District of Columbia
Office of Planning

MEMORANDUM

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TO: District of Columbia Zoning Commission

FROM: Joel Lawson, Associate Director, Development Review

Jennifer Steingasser, Deputy Director Development Review & Historic Preservation

DATE: November 24, 2014

SUBJECT: ZC 14-13: Supplemental Report - Text Amendment to the Zoning Regulations: Rooftop Penthouses

I. BACKGROUND

At its July 28, 2014 public meeting, the Zoning Commission received a report from the Office of Planning (OP), dated July 24, 2014, describing proposed amendments to the Zoning Regulations pertaining to rooftop penthouses arising from recent federal amendments to the Height Act. The proposed amendments complement the recent amendments by the federal government 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 most instances more restrictive than what the Height Act amendment would permit, the changes to the Height Act cannot be given effect until corresponding changes to the Zoning Regulations are also adopted. The proposals are consistent with the Comprehensive Plan, and with both Congressional and Council action.

The Zoning Commission requested that OP work with the Office of the Attorney General (OAG) to draft proposed text amendment language, prior to set down, and noted a number of issues for which it wished to have alternative language prepared for inclusion in the notification At the September 4, 2014 special public meeting, the Commission set down the draft text The Commission requested that the notification include a number of alternatives to specific portions of the text, and additional notices that the Commission was inviting comments on portions of the text for which no specific alternative had been suggested

The Public Hearing was held on November 6, 2014. The Zoning Commission requested additional information from the Office of Planning, and left the record open for OP and public comment.

II. ADDITIONAL ANALYSIS OF PROPOSED AMENDMENTS

At the November 6, 2014 public meeting, the Zoning Commission requested additional information or clarification regarding the following issues

1. Definitions as of Story and Story, Top,
2. Current solar panel interpretations,
3. Uses permitted within a rooftop penthouse for mixed use zones,
4. Affordable housing linkage for habitable penthouse space in a non-residential building; and
5. Inclusionary Zoning applicability to habitable penthouse space in a residential building.

III. ANALYSIS AND OP RECOMMENDATIONS

1. Definitions

The Commission noted concerns that the definitions proposed for "Story" and Story, Top" might be inconsistent This was due to an error in the OP report The definitions as proposed and as included in the notice are as follows·

> **Story** - the space between the surface of two (2) successive floors in a building or between the top floor and the ceiling or underside of the roof framing. The number of stories shall be counted at the point from which the height of the building is measured
> For the purpose of determining the maximum number of permitted stories, the term "story" shall not include cellars**, or** ~~**stairway or elevator**~~ penthouses.~~**, or other roof structures; provided, 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.**~~
>
> **Story, top** - the uppermost portion of any building or structure that is used for purposes other than ~~**housing for mechanical equipment or stairway or elevator**~~ penthouses The term "top story" shall exclude architectural embellishment.

2. Solar Panels on Top of a Penthouse Roof

As noted at the hearing, OP recommends that the issue of solar panels, and other similar devises, be addressed more comprehensively as part of a separate zoning regulations text amendment currently being prepared by OP for Zoning Commission consideration. This would allow OP an opportunity to continue discussions with the solar industry and other interested parties, and would permit a more thorough and coordinated approach to this important issue

However, the Zoning Commission requested additional clarification regarding the current regulation of solar panels in the District. OP Staff met with the Zoning Administrator on November 10, 2014, who provided the following clarification of what is currently permitted:

- Solar panels, solar thermal, and other similar technologies are considered "mechanical equipment" for the purposes of zoning and Height Act review
- For a "tiltable" solar panel, the height is measured to the maximum possible height
- On a <u>BUILDING</u> roof.
    - Mechanical equipment (including solar) less than 4' in height above the roof or parapet is not considered "structure" so is allowed to be on the roof and does not require screening or a 1 1 setback from the edge of the roof,
    - Mechanical equipment (including solar) more than 4' in height above the roof or parapet is considered "structure", so is allowed to be on a roof only if it is screened[1] and set back 1:1 from the edge of the roof,
    - This is the case for a roof that is below or at the Height Act maximum permitted height limit; i e the rules are the same if the building roof is at or below the Height Act limit.

[1] Under current regulations, the screening would have to be of the same height as the mechanical penthouse

- On a PENTHOUSE Roof
  - There have been very few examples of requests for a solar installation on a penthouse roof,
  - Mechanical equipment above the current 18'6" penthouse height limit (whether above or below the Height Act limit) is not permitted,
  - Mechanical equipment (including solar) below the current 18'6" penthouse height limit and less than 4' in height above the penthouse roof is not considered "structure" so is allowed to be on the roof and does not require screening or a 1.1 setback from the edge of the roof,
  - Mechanical equipment (including solar) below the current 18'6" penthouse height limit and more than 4' in height above the penthouse roof is considered "structure" " so is allowed to be on the roof only if it is screened and set back 1:1 from the edge of the roof
  - This is the case whether the penthouse is above or below the Height Act limit, i e the rules are the same if the penthouse roof is above, at, or below the Height Act limit for the building.

