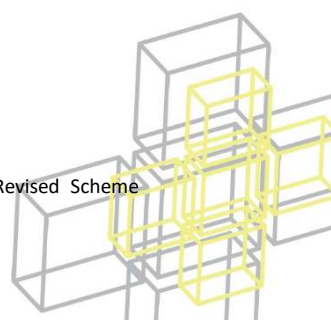
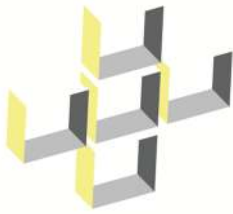


# **Annexure 10: Visual Impact Assessment**





# PLANNING PLUS

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## Visual Impact Assessment in relation to Application for Development Permit for Material Change of Use for 'Multiple Dwellings' and 'Short-Term Accommodation' over Land at 69 – 73 Murphy Street, Port Douglas, described as Lot 2 on RP724386 and Lot 516 on PTD2094

October 2021

---

Prepared by:

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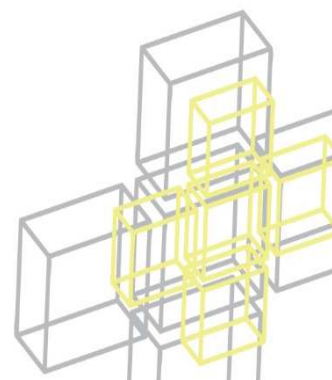
Prahran VIC 3181

Author: Evan Yelavich

Report Number: 20-12/001144

Version / Date: 1 / October 2021

*town planning, project management & development consultants*





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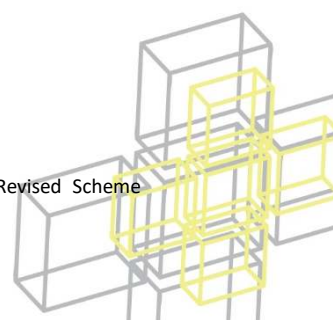
In preparing this report we have made certain assumptions. We have assumed that all information and documents provided to us by the Client or as a result of a specific request of enquiry were complete, accurate and up-to-date. Where we have obtained information from a government register or database, we have assumed that the information is accurate. Where an assumption has been made, we have not made any independent investigations with respect to the matters which are the subject of that assumption. We are not aware of any reason why any of the assumptions are incorrect.

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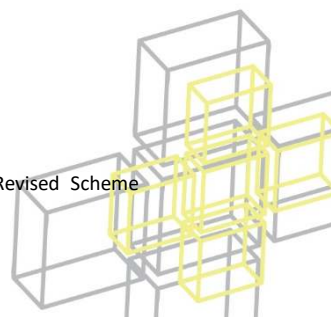


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## Annexures

Annexure 1:	Landscape Values Overlay Code Assessment
Annexure 2:	Viewpoint Analysis Map
Annexure 3:	Photopoint Views

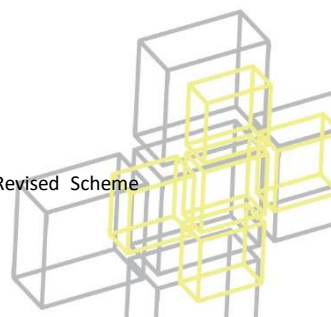


## 1.0. Introduction

The purpose of this report is to provide an assessment of the potential visual impact in relation to the proposed development of 'Multiple Dwellings' and 'Short-Term Accommodation' over land at 69 – 73 Murphy Street, Port Douglas, described as Lot 2 on RP724386 and Lot 516 on PTD2094. The report has been prepared in accordance with Douglas Shire Council's Planning Scheme Policy SC6.6 – Landscape Values.

The proposal consists of a high-quality residential development comprising a building height of 18.6m which is located on an existing benched area that has been cut into the foothills of Flagstaff Hill. The site is characterised by existing vegetation and an altered topography from past quarry activities, while the broader locality comprises a mix of accommodation activities and is located a short distance to the centre of Port Douglas.

This report describes the existing landscape character within the local context of the site and identifies and assesses the existing local visual context, key viewpoints and impacts of the proposed development on the visual landscape character.



## 2.0. Site Context

The subject site, being 69 – 73 Murphy Street, Port Douglas, described as Lot 2 on RP724386 and Lot 516 on PTD2094, is located at the base of Flagstaff Hill, Port Douglas, a short distance from the coastline of Four Mile Beach. The site is currently vegetated and sloping, with a significant cut batter along the northern boundary as a result of past quarrying activities.

The surrounding area comprises a mix of accommodation activities, primarily consisting of multiple dwellings or large detached residential dwellings. A Google Aerial Image Overlay is provided below as Figure 1.

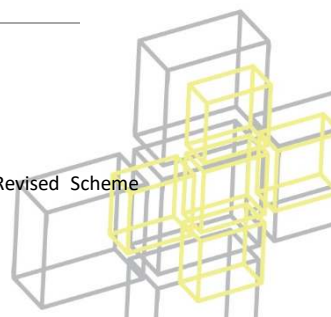
**Figure 1: Google Aerial Image Overlay**



The site is located a short distance from the centre of Port Douglas where the highest intensity of development in the region occurs.

The planning context of the site includes:

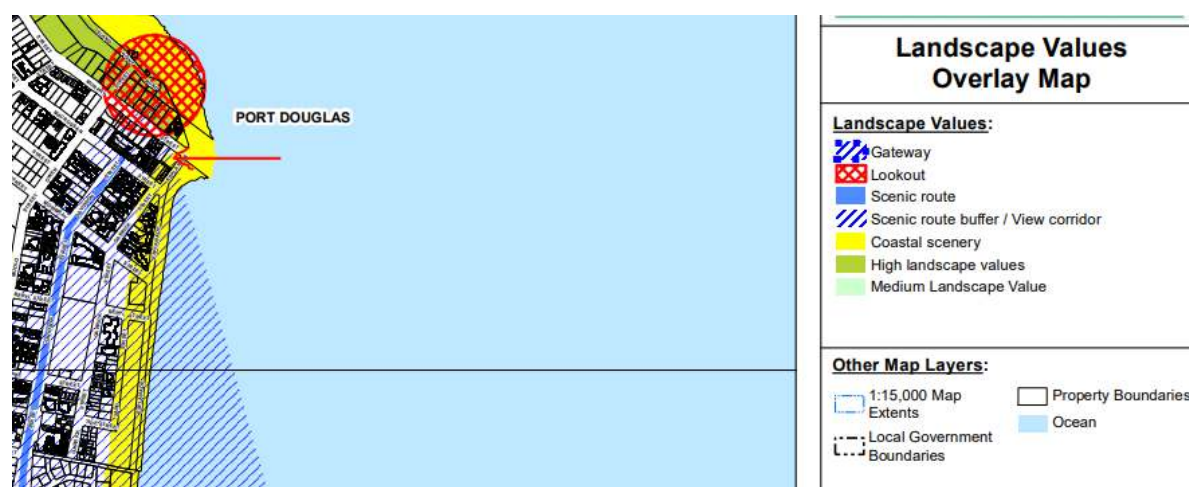
<b>Regional Plan Designation:</b>	Urban Footprint
<b>Planning Scheme Local Plan Area:</b>	Port Douglas/Craiglie



<b>Planning Scheme Zone:</b>	Tourist Accommodation
<b>Planning Scheme Overlays:</b>	Acid Sulfate Soils Overlay; Bushfire Hazard Overlay; Hillslopes Overlay; Landscape Values Overlay*; Potential Landslide Hazard Overlay; and Transport Road Hierarchy Overlay.

\*Within the Landscape Values Overlay, the subject site is identified as comprising 'coastal scenery' and 'scenic route buffer / view corridor'. It appears from the overlay mapping that the 'view corridor' which applies to the site is associated with the 'lookout' on Flagstaff Hill – see Figure 2 below:

**Figure 2: Landscape Values Overlay Map Extract**

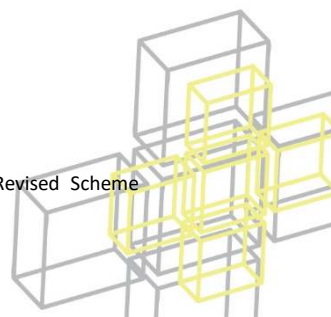




### **3.0. Proposed Development**

The proposal consists of a high-quality residential development comprising a building height of 18.6m which is located on an existing benched area that has been cut into the foothills of Flagstaff Hill.

A full set of Architectural Plans and description of the proposal is included within the Town Planning Report.



## 4.0. Landscape Values Planning Scheme Policy

### 4.1. Landscape Character Types

Under the Landscape Values Planning Scheme Policy, the first step is to identify the Landscape Character Type of the site. The various options are provided in Table SC6.6.4.a - Landscape Character Types, included below as Figure 2.

Figure 2 - Table SC6.6.4.a - Landscape Character Types

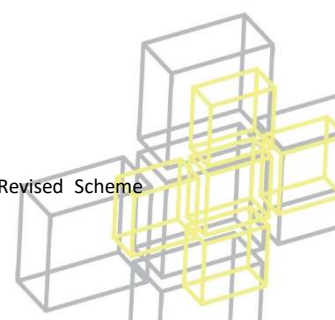
Character Type	Description
Forested mountains	Generally, the uplands of the mountain ranges which create the landscape 'frame' and viewshed edges, and form the scenic background to most views across the study area, and also from offshore. Forested hillslopes and headlands are also included in this character type.  Example: the Dagmar Range adjacent to Wonga.
Grassy hillsides	Grazed, burnt or disturbed hillsides, with grassy slopes often with a backdrop of forested mountain ranges.
Lowlands	The coastal and river plains and valley floors which are not used for sugar cane *, including forested woodland areas, grazed grassland and crops.  *canefields are a separate character type.
Canefields	Generally flat areas used for sugar cane cultivation.
Coast	The coastline is a mixture of mangrove inlets, rocky headlands and beaches, plus bays and inshore ocean.  For the purposes of landscape character type mapping, forested headlands are included in forested mountains landscape character type. The area mapped as the coastal landscape character type includes beaches, bays, mangroves and inshore ocean. Some of the beaches have an 'iconic' combination of white sand, fringing vegetation, and long views over the Coral Sea.
Inland watercourses	The major rivers include the Mowbray, the North and South Mossman, Daintree and Bloomfield Rivers, plus the associated gorges and waterfalls and many tributary creeks that either feed into these, or directly into the Coral Sea.
Urban	Urban areas include Mossman, Port Douglas, Craigie and smaller towns.

Given the urban zoning of the site and location within Port Douglas, the 'urban' landscape character type is considered applicable.

### 4.2. Landscape Values Overlay Code

Following identification of the relevant landscape character type, the relevant provisions of the Landscape Values Overlay Code are to be identified. We note that this code differs from the Landscape Values Overlay Code contained within the Douglas Shire Planning Scheme.

An assessment of the proposal against the provisions of Table SC6.6.5.a - Landscape Values Overlay Code is provided as **Annexure 1**.



### 4.3. Summary of Analysis

As referenced in the assessment against the Landscape Values Overlay Code, a Viewpoint Analysis Plan and images from the various photopoints with red outline of the proposal are included as **Annexures 2 & 3**, respectively. A summary of these views and commentary on visual impacts is provided as follows:

#### Photopoint 1

Location: Esplanade (approx 200m from site)

Visibility: Slightly/moderately visible.

Comment: Views to the site are filtered by existing buildings and vegetation in the foreground and the vegetated hillsides in the background assist in absorbing the building. Reduced building bulk and use of appropriate colours and materials will assist in reducing visual impact of upper levels.

