

## MEMORANDUM

**TO:** District of Columbia Zoning Commission  
**FROM:** Joel Lawson, Associate Director, Development Review  
Jennifer Steingasser, Deputy Director Development Review & Historic Preservation  
**DATE:** July 24, 2014  
**SUBJECT: ZC 14-\_\_\_: Setdown and Pre-hearing Report – Recommendations for a Text Amendment to the Zoning Regulations: Rooftop Penthouse Regulations for All Non-Low Density Residential Development**

This report is being submitted less than 10 days prior to the Zoning Commission's Public Meeting. The Office of Planning respectfully requests that the Commission waive its rule and accept this report into the record.

### I. INTRODUCTION

This report is provided in response to requests from the Zoning Commission (the Commission) and the development community that OP submit, as soon as possible, proposed amendments to the zoning regulations which reflect the recent federal amendments to The Act to Regulate the Height of Buildings in the District of Columbia of 1910 (the Height Act). Because the current Zoning Regulations pertaining to penthouse are in some instances more stringent than what the amendment would permit, the changes to the Height Act cannot be given effect until corresponding changes to the Zoning Regulations are also adopted. The Commission also provided general instruction for what those amendments should include.

### II. RECOMMENDATION

The Office of Planning (OP) recommends that the Commission set down for a public hearing the following amendments to zoning regulations pertaining to rooftop penthouses:

- Allow 20' of height for all rooftop penthouses and uses within rooftop penthouses;
- Permit two levels, or stories, within the 20 foot rooftop penthouse height if located entirely below the Height Act limit;
- Eliminate both of the limits (on percentage of roof area and the limit on FAR), allowing the 1:1 setback requirement to dictate the maximum area of a penthouse;
- Allow all forms of habitable space within a rooftop penthouse; and
- In response to the Commission's stated wish to institute a linkage between new roof structure habitable space and affordable housing, apply the current Inclusionary Zoning program to new residential habitable space, and the existing Housing Linkage program to new habitable office space.

The recommendations for amendments, described in more detail in Section VI of this report, are consistent with the Height Act, and are not inconsistent with the Comprehensive Plan for the District of Columbia. In general, they would be anticipated to apply to all forms of development other than detached, semi-detached, and rowhouse dwellings.

This issue is complex, with ramifications to the city's built form, policy objectives, and land and building economics. There are differing expectations regarding the federal Height Act amendments, and how they should be implemented through zoning. There is also much concern in the development community, particularly among developers with projects in the planning and design phase, regarding how they should proceed if they wish to avail themselves of the additional flexibility granted by the Height Act but not yet permitted by zoning. OP has also received input from other city agencies and the Commission regarding how these changes should be implemented.

Due to the pressing need for these zoning amendments, OP is recommending that the Commission set down at this time the recommendations for amendments to the zoning text as outlined in this report. Based on what is set down by the Commission, OP will work with the Office of the Attorney General (OAG) to draft specific amendment text, which may include alternatives, prior to publication of the notification of the public hearing.

This report also serves as the Pre-Hearing report for this case, although OP anticipates providing more refined information, including draft text, prior to a public hearing.

### **III. BACKGROUND**

The Height Act is a District law adopted by the Congress in its capacity as the District's ultimate legislative body. The Act applies citywide and sets uniform maximum building heights throughout the District. In very general terms, the Act establishes the principle of relating the height of buildings to the width of the adjacent street. Maximum heights on residential streets are generally determined by the width of the street minus ten feet, up to maximum height of 90 feet (typically about 7 to 8 stories). For commercial streets, maximum heights are generally determined by the width of the street plus twenty feet, up to a maximum of 130 feet (typically 10-11 stories, but for some forms of development, 13 or even 14 stories are possible). The law permits the north side of Pennsylvania Avenue, NW between the U.S. Capitol and the White House to rise as high as 160 feet.

The Height Act permits certain structures to exceed the otherwise applicable height limits if approved by the District. The only type of penthouses expressly permitted by the Act was one over an elevator shafts. However, the Office of the Corporation Counsel, now OAG, later interpreted the Act as permitting penthouses over stairwells and penthouses housing mechanical equipment.

In doing so, the Height Act also establishes clear rules for rooftop penthouses which, prior to the recent amendments, included:

- A prohibition against the inclusion of "occupiable space" within penthouses that are above the height limit, limiting the use of the penthouse space to mechanical and circulation-over-ride area for penthouses; and
- A 1:1 setback from the edge of the building roof below to the penthouse.

