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November 2019
Prepared by City of Gold Coast Urban Design Team.
Office of the City Architect.
1.0 Introduction

The aim of the Streetscape Design Guidelines is to provide direction about the spatial organisation and materiality of the public realm within the Major Centre and adjoining areas.

The Guidelines intend to support the City Plan and the Coolangatta and Kirra Business Centre Place Based Master Plan with public realm outcomes expected of Coolangatta, by improving the pedestrian experience and legibility.

The intent of the Guidelines is to simplify the development approval process for contributed streetscape delivery, whilst informing public and private streetscape outcomes and facilitating a consistent and improved streetscape for Coolangatta.

The Guidelines have been designed to allow for future additions, including streetscape elements such as furniture and planting.

Principles

The principles of the Coolangatta Streetscape Design Guidelines are:

<table>
<thead>
<tr>
<th>Simple</th>
<th>Consistent</th>
<th>Economical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear direction regarding desired footpath pavement treatment for each street in core areas of Coolangatta.</td>
<td>Spatial arrangement and material palette that visually unifies the area.</td>
<td>A specific and consistent material palette that has longevity and is easily constructed and maintained.</td>
</tr>
</tbody>
</table>

Related reference documents

Note the following documents:

City Plan Land Development Guidelines


Coolangatta & Kirra Business Centre Place Based Master Plan

2.0 Coolangatta streetscape types

Coolangatta has been divided into the following types.

**Type A – Core (Retail):**
The core of Coolangatta is defined by a concentration of commercial and retail activities accessed by public/active transport, a pedestrian-oriented urban environment of high visual amenity reflecting its role as a Major Centre.
- Griffith Street

**Type A – Core (Coast):**
Foreshore urban areas defined by a concentration of entertainment and recreational leisure activities orientated around a pedestrianised environment of extremely high visual amenity and iconic beachside location.
- Marine Parade
- East–West Streets

**Type B – Fringe:**
A sub-tropical urban environment that creates a balance between paved areas and vegetated areas, while still providing the visual quality and support function to the Major Centre.

**Type C – Periphery:**
A beachside village character that reflects the residential nature of the area through an emphasis on greenery that complements it’s density.

**Laneway:**
Coolangatta laneways and retail arcades provide cross block pedestrian links to the retail core. These underutilised areas provide opportunities for internal block activation.

---

**Diagram 1 - Typical section through footpath**

PROPERITY BOUNDARY

AWNING PROJECTION LINE

TREES (REFER TO SCHEDULES FOR SPECIES SELECTION BY STREET)

OUTDOOR DINING/VENDOR AREAS

ALL FURNITURE MIN. 600mm FROM FRONT OF KERB
Legend  - Street Typologies

Type A - Core (Retail)
Full width honed aggregate coloured concrete

Type A - Core (Coast)
Full width honed aggregate coloured concrete

Type B - Fringe
3m wide honed aggregate coloured concrete

Type C - Periphery
Plain grey concrete 2m wide pathway, with option to hone

Laneways

Map 1 – Coolangatta streetscape character types
## Streetscape types hierarchy table

### Type A – Core (Retail)

<table>
<thead>
<tr>
<th>Spatial requirements according to verge widths</th>
<th>Overall verge width</th>
<th>Access zone width</th>
<th>Utility zone width</th>
<th>Awning required?</th>
<th>Awning width (if applicable)</th>
<th>Trees required in utility zone? (see Section 4.0 Tree planting and utility services)</th>
<th>Plant beds required in utility zone?</th>
<th>Turf strip required in utility zone?</th>
<th>Furniture required in utility zone?</th>
<th>Roadside dining in utility zone?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6m total verge</td>
<td>over 6m total verge</td>
<td>4m</td>
<td>5–7m</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>4.5m total verge</td>
<td>3m of 4.5m</td>
<td>1.5m of 4.5m</td>
<td></td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>2m or less total verge</td>
<td>2m of 4.5m</td>
<td>full width</td>
<td>not applicable</td>
<td>yes</td>
<td>desirable</td>
<td>no – in private setback</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

### Type A – Core (Coast)

<table>
<thead>
<tr>
<th>Spatial requirements according to verge widths</th>
<th>Overall verge width</th>
<th>Access zone width</th>
<th>Utility zone width</th>
<th>Awning required?</th>
<th>Awning width (if applicable)</th>
<th>Trees required in utility zone? (see Section 4.0 Tree planting and utility services)</th>
<th>Plant beds required in utility zone?</th>
<th>Turf strip required in utility zone?</th>
<th>Furniture required in utility zone?</th>
<th>Roadside dining in utility zone?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6m total verge</td>
<td>6m total verge</td>
<td>3.5m of 6m</td>
<td>2.5m of 6m</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>4.5m total verge</td>
<td>2.5m of 4.5m</td>
<td>2m of 4.5m</td>
<td>not applicable</td>
<td>yes</td>
<td>desirable</td>
<td>no – in private setback</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>2m or less total verge</td>
<td>2m of 4.5m</td>
<td>full width</td>
<td>not applicable</td>
<td>yes</td>
<td>desirable</td>
<td>no – in private setback</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

### Type B – Fringe

<table>
<thead>
<tr>
<th>Spatial requirements according to verge widths</th>
<th>Overall footpath width</th>
<th>Access zone width</th>
<th>Utility zone width</th>
<th>Awning required?</th>
<th>Awning width (if applicable)</th>
<th>Trees required in utility zone? (see Section 4.0 Tree planting and utility services)</th>
<th>Plant beds required in footpath? (includes rear of footpath)</th>
<th>Turf strip required in footpath? (includes rear of footpath)</th>
<th>Furniture required in utility zone?</th>
<th>Roadside dining in utility zone?</th>
</tr>
</thead>
<tbody>
<tr>
<td>6m total verge</td>
<td>6m total verge</td>
<td>3m of 6m</td>
<td>3m of 4.5m</td>
<td>desirable</td>
<td>desirable</td>
<td>no – in private setback</td>
<td>desirable</td>
<td>yes</td>
<td>desirable</td>
<td>as required</td>
</tr>
<tr>
<td>4.5m total verge</td>
<td>3m of 4.5m</td>
<td>1.5m of 4.5m</td>
<td>1.2–2m</td>
<td>desirable</td>
<td>desirable</td>
<td>no – in private setback</td>
<td>undesirable</td>
<td>yes</td>
<td>desirable</td>
<td>as required</td>
</tr>
<tr>
<td>1.2–2m</td>
<td></td>
<td></td>
<td>1.2m</td>
<td>desirable</td>
<td>desirable</td>
<td>no – in private setback</td>
<td>yes</td>
<td>yes</td>
<td>desirable</td>
<td>no</td>
</tr>
</tbody>
</table>
## 3.0 Streetscape types hierarchy table