#### Photopoint 2

Location: Garrick Street (approx 150m from site)

Visibility: Barely visible.

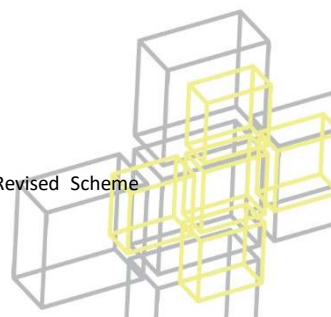
Comment: As per photopoint 1, views to the site are filtered by existing buildings and vegetation in the foreground and the vegetated hillsides in the background assist in absorbing the building. Reduced building bulk and use of appropriate colours and materials will assist in reducing visual impact of upper levels.

#### Photopoint 3

Location: Jalun Park

Visibility: Moderately/highly visible.

Comment: Moderate to high level of visibility expected at such close range. The building is partly filtered by existing and proposed vegetation and the sloping landform in the foreground, while vegetation in the background assists in absorbing the building. Reduced building bulk and use of appropriate colours and materials will assist in reducing visual impact of upper levels.

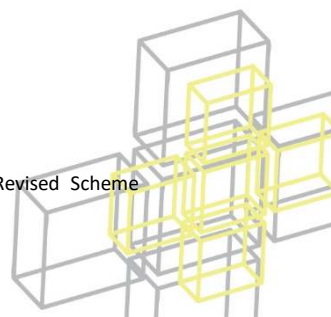




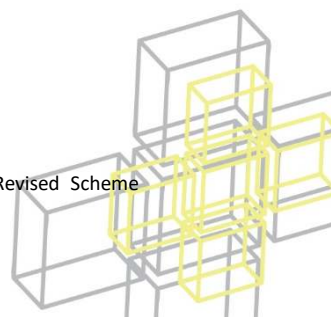
## 5.0. Conclusion

This Visual Impact has been prepared by Planning Plus (QLD) Pty Ltd (Planning Plus) on behalf of GurnerTM Nominee Pty Ltd (the 'applicant') to provide an assessment of the potential visual impact in relation to the proposed development of 'Multiple Dwellings' and 'Short-Term Accommodation' over land at 69 – 73 Murphy Street, Port Douglas, described as Lot 2 on RP724386 and Lot 516 on PTD2094.

The report has been prepared in accordance with Douglas Shire Council's Planning Scheme Policy SC6.6 – Landscape Values and has found that the proposed development is generally not visible from significant viewpoints to the north (Flagstaff Hill lookout) and west (Davidson Street / Macrossan Street intersection). The proposal is barely visible from viewpoints to the south of the site where foreground filtering exists to a large degree, while short-range views from the south-east are also filtered to a lesser degree. In all cases, background vegetation acts to absorb the building, while design features including reduced bulk and use of appropriate colours and materials on upper levels will act to reduce the severity of the visual impact.



# **Annexure 1:            Landscape    Values    Overlay Code Assessment**

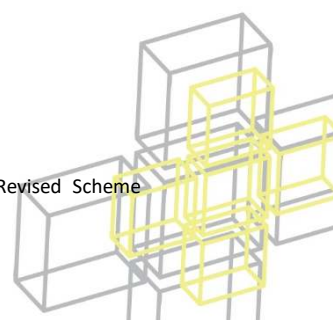


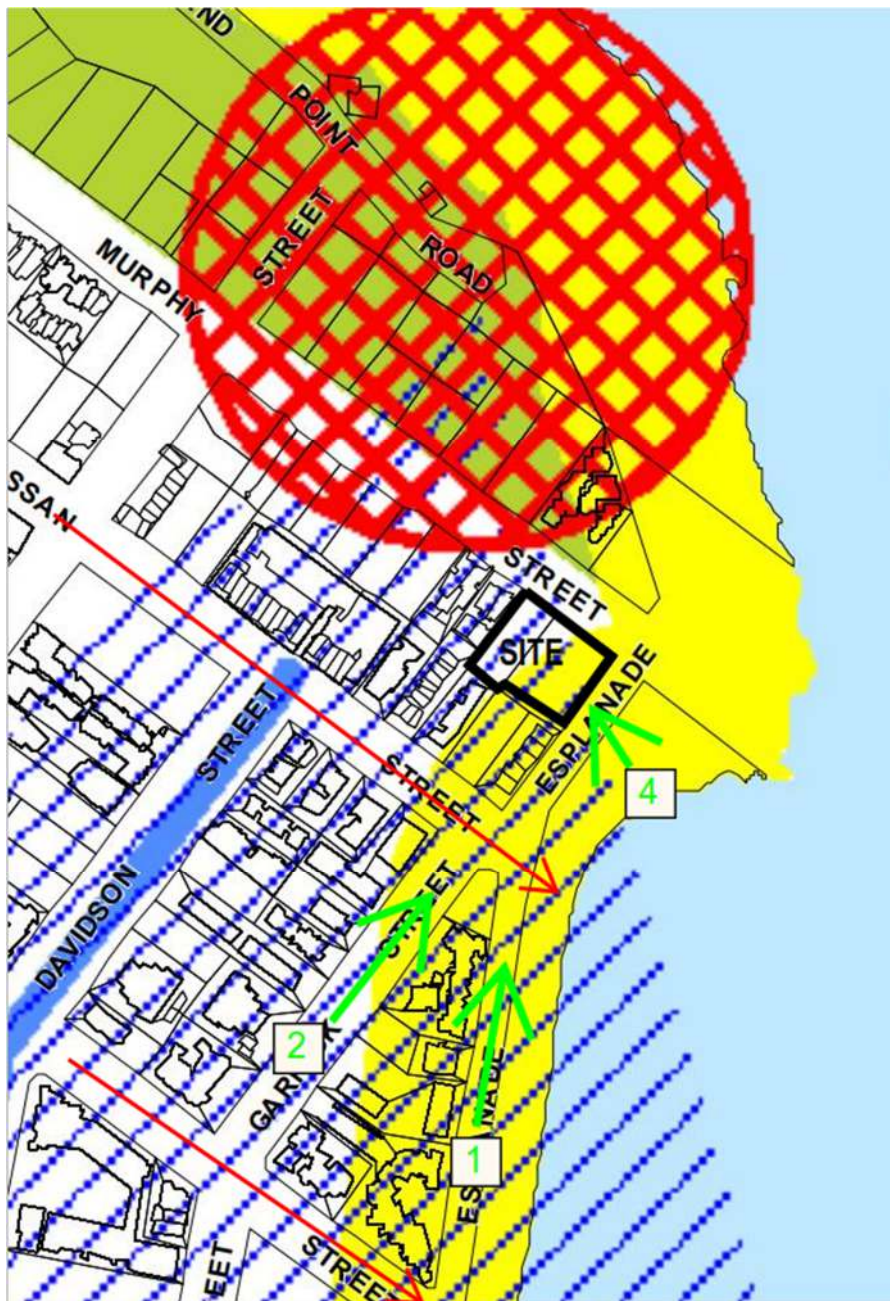
**Table SC6.6.5.a - Landscape values overlay code**

<b>Map category</b>	<b>Information required</b>	<b>Details</b>	<b>Response</b>
View corridors	Item 1: Context and setting	Detail 1: (a) provide a setting map or plan showing the proposed development in relation to lookouts, view corridors and sensitive receptors.	Viewpoint Analysis Plan shows location of site in relation to lookout/view corridor and is included as <b>Annexure 2</b> .
	Item 5: Landscape character analysis	Detail 5: (a) description of existing character within view corridor or surrounding the gateway; (b) provide an analysis of proposed built form scale and character (including earthworks and landscape) and their contrast or compatibility with existing scale and character.	(a) The existing character within the view corridor is considered to be largely urban, with the exception of foreground vegetation on Flagstaff Hill and the coastline of Four Mile Beach. (b) The proposed built form and scale is largely irrelevant for this part of the assessment as the proposed development will not be visible from the lookout and associated view corridor.
	Item 6: View analysis	Detail 6: (a) sight lines sections to the proposed development from lookouts or important view corridors shown on the Landscape Values Overlay Maps and the Local Plan (Townscape Plan Maps) for Port Douglas / Craiglie and Mossman in Schedule 2 including views to background landscape features.	(a) Sightlines have been assessed from the lookout and it is obvious that the proposed development will not be visible within the view corridor.
	Item 7: Visual impact assessment	Detail 7: (a) assessment of likely impacts on views, view corridors, visible features and landscape values, and/ or sense of entry or edges.	(a) As above, no visual impact will occur in relation to the lookout / view corridor.
Coastal landscape areas	Item 1: Coastal context and setting	Detail 1: (a) district setting map or plan showing the proposed development in relation to the coastline	(a) Viewpoint Analysis Map showing location of site in relation to coastline and routes

		and routes (vehicle and pedestrian) leading to the coast; as well as lookouts, view corridors, gateways, scenic routes and sensitive receptors; (b) identify existing vegetation on site.	leading to the coast is included as <b>Annexure 2</b> . (b) Site is largely vegetated as shown on photos in <b>Annexure 3</b> .
	Item 5: Landscape character and coastal relationship analysis*- consistency or incongruity with existing character.	Detail 5: (a) provide a description of the existing character of the surrounding areas, (b) provide an analysis of proposed built form scale and character (including earthworks and landscape) and their contrast or compatibility with existing scale, character and landscape with emphasis on those elements or features which contribute or relate to the coastal environment and visual experience.	(a) Existing character of the surrounding area is largely urban, although Flagstaff Hill provides a vegetated backdrop. On Flagstaff Hill, vegetation is pierced by existing development, some of which is relatively large in scale. (b) Proposed built form appears to be generally consistent with scale of some larger existing development in the locality when viewed from surrounding viewpoints.

## Annexure 2: Viewpoint Analysis Map





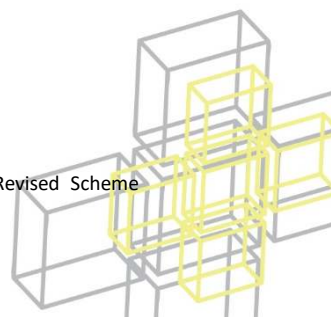
### Landscape Values Overlay Map

#### Landscape Values:

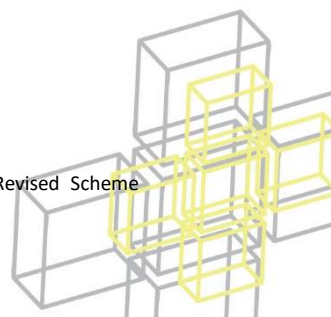
- Gateway
- Lookout
- Scenic route
- Scenic route buffer / View corridor
- Coastal scenery
- High landscape values
- Medium Landscape Value

Photopoint

Route to coast



## Annexure 3: Photopoint Views







VIEW 1A: VIEW FROM THE ESPLANADE - LOOKING NORTH  
PROPOSED BUILDING ARTIST IMPRESSION



VIEW 1B: VIEW FROM THE ESPLANADE - LOOKING NORTH  
PROPOSED BUILDING OUTLINE





VIEW 2A: VIEW FROM GARRICK STREET - LOOKING NORTH  
PROPOSED BUILDING ARTIST IMPRESSION



VIEW 2B: VIEW FROM GARRICK STREET - LOOKING NORTH  
PROPOSED BUILDING OUTLINE





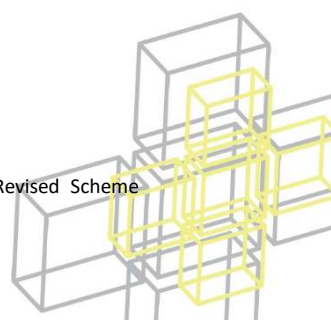
VIEW 4A: VIEW LOOKING WEST  
PROPOSED BUILDING ARTIST IMPRESSION



VIEW 4B: VIEW LOOKING WEST  
PROPOSED BUILDING OUTLINE



# Annexure 11: Geotechnical Report



5 October 2021

GEO Ref: 20039AA-D-L01-v2

Client Ref: TBA

Alex Fin  
General Manager – Design  
Gurner  
168 Williams Road  
PRAHRAN VIC 3181

Transmission via email: alex@gurner.com.au

**FURTHER GEOTECHNICAL ADVICE  
PROPOSED NEW DEVELOPMENT  
69-73 MURPHY STREET  
PORT DOUGLAS QLD 4877**

Dear Alex,

Further to your request, GEO Design has carried out a review of the provided alternate design for a proposed multiple level development at 69-73 Murphy Street, Port Douglas. It is understood that the design is to be submitted to Douglas Shire Council for evaluation.