Prior to the amendment, the Height Act included no limitation on the height or number of stories for the penthouses allowed, most likely because the only penthouse it expressly recognized was one over an elevator shaft.

At the request of Congress, the District of Columbia partnered with the National Capital Planning Commission (NCPC) between fall 2012 and November 2013 on a joint Height Master Plan to determine the extent to which the Height Act continues to serve both the federal and District government interests. Following many public meetings and hearings, a bill was introduced into the House on March 11, 2014 to take limited actions to amend the Height Act. *H.R.4192 - To amend the Act entitled "An Act to regulate the height of buildings in the District of Columbia"* which

permitted any type of penthouse above the Height Act limit, and permitted the human occupancy of penthouses no more than one story or 20 feet or less above the level of the roof directly below. This bill was passed on April 28, 2014 by a vote of 367 to 16. The bill was received by the Senate on April 29, 2014, and was passed by Unanimous Consent on May 6, 2014. Finally, the President of the United States of America signed the bill into law on May 16, 2014- Public Law No. 113-103. It included the following amendment text:

- (1) Replace “*penthouses over elevator shafts,*” with “*penthouses,*” and
- (2) Replace “*and no floor or compartment thereof shall be constructed or used for human occupancy above the top story of the building upon which such structures are placed*” with “*and, except in the case of a penthouse which is erected to a height of one story of 20 feet or less above the level of the roof, no floor or compartment thereof shall be constructed or used for human occupancy above the top story of the building upon which such structures are placed*”.

The changes would provide a valuable new source of taxation revenue, and present an exciting opportunity for a better utilization of our land-base within the confines of the Height Act limits.

The Zoning Regulations allow only certain types of uses, including those permitted by the pre-amendment Height Act and certain others that are accessory to amenity features. However, human occupancy is not among the uses permitted. In addition, the Zoning Regulations place more restrictive penthouse height and area restrictions. Therefore, at its May 12, 2014 public meeting, the Commission discussed in general terms the then-pending Height Act amendments, noting that it was important for the Commission to address this issue as soon as possible, and that any new permissions for human occupancy, which could have considerable benefit to landowners, should be tied to addressing broader District objectives for the provision of affordable housing - not necessarily in the new penthouse space, but through the provision of an affordable housing “linkage” applied to all new buildings or additions, regardless of the use or the location.

#### IV. EXISTING ZONING REGULATIONS

<b>Penthouse Regulation:</b>	<b>Revised Height Act:</b>	<b>Current Zoning Regulations:</b>
Height:	20 feet maximum for habitable space	18'-6" maximum
Stories:	1 for habitable space	Not directly regulated
Setback:	1:1 from all building exterior walls	1:1 from all building exterior walls
Size:	Not regulated (other than setback)	.37 FAR maximum; 1/3 of area of roof below, maximum.
Permitted Uses:	Any, including habitable space and space for mechanical equipment	Mechanical space; Habitable space not permitted, other than limited space ancillary to rooftop recreation space in residential buildings below the Height Act

Table 1 - Comparison of Height Act and Zoning Regulations Pertaining to Penthouses

As shown in Table 1 above, existing Zoning Regulations are more restrictive than the Height Act, in that they:

- Limit permitted uses within the penthouse to mechanical equipment, and a very limited range of ancillary spaces associated with rooftop recreation space for residential buildings below the Height Act (example – changing rooms, washrooms, etc.)

- Limit the height of a penthouse to 18’6” above the roof (§ 400.7(c) and various other zone specific regulations), although the zoning regulations do not provide a limit on the number of levels for a penthouse;
- Require 1:1 setbacks from the edge of the roof below (§ 400.7(b) and various other zone specific regulations);
- Provide limits on the size of rooftop penthouse, specifically:
  - an FAR limit of .37 FAR for designated rooftop penthouse enclosed space (including mechanical equipment) (§ 411.7);
  - an area limit of 1/3 of the total roof area in those zones with a limit on the number of stories (R-1 through R-5-A, C-1, and C-3-B<sup>1</sup>) (§ 411.7); and
  - within the definition for “Story”, which would apply to all zones, a limit that “*the total area of all roof structures located above the top story shall not exceed one-third (1/3) of the total roof area*”;
- Require that all roof structures be in one enclosure (§ 411.3);
- Require that the roof structure(s) be of one uniform height (§ 411.5);
- Provide for special exception review of relief from some Zoning Regulation (such as the requirement that all roof structures be enclosed within one space) but not for restrictions related to height or total size of the penthouse (§ 411.11); and
- Permit, for zones other than residential zones, that penthouse space does not count towards building parking requirements (example, § 537.2 for the SP zones).

