The Urban Ground Guideline
A guide for podium and ground plane built form
Awards
Minister’s Award for Urban Design 2019, Commendation
AIA Regional Architecture Awards 2019, Commendation

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Introduction

The Gold Coast skyline is globally recognised. The distinctive silhouette of architecturally designed high-rise buildings provides a dramatic contrast to the golden shoreline of the Pacific Ocean below.

One of Australia’s fastest growing cities, the Gold Coast is forecast to grow by 290,000 additional residents over the next 20 years. To cater to this growth, the City of Gold Coast (City) and private enterprise are investing in city-shaping infrastructure including the Gold Coast Light Rail, expansion of the Gold Coast International Airport, innovative Health and Knowledge Precinct and new Cultural Centre.

Maintaining the amenity of our streetscape is also a focus so that our public realm comes alive, new outdoor dining possibilities are created and our urban centres provide a comfortable, shaded and attractive pedestrian experience.

As we anticipate a greater number of high-rise and medium-density development, the pedestrian experience of our centres will be defined by the first few floors of a development where street entrances, retail, offices and landscape present a subtropical character that is unique to our city. This will be enhanced by our warm weather, where natural light beams onto our streets and vistas, to our beaches and hinterland - all contributing to this high quality and desirable pedestrian experience.

It is important that as centres develop, an appropriate range of urban ground form of development is built (the lower 16 metres) that balances economic opportunity while enhancing the amenity that drives investment of these places in the first instance.
Purpose
The Urban Ground Guideline encourages best practice in the design of medium-rise and high-rise development. It guides how this type of development integrates with street level and frames the public realm. By influencing new architecture that addresses our streets and public places we can enhance how people interact and engage with our urban centres.

Outlined in this guideline are important design and planning principles that support a range of podium or street interface development, depending on the location context of the site. The illustrations aim to assist mutually beneficial discussions between the City of Gold Coast (City) and development applicants on the appropriate form of development for their sites.

City Plan vision

Our City’s urban design and architecture is world-class and our iconic skyline is internationally-recognised. As we become a world-class city, well-designed buildings and places will continue to reinforce local identity and sense of place, and provide places that are attractive, functional, safe and accessible, while supporting social diversity and cultural expression. (City Plan 3.2.1)

The City Plan nominates a strategic intent that includes:
- Creating liveable places.
- Making modern centres.
- Diversifying the economy.
- Improving transport.
- Living with nature.
- A safe and well designed city.

These strategic intents can be expressed as a series of aspirational design values:
- Responsive
- Connected
- Engaged
- Subtropical
- Attractive
- Adaptable.
What is an urban ground?

The visual experience of the city of Gold Coast is the distinctive skyline of modern high-rise towers set in a water foreground and forest mountain backdrop. It is an experience of the city seen from a distance and is made of the built form—an architecture of how buildings touch the sky.

The real experience within the city's urban areas is defined by the human scale experience of the streets and public places. Our urban centres are, to a large part, framed and programmed by the enclosing city buildings and their lower levels—the spaces made between the buildings. This public realm experience is made from the street—an architecture of how buildings touch the ground.

What is desired

The Urban Ground describes the building form that frames our city's streets and public places. The lower floors of buildings can deliver a well-defined, active and lively, spatially rich and responsive urban realm that captures our city's qualitative aspirations whilst mediating tall tower form with the ground plane. The ‘Urban Ground’ is a way of naming the important first four floors of a building (max. 16m) that create the human-scale experience of the city.

What is not desired

The Urban Ground is more sophisticated than merely a ‘podium’. A podium is often read as a built to boundary mass—as a base upon which a tower is placed. The ‘built to boundary’ nature of podiums mean they are often presumed as mere extrusions of the site's cadastral boundaries with little real modulation of form and inactive, unengaging uses (car parking is the typical example). This makes for simplistic street enclosures, sometimes with a thin architectural proposition hinging on ‘articulation and activation’ provided by openings and decorative screening. These multi-storey podiums are specifically not desired outside the centre areas of Southport, Surfers Paradise and Broadbeach.
Guideline structure

This design guide is a tool to provide a common reference point for architects, planners, developers, and the community. It includes:

**Five key values:** the important design values of the urban ground.

**Design elements:** to provide guidance on potential ways to deliver the design values.

**Urban Ground Condition types:** illustrates the application of design elements in the primary focus, secondary focus, frame and transition areas between Southport and Broadbeach.

