

Development Services

From Concept to Construction

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APPEAL SUMMARY

Status: Decision Rendered

Appeal ID: 14925	Project Address: SW Park Ave & SW Columbia St
Hearing Date: 4/12/17	Appellant Name: Eric Buschert
Case No.: B-004	Appellant Phone: 503-224-9656
Appeal Type: Building	Plans Examiner/Inspector: Natalie Davis
Project Type: commercial	Stories: 7 Occupancy: R-2, S-2 Construction Type: I-A, III-A
Building/Business Name:	Fire Sprinklers: Yes - Entire building
Appeal Involves: Erection of a new structure	LUR or Permit Application No.:
Plan Submitted Option: mail [File 1]	Proposed use: Multi-family housing (apartments)

APPEAL INFORMATION SHEET

Appeal item 1

Code Section Section 510.2 Horizontal building separation allowance

Requires 510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of fire walls, limitation of number of stories and type of construction where all of the following conditions are met:

I. The buildings are separated with a horizontal assembly having a fire resistance rating of not less than 3 hours.

The building below the horizontal assembly is not greater than one story above grade plane.
The building below the horizontal assembly is of Type I-A construction.
Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2- hour fire resistance rating with opening protectives in accordance with Section 716.5.

Exception: Where the enclosure walls below the horizontal assembly have not less than a 3-hour fire resistance rating with opening protectives in accordance with Section 716.5, the enclosure walls extending above the horizontal assembly shall be permitted to have a 1-hour fire-resistance rating, provided:

I. The building above the horizontal assembly is not required to be of Type I construction;

The enclosure connects fewer than four stories; and
The enclosure opening protectives above the horizontal assembly have a fire protection rating of not less than 1 hour.

The building or buildings above the horizontal assembly shall be permitted to have multiple Group A occupancy uses, each with an occupant load of less 300, or Group B, M, R or S occupancies.

The building below the horizontal assembly shall be protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1, and shall be permitted to be any of the following occupancies:

- 6.1. Group S-2 parking garage used for the parking and storage of private motor vehicles;
- 6.2. Multiple Group A, each with an occupant load of less than 300;
- 6.3. Group B;
- 6.4. Group M;
- 6.5. Group R; and
- 6.6. Uses incidental to the operation of the building (including entry lobbies, mechanical rooms, storage areas and similar uses).

The maximum building height in feet (mm) shall not exceed the limits set forth in Section 503 for the building having the smaller allowable height as measured from the grade plane.

Proposed Design

The proposed design for the SW Park & Columbia building meets the requirements of OSSC 510.2, except the building below the 3-hour rated horizontal assembly is two stories above grade plane.

To provide equivalent protection, the proposed design will meet the requirements of 2015 IBC Section 510.2 for horizontal building separation allowance.

Reason for alternative

The SW Park & Columbia project is designed as a 1/4 block "five-over-two" apartment building, with the lower two levels of Type IA construction including S-2 and R-2 occupancies, and 5 stories of Type IIIA construction with R-2 and B occupancies above.

2015 IBC has been approved by the ICC and recognized by Oregon Building Codes Division as an alternate to the 2014 OSSC. 2015 IBC 510.2 has modified the requirements of number of stories below the horizontal separation assembly and does not have the limit of 1 story below the assembly. The remaining building requirements of 2015 IBC 510.2 remain the same as 2014 OSSC 510.2 and provides equivalent protection.

The 2015 IBC code change hearings did not find that limiting the number of stories below the horizontal assembly provided any additional protection for occupants. The overall building height limits based on occupancy types R-2 and B, and construction type IIIA above the podium will be met.

The proposed design uses the approved 2015 IBC allowance for more than one story of Type IA construction below the horizontal separation and request approval of this appeal.

