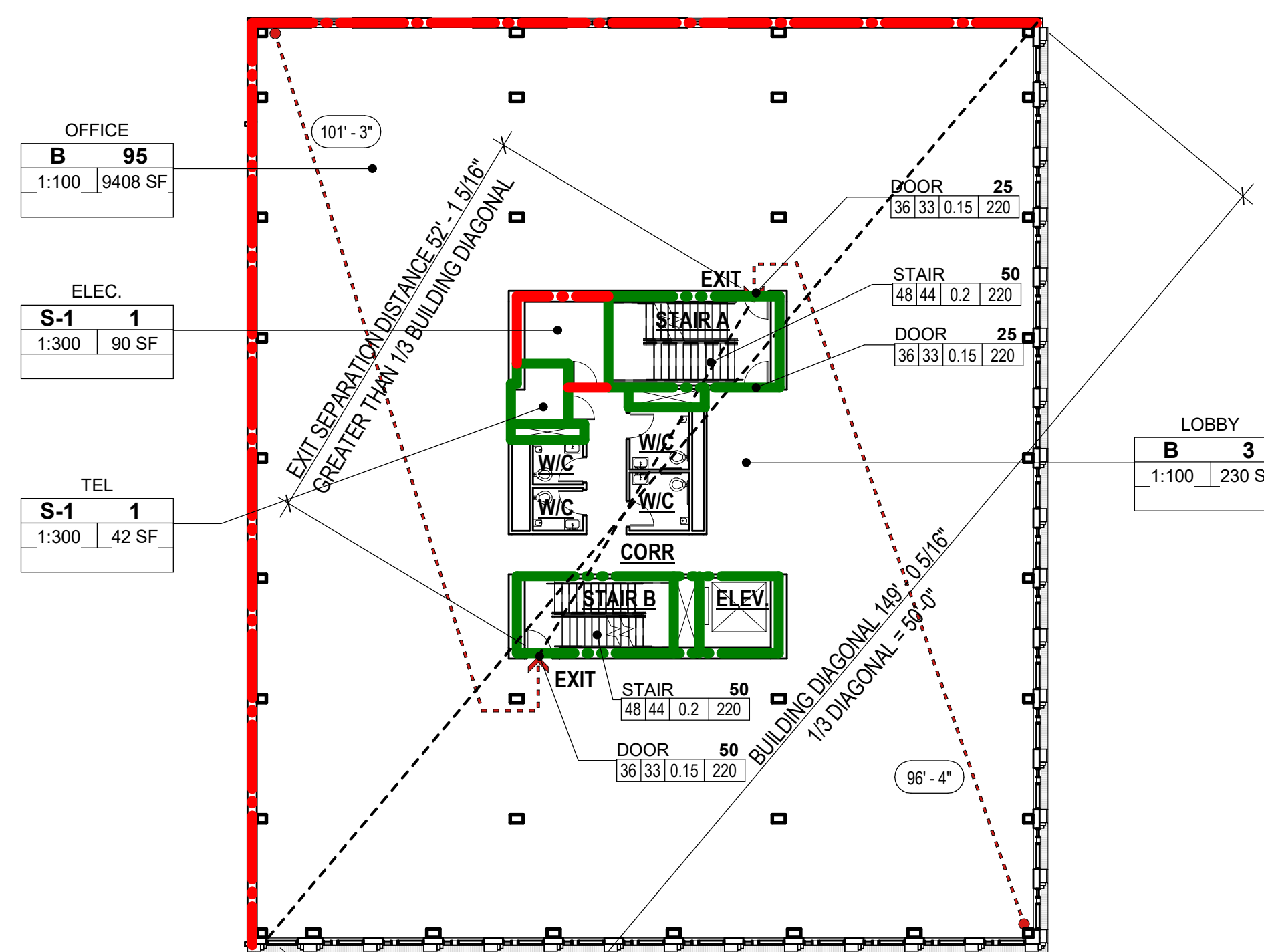


2 PLAN, LIFE SAFETY - LEVEL 02  
1/16" = 1'-0"

AREA - 10,813 GSF  
OCCUPANCY CLASSIFICATION: BUSINESS  
CONSTRUCTION TYPE: IIIA  
EXITS REQUIRED - 2  
OCCUPANT LOAD: 104 PERSONS (100 GSF/PERSON)  
TRAVEL DISTANCE:  
COMMON PATH - 100' MAX  
EXIT ACCESS - 300' MAX  
EXIT STAIR WIDTH:  
REQUIRED - 104 x 2 = 20.8' / 2 EXITS = 11"  
PROVIDED - 52"  
EXIT DOOR WIDTH:  
REQUIRED - 104 x 15 = 15.6' / 2 EXITS = 8"  
PROVIDED - 36"

Occupant Load - Level 2				
Level	Occupancy Group	Occupant Load Factor	Area	Occupant Load
LEVEL 2	B	100	4783 SF	48
LEVEL 2	B	100	4535 SF	46
LEVEL 2	B	100	219 SF	3
LEVEL 2	S-1	300	42 SF	1
LEVEL 2	S-1	300	90 SF	1

