3. DEFINING TALL BUILDINGS

3.1 DEFINITION OF A TALL BUILDING IN TOWER HAMLETS

TALL BUILDINGS PRINCIPLE 2:
TALL BUILDINGS DEFINITION

A tall building is classified as any building that is significantly taller than its local context and/or has a significant impact on the skyline. Within the borough, buildings of more than 30 metres, or those which are more than twice the height of surrounding buildings (whichever is less) will be considered to be a tall building.

Image 3.1: An eight storey building in an area with a three storey context appears tall

3.1.1. The definition of a tall building in Tall Building Principle 2 is taken from Local Plan Policy D.DH6 which in paragraph 8.64 of the explanatory test states that:

'For the purposes of this policy, a tall building is classified as any building that is significantly taller than its local context and/or has a significant impact on the skyline. Within the borough, buildings of more than 30 metres, or those which are more than twice the height of surrounding buildings (whichever is less) will be considered to be a tall building.'

3.1.2. Understanding the local context and in particular the typical or defining height of a particular area (the context height) is therefore required to determine whether a building of less than 30 metres is a tall building.

3.1.3. As an example a building of 25 metres in height (8 residential storeys) would be a tall building in a domestic scaled area where buildings are typically 8 metres in height (two residential storeys) but a local high point in an urban area composed of buildings that are 15-18 metres in height (5 storeys).

3.1.4. Furthermore London Plan Policy D9 indicates that for a building to be defined as a tall building it should not be less than 6 storeys or 18 metres measured from ground to the floor level of the uppermost storey.

Context height 8 metres (2 storeys) / 25 metre high building (8 storey) = tall building

Context height 15-18 metres (5-6 storeys) / 25 metre high building (8 storey) = local high point

Figure 3.1: Determining whether a building under 30 metres in height is a tall building depends on the local context

Policy Links
London Plan: D9
Local Plan: D.DH6

3.2 BUILDING CONTEXT HEIGHT

TALL BUILDINGS PRINCIPLE 3: CONTEXT HEIGHT

When preparing proposals for a tall building an applicant should identify the context height within which their site is located and demonstrate how the proposal responds to the local height characteristics.

3.2.1. The context height of an area is the height that an observer would read as the typical or defining height of a particular area. In places where buildings are of consistent height, the context height may be the most commonly occurring building height. In places where building height is more varied the context height may be a middle point that buildings fluctuate around.

3.2.2. Context heights for Tower Hamlets are identified in Figure 3.2. These have been established by sub-dividing the whole borough into its constituent character typologies and using Lidar data* to determine the context height of each of the areas. The context height is based on the mean height of buildings within an area with small structures (garden sheds outbuildings etc) and buildings above 30m in height (the exception to the context) removed from the calculation. To ensure the robustness of the dataset, spot checks have also been carried out. In areas that comprise mostly buildings above 30m, the context height is manually set to '30m+'.

3.2.3. Applicants preparing proposals for tall buildings will be expected to identify and refer to the context height of the area in which the building is located when considering and justifying its height. Where a proposal is located at the interface between context height areas, or where a new general height is emerging, applicants should establish an understanding of the prevailing height context for the site which the proposal must respond to.

3.2.4. As with building height, context heights are represented as height in metres and with the typical number of residential storeys used as a comparator.

3.2.5. The relationship between the height of a tall building and the context height is an important factor in understanding how prominent a tall building may be and in determining whether or not its height is proportionate to its wider role and significance in the context of the borough and wider city.

3.2.6. It is not however the only consideration and the form of a tall building, its proportions, slenderness and bulk will also be important factors to consider.

Policy Links
Local Plan: S.DH1; S.DH3; D.DH6

Using Lidar Data to establish Context Heights

Lidar is a dataset that holds information of the elevation of land or objects. Within GIS software, a process is conducted to subtract the Digital Terrain Model (DTM), with Digital Surface Model (DSM), to create a new dataset that identifies building heights above ground

Code	Context Height	Equivalent storey height	Area Description
A	4-6m	1 storey	Low scale
B	6-9m	2 storeys	Domestic scale
C	9-12m	3 storeys	Local centre, large domestic scale
D	12-15m	4 storeys	Urban scale
E	15-18m	5 storeys	Intense urban scale
F	18-21m	6 storeys	High density urban development
G	21-24m	7 storeys	High density urban development
H	24-27m	8 storeys	High density urban development
J	30m+	10+ storeys	High rise cluster