GEO Design carried out a geotechnical investigation based on the previously proposed development application. The results of the geotechnical investigation were presented in our report 20039AA-D-R01-v2 dated 6 November 2020.

Based on our discussion, we understand that updated geotechnical advice regarding the proposed alternate design is required as part of a submittal to council. The aim of the updated geotechnical advice is to provide initial comments on potential footing types and geotechnical design parameters together with comments on stability and construction issues for consideration.

Our review of the provided design drawings, as provided by Warren and Mahoney Architects on 4 October 2021, indicates the following:

- The development comprises up to a four-level building along the northern boundary of the site and a single level building located downslope near the southern portion of the allotment.
- The lower ground floor will be around RL 12.2 m.
- The finished floor level of the lower single level structures will be around RL 10.8 m.
- The proposed structures will be founded partly on prepared cut/fill building platforms and partly over the existing slopes.
- Fill portions of the proposed building platforms will be supported through new retaining walls.

- Some excavation work is proposed on the cut batter located along the northern boundary of the site adjacent to Murphy Street.
- The Murphy Street batter will not be significantly increased in contrast to the previously submitted design.

## FOOTINGS

The provided updated drawings indicate that the main four-level building will be founded on prepared cut/fill building platforms. Following site preparation and filling in accordance with Section 6.2.1 of our previous report, it is considered that portions of the proposed building founded on the building platform and at least 3 m from the edge of any unsupported batters could be founded on high level footings such as pad, strip, slab on ground or raft type footings founded on the prepared surface. Footings founded in this manner could be designed with an allowable bearing pressure of 100 kPa.

Where filling is to be supported by retaining walls designed to withstand loadings at their crest, high level footings in accordance with the above could be adopted to the crest of the supported batter.

Portions of proposed structures founded over existing slopes or cut/fill batters or within 3 m of the crest of any unsupported batter, should be founded on bored pier footings. Bored pier footings should be extended at least three times their diameter into the very low strength to stronger rock at depth. On this basis, bored piers will likely be required to be extended to a minimum level of about RL 5.0 m to RL 6.0 m. Bored pier footings founded in this manner can be designed with an allowable end bearing pressure of 800 kPa and an allowable shaft adhesion of up to 70 kPa, neglecting the contribution of the upper 1 m of the shaft.

All footing excavations should be inspected by an experience geotechnical engineer to confirm adequacy of the founding material.

## RETAINING WALLS

Retaining walls could be designed using the earth pressure coefficients outlined in the following table.

Material	Lateral Earth Pressures		
	$K_a$	$K_0$	$K_p$
Soils, Engineered Fill and Extremely Low Strength Rock	0.4	0.6	2.5
Very Low Strength to Stronger Rock	0.10	0.11	10

Retaining walls could be founded on high level footings. High level footings founded on Very Stiff to Hard clays, engineered fill or extremely low strength rock could be designed using an allowable bearing pressure of 100 kPa. High level footings founded in very low to stronger rock could be designed using an allowable bearing pressure of 1.5 MPa.

Alternatively retaining walls could be founded on bored pier footings. Bored pier footings for retaining walls should be extended at least three times their diameter into the very low strength to stronger rock. Bored pier footings founded in the above manner can be designed using an allowable end bearing pressure of 800 kPa and an allowable shaft adhesion of up to 70 kPa, neglecting the contribution of the upper 1 m of the shaft.

All retaining walls should be designed by a Structural Engineer.

## **STABILITY**

As outlined in our previous report, ongoing stability issues are present at the site, particularly along the Murphy Street cut batter located along the northern boundary of the site. Notwithstanding the alternate designs significant reduction on the proposed cut height compared with the previously submitted design, the risk of instability impacting the proposed development is considered to be Medium to High in accordance with the Guidelines for Landslide Risk Management outlined in Australian Geomechanics, Volume 42, No. 1 March 2007.

On this basis stabilisation works will be required to support the batter and reduce the risk of instability to acceptable levels.

Based on the provided information to date, a likely acceptable stabilisation design will include the following:

- Trimming of the batter to remove loose material and form an acceptable profile.
- Install soil nails/passive dowels on a nominated grid pattern over the prepared batter face. For initial estimation purposes, soil nails/passive dowels are likely to be between 4-6 m in length and installed on a 1.0-1.5 m grid.
- Install sub-horizontal drains in the exposed batter to alleviate potential pore pressures behind the retained face. For estimation purposes, sub-horizontal drains are likely to be 4 m in length on a 3 m grid.
- Place a reinforced shotcrete surface over the exposed portion of the batter. The shotcrete should include strip drains, steel reinforcement and weep holes.

A detailed investigation, analyses and design should be carried out to develop a suitable retention system for the cut batter based on final approved plans.

## **DRAINAGE MEASURES**

Together with the sub-horizontal drains, other drainage measures that should be implemented include:

- Provision of lined drains at the crest of the cut/fill batters and on interim berms.
- Provision of lined drains and kerbing or similar along the downhill margin of the concrete driveway and building areas.
- Provision of subsurface drainage behind retaining walls and lined drains above the crest of any retaining walls over 1.5 m in height.

All stormwater should be collected and discharged from the site via pipes into designated drainage paths and not allowed to flow on to the ground or around footings or structures. Where this is not possible, stormwater should be directed into flow spreaders or energy dissipaters to prevent concentrated flows.

It is considered that considerable surface water flow could be expected to reach the building area. On this basis, in addition to the above, it is recommended that a lined concrete drain is formed at the base of the proposed cut batters along the northern boundary of the site to collect surface water and divert into a lined drainage path.

## SUMMARY

Based on our review of the provided drawings, it is considered that the proposed development design is feasible from a geotechnical point of view. The main considerations and recommendations include:

- A revised and updated geotechnical report should be prepared based on the final architectural designs and consider footings, stability and construction recommendations.
- The updated geotechnical report may require the completion of additional fieldwork.
- A detailed slope stabilisation design should be adopted for the Murphy Street batter that decreases the risk to the proposed development and Murphy Street.
- Retaining works or slope retention systems may be required on other batters or natural slopes subject to a review of the final design.
- Drainage works are considered essential to the successful completion of the works to minimise potential sediment and erosion issues together with decreasing the risks of instability.

We would be pleased to answer any questions that you may have regarding this matter.

Yours sincerely,



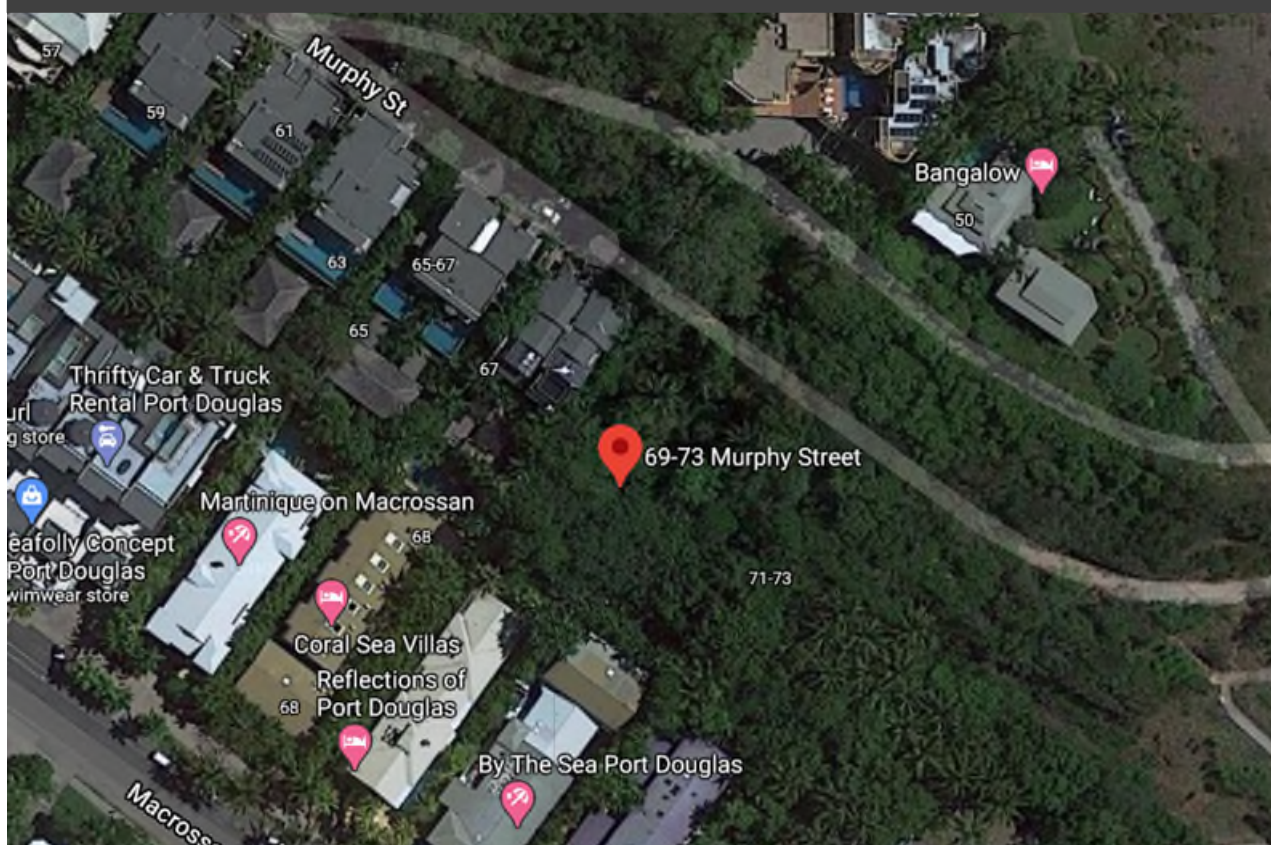
**Steve Ford**  
**Managing Director/ Principal Engineering Geologist**  
**BSc (Geo) BSc (Geo) Hons MEngSc (Geotechnical)**  
**RPEng RPEQ**



## REPORT

### Geotechnical Investigation

69-73 Murphy Street  
Port Douglas QLD 4865



20039AA-D-R01-v1

Gurner

29 October 2020



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## 1.0 Introduction

GEO Design has carried out a geotechnical investigation for a proposed development at 69-73 Murphy Street, Port Douglas. From the preliminary plans provided, it is understood that the proposed development comprises multiple level buildings, associated driveways and landscaped areas. It is further understood that the proposed development comprises significant cut earthworks that will form high batters that will require retention.

Further to our proposal, GEO offered to carry out a staged geotechnical investigation based upon our understanding of the project requirements. On this basis, GEO originally proposed the following stages:

Stage 1 - Preliminary Geotechnical Investigation - for submission for town planning.

