

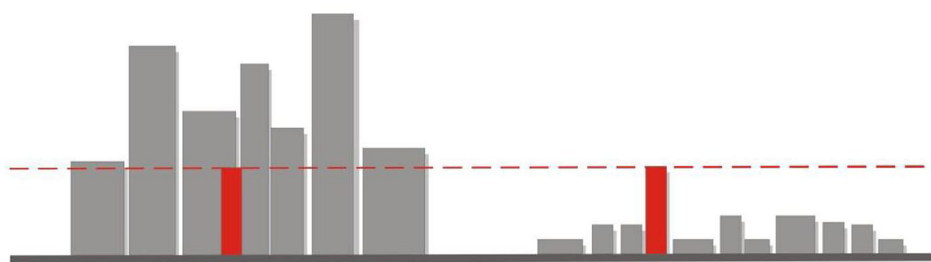


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TALL BUILDING POLICY (POLICY NUMBER 11907)

APPROVED BY COUNCIL : 29 MAY 2013
C25/05/13



Adopted
May 2013

CAPE TOWN

TALL BUILDING POLICY

A policy for managing the development of tall buildings in Cape Town



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the 1990s, the incidence of *S. flexneri* infections has increased in the United Kingdom [10]. In the United States, the incidence of *S. flexneri* infections has increased in the 1990s, with a peak in 1994 [11].

There is a paucity of data on the incidence of *S. flexneri* infections in the United Kingdom. In the 1980s, the incidence of *S. flexneri* infections was estimated to be 1.5 cases per 100 000 per year in the United Kingdom [12]. In the 1990s, the incidence of *S. flexneri* infections was estimated to be 1.5 cases per 100 000 per year in the United Kingdom [13].

The purpose of this study was to determine the incidence of *S. flexneri* infections in the United Kingdom in the 1990s. The study was conducted in the United Kingdom, where the incidence of *S. flexneri* infections has increased in the 1990s.

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1. INTRODUCTION AND RATIONALE FOR POLICY FORMULATION

Whilst the City is desirous of facilitating a bold and prosperous future, the development of “tall buildings” has a direct impact on the identity, image and experience of our city. For some, tall buildings represent a city of progress and striving for international recognition. For others tall buildings are a matter of concern, particularly in relation to views of Cape Town’s mountain ranges, especially Table Mountain and visual connection to the sea. Other concerns relate to the integrity of protected heritage buildings, the experience of public spaces, the character of the urban fabric and the quality of the street environments for city users and residents.

The City of Cape Town (the City) has received and is expecting to receive more applications for departures related to the height of buildings. At the core of this is the desire among developers to capitalise on their landholdings at a time when property values are increasing. Understandably, developers want to gain maximum leverage from the development rights conferred by the zoning regulations.



In some cases tall building developments are driven by the desire to create something “bigger and better” than the surrounding buildings. In other cases, tall buildings are proposed in order to improve areas where the zoning regulations currently allow inappropriate development. And to complicate matters, some existing buildings have been allowed to develop to heights well above the maximum height stipulated in the zoning regulations. However, each application has to be dealt with on its own merit and due to various shortcomings - limited resources of the City and a lack of clarity in the zoning regulations - this leads to inconsistent decisions. It is therefore not just the City that is looking for clarity and guidance, but also the developers and architects who want consistency in assessment.

For these reasons, it was necessary to devise a clear and comprehensive Tall Buildings Policy that will save time, effort and money for both the City and applicants of height related departures. It will also ensure that development is both responsible and sustainable for future generations.

It is the City’s view that taller buildings are part of our future. If developed with sensitivity to the environment and with awareness of the unique urban context, tall buildings can enhance their environment and serve as beacons of urban improvement. If correctly placed and well-designed, these buildings can enhance the public perception of an area by contributing to a well-defined and assessable public realm, attracting further investment.

Building an unusually tall structure normally requires the City’s approval of what is called a “departure” from the existing regulations. This departure would typically involve the removal of height or bulk restrictions, changes to the space between the building and the road, or changes to the standard regulations for the provision of parking.

Moving away from the purely visual impact of the tall building, there are other important considerations – the demands on infrastructure, municipal services and transport systems which are already stretched in some city areas. The overall impact of tall buildings should therefore be assessed holistically through the planning process. In fact, due to the scale of the development, the Policy propagates pre-submission consultation with the City to alleviate key concerns early on rather than wait until the formal application process.

In summary, the Tall Buildings Policy advocates responsible and sustainable growth, positive contributions to the public realm and the enhancement of the overall cityscape by ensuring the development of well-integrated tall buildings in appropriate locations. It is therefore a guide for the location and design of tall buildings that require height related departures (pre-submissions phase) as well as an assessment tool (post submission phase). In the spirit of co-operation, the positive potential of large scale developments can be harnessed, and the longer term interests of the city can be served through a process of consultation with stakeholders, the City, public and private developers.

2. LEGISLATIVE & STATUTORY CONTEXT

Neither the Tall Building Policy nor the accompanying Design Guidelines seek to introduce or take away any existing development rights. As such, there is synergy between the Cape Town Zoning Scheme (CTZS) as well as the National Building Regulations and the intentions of the Tall Building policy. The Tall Building Policy and guidelines aim to provide more clarity to the development process and assessment process so as to promote high quality design in appropriate locations.

a Legislation influencing the Tall Building Policy:

- Constitution of Republic South Africa, Act No. 108 of 1996
- National Building Regulations and Building Standards, Act No.103 of 1977
- National Environmental Management Act (NEMA,) Act No. 107 of 1998
- National Heritage Resources Act (NHRA), Act No. 25 of 1999
- Aviation Act, No. 74 of 1962
- Land Use Planning Ordinance (Western Cape) Ordinance No 15 of 1985
- City of Cape Town Zoning Scheme Regulations

The current Land Use and Zoning Schemes Regulations are legal documents that confer particular development rights and obligations to properties and are used in conjunction with other legislation, such as environmental laws, to manage development in the city. The Central City CBD is currently the only area within the city that has a defined height limit of 60m, while other areas throughout the city are mainly defined by general zoning regulations. Even so, there is a need for a set of well-defined principles that could sit alongside the Land Use Regulations and offers the requisite guidance especially in the case of departure applications. The Tall Building Policy aims to bridge this gap in relation to tall buildings.

b City of Cape Town Related Planning Strategies and Policies:

The Tall Building Policy and associated design guidelines are intended to assist in providing a uniform basis for consideration of land use and built form applications. Due to their central role in using the policy, the content of the document has been work-shopped with the Planning and Building Development Management department. In constructing this policy, there has also been consideration of other city wide initiatives such as:

i City Development Strategy (draft 2010)

The City Development Strategy is a high-level policy initiative that aims to define a long-term vision for the city's development. By establishing a clear and transparent process for the assessment and delivery of tall buildings, the Tall Building Policy is aligned to the strategic aims of the CDS by supporting economic competitiveness and social development while considering the natural environment and future city form.

ii Cape Town Spatial Development Framework (2012)

This is a long-term, citywide plan (20 years plus) to manage the growth and change in Cape Town metropolitan area. The plan encourages appropriate land use intensification, a more compact city and the enhancement of the unique sense of place and quality of the built form in Cape Town. The plan also promotes good contextual urban design fit, and ordering of the relationship between people, urban space and the environment (natural and built).

The Tall Building Policy supports the realisation of the long-term metropolitan spatial structure put forward by the Cape Town SDF by facilitating land use intensification in accessible, high-opportunity locations (e.g. urban nodes and development corridors) and clarifying the City's development intentions to private investors.

iii District Spatial Development Plans & Environmental Management Frameworks (2012)

These are medium-term plans for the use of space at district level that indicate possible land use in new development areas, urban renewal or proposed improvements to existing areas.

iv Local Spatial Plans

These are detailed plans for specific parts of the city. These include detailed proposals regarding the character of certain areas and the maximum height of buildings. They may also suggest site-specific development or design criteria. The focus is on analysis prior to development and the clear presentation of this process. The *CCDS-DGLUM* (below) is an example of such a more detailed Local Area Plan that supports the Tall Buildings Policy:

Central City Development Strategy: Development Guidelines for Land Use Management (CCDS-DGLUM)

The *CCDS-DGLUM* aims to translate the vision for the Central City into a desirable built form, thereby directing public and private sector development. This is done through a set of clear guidelines that provide a consistent basis for development decision-making by public officials and at the same time give direction and certainty to the private sector.

v Other Strategy or policy documents

The Tall Building Policy falls in this category. Other policy documents include the densification and scenic drives policy. These suggest what factors should be taken into account when considering applications. To safeguard scenic routes and views, the documents indicate view lines that should be preserved, and recommend land use along these routes.

Economic Growth Strategy (draft)

The principal objective of the Economic Growth Strategy (EGS) is to grow the economy and create jobs - an overarching objective of the *Opportunity City*. The EGS is based on the latest research on globally competitive cities, and structured around five strategic areas or chapters which are fundamental building blocks of competitive cities. The first chapter of the EGS specifically points towards building a globally competitive city through institutional and regulatory changes. Strategy 4 within this chapter has direct relevance to the Tall Building Policy in that it focuses on accelerating and deepening regulatory modernisation and business improvement processes and the establishment of an institutional environment conducive to entrepreneurial activity.

The other four chapters focus on providing the right basic service, transport and ICT infrastructure, utilising work and skills programmes to promote growth that is inclusive, leveraging trade and sector development functions to maximum advantage and ensuring that growth is environmentally sustainable in the long-term.

The Tall Building Policy fully supports these principles of creating an environment conducive to accelerating economic growth as well as that of ensuring that growth is environmentally sustainable in the long-term.

Densification Strategy (2012)

The Densification Strategy seeks to improve the City's sustainability status and enhance the quality of the built environment by promoting higher densities in appropriate locations so as to ensure optimal and efficient use of infrastructure, services, facilities and land. Tall buildings will be one of the ways to achieve this and the Tall Building Policy will contribute by giving guidance on how land use intensification in the form of tall buildings should be approached.

Scenic Drive Network Management Plan (2003)

The Scenic Drive Network Management Plan contains guidelines for development alongside designated scenic routes. In addition, the proposed Cape Town Zoning Scheme has provisions for overlay zone controls for scenic drives for certain of the planning districts. Due to the effect that tall buildings might have on these key views, it is suggested that reference is made to these two documents.

Integrated Transport Plan (2006-2011)

This is a medium-term plan that supports the development of a more compact city that allows for adequate public transport thresholds. By aligning transport and land use planning, a land use pattern can be brought about which would reduce the total amount of travel, while improving access to opportunities. The need to travel by car would be minimised by promoting sustainable travel patterns such as encouraging walking, cycling and the use of public transport modes.

On-going transport planning is an important informant in a number of the planning processes outlined above and has been taken into account in formulating the policy and guideline proposals. The link between public transport and higher density uses (not just residential) is key to promoting a sustainable city.

vi Development guidelines

These are “softer” guidelines emphasising the need for good practice. The *Design Guidelines for Tall Buildings* falls in this category. The strong message here is the need for good urban design in the local and broader contexts. These guidelines are helpful in the preparation of plans and in the assessment of development applications.

City of Cape Town Green Buildings Guidelines (Draft)

The aim these guidelines is to actively promote resource efficient construction of new or renovated buildings in Cape Town to minimise the negative environmental impacts of the built environment, while maximising positive social and economic impacts. Incorporating principles of sustainability into the lifecycle of buildings including materials, manufacture, design, construction and operation enables designers and developers to minimise the environmental impact of a development at little or no cost. Many sustainable interventions actually save money through lower water and electricity bills, less maintenance and the improved health of inhabitants. Green buildings also save the externalised environmental and social costs we all bear.

The Green Building Guidelines document is aligned with the Green Building Council of South Africa, which has incorporated the Green Star Rating system of the Green Building Council of Australia. It is envisaged that The City will incorporate the Green Star Rating system in the future.

Tall Building Protocol (2008) - replaced by Tall Building Policy once adopted.

This interim procedural tool was established to bridge the gap for assessing Tall Building applications in the absence of a Tall Building Policy. It identifies the assessment criteria¹, considerations and assessment methods as well as submission requirements² for tall building applications. The use of these tools has been taken forward into the final Tall Building Policy.

¹Protocol's Assessment criteria includes: a) motivation, b) relationship to context, c) heritage impact assessment at city-wide and local level, d) transport impact assessment, e) contributions to permeability and legibility of the site and wider area, f) impacts to the public realm, g) architectural excellence, h) impacts on the local environment (micro climate and general amenity considerations), i) alternative urban form/density analysis, j) green building design and k) impacts on existing infrastructure and services.

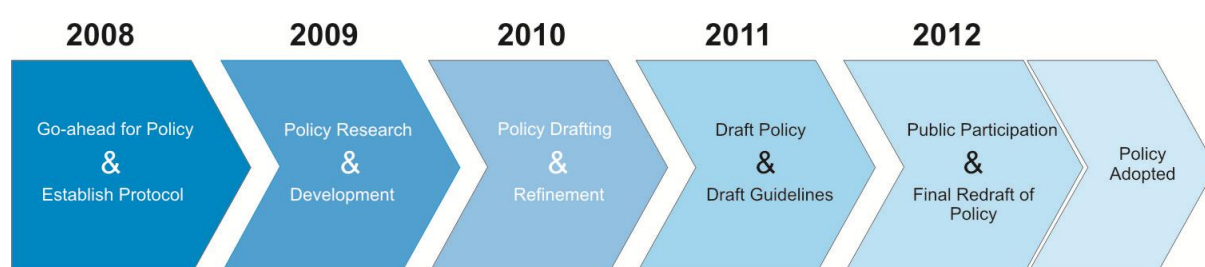
²Protocol's Submission requirements includes: a) full motivation on desirability to extend beyond the Zoning Scheme height limit, b) submission of fully calibrated, accurate electronic three-dimensional representation of the proposed building, c) a full urban design analysis, d) the results of a wind tunnel test indicating the wind impacts of building in context, e) impacts on public realm, f) a study of alternative building form explorations, g) heritage impact assessment, h) transport impact assessment and i) a green building plan indicating environmental and energy impacts with mitigating proposals.

To avoid misunderstandings and delays, all these documents should be studied by developers before they submit applications for taller buildings to Council for consideration.

3. BACKGROUND and POLICY DEVELOPMENT

Due to development pressures, especially in the Central City CBD, approval was given in October of 2008 by the Planning and Environment Portfolio Committee (PEPCO) to proceed with a Tall Building Policy. A Project Management Team and Task Team was identified and approached to take this forward.

While the Policy was researched and developed, an intermediate *Tall Building Protocol* was established and came into effect. This Protocol identified the assessment criteria, considerations and assessment methods as well as submission requirements for tall building applications. The use of these tools has been taken forward into the final Tall Building Policy.



In February 2011 a *Draft Tall Building Policy* and accompanying best practice “*Draft Design Guidelines for Tall Buildings*” were tabled with PEPCO and was favourably received. PEPCO requested that this draft report should be re-written in non-technical language so as to be more accessible to a wider audience prior to being permitted to go through the public participation process.

An amended version of the Draft Tall Building Policy was then submitted to the newly constituted portfolio committee, called Economic, Environmental and Spatial Planning Committee (EESP) in September 2011. Following this meeting Spatial Planning and Urban Design (SPUD) was tasked to first brief a newly elected Task Team, to explain the background, get feedback and acquire their input. This step was regarded as a necessary precursor for the EESP to be able to consider the granting of authority for SPUD to proceed with the suggested public participation phase of the project (during February and March 2012).

As part of the public participation process, a stakeholder workshop was held on the 20th of February 2012. Presentations were made to a targeted interest groups and professional bodies such as the Urban Design Institute of South Africa (UDISA), Council for Tall Buildings and Urban Habitats (CTBUH-SA), Cape Institute for Architecture (CIA), South African Institute of Civil Engineers (SAICE), Institute of Landscape Architects South African (ILASA), South African Planning Institute (SAPI) in order to glean specialist support for and input into the policy and its utilisation.

The policy was also presented at all Subcouncil meetings in February 2012 where Councillors and Ward Forums members were invited to input into the policy and its utilisation.

The draft Policy document and accompanying Best Practice “*Draft Design Guidelines for Tall Buildings*” was then made available for public perusal during the month of March at the 24 sub-council offices, municipal libraries, at PBDM district offices, as well as on the City’s website, as part of a 30-day notice period for comment. Individual presentations at some Subcouncil Activity days and to District offices as well as to the Project Management Team and the Task Team also offered valuable input into the public participation process.

The amended Tall Building Policy was resubmitted to the Economic, Environmental and Spatial Planning Portfolio Committee (EESP) in February 2013. Now, with final comments from and support of the Strategic Planning Unit and Tall

Building Task Team, the Tall Building Policy (with Design Guidelines annexure) was finally adopted by Council in May 2013.

4. WHAT IS A TALL BUILDING

The policy shall apply to all departure applications for Tall Buildings. There is no absolute definition of what represents a “tall building.” International best practice points towards the Council for Tall Buildings and Urban Habitat (CTBUH)³ and their definition or criteria for height. The CTBUH suggest that a building, in terms of international standards, of perhaps 14 plus storeys (*or over 50 meters in height*) could be used as a threshold for considering it as a “tall building. This is in the context of super tall buildings and international standards. In the Cape Town context, we believe that a tall building is a building that exhibits some element of “tallness” in one or more of the following categories (as based on CTBUH definition): a) Height in relation to context, b) height in relation to proportion and b) height in relation to building technologies.

a. Height in relation to Context

It is not just about height of a building, but about the context in which the building exists. Therefore, in a Cape Town context, a 10-storey building may not be considered a tall building in a high-rise metropolitan node such as the City Central Business District (CBD) and Foreshore, yet in another local node or CBD this may be distinctly taller than the average local urban form. The same applies for a residential area where for instance the building is double the height the Zoning Scheme allows. This could be a 5-storey building in a single dwelling area where a double storey is the maximum allowed by the Zoning Scheme.



Image from CTBUH www.ctbuh.org

It is however important to remember that the number of floors is a poor indicator for defining a tall building because the current variation is between 2.4m – 4.6m (*per zoning scheme due to different uses e.g., office vs. residential usage*), therefore the reference to 35m in height as a comparison to 10 storeys.