**Checklist of design elements:** provides a compliance checklist of design elements when designing in response to the Guidelines.

Design values and elements

<table>
<thead>
<tr>
<th>Values</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1 Form and space</td>
<td>E1.1 E1.2</td>
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<td>V2 Active and engaged</td>
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<td>V3 Connected</td>
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<tr>
<td>V4 Subtropical and living</td>
<td>E4.1 E4.2 E4.3 E4.4 E4.5</td>
</tr>
<tr>
<td>V5 Functional</td>
<td>E5.1 E5.2</td>
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</table>
**Form and space**
Balance between building shape and urban space.

The spaces between buildings are as important as the building themselves. It is these public spaces that collectively form the spatial experience of our city. Whilst this space is unbuilt, it is described and defined by its enclosing built form and by its edges. Streetscape elements such as landscaping, topography, use, pedestrian space and outdoor seatings offer qualities as critical to our experience as any building.

**Modulation**

Traditional lot widths create a rhythm in the urban fabric that is important to the Gold Coast sense of place. Urban Ground responds to traditional lot widths to provide this contextual grain. This should be represented authentically within the architecture with use, form and modulation responding accordingly.

When built to boundary, Urban Ground to have substantial modulation of the facade frontage, see Figs. 7 and 8. Continuous facade is a maximum of 20 metres.

Surface effects with limited depth are not to be relied on to provide articulation and modulation to building frontages.

Modulation depth is not less than 25% of the Urban Ground height.
E1.2 Enclosure

Building height to street width forms a sense of enclosure to the public realm of the street. A street width to urban ground building height ratio of between 1:1 to 1:2 is desired. This height to width ratio provides sunlight to the street and maintains the open streetscape character of the Gold Coast.

<table>
<thead>
<tr>
<th>Built form precinct</th>
<th>A: Podium Height (metres)</th>
<th>B: Street Width to Building Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary focus area</td>
<td>Up to 16 m (2–4 storeys)</td>
<td>1:1</td>
</tr>
<tr>
<td>Secondary focus area</td>
<td>Up to 12 m (1–3 storeys)</td>
<td>1.5:2</td>
</tr>
<tr>
<td>Frame area</td>
<td>Up to 8 m (0–2 storeys)</td>
<td>1:2</td>
</tr>
<tr>
<td>Transition area</td>
<td>Up to 4 m (0–1 storeys)</td>
<td>1:2</td>
</tr>
</tbody>
</table>

Urban Ground achieves either:
Column A – Podium height or
Column B – Street width to Building Ratio, whichever is lesser.

E1.3 Room to move

Space must be preserved for the rich modulation of form, openings, setbacks, courtyards, laneways, and other ground plane spaces. As a guide, Urban Ground should be defined with a site cover height set for the Urban Ground level floors.

E1.4 Public realm

Provide public realm additions within the site as an extension of the street. Courtyards, colonnades, awnings, laneways, urban rooms contribute to the richness of the ground plane. Demonstrate contributions to the public realm that are at the ground, which are accessible, active, unenclosed, dimensionally appropriate—not less than 6m in any dimension.
Active and engaged

Engaged, interesting, public.

Buildings can be good citizens, neighbours, and residents in the way they physically contribute and engage in the activity of the public realm. Our Urban Ground is ideally made of built fabric rich in active uses, that opens, interacts, engages and helps to programme the life of the street and in so doing works to facilitate the leisure-oriented, lifestyle-rich urban offer of the Gold Coast.

Active Urban Plane

Urban Ground built form is designed to address the street. Entrances are direct from the street rather than via an off-street lobby or foyer. All levels offer spaces that publicly engage regardless of use. This engagement is ideally physical—openings, doorways, verandahs, terraces, windows, balconies—to establish meaningful and activated addresses.