Stage 2 - Detailed Geotechnical Investigation – for final design completed architectural drawings and in accordance with council request.

However, the above stages were combined as requested by the client into a single geotechnical investigation.

The aims of the combined geotechnical investigation generally comprised the following:

- Review the existing available information for the site (as provided by Gurner and in house).
- Evaluate the subsurface conditions in the area of the proposed development.
- Comment on suitable footings and provide geotechnical design parameters to allow structural design of footings.
- Comment on potential settlements based on the selection of footing options and potential loads.
- Comment on likely retaining wall design and provide geotechnical design parameters.
- Comment on earthworks including recommended cut and fill batters, and site preparation.
- Comment on excavation conditions and requirement for temporary support.
- Provide geotechnical design parameters for basement construction and comments on dewatering requirements.
- Comment on slope stability issues at the subject allotments and provide comments in regards to the development's adherence to the State Planning Policy 1/03-Mitigating the Adverse Impacts of Flood, Bushfire and Landslide (Landslides only).
- Comment on the requirement of slope stabilisation works including potential options.
- Comment on the likely presence of any Acid Sulfate Soils (ASS) at the site and potential management plans.

This report presents the results of the geotechnical investigation together with the engineering comments outlined above. At the time of report preparation laboratory test results were not available. As such, this report represents a draft that will be updated based on the results of the laboratory testing.

## 2.0 Fieldwork

The fieldwork carried out as part of the geotechnical investigation comprised the following:

- A walkover assessment, carried out by an experienced geotechnical engineer.
- Field mapping of the exposed batters.
- Excavation of six test pits (TP1 to TP6) to depths of between about 0.3 m to 2.9 m below the surface. Test pits were advanced until refusal was reached.
- Drilling of two geotechnical boreholes (BH1 and BH2). BH1 was extended to a maximum depth of about 8.0 m and BH2 to about 8.8 m below the current surface of the formed near level building pad. Rock core drilling commenced at 0.56 m and 1.0 m in BH1 and BH2 respectively.

The results of the fieldwork are presented in Appendix A. The approximate locations of the field tests are shown in Figure 1.

## 3.0 Method of Investigation

### 3.1 Fieldwork

#### 3.1.1 Surface Conditions

The site of the proposed development is located at 69-73 Murphy Street, Port Douglas (Lot 2 on PTD2094 and Lot 516 on RP724386). The site is bound to the south west by Macrossan Street, to the east by an undeveloped section of the Esplanade and in-turn by Jalun Park, and to the west by an existing development. The northern and north western boundary of the site is bound by a largely undeveloped section of Murphy Street. The section of Murphy Street is dominated by an unsealed road bound by a cut batter upslope of the road.

Access to the site is provided by a gravel driveway that extends from an existing car park area adjacent to Jalun Park.

The site is dominated by a large cut batter located along the sites northern and north western boundary. The cut batter extends to a height of about 10 m and varies from about 30-40° in the lower portions of the batter up to about 70-80° in the upper sections along the Murphy Street boundary, with some locally steeper sections. The cut batter is dominated by numerous small scale slumps and structurally controlled failures within the exposed rock. The instability has resulted in near vertical areas within the cut batter. Areas of erosion were also noted within the batter resulting in some trees and other vegetation being undercut and destabilised.

A large near level platform has been formed in the central portion of the site. The platform appears to have been formed through cut and fill earthworks. The platform extends nearly the length of the subject allotments and is bound to the south by a fill batter of up to about 5 m in height formed at about 25-30° overall.

Mounds of soil and rock debris are located along the northern section of the building platform, adjacent to the toe of the cut batter. It appears that the soil and rock debris located at the toe of the cut batter are related to uncontrolled filling and stockpiling of materials, together with debris from small scale failures within the cut batter.

At the time of fieldwork the site was generally covered by trees and shrubs with some low level sparse grass.

### 3.1.2 Subsurface Conditions

The subject area is generally located on the lower margins of Flagstaff Hill. This area is dominated by thin colluvium and residual soils overlying rocks of the Hodgkinson Formation. The Hodgkinson Formation is dominated by metamorphosed fine grained sedimentary rocks and Greywacke. Greywacke rock is known to outcrop in the area of the proposed development and is exposed in the cut batter below Murphy Street.

The lower regions of Port Douglas along Four Mile Beach etc. are dominated by alluvial soils such as sands, soft marine clays and other clays.

The subsurface conditions encountered within the boreholes BH1 and BH2 generally comprised a thin layer of variable fill and minor clayey soils over Greywacke rock to the depths investigated. A summary of the subsurface conditions encountered within the boreholes is summarised in the following table. Geotechnical logs are presented in Appendix A.

Depth From (m)	Depth To (m)	Approx. RL (m) From	Approx. RL (m) To	Material Description
0	0.6/1.0	10.4/10.6	9.8/9.6	Variable Fill and Sandy Clay, Stiff to Hard.
0.6/1.0	3.3/5.1	9.8/9.6	7.1/5.5	Extremely Low to Distinctly Weathered, Extremely Low to Very Low Strength Greywacke rock.
3.3/5.1	5.8/6.0	7.1/5.5	4.4/4.6	Distinctly Weathered to Slightly Weathered, Low to Medium Strength Greywacke rock.
5.8/6.0	8.0/8.8	4.4/4.6	2.4/1.8	Fresh, High to Very High Strength Greywacke rock.

The subsurface conditions encountered within BH1 and BH2 are consistent with the previous works carried out at the site and with the published data.

The subsurface conditions encountered within the test pits TP1 and TP4, excavated near the crest of the fill batter along the southern boundary of the existing building platform, generally comprised Gravelly Fill to depths of about 0.9 m below the surface, over Very Stiff to Hard Sandy CLAY to a depth of about 1.6/1.7 m, over Extremely Weathered to Distinctly Weathered, Extremely Low to Very Low Strength Greywacke to the maximum depths investigated. Refusal was reached at depths of 2.6 m and 2.9 m for TP1 and TP4 respectively.

The subsurface conditions encountered within test pits TP2, and TP5 generally comprised some minor filling over Extremely Weathered, Extremely Low to Very Low Strength Greywacke. Test pits TP3 and TP6 encountered Extremely Weathered, Extremely Low to Very Low Strength Greywacke rock at the surface. Test pits TP3 and TP6 were excavated near the northern boundary of the existing building platform.

The subsurface conditions exposed in the existing cut batter are dominated by a thin soil cover overlying Extremely Weathered to Distinctly Weathered, Extremely Low to Very Low Strength Greywacke.

Groundwater was not encountered within the test pits to the depths investigated.

## **3.2 Laboratory Testing**

Laboratory testing was carried out on selected samples collected from the investigation works. At the time of preparation of this report the results were not available. The results of the laboratory testing, and any subsequent changes to the engineering comments will be provided in our final report.

## **4.0 Stability**

It is known that some significant slope stabilisation issues are present at the site, particularly within the existing high cut batter located along the northern boundary of the site adjacent to Murphy Street.

It is considered that significant stabilisation works will be required to be carried out on the cut batter to allow the construction of the proposed development together with reducing any possible landslide risks that may be present for the future development.

As part of this investigation, a landslide risk assessment was carried out on the existing cut batter and fill batter in general accordance with the guidelines of the Landslide Risk Management Concepts and Guidelines published by the Australian Geomechanics Society in March 2000. Further landslide risk assessments should be completed, along with detailed slope stability analyses in the preparation of possible retaining structures to support new and existing cut batters.

### **4.1 Stability Analysis**

Stability analyses were previously carried out at the site by others. The results of the analyses indicate that the existing cut batter is marginally stable under normal conditions and is either unstable to near unstable under the extreme conditions modelled.

The stability analyses carried out for the existing fill batter indicate that the batter is generally stable under the normal conditions modelled and marginally stable under the extreme conditions modelled.

The methodology and results of the stability analyses are presented in Golder Associates report 01672037(B) dated June 2001.

## 4.2 Landslide Risk

The Landslide Risk Management Concepts and Guidelines published by the Australian Geomechanics Society in March 2000 are based on the approach suggested in the Landslide Risk Management Concepts and Guidelines and to those outlined in the Australian Geoguide LR7 (Landslide Risk).

The landslide risk assessment generally involves the evaluation of slopes enabling the identification of potential hazards ("a condition with the potential for causing an undesirable consequence", for example, rockfall or slump type failure) and analyses the identified hazards with respect to likelihood and consequences using prescribed risk matrices.

The risk assessment procedure generally uses estimated conditional probabilities designed to characterise a sequence of events which must occur for slope instability to result in a fatality or injury to the community, damage to structures or buildings, and/or economical costs that may be associated with the effects of instability.

The principal conditional probabilities used in the risk assessment include the following:

- Temporal Probability (T)
- Vulnerability (V)
- Likelihood of instability (L)

In terms of the Guidelines for Landslide Risk Management outlined in Australian Geomechanics, Volume 42, No. 1 March 2007 (AGS 2007) the risk to property is defined as Very Low to Very High. In general terms risks of very low to low are tolerable for regulatory bodies in relation to developments, while higher risks are generally unacceptable without detailed investigation and implementation of risk reduction strategies to enable the reduction of risk to an acceptable level. The risk system matrix outlined in AGS 2007 is presented in Appendix B.

A full description of the risk analyses procedures are presented in the AGS 2007 documents. For further information the reader is directed to these documents.

The landslide risk assessment carried out as part of this investigation was based on the results of the stability analyses (outlined in the previous section), the walkover survey, site observations, and based on experience in this area of Port Douglas.

The hazards evaluated as part of the risk analysis comprised the following:

1. Instability within the existing batters or natural slopes resulting in downward migration of  $>2\text{m}^3$  of soil or rock debris impacting Murphy Street, existing residences or surrounding structures.

2. Instability within the existing batters or natural slopes resulting in downward migration of  $>20\text{m}^3$  of soil debris impacting Murphy Street, existing residences or surrounding structures.

Based on the above, the following AGS 2007 risk classifications have been assessed for the proposed development:

Hazard	AGS 2007 Risk Rating
1	Medium
2	High

Very Low to Low risks are generally considered acceptable to regulators for development approval in accordance with the relevant guides. Higher risks require stabilisation or remediation works to be carried out to reduce the risks to acceptable levels. As such further risk reduction measures are required at the site.

## 5.0 Engineering Comments

### 5.1 Proposed Development

Based on the plans provided, is understood that the proposed development generally comprises the following:

- A main building of up to about 8 levels founded at about RL 6.0 m. The main building is to be constructed in the northern portion of the allotment.
- A smaller three level building founded at about RL 3.5 m in the southern portion of the allotment.
- Construction of a new cut batter along the northern boundary of the site up to a height of about 15 m to 17m at the rear of the main building.
- Construction of temporary and low cut batters as part of the site preparation.
- Landscaped areas and elevated pools.
- Access roads and outdoor areas.

Further to the above, it is understood that the new cut batter along the northern boundary, together with new cut batters along the western and eastern boundaries of the proposed building will require retention works.

Engineering comments relating to site preparation and earthworks procedures, foundation options, slope stabilisation and retention options, and comments on construction issues are presented in the following sections.

## 5.2 Site Preparation and Earthworks

### 5.2.1 Filling

It is envisaged that only minor filling works will be required as part of the works. On this basis, where required, site preparation and earthworks procedures should involve the following:

- Strip and remove existing topsoil and soil containing significant amounts of organic materials from the surface.
- Compact the subgrade with a heavy roller to reveal soft or loose materials. Soft or loose material that cannot be improved by compaction should be removed and replaced with engineered fill.
- Place fill where required in uniform horizontal layers not exceeding 200 mm loose thickness and compact to achieve a relative dry density ratio of at least 95% using Standard Compaction.