Through the public participation process it was decided that, in the context of Cape Town’s Tall Building Policy, the following definitions (in relation to context) and therefore the application of the Policy, will apply:

- In high order nodes storey height of more than 10 storeys or 35m (whichever is the highest) is seen as *significantly* tall buildings. *Significantly* taller buildings are commonly known as skyscrapers, and applications in this instance could be referred to the Trans-disciplinary Design Panel for further assessment. Referral to this panel would be at the discretion of The City.
- In lower order nodes the definition of a tall building will depend on the local context and here a building is seen as a *substantially* taller building if it is more than 1.5 times the permissible height as specified in the Zoning Scheme Regulations.

³The **Council for Tall Buildings and Urban Habitat (CTBUH)** is an international not-for-profit organisation supported by architecture, engineering, planning and development and construction professionals. The CTBUH is the world’s leading body in the field of tall buildings and the recognised source of information on tall buildings internationally. Founded in 1969, the Council’s mission is to disseminate multi-disciplinary information on tall buildings and sustainable urban environments, to maximise the international interaction of professionals involved in creating the built environment, and to make the latest knowledge available to professionals in a useful form. The Council is the arbiter of the criteria upon which tall building height is measured, and thus the title of “The World’s Tallest Building” determined. The South African section of the CTBUH includes leading members of the architectural, engineering and related built environment professions and is currently led by Kevan Moses of Stauch Vorster Architects (Country Representative, based in Johannesburg) and Guy Briggs of GB|USPD (City Representative in Cape Town).

b. Height in relation to proportion

It is also about proportion. There are numerous buildings which are not particularly high, but are slender enough to give the appearance of a tall building, especially against low urban backgrounds. Conversely, there are numerous big/large footprint buildings which are quite tall but their size/floor area rules them out as being classed as a tall building.



Image from CTBUH www.ctbuh.org

Through the public participation process, it was decided that, in the context of Cape Town's Tall Building Policy, this definition (*proportion*) of a tall building, and subsequent application of the Tall Building Policy objectives, should be interpreted by the Local District office based on their local knowledge.

c. Height in relation to building technologies

If a building contains technologies⁴ which may be seen as being a product of "tall" (e.g., specific vertical transport technologies, structural wind bracing as a product of height, etc.), then this building can be classed as a tall building.

5. POLICY APPROACH, PRINCIPLES AND AIMS

As per the Economic Growth Strategy, The City has as an objective the creation of a regulatory environment that facilitates investment and supports growth in an efficient, responsible, environmentally appropriate and sustainable manner. The Tall Building Policy provides for this by introducing greater certainty into the processes related to the assessment of tall buildings as defined in the policy.

In many cities around the world, the design of tall buildings is specifically dealt with in dedicated tall building policies and in the development approval processes. In Cape Town, this policy now aims to bridge the gap and facilitate appropriate solutions in both the context of the local area and the wider city, bearing in mind that Cape Town has a specific character and a context that is different to other cities. The policy brings to public knowledge that taller buildings should preferably be located in nodal areas and should enhance the character of the urban environment through quality design and architectural excellence. The policy also highlights the impact that tall buildings could have on the social and economic wellbeing of related communities.

The main principles of the Tall Buildings Policy are to:

- Promote and encourage sustainable growth in the city by permitting greater building height in appropriate locations;
- Ensure that taller buildings fit into the context of the surrounding cityscape, without negative impacts;
- Encourage design excellence. Tall buildings should form part of high quality urban environments in specific locations;
- Recognise that growth is dynamic and that the approach to tall buildings should therefore be flexible, provided that the proposal meets the strictly applied criteria for quality, design, character, context and protection of the urban environment.

As mentioned before, neither the Tall Building Policy nor the accompanying development guidelines seek to introduce or take away any existing development rights. Specific aims of the policy rather include the following:

⁴The CTBUH definition also mentions this as a definition and, in the context of Cape Town's Tall Building Policy, this definition (*technologies*) of a tall building is a case in point rather than an interpretation.

- Creating greater awareness of the issues surrounding the design and location of tall buildings;
- Ensuring that new tall buildings reinforce the attractive qualities of the built environment in order to sustain or improve the image of the city;
- Encouraging a high standard of design and architectural excellence, blending sympathetically with the local and city context, and respecting attractive views across the city;
- Providing a more consistent transparent approach to dealing with applications for departures concerning the relaxation of height restrictions;
- Explaining clearly to developers the criteria and procedures to be adopted in the assessment of applications for taller buildings;
- Preserving areas of special character or interest, protecting principal views across the city and, most importantly, preserving the iconic skyline created by Table Mountain, a World Heritage Site;
- Preserving or enhancing the quality of Urban Conservation Areas, heritage areas and listed buildings of special character;
- Reducing, as far as possible, speculative or opportunistic applications and applications lacking merit; and
- Meeting the development objectives of a sustainable development.

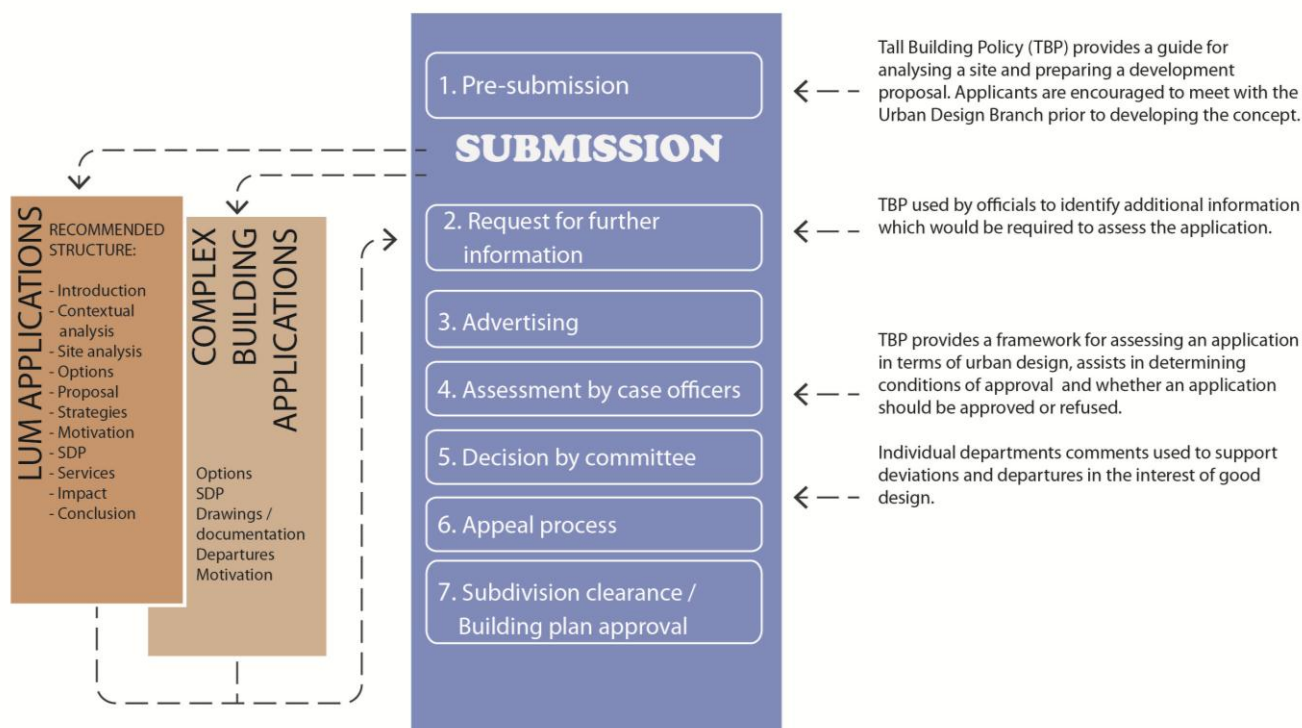
In summary, the Tall Buildings Policy advocates responsible sustainable growth that makes a positive contribution to placemaking and the public realm and enhance the overall cityscape by ensuring the development of well-integrated tall buildings in appropriate locations, while giving guidance on the design during the early planning and design phases.

6. HOW TO USE THE POLICY – ITS APPLICATION

The Tall Building Policy contains information that will help developers when they prepare their applications, specifically regarding the siting and design of tall buildings, and detail the information that needs to accompany the submission.

It will also help officials to assess tall building applications, aiming to make the process far more transparent. In fact, it is hoped that the Policy will be used more during the pre-submission phases in discussion with The City and others, to guide design and make the application process easier.

TALL BUILDING POLICY AND EXISTING LUM PROCESSES



The Tall Building Policy (and reference to the Design Guidelines for Tall Buildings) will apply whenever an applicant seeks approval of an application for relaxation of the Scheme Regulations⁵.

The Policy and Design Guidelines can however also be used generally as a reference guide for all taller building applications, especially to assist during pre-submission discussions. Taken together, these documents promote an awareness of better design through an integrated and holistic understanding of the potential impacts of a tall building in relation to its place and purpose in the greater and immediate context of urban development.

Practical application of the policy, when requesting additional rights (beyond the existing rights) for the development site(s), can be expressed as follow:

⁵Planning applications that can influence height as determined by the relevant district planning office

Level 1: Applications for minor additional height (whether new buildings or modifications to existing buildings), i.e. for building less than 1.5 times the underlying bulk and height rights as referred to in the Scheme Regulations and less than 10 storeys/35m)

- The applicant will adhere to Policy statements: 1, 4, 6, 7 (related to local context) and 8;
- The application should be unpacked (full documentation provided with reasoning to demonstrate how the design solution has been arrived at) with reference to the "Issues to be addressed by applicant".

Level 2: Applications for substantial tall buildings or major additional height (whether new buildings, modifications to existing substantial tall buildings or modifications to existing tall buildings that would create a substantial tall building), i.e. more than 1.5 times the underlying rights as referred to in the Scheme Regulation)

- The applicant will adhere to Policy statements: 1, 3, 4, 6, 7, 8, 9 and 10;
- The applicant should adhere to Assessment Criteria and submission material;
- The application will be unpacked (full documentation provided with reasoning to demonstrate how the design solution has been arrived at) with reference to the "Issues to be addressed by applicant"; and
- The application can possibly be referred to an Inter-disciplinary Design Panel.

Level 3: Applications for significant tall buildings (whether new buildings, modifications to existing significant tall buildings or modifications to existing tall buildings that would create a significant tall building), i.e. applications for additional height application to buildings over 10 storeys/35m)

- The applicant will adhere to ALL Policy statements;
- The applicant should adhere to Assessment Criteria and submission material;
- Pre-application discussions with the City will be a requirement;
- The application should be unpacked (full documentation provided with reasoning to demonstrate how the design solution has been arrived at) with reference to the "Issues to be addressed by applicant"; and
- The application will most likely be referred to an Inter-disciplinary Design Panel.

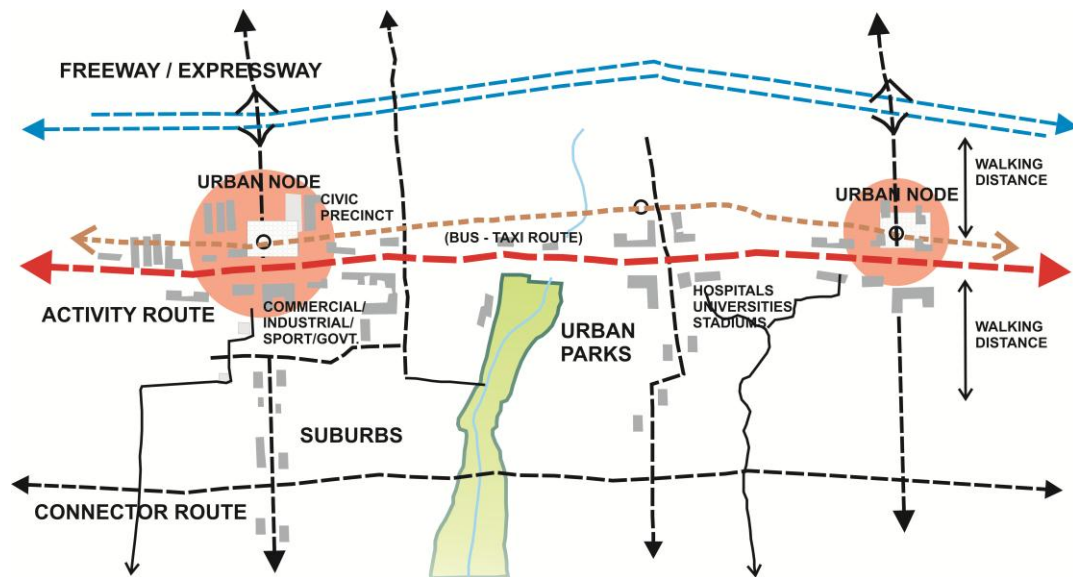
The Tall Buildings Policy aims to facilitate growth in a sustainable manner that positively contributes to placemaking, the public realm and to the overall cityscape by:

- Directing prospective developers towards existing nodes and spatial plans that provide guidance regarding **appropriate locations** for tall buildings;
- Requesting prospective developers to provide **adequate information** to motivate and substantiate the proposal (that usually requires departures);
- Requesting prospective developers to illustrate how they have considered the quality of design and consequent **impacts of the proposed tall building at a range of scales** as identified in the Issues to be addressed by Applicant in Section 8a (also the headings of the *Design Guidelines for Tall Buildings*).

The overall intention of the *Tall Building Policy* is to ensure that all Tall Building applications are assessed in a balanced, transparent and objective manner and to prevent short term interests overriding the long term sustainability of the city.

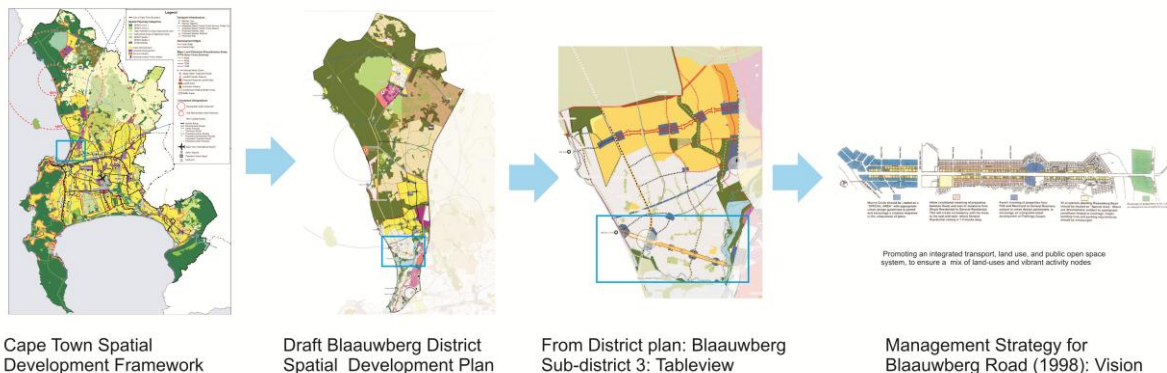
Appropriate Locations – refer to Spatial Plans and guidelines

It is important to guide future tall building developments toward areas that are sustainable in terms of access to adequate infrastructure. It is also important to define areas for increased development form (massing and height) which contribute to the visual perception of higher order areas within the city (nodes and corridors) where more intense development is favoured.



Concept of a development corridor (taken from CTSDf)

The Cape Town Spatial Development Framework, Cape Town Densification Strategy, draft District Plans and future local area densification plans/design guidelines prioritise and give guidance to urban nodes and corridors as appropriate locations for increased development opportunities, which should include tall buildings in Cape Town.



The final height approved for each application will be dependent on its unique location, context and the application of the policy objectives and design guidelines provided in this policy. But in general, tall buildings will not be appropriate where they:

- hide or mask the unique topography of the city;
- obstruct views from key public vantage-points;
- have a detrimental impact on the city's historic environment; and
- have a significant adverse impact on the amenity value of local residents.

Tall buildings may be appropriate:

- in or at urban nodes where intensified urban development is proposed/provided;
- in areas with adequate service infrastructure;
- close to public transport infrastructure;
- at gateways into key nodes;
- close to other tall residential or commercial clusters of tall buildings where it can be demonstrated that a new tall building serves to raise the quality and coherence of the cluster; and

- at locations where the provision of a landmark building would clearly improve the legibility and visual image of the city.

Reference to the hierarchy of plans - from the top (metro-wide plans and guidelines), down through the district plans to the local area plans and finally to the building plans on the site will motivate the appropriateness of the proposal within the wider context and the response to this.

Adequate information – refer to Assessment Criteria for Tall Buildings Applications

In order to achieve an appropriate form and building quality, the Tall Building Policy also requires development proposals for tall buildings to adhere to assessment criteria. This will offer assistance to developers and assessors during the design and application processes and aim to make the assessment process more effective and efficient for all parties involved.

To ensure uniformity of approach, a detailed list of the requirements for each application has been provided in the policy. Through these, all tall building development applications need to indicate that they comply with:

- An appropriate location;
- Enhancing the quality of the local and wider context;
- Producing improved benefits to the public realm; and
- Offer first class design quality that talks to the area specific development, design parameters and generic design guidelines as set out in the Design Guidelines for Tall Building.

Applicants must address all of these issues, and put forward any mitigating factors in their motivations.

It is suggested that, in unpacking the proposals in the application, a motivation and response approach be adopted, such as suggested in the headings of the *Design Guidelines for Tall Buildings*. This is reiterated in the Assessment Criteria table: Issues to address by applicants.

The City will assess applications using the current and existing land use and zoning regulation process, but with the additional assistance of the checklists provided in this policy. When assessing a significantly tall building (a building that would exceed 10 storeys or 35m in height), the application may be referred for assessment by a city-wide Trans-disciplinary Design Panel⁶ which can consider the merits (beyond aesthetics) of Tall Buildings within an Urban Design framework.

In the event that all the objectives are met, a recommendation will be made on whether or not the proposal provides for the optimal siting and design of a tall building within that specific location.

Quality design at a range of scales – refer to headings of Design Guidelines for Tall Buildings

The Tall Building Policy (and the good practice Design Guidelines for Tall Buildings) has been structured for applicants and assessors to consider the design and consequent impacts of tall buildings *at a range of scales* covering the building within its broader context, its site and the specific building itself, allowing for an integrated and holistic understanding of the building form and its impact at various scales.