Appeal item 2

Code Section

Section 505.2.1 Area limitation

Requires

505.2.1 Area limitation. The aggregate area of a mezzanine or mezzanines within a room shall be not greater than one-third of the floor area of that room or space in which they are located. The enclosed portion of a room shall not be included in a determination of the floor area of the room in which the mezzanine is located. In determining the allowable mezzanine area, the area of the mezzanine shall not be included in the floor area of the room.

Proposed Design

The project is designed as a 1/4 block "five-over-two" apartment building, with the lower two levels of Type IA construction and levels 3-7 of Type IIIA construction. The ground level plan includes the entry lobby, parking, bike storage, utility rooms and three residential units accessed only from the building exterior along SW Park Ave. Those three residential units each include a mezzanine or

"loft" level, accessed only by a stairway within each unit. Refer to attached unit floor plans and section.

Each mezzanine exceeds 1/3 of the area of the main level of the unit: the main level is 554 sf, and the loft is 224 sf (44% of the main level area). Considered another way, the overall ground floor of the building is 9,794 sf. The combined area of the three mezzanines is 672 sf, or 6.8% of the overall floor area. There are no other mezzanines in the building.

At 200 gsf per occupant, the main level of the residential units would have three occupants, and the mezzanine would add two more.

Reason for alternative The essence of this appeal is to allow a slightly larger mezzanine for three residential units. The size of the mezzanine is important in part for functionality, and in part relating to the size/proportion of the spaces that are aligned directly below it.

Although the mezzanine exceeds the 33% area maximum, the proposed larger area would only increase the occupant load in each unit by one. At 200 gsf per occupant, the main level of the residential units would have three occupants, and the mezzanine would add two more occupant, for a total of five per unit.

Egress from the mezzanine is very direct and clear, via an internal stair within each unit and directly to the exterior at the main level. The required door width for the exterior door would be 1". The maximum travel distance from the mezzanine is about 52 feet.

The building will be fully sprinklered per OSSC Sec. 903.3.1.1. To meet requirements for Type 1-A non-combustible construction, the mezzanine floor will be framed with structural steel and concrete slab over metal deck, and the unit walls are either metal stud framed or CMU.

Since the slightly larger mezzanine essentially offers no additional risk to the building or occupants, we respectfully request that this appeal be granted.

Appeal item 3

Code Section NEC 701.12 (8)(3)

Requires (3) Dual Supplies. Prime movers shall not be solely dependent on a public utility gas system for their fuel supply or on a municipal water supply for their cooling systems. Means shall be provided for automatically transferring one fuel supply to another where dual fuel supplies are used.

Exception: Where acceptable to the authority having jurisdiction, the use of other than on-site fuels shall be permitted where there is a low probability of a simultaneous failure of both the off-site fuel delivery system and power from the outside electrical utility company.

Proposed Design This project is designed as a 1/4 block "5-over-2" apartment building, with levels 1-2 being Type I-A construction and levels 3-7 are Type III-A construction. Per OSSC 1007.2.1, an elevator is required for an accessible means of egress and must be provided with standby power. A natural gas emergency generator will be located on the roof solely to provide standby power to the elevator. The generator will not have a secondary, on-site fuel source.

Reason for alternative Per communication with the fire marshal's office, the jurisdiction has indicated that the on-site fuel supply requirement can be waived, given the low probability that electrical power and natural gas services will be disrupted at the same time.

APPEAL DECISION

- 1. Increase from 1 story to 2 stories of Type IA construction below the 3 hour horizontal separation: Granted provided all provisions of 2015 IBC section 510.2 are met and overall building height is limited to that allowed for proposed IIIA construction.**
- 2. Mezzanine floor area within (3) residential units exceeds 33% of the room it is within: Granted for this configuration and exiting without voice alarm.**
- 3. Use of natural gas as fuel source for power back up of accessible elevator, without onsite secondary fuel source: Granted provided the generator is used for standby power loads only and does not supply emergency power to any building systems.**

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, call (503) 823-7300 or come in to the Development Services Center.