Imported fill materials should have a Plasticity Index less than 20 and a soaked CBR value of >15%.

It is recommended that all earthworks procedures be carried out in accordance with AS 3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments" and local authority requirements. It is recommended that the earthworks contractor be familiar with site conditions.

Unsupported permanent fill batters should be limited to a height of 2.0 m and formed at an angle of 1.5H:1V. Higher or steeper fill batters should be supported by retaining structures. All unsupported fill batters require protection from erosion through the placement of erosion matting or suitable vegetation.

### 5.2.2 Cut Batters

As outlined above, it is understood that significant cut earthworks are proposed. It is considered that any permanent unsupported batters should be limited to a maximum 3 m high formed at 1H:1V. Higher or steeper batters will require to be retained.

Temporary cut batters formed within the overlying soils and extremely weathered rock could be formed up to 1H:2V for heights up to about 3 m. Temporary cuts formed within the Very Low to Stronger Greywacke rock can be formed at about 1H:3V to a maximum height of 5 m. It is considered that temporary batters that are proposed to be in place for over 3 months, and/or are to be in place during the wet season months, should have a shotcrete covering placed over the batter surface and batter crest. The aim of the shotcrete would be to limit surface erosion, water ingress and rain induced damage to the batters.

It should be noted that all unsupported cut batters should be protected from erosion. Erosion protection could comprise the placement of erosion matting, placement of suitable vegetation and the formation of lined drains above all batter crests. All stormwater should be collected and not allowed to flow directly around or over cut batters. All collected stormwater should be discharged into designated drainage paths or over flow spreaders or energy dissipaters.



## 5.2.3 Excavation Conditions

The proposed new cut batter along the northern boundary of the site is expected to mainly encounter Greywacke rock. The Extremely Low to Medium Strength Greywacke rock near the surface down to about RL4.2/4.4 m should be achievable using a large excavator with a ripper. An impact breaker may be required to remove harder zones.

Excavation of the Fresh, High to Very High Strength Greywacke below about RL4.2/4.4 m will require an impact breaker to remove. Alternatively rock splitters or chemical rock fracturing methods may be required to break up the rock to allow removal. Rock blasting may be required for deep excavations into the Fresh Greywacke.

## 5.3 Footings

Based on the results of the investigation and the proposed founding levels of the buildings, the main eight level building and lower three level building will likely be founded within the Distinctly to Slightly Weathered, Low to Medium Strength to stronger Greywacke rock. On this basis it is considered that the building could be founded on a high level footings system.

High level footings such as strip, pad, slab on ground or raft founded on the Low to Medium Strength or stronger Greywacke could be designed using an allowable bearing pressure of 1.5 MPa.

Settlements are expected to be minor (<20 mm).

For other structures founded in Very Stiff to Hard Clays or Extremely Weathered, Extremely Low to Very Low strength Greywacke rock, or engineered fill placed in accordance with Section 5.2.1, high level footings can be designed using an allowable bearing pressure of 100 kPa. Settlements for structures founded in this manner are expected to be <20 mm.

For the purposes of AS2870-2011, high level footings as outlined above could be designed in accordance with the guidelines of a Class S site.

## 5.4 Retaining Walls

Where required, conventional retaining walls to be constructed as part of the proposed development can be designed using the earth pressure coefficients outlined in the following table.

Material	Lateral Earth Pressures		
	$K_a$	$K_0$	$K_p$
Clays and Extremely Weathered Greywacke	0.4	0.6	2.5
Distinctly Weathered to Fresh Greywacke	0.10	0.11	10

Retaining walls could be founded on high level footings. High level footings founded on Very Stiff to hard clays, Extremely Low Strength Greywacke or engineered fill placed in accordance with Section 5.2.1 could be designed using an allowable bearing pressure of 100 kPa. High level footings founded in

the Low strength to stronger Greywacke could be designed using an allowable bearing pressure of 1.5 MPa.

Alternatively retaining walls could be founded on bored pier footings. Bored pier footings for retaining walls should be extended at least three times their diameter into the Very Low strength to stronger rock. Bored pier footings founded in the above manner can be designed using an allowable end bearing pressure of 800 kPa and an allowable shaft adhesion of up to 60 kPa, neglecting the contribution of the upper 1 m of the shaft.

All retaining walls should be designed by a Structural Engineer.

Comments on retaining structures for the proposed new cut batters are presented in the following sections.

## **5.5 Retention of Cut Batters**

As outlined above, the proposed development includes the formation of significant cuts to allow construction of the lower portions of the buildings.

It is considered that the existing and proposed main cut batter along the northern boundary of the site will need stabilisation as works progress. Given the proximity and proposed height of the batter to be retained, the options for stabilisation are somewhat limited. On this basis, the following stabilisation works are considered to be most appropriate:

1. Remove existing trees and vegetation from batter.
2. Trim existing batter to form the proposed profile in maximum 2 m high cuts/lifts.
3. Install soil nails/passive dowels on a nominated grid pattern on each cut/lift into the prepared batter face. For initial estimation purposes, soil nails/passive dowels are likely to be between 6-8 m in length and installed on a 1.0-1.5 m grid.
4. Install sub-horizontal drains in the exposed batter to alleviate potential pore pressures behind the retained face. For estimation purposes, sub-horizontal drains are likely to be 4-6 m in length on a 3 m grid.
5. Place a reinforced shotcrete surface over the exposed portion of the batter. The shotcrete should include strip drains, steel reinforcement and weep holes.
6. Continue this process to base of proposed excavation.

A detailed investigation, analyses and design should be carried out to develop a suitable retention system for the cut batter.

For the smaller cut batters along the western and eastern boundaries of the site along the margins of proposed main cut batter, will also require retention. The above approach should be adopted for permanent batters over about 5 m in height.

For lower batters, and temporary batters that are to be in place for over 3 months and/or during the wet season months, retention options including the installation of sub-vertical micropiles or short passive dowels/soil nails and placement of shotcrete could be adopted. Suitable designs should be developed following confirmation of proposed batter heights, geometries and limitations including the installation of underground elements outside the property boundary.

## **5.6 Acid Sulphate Soils**

Based on the results of the investigation, together with our experience in this area of Port Douglas, no Acid Sulphate Soils (Actual Acid Sulphate Soils (AASS) or Potential Acid Sulphate Soils (PASS) are expected in the excavations at the site. As such, no Acid Sulphate Soils management plan is required.

## **5.7 Dewatering**

Groundwater was not encountered to the depths investigated. However, seepage through the weathered rock is likely during or following prolonged periods of rain. The groundwater inflows into the open excavation are expected to be low and should not adversely affect the construction works.

It is considered that if required, groundwater seepage into the proposed open excavation at the site should be able to be managed using small drains and minor sump pumping.

## **5.8 Drainage Measures**

Together with the sub-horizontal drains that will be required in the proposed new cut batter, other drainage measures that should be implemented include:

- Provision of lined drains at the crest of the cut/fill batters and on interim berms.
- Provision of lined drains and kerbing or similar along the downhill margin of the concrete driveway and building areas
- Provision of subsurface drainage behind retaining walls and lined drains above the crest of any retaining walls over 1.5 m in height.

All stormwater should be collected and discharged from the site via pipes into designated drainage paths and not allowed to flow on to the ground or around footings or structures. Where this is not possible, stormwater should be directed into flow spreaders or energy dissipaters to prevent concentrated flows.

It is considered that considerable surface water flow could be expected to reach the building area. On this basis, in addition to the above, it is recommended that a lined concrete drain is formed at the base of the proposed cut batters along the northern boundary of the site to collect surface water and divert into a lined drainage path.

## 5.9 Pavement Design

It is envisaged that new concrete pavements and hardstand areas will be founded near the current ground surface. On this basis and in accordance with the results of the investigation, the subgrade materials will comprise very stiff to hard clays and perhaps some surficial sands near the entry of the access road. On this basis, and in accordance with Austroads guidelines, it is recommended that a subgrade CBR of 15% could be adopted for the clay and sandy subgrades for design of pavements at the site.

## 6.0 Limitations

GEO Design has prepared this report for the use of Gurner for design purposes in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has not been prepared for use by parties other than Gurner and their client or their other consultants. It may not contain sufficient information for purposes of other parties or for other uses.

Your attention is drawn to the document - "Important Information About Your Geotechnical Engineering Report". This document has been prepared by the ASFE (Professional Firms Practicing in the Geosciences). The statements presented in this document are intended to advise you of what your realistic expectations of this report should be, and to present you with recommendations on how to minimise the risks associated with the ground works for this project. The document is not intended to reduce the level of responsibility accepted by GEO Design Pty Ltd, but rather to ensure that all parties who may rely on this report are aware of the responsibilities each assumes in so doing.

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We would be pleased to answer any questions that you may have regarding this matter.

Regards,



Steve Ford

**Principal Geotechnical Engineer**  
**BSc (Geo) BSc Hons (Geo) MEngSc (Geotechnical)**



SITE PLAN DEVELOPED FROM IMAGES FROM QUEENSLAND GLOBE

**GEO** | design

<b>Client:</b> GURNER	<b>GEOTECHNICAL INVESTIGATION</b>
<b>Drawn:</b> DHALL	<b>69 - 73 MURPHY STREET, PORT DOUGLAS</b>
<b>Scale:</b> NTS	<b>FIGURE 1 SITE PLAN</b>
<b>Project No:</b> 20039AA-D-Figure 1-v1	

**Appendix A**  
**Results of Fieldwork**



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Project Geotechnical Investigation East 336511.0 m  
Site 69 - 73 Murphy Murphy Street North 8176825.0 m MGA94 55  
Location Port Douglas Surface RL 10.40 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Drill Rig EVH3300  
Client Gurner Inclination -90° Hole Dia. 76/127 mm


## BOREHOLE: BH1

Sheet 1 OF 1

Date Started 16/10/20

Date Completed 16/10/20

Logged DHall

Drilling					Sampling		Field Material Description						
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
ADT	L-M	NMLC	M-H	Not Encountered				CL	FILL SANDY CLAY: brown, low plasticity, fine to coarse grained sand, with fine to coarse gravel	M	St to VSt		
								CL	GRAVELLY SANDY CLAY: yellow-brown, low plasticity, fine to coarse grained sand, fine to coarse gravel	D	VSt to H		
	GREYWACKE: pale grey, fine grained; extremely weathered to distinctly weathered, extremely low to very low strength												
									GREYWACKE: grey, fine grained; distinctly weathered to slightly weathered, low to medium strength				
									GREYWACKE: dark grey, fine grained; fresh, high to very high strength				
									BOREHOLE TERMINATED AT 8.00 m Target depth				

Comments

Checked SRF  
Date 27/10/20



GEO Ref:	20039AA-D - Core Photographs - BH1
Project Address:	69-73 Murphy Street, Port Douglas
Client:	Gurner
Drawn:	Steve Ford, Engineering Geologist

## Core Photographs – BH1



0.56 m – 5.0 m



5.0 m – 8.0 m





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Project Geotechnical Investigation East 336497.0 m  
Site 69 - 73 Murphy Murphy Street North 8176832.0 m MGA94 55  
Location Port Douglas Surface RL 10.60 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Drill Rig EVH3300  
Client Gurner Inclination -90° Hole Dia. 75/127 mm