Table 3.1: Context height categories

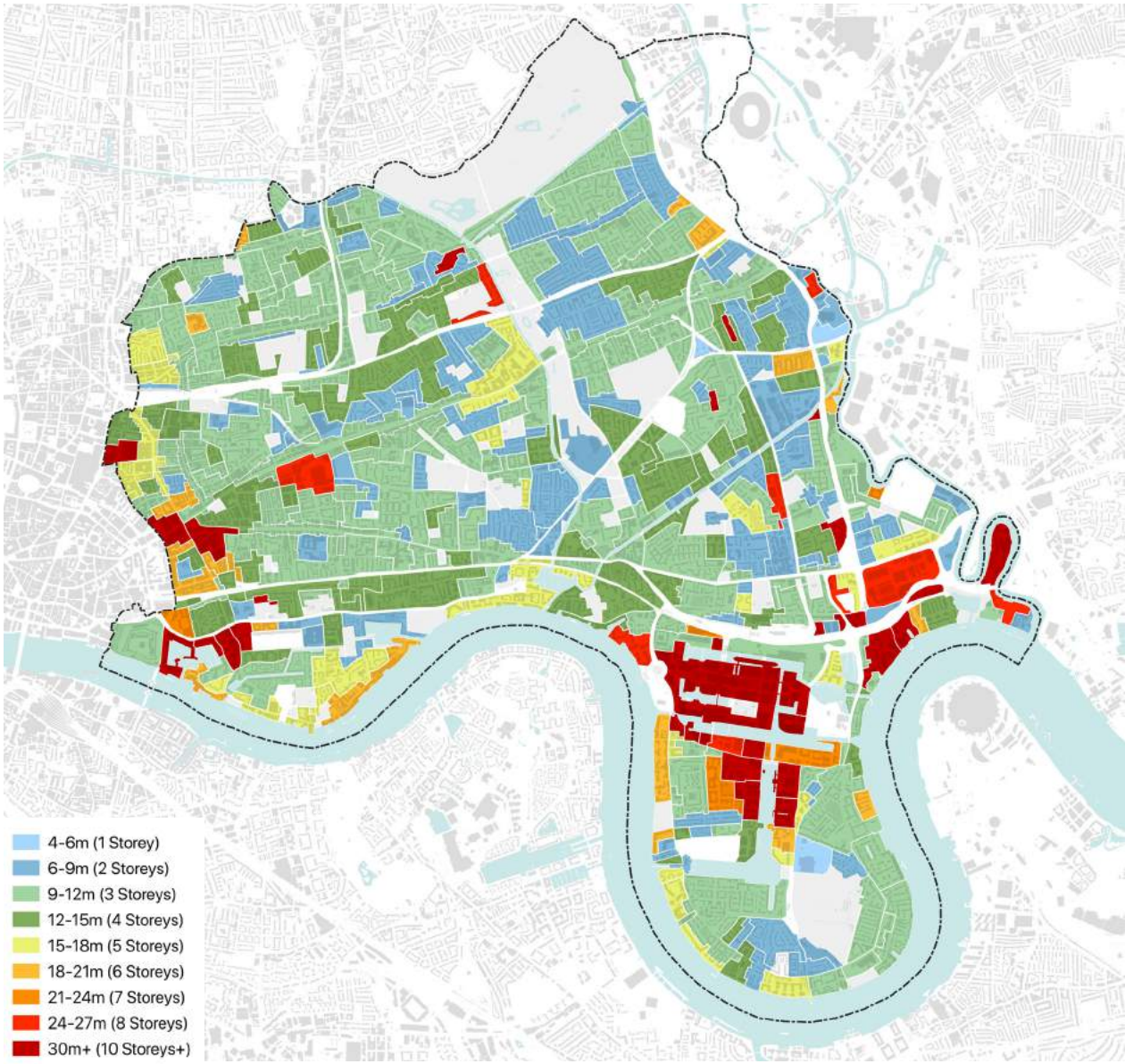
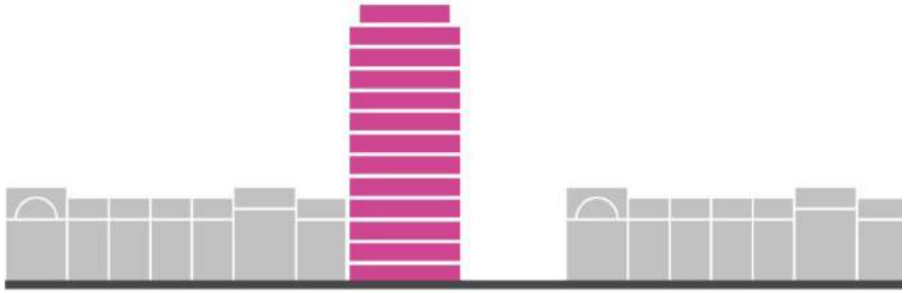


