ANN ARBOR BUILDING BOARD OF APPEALS STAFF REPORT

Meeting Date: May 25, 2023

Type of Request: APPEAL

Building Board of Appeals Request **BBA23-0001** at 1211 White St., ANN ARBOR, MI 48104.

(Parcel Identification Number: 09-09-33-217-003)

DESCRIPTION AND DISCUSSION

Property Owners Name and Address:

Washington Street Apt. LLC. 1211 White Street Ann Arbor. MI 48104

Architect:

Aaron Vermeulen O-X Studio Inc. 2373 Oak Valley Dr., Suite 180 Ann Arbor, MI, 48103

BACKGROUND

The property at 1211 White Street is a mix use building consisting of S-2 and R-2 occupancy. The R-2 units are proposed to be VB construction with a NFPA 13R Fire Suppression system built over a Type 1A podium with a 3 hour separation. The S-2 use is a Type 1A construction parking garage with a NFPA 13 Fire suppression system. The proposed construction includes a 3 hour vertical offset as part of the horizontal assembly making up the type 1A parking area. The petitioner is requesting relief from section 510.2 of the 2015 Michigan Building code. No height or area increase is being requested. Petitioner is presenting what they consider an equal or better form of construction.

Standards for Approval:

- 1. The True intent of the code or the rules governing construction have been incorrectly interpreted.
- 2. The provisions of the code do not apply; and
- 3. An equal or better form of construction is proposed.

STAFF RECOMMENDATION

Staff has no opposition to this application being approved, based on the more recent code language considering this design as acceptable and addressed in the 2018 International Building Code and the 2021 International Building Code and maintains a 3 hour continuous separation between buildings. Code sections progress as follows:

2015 MBC:

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:

- 1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours.
- 2. The building below the *horizontal assembly* is of Type IA construction.
- 3. *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 *fireresistance 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:

- 1. The building above the *horizontal assembly* is not required to be of Type I construction;
- 2. The enclosure connects fewer than four *stories*; and
- 3. The enclosure opening protectives above the *horizontal assembly* have a *fire protection rating* of not less than 1 hour.
- 4. 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.
- 5. 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 occupancy allowed by this code except Group H.
- 6. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the

2018 IBC:

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:

- 1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours. Where vertical offsets are provided as part of a horizontal assembly, the vertical offset and the structure supporting the vertical offset shall have a *fire-resistance* rating of not less than 3 hours.
- 2. The building below, including the *horizontal assembly*, is of Type IA construction.
- 3. *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.

Exception: Where the enclosure walls below the *horizontal assembly* have not less than a 3-hour *fireresistance rating* with opening protectives in accordance with Section 716, the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating*, provided:

- 1. The building above the *horizontal assembly* is not required to be of Type I construction;
- 2. The enclosure connects fewer than four *stories*; and
- 3. The enclosure opening protectives above the *horizontal assembly* have a *fire protection rating* of not less than 1 hour.
- 4. 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.
- 5. 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 occupancy allowed by this code except Group H.
- 6. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the *grade plane*.

2018 IBC Commentary:

1. Separation of upper and lower buildings by a 3-hour fire-resistance-rated horizontal assembly. This otherwise horizontal separation can have vertical offsets. Such offsets can be used to facilitate designs for hillside locations, allowing a building to stairstep down the slope. There may be other reasons why a designer may want part of the lower building to be two stories and part of it only a single story. The offset will allow such designs.

2021 IBC:

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 the following conditions are met:

- 1. The buildings are separated with a horizontal assembly having a fire-resistance rating of not less than 3 hours. Where vertical offsets are provided as part of a horizontal assembly the vertical offset and the structure supporting the vertical offset shall have a fire-resistance rating of not less than 3 hours.
- 2. The building below, including the horizontal assembly, is of Type IA construction.
- 3. 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.
- 4. Interior exit stairways located within the Type IA building are permitted to be of combustible materials where the following requirements are met:
- 4.1. The building above the Type IA building is of Type III, IV, or V construction
- 4.2. The stairway located in the Type IA building is enclosed by a-hour fire-resistance-rated construction with opening protectives in accordance with Section 716
- 5. 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 than 3007 or Group B, M, R or S occupancies.
- 6. The building below the horizontal assembly shall be protected throughout by an approved automatic sprinkler system in accordance with Section 903.3 and shall be permitted to be any occupancy allowed by this code except Group H.
- 7. The maximum building height in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the grade plane. Exception: Where the enclosure walls below the horizontal assembly have not less than a a-hour fire-resistance rating with opening protectives in accordance with Section 716, the enclosure walls extending above the horizontal assembly shall be permitted to have a I-hour fire-resistance rating, provided that the following conditions are met:
- 1. The building above the horizontal assembly is not required to be of Type I construction.
- 2. The enclosure connects fewer than four stories.
- 3. The enclosure opening protectives above the horizontal assembly have a fire protection rating of not less than 1 hour.

It is understood by staff that the State of Michigan has not adopted the 2018 or the 2021 IBC and that Michigan may modify sections prior to adoption, the consistent progression and clarification of this section in the International Building Code provides recognition that vertical offsets are considered an acceptable separation of building types, and in the opinion of Staff meet the criteria of an equal form of construction.

PROPOSED MOTION

APPEAL GRANTED

That in Case BBA23-0001, Relief is GRANTED from section 510.2 of the 2015 Michigan Building		
Code, and the requirements of section 510.2 of the 2021 International Building Code shale		
apply. the Building Board of Appeals grants relief for the reason(s) that [state reason in		
motion]:		
☐ (1) The true intent of the 2015 Michigan Building Code and section 510.2 of the Michigan governing the renovation of 1211 White Street has been incorrectly interpreted by the Building Official;		
\square (2) The provisions of 2015 Michigan Building Code section 510.2 does not apply to the construction at 1211 White Street.		
☐ (3) The applicant has proposed an equal or better form of construction (section 510.2 of the 2021 International Building Code).		
Stipulations – If Applicable:		
[Chairman to check box(es) following vote]		
OR		
APPEAL DENIED		
That in Case BBA23-0001 Relief is DENIED and the Building Board of Appeals AFFIRMS section		
510.2 of the 2015 Michigan Building Code must be followed, the reason(s) that [state reason in		
motion]:		
☐ (1) The true intent of the 2015 Michigan Building Code and section 510.2 governing the construction at 1211 White Street has been correctly interpreted by the Building Official and construction must conform to that section.		
☐ (2) The provisions of 2015 Michigan Building Code section 510.2 applies to the construction at 1211 White Street and an alternative is not accepted.		
\square (3) The applicant has not proposed an equal or better form of construction.		

Stipulations – if Applicable: [Chairman to check applicable box(es) following vote]		
Yeas:		
Nays:		
Absent for this vote:		
Date	Paul Darling, Chairperson Building Board of Appeals	