99

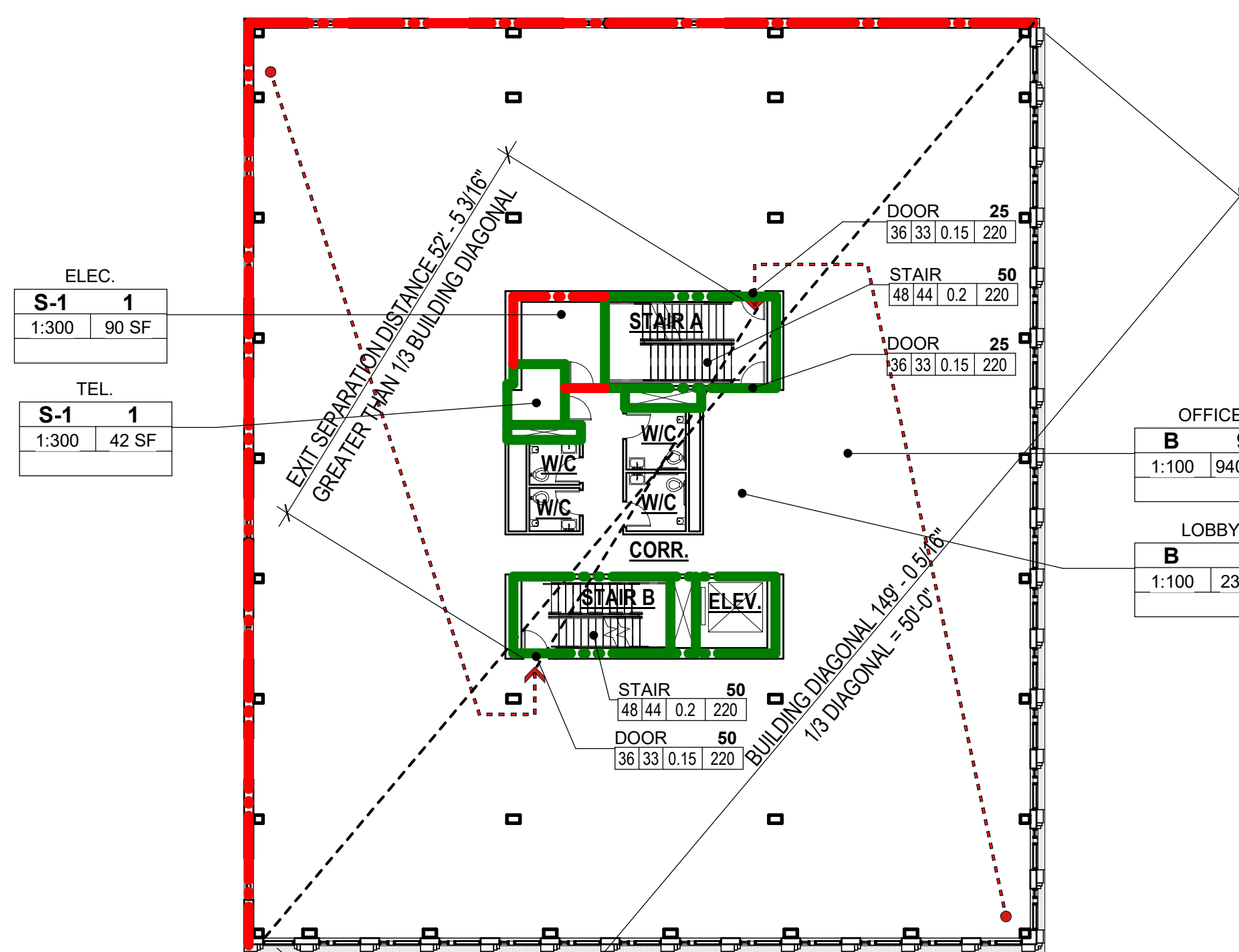


3 PLAN, LIFE SAFETY - LEVEL 03  
1/16" = 1'-0"

AREA - 10,819 GSF  
OCCUPANCY CLASSIFICATION: BUSINESS  
CONSTRUCTION TYPE: IIIA  
EXITS REQUIRED - 2  
OCCUPANT LOAD: 103 PERSONS (100 GSF/PERSON)  
TRAVEL DISTANCE:  
COMMON PATH - 100' MAX  
EXIT ACCESS - 300' MAX  
EXIT STAIR WIDTH:  
REQUIRED - 103 x 2 = 20.6' / 2 EXITS = 11"  
PROVIDED - 52"  
EXIT DOOR WIDTH:  
REQUIRED - 103 x 15 = 15.45' / 2 EXITS = 8"  
PROVIDED - 36"

Occupant Load - Level 3				
Level	Occupancy Group	Occupant Load Factor	Area	Occupant Load
LEVEL 3	B	100	9408 SF	95
LEVEL 3	B	100	230 SF	3
LEVEL 3	S-1	300	42 SF	1
LEVEL 3	S-1	300	90 SF	1