Figure 3.2: Existing context heights in Tower Hamlets

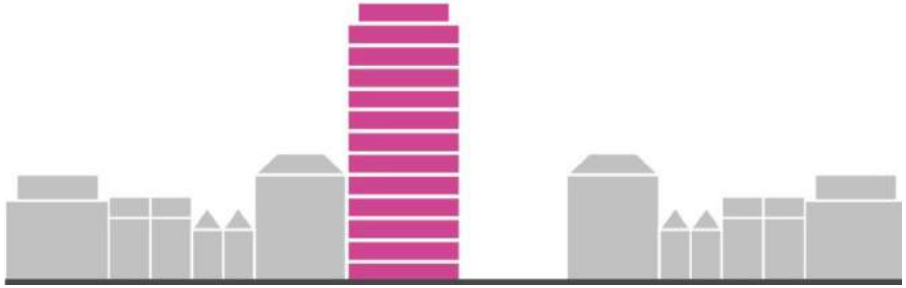
CONSISTENT VS VARIED CONTEXT HEIGHT

3.2.7. In some parts of the borough the height of buildings is relatively consistent (for instance where there are streets of Victorian or Georgian terraces) where as in other areas, where for instance there is a greater mix of building typologies, the building heights may be more varied.

3.2.8. In areas of consistent height (consistent context height) a taller building is likely to be perceived as being more prominent and outstanding than in an area where there is significant variation in building height (varied context height). Areas with consistent context height are therefore likely to be more sensitive to tall buildings than those with varied context.



Consistent context height



Varied context height

Figure 3.3: A building is likely to be perceived as taller where building context height is consistent than where it is varied

AREAS WITH A VARIED CONTEXT HEIGHT

3.2.9. When using Lidar data to establish the context heights it is also possible to assess how much variance in building height there is within a context height area. This is represented by the standard deviation. Calculating the Relative Standard Deviation allows us to compare the variance across different areas as a percentage. Areas above 40% Relative Standard Deviation are classified as having varied height whereas those below 40% are classified as having consistent height.

3.2.10. Areas considered to have a Varied Context Height are identified in Figure 3.4 with a hatch. This is relevant when considering the likely prominence of a tall building within an area - refer to paragraph 3.2.8.

EVOLVING CONTEXT HEIGHT

3.2.11. Some parts of the borough are likely to change significantly through the plan period as part of a plan led regeneration. This includes sites within the Poplar Housing Zone and on the Isle of Dogs where substantial change is envisaged. In some cases this may give rise to a change in the context heights indicated in Figures 3.2 and 3.4.

