

MEMORANDUM

TO: District of Columbia Board of Zoning Adjustment

FROM: Jonathan Kirschenbaum, AICP, Development Review Specialist

Joel Lawson, Associate Director Development Review

DATE: September 24, 2020

SUBJECT: BZA Case 20291 (2100 M Street, NW) to permit the renovation and expansion of an

existing office building.

I. OFFICE OF PLANNING RECOMMENDATION

The Office of Planning (OP) recommends **approval** of the following variance relief:

- Setback Plane, Subtitle I § 201.6, pursuant to Subtitle X § 1000 (an addition to an existing building shall be set back under a 45-degree plane starting at 90 feet abutting an MU-10 zone; existing building is 90 feet in height; proposed expansion would bring the total height to 130 feet and create a projection above the required 45-degree setback plane);
- Closed Court #3 ("CC3") Minimum Width and Area, Subtitle I § 207.1, pursuant to Subtitle X § 1000 (12 feet minimum width and 250 square feet minimum area required; court does not exist; 10 feet 6 inches width and 168 square feet area proposed);
- Open Court #1 ("OC1") Minimum Width, Subtitle I § 207.1, pursuant to Subtitle X § 1000 (13.08 feet minimum width required; court does not exist; 11 feet 8 inches width proposed); and
- Loading Berth Vertical Clearance, Subtitle C § 905.2, pursuant to Subtitle X § 1000 (14 feet minimum vertical clearance required; two existing berths each 12 feet 5 inches 18 feet 5 inches existing; three berths each 12 feet 5 feet inches proposed).

The Office of Planning (OP) recommends **approval** of the following special exception relief:

• Penthouse Side Setback, Subtitle C § 1502.1(c), pursuant to Subtitle C § 1504.1 (penthouse shall be set back a distance equal to its height from the side building wall; existing penthouse is not set back 1:1 from the side (western) building wall; proposed penthouse and mechanical equipment would not comply with side set back from western building wall).

II. LOCATION AND SITE DESCRIPTION

Address	20 Massachusetts Avenue, NW		
Applicant	t 2100 M Street Property Owner LLC		
Legal Description Square 72, Lot 75			
Ward, ANC	2/2A		
Zone	D-5		

Board of Zoning Adjustment
District of Columbia

Lot Characteristics	Irregular shaped corner lot abutting three streets. The applicant states (Exhibit 34) that the front of the building abuts New Hampshire Avenue, NW and M Street, NW to the north, the rear abuts 21 st Street to the east, NW, and the sides abut the buildings at 1143 New Hampshire Avenue, NW to the west and 2101 L Street, NW to the south.			
Existing Development	The property is improved with an eight-story (plus mechanical penthouse) office building.			
Adjacent Properties	Adjacent properties include a nine-story hotel to the west and a 10-story office building to the south.			
Surrounding Neighborhood Character	Commercial buildings, hotels, and apartment houses.			
Proposed Development	The applicant proposes to renovate and expand an existing office building built in 1969 into an 11-story building. Three new floors and a habitable penthouse would be constructed above the existing eight-story building, which would add 103,221 square feet of new gross floor area. The existing façade would be fully removed and replaced with a modern exterior and a tiered system of terraces. The building's envelope would also be extended into the northern portion of the lot, which is currently an open plaza. The ground floor arcade would be removed, and the first story enlarged. The first floor would be split between office and retail uses and the upper floors, including the penthouse, would be devoted to office uses. One new loading dock would be constructed for a total of three loading berths. Relief is required because the proposed vertical addition would not be set back starting at 90 feet abutting the MU-10 zone to the west under a 45-degree plane. The proposed mechanical equipment and screening on the 11 th floor and a portion of the proposed penthouse elevator overrun would not comply with the side penthouse setback requirements. Relief is also required because two of the proposed courts do not provide either the required width or area and the two existing loading berths in addition to the proposed loading berth would not provide the required minimum vertical clearance. This property was previously granted zoning relief under BZA Order			
	No. 17696 (Exhibit 13), including relief from the 45-degree setback plane, penthouse roof structure setbacks, and loading berth vertical clearance. Several extensions were granted by the Board and the last extension expired in December 2014.			