100

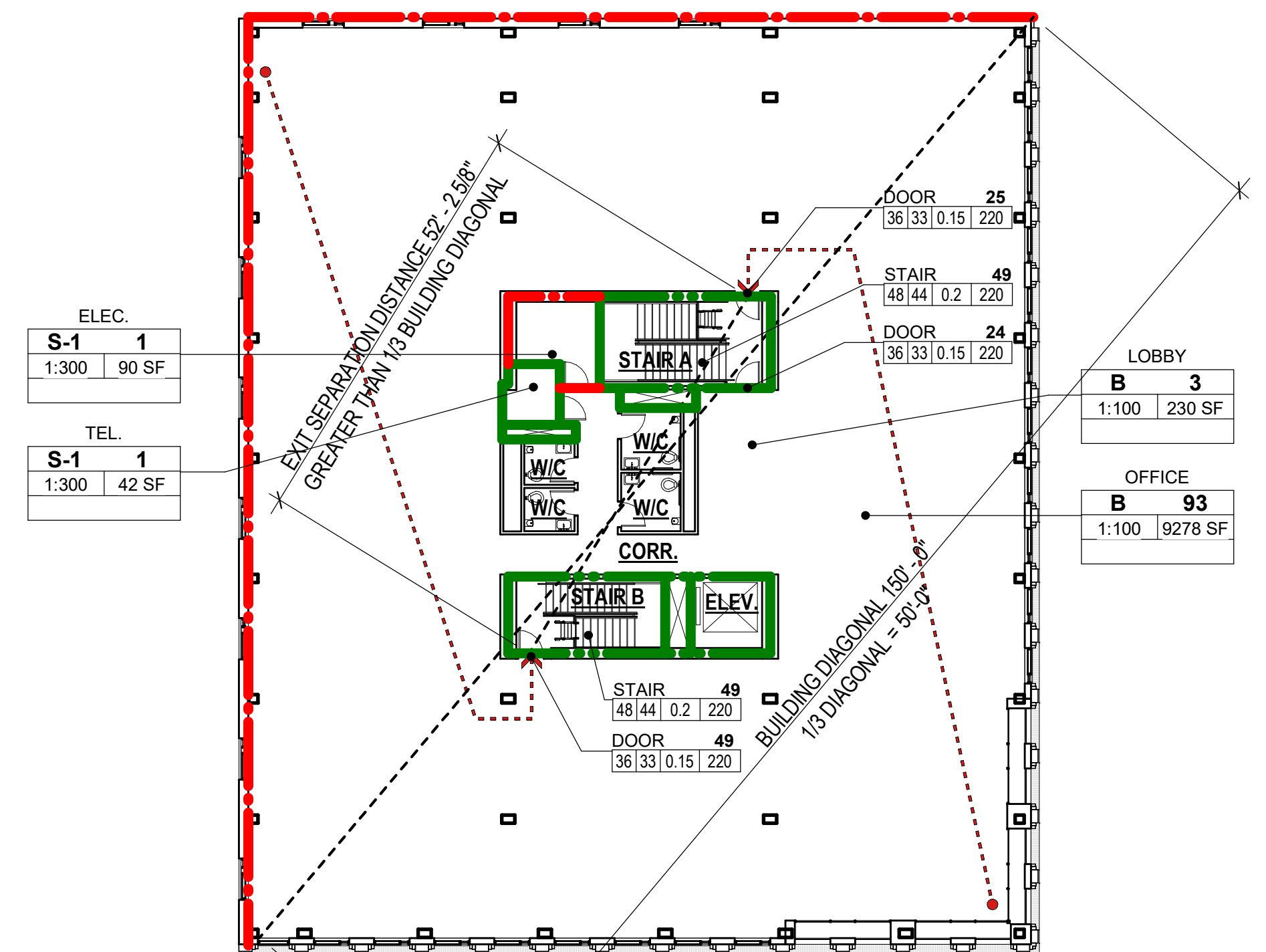


5 PLAN, LIFE SAFETY - LEVEL 04  
1/16" = 1'-0"

AREA - 10,831 GSF  
OCCUPANCY CLASSIFICATION: BUSINESS  
CONSTRUCTION TYPE: IIIA  
EXITS REQUIRED - 2  
OCCUPANT LOAD: 103 PERSONS (100 GSF/PERSON)  
TRAVEL DISTANCE:  
COMMON PATH - 100' MAX  
EXIT ACCESS - 300' MAX  
EXIT STAIR WIDTH:  
REQUIRED - 103 x 2 = 20.6' / 2 EXITS = 11"  
PROVIDED - 52"  
EXIT DOOR WIDTH:  
REQUIRED - 103 x 15 = 15.45' / 2 EXITS = 8"  
PROVIDED - 36"

Occupant Load - Level 4				
Level	Occupancy Group	Occupant Load Factor	Area	Occupant Load
LEVEL 4	B	100	9408 SF	95
LEVEL 4	B	100	230 SF	3
LEVEL 4	S-1	300	90 SF	1
LEVEL 4	S-1	300	42 SF	1