Through the ongoing Zoning Regulations Review (ZRR) process (ZC Case 08-06A), OP has proposed some relatively minor amendments to how rooftop structures are regulated, including:

- 1) Reduce the permitted height of rooftop penthouses in the current R-1 through R-4 zones from 18’6” to 10’0”;
- 2) Amend the amount of enclosed penthouse area from FAR from .37 to .40 (an increase of 0.03 FAR); and
- 3) Clarify rooftop penthouse setback requirements for penthouses located below the Height Act limit.

The Zoning Administrator has also provided interpretations regarding the implementation of the Zoning Regulations and Height Act provisions, particularly related to the amount and location on the roof of enclosed space that can be devoted to ancillary spaces associated with rooftop residential amenity space (such as pool rooms, storage rooms, changing and wash rooms, etc.) located below the Height Act.

## V. ANALYSIS OF DEVELOPMENT PROJECTS

The Office of Planning has conducted a cursory analysis of recent projects that went through discretionary approval processes – 41 Zoning Commission cases dating to mid-2007, and a smaller number (18) of Board of Zoning Adjustment (BZA) cases for larger projects that included roof structure relief. OP chose these projects because they were located in all parts of the city in various non-low density zones; and because the information related to building, rooftop, and penthouse design was relatively readily available. The sample projects represent a range of uses – residential,

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<sup>1</sup> OP is proposing to remove the limit on the number of stories in the C-3-B zone as part of ZRR.

office, hotel, and mixed use developments, in zones ranging from R-5-A and C-2-A to C-3-C and C-4. In total, the sample sites have a combined land area of over 2.5 million square feet.

While a more comprehensive review including more projects and particularly more conforming projects may be possible, for the purposes of this stage of this initiative, OP feels that this data set is sufficiently representative of current projects in the District. The results of the analysis were illuminating, regarding actual and potential rooftop penthouse size under current zoning restrictions:

	Permitted	Actual <sup>2</sup>
Average area of enclosed rooftop penthouse as a percentage of roof area below:	33%	15%
Average FAR of enclosed rooftop penthouse area:	.37 FAR	.08 FAR
Average percentage of enclosed rooftop penthouse area used for mechanical equipment:		77%

Although these statistics are approximate and actual numbers vary somewhat depending on factors such as the size of the lot, OP found no examples of a building which appeared to utilize the full .37 FAR allowances for rooftop space. Typically, if the full FAR allowance was utilized, the resulting penthouse would exceed 1/3 of the area of the roof below<sup>3</sup>. However, the data also already indicates a desire for better utilization of the penthouse - for non-residential buildings, the percentage of the penthouse occupied by mechanical equipment is higher than in residential buildings (over 90% of office penthouse area compared to 73% for residential), reflecting the limited ability to provide some enclosed space associated with rooftop amenity space in residential buildings below the Height Act. This is even though the penthouse, as a percentage of the building roof area, tends to be slightly smaller in residential buildings than in office buildings, in the buildings studied to date.

Further OP analysis of the Zoning Commission cases studied, for which more detailed roof plans were typically available, indicated that enclosed penthouse space occupied on average about 15% of the rooftop space. Of the remaining unenclosed portion of the roof, on average, green roof occupied about 32%; outdoor terraces and amenity space covered about 23%, other mechanical equipment covered about 21%, and the remainder was either not specified, or was “cool” roof or some other roof material.

## VI. OP RECOMMENDED AMENDMENTS

### 1. ROOFTOP PENTHOUSE HEIGHT: Allow 20’ of height for all rooftop penthouses and uses within rooftop penthouses.

In accordance with the recent Height Act changes, all roof structures should be permitted a maximum height of 20 feet, measured from the top of the building roof that the penthouse sits on. In addition to being consistent with the Height Act, the small amount of additional height may permit some additional flexibility in the type and design of mechanical equipment, and may facilitate the ability to provide structures required for sustainable features such as intensive green roofs or solar panels on top of the penthouse roof.

<sup>2</sup> It is likely that actual numbers for downtown buildings, underrepresented in this list because fewer downtown buildings require a PUD, may be higher.

<sup>3</sup> This results from the fact that most buildings (and therefore their roof surface) do not occupy 100% of the lot and many buildings provide additional step-backs, or sculpting. On average, buildings provide a lot occupancy of about 85%, but the uppermost level has a lot occupancy of 53%.