In order to avoid misunderstandings or conflict, the policy and supporting guidelines should be studied by planners, urban designers and architects in the initial planning phase and before applications for tall buildings are submitted for approval. The preferred course of action is consultation between the applicant and The City before the application

⁶Design Review Committee established in terms of the Tall Building Protocol for the Central City could be extended.

is submitted. This would hasten the approval process and create a shared path towards the development of a tall building that would meet the requirements of the Tall Buildings Policy, the existing spatial plans and guidelines, the need for high quality buildings as well as the vision of the developer.

The Tall Buildings Policy is a land use policy that supports the statutory functions, and specifically the development control function of The City's Planning and Building Development Management Department. The City must ensure that the guidelines and assessment criteria contained in the policy are used in the assessment of all applications for height departures as determined by the underlying rights as referred to in the Scheme Regulations.

Both developers and The City have an obligation to ensure that tall buildings have a high standard of finishes and materials, and a friendly interface with the public realm. This overall "building treatment" can be secured only through the enforcement of planning conditions and obligations that are mutually negotiated and agreed upon in the initial planning stages of the proposed development. Adequate guarantees are required in order to retain the original architectural quality of the building and to avoid the possibility that inferior materials or finishes could be substituted at a later date.

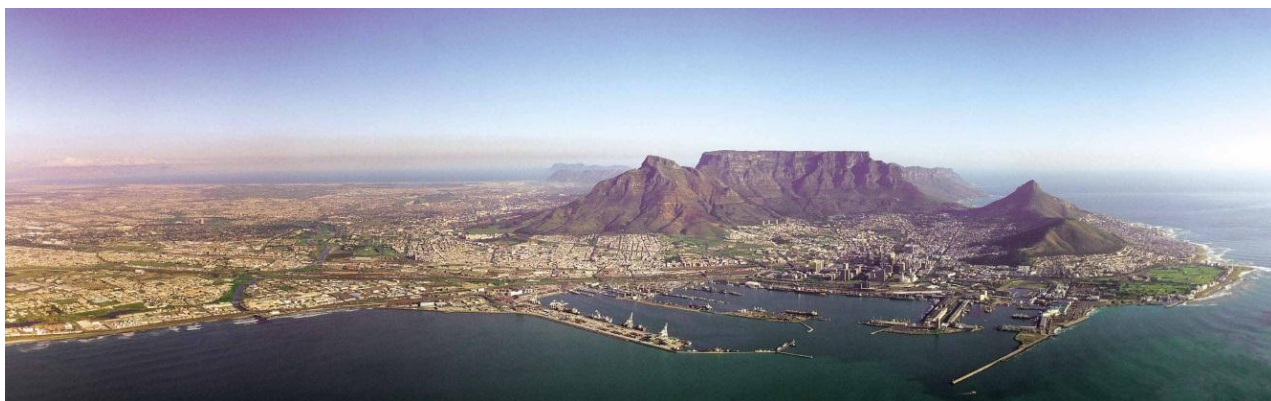
It is however not always possible to achieve the maximum public benefit that can be derived from a tall building within the confines of the proposed site. In these cases, the desired outcome suggested is a mutually determined planning agreement between the applicant and The City. An agreement of this nature would help to ensure that a tall building is fully integrated with its surroundings at the lower level, where the interface with the public realm is greatest, but also if needed, contribute more widely as per the agreement.

7. THE POLICY STATEMENTS

This section defines the overriding policy statements which will be used alongside the assessment criteria to assess tall building applications.

P1. The location of tall buildings must protect the key views to Table Mountain, other mountain ranges such as Kogelberg/ Helderberg and the sea from public spaces and key public places.

A major component of the city's unique appeal is centred on its Table Mountain skyline and views of the sea. These views must continue to be protected from inappropriate built form. This is also relevant for the other mountain ranges such as Kogelberg and Helderberg.



In terms of the policy, substantially (one and a half times the underlying rights as referred to in the Scheme Regulations) and significantly (buildings exceeding 10 storeys or 35m) tall buildings should be considered with careful planning, including specific references to the existing policy documents referred to above and, preferably, in pre-application liaison with The City's relevant line departments.

P2. Tall buildings should only be located in appropriate locations

New tall buildings should be located in appropriate locations which are being identified in The City's hierarchy of plans/guidelines:

Cape Town Spatial Development Framework and Cape Town Densification Policy – these identify, at citywide level, areas for higher density developments at:

- local urban nodes;
- along development routes, activity routes and transport corridors; and

District Spatial Development Plans and Environmental Management Frameworks – these identify, at district and sub-district level, areas that are more suitable for mixed use. Local nodes are indicated as locations for mixed use buildings and higher density development (which include taller buildings).

Local spatial plans – these could recommend densities and building heights at block, street and site level. They also deal with area-specific development and urban design criteria. In many areas of the city these are in the process of being developed.

Favourable consideration will be given to applications that align with these spatial plans and guidelines. If there are no local spatial plans, reference should be made to district or metropolitan-wide guidelines for the preferred locations of tall buildings.

It is important to stress that the plans/policies referred to in P.2 above do not grant development rights nor does it take away any existing rights.

P3. Applications must meet assessment criteria as set out in the Policy

Applications for tall buildings that exceed its existing rights should meet the assessment criteria as set out in the *Tall Buildings Policy* and its accompanying document, *Design Guidelines for Tall Buildings* in addition to the standard requirements and conditions as set out in the Land Use and Zoning Scheme Regulations.

P4. All tall buildings must contribute to a quality, active public realm at street and first floor level



Priority in the design of a tall building must be given to 'life on the street' for it contributes to genuine public life. This means tall buildings should be porous at street level having for example shops, cafes, restaurants, small businesses on preferably all sides. Parking levels should start only from two levels up or be wrapped by public/semi-public facilities. Buildings with continuous blank, solid walls at street level will not be accepted.

P5. Possible additional review for significantly tall buildings

Significantly taller buildings are commonly known as skyscrapers, and in the context of the Tall Building Policy, it represents a building that is taller than 10 storeys or 35m. At the discretion of the post responsible for overseeing of Planning and Building Development Management, Environment Resource Management and Spatial Planning and Urban Design, applications for the development of significantly taller buildings may be referred to a Trans-disciplinary Design Panel⁷ for assessment.

P6. Assessment on merit within the building's unique context

Approval of the height of a tall building should not be seen as a precedent for other applications in the same area. The final height that is approved will depend on the tall building's motivation towards an appropriate location, response to the context and its compliance with the Tall Buildings Policy assessment criteria.

P7. Area character analysis will inform the design of tall buildings

New or updated local spatial plans and development guidelines should identify locations where buildings that are substantially taller or significantly taller buildings are desirable. In many areas such local plans or guidelines do not exist yet. Therefore the applicant's motivation for height related departures should be based upon an area character

⁷ Design Review Committee established in terms of the Tall Building Protocol for the Central City will be reconfigured.

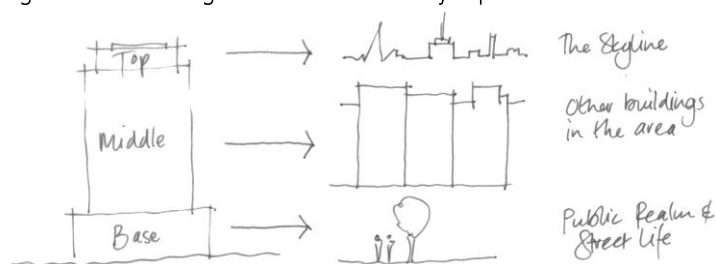
analysis in which urban design, heritage sites and environmental fixes are noted and analysed. This will ensure a holistic understanding of the urban design fixes and the overall vision for the area.

P8. A tall building design should consider the three parts of a tall building within its context

Tall buildings, due to their size respond to the city in three ways or on three levels:

- the base or podium – this must promote and support an active pedestrian/public realm (refer to P4);
- the middle or shaft - this talks directly to the surrounding built form and therefore elements (e.g. rhythm of fenestration or columns, horizontal lines and recesses) from surrounding buildings should be picked up on to contribute to the contextual fit. The design of the middle or shafts should also be such that it minimises shadows and increase sky views from the street; and
- the top or crown – this section should be sculpted to enhance the skyline character of the city.

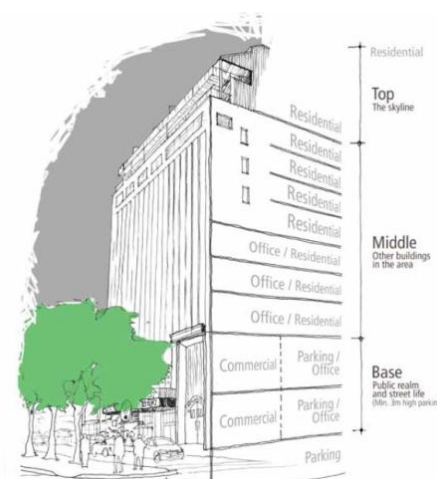
If an application for a tall building is to be successful, the design must consider these three distinct parts. All three parts should be carefully integrated into the whole building, thereby making the structure far more appealing than a block-shaped monolith with characterless floor plates. This approach will encourage an attractive vertical definition of a tall building. This does not prohibit the design of the building but merely requires architects and designers to express through their design an acknowledgement of how the city is perceived and used at various levels.



Sketch of three-part expression of/and relationship of tall buildings to its context.

P9. A tall building's design should include a mix of uses and promote the City's Densification Strategy

Having a combination of more than one use ensures there are people around at longer periods of the day and possibly night that results in no part of the city becoming deserted and unsafe at night.



P10. Criteria for renewable energy and/or energy efficiency in tall buildings must be considered to support limited infrastructure resources

The active promotion of resource efficient construction of new or renovated buildings in Cape Town is critical to minimising the negative environmental impacts of the built environment, while maximising positive social and economic impacts⁸. Designs must show that the burden on the local infrastructure are minimised and do not have a detrimental effect on the wider area.

⁸ As per the City's Green Building Guidelines.

8. ASSESSMENT CRITERIA FOR THE ASSESSMENT OF TALL BUILDING APPLICATION

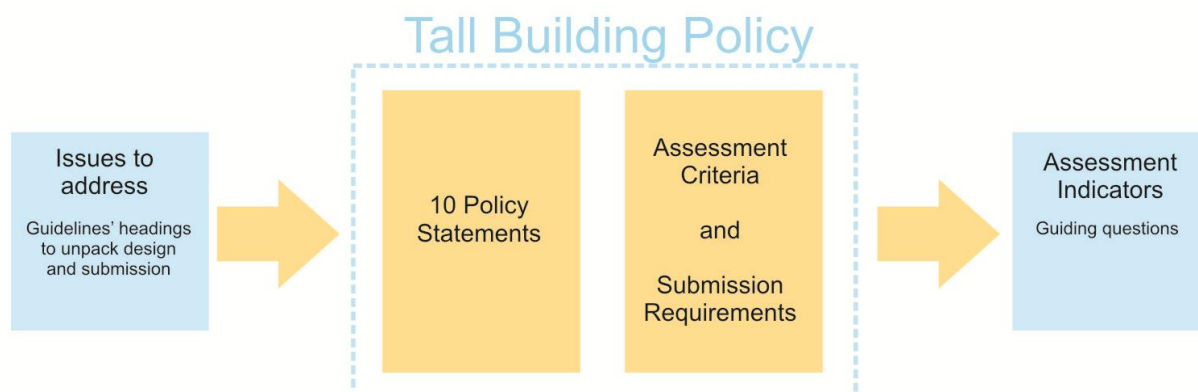
The Tall Buildings Policy is designed to minimise misunderstandings and to assist developers in the preparation of their applications. It is therefore critical that the assessment criteria for tall building applications are clear and not open to mis-interpretation or speculation.

During the planning and design process a wide range of issues need to be addressed by the applicant who must take a balanced approach. This cuts across spatial scales and recognises complex issues such of heritage and conservation as well as site specific issues. The process also needs to resolve technical issues such of infrastructure capacity, the provision of adequate parking and traffic management.

The policy, supported by the accompanying Design Guidelines for Tall Buildings, enables applicants to consider the design and consequent impacts of the proposed tall building on a **range of scales**, starting with the broader context, then within the site and adjacent environs, down to the specific building. This will assist the applicant to understand holistically how the proposed building would integrate with its environment.

In design terms, a successful tall building is one that will ensure that the proposal for a tall building fits the local **context** and that of existing City spatial plans/guidelines. The motivation can be based on the **principles** of the Tall Buildings Policy and the guidance of the accompanying Design Guidelines for Tall Buildings.

For an application to be considered favourably the applicant must address the 10 policy statements, assessment criteria and submission material.



To ensure clarity and consistency, a detailed list of **requirements** for tall building applications is set out. The tables overleaf summarise the issues to be addressed (preferably in pre-submission stage), the assessment criteria, submission requirements and assessment indicators.

a. Issues to be address by applicant

These represent the headings of the Design Guidelines for Tall Buildings and aim to act as discussion topics during the pre and post application assessment processes⁹. This can be used by both the applicant and the assessor as a guide.

		Good response	Average response	Poor response	Not described
Locational Guidance					
1	Response at the Scale of the Precinct				
a	Relationship to wider context				
b	Prominent Sites				
b	Landmarks, views and vistas				
d	Infrastructure, access and transport				
2	Response at the Scale of the Site				
a	Building placement and orientation				
b	Transitions in scale				
c	Local access and permeability: entrances				
d	Site servicing and parking				
e	Open space & connections to Open space				
f	Heritage and Cultural Landscapes				
Building Specific Guidance					
3	Response at the Scale of the Building				
a	Overall form and massing (impacts on the public realm)				
b	Scale of the base building (impacts on urban form)				
c	Shaft design and floor plates (impacts on skyline)				
d	Location and design of the tower				
e	Tall building height				
f	Tall building uses				
g	Design Quality and Building Materials				
4	Impacts on the Public Realm				
a	Ground floor interface and the streetscape				
b	Weather protection				
c	Sun, shadows and sky view				
d	Wind impacts at street level				
5	Sustainable Design				
a	For the building and the site				
Other Guidance					
6	Social Responsibility contributions				

⁹ The Portside II application used this as a point of departure and it helped to make the discussion process between applicant and City more transparent and open.

b. Assessment Criteria for Tall Building Applications

	CRITERIA	CONSIDERATIONS (as established in the Tall Building Protocol, 2008)	ASSESSMENT METHOD¹⁰
1	Motivation: for development and related height departures	1 Role, vision and need for such a Tall building development 2 How it contributes to the broader city's spatial development frameworks' vision and aims 3 How it contributes to the broader city development objectives for affordable housing, improving quality of public realm, supporting long term and short term job creation and contributions to the creation and maintenance of public institutions and amenities.	Motivational Statement, Urban Design Appraisal/ Statement, Urban Design Framework
2	Relationship to physical context: including topography, built form, skyline and key views	1 If the building is appropriately located within a Tall Buildings Precinct (node or key development corridor) 2 How well the development fits/respond to and reinforces locally distinctive patterns of development of its local context 3 The impact the building has on important & significant views 4 The impact the building/development has on its immediate environment, at street-level and how well the building promotes the continuity of street frontages and the enclosure of spaces by the built form that clearly defines private and public areas	Accurate Visual Representations / View Analysis & Assessment, Physical or digital model (1:500 and extending on block in each direction at a minimum)
3	Relationship to historic and cultural context: including city wide scale as well as local environment with emphasis on morphology, historic routes, block patterns, plot sizes, local vernacular	1 The historical development of the area; the underlying morphology of the area (block patterns, plot sizes, historic routes) and the local vernacular architecture. It will need to be demonstrated how an understanding of the historical context has informed the design of the buildings. 2 The impact the building makes towards the distinctive local context in which it is located. 3 The impact the building has on the following: World heritage sites and their settings, listed heritage buildings and their settings including foregrounds/backdrops to landmark buildings, conservation areas and their settings, historic parks, gardens, landscape and their setting.	Characterisation study of the historical environment
4	Relationship to transport infrastructure: particularly public transport and NMT	1 The contribution the building makes to peak travel flows 2 Additional demands placed on local parking in the area 3 Proximity & accessibility to public transport 4 Funded measures to encourage more sustainable travel behaviour in form of a "travel Plan" (e.g.: car club) 5 Access arrangements by all the non-car travel modes and the access of the disabled; 6 Emergency plan for the building, detailing access arrangements in the event of emergency or major incident.	Transport Assessment
5	Contributions to permeability and legibility: of the site within the wider context	1 How well the development promotes accessibility and local permeability by making places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport 2 How well the development provides recognisable routes, intersections, landmarks to help people find their way around, with particular emphasis on assisting people find their way around key NMT routes/ public spaces identified in the 2010- Inner city integrated transport plan.	Urban Design Appraisal/ Statement Urban Design Framework
6	Contribution to the public realm: (at the base level of the building) public spaces, facilities and mixed uses	1 How well the development promotes diversity of choice through a mix of compatible uses that work together to create viable places that respond to local need. 2 The types of uses being proposed at the ground level, whether they have any broader public/ social benefit (e.g.: crèche) 3 The design of the lower ground floors and whether they have open and active frontages and how well they contribute to the vitality and vibrancy of the surrounding streets and spaces.	Design Statement, Trans-disciplinary Design Panel, Market Appraisal

¹⁰ See submission requirements below.