III. ZONING REQUIREMENTS and RELIEF REQUESTED

D-5 Zone	Regulation	Existing	Proposed	Relief
Lot Width	No requirement	Not provided by applicant	No change	None Required
Lot Area	No requirement	41,196 sq. ft.	No change	None Required
Height I § 540.1	130 ft. max. for right-of- way greater than or equal to 110 ft. in	90 ft.	130 ft.	None required
Setback Plane I § 201.6(b)	No vertical expansion shall project above a 45- degree setback plane starting at 90 ft. abutting an MU-10 zone	90 ft.	Vertical expansion would project above the required 45- degree setback up to 130 feet	Variance Relief
Penthouse Side Setbacks C § 1502.1(c)	11 th Floor Mechanical equipment and screen wall shall be set back 1:1 or 16 ft. 4 in.	Existing penthouse does not provide the 1:1 setback	Mechanical equipment: 7 ft. ½ in. setback Screen wall: No setback	Special Exception
	Penthouse Elevator Core shall be set back 1:1 or 35 ft. 1 in.		30 ft. setback	
Floor Area Ratio I § 539.3	6.5 max. for non- residential FAR	6.5	9.12 ¹	None Required
Lot Occupancy I § 202.1	100% max.	88.9%	98.2%	None Required
Rear Yard B § 318.8 & I § 205.1	27 ft. min. (2.5 in. per 1 ft. of building height) Corner lots abutting 3 street or more may measure depth of rear yard from the center line of street abutting the lot at rear of structure	45 ft. measured from center line of 21 st Street, NW	27 ft. min. measured from center line of 21st Street, NW	None Required
Open Court I § 207.1	OC1 Min. Width: 13.08 ft. OC1 Min Area: No requirement	Court does not exist	Width: 11 ft. 8 in.	Variance Relief

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¹ Applicant states the proposal would utilize density credits/transferable development rights to go above the maximum permitted 6.5 FAR for non-residential uses.

September 24, 2020 Page 4

D-5 Zone	Regulation	Existing	Proposed	Relief
Closed Court	CC3 Min. Width: 12 ft.	Court does not exist	Width:	Variance
I § 207.1	CC3 Min. Area:		10 ft. 6 in.	Relief
	250 sq. ft.		Area: 168 sq. ft.	
Loading Berth Vertical Clearance C § 905.2	14 ft. min vertical clearance	Two berths each 12 ft. 5 in. – 18 ft. 5 in.	Three berths each 12 ft. 5 in.	Variance Relief
Parking	184 spaces	271 spaces	265 spaces	None Required
C § 701.5				

IV. OFFICE OF PLANNING ANALYSIS

- a. Area Variance Relief from Subtitle I § 206.1, Setback Plane; Subtitle I § 207.1, Courts; and Subtitle C § 905.2, Loading Berth Vertical Clearance.
- i. Extraordinary or Exceptional Situation or Condition Resulting in Peculiar and Exceptional Practical Difficulties

a. Extraordinary or Exceptional Situation or Condition

The exceptional condition effecting the subject property is an existing office building located on an irregular shaped triangular lot with few regularly shaped angles or lot lines. As a result of the lot configuration, the existing floor plates of the existing building consist of multiple unique and atypical angular features, particularly along the western and northern sides. In addition, the building has elevator cores and structural support systems that already exist and cannot practically be moved.

There is also an exceptional situation where the subject lot abuts lot 74, which is zoned MU-10, and where the zone boundary line follows the property lines between these two lots creating a zoning line that is both irregular and jagged. The majority of D zones are based on regularly shaped zoning lines that are located in the center of street rights-of-way and are not based on irregular property lines.

The subject property is also the only property on the square with this number of atypical angles and jagged property lines abutting a lower density zone district.

b. Exceptional Practical Difficulties

<u>Setback Plane</u>: An exceptional practical difficulty results because the jagged nature of the abutting MU-10 zoning line creates an unduly large and unusually shaped setback requirement. If the applicant were to comply with setting the building back starting at 90 feet under a 45-degree setback plane, it would have a deleterious impact on both the existing mechanical penthouse above the eighth floor roof and the proposed floor plates of floors nine through eleven, in addition to the proposed penthouse above the 11th floor roof (Sheets A-12 – A-13, Exhibit 34A3). The setback would reduce the amount of usable office space on floors nine through eleven by creating irregular shaped floor plates. The applicant states this would diminish "the boarder efficiency, usefulness, and overall quality of occupancy" (Exhibit 8) for each new floor.

Importantly, the structural design of the proposed upper floors relies on the existing column grid below. The applicant states that complying with the setback would require significant additional structural support on the existing floors below to transfer the load of the proposed floors, which would have to be stepped-back from one another because of the setback requirement. In particular, new beams and other support systems would have to be installed on the existing eighth floor. The applicant states that this would be financially unfeasible and would also reduce the usable space of the existing eighth floor.