## BOREHOLE: BH2

Sheet 1 OF 1

Date Started 16/10/20

Date Completed 17/10/20

Logged DHall

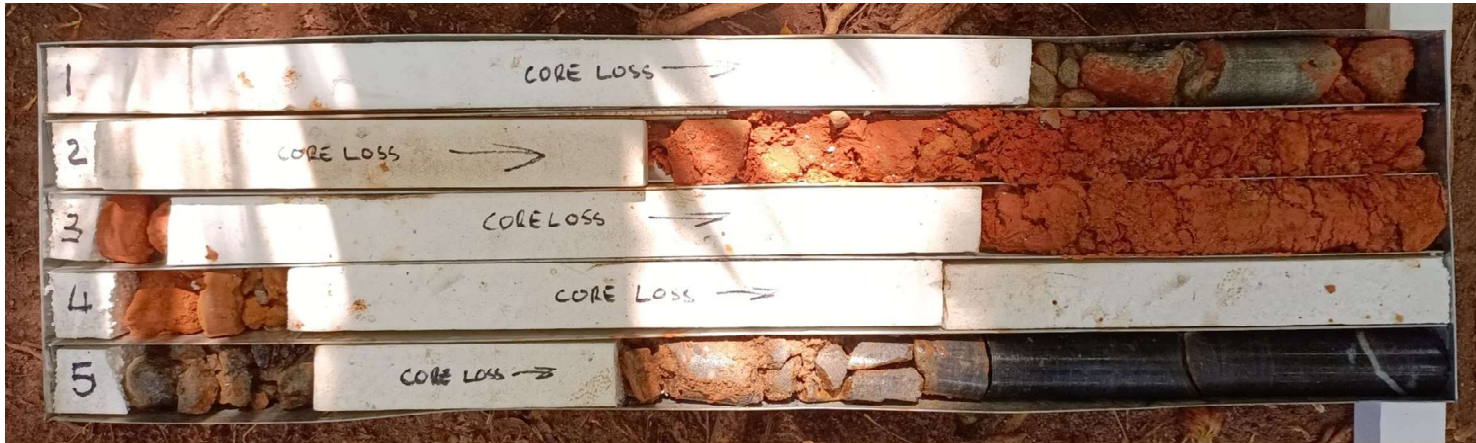
Drilling					Sampling		Field Material Description					
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
ADT	L-M		0	10.60 0.20				CL	SANDY CLAY: brown, low plasticity, fine to coarse grained sand	M	St	
			10.40	CL				SANDY CLAY: yellow-brown, low plasticity, fine to coarse grained sand, with fine to coarse gravel, trace cobbles	D	VSt to H		
NMLC	M-H	Not Encountered	1	1.00 9.60					GREYWACKE: red-brown, fine grained; extremely weathered to distinctly weathered, extremely low strength			
			2									
			3									
			4									
			5	5.13 5.47					GREYWACKE: grey, fine grained; distinctly weathered to fresh, very low to very high strength			
			6	6.42 4.18					GREYWACKE: dark grey, fine grained; fresh, high to very high strength			
			7									
			8									
			8.80						BOREHOLE TERMINATED AT 8.80 m Target depth			
			9									

Comments

Checked SRF  
Date 27/10/20

GEO Ref:	20039AA-D - Core Photographs - BH2
Project Address:	69-73 Murphy Street, Port Douglas
Client:	Gurner
Drawn:	Steve Ford, Engineering Geologist

## Core Photographs – BH2



1.0 m – 5.0 m



5.0 m – 8.8 m



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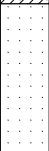

Project Geotechnical Investigation East 336506.0 m  
Site 69 - 73 Murphy Murphy Street North 8176814.0 m MGA94 55  
Location Port Douglas Surface RL 9.80 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Machine >6t Excavator  
Client Gurner Bucket Size 450mm Bucket

## TEST PIT: TP1

Sheet 1 OF 1

Date 17/10/20

Logged SRF

Excavation					Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
EX	L	Not Encountered	0.0	9.80			GC	FILL CLAYEY SANDY GRAVEL: brown, fine to coarse gravel, fine to coarse grained sand, low plasticity clay	M	L to MD		
			0.5									
	L-M		0.90	8.90			CL	SANDY CLAY: red-brown, low plasticity, fine to coarse grained sand	VSt to H			
			1.0									
	H		1.70	8.10				GREYWACKE: orange-brown, fine grained; extremely weathered, extremely low to very low strength				
			2.0									
			2.30	7.50				GREYWACKE: brown, fine grained; extremely weathered to distinctly weathered, very low strength				
			2.5	2.60								
							TEST TERMINATED AT 2.60 m Refusal					

### Sketch & Other Observations

Comments

Checked SRF  
Date 28/10/20




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Project Geotechnical Investigation East 336509.0 m  
Site 69 - 73 Murphy Murphy Street North 8176827.0 m MGA94 55  
Location Port Douglas Surface RL 10.40 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Machine >6t Excavator  
Client Gurner Bucket Size 450mm Bucket

## TEST PIT: TP2

Sheet 1 OF 1  
Date 17/10/20  
Logged SRF

Excavation				Sampling		Field Material Description								
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS		
EX	L	Not Encountered	0.0	10.40				CL	FILL GRAVELLY SANDY CLAY: brown, low plasticity, fine to coarse grained sand, fine to coarse gravel	M	St to VSt			
			0.30	10.10					GREYWACKE: brown, fine grained; extremely weathered to distinctly weathered, very low strength					
	H		0.5											
			0.80					TEST TERMINATED AT 0.80 m Refusal						
			1.0											
			1.5											
			2.0											
			2.5											
			3.0											

### Sketch & Other Observations

Comments

Checked SRF  
Date 28/10/20



investigate | design | construct

Project Geotechnical Investigation East 336515.0 m  
Site 69 - 73 Murphy Murphy Street North 8176835.0 m MGA94 55  
Location Port Douglas Surface RL 10.80 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Machine >6t Excavator  
Client Gurner Bucket Size 450mm Bucket

## TEST PIT: TP3

Sheet 1 OF 1  
Date 17/10/20  
Logged SRF

Excavation					Sampling		Field Material Description					
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
EX	L	Not Encountered	0.0	10.80			.	.	GREYWACKE: brown, fine grained; extremely weathered to distinctly weathered, very low strength			
			0.40	TEST TERMINATED AT 0.40 m Refusal								
0.5												
1.0												
1.5												
2.0												
2.5												
3.0												
3.5												
4.0												

### Sketch & Other Observations

Grid area for sketch and observations.



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Project Geotechnical Investigation East 336491.0 m  
Site 69 - 73 Murphy Murphy Street North 8176825.0 m MGA94 55  
Location Port Douglas Surface RL 10.00 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Machine >6t Excavator  
Client Gurner Bucket Size 450mm Bucket

## TEST PIT: TP4

Sheet 1 OF 1  
Date 17/10/20  
Logged SRF

Excavation					Sampling		Field Material Description						
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS	
EX	L	Not Encountered	0.0	10.00				GC	FILL CLAYEY SANDY GRAVEL: brown, fine to coarse gravel, fine to coarse grained sand, low plasticity clay, with cobbles	M	L to MD		
			0.90	9.10				CL					SANDY CLAY: orange-brown, low plasticity, fine to coarse grained sand
	L-M		1.60	8.40					GREYWACKE: orange-brown, fine grained; extremely weathered to distinctly weathered, extremely low to very low strength				
	H		2.50	7.50					GREYWACKE: brown, fine grained; extremely weathered to distinctly weathered, very low strength				
				2.90					TEST TERMINATED AT 2.90 m				
				3.0									

### Sketch & Other Observations

Comments

Checked SRF  
Date 28/10/20




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Project Geotechnical Investigation East 336478.0 m  
Site 69 - 73 Murphy Murphy Street North 8176835.0 m MGA94 55  
Location Port Douglas Surface RL 10.40 m AHD  
Position Refer to Site Plan Contractor Geo Investigate  
Job No. 20039AA-D Machine >6t Excavator  
Client Gurner Bucket Size 450mm Bucket

TEST PIT: TP5

Sheet 1 OF 1  
Date 17/10/20  
Logged SRF

Excavation				Sampling			Field Material Description							
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION		MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS	
EX	L-M		0.0	10.40				CL	SANDY CLAY: grey, low plasticity, fine to coarse grained sand	M	VSt			
			0.20					GREYWACKE: brown, fine grained; extremely weathered to distinctly weathered, very low strength						
	H		10.20											
		Not Encountered	0.5	0.80										
			1.0						TEST TERMINATED AT 0.80 m Refusal					
			1.5											
			2.0											
			2.5											
			3.0											

Sketch & Other Observations

Comments

Checked SRF  
Date 28/10/20





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Project Geotechnical Investigation  
Site 69 - 73 Murphy Murphy Street  
Location Port Douglas  
Position Refer to Site Plan  
Job No. 20039AA-D  
Client Gurner

East 336502.0 m  
North 8176836.0 m MGA94 55  
Surface RL 10.60 m AHD  
Contractor Geo Investigate  
Machine >6t Excavator  
Bucket Size 450mm Bucket  
450mm Bucket

## TEST PIT: TP6

Sheet 1 OF 1

Date 17/10/20  
Logged SRF

Excavation					Sampling		Field Material Description						
METHOD	EXCAVATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS SYMBOL	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY	DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
EX	±	Not Encountered	0.0	10.60			<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div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### Sketch & Other Observations

Comments

Checked SRF  
Date 28/10/20

## **Appendix B**

### **AGS 2007 Risk Matrix**

**QUALITATIVE RISK ANALYSIS MATRIX – LEVEL OF RISK TO PROPERTY**

LIKELIHOOD		CONSEQUENCES TO PROPERTY (With Indicative Approximate Cost of Damage)				
	Indicative Value of Approximate Annual Probability	1: CATASTROPHIC 200%	2: MAJOR 60%	3: MEDIUM 20%	4: MINOR 5%	5: INSIGNIFICANT 0.5%
<b>A - ALMOST CERTAIN</b>	$10^{-1}$	VH	VH	VH	H	M or L (5)
<b>B - LIKELY</b>	$10^{-2}$	VH	VH	H	M	L
<b>C - POSSIBLE</b>	$10^{-3}$	VH	H	M	M	VL
<b>D - UNLIKELY</b>	$10^{-4}$	H	M	L	L	VL
<b>E - RARE</b>	$10^{-5}$	M	L	L	VL	VL
<b>F - BARELY CREDIBLE</b>	$10^{-6}$	L	VL	VL	VL	VL

**Notes:** (5) For cell A5, may be subdivided such as that a consequence of less than 0.1% is Low risk

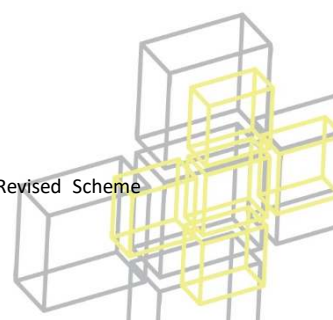
(6) When considering a risk assessment it must be clearly stated whether it is for existing conditions or with risk control measures which may not be implemented at the current time

**RISK LEVEL IMPLICATIONS**

Risk Level		Example Implications (7)
<b>VH</b>	<b>VERY HIGH RISK</b>	Unacceptable without treatment. Extensive detailed investigation and research, planning and implementation of treatment options essential to reduce risk to low; may be too expensive and not practical. Work likely to cost more the value of the property.
<b>H</b>	<b>HIGH RISK</b>	Unacceptable without treatment. Detailed investigation, planning and implementation of treatment options required to reduce risk to Low. Work would cost a substantial sum in relation to the value of the property.
<b>M</b>	<b>MODERATE RISK</b>	May be tolerated in certain circumstances (subject to regulator's approval) but requires investigation, planning and implementation of treatment options to reduce risk to Low. Treatment options to reduce to Low should be implemented as soon as practical.
<b>L</b>	<b>LOW RISK</b>	Usually acceptable to regulators. Where treatment has been required to reduce the risk to this level, ongoing maintenance is required.
<b>VL</b>	<b>VERY LOW RISK</b>	Acceptable. Manage by normal slope maintenance procedures.