100

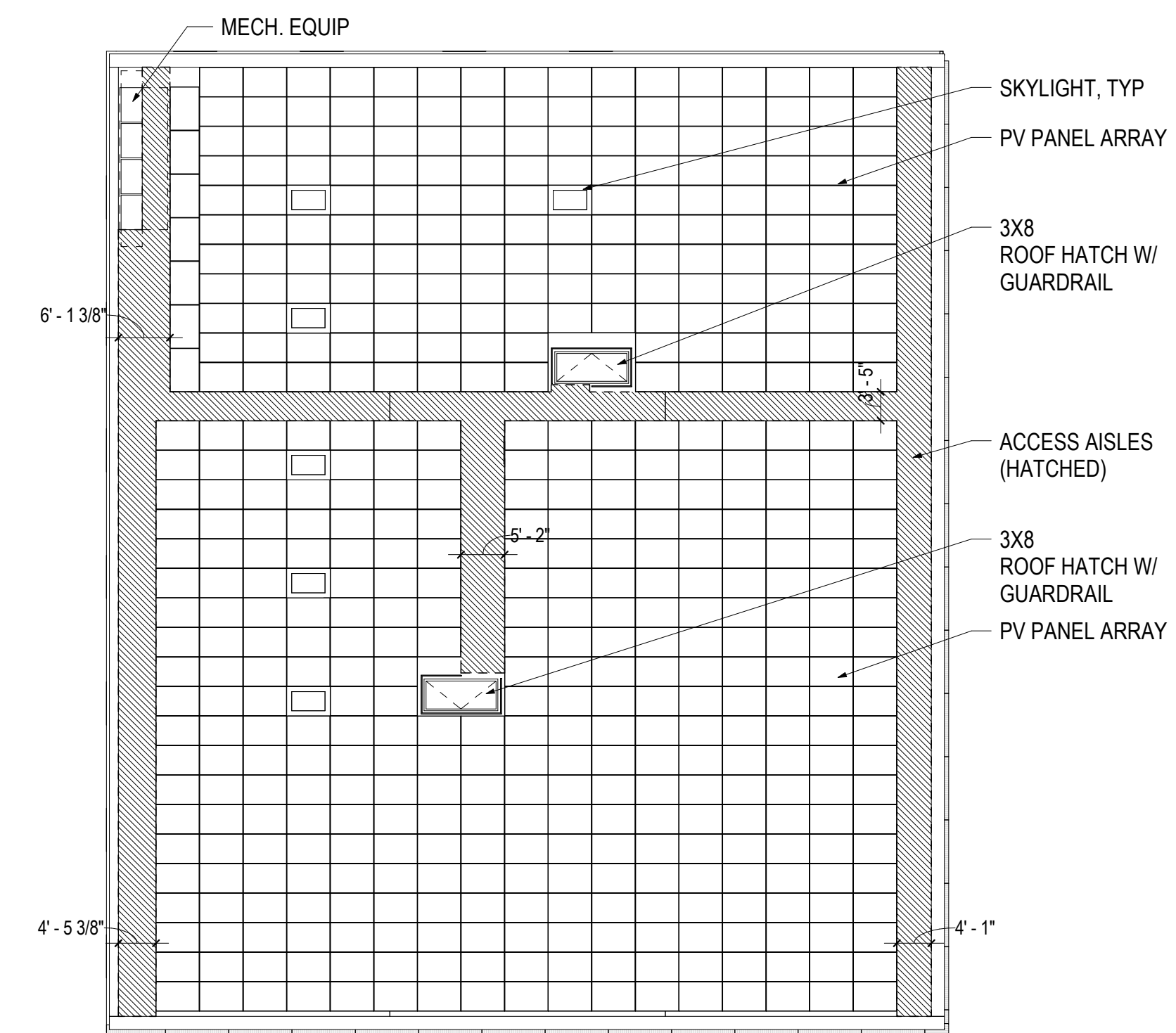


4 PLAN, LIFE SAFETY - LEVEL 05  
1/16" = 1'-0"

AREA - 10,653 GSF  
OCCUPANCY CLASSIFICATION: BUSINESS  
CONSTRUCTION TYPE: IIIA  
EXITS REQUIRED - 2  
OCCUPANT LOAD: 98 PERSONS (100 GSF/PERSON)  
TRAVEL DISTANCE:  
COMMON PATH - 100' MAX  
EXIT ACCESS - 300' MAX  
EXIT STAIR WIDTH:  
REQUIRED - 103 x 2 = 20.6' / 2 EXITS = 11"  
PROVIDED - 52"  
EXIT DOOR WIDTH:  
REQUIRED - 103 x 15 = 15.45' / 2 EXITS = 8"  
PROVIDED - 36"