Some of the existing mechanical equipment and systems would have to be relocated on the ninth and tenth floors, in addition to the existing elevator core, which is located within the required setback area on the proposed penthouse level and roof level. Complying with the setback would require the entire elevator core to be shifted further to the east of the building, which would reduce existing usable office space on all floors below, both existing and new, and would be cost prohibitive.

The proposed habitable penthouse would be significantly impacted because it would not be able to be accessed using the existing elevator core or northern fire staircase. The proposed floor plate would also need to be significantly reduced to comply with the setback. Further, the resulting floor plate would be further diminished because of a new elevator core, fire staircase, bathrooms, and other mechanical space that would be required. The applicant states the size of the penthouse that would result would not be a viable space to use for building tenants.

Courts: An exceptional practical difficulty results for CC3 and OC1 because of the structural system of the existing building. The applicant states that CC3 is being proposed because the existing structural grid of the building does not include the column support necessary to create new building area at the intersection of the northwest property line and the western property line. Thus, the lack of available column support results in the creation of a closed court, which is unusual in size and not compliant with minimum width and area requirements. The applicant states that if this entire section or "void" of the building was filled in with no court provided, it would require cost-prohibitive structural accommodations. This would include reinforcement of and modification to existing columns below and new beams.

The creation of OC1 arises from the proposal to extend the first story of the building out to the front property line along New Hampshire Avenue, NW while maintaining the existing vertical plane of the building's façade above. Currently, all floors of the building are set back from the New Hampshire Avenue, NW frontage. The resulting width of the court (between the front property line and the existing building façade) would not meet the minimum width requirements. The applicant states that full compliance with the width requirement would necessitate relocating the entire existing building façade further back from the proposed court. This would be cost-prohibitive and would also be practically infeasible because the building's structural supports are located along this façade. To make this court fully compliant would require demolishing and replacing existing columns and floor slabs, which would be cost prohibitive.

<u>Load Berth Vertical Clearance:</u> An exceptional practical difficulty results because the area of the existing and proposed loading berths has an existing vertical clearance that ranges between 12 ft. 5 in. and 18 ft. 5 in. The applicant states that the ceiling in the area with vertical clearance of only 12 ft. 5 in. instead of the required 14 ft. cannot be raised because

of an existing overhead slab and significant transfer beam that spans 56 feet above the loading area and parking garage entrances. Another practicality difficulty that results is the fact that the exiting loading berth area is not level and slopes downward, which the applicant states creates a dangerous condition for trucks. As a result, the applicant proposes to regrade the two existing berths and make all three berths almost entirely level with the street (Sheet A-19, Exhibit 34A4).

ii. No Substantial Detriment to the Public Good

The proposed upper story additions to the existing building and the inclusion of a third loading berth should not be substantially detrimental to the public good. The overall redesign and expansion would make the existing office building built in 1969 up-to-date with modern office and retail space needs. It would also replace an outdated recessed retail arcade by enlarging the existing retail space to front along the building's property lines, which would positively activate the abutting sidewalks and streets. Though the upper floor additions would not comply with the required 45-degree setback plane, these proposed floors would not abut any residential uses. In addition, while proposed CC3 and OC1 are non-conforming and are not even required to be provided, they would provide additional setbacks from the abutting hotel at 1143 New Hampshire Avenue, NW and would provide additional light and air to this property. The addition of the third loading berth would provide additional capacity for the building to accept off-street deliveries and would reduce the need to conduct loading on the abutting sidewalk.

iii. No Substantial Impairment to the Intent, Purpose, and Integrity of the Zoning Regulations

The intent of the 45-degree setback plane regulation is to minimize any potential negative light and air impacts on abutting residential uses that are lower in height. In this case, the use abutting the required setback plane is a hotel located at 1143 New Hampshire Avenue, NW, and thus is not residential in use. In addition, there is an existing mechanical penthouse at the property that encroaches on the required 45-degree setback plane.

The intent of the court requirements is to provide minimum distance between two building walls on the same lot that face one another and to ensure adequate light and air to the building. The provision of CC3 though non-conforming would provide additional access to light and air than what would otherwise be provided if the court did not exist. OC1 is proposed to be substantially deep fronting New Hampshire Avenue, NW and the proposed width is only deficient by a little more than one foot. However, since this court faces the street and is measured by how far back the building is from the front lot line, there should be no change in the amount of light or air available between the proposed condition and what would be required as a matter-of-right.