3. Uses Permitted Within a Penthouse

The Zoning Commission questioned whether, in a mixed use zone where the non-residential use is limited, the penthouse would be permitted to be for any permitted use OP interpreted this as including two questions

- Should penthouse space in a mixed use zone be allowed to be used for non-residential use?
- Should non-residential space on a building otherwise largely or entirely devoted to residential use be permitted?

Currently, most mixed use zones (C, SP, W and CR) permit and incentivize the provision of residential space – the FAR permitted for residential exceeds that of non-residential building The OP proposal for penthouses, as drafted, would not restrict the use of the penthouse area, beyond restricting it to uses permitted in the zone

While a commercial use in a penthouse on a building devoted entirely or mainly to residential use would be unlikely due to security and access issues, OP is not opposed to a provision which would restrict this possibility, for example a provision which limits the use of the penthouse to residential or residential-amenity space if the floor below is devoted to residential use

OP remains supportive of permitting the penthouse area on a non-residential building in a mixed use zone to be utilized for non-residential use This would particularly be the case if the Zoning Commission elected to limit the height of the penthouse in the C-1 or C-2-A zones to 10 feet and/or one story, as discussed at the public hearing OP would also continue to support permitting penthouse space on a non-residential or mixed use building to be for residential use. This would provide additional flexibility and encourage continued improvements to DC's commercial corridors, either through the provision of additional employment in non-residential space, or additional residences through the provision of new housing. Either way, such habitable space would contribute towards the affordable housing provisions proposed

A commercial use on a residential building in a residential zone would not be permitted – under the OP proposal, a use not permitted within the zone would not be permitted within the penthouse.

4. Affordable Housing Linkage for the Provision of Habitable Penthouse Space on Non-Residential Buildings

The Commission requested

- **Verification of the AMI requirement for affordable housing space generated under the current housing linkage requirement.**

  The existing housing linkage requirement for a PUD that proposes an increase in office gross floor area above the amount of office space permitted as a matter of right is provided in Section 2404 of the zoning code. Section 2404 2 requires "*the applicant to produce or financially assist in the production of dwellings or multiple dwellings that are affordable to low- and moderate-income people*". Chapter 24 goes on to define these terms

  > ***Low-income households*** *- households whose incomes do not exceed eighty percent (80%) of the median income for the area, as determined by the U S Department of Housing and Urban Development (HUD), with adjustments for smaller and larger families, except that HUD may establish income ceilings higher or lower than eighty percent (80%) of the median for the area on the basis of HUD's findings that such variations are necessary because of prevailing levels of construction costs or fair market rents, or unusually high or low family incomes Note HUD income limits are updated annually and are available from local HUD offices*
  >
  > ***Moderate-income households*** *- households whose incomes are between eighty-one percent (81%) and ninety-five percent (95%) of the median for the area, as determined by HUD, with adjustments for smaller or larger families, except that HUD may establish income ceilings higher or lower than ninety-five percent (95%) of the median for the area on the basis' of HUD's findings that such variations are necessary because of prevailing levels of construction costs, fair market rents, or unusually high or low family incomes*

  However, the OP proposal (proposed §414 1) would require that if housing is provided (as opposed to a payment to a housing production trust fund), that it be for low income households as defined in Chapter 26, Inclusionary Zoning §2601 1.

  > ***Low-income household*** *- a household of one or more individuals with a total annual income adjusted for household size equal to less than fifty percent (50%) of the Metropolitan Statistical Area median as certified by the Mayor pursuant to the Act*

  As such, the proposal would be a deeper level of affordability than the housing linkage requirement for PUDs The OP proposal would also require that housing provided as part of new construction shall be not less than 850 sq.ft. per apartment unit (§414.7), and that it be provided for a period of not less than 20 years, consistent with the current housing linkage requirement for PUDs.

- **Additional clarification of the methodology used by OP to determine the potential amount space that would result in an affordable housing requirement, and the methodology for providing an approximate valuation of that space.**

  1. OP first had to determine the potential size of a penthouse on a non-residential building To do this, OP examined over 50 existing or planned non-residential buildings to

determine their lot size, their approximate roof area, and the current area of their penthouse and enclosed mechanical equipment

2 Using the proposed penthouse setback requirements for a 20 foot tall penthouse as they would apply to each property, OP then determined the maximum potential size of the penthouse on each of these roofs [2] The end result was a maximum potential habitable penthouse area, based on a 20 foot tall penthouse, for each of the commercial buildings studied

3. OP also approximated the value of developable space for non-residential buildings within each commercial zone.

   a. OP used GIS data to prepare spreadsheets including data for each lot developed with a non-residential building in each zone, including lot area, permitted FAR, and assessed land value Lots that could tend to skew the results, such as lots that had no land value or which had a very small lot area (less than 1,000 sq.ft.) were eliminated.

   b OP used the land area for each property and the maximum permitted FAR in each zone, to determine the maximum development potential development for each lot

   c Using the assessed land value for each property, OP then determined the per square foot value of construction on that property.

   d Finally, OP applied a height premium. The premium was set at 2.5% for each additional story (for the purposes of this study, a story was defined as 10 feet in height), so the premium for a penthouse in a zone allowing a height of 70 feet would be lower than the premium for a penthouse in a zone allowing 90 feet. As noted at the hearing, a second and higher premium (equal to about 4% per floor) for "view" was not included for these purposes, as the view potential for each penthouse could not reasonably be ascertained

   e These values were then averaged, resulting in an average per square foot value of non-residential building in each zone

4 OP then returned to the assessment of potential penthouse area for the commercial buildings studied in Steps 1 & 2. Any property for which the maximum potential penthouse would be less than 1,000 sq.ft. was eliminated (2 in total), consistent with the OP proposal.