### Type C – Periphery

<table>
<thead>
<tr>
<th></th>
<th>6m total verge</th>
<th>4.5m total verge</th>
<th>1.2–2m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall footpath width</td>
<td>2m of 6m</td>
<td>2m of 4.5m</td>
<td>1.2m</td>
</tr>
<tr>
<td>Access zone width</td>
<td>4m of 6m</td>
<td>2m of 4.5m</td>
<td>0.8m</td>
</tr>
<tr>
<td>Utility zone width</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Awning required?</td>
<td>desirable</td>
<td>desirable</td>
<td>desirable</td>
</tr>
<tr>
<td>Trees required in utility zone? (see Section 4.0 Tree planting and utility services)</td>
<td>yes</td>
<td>yes</td>
<td>no – in private setback</td>
</tr>
<tr>
<td>Plant beds required in footpath? (includes rear of footpath)</td>
<td>desirable</td>
<td>desirable</td>
<td>no</td>
</tr>
<tr>
<td>Turf strip required in footpath? (includes rear of footpath)</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Furniture required in utility zone?</td>
<td>desirable</td>
<td>desirable</td>
<td>no</td>
</tr>
<tr>
<td>Roadside dining in utility zone?</td>
<td>as required</td>
<td>as required</td>
<td>no</td>
</tr>
</tbody>
</table>
4.0
Tree planting and utility services

Tree planting

- Tree planting in the utility zone is the preferred minimum outcome for all street types.
- Where tree planting cannot be achieved in the verge due to site conditions (e.g. underground services or overhead services), then the alternative options (set out in the table below) should be deployed at a minimum.
- Trees retain clear sight lines within the road corridor with foliage under-pruning to 2.4 metres.
- Trees used in road build outs should achieve clear sight lines (at maturity) within the road corridor.

<table>
<thead>
<tr>
<th>1st preference</th>
<th>2nd preference</th>
<th>3rd preference</th>
<th>4th preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees in utility zone</td>
<td>Trees in road build outs</td>
<td>Trees in private space</td>
<td>Arbour/green wall</td>
</tr>
</tbody>
</table>

Utility services generally

To reduce conflict with pedestrian access, all above ground utility infrastructure such as service cabinets and masts are to be located within the utility zone areas with dimensions according to the Streetscape hierarchy table (page 4 of this document).

The location of all underground services and above ground services must be located and verified on site prior to commencement of any design and site work. If existing services locations prevent the intention of the street types from being implemented advice should be sought from the City.
5.0
Type A – Core (Retail)

Paving style detail

HONED COLOURED CONCRETE WITH INDICATIVE HIGH QUALITY UNIT MULTI-COLOUR PAVER DETAIL TO CORNER NODES AND SEATING AREAS (UTILITY ZONES)

Typical section

DUAL BINS

SEATING

OUTDOOR DINING / VENDOR AREAS

SHADE TREES SPACED ACCORDING TO SPECIES TO ACHIEVE CONTINUOUS TREE CANOPY

ALL FURNITURE MIN. 600mm FROM FRONT OF KERB

60° ANGLE PARKING

TYPE A - CORE (RETAIL) PAINTING STYLE

LANEWAY ENTRANCE PAINT TREATMENT

HONED COLOURED CONCRETE WITH INDICATIVE HIGH QUALITY UNIT MULTI-COLOUR PAVER DETAIL TO CORNER NODES AND SEATING AREAS (UTILITY ZONES)
Type A – Core (Retail) design intent

Improved palette for an urbanised Major Centre core and connection routes between the Coolangatta foreshore, Marine Parade and Griffith Street.

For specifics on any items refer to Appendices 1 and 2. Note the application of the Coolangatta and Kirra Business Centre Place Based Master Plan by City Place Making.

Spatial arrangement
- Hard paved from property line to kerb line to optimise pedestrian circulation
- Access zone as shown to maximise pedestrian movement, building access and navigation by a person with vision impairment
- Minimum access zone width as shown
- Utility zone as shown on kerbside of pavement to accommodate various functions, e.g. outdoor dining, trees, furniture, utility cabinets and/or raised planters
- Build outs into road space (typically in kerbside parking zone) to accommodate trees, street furniture and/or additional outdoor dining

Awning
- For new/retrofit development in identified streets continuous permanent awning cover to extend from building either:
  1. over entire width of access zone or
  2. minimum awning width indicated (for wide streets).
See outdoor dining, next column, for awning cover to outdoor dining areas

Paving
- At least two concrete (beach) colours with the same aggregate mix, honed with penetrative sealant and curved expansion joints. High quality pavers at meeting points, corner nodes, street furniture and crossing points
- Tactile Ground Surface Indicators (TGSIs) – refer to Additional notes in Appendices

Trees and other planting
- WSUD initiatives to garden beds and tree pits (where applicable)
- Preference for trees in metal grates as specified
- For trees in plant beds provide under storey planting
- Structural soil solutions to be used for tree holes/trenches to optimise root zones and tree growth
- Pergolas, trellises, green walls etc. are an optional inclusion and an alternative to trees where constrained by underground services
- For tree species designated for each street refer to Section 10 – Recommended street trees

Street furniture
- Type A Street furniture to be of high quality urban materiality and finish – refer to standard drawings and specifications in Appendix 2 – Type A paving and street furniture palette
- Furniture elements include seats, picnic tables/decks, 240 Litre bin enclosures; pedestrian pole-top lights, tree up lights, bollards, cycle racks, water bubblers and raised planters
- All furniture to be placed in utility zone and set 1000mm back from front of kerb

Outdoor dining
(Refer Local Law No. 115, Standard Details and Specifications)
- All outdoor dining areas to be located in utility zone
- Footpath dining may only be undertaken in locations where a footpath dining permit has been obtained, in accordance with relevant local laws
6.0
Type A – Core (Coast)

Paving style detail

Diagram 2 – Typical plan

Typical section
Type A – Core (Coast) design intent

Improved palette for a beachside Major Centre core and connection routes between the Coolangatta foreshore and Griffith Street.