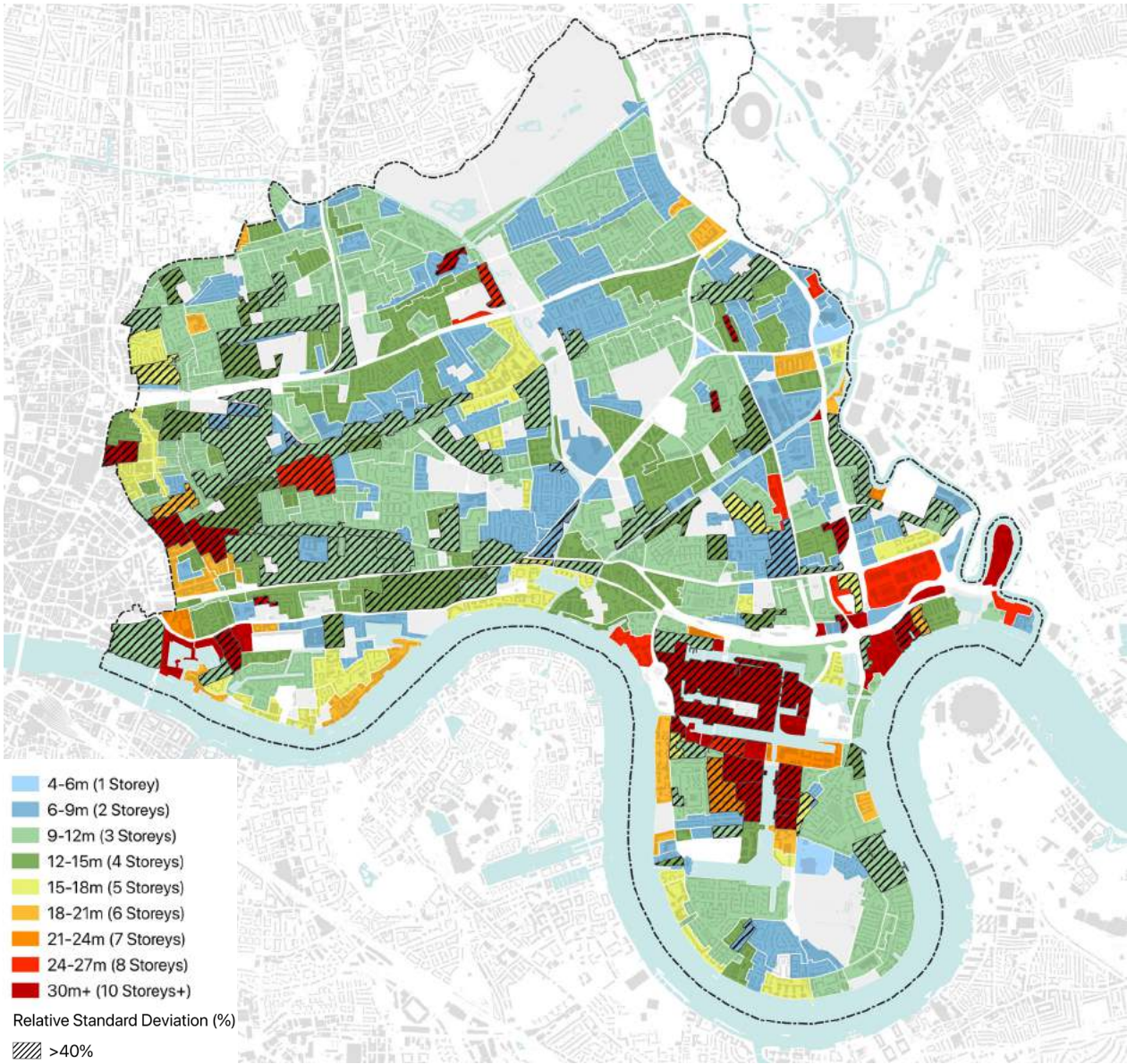


Figure 3.4: Existing context heights in Tower Hamlets with areas with varied context height identified