	4	The types of uses being proposed for the top floors of the building and whether or not it is the intention to provide access to these spaces in order that may enjoy the benefit of panoramic views across the city or sky gardens	
	5	If the mix of uses proposed within the building helps meet the need for affordable housing.	
	6	The ways in which the building can deliver public benefits beyond its own site boundary (social responsibility and benefits).	
	7	How the proposal contributes to the provision of public and private open space, how well the development promotes attractive and safe public spaces and routes, which meets the need of all sectors of society across the wider neighbourhood/ city. The management of these spaces needs to be made explicit.	
7	Architectural excellence: of the building itself (overall building form and architecture)	1 The scale, form, massing, proportion and silhouette of the building	Trans-disciplinary Design Panel, Design Statement, View Assessment, Physical or digital model, Material Samples
		2 The design of the top of the building i.e. effect on skyline	
		3 Relationship of building to other structures	
		4 Materials used - samples to be provided.	
		5 Assessment to look for buildings that are far better designed than previously and to be icons of quality in themselves.	
		6 Relevance of proposed architectural language/ style - does it promote the development of authentic Cape and or South African design/ identity.	
8	Impacts to the local environment: including microclimate and general amenity considerations	1 The impact of the building on the wind conditions at the base of the building	Urban Design Framework
		2 The impact of shading paths created by the building	Wind Tunnel/ computer modelling, Shadow Modelling, Design Statement
		3 The night-time appearance of the building	
		4 The reflectivity of the building, identifying the possibility of any obtrusive day-time glare	
		5 The impact on the amenity of nearby occupiers/ general public (e.g.: colonnades for shelter from wind, sun & rain)	
9	Alternatives: Urban form/ density analysis	1 The preparation of indicative low, medium and high rise schemes for the site, producing comparative information on density, amount of private open space, number of parking spaces, vehicular/ public access to site	Urban Design Framework, 3D conceptual representation of alternative building forms
		2 The production of cost-benefit analysis of low, medium and high rise approach to development, covering such issues as: - View impacts - Contributions to and Management of public realm - Creation of integrated development with variety of housing choice and neighbourhood services - Connectivity with surrounding street network (pedestrian and vehicular)	
10	Green building design: demonstration of sustainable design and use of innovative technologies for construction of Tall Buildings	1 Energy usage - operational energy and CO ² emissions, use of methods for natural ventilation, heating, use of alternative energy methods	Green Building Plan
		2 Health and well-being - indoor and external issues facing health and well being	
		3 Pollution - air & water	
		4 Transport - transport related CO ² and location related factors	
		5 Land use - Greenfield & Brownfield sites	
		6 Ecology - Ecological value of the site	
		7 Materials - environmental implications of building materials	
		8 Water - consumption and water efficiency	
	Impacts to existing Infrastructure and Services	1 Impacts to existing stormwater, sewerage and electrical networks and services	Technical detail and information
		2 Contributions to mitigate impacts	

c. Submission Requirements¹¹

(Information to accompany an application for significant height departures - Level 3)

1	A full motivation on desirability to extend beyond the Cape Town Zoning Scheme height limit.
2	In the case of significantly tall buildings (buildings exceeding 10 storeys or 35m), submission of a fully calibrated, accurate electronic three-dimensional representation of the proposed building, highlighting the extent of the departure. This representation must include the surrounding area, with a minimum of one block in either direction represented in block model format. As far as possible, existing as well as proposed neighbourhood developments should be included in this representation.
3	A full Urban Design Analysis : • Motivating the contextual fit of the building; • Illustrating the near, middle and distant visual and cityscape impacts; • Illustrating view corridors; • Describing the effect on the local environment, including microclimate, heritage buildings or precincts; and • Depicting general amenity considerations such as overshadowing.
4	The result of a wind tunnel test that indicates wind impacts of the building in its context and the street level climatic conditions.
5	The submission should illustrate any impacts to the public realm , including streetscapes, public spaces and facilities. Measures to mitigate impacts should be demonstrated as well as contributions to enhancing the public environment.
6	A study of alternative building forms explorations motivating for the option proposed is required.
7	A Heritage Impact Assessment : If relevant to the location of the development.
8	Transport Impact Assessment : Measures taken to promote positive relationship to public transport; facilitate non-motorised transport and impacts to the transport network and parking provision should be demonstrated if relevant to location of the development.
9	Environmental and energy impacts with mitigating proposals (Green Building plan).

¹¹ As per Tall Building Protocol and relate to assessment method in Assessment Criteria table.

d. Assessment Indicators (additional)

(Checklist for council officials to assist in initial assessment process.)

		YES	NO	Not sufficient information	Outstanding elements
1	Has adequate site analysis been done?				
2	Has a development description and motivation been done?				
3	Does the site location and development proposal contribute to the City's planning strategies and vision, i.e. in a local node or development corridor?				
	• Cape Town Spatial Development Framework (2012)				
	• District Spatial Development Plans & Environmental Management Frameworks (2012)				
	• Local Spatial Plans				
	• Densification Strategy (2012)				
	• Scenic Drive Network Management Plan (2003)				
	• Integrated Transport Plan (2006-2011 or later)				
	• City of Cape Town Green Buildings Guidelines (Draft)				
4	Does the development proposal respond well to its context (precinct, site and building scales):				
	• cultural, historic and physical context				
	• topography and natural systems				
	• built form and morphology				
	• response to surrounding land uses				
	• landmarks and key spaces				
	• views / view corridors				
	• access and movement patterns				
	• services and infrastructure				
	• response to zoning / planning context				
	• heritage and cultural elements				
	• fit within urban grain				
5	Has pre-application consultation with The City been incorporated into the design process?				
6	Has sufficient and complete submission material been made available as part of the application assessment process?				
7	Has sufficient reference been made to the <i>Design Guidelines for Tall Buildings</i> ?				

9. INSTITUTIONAL ARRANGEMENTS

The Tall Buildings Policy will be used primarily by the City of Cape Town's Planning and Building Development Management Department and the Environmental Resource Management Department to facilitate their statutory development control functions. The powers and functions of these departments are captured in the system of delegations. The Spatial Planning and Urban Design Department will use the policy to comment on applications in support of these functions.

- The implementation of the policy is assisted by a Trans-disciplinary Design Panel
- This policy extends the scope of this Panel's advisory mandate to cover the whole city
- The above committee will be appointed by the relevant Executive Director of the City of Cape Town
- The Trans-disciplinary Design Panel is an *ad hoc* committee
- The relevant Executive Director may call it into being to advise on tall building applications
- The relevant Executive Director determines its membership

10. COMMENCEMENT AND IMPLEMENTATION OF THE POLICY

The Tall Buildings Policy will not apply retrospectively, and became effective from the date of its adoption by the City Council in terms of its system of delegation, 29th of May 2013.

The Policy supersedes all previous protocols or policies, including the Tall Buildings Protocol.

The level at which final decisions on tall building applications will be made, its review and any changes to the policy or its application, will be decided upon by the Council who will empower the District Manager to approve deviations from certain provision of the policy.



CAPE TOWN

DESIGN GUIDELINES for TALL BUILDINGS

To be read with adopted TALL BUILDING POLICY

Adopted
May 2013



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

THIS CITY WORKS FOR YOU





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Introduction

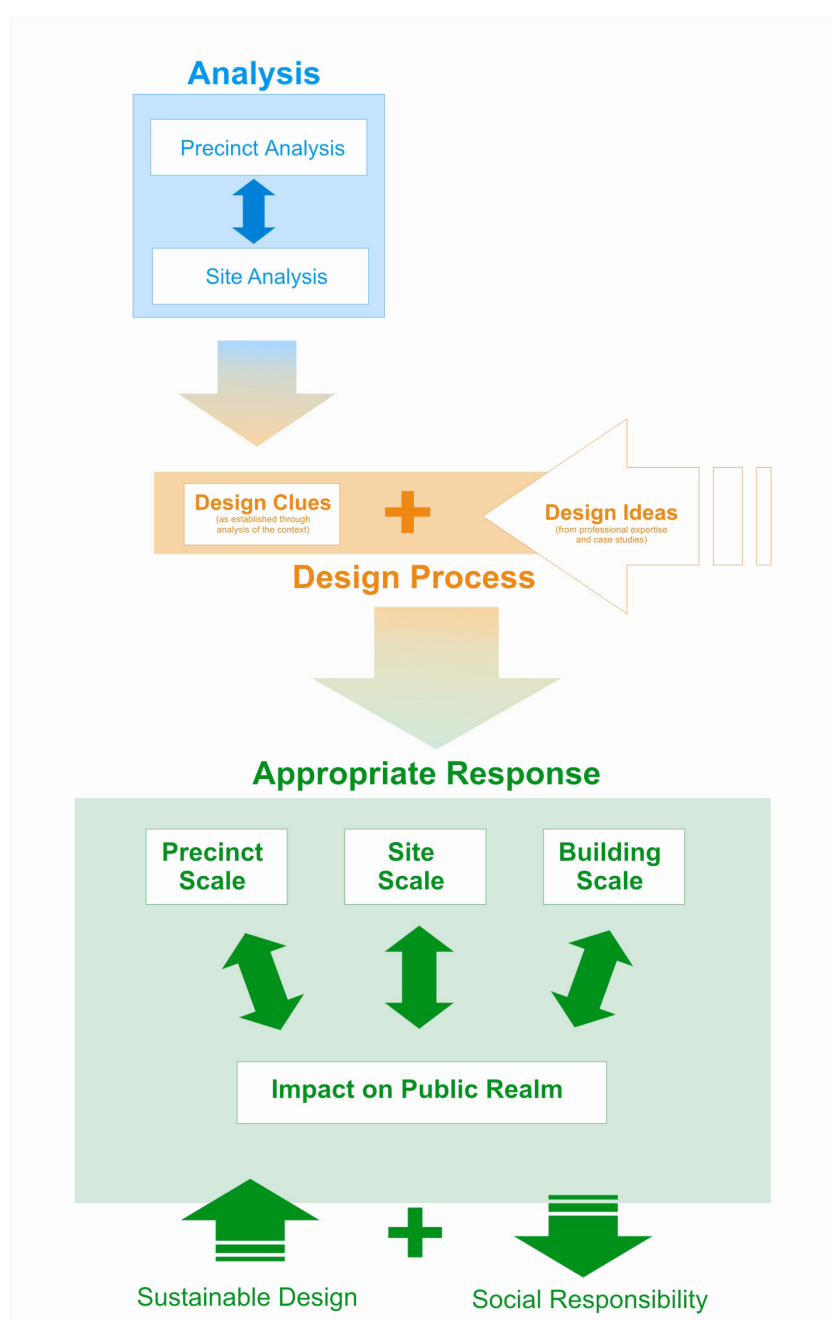
The Design Guidelines for Tall buildings are “softer” guidelines emphasising the need for good practice. This additional information document will give guidance on how to design tall buildings.

The Tall Building Policy (adopted in May 2013) should be read together with the Design Guidelines for Tall Buildings. Taken together, these documents will promote an integrated and holistic understanding of the potential impacts of a tall building in relation to its place and purpose in the greater and smaller context of urban development.

The strong message here is that all developments are context related. In this regard, the Design Guidelines for Tall Buildings look at the design and consequent impact of tall buildings within:

- The broader context
- The immediate surroundings
- The site and the building itself

The guidelines are therefore helpful in the preparation of plans, during pre-application discussions and in the assessment of development applications. It promotes sound design practice and will be expanded on over the next few years.



1. Locational Criteria: Response at the Scale of the Precinct

a) Relationship to the wider, existing context

Objectives:

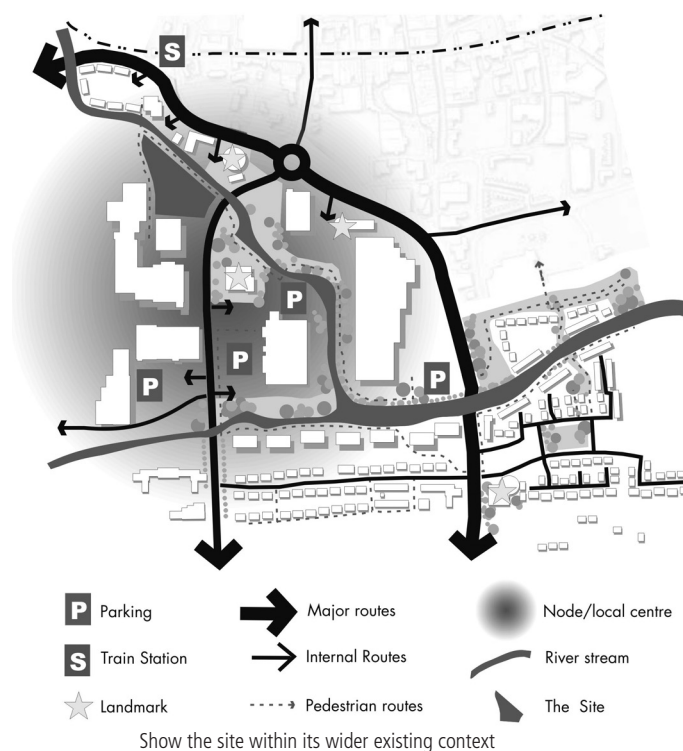
To ensure that tall buildings are planned, designed and phased in a holistic and integrated manner so as to appropriately fit within its broader context.

Due to their size and scale, the impacts of tall buildings on their surroundings are larger than those of conventionally sized buildings. Therefore a broader understanding is required of how the tall building development will potentially relate to and impact on its surrounds. This understanding will ensure that all measures to promote sensitive integration are maximised.

Guidelines:

Some of the wider context elements that could be expressed in a broader context plan i.e. of the precinct, could include:

- the circulation and servicing of the proposed tall building in relation to existing transport infrastructure of the precinct;
- how the new building contributes to the permeability and legibility of not only the site but also that of the wider precinct;
- the limitations of existing bulk infrastructure and utilities within the precinct and the creative design response to this;
- the relationship of the tall building to the skyline of the precinct;
- the response to the precinct grain in terms of proposed parcel/block in relation to the existing context;
- the identification and key height lines of existing buildings of height within the precinct - these could be picked up in the new building's design;
- the identification and response to key access points and gateways into the precinct;
- contributing to the public use character of ground floor uses throughout the precinct; and
- relationship to existing parks and open spaces within the precinct and immediate surroundings.



1. Locational Criteria: Response at the Scale of the Precinct

b) Prominent sites

Objectives:

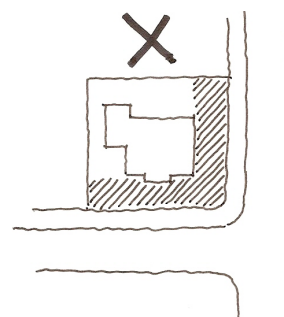
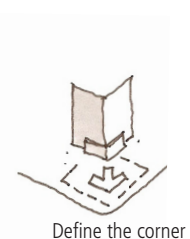
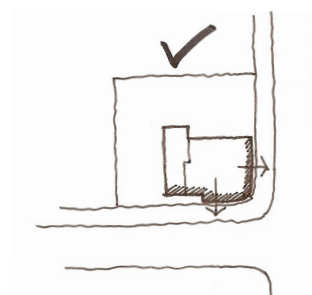
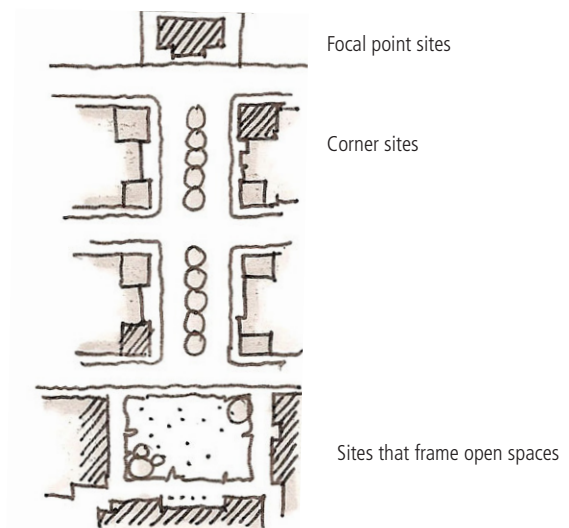
To ensure that the locational prominence of a site is appropriately acknowledged in the design of the tall building.

Prominent sites are defined by their strategic location and relationship to adjoining public streets and open spaces and consequently by their strong visual impact on the surrounding area. Prominent sites can be understood to include those that terminate on a street, are on street corners or that frame the edge of a major park or public space. Sites adjacent to bridges and underpasses or on sites where changes in land uses occur could also be considered as prominent sites.

Guidelines:

Tall buildings on prominent sites should be designed and organised to:

- reinforce the special prominent location. Note that prominent sites do not require height per se to make them special but rather be expressed in a more thoughtful way so as to acknowledge its strategic or prominent location within the wider context;
- complement and enhance, not compromise strategic views and important vistas in the city;
- On corner sites, the base building (relation to pedestrian life on street) should preferably be located along both adjacent street frontages thereby giving prominence to the corner.
- If proposed on a site that ends on a street corridor or adjacent to a significant street or public open space, the development should acknowledge the prominence of the street or open space and respond positively towards it;
- provide a high level of architectural treatment to all frontages that are visible and prominent;
- ensure that frontages contribute to the public and pedestrian environment, preferably with zero set backs at the ground floor; and
- tall buildings should not be located on sites where they visually compete with sensitive historic buildings or environments. Tall buildings should rather be developed on adjacent sites so as to reinforce, through their juxtaposition, the importance of the sensitive environment.



1. Locational Criteria: Response at the Scale of the Precinct

c) Landmarks, views and vistas

Objectives:

To ensure the retention and enhancement of key strategic views towards or from key landmark through the sensitive siting of tall buildings.

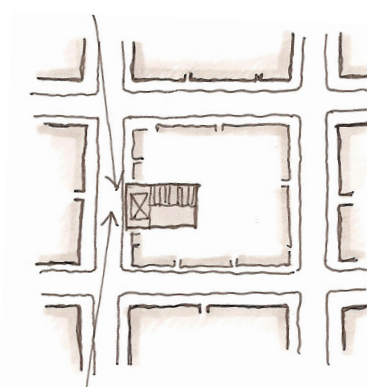
Any critical views or vistas identified in a specific area (e.g. scenic routes) or through the precinct character analysis that must be protected, require a specific response in design terms. In some instances this analysis might change or even negate the appropriateness for a tall building in that specific location. Tall buildings should therefore, as a general principle, not be developed on sites where they can create negative visual impact on, for instance sensitive historic environments. The main aim is to reinforce key landmarks, views and vistas.

Guidelines:

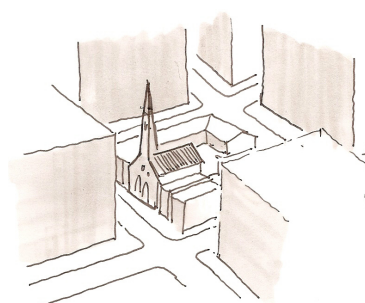
In order to complement and enhance rather than compete with important landmarks or compromise strategic views and important vistas in the city, tall buildings should be designed and organised to:

- contribute towards the development of a 'views framework' for Cape Town - this can inform the City's scenic drives strategy when next amended;
- protect and enhance the visual experience of the precinct and wider city;
- preserve the setting of landmarks, listed buildings and conservation areas within the precinct; and
- pick up, in the design of the tall building, some key height lines or venestration rhythm or proportions of the surrounding area that will make the tall building fit into the context and reinforce the importance of the landmark and its uniqueness.