5. OP multiplied the applicable average value per square foot of development (based on the zone that the building is in), with the premium added, to the potential habitable penthouse area, to arrive at a total valuation.

6 Finally, consistent with the current formula for calculating the housing linkage requirement, OP divided this number, for each building studied, but one-half, to arrive at the estimated average contribution to a housing trust fund – approximately $940,000.

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[2] OP did not discount space that would be unviable due to penthouse size or configuration OP did discount area for mechanical equipment, over-rides, and other space that OP has proposed would not count towards the housing requirement – this worked out to, on average, about 14% of the roof area

As noted in the OP report, OP acknowledges that this results a rough estimate of the impact of the housing linkage requirement on any individual site – many factors, such as lot area, building size and age, location in the city, zone; use; and size of both the building and the proposed penthouse would significantly impact the assessed land values, the value of penthouse space, and the feasibility and costs associated with constructing new rooftop space.

OP also notes that the potential habitable penthouse area, and therefore the potential housing linkage requirement, would typically increase for a two story penthouse (where permitted), or for a penthouse constructed to less than the permitted 20 foot height.

5. Inclusionary Zoning for the Provision of Habitable Penthouse Space on Residential Buildings

The Commission requested additional clarification of the methodology used by OP to determine the potential amount of IZ space that would result from the penthouse area, and the methodology for providing an approximate valuation of that space, compared to the value of space in the rest of the building

1 As with the commercial buildings, OP first had to determine the potential <u>size</u> of a penthouse on a residential building To do this, OP examined 50 existing or planned residential buildings to determine the lot size, the approximate roof area, and the current size of the penthouse and enclosed mechanical equipment.

2 Using the proposed penthouse setback requirements for a 20 foot tall penthouse as they would apply to each property, OP then determined the maximum potential size of the penthouse on each of these roofs.[3] The end result was a maximum potential habitable penthouse area, based on a 20 foot tall penthouse, for each of the residential buildings studied.

3 OP them applied the IZ set-aside requirement applicable to the zone, to each of the properties (8% or 10% of the potential penthouse area, at 50% or 80% AMI, as applicable), to determine how much affordable housing requirement would result from each of the residential buildings studies, if the penthouse area was maximized. This is the square footage figure provided in the OP report – 753 sq.ft on average.

4. OP then approximated the <u>value</u> of the penthouse space, compared to space in the remainder of the building. OP used the same methodology described for commercial buildings above, but substituted assessed land values for residential buildings in residential and mixed use zones

   a OP used GIS data to prepare spreadsheets including data for each lot developed with a residential building in each zone, including lot area, permitted FAR, and assessed land value Lots that could tend to skew the results, such as lots that had no land value or which had a very small lot area (less than 1,000 sq.ft.) were eliminated

[3] OP did not discount space that would be unviable due to penthouse size or configuration. OP did discount area for mechanical equipment, over-rides, and other space that OP has proposed would not count towards the housing requirement – this worked out to, on average, about 8% of the roof area

b OP used the land area for each property and the maximum permitted FAR in each zone, to determine the maximum development potential development for each lot.

c. Using the assessed land value for each property, OP then determined the per square foot value of construction on that property.

d. OP applied the defined height premium to each of the zones, to estimate the premium for penthouse space. The premium was set at 2 5% for each additional story, so the premium for a penthouse in a zone allowing a height of 50 feet would be lower than the premium for a penthouse in a zone allowing 90 feet.

e. These values were then averaged, resulting in an average per square foot value of residential building in each zone

5. OP then returned to the assessment of potential penthouse area for the commercial buildings studied in Step 1

6 OP multiplied the applicable average value per square foot of development (based on the zone that the building is in) with the premium added, to the potential habitable penthouse area, to arrive at a total valuation. To do this, OP simply compared the estimated average value of the penthouse space with the premium (about $633,000) to the estimated average value of the same amount of space in the rest of the building (about $563,000)

As noted in the OP report, OP acknowledges that this results a rough estimate of the impact of the housing linkage requirement on any individual site – many factors, such as building size and age; location in the city; zone; use, and size of both the building and the proposed penthouse would significantly impact the assessed land values, the value of penthouse space, and the feasibility and costs associated with constructing new rooftop space

OP also notes that the potential habitable penthouse area, and therefore the potential IZ requirement, would typically increase for two story penthouses (where permitted), or for penthouses constructed to less than the permitted 20 foot height.

JLS/jl