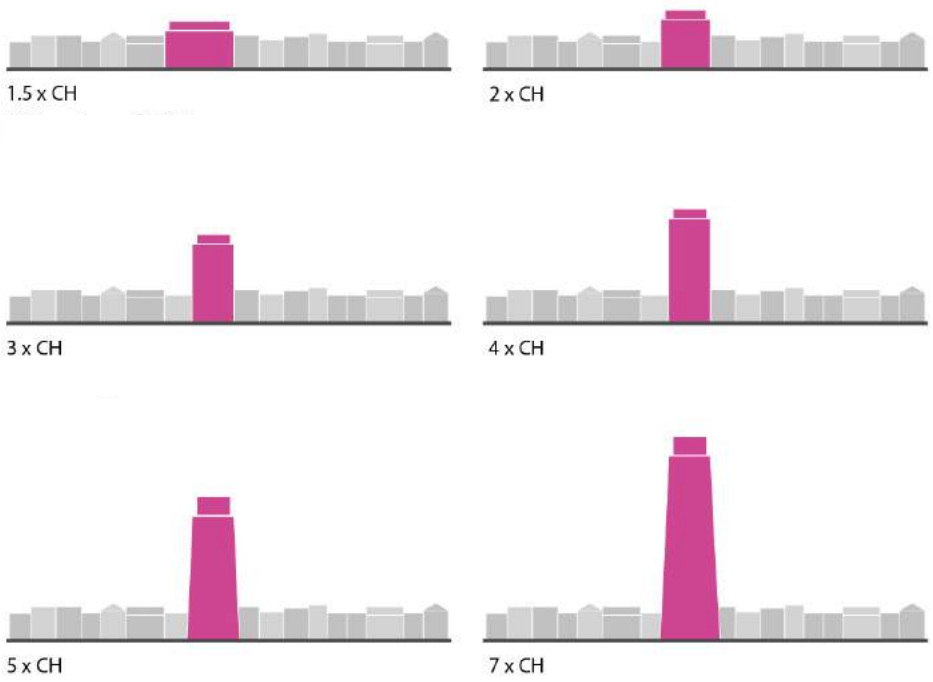


Figure 3.5: The height of buildings can be expressed as 'context height ratio'

Figure 3.6: The context height expressed as an impact on the skyline

CONTEXT HEIGHT RATIO

3.2.12. The height relationship of a tall building with its context can be expressed as a factor of the prevailing contextual height or as the 'context height ratio' (CHR). The CHR indicates the degree of 'tallness' of a building in relation to its context. It also provides a measure of the extent to which a building is 'outstanding' on the skyline considering the prevailing height and scale of development of a place.

3.2.13. The CHR provides a means to discuss the relative relationship of a building's height within its immediate context, as well as to discuss this within the wider place setting. It also enables the simple categorisation of tall buildings by height in respect to their context height.

3.2.14. Figure 3.5 diagrammatically depicts a building within its context. It illustrates how the relationship between the building and its surrounding context changes as its height increases. Figure 3.6 indicates how this may impact on the skyline.

3.3 TALL BUILDING CLASSIFICATION

TALL BUILDINGS PRINCIPLE 4: TALL BUILDINGS CLASSIFICATION

In Tower Hamlets a tall building is classified in terms of its height relative to the context height of the area in which it is located and as any building over 30 metres in height. This should be expressed as the context height ratio and provides a measure of the degree of prominence that the tall building is likely to have within the wider area. This prominence should respond to its role and location within the wider townscape and applicants will need to provide a reasoned justification for this prominence.

You said...

'The context ratio thinking is particularly appropriate and helpful in the local context due to the perception of height relative to the height and uniformity of other buildings in the neighbourhood.'

What we did...

Made it a requirement for applicants to identify the context height of the area in which their site is located and justify the proposed height against this.

3.3.1. The prominence of a tall building in the wider townscape will normally increase as its scale, height and massing increases although it is recognised that topography, the variation in context height, the form, scale and roofscape of surrounding buildings, other tall buildings in the vicinity and the location within a street block will also will also play a role in determining a tall buildings prominence.

3.3.2. Policy D.DH6 states in part 1 (a) that:

'Tall buildings must demonstrate how they will be of a height and scale, mass and volume that are proportionate to their role, function and importance of the location in the local, borough-wide and London context; and take account of the character of the immediate context and of their surroundings'.

3.3.3. In Tower Hamlets tall buildings are classified as either 'Local scale tall buildings', 'District scale tall buildings' or 'Metropolitan scale tall buildings'. This classification is based on the height of a tall building relative to its context expressed as a multiplier of the context height (Context Height Ratio). As the CHR increases the prominence of the tall building is also likely to increase. In areas with varied context height the CHR can be a little higher reflecting the potential for these areas to accommodate greater variation in building height.

3.3.4. The following tall buildings classification is established in relation to the context height in Tower Hamlets:

- Local Scale Tall Building – 2 to 3x context height (CHR 2-3) within an area of consistent context height / 2 to 3.5x context height (CHR 2-3.5) within an area of varied context height;
- District Scale Tall Building – 3 to 5x context height (CHR 3-5) within an area of consistent context height / 3.5 to 5.5x context height (CHR 3.5-5) within an area of varied context height; and
- Metropolitan Scale Tall Building – 5x context height and above (CHR 5+) within an area of consistent context height / 5.5x and above context height (CHR 5.5+) within an area of varied context height.