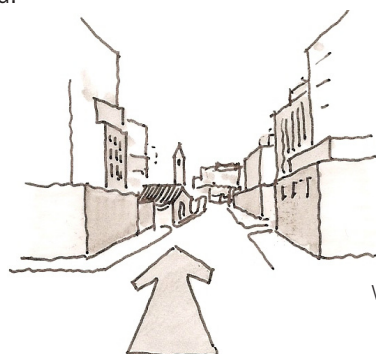
The improvement/removal of existing poor quality buildings that block or distract from key landmarks or views, will be favourably received.



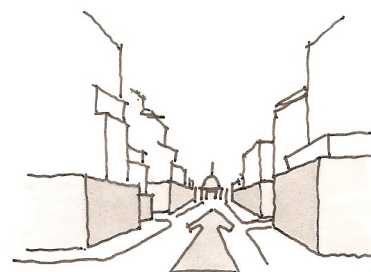
Frame the landmark with taller buildings while respecting view corridors along streets.



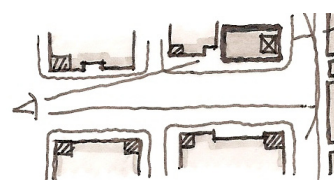
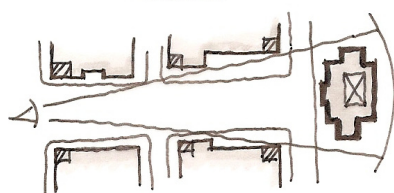
Respect landmark and historic buildings within a development block by not challenging the height or importance of the landmark.



View cones and view corridors along the street



View cones and view corridors to the end of the street



1. Locational Criteria: Response at the Scale of the Precinct

d) Infrastructure, Access and Transport

Objectives:

To ensure a sustainable response to capacity constraints, public transport strategies, the quality of links between transport nodes and the site, and the feasibility of making improvements where appropriate within the wider precinct.

Guidelines:

The effect that tall buildings, due to their scale and size, have on the local infrastructure (sewerage, water, electricity, access, parking, etc.) should be taken into account during the design phases by developing and illustrating a clear understanding of the existing local infrastructure, its opportunities and limitations.

This is necessary to respond responsibly in offering on-site solutions that limit the impact on the precinct's infrastructure resources and / or offer mitigation measures where necessary.

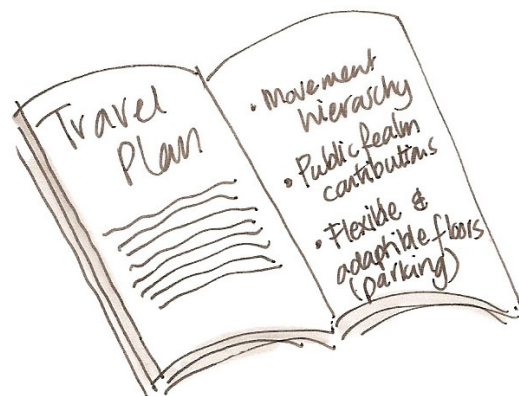
An important element of infrastructure that effects tall buildings, is transport because of the intensity of use, as well as density that it represents.

A suggestion for mitigating the tall building's effect on the local transport infrastructure is, a travel plan. This could show elements such as carshare schemes, support for public transport and campaigning for better pedestrian and cycling provision.

In this regards, and within the wider context scale, tall buildings should be designed and organised so as to offer:

- easy access for all kinds of people to activities within and outside of the locality, with a particular emphasis on non-motorised transport and access for less-mobile / less-able individuals;
- to contribute to a sense of community in that it offers street frontages and public spaces where people can meet and thus foster local social networks, improving their quality of life and sense of local community;

- to contribute to the reduction or at least limitation of transport-related levels of local air-pollution and globally damaging greenhouse emissions; and
- to minimise the impact on the local resources, by designing on-site solutions for service infrastructure technology into the design of the tall building.



2. Locational Criteria: Response at the scale of the Site

a) Building placement and orientation

Objectives:

To ensure the making of a positive street interface through the appropriate location and orientation of the base buildings of tall buildings (refer to 'scale of building: the base building'). All base buildings of tall buildings should reinforce and directly address the street as well as, where possible, align with existing building frontages.

Guidelines:

New tall building developments should be positioned and organised on the site so as to integrate appropriately with the existing context.

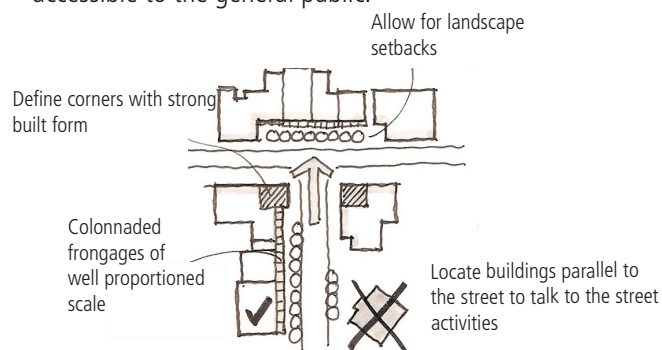
The base of the tall building should frame and support the adjacent street context, parks and open spaces in general by being placed parallel to the street and aligning with neighbouring buildings. This create a continuous building façade and reinforce the street experience while addressing safety on street in terms of overlooking through its placement. Introverted designs are not preferred for it can result in streets with little human activity which can lead to an enhanced perception of unsafe areas.

To avoid this, the siting of the base building could responded to the site in terms of:

- locating the main façade of the base building preferably parallel to the street and front property line, so as to contribute to the active use of the street frontage for pedestrians and not resulting in corners that is not overlooked;
- where setbacks of the adjacent buildings are the same, aligning the front façade of the base building to be consistent with adjacent building facades;
- colonnaded edges, of a human scale, should be incorporated and also align with adjacent buildings;
- where the setbacks of existing buildings on either side of the new development have differing setbacks from the street, the difference could be resolved through the design of the new base building with a particular focus on adding to the making of a hospitable public environment;
- on corner sites, respect the appropriate alignment and building setbacks of both streets and necessary transition to both edges; and

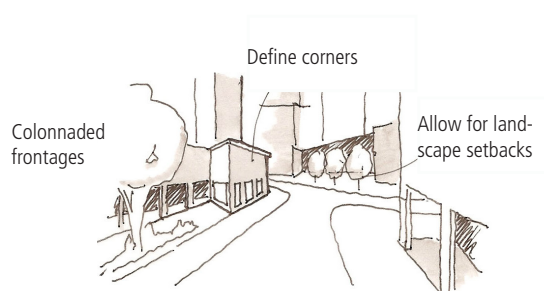
- where a consistent building setback pattern does not exist on a block:

- locate the base building parallel and adjacent to the street,
- set back new development on streets with additional sidewalk space to allow for the incorporation of tree planting and other public amenities,
- on larger sites, provide additional open space along street frontages in the form of landscaped setbacks, plaza, forecourts or gardens. These areas should be accessible to the general public.



Locate buildings parallel to the street and provide public streetscape improvements

The tall building's shaft may be orientated differently to the base building, when demonstrated that the proposed orientation minimises shadow impacts, loss of light, sky-views or improves wind conditions and/or sustainable design features, but this will only be seen as desirable in unique circumstances where the grain of the block allows for this.



2. Locational Criteria: Response at the Scale of the Site

b) Transitions in scale

Objectives:

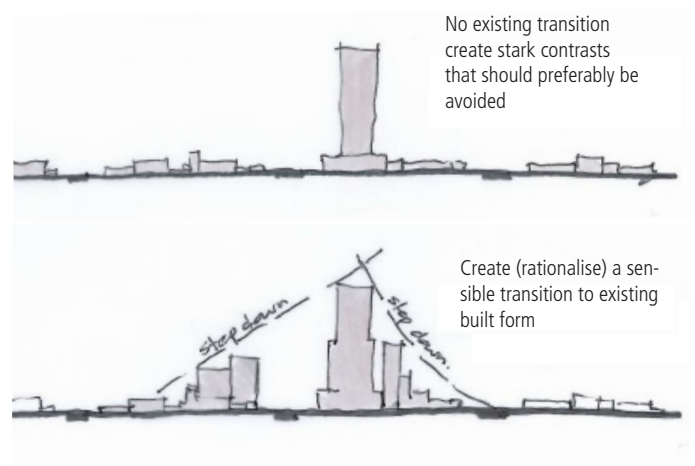
To ensure that tall buildings are massed to fit harmoniously into its existing / planned context by limiting its impacts on neighbouring streets, parks, open spaces and buildings; and by creating appropriate transitions in scale to the surrounding existing and / or planned buildings.

Transition in scale between tall buildings and the existing environment should be considered at the scale of the site and block. Stark contrasts in scale should only be used in very special circumstance.

Guidelines:

On sites adjacent to lower scaled buildings on the block or across the street, the following should be considered and expanded upon:

- ensure that the proposed building's base are appropriately scaled and designed to match existing buildings in the street - this talks to respect for the wider context and should not be seen as a design constraint but rather an acknowledgement of that which has gone before;
- complement and enhance the overall form of the precinct by scaling proposed tall buildings to sit in harmony with immediate / adjacent buildings or respecting other height levels in the design of the new tall building development;
- locate and set the tall building's shaft back in such a manner that it limits its visual impact on the street, open space and neighbouring properties that are lower in scale; and
- provide appropriate setbacks of tall buildings from existing buildings to give sufficient space so as to create / achieve an appropriate transition.



When considering a tall building on a site between two land uses or areas of different heights or built form, consideration must be given to:

- providing appropriate horizontal separation between tall building(s) and the lower scaled area
- the final appropriate height should be determined by having sufficient vertical space to allow for a balanced stepping down of the tall building towards the lower scaled buildings.

2. Locational Criteria: Response at the scale of the Site

c) Local access and permeability : Entrances

Objectives:

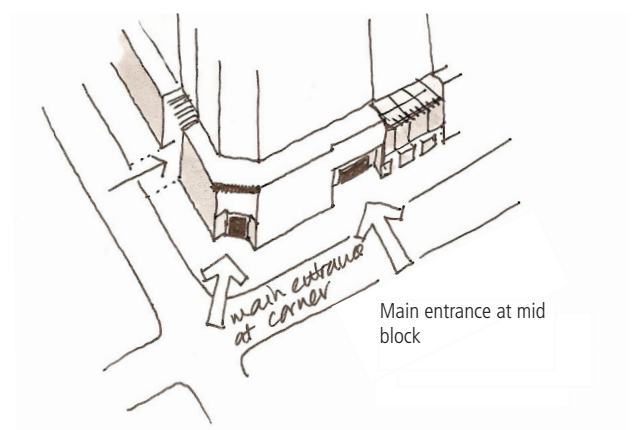
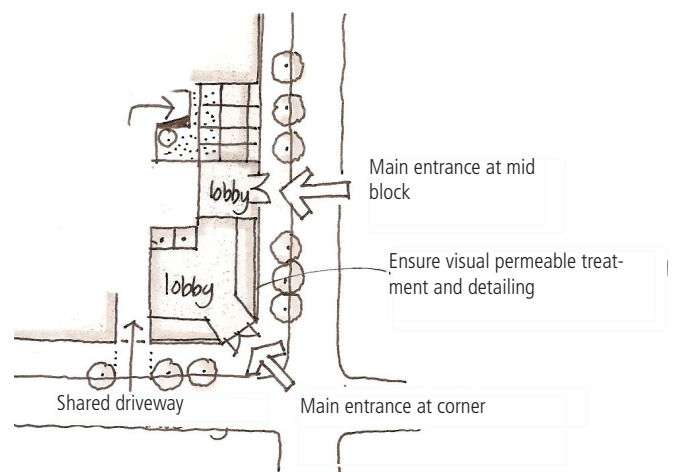
To ensure that all tall building developments have direct, visible and public entrances at street level in order to promote the making of safe, vibrant public streets and sidewalks. To support this, the ground floor uses should contribute to active, public use, be visually permeable and have views into and where possible, direct access to adjacent streets, parks and open spaces.

The location and design of the primary entrance of a tall building development must reinforce the street experience and should prioritise pedestrian not vehicular access. Introverted entrances, which are not visible or easily acceptable from the public sidewalk, including entrances behind parking areas, from long driveways or recessed interior malls, take away from the street and are inappropriate as entrances to tall buildings. Typically, the most vibrant and interesting streets have a fine grain of entrances along the street edge.

Guidelines:

When designing tall building entrances, in the site context, the following should be taken into account:

- locate main entrances to buildings at grade and on the main public street frontage;
- if setback from the public sidewalk, clear sight lines should be incorporated;
- use a high level of architecture and where appropriate landscape treatment to emphasise the main entrance;
- organise vehicular drop-offs at the side and rear of development sites;
- incorporate a fine grain of entrances along the edge of public streets to support the safe and active use of the public sidewalk;
- ensure visually permeable treatment and detailing of facades at the ground floor level - continuous blank facades are not acceptable for this contribute to an unsafe public realm;
- porte-cocheres are not considered as primary entrances as they are predominantly designed for vehicular access and negatively impact surrounding pedestrian movement and streetscapes; and
- main exit points from internalised parking garages are also not appropriate along key pedestrian routes.



2. Locational Criteria: Response at the scale of the Site

d) Site servicing and parking

Objectives:

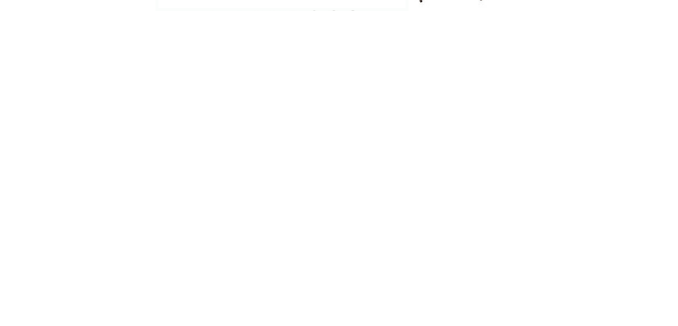
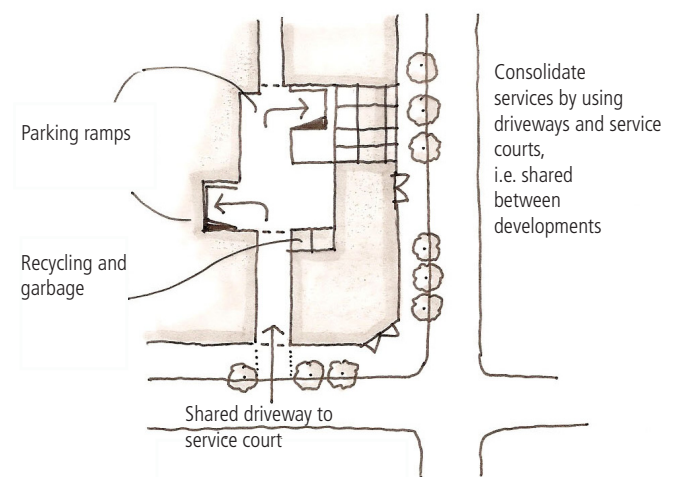
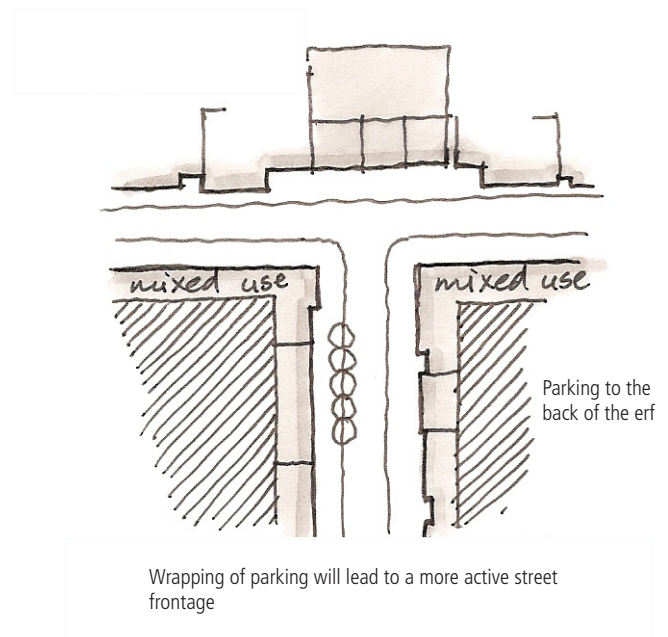
To ensure that all tall buildings locate and organise vehicular parking, service areas and utilities in such a manner so as to minimise their impact on adjacent properties and the quality and functioning of the public realm.