**Note:** (7) The implications for a particular situation are to be determined by all parties to the risk assessment and may depend on the nature of the property at risk; these are only given as a general guide.

# **Annexure 12: Douglas Shire Planning Scheme Code Assessment**



## Port Douglas/Craigie local plan code

### Application

- (1) This code applies to assessing development within the Port Douglas/Craigie local plan area as identified on the Port Douglas/Craigie local plan maps contained in Schedule 2.
- (2) When using this code, reference should be made to Part 5.

### Context and setting

Editor's note - This section is extrinsic material under section 15 of the *Statutory Instruments Act 1992* and is intended to assist in the interpretation of the Port Douglas/Craigie local plan code.

The Port Douglas/Craigie local plan encompasses the traditional Port Douglas town centre and surrounding tourist and residential areas, including Four Mile Beach and Craigie.

Port Douglas was officially named in 1877. It was initially settled as the port of entry and supply for the Hodgkinson goldfield on the Hann Tableland which was proclaimed in 1876. It was the dominant port in Far North Queensland until a decision was made to establish Cairns as the terminus for a new railway in 1884. This ended the town's dominance, and it gradually became a small centre for local residents and fishing activities. During the 1970s and 1980s, a renewed interest in Far North Queensland as a holiday destination led to a boom in large scale tourism and residential development with Port Douglas re-emerging as a premium destination.

The Captain Cook Highway runs north-south to the west of Port Douglas through Craigie (Four Mile). Craigie caters for the permanent resident population associated with Port Douglas, as well as providing for service industries to support business in the town. The majority of urban development is confined to the eastern side of the highway. The main entrance to Port Douglas at the intersection of Port Douglas Road is accentuated by mature oil palms lining both sides of the street for almost the entire length of the corridor into the heart of Port Douglas.

Flagstaff Hill is a prominent headland on the northern side of the Port Douglas town centre providing a green tropical backdrop to the town. Island Point Road runs to the top of Flagstaff Hill and provides access to the iconic lookout overlooking the sweep of Four Mile Beach.

Macrossan Street is the main shopping area in Port Douglas running in a general east-west direction at the base of Flagstaff Hill connecting Four Mile Beach to Dickson Inlet. Tourist and commercial development is concentrated towards the western side of Macrossan Street, with marine orientated activity focussed around the inlet. The western side of the inlet provides unspoiled views across mangroves to the distinctive formations and features of the coastal range.

The street pattern in the town centre is based on the original grid pattern survey of 1878. While the town has lost many of its original buildings to cyclones and redevelopment, a number of important built features remain including the Central Hotel, the Court House Hotel, a number of relocated buildings such as St Mary's Church, the former Clink Theatre and the Court House Museum and scattered memorials such as the Carstens memorial in Macrossan Street

and the Port Douglas War memorial in Wharf Street. The Sugar Wharf on Dickson Inlet was the original terminus of the tramline to Mossman. The tramline now terminates adjacent to the Port Douglas marina and operates as the Balley Hooley passenger service on four kilometres of track between the Port Douglas Marina and St Crispins Station.

A particular characteristic of the local plan area is its high quality, lush landscaping complementing the tropical resort town atmosphere. This theme will be carried throughout the local plan area with gateways, nodes and corridor planting emphasising the role of the town as a tropical tourist destination.

## Purpose

- (1) The purpose of the Port Douglas/Craigie local plan code is to facilitate development outcomes consistent with community values, the local tropical built-form and protection of the natural environment within the Port Douglas/Craigie local plan area, while providing a platform for investment and prosperity.
  - (a) In addition, the purpose of the code is supported by the Port Douglas Waterfront Master Plan which provides a clear strategic direction for the incremental transformation of the Port Douglas Waterfront, including the following objectives:
    - (b) To set out a vision for revitalisation of the waterfront;
    - (c) To protect and enhance the environmental attributes; and
- (2) To provide a flexible framework, expressed through several key strategies that will assist the Council and community in managing change.
- (3) The purpose of the code will be achieved through the following overall outcomes:
  - (a) Port Douglas will continue to develop as the premium destination for international and domestic tourists in the Far North Queensland Region, while also acting for permanent residents attracted to the associated lifestyle.
  - (b) Major tourist, retail, dining and entertainment facilities will consolidate in the Town Centre and the Waterfront North sub-precincts, with improved pedestrian connections between the town centre and the waterfront.
  - (c) Craigie will develop as an integrated residential community with some low scale tourism development opportunities in appropriate locations. Craigie will also function as small scale commercial and light industry node, providing employment opportunities for the Shire's permanent resident population.
  - (d) All forms of development will complement the tropical image of the town through distinctive tropical vernacular, urban design and landscaping.
  - (e) Character will be enhanced through the identification of gateway sites, landmarks, main approach routes and pedestrian thoroughfares and view corridors;
  - (f) The Flagstaff Hill, Dickson Inlet, Four Mile Beach and other areas of scenic and environmental significance will be protected from development. Vegetation cover will dominate over built form.
  - (g) Vegetation, iconic to the character of Port Douglas, including the avenues of Oil Palms, is retained and where appropriate supplemented.

- (h) Development will be indistinguishable from view from Four Mile Beach. In addition, any development on Flagstaff Hill will be indistinguishable when viewed from vantage points in Port Douglas.
  - (i) Residential areas are designed as pleasant, functional and distinctive, in visually well-defined areas.
- (4) The purpose of the code will be further achieved through the following overall outcomes:
- (a) Precinct 1 – Port Douglas precinct
    - (i) Sub-precinct 1a – Town Centre sub-precinct
    - (ii) Sub-precinct 1b – Waterfront North sub-precinct
    - (iii) Sub-precinct 1c – Waterfront South sub-precinct
    - (iv) Sub-precinct 1d – Limited Development sub-precinct
    - (v) Sub-precinct 1e – Community and recreation sub-precinct
    - (vi) Sub-precinct 1f – Flagstaff Hill sub-precinct
  - (b) Precinct 2 – Integrated Resort precinct
  - (c) Precinct 3 – Craiglie Commercial and Light Industry precinct
  - (d) Precinct 4 – Old Port Road / Mitre Street precinct
  - (e) Precinct 5 – Very Low Density Residential/ Low Scale Recreation/Low Scale Educational/Low Scale Entertainment Uses precinct

### **Precinct 1 – Port Douglas precinct**

- (5) In addition to the overall outcomes, the outcomes sought for the precinct are to ensure that:
- (a) development will contribute to the incremental transformation of the township, preserving and enhancing maritime activities and environmental areas, delivering tropical open spaces and a high quality public realm, and allowing for tourism opportunities and investment.
  - (b) development contributes to the enhancement of the Port Douglas precinct through the following development outcomes:
    - (i) access and connectivity throughout the township is enhanced through a series of improvements to circulation and mobility, including:
      - (A) access to, and connectivity along, the waterfront and foreshore areas is maintained and, where appropriate, enhanced;
      - (B) reducing reliance on the waterfront as a car parking resource.
    - (ii) the use of land in the Port Douglas precinct improves the cohesive layout of the township through:
      - (A) the establishment of distinct sub-precincts that reinforce the character and built form of the Port Douglas local plan area including:
        - Port Douglas centre sub-precinct 1a – Town Centre sub-precinct;
        - Port Douglas centre sub-precinct 1b – Waterfront North sub-precinct;
        - Port Douglas centre sub-precinct 1c – Waterfront South sub-precinct;
        - Port Douglas centre sub-precinct 1d – Limited development sub-precinct;
        - Port Douglas centre sub-precinct 1e – Community and recreation precinct;



- Port Douglas centre sub-precinct 1f – Flagstaff Hill sub-precinct;
- (B) facilitating marina facilities and supporting marine industry uses as a key part of the local economy;
- (C) reducing conflict between industry, community and commercial activities in the waterfront, without diminishing the marine industry capacity in the Port Douglas precinct;
- (i) environment and sustainability is integrated into the township through:
  - (A) preservation and enhancement of the qualities and characteristics of environmental areas of the township;
  - (B) water sensitive urban design is considered as a means of water quality improvement and management of overland flow to ensure hard infrastructure solutions in Warner Street can be mitigated;
  - (C) design of buildings and access way improvements prioritises walking and cycling modes of transport.
- (ii) the tropical character of the Port Douglas precinct is enhanced by ensuring development:
  - (A) maintains and enhances the built form, local character, streetscapes and natural elements of the township;
  - (B) is compatible with the desired character and amenity of local places and neighbourhoods;
  - (C) does not exceed the height of buildings designations which contribute to the desired form of the township which contains three storey development heights in sub-precinct 1a – Town Centre sub-precinct and part of sub-precinct 1b – Waterfront North sub-precinct;
  - (D) implements high quality landscaped environments around buildings and on streets;
  - (E) protects the recognisable character and locally significance sites throughout the precinct.
- (iii) public spaces and the streetscape are enhanced through:
  - (A) an increase in the quantity and quality of public land and places throughout the precinct;
  - (B) consolidating community recreation and sporting uses to create a precinct of community focussed activity between Mudlo Street and Wharf Street;
  - (C) improved connections between the town centre and the waterfront marina, including an investigation of a plaza on the waterfront;
  - (D) improved streetscapes with high quality landscaping, surface treatments and shaded pedestrian environments;
  - (E) the creation of a sense of place through aesthetic streetscapes and built-form character;
  - (F) managing vegetation to ensure succession of planting and the ongoing presence of significant trees.
- (iv) advertising signage is small scale, low-key and complements the tropical character of the town.

#### **Sub-precinct 1a – Town Centre sub-precinct**

- (6) In addition to other overall development outcomes, development in the Town Centre sub-precinct facilitates the following development outcomes:
  - (a) tourist, retail, dining and entertainment activities are facilitated at an appropriate pedestrian scale;
  - (b) drive-through developments, bulky goods showrooms, outdoor sales, saleyards and other big-box retailing or entertainment facilities are not established;
  - (c) development contributes to a high quality public realm;
  - (d) parking (and associated infrastructure) does not undermine the relationship between buildings and street or pedestrian circulation patterns;

- (e) consolidation of community and cultural land use activities along Mowbray Street between Wharf Street and Mudlo Street;
- (f) active street frontages are established along Macrossan and Wharf Streets and other nearby streets as shown on the Port Douglas Centre Active Frontages and Pedestrian and Cycle Network Plan;
- (g) Live entertainment activities are concentrated within the Live Entertainment Precinct and are subject to the recommendations of a suitably qualified acoustic engineer.

#### **Sub-precinct 1b - Waterfront North sub-precinct**

- (7) In addition to other overall development outcomes, development in the Waterfront North sub-precinct facilitates the following development outcomes:
  - (a) the precinct evolves as a revitalised open space and waterside development precinct;
  - (b) development within the precinct is designed to be sympathetic to the environmentally sensitive Dickson Inlet and mitigates any adverse impacts;
  - (c) the establishment of mixed-use development is facilitated to promote activity and vitality;
  - (d) public pedestrian access is maximised along the extent of the edge of the waterfront, consisting of a boardwalk or similar structure available for 24-hour use;
  - (e) development contributes to a high quality public realm;
  - (f) built form provides an attractive point of arrival from both land and sea;
  - (g) pedestrian connectivity is safe, efficient and provides for the needs of all users of the Port Douglas waterfront;
  - (h) parking (and associated infrastructure) does not undermine the relationship between buildings and street or pedestrian circulation patterns;
  - (i) the importance of existing marine-based industries to the area is recognised, not diminished and protected from incompatible uses. Relocation of marine based industries to an alternative precinct does not occur until such time that agreement has been reached among all relevant stakeholders such that development does not diminish the viability of marine based industrial uses that directly serve the Port Douglas tourist and fishing operators and private boat owners;
  - (j) marine infrastructure is established to service the tourism, fishing and private boating community;
  - (k) Live entertainment activities are concentrated within the Live Entertainment Precinct and are subject to the recommendations of a suitably qualified acoustic engineer;
  - (l) the functionality of the Balley Hooley tourist rail is retained.