Where residential uses are provided, deliver strategies (setbacks, grade separation, screening) to preserve privacy to ground floor spaces whilst maintaining physical contact with the street.

Fig. 14
Commercial use built form: Create facades that activate the address and entrances that directly connect with the street.

Fig. 18
Strategically, grade separations can preserve ground floor privacy where residential addresses physically connect with the street.
Extending the Street

Extend the public realm of the street up and into the Urban Ground built form to invite interaction and engagement—providing a seamless transition between the public and private realms. Stairways, stepping terraces, undercroft spaces can significantly expand the public realm of the street providing interest and richness through appropriate spatial layout and material selection and encourage physical or visual public engagement through the site.

Fig. 19
Public realm extends into development: vertical extension.

Fig. 20
Public realm extends into development: horizontal extension.

Vibrancy and materials

Colours, lighting and materials contribute to the sense of vibrancy of the Urban Ground, respond to the existing culture and built form heritage and the surrounding context.

Employ robust, low maintenance materials in the higher parts of a building, and natural, tactile and visually interesting materials at the lower levels near the public interface to reinforce a human scale.
E2.4  **Making Streets**

Provide development responses to the existing built form and grain of opposite and adjacent facades to reinforce a sense of address and cohesiveness for the street.

Fig. 22
New development responds to the existing grain opposite with facade relief.

Streets with similar built form responses improve street legibility.

Fig. 23
Similar built form responses addressing the street.

E2.5  **Making Corners**

Provide built form responses that enhance and activate corners. At the ground, step the built form edge back to provide an urban space free from obstruction with minimum dimension equal to the width of the typical verge. This space can be built over or left open to the sky.

Figs. 25
Express and strengthen street corners.

Strengthen corners with clear urban space by stepping the built form edge back. Chamfered/truncated corners create plazas.
Connected
Legibility and permeability.

Built form within the public realm of the street should work to make meaningful connections between the activity of the public realm and the activity of the Urban Ground. The ability to have a strong sensory connection in those uses enclosing the street, facilitates engagement. This makes the relationship between the building and spaces between them active and meaningful. A porous, permeable and legible Urban Ground increases the quality and perceived scale of the public realm.

E3.1 Towers touchdown

Design tower to the ground in at least one instance to connect the tower to the streetscape. Towers isolated on podiums are architecturally disconnected from the space of the street. The form of the tower should touch the ground plane preferably in concert with a significant ground plane space—the building entry court.

Fig. 27
Tower touching the ground plane connects the built form with the public realm on the street.

E3.2 Legibility

Urban Ground forms are modulated to communicate function. Breaks in the building facade may coincide with building entrances, for example, modulations may express where commercial uses stop and residential uses start. Honest expression of function and use allow the public to read and connect with how the building wants to be used.

Fig. 28
Modulation in the building facade express the different functions and uses of the built form and the public realm.
Urban Ground uses are transparent and permeable. Uses directly connect with the public realm.

Breaking up the building mass allows the public realm to permeate through, providing increased ways for users to move and circulate and exposing more active spaces in the street. Cross block links, laneways, arcades, courtyard, walkways and stairways all work to create a permeable Urban Ground.

Design of spaces to provide a seamless transition between public and private realms. This helps to connect Urban Ground uses with the space of the street and invite in interaction and engagement.

Views are mediated to preserve privacy whilst encouraging activity at the edge and overlooking of the public realm to facilitate passive surveillance.

Design out crime by contributing to a sense of safety without being overbearing or intimidating. Development ensures good natural surveillance, clear sightlines, logical and well used routes/paths of travel, appropriate lighting and reduce potential areas of entrapment.
The unique condition of the SEQ regional climate is unlike most in the world, central to our way of living and formative in the establishment of our built vernacular. Our climate is mediated by our proximity to the ocean, our latitude, and our localised topographical situation.

Wherever possible allow the Urban Ground to embrace our unique climate and open up to the public realm. Operable enclosures, windows, sliding doors, verandahs, balconies and terraces oriented to the street are encouraged. Development ensures green spaces are given back to the city, heat island effects are reduced and biophilic design and architecture are embraced.