3.3.5. District and metropolitan scale buildings should only be promoted in urban areas well served with infrastructure and facilities and that have a character and built form that can assimilate the height, scale and massing of these buildings and accommodate associated activities. In Tower Hamlets these are likely to be restricted to the designated tall building zones for which specific guidance is provided.

3.3.6. Further information on the tall building classification including potential roles and locations for each classification is provided in Table 3.2.

Policy Links
London Plan: D9
Local Plan: D.DH4; D.DH6

	Building height classification	Ratio to Context Height (CH) Consistent Context	Ratio to Context Height (CH) Varied Context	Perception in Relation to its Context	Visual Impact on the Skyline	Potential location
	**Local Scale Tall Building** Tall building of local significance	2x CH to 3x CH (CHR 2-3)	2x CH to 3.5x CH (CHR 2-3.5)	Tall building establishes a prominent exception within its context, yet may be perceived as constituent part of the context	Tall building stands out from its context, yet its impact on the skyline is mainly local	To mark special locations in the townscape, such as a strategic street corner, a public space or a particular function, such as a station
	**District Scale Tall Building** Tall building of district wide significance	3x CH to 5x CH (CHR 3-5)	3.5x CH to 5.5x CH (CHR 3.5-5.5)	Tall building stands out markedly from its context and establishes a pronounced contrast with its context	Tall building is highly visible and notably affects the skyline on a district wide scale	Limited to locations that are of district or borough wide importance, such as strategic infrastructure nodes or public institutions
	**Metropolitan Scale Tall Building** Tall building of metropolitan significance	5x CH and above (CHR 5+)	5.5x CH and above (CHR 5.5+)	Tall building establishes a jarring contrast with its context, unless a locally increased building height and/or a cluster of other tall buildings help to mediate and visually build up to and integrate its height	Tall building is highly visible and significantly affects the skyline on a London wide scale	Confined only to areas that have a London wide strategic importance and form part of a high intensity employment cluster

Table 3.2: Table of tall building classifications relative to context height

3.3.7. Applying the tall building classification provides a theoretical starting point for considering the height of a tall building in locations that have been identified as appropriate for tall buildings within different parts of the borough. Potential heights for local scale tall buildings are set out in Table 3.3 for both areas with a consistent or varied context height.

3.3.8. This does not imply that these heights will be appropriate and any proposal for a tall building will need to be carefully considered in respect of its location and design merits against other criteria identified within this Tall Buildings SPD and development plan policies as part of the planning application process.

3.3.9. It should be noted that height should not be the only factor that is considered when assessing potential acceptability of a tall building in relation to its context and the form of a tall building, its proportions, slenderness and bulk will also be important factors.

3.3.10. In context height categories A and B (low scale and domestic and scale areas) buildings that exceed twice (2x) the context height within an area of consistent context height and 2.5x the context height within an area of varied context height but have an overall height less than 18 metres are not considered to be tall buildings, as per the London Plan Policy D9 directive. However taller buildings within these areas may still have a considerable impact on their local context and should be carefully considered in respect of the Council's general design policies.

Code	Context Height	Equivalent storey height	Area Description	Consistent context height	Varied context height
				Local scale tall building 2 - 3x context height	Local scale tall building 2 - 3.5x context height
A	4-6m	1 storey	Low scale	N/A	N/A
B	6-9m	2 storeys	Domestic scale		18m – 21m (6 to 7 storey)
C	9-12m	3 storeys	Local centre, large domestic scale	18m – 27m (6-9 storey)	22.5m – 31.5m (7-10 storey)
D	12-15m	4 storeys	Urban scale	24m – 36m (8-12 storey)	30m – 42m (10-14 storey)
E	15-18m	5 storeys	Intense urban scale	30m – 45m (10-15 storey)	30m – 52.5m (10-17 storey)
F	18-21m	6 storeys	High density urban development	30m – 54m (10-18 storey)	30m – 63m (10-21 storey)
G	21-24m	7 storeys	High density urban development	30m – 63m (10-21 storey)	30m – 73.5m (10-24 storey)
H	24-27m	8 storeys	High density urban development	30m – 72m (10-24 storey)	30m – 84m (10-28 storey)
J	30m+	10+ storeys	High rise cluster	Varies	Varies

Table 3.3: Local scale tall building definition