**2. ROOFTOP PENTHOUSE STORIES OR LEVELS: Permit two levels, or stories, within the 20 foot rooftop penthouse height if the penthouse is located entirely below the Height Act limit.**

Although the zoning regulations do not appear to currently limit the number of stories in a penthouse, OP is not aware of any multi-story rooftop penthouses. However, the proposed 20 foot height limit could accommodate more than one story. For example, it could accommodate two story penthouse dwelling units, or habitable space with some types of mechanical rooms above, within the 20 foot limit. The explicit allowance for two levels within the 20 foot height limit would provide additional flexibility and opportunity to better utilize this permitted volume, without increasing the permitted volume. OAG has advised that this could be permitted only if the entire height of the penthouse is located below the permitted Height Act building height.

**3. ROOFTOP PENTHOUSE ENCLOSED AREA: Eliminate both of the limits on penthouse area in the current regulations (percentage of roof area and FAR).**

Under this scenario, penthouse area would be limited by the 1:1 setback requirement, consistent with the Height Act. Even though there has been an increasing desire to creatively utilize rooftop space, OP's cursory analysis indicated that buildings currently do not maximize the size of the penthouse structure, because the uses permitted within this space are so limited. However, the intent of the Height Act amendment is clearly to provide additional flexibility and opportunity to use penthouse space as habitable space, both in existing buildings and new buildings. OP is supportive of this ability, and the OP recommendation would help to facilitate this, while maintaining a reasonable setback to address design and penthouse visibility issues, providing additional opportunity for affordable housing linkage, and maintaining rooftop area for other uses such as terrace, green roof, or unenclosed mechanical equipment. Of course, green roof and other features may also be possible on top of the rooftop penthouse roof.

However, if the Commission wishes to retain a limitation on the permitted FAR or area of the building that the penthouse could cover, in addition to the 1:1 setback required, OP would recommend the following be set down in the alternative, for discussion:

- Expand the permitted FAR for rooftop penthouse space from 0.37 to 0.5 (or some other number).
- Increase the area of the building roof that may be covered with penthouse from 1/3 to 1/2 (or some other number) of the roof surface below.

**4. ROOFTOP PENTHOUSE USE: Allow all forms of habitable space within a rooftop penthouse, provided the use is permitted within that zone.**

The Height Act amendment is specifically intended to permit habitable space within rooftop penthouses above the Height Act. Since "habitable space" is not defined and the Height Act amendment did not limit permitted uses, the zoning regulations should allow the same flexibility in uses, including residential living or amenity spaces; offices or meeting rooms, or even commercial space such as a restaurant; provided the uses are permitted within that zone. Some of these enclosed spaces may also have associated unenclosed space – residential living or amenity space could have associated open terrace space; a restaurant could have associated outdoor seating, which would expand the useful space beyond that permitted to be enclosed.

The Commission may also wish to consider whether there are some uses that should be permitted on a rooftop only by special exception. An example could be a rooftop nightclub or bar located on a building which is directly adjacent to a residential zone.

**5. AFFORDABLE HOUSING LINKAGE: Apply existing affordable housing programs to new habitable penthouse space.**

In response to Zoning Commission direction to ensure that there is a linkage between new roof structure habitable space and affordable housing, it is proposed that the existing Inclusionary Zoning (IZ) requirement be applied to habitable space in residential buildings, and that the existing Housing Linkage requirement be applied to new habitable office space. Under this scenario:

- The IZ program would apply to any new residential penthouse space where IZ applies, i.e. the requirement to provide affordable housing at 8% to 10% of the space in residential buildings at an AMI of 50% to 80% would be applied to the additional habitable density gained through the Height Act amendment, as well as the rest of the building's proposed residential FAR; and
- A contribution to the Housing Production Trust Fund would be required for new discretionary office penthouse space. The housing linkage formula is an established process for office space that results from alley closings and Planned Unit Developments. Such a linkage between this new office density and housing would be consistent with Comprehensive Plan language, which, in Chapter 25 Implementation Table 25-2 Housing Linkage states that:

*“The housing linkage objective requires applicants who obtain bonus commercial office space as a result of a discretionary and otherwise appropriate street or alley closing or zoning density increase to produce housing or contribute funds to the production of housing, particularly housing that is affordable to low- and moderate-income households throughout the District, in an amount based on a formula tied to the amount or value of the additional commercial office square footage obtained.”*  
2520.1 (emphasis added)

OP would work with OAG to draft text to effectuate these, prior to a public hearing.