For specifics on any items refer to Appendices 1 and 2. Note the application of the Coolangatta and Kirra Business Centre Place Based Master Plan by City Place Making.

Spatial arrangement
- Hard paved from property line to kerb line to optimise pedestrian circulation
- Access zone as shown to maximise pedestrian movement, building access and navigation by a person with vision impairment
- Minimum access zone width as shown
- Utility zone as shown on kerbside of pavement to accommodate various functions, e.g. outdoor dining, trees, furniture, utility cabinets and/or raised planters
- Build outs into road space (typically in kerbside parking zone) to accommodate trees, street furniture and or additional outdoor dining

Awning
- For new/retrofit development in identified streets continuous permanent awning cover to extend from building either:
  1. over entire width of access zone or
  2. minimum awning width indicated (for wide streets).

See outdoor dining, next column, for awning cover to outdoor dining areas

Paving
- At least two concrete colours with the same aggregate mix, honed with penetrative sealant and curved expansion joints from property line to kerb line. High quality pavers accentuate tree pits and garden beds locations
- Tactile Ground Surface Indicators (TGSIs) – refer to Additional notes in Appendices

Trees and other planting
- WSUD initiatives to garden beds and tree pits (where applicable)
- Preference for trees in metal grates as specified
- For trees in plant beds provide under storey planting
- Structural soil solutions to be used for tree holes/trenches to optimise root zones and tree growth
- Pergolas, trellises, green walls etc. are an optional inclusion and an alternative to trees where constrained by underground services
- For tree species designated for each street refer to Section 10 – Recommended street trees.

Street furniture
- Type A Street furniture to be of high quality urban materiality and finish – refer to standard drawings and specifications in Appendix 2 – Type A paving and street furniture palette
- Furniture elements include seats, picnic tables/decks, 240 Litre bin enclosures; pedestrian pole-top lights, tree up lights, bollards, cycle racks, water bubblers and raised planters
- All furniture to be placed in utility zone and set 1000mm back from front of kerb

Outdoor dining
(Refer Local Law No. 111, Standard Details and Specifications)
- All outdoor dining areas to be located in utility zone
- Footpath dining may only be undertaken in locations where a footpath dining permit has been obtained, in accordance with relevant local laws
7.0
Type B – Fringe

Diagram – 3 Typical plan

Paving style detail

Typical section

GRASS VERGE

SHADE TREES SPACED ACCORDING TO SPECIES TO ACHIEVE CONTINUOUS TREE CANOPY

TREE IN ROAD BUILD OUT

TREES SUITABLE TO GROW UNDER POWERLINES (REFER TO SCHEDULES FOR SPECIES SELECTION BY STREET)

ALL TREES MIN. 1M FROM FRONT OF KERB

3M ACCESS ZONE

UTILITY ZONE

PARKING

CYCLE AND ONE WAY TRAVEL LANE

60° ANGLE PARKING
Type B – Fringe design intent

Subtropical urban theme applies to the streets linking Marine Parade and Griffith Street in the Major Centre.

For specifics on any items refer to Appendices 1 and 2. Note the application of the Coolangatta and Kirra Business Centre Place Based Master Plan by City Place Making.

Spatial arrangement
- Hard paved from property line to kerb line to optimise pedestrian circulation
- Access zone as shown to maximise pedestrian movement, building access and navigation by a person with vision impairment minimum access zone width to be as shown
- Minimum access zone width to be as shown
- Utility zone as shown on kerbside of pavement to accommodate various functions, e.g. outdoor dining, trees, street furniture and/or utility cabinets
- Plant beds included both in private property and utility zone
- Build outs into road space (typically in kerbside parking zone) to accommodate trees, street furniture and/or additional outdoor dining

Awning
- For new/retrofit development in identified streets continuous permanent awning cover to extend from building either:
  1. over entire width of access zone or
  2. minimum awning width indicated (for wide streets).
- See outdoor dining below for awning cover to outdoor dining areas

Paving
- Hard paved areas to be coloured concrete with honed aggregate finish, laid from property line to utility or kerb line
- Tactile Ground Surface Indicators (TGSI) – refer to Additional notes in Appendices

Trees and other planting
- Preference for trees in turf or plant beds with understorey planting
- For trees in paving tree surrounds to be porous paving as specified
- Tree planting and tree hole installation as specified
- Structural soil solutions, as specified, to be used for tree holes/trenches to optimise root zones and tree growth
- Pergolas, trellises, green walls etc. are an optional inclusion and an alternative to trees where constrained by underground services
- For tree species designated for each street refer to the Section 10 – Recommended street trees

Street furniture
- Type B Street furniture to be of good quality urban materiality and finish as specified – advice should be sought from the City
- Furniture elements include seats, picnic tables/decks, and 240 Litre bin enclosures, pedestrian pole-top lights, tree up lights, bollards, cycle racks and water bubblers
- All furniture to be placed in utility zone and set 600mm back from front of kerb

Outdoor dining
(Refer Local Law No. 115, Standard Details and Specifications)
- All outdoor dining areas to be located in utility zone
- Footpath dining may only be undertaken in locations where a footpath dining permit has been obtained, in accordance with the relevant local laws
8.0

Type C – Periphery

Diagram 4 – Typical plan

Typical section
Type C – Periphery design intent

Urban village theme complementing the residential nature of suburbs, using design and materiality from the City Plan’s Land Development Guidelines.

For specifics on any items refer to Appendix 1. Note the application of the Coolangatta and Kirra Business Centre Place Based Master Plan by City Place Making.