Occupant Load - Level 5				
Level	Occupancy Group	Occupant Load Factor	Area	Occupant Load
LEVEL 5	B	100	9278 SF	93
LEVEL 5	B	100	230 SF	3
LEVEL 5	S-1	300	42 SF	1
LEVEL 5	S-1	300	90 SF	1

98



6 PLAN, LIFE SAFETY - ROOF  
1/16" = 1'-0"

UNOCCUPIED

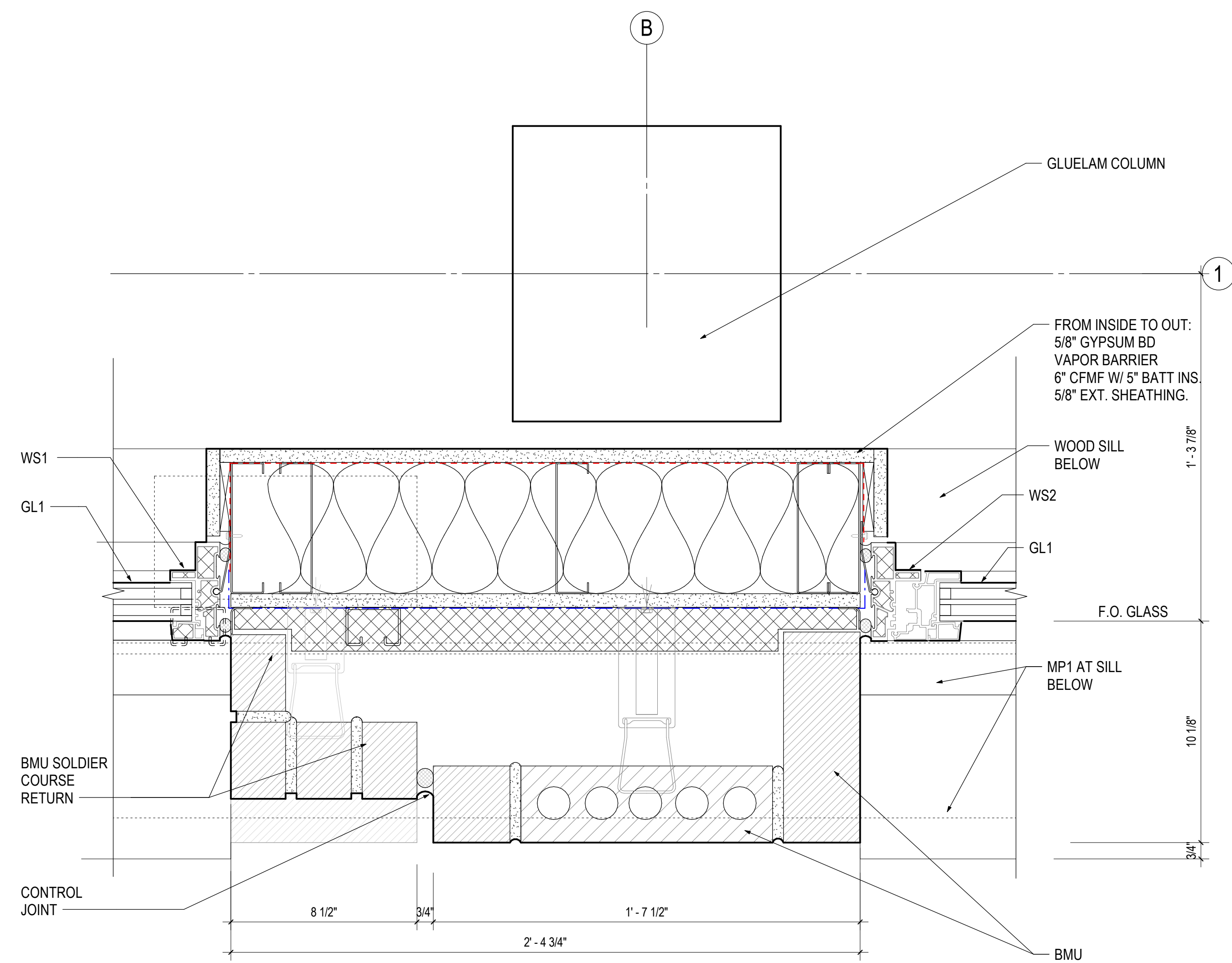
## GENERAL NOTES

- COMPLY WITH ALL REGULATIONS, CODES, AND AUTHORITIES HAVING JURISDICTION INCLUDING THE ADA, ANSI A117.1, OREGON STRUCTURAL SPECIALTY CODE, NEC, NFPA, AND CITY OF PORTLAND BUREAU OF DEVELOPMENT SERVICES AND CITY OF PORTLAND FIRE AND RESCUE.
- PROVIDE AUDIBLE AND VISUAL ALARMS AS INDICATED, CONFIRM REQUIRED LOCATIONS WITH CITY OF PORTLAND BUREAU OF FIRE. SUBMIT LOCATIONS TO ARCHITECT FOR APPROVAL OF DESIGN INTENT PRIOR TO SUBMISSION TO THE AUTHORITIES HAVING JURISDICTION.
- ALL EGRESS PATHWAYS SHALL BE A MINIMUM OF 44" WIDE CLEAR. MAINTAIN GREATER WIDTH WHERE SO DIMENSIONED. EACH DOOR OPENING SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32 INCHES.
- PROVIDE EMERGENCY LIGHTING DELIVERING A MINIMUM AVERAGE OF 1 FT CANDLE AND AT LEAST .1 FOOTCANDLE ALONG EGRESS PATH.
- PROVIDE FIRE EXTINGUISHERS PER LOCAL JURISDICTION'S REQUIREMENTS. BUILDING STANDARD FIRE EXTINGUISHERS SHALL BE LOCATED AT A MINIMUM OF 1 FIRE EXTINGUISHER PER EVERY 3000 SF WITH NO MORE THAN 75 FEET OF TRAVEL DISTANCE FROM ANY POINT IN THE TENANT AREA. VERIFY AND LOCATIONS AND TYPES OF EXISTING FIRE EXTINGUISHERS AND PROTECT THEM DURING THE WORK. CONFIRM LOCATIONS OF EXISTING AND NEW FIRE EXTINGUISHERS WITH ARCHITECT PRIOR TO INSTALLATION.