The intent of the loading berth vertical height requirement is to ensure there is adequate clearance for trucks to access the berth. The proposed third loading berth would bring the building into compliance with the loading berth requirements and ensure that deliveries are conducted off-street. In addition, the size of truck that can be accommodated in the existing condition would not change in the proposed condition since parts of the existing loading berths are already 12 ft. 5 in. The applicant demonstrated that a 30-foot truck could be accommodated in the proposed loading berths (Sheet A-19, Exhibit 34A4). Further, the applicant submitted a transportation demand management ("TDM") TDM at Exhibit 33A2 that states a loading

management plan will be implemented to reduce loading related disrubtions on adjacent streets. DDOT is expected to file comments to the record separately.

b. Special Exception Relief from Subtitle C § 1502.1(c), Penthouse Setbacks, Side Wall.

Relief to the requirements of Subtitle C §§ 1500.6-1500.10 and 1502 may be granted as a special exception by the Board of Zoning Adjustment subject to Subtitle X, Chapter 9 and subject to the following conditions:

(a) The strict application of the requirements of this chapter would result in construction that is unduly restrictive, prohibitively costly, or unreasonable, or is inconsistent with building codes;

The setback regulations require that penthouses and mechanical equipment be set back from the side² wall of the building at a distance equal to its height.

The proposed mechanical equipment and screening on the 11th floor would not comply with the penthouse setback requirements along the western side of the property. This is because the mechanical equipment and HVAC systems that are required for the enlargement must be co-located in the same portion of the building with existing mechanical equipment, which is located in an existing penthouse that does not comply with the side setback requirement. In addition, the space available for mechanical and HVAC systems combined with the need to provide a green roof creates highly limited space on the roof. The applicant states that moving the mechanical equipment to the uppermost roof of the building to comply with the setback requirement would put the equipment in a different portion of the building and would require significant new infrastructure and systems work that would be cost-prohibitive.

A portion of the proposed penthouse elevator overrun would not comply with the penthouse setback requirements from a side wall. This is because the proposed elevator shaft as part of the enlargement would be a vertical extension of the existing elevator core. The applicant states that it would be infeasible and cost-prohibitive to move the entire elevator core to another location of the building so the new elevator overrun would comply with the side setback requirement.

(b) The relief requested would result in a better design of the roof structure without appearing to be an extension of the building wall;

The requested relief would result in a better design of the roof structures and the building's floor plates below. The wall for the mechanical equipment on the 11th floor is required by Subtitle C § 1500.6 and would appropriately screen this equipment. Both the 11th floor mechanical equipment and the penthouse elevator overrun would fully comply with the other required setbacks including, front, rear, and side along the southern property line. The only setback that would not be provided is along the western building wall, which faces the interior of the square and would not be visible from the street. As a result, the 11th floor mechanical equipment and associated screen along with the penthouse elevator overrun would appear not to be an extension of the building's wall.

² The side building wall in this case abuts the property's western property line, which is shared with 1143 New Hampshire Avenue, NW.

(c) The relief requested would result in a roof structure that is visually less intrusive;

See responses above – the proposed 11th floor mechanical equipment would be screened by the proposed wall that is located on the interior of the square, which should minimize visual impact from both the street and also the adjacent property at 1143 New Hampshire Avenue, NW. and the part of the penthouse elevator overside not meeting one of the side setback requirements would face the interior of the square.

(d) Operating difficulties such as meeting D.C. Construction Code, Title 12 DCMR requirements for roof access and stairwell separation or elevator stack location to achieve reasonable efficiencies in lower floors; size of building lot; or other conditions relating to the building or surrounding area make full compliance unduly restrictive, prohibitively costly or unreasonable;

It would be unduly restrictive and cost-prohibitive to move the 11th floor mechanical equipment and associated screen to another portion of the roof as it needs located in the area where there are existing HVAC and mechanical support systems, and moving the penthouse elevator overrun would require either moving the entire existing elevator core or creating a new core to serve just the penthouse, which would reduce usable space on the floors below.

- (e) Every effort has been made for the housing for mechanical equipment, stairway, and elevator penthouses to be in compliance with the required setbacks; and
 - The mechanical equipment and penthouse elevator overrun appear to be the minimum size necessary and conform to all other penthouse requirements other than side setback along the western building wall.
- (f) The intent and purpose of this chapter and this title shall not be materially impaired by the structure, and the light and air of adjacent buildings shall not be affected adversely.

There should be no adverse impacts to light and air available to adjacent buildings as the adjacent building in the rear is separated by a rear yard.

V. OTHER DISTRICT AGENCIES

No comments from other district agencies were received at the time this report was filed to the record.

VI. ADVISORY NEIGHBORHOOD COMMISSION

No comments from the ANC had been entered into the record at the time this report was filed to the record.

VII. COMMUNITY COMMENTS TO DATE

No comments from the community had been entered into the record at the time this report was filed to the record.

Attachment: Location Map