Spatial arrangement
- Footpath layout has turf strip/planted area to front and rear of hard paved area
- Access zone as shown to provide spatial balance between pedestrian circulation and green space
- Minimum access zone width to be as shown
- Utility zone as shown on kerbside of pavement predominantly for street trees, power/light poles (minimal use of street furniture)
- Plant beds an alternative to turf strip at rear of footpath and in utility zone
- Build outs into road space (typically in kerbside parking zone) for street trees and under storey planting

Paving
- Hard paved areas to be plain coloured, broom finished concrete (either poured in situ or large pre-cast panels)
- Tree surrounds – see below trees and other planting
- Tactile Ground Surface Indicators (TGSIs) – refer to additional notes in appendices

Awning
- Generally not required in this predominantly residential area
- For exceptions (e.g. cafe, corner shop) advice should be sought from the City

Trees and other planting
- Preference for trees in turf or plant beds with understorey planting
- Tree planting and tree hole installation as specified
- Pergolas, trellises, green walls etc. are an optional inclusion and an alternative to trees where constrained by underground services
- For tree species designated for each street refer to the Section 9 – Recommended street trees for Coolangatta

Street furniture
- Type C Street furniture to be of good quality urban materiality and finish as specified – advice should be sought from the City
- Furniture elements include seats, picnic tables/decks, and 240 Litre bin enclosures, pedestrian pole-top light, bollards and cycle racks
- All furniture to be placed in utility zone and set 600mm back from front of kerb

Outdoor dining
(Refer Local Law No. 11[5], Standard Details and Specifications)
- Typically no outdoor dining areas located in this streetscape type
- All outdoor dining areas to be located in utility zone
- Footpath dining may only be undertaken in locations where a footpath dining permit has been obtained, in accordance with the relevant local laws
9.0 Layout options

9.1 Street corners

Street corners design intent

- Intersections include street corner build outs to increase the availability of public space, narrow the road width at the point at which pedestrians cross and reduce speed of vehicles turning the corner.
- Kerb ramps and pedestrian crossings (where included) are aligned with access zones to provide clear lines of circulation.
- Utility zones on street corner build outs provide additional space for various uses that can help to activate the street, including tree planting, seating and outdoor dining (if adjacent to cafe/restaurant).

For specifics on any items refer to Local Law No. 11 – Standard Details and Specification and the Coolangatta and Kirra Business Centre Place Based Master Plan.
9.2 Griffith Street laneways

Laneways design intent

- Connectivity – retail arcades and laneways provide physical connection through a city block.
- Active frontages – visual and physical interaction between the public spaces of the lane with the ground floors of buildings.
- Views – views from the lane’s public realm towards a connecting lane, street or landmark.

For specifics on any items refer to Local Law No. 11 – Standard Details and Specification and the Coolangatta and Kirra Business Centre Place Based Master Plan.

Diagram 6 – Type C – Typical Laneway
10.0

Typical street tree planting palette

**Hibiscus tiliaceus**
- **Botanical Name:** Hibiscus tiliaceus
- **Common Name:** Cottonwood
- **Ultimate Height:** 8m
- **Ultimate Spread:** 5–8m
- **Flowers:** Yellow in summer
- **Fruit:** Woody capsules

**Alectryon coriaceus**
- **Botanical Name:** Alectryon coriaceus
- **Common Name:** Beach alectryon
- **Ultimate Height:** 4–5m
- **Ultimate Spread:** 2–3m
- **Flowers:** Tiny yellow petals
- **Fruit:** Red and black fruit

**Acmena hemilampra**
- **Botanical Name:** Acmena hemilampra
- **Common Name:** Broad-leaved lilly pilly
- **Ultimate Height:** 5–10m
- **Ultimate Spread:** 2–4m
- **Flowers:** White flowers in spring
- **Fruit:** White, globular

**Flindersia australis**
- **Botanical Name:** Flindersia australis
- **Common Name:** Crows ash
- **Ultimate Height:** 20m
- **Ultimate Spread:** 6–10m
- **Flowers:** Creamy-white
- **Fruit:** Woody capsules

**Livistonia australis**
- **Botanical Name:** Livistonia australis
- **Common Name:** Cabbage Palm palm
- **Ultimate Height:** 15–20m
- **Ultimate Spread:** 2–4m
- **Flowers:** Cream-white flower stalk
- **Fruit:** Red berries

**Melaleuca leucadendra**
- **Botanical Name:** Melaleuca leucadendra
- **Common Name:** Weeping paperbark (fine leaved)
- **Ultimate Height:** 8–12m
- **Ultimate Spread:** 4–6m
- **Flowers:** Creamy-white
- **Fruit:** N/a

**Araucaria columnaris**
- **Botanical Name:** Araucaria columnaris
- **Common Name:** Cook pine
- **Ultimate Height:** 30–60m
- **Ultimate Spread:** 3m
- **Flowers:** N/a
- **Fruit:** Cones

**Araucaria heterophylla**
- **Botanical Name:** Araucaria heterophylla
- **Common Name:** Norfolk island pine
- **Ultimate Height:** 50–65m
- **Ultimate Spread:** 6–8m
- **Flowers:** N/a
- **Fruit:** Cones

For additional street tree species refer to page 21 Street Tree Species
Map 2 – Existing and recommended street trees

- Existing trees
- Beach
- Parkland
- Roadways
- Recommended infill street tree species locations
## 10.1 Street tree species

Street trees designated for individual Coolangatta streets are outlined below. Recommend local, coastal tolerant species that provide shade and habitat are used to improve this important beachside suburb.

Refer to preferred lists for understorey plants (shrubs, groundcovers and climbers)


Refer to standard details and specification – See City Plan Policy SC6.10 Landscape Works.

Refer to standard details and specification for plant sizes at time of planting, and all other technical landscape information.

Additional species, refer to the Coolangatta and Kirra Business Centre Place Based Master Plan.