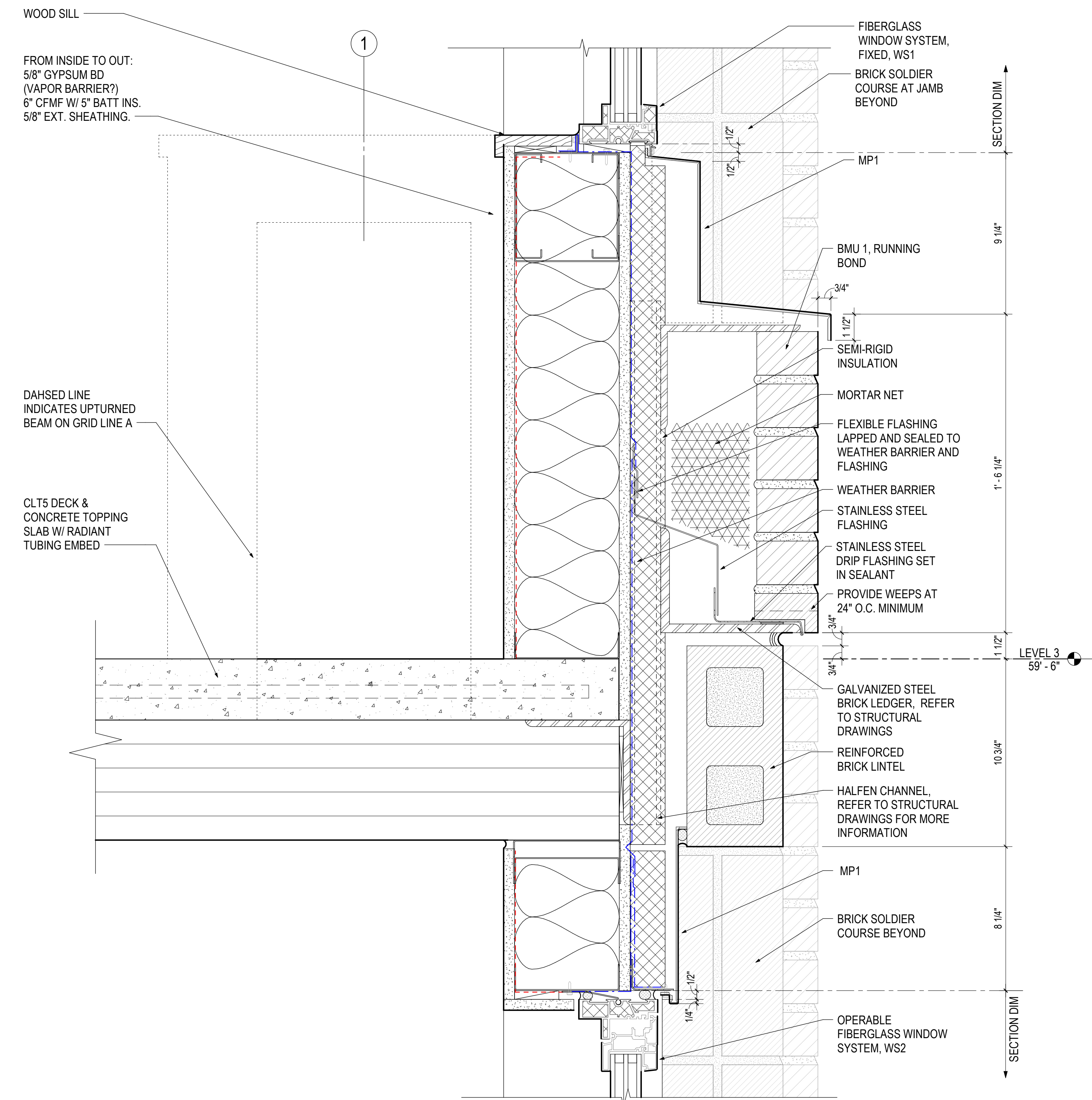
## FIRE AND LIFE SAFETY LEGEND

- FIRE - 0.5 HR
- FIRE - 1 HR
- FIRE - 2 HR
- FIRE - 3 HR
- FIRE - 4 HR
- FIRE SMOKE BARRIER - 1 HR
- FIRE SMOKE PARTITION
- EXIT SIGN
- FE FIRE EXTINGUISHER
- FEC FIRE EXTINGUISHER CABINET
- SC STANDPIPE CABINET
- BUILDING EXIT
- TRAVEL DISTANCE
- EGRESS PATH
- EXIT COMPONENT
- OCCUPANT LOAD
- OCCUPANCY CAPACITY
- OCCUPANCY LOAD FACTOR
- WIDTH REQUIRED
- WIDTH PROVIDED
- SPACE NAME
- OCCUPANCY GROUP
- OCCUPANCY LOAD
- CALCULATED AREA
- OCCUPANCY SEPARATION
- OCCUPANT LOAD FACTOR





TYPICAL PLAN AT EXT. WALL



TYPICAL SECTION AT EXT. WALL



**BASIS OF DESIGN: USF FAB FIRE RATED FLOOR DOOR, PRODUCT DATA ABOVE.**