Living with nature
Leverage the rich natural setting and reinforce the subtropical character of the Gold Coast. The Urban Ground is an extension of the streetscape and can contribute to the urban experience. By integrating and extending the landscaped area, the living green becomes more present in the public realm experience.

Access to natural light
A view to the sky is fundamental to the subtropical experience. Where Urban Ground uses are provided, preserve the ability to view the sky. The internal configuration of development secures a high level of well-being for occupants through natural light and ventilation, outlook and thermal comfort. Habitable space more than 12m from external glazing is discouraged. Cross block links, courtyards, light wells and open spaces are open to the sky.

Full podiums with no access to natural light are discouraged.
E4.2 Protection

Consider all-weather uses for the subtropical climate. Provide protection from rain, solar heat and glare to active ground plane uses. Awnings, eaves, under crofts, all assist. Provide protection in Primary and Secondary focus areas, to the full extent of the site frontage, and in Frame and Transition area, to building entrances.

Appropriately designed vertical or horizontal shading structures should also be used on western and eastern facing elevations to reduce the heat load in apartments and ensure there is not an over reliance on the thermal properties of the selected glass or the mechanical cooling systems for the buildings.

E4.3 Layered façade

Transitioning the zone between outside and in softens the harsh SEQ light, blurs the sense of enclosure, provides privacy, helps integrate landscape, provides shade and amenity and provides an opportunity for an active and expressive architecture. Utilise façade layers to shade, screen, activate and mediate the Urban Ground built form.

E4.4 Integrated green

Streetscaping and landscaping is extended horizontally and vertically into the development. Green open space is provided within the Urban Ground and is open to the sky with a minimum area of 50m² or 10% of the site area (whichever is greater). This green space integrates living with nature into the urban context.

Tall trees mediate and modulate the built form and scale of the Urban Ground, and reinforce streetscaping. Development includes tall tree planting and provides appropriate soil volume for unobstructed deep planting (canopy of mature tree x depth of 0.6m soil volume.)
Plants are present in a variety of places and spaces in the Urban Ground. Planted areas are integrated into the architecture throughout the development totalling a minimum of 50% of site area. Planted areas include deep planting, tall shade trees, elevated planters, garden beds, terraced gardens, trellises, hanging planter boxes, green walls and green roofs.

All planted areas must be designed for adequate planting depth, servicing and maintenance.

The architectural facade behind green walls include sufficient articulation and materiality to maintain a high quality visual appearance if the green wall is less than successful.

**E4.5 Optimise green address**

Where addressing onto or across from green open space, optimise use, address and engagement from the Urban Ground. Provide views, movement and physical connection to open, strengthen and activate these spaces.
As site yield increases, the ground plane must accommodate additional services to meet the increasing demand. Often urban consideration is set aside for utility requirements with implication to built form outcomes. Car access and parking, waste management, delivery vehicles, visitor car parks, at grade plant, emergency egress, are all elements of the buildings uses that can negatively impact on the amenity of the ground plane. These must be considered in location and treatment to ensure a high quality streetscape and urban ground outcome for the city. Carparking above ground is not envisaged in Frame and Transition areas.

### E5.1 Ground plane is for active use

The ground plane of buildings is preserved for active use by people. Service functions, plant and car parking are organised away from the ground plane with a minimum floor to ceiling height of 4.5m.

The impacts to the street of building service areas can be significant. Locate loading bays and servicing areas away from street entries with visual screens or automated enclosures to minimise street impacts during use.

### E5.2 Car parking (primary and secondary focus area)

Carparking above ground is not desirable, however, where car parking is provided above ground it responds by:

- Sleeving with active building uses to all street frontages with a minimum building depth of 4m.
- Minimising impacts of entries and ramping.
- Minimising any ground plane parking.
- Screening with high quality, modulated facade that visually mitigates impacts of vehicles and internal lighting.
- Future proofing for technology change by providing car parking levels that are suitable structurally and spatially for adaptive re-use with minimum floor to ceiling heights of 3.5m.
- A coordinated and demonstrated strategy for adaptive re-use, including light wells, vertical circulation, services integration and safe egress.
- Ground plane parking is minimised and screened to ensure they are visually unobtrusive.
Servicing and overlooking

Plant and services are integrated into the built form design and noise pollution, light pollution and any other environmental impact is mitigated.