<table>
<thead>
<tr>
<th>Street</th>
<th>Tree species</th>
<th>Common name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalk Street</td>
<td>Acmena hemilampra</td>
<td>Broad-leaved lilly pilly</td>
</tr>
<tr>
<td>Chalk Street</td>
<td>Melaleuca leucadendron*</td>
<td>Weeping paperbark (fine leaved)</td>
</tr>
<tr>
<td>Chalk Street</td>
<td>Flindersia australis</td>
<td>Crows Ash</td>
</tr>
<tr>
<td>Clarke Street</td>
<td>Cupaniopsis anacardioides</td>
<td>Tuckeroo</td>
</tr>
<tr>
<td>Dutton Street</td>
<td>Hibiscus tiliaceus</td>
<td>Cottonwood tree</td>
</tr>
<tr>
<td>Dutton Street</td>
<td>Hibiscus tiliaceus var. rubra</td>
<td>Bronze cottonwood</td>
</tr>
<tr>
<td>Dutton Street</td>
<td>Araucaria columnaris</td>
<td>Cook pine</td>
</tr>
<tr>
<td>Gerrard Street</td>
<td>Banksia integrifolia</td>
<td>Coastal banksia</td>
</tr>
<tr>
<td>Gerrard Street</td>
<td>Banksia serrata</td>
<td>Old man banksia</td>
</tr>
<tr>
<td>Gerrard Street</td>
<td>Hibiscus tiliaceus var. rubra</td>
<td>Bronze cottonwood</td>
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<td>Cupaniopsis anacardioides</td>
<td>Tuckeroo</td>
</tr>
<tr>
<td>Griffith Street</td>
<td>Melaleuca leucadendron*</td>
<td>Weeping paperbark (fine leaved)</td>
</tr>
<tr>
<td>Griffith Street</td>
<td>Banksia integrifolia</td>
<td>Coastal banksia</td>
</tr>
<tr>
<td>Griffith Street</td>
<td>Casurina equisetifolia</td>
<td>Horse Tail She-oak</td>
</tr>
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<td>Banksia serrata</td>
<td>Old man banksia</td>
</tr>
<tr>
<td>Griffith Street</td>
<td>Araucaria columnaris (intersections)</td>
<td>Cook pine</td>
</tr>
<tr>
<td>Griffith Street</td>
<td>Livistona australis (intersections)</td>
<td>Cabbage Palm</td>
</tr>
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<td>Griffith Street</td>
<td>Cupaniopsis anacardioides</td>
<td>Tuckeroo</td>
</tr>
<tr>
<td>Lanham Street</td>
<td>Acmena hemilampra (eastern side)</td>
<td>Broad-leaved lilly pilly</td>
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<td>Lanham Street</td>
<td>Alectryon coriaceus (suitable under powerlines)</td>
<td>Beach alectryon</td>
</tr>
<tr>
<td>Lanham Street</td>
<td>Hibiscus tiliaceus (western side)</td>
<td>Cottonwood</td>
</tr>
<tr>
<td>Marine Parade</td>
<td>Araucaria columnaris (between Dutton and Warner streets)</td>
<td>Cook pine</td>
</tr>
<tr>
<td>Marine Parade</td>
<td>Araucaria heterophyllis (eastern side)</td>
<td>Norfolk Island pine</td>
</tr>
<tr>
<td>Marine Parade</td>
<td>Pandanus tectorius</td>
<td>Screw Palm</td>
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<tr>
<td>McDonald Street</td>
<td>Cupaniopsis anacardioides</td>
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<td>Hibiscus tiliaceus</td>
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<tr>
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</tr>
<tr>
<td>Warner Street</td>
<td>Casurina equisetifolia</td>
<td>Horse Tail She-oak</td>
</tr>
</tbody>
</table>

* In wide planter beds or wide verges only
11.0 Public art locations

The City supports the inclusion of site-specific public art in the public domain of streets, parks, waterways and civic spaces that celebrates our city as a distinct, culturally rich destination. Artwork purchased or commissioned by the City represents a variety of styles and artistic practices; curated to be specific to its location. Public art includes artwork in the public areas of private development such as the public areas of interior fit-outs, on building façades, pavements, building surrounds and in water environments.

Principles for public art

Public artwork in the private or public domain should be:

1. Informed by both current and historical site research to understand and positively contribute to the heritage, culture and environment of the proposed location.
2. Purposely designed for the location to enhance the site and built environment, and be professionally fabricated and installed by licensed contractors.
3. An opportunity for collaborative projects to be developed between visual artists, architects and landscape architects with respect to the design and integrated location of artwork.
4. For Development Applications, a Public Art Plan should be developed using a professional public art curator. The plan will contain concept imagery information, technical drawings and a maintenance management plan.
5. Council approval for artwork proposed for the public domain is explicitly required. The future maintenance of artwork needs to be considered at the design stage to ensure that artwork continues to enhance Coolangatta in the longer term.
Appendix 1 – Technical notes

Other standard drawings and specifications

<table>
<thead>
<tr>
<th>Streetscape type</th>
<th>Standard drawings/specification</th>
<th>Web link</th>
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</thead>
<tbody>
<tr>
<td>All</td>
<td>LDG Planting dwg no. 05-101 to 05-106</td>
<td>cityplan.goldcoast.qld.gov.au/eplan/#Rules/0/213/1/0</td>
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<tr>
<td>All</td>
<td>LDG Concrete Footpaths, Kerb Ramps and Vehicular Crossings dwg nos. 02-401</td>
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<tr>
<td>All</td>
<td>LDG WSUD dwg nos. 05-02-000a to 05-02-611</td>
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</tbody>
</table>

Accessibility design guidance

(Refer to City of Gold Coast Equitable Access Policy4)

Tactile Ground Surface Indicators (TGSIs)

Recommend shorelines along building edges are established rather than the use of TGSIs.

There are two types of TGSIs as described below:

- Warning TGSIs are to warn people of a hazard and the need to stop and analysis before proceeding.
- Directional TGSIs are to indicate direction of travel through a space or to an element or service.

All TGSIs products must comply with the AS 1428 suite of standards.

Integrated TGSIs – preferred option

Integrated TGSIs are tiles/pavers which are of the same luminance contrast as their base surface. The truncated cones are integrated with the tile. Integrated TGSIs must be installed correctly in accordance with the relevant Australian Standards. The tile may become a trip hazard if it is not installed correctly. The tile must be recessed so that it is flush with the substrate so that the truncated cones are no higher than 4–5mm.