Guidelines:

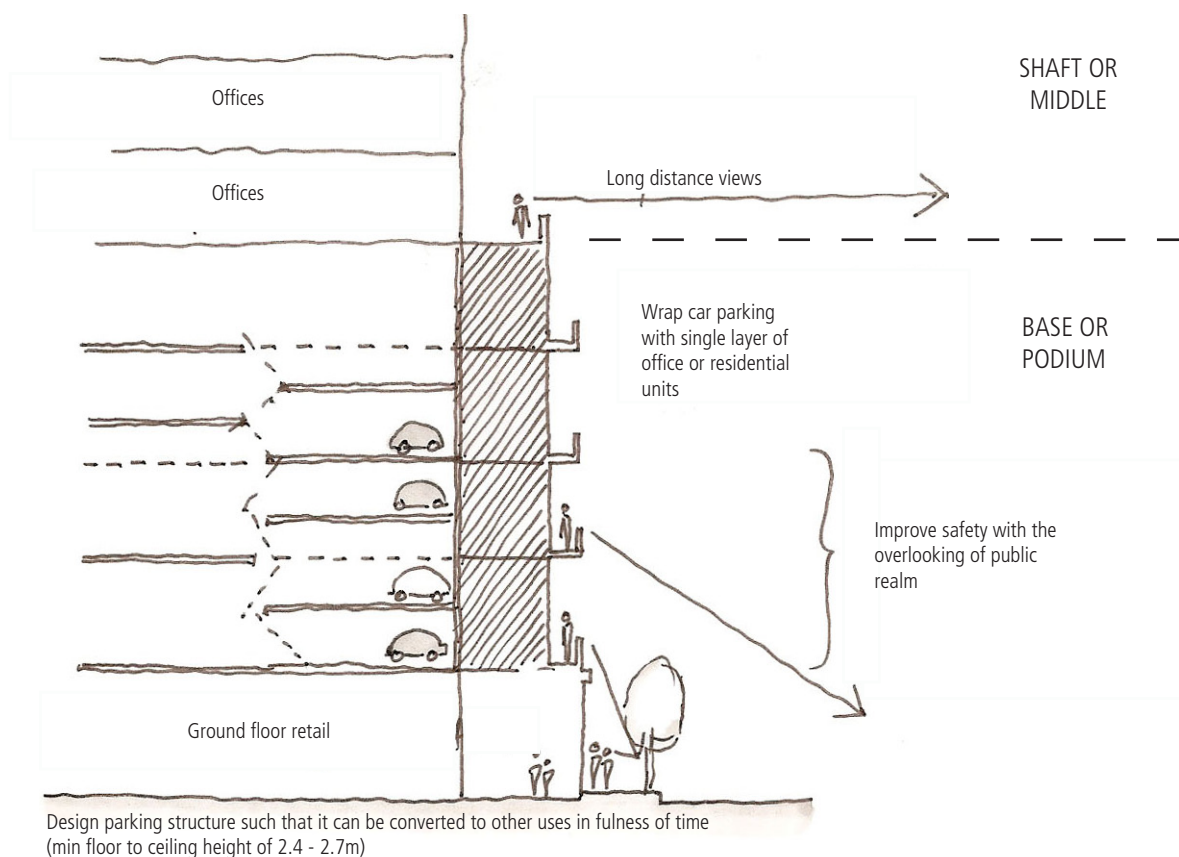
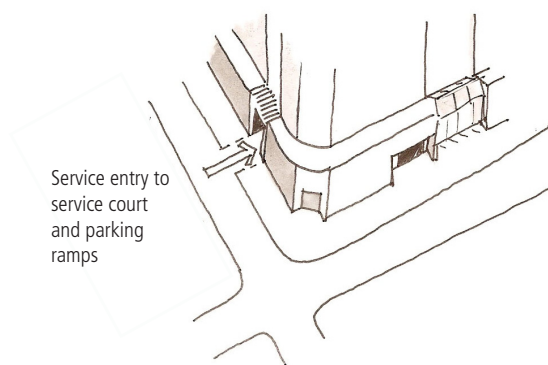
The provision and manner in which vehicular parking is provided should favour the pedestrian and the making of a high quality public environment. All buildings and developments must be designed and programmed to accommodate 'front of house' and 'back of house' functions and activities.

Tall building developments should organise site access and servicing to:

- screen, to the maximum extent possible "back of house" uses from public view and limit their location within primary pedestrian areas. "Back of house" activities includes the following: refuse storage and collection, loading areas, ramps to internal parking, vents, meters and transformers;
- encourage shared service areas and integrate service and utility functions within the building and within the site where possible;
- consolidate and minimise the width of driveways, curbs cutting across public sidewalks, vehicular entrance and exits points into the building;
- organise vehicular drop-off areas into the side and rear of the development site. Porte-cochères should preferably not be located on the primary pedestrian entrance;
- provide underground parking where possible or above ground parking from the 2nd floor of the building;
- the presence of street facing parking in above ground structures denudes our streets of activity and natural surveillance, rendering them dull and unsafe places. A minimum 10m (preferably 12m) setback should apply to create useable space. This will provide sufficient depth for useable retail functions at ground floor, and residential or office uses at upper levels.



- the design of basement parking must integrate with landscape proposals at grade and make provision for areas where tree planting can occur. This relates to having sufficient load capacity and soil depth to sustain mature trees. Options that facilitate tree planting directly into natural ground are preferred;
- above ground parking structures should be designed to integrate with the building and be able to be converted into habitable floor space at a later stage;
- eliminate surface parking between the front face of a building and the public street or sidewalk;
- lease agreements for parking should encourage flexible and 24 hour usage;
- provision for motorbike parking, as well as on-site bicycle storage and change rooms are encouraged. Where a tall building provides substantial office accommodation and will therefore generate a large number of commuter trips, provision of bicycle storage, changing rooms and shower facilities will be a requirement rather than simply encouraged; and
- a maximum ratio of parking will be encouraged so as to support public transport and proposed parking strategies, especially if near IRT stations or other stations (future PT1 and PT2 zones).



2. Locational Criteria: Response at the scale of the Site

e) Open space and connections to open space

Objectives:

To ensure the provision of high quality, accessible and safe public spaces for the benefit of its occupants and surrounding neighbours, promote the upgrade and maintenance of the immediate public environment surrounding the development for the enjoyment of the general public.

Guidelines:

The development of new tall buildings should facilitate the provision of new open space within the development in a manner that extends, enhances and complements the existing system of public streets, public spaces and parks. The form of open space provision can vary depending on the building programme, site and planning expectations for the development, but a prioritisation of, and commitment to improving and enhancing the public realm for the general public is necessary to assist with mitigating some of the negative impacts associated with tall building development.

Furnishing, landscaping, lighting, public art and connections to public streets and other public open spaces need to be considered when locating and designing new open space. In larger developments of which a tall building is a component, pedestrian access to the various buildings should be prioritised at street level. This can be explained in the landscape / public realm plan for the site.

The typologies of open space that can be explored and incorporated in the development could be:

- forecourt - an open, publically accessible transition space between the public sidewalk and the main entrance of the building;
- plaza - an animated gathering space for general public usage, with landscape features flanking a public street;
- courtyard - a landscaped open space located in the centre of a single or consolidated block with no direct street frontage;
- urban garden - a landscaped open space, usually of intimate scale, located and orientated to provide maximum sunlight during midday;
- colonnade/ walkway - an exterior pedestrian way at street level providing access through the block; but
- sky bridges and underground passageways

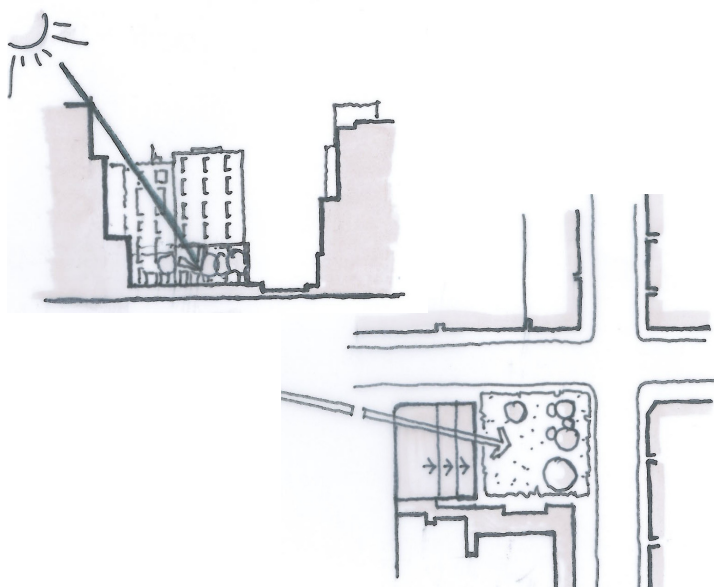
- these are less favourable due to the negative impact it could have on the vitality of the at grade public realm due to its segregation characteristics, but where relevant refer to the Skybridges Policy (2012).

In all of the typologies listed above, opportunities for facilitating and fostering public life and activity should be explored in the making and design of these spaces.

It is critical that sufficient open space for residents and users of the tall building is provided, particularly in dense urban areas where open space is limited.

The following internal spaces are encouraged:

- the provision of communal roof / terrace gardens is encouraged to optimise on a space that could potentially be under-utilised; and
- the provision of balconies should also be prioritised in the building design, particularly within the base building, to encourage connections to the street and the potential for passive surveillance.



2. Locational Criteria: Response at the scale of the Site

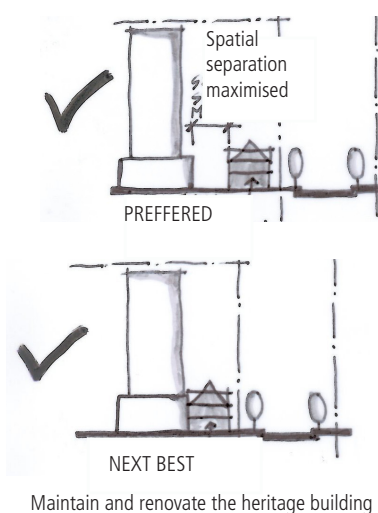
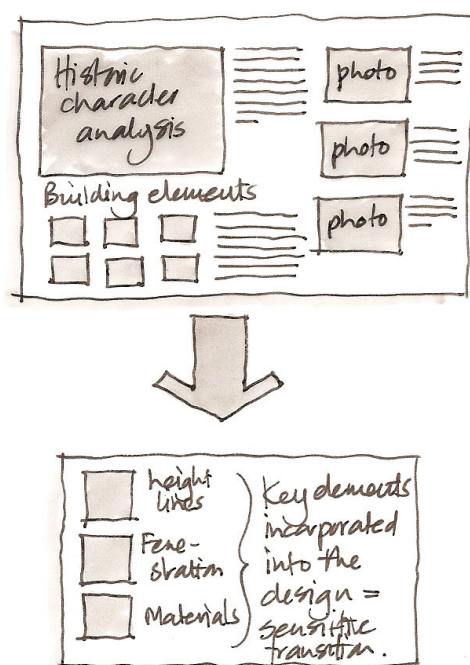
f) Heritage and cultural landscapes

Objectives:

To ensure that the heritage of the city and its cultural landscapes are respected and that all new tall building developments are sensitively integrated in a manner that contribute to their setting, character and integrity.

As a principle, it is accepted that the historic legacy of the city can and must co-exist with new development. New tall building development should however strive for the long term protection, integration and re-use of heritage and cultural resources.

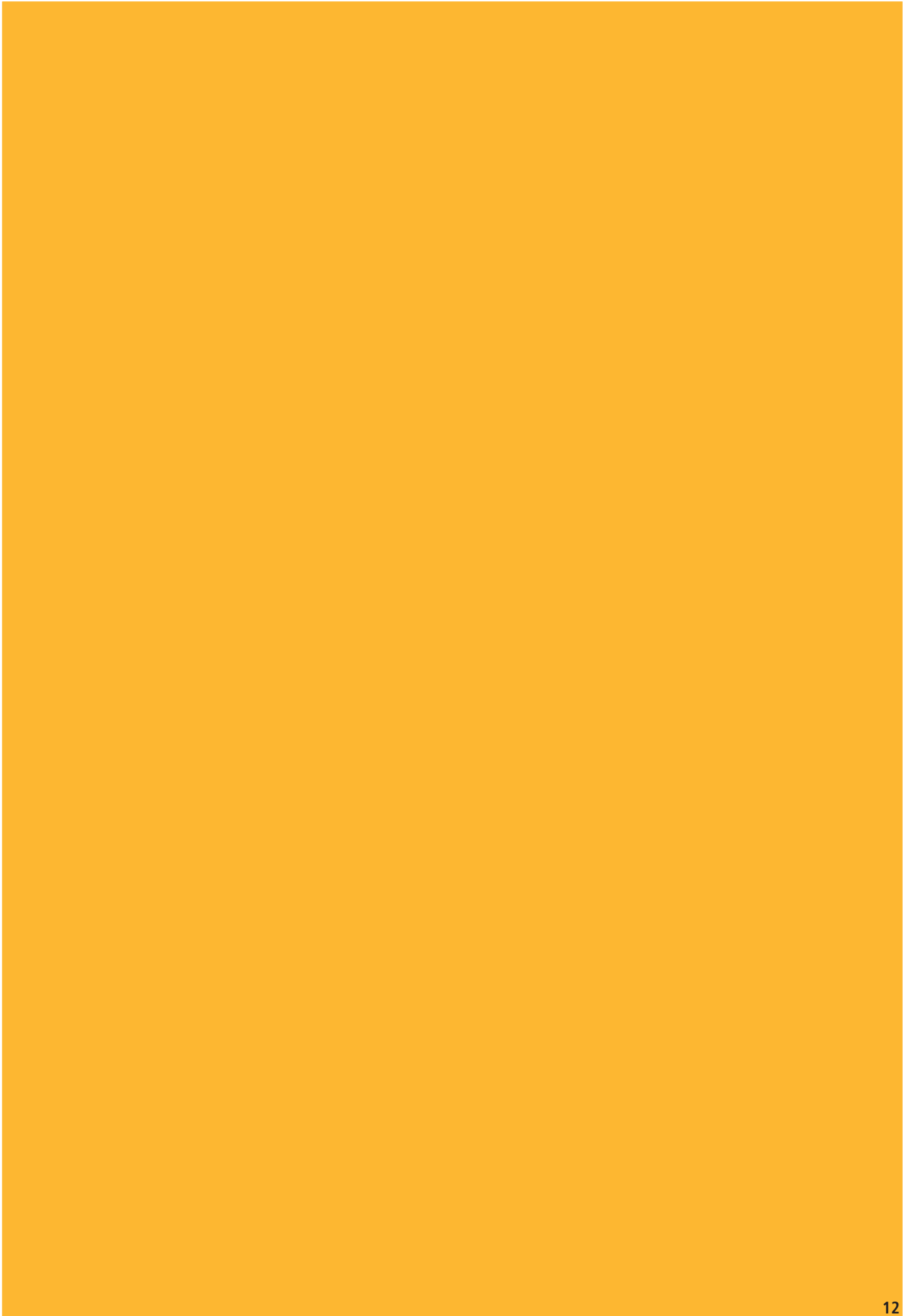
An understanding of the character and context can be expressed in a character analysis study, identifying the key historical elements that the new development adapts in its sensitive transition.



Guidelines:

New development that is either within, adjacent to or impacts on the setting of a heritage building, site or cultural landscape resource should aim to adopt the following principles:

- new tall buildings should not visually impede the setting of listed heritage buildings and cultural landscapes or block important views into areas with heritage conservation status (including amongst other mountain ranges Table Mountain, which is listed as a World Heritage site and one of the New Seven Natural Wonders);
- where heritage buildings are low-scaled, the base building of the tall building will respect the unique urban grain and scale, visual relationships, topography and materials of the surrounding historic fabric; and
- where a tall building proposes to integrate with an existing conservation building, the following should be noted:
 - The design of the new building should respect the autonomy of the heritage building by using sensitive transitions and junctions between itself and the heritage building;
 - Maintain as far as feasible, the function/working character of the heritage building and avoid mere facadism, which can be understood as the reduction of the heritage building to its original exterior wall(s) and parts of the roof structure.



3. Response at the scale of the Building

a) Overall Form and Massing

Objectives:

To ensure that all parts of a tall buildings are appropriately scaled and designed to relate simultaneously to a range of differing performance needs that include the pedestrian, the street and its broader surrounds.

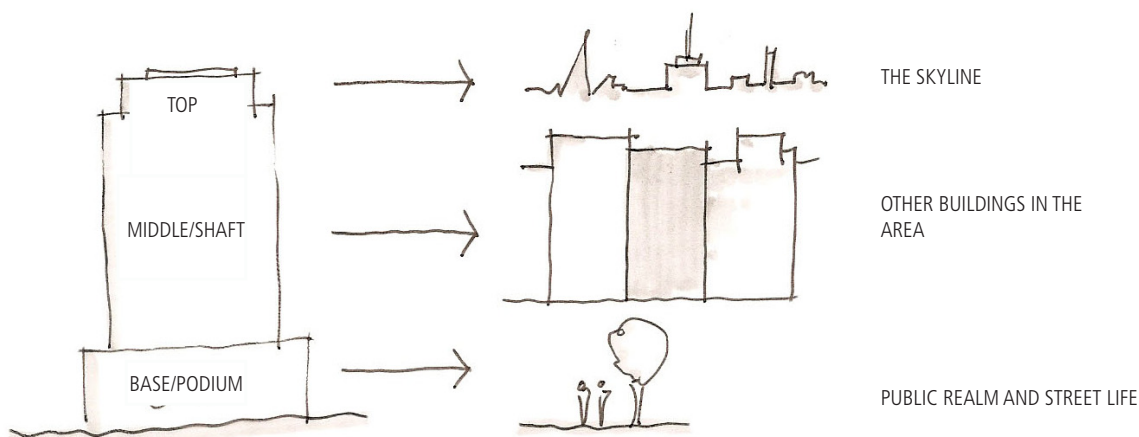
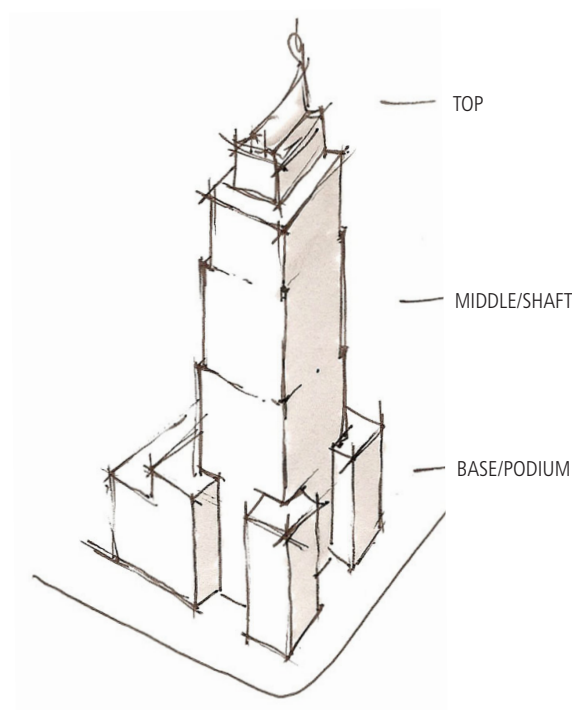
Guidelines:

In respect to tall buildings' effect on the environment and its visual perception, all tall buildings should acknowledge the three relationships that a tall building has to its surroundings:

- a) response to people on the street and in the public realm - podium/base,
- b) response to other buildings in the area - middle / shaft
- c) response to the sky line - top element.