Innovations in waste management including compactors, shredders, conveyors, servicing intervals minimise the spatial impact of waste services and visual impacts of onsite servicing.

The overlooking of roofs and terraces of the Urban Ground is an important design consideration. Roofs and terraces incorporate high quality materials, screening elements and landscaping to mitigate the visual impact of overlooking buildings.

Services are located away from the street.

Consider the design and surface material finishes for roofs and terraces of the Urban Ground.
Urban ground condition

The urban ground conditions are divided into four precincts:

- Primary focus areas
- Secondary focus areas
- Frame areas
- Transition areas

The diagram represents the spatial definition of the primary, secondary, frame and transition areas in the light rail urban renewal area. The primary focus area is at the core with higher intensity urban ground street interface moving to lower intensity urban ground interfaces at the frame and transition areas.
Urban ground condition – primary focus areas

Primary focus areas allow for the highest concentrations of activity, commerce and built form intensity, where podiums containing business uses are built to the street edge with towers above, an active frontage and a sense of enclosure is provided at the lower levels reflecting the retail and commercial character of the area, and highly permeable connections and public spaces facilitate large volumes of pedestrian activity and movement. The podiums in this zone will be 3–4 storey/12–16m with green and communal open space on top.

Fig. 48

Illustration showing urban ground outcomes in primary focus areas (refer to checklist for a full list of design elements)

Fig. 49

Illustration showing urban ground outcomes between primary focus areas and secondary focus areas (refer to checklist for a full list of design elements)
Urban ground condition – secondary focus areas

Secondary focus areas support the centres and light rail stations but are of a lower intensity than Primary focus areas, where lower intensity podiums containing business or residential uses may be built to the street edge with towers above (however uses will depend on the relevant zone and not all buildings will be built to boundary), an active frontage and a sense of enclosure is provided at the lower levels reflecting the predominantly residential character of the area, and pedestrian connectivity allows for movement between residential areas, centres, public open space and light rail stations. The podiums in this zone will be 2-3 storey / 8-12m with green and communal open space on top.

Fig. 50
Illustration showing urban ground outcomes in secondary focus areas (refer to checklist for a full list of design elements)

Fig. 51
Illustration showing urban ground outcomes between secondary focus areas and frame areas (refer to checklist for a full list of design elements)
Urban ground condition – frame areas

Frame areas support and connect to the Primary and Secondary focus areas and allow for a range of built form outcomes with an active frontage containing predominantly residential uses, a sense of enclosure at the lower levels reflecting the residential character of the area, and the majority of buildings set back from the street to allow for landscaping, communal and public open space area. The podiums in this zone will be 1-2 storey / 4-8m with green and communal open space on top.
Urban ground condition – transition areas

Transition areas offer a clear delineation and difference to the higher intensity areas within the corridor, allowing the logical tapering of built form intensity down to adjacent lower intensity neighbourhoods, and encouraging the lowest intensity urban ground built form in the corridor.

Fig. 54

Illustration showing urban ground outcomes in transition areas (refer to checklist for a full list of design elements)

Fig. 55

Illustration showing urban ground outcomes between transition areas and frame areas (refer to checklist for a full list of design elements)
Checklist of design elements

Use the checklist template below when designing in response to the Gold Coast Urban Ground Guidelines for each of the typologies.

<table>
<thead>
<tr>
<th>Form &amp; Space</th>
<th>Primary Focus Area</th>
<th>Secondary Focus Area</th>
<th>Frame Area</th>
<th>Transition Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1.1 Modulation</td>
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<td>✓</td>
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<tr>
<td>E1.3 Room to Move</td>
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<thead>
<tr>
<th>Active &amp; Engaged</th>
<th>Primary Focus Area</th>
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<tr>
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<td>E2.3 Vibrancy and Materials</td>
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<td>E4.2 Protection</td>
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<td>E5.1 Ground Plane is for active use</td>
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<td>E5.2 Cars Parking (core only)</td>
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* where applicable.
For more information
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