Discrete TGSIs – not preferred option

Discrete/Composite TGSIs are individually installed units/dots. Composite units, with a colour infill and a stainless steel surround are a suitable material as it is hardwearing, is UV stable and is recessed into the ground via individual stems. The truncated cone of the TGSI must not protrude any more than 4–5mm from the surrounding surface. Individual Discrete/Composite units are more suitable at hazards where there is a radius or linear edge as they are easier to array i.e. at curved pathways and roadways at the same grade.

Luminance contrast

Over 90% of people with a vision impairment have some residual sight and sufficient light perception 3. Luminance contrast is the amount of light reflected from one surface to another. Therefore TGSIs must have the following luminance contrast to enable people with vision impairment to identify the location of TGSIs:

- Integrated units (tiles) minimum of 30% luminance contrast with their surrounding surface
- Discrete units (individual dots) minimum of 45% luminance contrast with their surrounding surface
- Composite units (individual dots with contrasting infill to the truncated cones) minimum of 60% luminance contrast with their surrounding surface.

On site measurement of the luminance contrast of TGSIs with their surroundings can be carried out by luminance meters, such as a tristimulus colorimeter or a spectrophotometer.

Type A – Core installation

Integrated TGSIs should consist of ceramic, granite or stone which is recessed into the substrate of the concrete ensuring that the base tile is flush with the surround.

Discrete TGSIs are not preferred. Should Discrete TGSIs be used for Type A area, a composite unit with colour infill with a single stem of at least 18mm is recommended.

Within Type A areas, site measurements are recommended with a luminance meter prior to the installation of TGSIs as there may be multiple types of coloured pavers used in the Principal Centre. Accordingly, in some instances a combination of two different luminance contrasts of TGSIs may be required to achieve the required luminance contrast.

Type B – Fringe and Type C – Periphery installation

Should a Discrete TGSI be used for Type B and C areas, a composite unit with colour infill and stem shaft is preferred. Alternatively a polyurethane unit with a single shaft/stem of at least 18mm is recommended. Within Type B and Type C areas, TGSIs that are black or similar dark colours may be suitable for installation in areas where plain brush concrete is used.

It recommended that the luminance contrast of the proposed TGSI and surrounding concrete are tested in wet conditions as well as dry prior to final installation to ensure sufficient luminance contrast. Stainless steel alone must never be used for TGSIs.

Slip resistance

Prior to selection of a TGSI the supplier should provide a letter of certification from a National Association of Testing Authorities (NATA) accredited laboratory that the TGSI meets the R Rated Slip Resistance required in accordance with AS4663 and AS4586. The R Rating should be similar to the adjacent surface to avoid different gripping characteristics between materials. To prevent stumbling the R value between ground surfaces and TGSIs should be no greater than R28.
**Visual shorelines**

Shorelines include the use of texture or features such as the property line of buildings and tactile cues such as planting, grass or TGSIs. Visual shorelines are assisted by cues such as luminance contrast of adjacent surfaces, e.g. such as light coloured footpath adjacent to grass. Where no natural shorelines exist, artificial shorelines can be provided by means of TGSIs. Accordingly TGSIs ensure people with a vision impairment avoid obstacles and obtain information about their location.

Other elements of wayfinding include sensory elements such as aromatic planting, culinary cues and architectural/landscape elements such as landmarks and public art. Prominent landmarks and public art are useful wayfinding clues for all people, and are particularly beneficial to people with cognitive impairment.

**Wayfinding directional TGSIs**

Establishing shorelines along building edges is preferred and wayfinding directional TGSIs are generally not encouraged except where they are used to locate bus stops or where they are particularly needed in open plaza type areas. Here directional TGSIs act as an artificial shoreline which can lead to information such as a tactile map, information and a pedestrian crossing where the distance is greater than 3m to tactile cue such as kerb ramp or an at grade crossing point.

In the event that there is no clear shoreline at the property line directional TGSIs which run parallel with a property line must ensure a clear path of travel, a minimum of 1500mm wide for a wheelchair user.

Directional TGSIs should be 600mm wide where pedestrians predominantly approach at 90 degrees. (Note that people with a vision impairment may shoreline the property boundary within the Access Zone, therefore a 600mm x 600mm may be sufficient setback 300mm/-/+10 from the property line.)

Refer to Figure 1 below.

**Figure 1**

![Figure 1](image1)

**Figure 2**

Directional TGSIs should be 300mm wide where pedestrians travel parallel to the direction of travel. This is for reasons that people are walking in line as opposed to traversing across the Directional TGSIs, therefore there is less risk of overstep. Refer to Figure 2 example above.

**Kerb ramps**

The top and bottom of the kerb ramps must be aligned in the direction of travel and at 90° with the property line.

Kerb ramps on both sides of the carriageway must be aligned with each other. Kerb ramps must be constructed to Australian Standards and reference should be made to the provisions within AS1428.1 and AS1428.4.1. This should include a gradient between 1:8 and 1:8.5 with the sloping sides of the kerb ramp being tapered or splayed.

The width of the kerb ramp is recommended to be at least 1200mm wide to accommodate electric scooters (Dual entry kerb ramps of 2m wide should be considered wherever possible to meet the needs of all user groups).

The transition between the kerb ramp and kerb and channel must be no greater than 166° to avoid jolting and abrupt landing of rear wheels of mobility devices when descending from the ramp to the roadway. Also this would avoid scrapping of footplates to manual wheelchairs whilst ascending from the roadway to the kerb ramp.
Dual entry kerb ramps

People with a mobility impairment and wheelchairs users prefer not to travel across TGSIs as they can restrict mobility. However, people with vision impairment require TGSIs for warning and orientation purposes. Dual entry crossings are a solution which contain kerb ramps which are free of TGSIs whilst containing Warning TGSIs adjacent. Accordingly directional TGSIs would also be provided adjacent (if the kerb ramp is further than 3m from the property boundary).

It is preferable that kerb ramps are designed as dual entry points, i.e. both for people with a vision impairment and mobility impairment. Accordingly the kerb ramp should be at least 2m wide to accommodate at least 1m clear of TGSIs. Refer to Figure 2 and Figure 3 from AS1428.