The vertical categorisation of tall buildings into the three parts should be made in order to recognise, as well as provide solutions to the various impacts and design considerations that should be taken in the planning and design process for tall buildings.

The parts should be carefully integrated into a single whole, but the final overall height of the building will ultimately depend on the scale and dimensions of the site and its surrounds as well as by the character of broader context. The design expression of these will therefore differ from location to location and be based on an understanding of the context.



PODIUM/BASE BUILDING:

The base is the part that is seen and experienced from the street. This interface is of high importance since it establishes a relationship with the pedestrians at the street level. This is a crucial determinant of the building's contextual quality and has a significant impact on the scale and definition of the street.

The base building should:

- give definition and support at an appropriate scale to adjacent streets and surrounding open spaces;
- contribute to human scale and comfort;
- promote active frontages to relate the building with its users and those passing by;
- integrate with adjacent buildings; and
- minimise the impact of parking and service uses.

MIDDLE/SHAFT BUILDING:

The shaft constitutes the principle element of a tall building in that it extends upwards from the base, alters air movement patterns and ultimately determines the scale perception of the building (considered as imposing or accommodating).

The middle/shaft of the building should:

- being sensitively orientated on the site and in relationship to the base building in order to minimise loss of views, shadow and wind, and
- the design of the floor plate size and shape will be required to have appropriate dimensions for the site and context.

TOP ELEMENT:

The top significantly impacts the city's skyline and is usually an aesthetic expression, seen from afar, it is the junction between the building and the sky. The design of the top will therefore be a critical design elements of a successful.

The top element of the building should:

- contributes to the exiting character of the skyline; and
- should integrate roof top mechanical systems into the design.

The integration of these three elements into a single whole should be prioritised to:

- avoid free standing towers without bases;
- avoid big boxy, rectangular forms and or ziggurat dominant massing of new tall buildings;
- where appropriate, break up the building mass to vertically express and celebrate traditional erven's form or create the impression of a series of independent buildings that have been consolidated;
- step back the building mass above the base to achieve an appropriate scale at street level;
- design the uppermost floors to achieve a distinctive profile; and
- integrate mechanical rooftop (air conditioning / lift shafts) functions into the total design.

3. Response at the scale of the Building

b) Scale of the base building (in relation to the public realm)

Objectives:

The base building should be scaled so as to provide definition and support to existing adjacent streets, parks and open spaces in order to promote contextual integration, 'good fit' and pedestrian comfort.

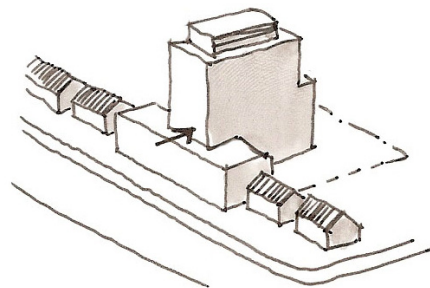
Guidelines:

In all tall building developments it is important that the base building recognise and integrate with the prevailing and planned context, building massing and the characteristics of the street. The scale of the base building should be determined from a review of existing or proposed street conditions and must be considered within the zoning envelope (where appropriate).

Also refer to later sections in the policy, i.e. Impacts to the Public Realm, which provide more guidance on the appropriate design of the base building with specific reference to Ground floor Interface, Streetscapes and Weather protection.

The following could apply in determining the base building's massing, height and setback:

- the appropriate scale of the setback from the base building is first of all governed by the zoning regulations;
- the building massing should include a base building that talks to the existing adjacent historical building context and street proportion;
- in the absence of an historical / adjacent building context, the massing of the base building could preferably be the average height of around three storeys with the ground floor being of an extended height so as to accommodate a variety of uses;
- in a context with very wide streets, an elegance ratio of 1:4 between the base building and overall height could be used (1m of base height to 4m in overall height). Another rule of thumb to determine the preferred height of the base of a tall building is to use a 45-degree angular plane which is taken from the curb of the opposite side of the street;
- on a corner site, the base building could preferably be massed as to respect the prevailing height of other base buildings and setback on adjacent street;
- in design terms, the appropriate scale of the setback of the shaft from the base building is determined by the relationship of the scale of the taller building to the base: the taller the building in relationship to the base, the larger the setback to reduce the negative impact of the taller element on street proportion and context.



Design the base building so that it relates to the proportions of existing heights of surrounding context.

3. Response at the scale of the Building

c) Shaft design and Floor plates (in relation to other buildings)

Objectives:

To ensure that all new development will be massed to fit harmoniously into its existing and / or planned context, and will limit its impacts and any resulting shadowing and uncomfortable wind conditions on surrounding streets, open spaces, parks and properties.

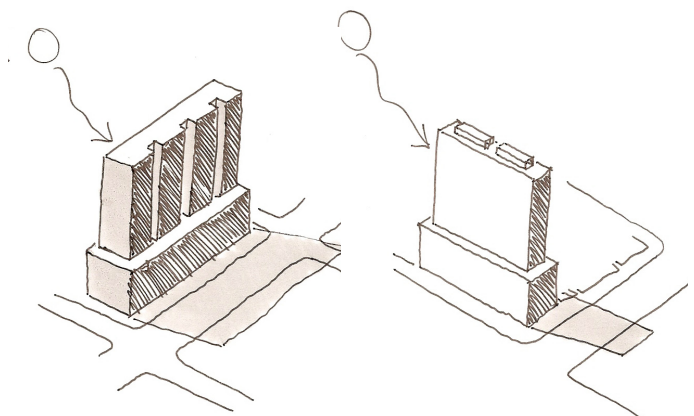
Guidelines:

The size and articulation of the floor plates in the shaft of the tall building is fundamental to its overall 3D massing and the achievement of an elegant and well proportioned building, because it will greatly influence its visual and physical impact on adjacent areas. The use of properly located small floor plates is encouraged since they result in slender buildings which cast smaller shadows, reduce loss of sky views at street level and permit better views between buildings and through the site.

In relation to the size and massing of tall buildings, the following is advised:

- the location and height of the middle or shaft building should be determined with a view to minimise overshadowing of adjacent streets, open spaces and buildings;
- the location and height of the shaft building should be determined with a view to minimise loss of sky views and important vistas;
- small floor plates are encouraged since they have the least impact on shadowing, winds and views;
- elongated floor plates cast bigger shadows and should preferably be located with a north-south orientation on the base building to mitigate shadows;
- buildings that are orientated in an east-west direction will cast the largest shadows. The shaft or middle section should therefore preferably be located on the north-side of a block so the shadows will fall within the block rather than on the adjacent street;
- articulate the large floor plates to break down the mass of the building and to create "street interest", and where appropriate to vertically emulate the historical erf pattern of the block and to enhance skyline profile;
- if the new building is significantly taller than the local context, acknowledgement of such heights within the new building will contribute to the street language; and
- articulate the uppermost floors of tall buildings to achieve a distinctive skyline profile.

Due consideration must also be given to ensuring that sufficient space is provided between towers. This will allow for appropriate light penetration and privacy for new and existing buildings. It will also ensure appropriate sky views and sunlight onto the adjacent streets, parks, open spaces and properties. Light and privacy are two separate but related issues that are influenced by the orientation, site characteristics, heights and distances between buildings.



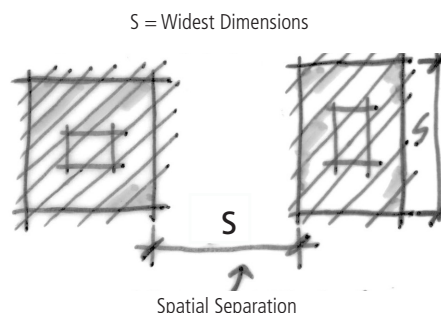
Avoid casting big shadows by orientating the base and/or building to mitigate shadows.

3. Response at the scale of the Building

c) Shaft design and Floor plates (in relation to other buildings) - continued

Guidance to achieve light, view and privacy, beyond that of the required building standards, in terms of the internal space between two tall buildings on an urban block relate to the following:

- the minimum internal/back spacing on one urban block, between the shafts of two tall buildings could be equal the width of the widest tower (measured perpendicularly to the building face), but preferably not less than 25m;
- the taller the building, the greater the facing distance should be (to the back) between the buildings, in order to achieve appropriate light and privacy;
- on compact urban sites, where a tall building is proposed, the shaft of the building could be located a minimum of 12.5m away from the property line; and
- the taller the building, the greater the distance to the property line and neighbouring buildings on a site should be in order to achieve appropriate light and privacy.



d) Location and design of tower (in relation to the skyline)

Objectives:

To promote an aesthetically pleasing skyline.

Guidelines:

Tall buildings are encouraged to have decorative elements at the top of the building to achieve a point tower form.

3. Response at the scale of the Building

e) Building Height

Objectives:

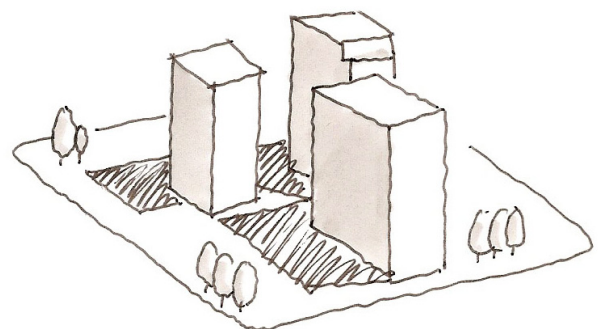
To support a legible, two and three dimensional structure in higher order nodes of the city; to promote the making of an aesthetically pleasing skyline form while protecting important views and vistas and to ensure adequate access to sky views for the proposed and future use of the area.

Guidelines:

The final height of a tall building will have significant impacts on the character of the local context as well as contribute to the creation of a memorable skyline. (The impacts in relation to overshadowing and wind as a consequence of height is discussed in a later section: Impacts to the Public Realm: Sun, Shadow and Sky View.)

To support the phased development of a legible skyline form and to mitigate impacts to important views, the following should be considered:

- the clustering of towers within a tall building precinct is favoured and encouraged to create a legible, aesthetically pleasing and memorable skyline form and to support higher order activities which will contribute to the sustainable use of resource in key, identified areas;
- stand alone / isolated towers will not generally be supported, but if part of a larger programme, the location and approval of individual towers must, in the short term, contribute to the making of a legible skyline form and not lead to a random, ad-hoc pattern of towers. This is based on the understanding that the approach to achieving greater height in Cape Town will be through an incremental and progressive increase of height;
- dramatic variations and fluxuations in height across an urban node are not supported;
- final height must be contextually appropriate and informed by the height of surrounding buildings, the scale of local streets and the size of the block; and
- decorative elements at the top of a tall building can significantly increase the overall height of the total building. Therefore, it is necessary for the final height to be calculated from the highest point of the building and not from the parapet height as per standard zoning regulations. This will ensure the making of a legible skyline form in the assessment process.



Avoid free-standing boxes in a park of parking with little spatial relationship to the surrounding built form.

3. Response at the scale of the Building

f) Building Uses

Objectives:

To promote diversity and choice through the provision of a broad range of mix of uses within a building that encourage long-term sustainability and viability of the development, to facilitate 24/7 activity in and around the development and to ensure that the development also serves the general needs of surrounding building occupants and the general public.

Guidelines:

A mix of uses is important for all buildings within activity nodes throughout the city, but due to their vertical projection and prominence, it is specifically important to incorporate mixed uses in tall buildings. This is because, due to the physical and visual impacts associated with tall buildings, it is unacceptable for tall buildings to function in an introverted and exclusionary manner.

Buildings that, due to their use, are unoccupied for certain times of the day and night, negatively impact on the character and safety of the public environment. In order to ensure that parts of building are continuously occupied, it is critical that a wide range of uses are provided within the development.

The generation of the building's programme and its associated economic feasibility requirements should therefore be influenced by the need for the building to actively participate and contribute to the character, quality and functioning of the area in which it is located. To achieve this, parts of the building should be continuously occupied and service related uses should be provided that also cater for the occupants of the building.

The following guidance should be taken into consideration:

- the ground floor should have substantial commercial/ retail/ service components that facilitate an active relationship with the street. Businesses that require more private interfaces should ideally be located on upper levels of the building. Car dealerships and show rooms are not generally supported within tall buildings due to their particular requirements that do not contribute to vibrant, pedestrian street life;

- as mentioned earlier, the presence of street facing parking in above ground structures denudes our streets of activity and natural surveillance, rendering them dull and unsafe places. A minimum 10m (preferably 12m) setback should apply to create useable space. This will provide sufficient depth for useable retail functions at ground floor, and residential or office uses at upper levels. This setback should preferably apply to any parking level above grade, not just to ground and first floors;
- the provision of above ground parking space must be able to be converted to habitable floor space at a later stage;
- the top floor, upper storeys or roof of the building could be designed and programmed to facilitate public use so that the surrounding views can be enjoyed by all. This could be achieved with the following uses: restaurant, public roof garden or public viewing platform or for a residential component; and
- a residential component should as far as possible be considered within the overall development programme that satisfies a range of affordability needs and life style choices (not just single bachelor units or high-end apartments);



3. Response at the scale of the Building

g) Design Quality and Building Materials

Objectives:

To promote architectural excellence, technical innovation and long term sustainable performance.

Guidelines:

Due to their size and prominence in the urban environment, it is critical that tall buildings are designed and specified to the highest standards possible. The huge costs associated with the development of a tall building will also require it to have a longer life cycle than conventional developments. This further emphasises the need for the use of high quality building materials and the application of appropriate design languages that promote timelessness.

The following should be considered in the design process:

- the proposed tall building should give reference to an appropriate existing design language in order to facilitate contextual fit, sense of place and legibility;
- the design of the base, shaft and top of the building should be balanced to create an elegant and well proportioned silhouette;
- the building design should be an example of design innovation/ inspiration and quality while limiting fashion like architectural styles that are likely to date in a short period of time;
- a colour pattern could be developed for the tall building which will manage the visual perception of the height of the building, i.e. darker colour to the bottom with lighter colours to the top which will create the effect of floating form. This also relates to coarseness of building materials, with coarser use towards the bottom and lighter use towards the top. Colour bands picking up that of adjacent buildings will make the tall building fit into its context better; and
- the specification of materials must limit reflectivity and the possibility of day-time glare.

4. Impact on the Public Realm

a) Ground floor interface and the streetscape

Objectives:

To ensure that all new developments, and specifically tall buildings, promote safe, comfortable, attractive and interesting pedestrians environments at ground floor level. It also aims to create attractive transitions from the private to public realm while promoting high quality landscaped public or semi-public open spaces within the development site.

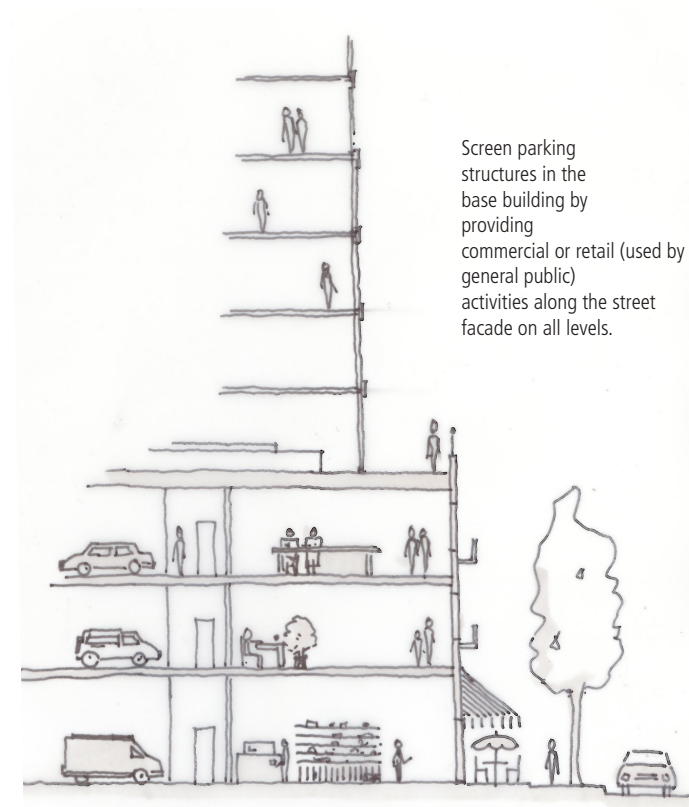
Guidelines:

The space between the building façade and the public sidewalk is an integral part of the image and character of the street and is dependent on positive interaction between ground floor uses and the public sidewalk. New tall buildings must integrate with and enhance their surrounding context as well as ensure that high quality streetscapes are achieved between the street and the building.

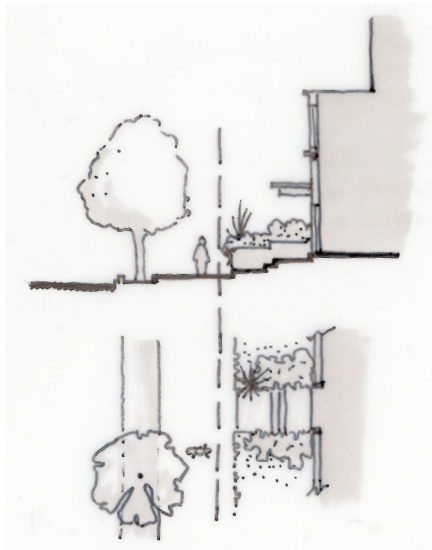
The design of Tall building developments should:

- contribute positively to the streetscape by providing active frontages, legible entrances and views to the street for security. Minimise non-active frontages to less than 20% of ground floor façade;
- attention should be given to the various characters and use of these spaces (length of time spent as indicator) so as to not clutter movement corridors or ill define waiting/resting points;
- incorporate co-ordinated landscape improvements to adjacent streets and open spaces including street trees, lighting and other street furniture;
- provide new, high quality streetscapes on each building frontage, as per City standards and requirements and reference to relevant guidelines where applicable;
- on streets with setbacks that are characterised by primarily hard landscaping features, tall building should encourage retail, commercial and/or public-orientated uses at-grade. Appropriate setbacks between the base building edge and public sidewalk should be provided to facilitate outdoor activity.