**VII. COMPREHENSIVE PLAN**

Changes to the roof structure regulations are required to effectuate the changes to the federal Height Act, and would not be inconsistent with the Comprehensive Plan. There would be no impact on either the Future Land Use Map, or the Generalized Policy Map. The proposal would not be inconsistent with Urban Design or Land Use policies, and would further Housing and Economic Development objectives:

**Land Use:**

*The Land Use Goal is: Ensure the efficient use of land resources to meet long-term neighborhood, citywide, and regional needs; to help foster other District goals; to protect the health, safety, and welfare of District residents and businesses; to sustain, restore, or improve the character and stability of neighborhoods in all parts of the city; and to effectively balance the competing demands for land to support the many activities that take place within District boundaries. 302.1*

**Urban Design:**

*The character of the central city has largely been shaped by the L'Enfant and McMillan Plans and the 1910 Height of Buildings Act. ... The Height Act has resulted in a predominance of structures that are as wide as they are tall, and a street environment that has more in common with Paris than it does with New York, Chicago, and other cities in North America. 902.2*

Policy UD-1.1.4: Height Act of 1910

*Protect the civic and historical character of the city, particularly the “horizontal” urban quality of Central Washington, by limiting building heights in accordance with the Height Act of 1910. ... 903.10*

UD-2.1 Place-Making in Central Washington

*Design decisions for Central Washington should also address the peculiar architectural dynamics created by the 1910 Height Act. Currently, the desire to maximize buildable floor area while adhering to height limits often results in buildings with very little sculptural form. The most innovative and distinctive buildings tend to be public places—museums, libraries, and other structures where maximizing rentable space is not the primary objective. This is consistent with the city’s architectural heritage in some respects, but there are still opportunities to improve the design of office, residential, and retail buildings in the central city. 909.4*

*While the height limit clearly affects building form, it also affects street life in unexpected ways. It results in ground floors that are sunken below grade by as much as several feet to maximize the number of stories that can be accommodated in each building. This in turn creates challenges for street-level retailers, and impacts the experience of walking or shopping downtown. Other challenges include the appearance of vents, mechanical equipment, and other essential rooftop elements that exceed the maximum building height. The design of these elements takes on special importance given their high visibility on an otherwise “flat” downtown skyline. 909.5*

**Housing:**

Policy H-1.2.1: Affordable Housing Production as a Civic Priority

*Establish the production of housing for low and moderate income households as a major civic priority, to be supported through public programs that stimulate affordable housing production and rehabilitation throughout the city. 504.6*

Policy H-1.2.7: Density Bonuses for Affordable Housing

*Provide zoning incentives to developers proposing to build low- and moderate-income housing. Affordable housing shall be considered a public benefit for the purposes of granting density bonuses when new development is proposed. Density bonuses should be granted in historic districts only when the effect of such increased density does not significantly undermine the character of the neighborhood. 504.14*

Action H-1.2.C: New Revenue Sources

*Identify and tap new sources of revenue for the Housing Production Trust Fund (HPTF) to produce affordable housing and keep rental and owned housing affordable. ... 504.20*

Table 25.2: Housing Linkage

*The housing linkage objective requires applicants who obtain bonus commercial office space as a result of a discretionary and otherwise appropriate street or alley closing or zoning density increase to produce housing or contribute funds to the production of housing, particularly housing that is affordable to low and moderate-income households throughout the District, in an amount based on a formula tied to the amount or value of the additional commercial office square footage obtained. 2520.1*

*In 1994, the District of Columbia adopted zoning provisions that linked the granting of bonus density in commercial development projects to requirements for affordable housing. The “linkage” recognized that the demand for housing in the city was driven in part by new commercial development and rising land values. The linkage provisions are currently triggered by:*

- *The approval of a "discretionary and otherwise appropriate street or alley closing which results in the provision of additional commercial office space" by the Council; or*



- *The approval of a "discretionary and otherwise appropriate zoning density increase which results in the provision of additional office space" by the Zoning Commission. (p.5-14)*

**Economic Development:**

Policy ED-2.1.1: Office Growth

*Plan for an office sector that will continue to accommodate growth in government, government contractors, legal services, international business, trade associations, and other service-sector office industries. The primary location for this growth should be in Central Washington and in the emerging office centers along South Capitol Street and the Anacostia Waterfront. 707.6*

Policy ED-2.1.5: Infill and Renovation

*Support the continued growth of the office sector through infill and renovation within established commercial districts to more efficiently use available space while providing additional opportunities for new space. 707.10*

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