In accordance with Ausroads guidance notes Catering For People With Disabilities Issue Paper, kerb ramps should be positioned on the straight section or on the tangent point of the kerb line as opposed to the radius of the kerb line. If a kerb ramp is located on a radius this can be a hazard particularly, when there is left hand turning traffic.

Kerb ramps also need to be aligned in the path of travel so that a person with a vision impairment is not disorientated and travels in a different direction to the intended path of travel. Accordingly the angles of the tapered or splayed sides and landings must be sharp to ensure a person with vision impairment is correctly aligned in the direction of travel.

The tapered and splayed sides to the kerb ramps should be positioned outside the marked crossing at all intersections as shown within the Australian Standard. Refer to Figure 4 below.

Footpath works

Accessible footpaths

A footpath should, as far as possible, allow for a continuous accessible path of travel so that people with a range of disabilities are able to use it without encountering barriers.

The design features of a continuous accessible path of travel (such as gradient, crossfall, minimum clear widths and heights, kerb ramps, Tactile Ground Surface Indicators and slip resistance) should comply with AS1428 suite of standards.

Levels and grades

Resolution of levels for access to buildings or flood mitigation should be undertaken in the private realm.

The public footpath is to be free of steps, ramps and trip hazards.

Footpath design is to achieve a uniform longitudinal gradient along the full length of the footpath and to tie in with the existing line and level of adjacent footpaths and kerb.

Minimum cross falls to be in accordance with AS1428.1 and AS1428.4.1. Where existing conditions within the public footpath prevent the establishment of the maximum cross fall of 1:40 (2.5%), the City will consider the footpath design on a site-by-site basis.

Tactile Ground Surface Indicators (TGSIs)

If the motorist’s view is limited, warning TGSIs must be applied for the full width of the driveway crossovers in accordance with AS1428.4.1. Where TGSI installations are in conflict with pit locations, they will be assessed on a site-by-site basis.

Kerb ramps

Kerb ramps are to comply with Accessibility Design Guidance in these technical notes. Refer AS1428.1 and Appendix C of AS1428.4.1 for details.
Paving types

All footpath works are to provide new pavement finishes in accordance with these guidelines; and provide new or reinstated kerb and channel, driveways, pedestrian kerb crossings, tactile paving, roofwater drainage line connections and service pit lids in accordance with the Land Development Guidelines (LDG).

All footpath surface works are to be undertaken in accordance with the City’s Standard Drawings and Specifications, refer to other standard drawings and specifications in the technical notes. To determine the paving materials for use in a particular location, refer to Map 1 and Streetscape types hierarchy table.

Footpaths are to be constructed in a single paving material as specified for the streetscape type.

Water Sensitive Urban Design (WSUD)

Water Sensitive Urban Design (WSUD) strategies and solutions such as passive kerb inlets, rain gardens, bioretention tree pits and tree trenches, must be investigated for integration into footways. For further information refer to Other Standard Drawings and specifications in these technical notes.

Driveways/vehicle cross-overs

Footpath surfacing materials shall generally extend across the driveway/vehicle crossover. Where the footpath surfacing is asphalt, the driveway/vehicle crossover shall be plain broom-finished concrete.

Service pit lids

For service pit lids in the public footpath refer to the LDG.

Minimum widths

The minimum width of a shared path is to be 2m. Where the overall footway extent is less than 2m, the shared footpath is to be provided for on private land. In order to provide acceptable path width, landscape works will be required to the site frontage within the property boundary.

Public footway widening in private ownership

In locations where a building setback provides a section of widened footpath inside the original property line, the private area is to be paved in the same material as the public footpath.

Public/private interface

Paving on private property adjacent to the public footpath may be selected to suit the private development, as long as this does not extend into the public footpath. Layout and junction of threshold materials are to be coordinated physically and visually.

Corners – intersection of footways

Where two street types intersect the higher level of street type will take precedence and its design layout will wrap around the corner into the lower level street. The extent and detail of the treatment wrapping around the corner is to be agreed through the development assessment process on a site-by-site basis.

Street furniture

Furniture elements

The range of furniture elements to be used includes seats, picnic tables/decks, rubbish bins, water bubblers, pedestrian pole-top lights, bollards and cycle racks. Furniture design should consider the needs of all people including people with a disability and people of all ages. Refer AS1428.2 for more information.

Locations

These guidelines outline general street furniture requirements according to streetscape types. In some streets there will be no requirement for street furniture.

Each footway will require varying types and amounts of street furniture to suit the specific situation. Where required, furniture is to be located to minimise clutter and provided in locations that are conducive to its use, with layouts to be agreed on a site-by-site basis. Provision of street furniture is subject to the City’s approval.

Setout and clearances

To avoid conflict with traffic, all furniture must be located a minimum of 600mm from the nominal face of kerb. Additionally, adjacent items must be appropriately spaced to allow for ease of movement between them. Seating is to be generally located parallel to the kerb, facing away from traffic and adjacent to street trees for shade.

Furniture materials

Hardwood timber slats to be sourced from plantation or sustainably harvested sources. All stainless steel furniture is to be manufactured in 316 grade stainless steel, and finished with a No.4 finish, with surface roughness (Ra) to be less than 0.5 micrometers. Timber furniture to be finished with sealant/stain. Refer to the street furniture standard drawings and specifications in these technical notes.

An acceptable alternative to hardwood timber slats is wood-plastic composites which includes recycle and waste material.

Pedestrian lighting

Preference is given to under-awning lighting. Such treatments will be agreed to on a site-by-site basis and the selection of light fittings must be approved by the City.

Up-lighting in footway

Up-lighting may be used to illuminate trees or public art located in the verge but should not be in the footpath to minimise glare and discomfort for people with a vision impairment. Such treatments will be agreed to on a site-by-site basis and the selection of light fittings must be approved by the City.

Awnings

An awning is any structure that is attached to a building and spans above and across the footway. These guidelines nominate street types where continuous awnings are required.