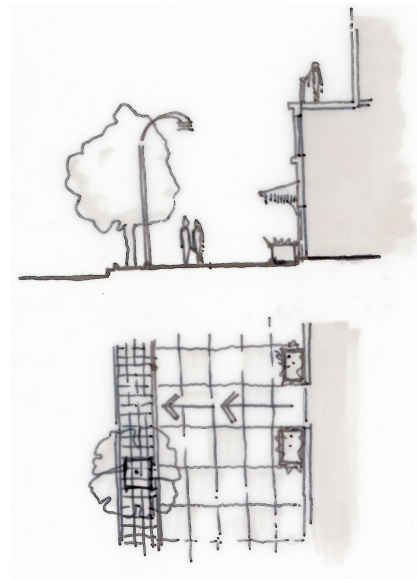
The design of the space will therefore be an extension of the material, levels and character of the public streetscape.



Impacts on the Public realm are influenced by, amongst others, the use within the ground floor, the depth of the pedestrian area, the location of parking and landscaping.



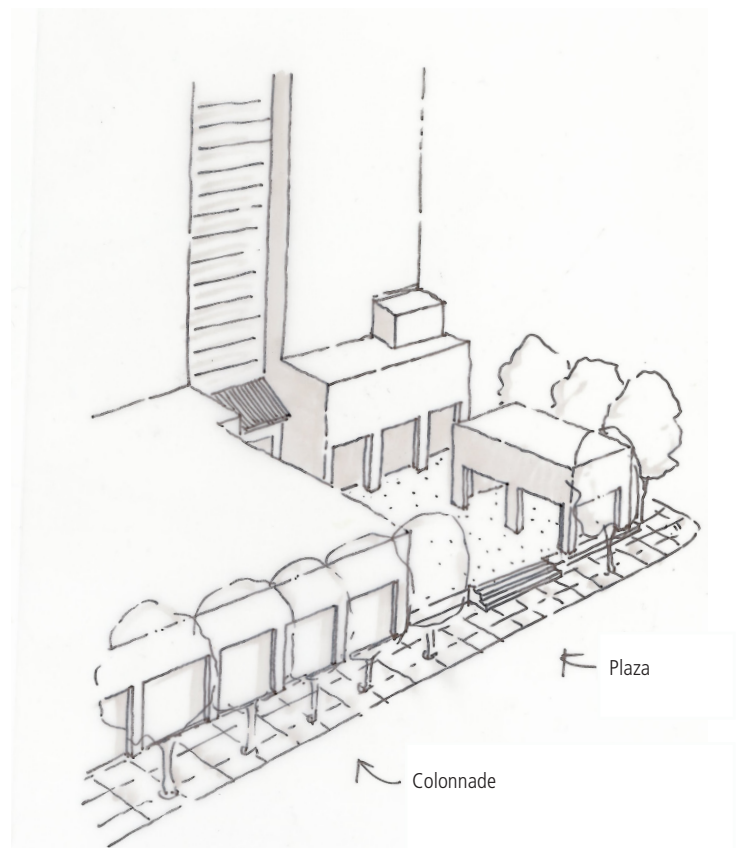
Introduce soft surface landscape for privacy adjacent to residential users.



Extend hard surface character along commercial frontages and where appropriate, provide canopies, awnings, planters, art, lighting and street furniture.

Where appropriate, tree planting, street furniture, pedestrian, lighting and public art must be introduced:

- on streets with setbacks characterised with soft landscaping features and where ground floor uses require more privacy from the adjacent sidewalk (i.e. residential), additional landscaping and amenity will be provided between the building face and the public sidewalk. The landscape treatment may include change of grade (up to 1m,) tree planting, water features, visually permeable fencing and railings, low walls and public art;
- attention should be given to linking the tall building's open spaces with exiting or proposed pedestrian routes so as to contribute to the legible continuation of the accessibility of the wider context; and
- service yard and parking space entrances should be carefully located and designed so as to not restrict or limit pedestrian safety, movement and interaction.



Define public open space by appropriately massing and orientating the base building

4. Impact on the Public Realm

b) Weather protection

Objectives:

To ensure that all new tall building developments provide at-grade protection to pedestrians from the elements, through the provision of appropriately scaled covered walkways, colonnades, canopies and / or awnings, on all edges of the building.

Guidelines:

The provision of continuous covered walkways on the street level of tall buildings is required to ensure improved comfort for pedestrians as well as promote the continued use of public streets and open spaces throughout all seasons of the year. While primarily provided to assist in the environmental comfort of pedestrians, weather protection elements also play an important role in framing and shaping our visual urban experience. They assist with enclosing the street and defining its edge. They change and redefine building proportions at the street level, articulate entrances, animate the base building and enhance the character of the neighbourhood.

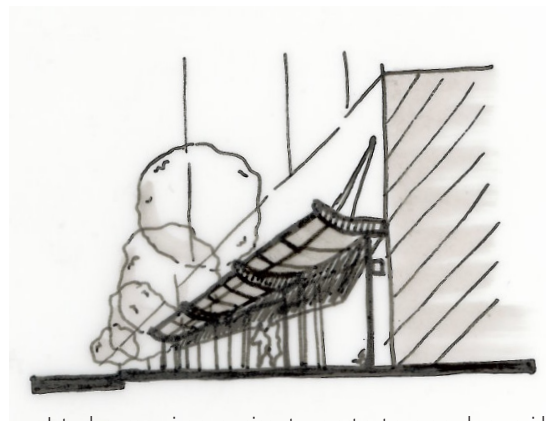
To be effective, weather protection should be well integrated into the building design, and while needing to have reference to the overall base building scale, must be primarily proportioned at a human scale.

New tall building developments should:

- provide continuous pedestrian weather protection along the base of tall buildings located on or at streets with retail or commercial uses at-grade, avenues and streets within defined CBD's and/or adjacent to public transport exchanges;
- co-ordinate pedestrian weather protection with adjacent street frontages to ensure shelter is continuous and the designs are compatible in scale;
- ensure coverage is provided to the primary entrances of tall buildings;
- proportion columns for colonnades to maintain clear views of the ground floor uses behind and to allow easy pedestrian flow and visibility from the street; and
- integrate lighting, signage and street numbering into canopy or arcade design for legibility and easy maintenance. Where space and lighting levels permit, planting will be encouraged as well.



Colonnaded frontages



Introduce canopies or awnings to protect entrances and or provide continuous weather protection along the base building.

4. Impact on the Public Realm

c) Sun, shadow and sky view

Objectives:

To ensure all new tall building developments will be massed to fit harmoniously into its existing and / or planned context, while adequately limiting the impacts of overshadowing on the utilisation of neighbouring streets, parks, open spaces and properties.

Also to ensure that new developments are massed to help define the edges of streets, parks and open spaces at good proportion. All tall buildings will also be located and its associated height controlled so as to ensure adequate access to

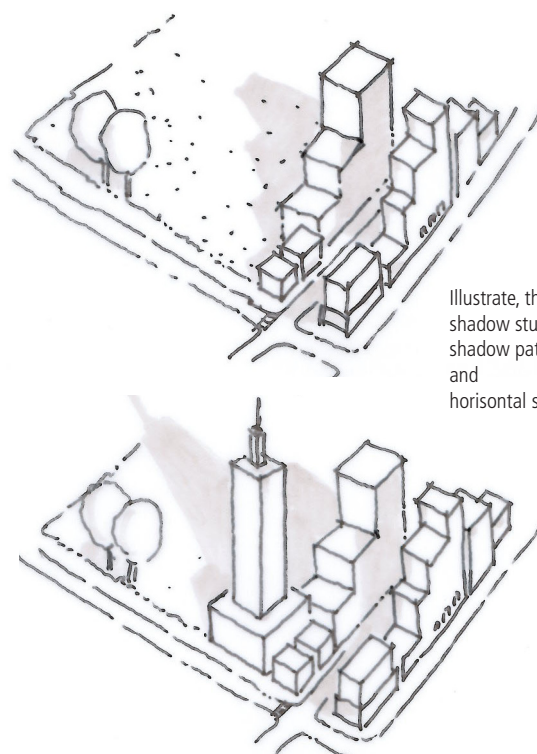
Guidelines:

Tall buildings can adversely affect the environmental quality of surrounding areas through loss of sky view and by the overshadowing of adjacent public and private open spaces. 'Sky view' is the measurable amount of sky seen from a street, park or open space above and in between the building mass. Sky view is important as it directly impacts on the character of streets and open space around a building. Adequate sky view improves the usability and quality of open spaces and the buildings that face them, even though it may not be a source of direct sunlight. Access to direct sunlight is another measurable quality of space and improves the usability of the space and the quality of rooms in buildings that face that space. Tall buildings need to consider how their massing will affect both direct access to sunlight and sky view when designing the building.

Alternative massing options for individual sites and blocks should always be prepared and analysed to evaluate the impact on sunlight and sky view in adjacent streets, parks, buildings and spaces. This could include:

- placing the appropriate amount of building mass in the base building. The appropriate amount of mass should be determined in relation to the existing and planned context for the site;
- an analysis of existing or proposed street width in relation to the proposed middle/shaft to top building height to determine final and appropriate overall tall building height and form. Again, a range of options should be explored;

- designing smaller floor plates that allow for more sun light penetration and sky view. Evaluations need to be made between the impacts of taller thin buildings and lower thick buildings; and
- placing the taller part of a tall building's shaft away from the street and / or affected open spaces. This reduces the amount of shadow cast and increases the sky view. Balance this with the need to maintain adequate spacing between buildings on a block for light, view and privacy.



Illustrate, through oblique shadow studies, the resultant shadow patterns on vertical and horizontal surfaces.

4. Impact on the Public Realm

d) Wind impacts at street level

Objectives:

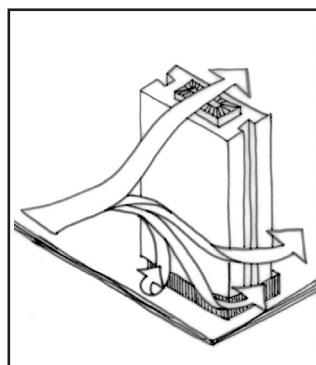
New tall building developments should be massed to fit harmoniously into its existing and / or planned context, and should limit its impacts on neighbouring streets, parks, open spaces and properties by adequately limiting uncomfortable wind conditions in order to ensure and preserve their utility.

Guidelines:

The position, mass and height of buildings that surround a proposed development site for a tall building are key factors that affect local wind patterns and comfort levels at street level. Down drafts off buildings and/or accelerated winds through tunnelling of wind between buildings are common hazards of tall buildings. These can be mitigated through good design, sensitive siting, appropriate scale of the base building and setting back the shaft building from the street edge. The use of architectural devices such as screens, horizontal baffles, terraces and overhangs also assist with reducing wind velocities at street level and improving conditions for pedestrians and cyclists.

In the design process, the following could be considered to ensure that wind speeds do not exceed safety levels for extended and unacceptable periods:

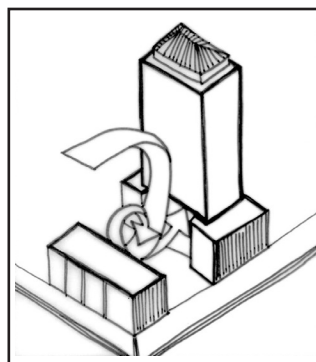
- tall and wide building facades that are orientated towards the prevailing wind direction are to be avoided as these assist with increasing wind speeds;
- low wind pressure areas are created immediately downwind of buildings. Therefore if a low building is placed upwind from a tall building, downward flow of wind is increased causing accelerated winds near the windward corners of the tall building; and
- the "wind canyon effect," is created when wind is funnelled between two buildings causing intensity of wind acceleration. This effect is influenced by inappropriate height, spacing and orientation of buildings.



PROBLEM:

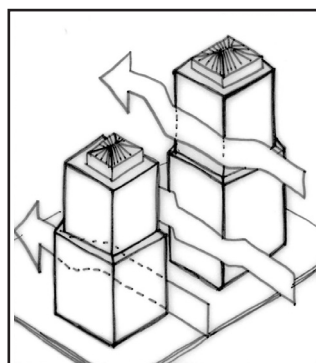
When wind meets a building, wind flows down the face of the building. This causes accelerated wind speeds near the windward corners.

= Tall and wide facades that face the prevailing wind are often undesirable.



PROBLEM:

A low building upwind from a tall building increases the downward flow of wind. This causes the wind to accelerate near the windward corners of the tall building.



PROBLEM:

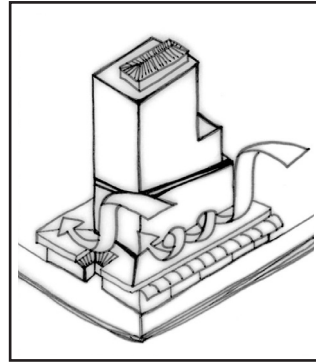
Accelerated winds (a wind canyon effect) is caused when wind is funneled between two buildings.

= The height, spacing and orientation of the buildings in a specific area affects the intensity of the wind acceleration.

The following design measures can be used to mitigate wind impacts at street level:

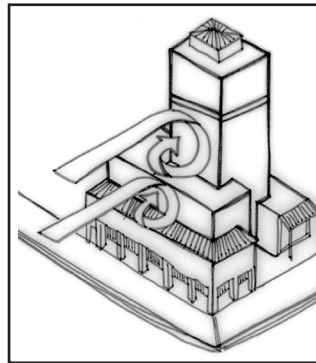
- colonnaded base buildings can be used on windward facades to control downward wind flows;
- base building roof areas that are inaccessible to pedestrians can be used to mitigate downward wind flows and improve conditions at-grade;
- landscaped base building roof areas further reduce wind speeds at-grade;
- the use of horizontal canopies on the windward face of base buildings is beneficial although sloped canopies only partially deflect downward wind conditions;
- parapet walls can increase the effectiveness of canopies;
- base buildings that are set back from the street edge can be used to reduce undesirable downward wind flows; and
- the required base building step-back needed to reduce wind velocities, is dependent on the height of surrounding buildings.

It must be highlighted that measures taken to ensure safe and comfortable pedestrian environments cannot include restricting pedestrian access on certain streets around a tall building precinct. All streets around a tall building, even if currently not used by pedestrians, must be accessible and functional for pedestrians and cyclists to ensure a permeable city.



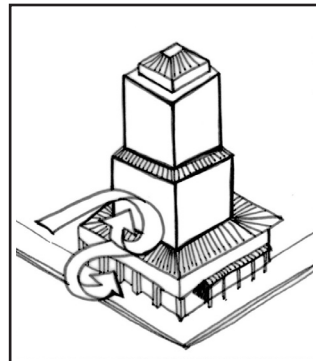
CANOPIES:

Use horizontal canopies on the windward face of base buildings.



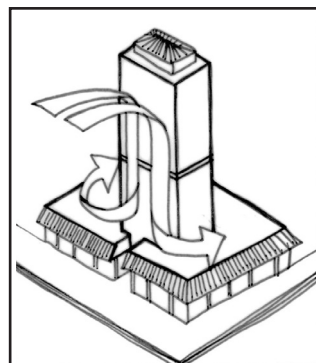
STEPPED BASE BUILDINGS:

Use a step-back in base buildings to reduce the undesirable downward wind flows. Note that the height of surrounding buildings have an affect on the newly proposed building so a wider wind study is needed to define this.



COLONNADES:

Use colonnaded base to control downward wind flows on windward facades. Colonnades provide pedestrians with a choice of enjoying the calm on windy days or a nice breeze on hot days.



ROOF AREAS OF BASE BUILDINGS:

Use the roof areas of base buildings to mitigate against downward wind flows and improve conditions at grade for pedestrians. Landscaping the roof of base buildings can further contribute to reducing wind speeds at grade.

5. Sustainable Design

Objectives:

To ensure that all new tall building developments reduce its potential impact on the environment, support the local and international green agenda towards a more sustainable future and are leaders of its type in the field.

Guidelines:

Due to the high visibility of tall buildings and / or tall building developments, it is expected that these buildings act as leading examples in the sustainability field and pioneer new approaches to sustainable design, construction practices as well as promoting sustainable lifestyles for its future users.

The green star rating tool should be used to assess the sustainable performance of the proposed tall building. A 5 star rating (60-74 points: Excellence) is encouraged. For larger developments, of which a tall building will be a component, sustainable principles and approaches for the whole settlement should also be adopted.

The overall, on-going energy consumption and natural resource requirements of a building will be dramatically impacted by the design decisions made at the project's initial or site planning stage.

Key factors that should typically be considered in the sustainable design of tall buildings include:

- Green Building Standards - also refer to the City's Green Buildings Guidelines (draft).
- Building orientation
- Natural ventilation
- Heat control & mitigation
- Water use, reduction & waste water technology
- Stormwater management
- Waste management
- Green roofs
- Sustainable material usage
- Renewable energy
- Daylight harvesting
- Alternative transportation
- New open space creation
- Sustainable landscape design

6. Social responsibility contributions

Objectives:

To ensure that the approval of departures for the development of the tall buildings directly and explicitly benefits the general public and to act as the mechanism required to realise the urban regeneration outcomes underpinning the intentions for this policy conception.

Guidelines:

In order to ensure that all tall building developments (which generally result in corporate statements) contribute and respond to the interests of the general public and to mitigate some of the impacts that are inevitable as a consequence of a tall building's construction, it is critical that a social responsibility component be included as a development objective of the project. These contributions should align with key City objectives, be to the benefit of the "public" and subsequent public realm and be of a physical nature that directly gives back to the environment and broader community in which it had or will have an impact.

It must also be emphasised that recommendations for departure approvals are not an automatic right. Applications will be assessed in relation to the manner and scale of support for key City objectives such as:

- Assessing the opportunity for providing a component of residential (mixed tenure) within the development. (on-site provision is preferable);
- provision of social / community facilities and amenities within or related to the development and / or contributions to the development and maintenance of such facilities in impoverished areas of the city;
- the development of new public space and / or improvements to and maintenance of the public environment in the general vicinity of the development and/or in impoverished areas of the city;
- support of and contributions to the development of public transport systems in the City; and
- support to small and emerging economic activity (e.g. reduced rental in prime locations).