Structural soils

To promote good street tree growth, soil vaults with proprietary strata cell systems should be used below paved areas. The soil volume should be calculated by taking the projected canopy area of the mature tree, multiplied by a depth of 0.6.
Appendix 2 – Paving and street furniture palette

Paving
- Type: Coloured concrete or approved equivalent
- Honed with penetrative sealant and slip resistant finish
- Colour 1: Standard Grey
- Colour 2: CCS Yorkstone
- Colour 3: CCS Paperbark
- Aggregate: Boral ‘Coral Coast’ or similar mix of different colours
- Joints: Curved expansion
- High quality paving to meeting places and corner nodes

Bench (without back)
- Type: Street Furniture Australia type CMM401 or approved equivalent
- Frame & splay legs: polished aluminium
- Battens: 63W x 30D x 1750Lmm wood fibre/recycled composite or Spotted Gum (dressed and shot edged finished with Cabot’s Aquadeck Satin or approved equivalent)
- Arms: elliptical polished aluminium
- Dimensions: 615W x 450H x 1750Lmm

Seat (with back)
- Type: Street Furniture Australia type CMM101 or approved equivalent
- Frame & splay legs: polished aluminium
- Battens: 63W x 30D x 1750Lmm wood fibre/recycled composite or Spotted Gum (dressed and shot edged finished with Cabot’s Aquadeck Satin or approved equivalent)
- Dimensions: 615W x 795H x 1750Lmm
- Options with and without armrests are recommended to provide a variety of seating options. Where possible provide seating which is open to one side to allow for a person to transfer onto a standard seat from a wheelchair. It is recommended that a space of 900mm by 1400mm is provided adjacent to the seat to allow for a person in a wheelchair to sit alongside.
- Locate seating near shade if possible

Reference:
- streetfurniture.com
- bottonandgardiner.com.au

Bin Enclosure
- Type: Street Furniture Australia F240 single or F240 dual frame bin enclosure(s) or approved equivalent
- Frame: 316 stainless steel, finished
- Roof: angle
- Panels: wood fibre/recycled composite or Spotted Gum / Jarrah timber, dressed and shot edged finished with Cabot’s Aquadeck Satin or approved equivalent
- Signage (door and rear panel): ‘rubbish’ or ‘recycle’
- Fixings: 316 stainless steel; s/s dome nuts for surface bolting
- Dimensions:
  - Single: 735W x 810D x 1335Hmm
  - Dual: 1440W x 810D x 1335Hmm
  - Timber batten size: nom. 80W x 20D x 1100Lmm

Reference:
- wcookeengineering.com.au
- streetfurniture.com
Bollards for pedestrian and vehicle area separation

- Type: Leda-Vannaclip slimline SSP80B (surface mount) or SSP80R (removable mount) or approved equivalent
- Pipe body: 88.9mm x 3.05 grade 316 stainless steel pipe
- Allen key locking
- Dimensions: 88.9mm dia x 1000Hm

All bollards are required to have a band of luminance contrast placed between a height of 850mm–1000mm high. All bollards must be at least 1000mm high with the exception of bollards in car parks which are required to be 1300mm high in accordance with AS2890.1. Special standards apply for impact protection bollards.

Reference
ledasecurity.com.au

Tree grates

- Laser cut perforated galvanised steel plate to meet AS1428.1
- Refer to notes for perforations
- Support frame: metal, include laser cut T sections to accommodate tree guards
- Tree grates tailored to cater for existing off centre tree trunks
- Grates fixed to frame by cam-locks in all corners. Frame fixed into footway surface
- Tree guards optional
- City of Gold Coast logo incorporated
- Dimensions: 1600 x 1600mm

Reference
urbanff.com.au

Bike racks

- Type: Street Furniture Australia semi hoop BST03 or approved equivalent
- Complies with AS2890.3 and provides luminance contrast of the rack to surroundings
- Material: 316 grade stainless steel, 42mm dia. pipe, matt bead blasted finish
- Dimensions 845W x 850Hmm
- For Type B and Type C areas, the rail type bicycle parking from City Plan Policy SC6.11 Land Development Guidelines can be used. Refer to Drawing No. 05-630. (see Figure 5 below)

Reference
streetfurniture.com

Figure 5
Drinking fountains (bubblers)

- Type: Apollo 900 or approved equivalent
- Material: 316 Grade stainless steel matt bead blasted finish
- Dimensions: refer to AS1428.2 compliant height. Apollo 900 has 860mm overall height

Reference
urbanff.com.au

Pedestrian lighting

- Luminaire type: We-ef PFL 240 or AEMO approved – PLED luminaire with 7 pin Nema – 18–72 wattage
- Pole type: GM pole or approved equivalent
- Luminaire material: Stainless steel SHS. Lighting performance (including luminance and product specification) to be determined by professionally accredited lighting engineer.
- Dimensions: Luminaire: 560L x 33W x 190Hmm Pole: 4–7m height

Reference
weef.de

MultiPole™

- Type: MultiPole™ or approved equivalent. All lighting to include a AEMO approved – PLED luminaire with 7 pin Nema – 18–72 wattage
- Material: Satin nickel alloy (SNA) finish pole with multi-mounting capability for GPO power, banners, CCTV, street lighting (high mounted) and pedestrian (lower mounted), bike hoop
- Type: FlagTrax (banner attachment system) by Evan Evans or approved equivalent
- Banner material: Trilobal or approved equivalent
- Dimensions: Banner: 2.7m high x 0.95m wide

Reference
lightpole.com
evanevans.com.au
Electric Vehicle charging bays

- EV Type: Compact, fast charge Veefil-RT or approved equivalent
- AC Input voltage range: 380-480 Vac 3o (50-60Hz)
- AC Input current (max): 80A (AC)
- DC input voltage range: 600-900Vdc (optional)
- DC input current: 90A (optional)
- Connector types: CHAdeMO, CCS (SAE-Combo-1/Combo-2)
- Power rating: 50kW in DC; up to 43kW in AC
- Output current (max): 125A in DC; up to 63A in AC
- Power factor: >0.99
- Efficiency: >93%
- IP rating: IP65, NEMA Type 3R
- Network connection: 3G, GSM and Gigabit Ethernet
- Communication Protocol: OCCP 1.5
- Refer to the Coolangatta and Kirra Business Centre Place Based Master Plan for preferred locations

Reference
tritium.com.au