#### **Sub-precinct 1c – Waterfront South sub-precinct**

- (8) In addition to all other overall development outcomes, development in the Waterfront South sub-precinct facilitates the following development outcomes:
  - (a) any use of land in the precinct does not affect the environmental, habitat, conservation or scenic values of Dickson Inlet and surrounding land;
  - (b) marine-based industries are established on appropriate land having regard to site suitability, accessibility, surrounding land uses, and location of utilities and services;
  - (c) marine-based industry achieves appropriate environmental standards;
  - (d) industrial buildings have a high standard of layout and building design;
  - (e) landscaping provides an attractive streetscape and screens utility, storage and car parking from the street and other public areas;

- (f) the precinct is protected from encroachment of incompatible land use activities.

#### **Sub-precinct 1d – Limited Development sub-precinct**

- (9) In addition to all other overall development outcomes, development in the Limited Development sub-precinct facilitates the following development outcomes:
  - (a) any use of land in the precinct does not affect the environmental, habitat, conservation or scenic values of Dickson Inlet and surrounding land;
  - (b) the open nature and character of the precinct is retained maintaining view lines across the inlet;
  - (c) community and recreation land use activities are established that promote public access to the foreshore.

#### **Sub-precinct 1e – Community and recreation sub-precinct**

- (10) In addition to all other overall development outcomes, development in the Community and recreation sub-precinct facilitates the following development outcomes:
  - (a) development for community uses, including sport and recreation is facilitated.
  - (b) sport and recreation activities predominantly involve outdoor activities;
  - (c) areas of natural vegetation are protected from further development;
  - (d) shade trees are increased, in appropriate locations, surrounding the sports fields.

#### **Sub-precinct 1f – Flagstaff Hill sub-precinct**

- (11) In addition to all other overall development outcomes, development in the Flagstaff Hill sub-precinct facilitates the following development outcomes:
  - (a) development is not established where it results in detriment to the vegetated and scenic qualities of Flagstaff Hill;
  - (b) development minimises excavation and filling;
  - (c) buildings and other works are unobtrusive when viewed from vantage points in Port Douglas and are designed and constructed of colours and materials which complement the hill's vegetated state;
  - (d) views from public viewing points within the precinct are protected.

## **Precinct 2 – Integrated Resort precinct**

- (12) In addition to the overall outcomes, development in the Integrated Resort precinct facilitates development in accordance with the *Integrated Development Resort Act, 1987*.

Editor's note – The development of land within this precinct is subject to the Integrated Development Resort Act 1987 (IDRA). Where a conflict exists between this planning scheme and the IDRA, the IDRA prevails.

## **Precinct 3 – Craiglie Commercial and Light Industry precinct**

- (13) In addition to the overall outcomes, development in the Craiglie Commercial and Light Industry precinct facilitates the following overall outcomes:
- (a) development supports the tourism and marine industries in Port Douglas, along with the small-scale commercial and light industry land uses that support the local economy that would otherwise be better suited to a location outside the Port Douglas Centre Precinct unless they pose a safety issue;
  - (b) development adjacent to the Captain Cook Highway presents an attractive appearance to the highway. The rain-trees, melaleucas and eucalypt trees along the Captain Cook Highway are retained where possible, taking into account the Department of Transport and main Road's requirements;
  - (c) retailing activities are generally restricted to those which are ancillary and necessarily associated with the primary service and light industry nature of the area;
  - (d) adjacent residential areas are protected from industry nuisances;
  - (e) lots fronting Downing Street, between Dickson Street and Beor Street, are provided with an appropriate standard of road access and infrastructure, prior to development occurring.

## **Precinct 4 – Old Port Road / Mitre Street precinct**

- (14) In addition to the overall outcomes, development in the Old Port Road / Mitre Street precinct facilitates the following overall outcomes:
- (a) the precinct is intended to be used for outdoor recreational land use activity, primarily as a golf course;
  - (b) areas of significant vegetation are protected from development and retained;
  - (c) other forms of development will only be considered if substantial areas of open space are retained adjacent to existing residential areas to maintain the existing residential amenity of open views across open space.

## **Precinct 5 – Very Low Density Residential/Low Scale Recreation/Low Scale Educational/Low Scale Entertainment Uses precinct**



- (15) In addition to the overall outcomes, development in the Very Low Residential Density/Low Scale Recreation/Low Scale Educational/Low Scale Entertainment Uses precinct facilitates the following overall outcomes:
- (a) residential accommodation does not exceed a maximum of 8.5 metres in building height;
  - (b) minimum lot sizes exceed 2 hectares;
  - (c) very low scale and intensity recreation/ very low scale and intensity educational/ and very low scale entertainment uses may be appropriate in areas of the precinct subject to erosion and other flooding constraints.

Note - Undeveloped lots in this precinct are located on very low-lying land. Council may consider a consolidation of existing land titles via lot reconfiguration to lot sizes less than 2 hectares, where the reconfigured lots are consolidated onto the highest terrain, to avoid a pattern of development consisting of dwelling houses located on isolated islands of raised building pads.

### Criteria for assessment

**Table Error! No text of specified style in document..a –Port Douglas / Craiglie local plan – assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
<b>For self assessable and assessable development</b>		
<b>Development in the Port Douglas / Craiglie local plan area generally</b>		
<b>PO1</b> Pedestrians, cyclists, motorists and public transport users can easily move into and through the precinct along planned connectivity routes, identified on the Port Douglas / Craiglie local plan maps contained in Schedule 2.	<b>AO1</b> A pedestrian and cycle movement network is integrated and delivered through development.	Subject site is not located such as to include opportunities for pedestrian and cycle movements through the site.
<b>PO2</b> Development retains and enhances key landscape elements including character trees and areas of significant vegetation contributing to the character and quality of the local plan area and significant views and vistas and other landmarks important to the context of Port Douglas / Craiglie (as identified on the Port Douglas/ Craiglie Townscape Plan map contained in Schedule 2).	<b>AO2.1</b> Development provides for the retention and enhancement of existing mature trees and character vegetation that contribute to the lush tropical character of the town, including: <ul style="list-style-type: none"> <li>(a) the tree covered backdrop of Flagstaff Hill;</li> <li>(b) natural vegetation along watercourses, in particular the Mowbray River, Beor Creek and Dickson Inlet;</li> <li>(c) the tidal vegetation along the foreshore;</li> </ul>	Retention of existing vegetation is challenging on the subject site given its topography and need for significant earthworks. Nevertheless, the proposal will include significant landscaping works and a built form that will positively contribute to, and maintain, the lush tropical character of the area.

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(d) beachfront vegetation along Four Mile Beach, including the fringe of Coconut Palms;</p> <p>(e) the oil palm avenues along the major roads;</p> <p>(f) the lush landscaping within major roundabouts at key nodes;</p> <p>(g) Macrossan Street and Warner Street;</p> <p>(h) Port Douglas waterfront.</p> <p><b>AO2.2</b> Development protects and does not intrude into important views and vistas as identified on the Port Douglas Townscape Plan map contained in Schedule 2, in particular:</p> <p>(a) Flagstaff Hill;</p> <p>(a) Four Mile Beach;</p> <p>(b) Across to the ranges over Dickson Inlet;</p> <p>(c) Mowbray Valley.</p> <p><b>AO2.3</b> Important landmarks, memorials and monuments are retained.</p>	<p>Proposal is not visible from lookout on Flagstaff Hill. Refer to Visual Assessment prepared by Planning Plus.</p> <p>Proposal complies.</p>
<p><b>PO3</b> Development contributes to the protection, reinforcement and where necessary enhancement of gateways and key intersections identified on the Port Douglas / Craiglie local plan maps contained in Schedule 2.</p>	<p><b>AO3</b> Development adjacent to the gateways and nodes as identified on the Port Douglas / Craiglie local plan maps contained in Schedule 2 incorporates architectural features and landscaping treatments and design elements that enhance the sense of arrival and way finding within the town.</p>	N/A
<p><b>PO4</b> Landscaping of development sites complements the existing tropical character of Port Douglas and Craiglie.</p>	<p><b>AO4</b> Landscaping incorporates the requirements of Planning scheme policy SC6.7 – Landscaping, in particular landscaping should</p>	<p>Proposal includes sufficient areas for landscaping which will be capable of achieving compliance with Planning scheme policy SC6.7 – Landscaping.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	be capable of achieving a 60% screening of development within 5 years and predominantly consists of endemic vegetation.	
<b>P05</b> Development does not compromise the safety and efficiency of the State-controlled road network.	<b>A05</b> Direct access is not provided to a State-controlled road where legal and practical access from another road is available.	Proposal complies.
<b>For assessable development</b>		
<b>Additional requirements in Precinct 1 – Port Douglas precinct</b>		
<b>P06</b> The views and vistas identified on the Port Douglas / Craiglie local plan maps contained in Schedule 2 are maintained.	<b>A06.1</b> Development does not impede continued views to scenic vistas and key streetscapes within the local plan area.  <b>A06.2</b> Unless otherwise specified within this Local Plan, buildings are set back not less than 6 metres from the primary street frontage.	N/A   N/A
<b>P07</b> Vehicle access, parking and service areas: (a) do not undermine the relationship between buildings and street or dominate the streetscape; (b) are designed to minimise pedestrian vehicle conflict; (c) are clearly identified and maintain ease of access at all times.	<b>A07.1</b> For all buildings, parking is: (a) to the side of buildings and recessed behind the main building line; or (b) behind buildings; or (c) wrapped by the building façade, and not visible from the street.  <b>A07.2</b> Ground level parking incorporates clearly defined pedestrian routes.  <b>A07.3</b>	N/A   N/A  N/A

Performance outcomes	Acceptable outcomes	Applicant response
	<p>Any porte-cocheres, disabled and pedestrian accesses are accommodated within the boundary of new or refurbished development.</p> <p><b>A07.4</b> Where the development is an integrated mixed-use development incorporating short term accommodation or multiple dwellings and either food and drink outlet or hotel or shop or shopping centre or office, on-site parking spaces are provided as per the number prescribed in the Parking and access code with a relaxation of 30% of spaces required for the non-residential uses.</p> <p><b>A07.5</b> On-site car parking available for public use is clearly signed at the site frontage.</p> <p><b>A07.6</b> Boom gates, pay machines or other regulatory devices to control access to a publicly available car parking area are not constructed or installed.</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p><b>PO8</b> Precinct 1 – Port Douglas precinct is not characterised by a proliferation of advertising signs.</p>	<p><b>A08</b> No acceptable outcomes are prescribed.</p>	<p>N/A</p>
<b>Additional requirements for Sub-precinct 1a – Town Centre sub-precinct</b>		
<p><b>PO9</b> Building heights: (a) do not overwhelm or dominate the town centre; (b) respect the desired streetscape;</p>	<p><b>A09</b> Buildings and structures are not more than 3 storeys and 13.5 metres in height, with a roof height of not less than 3 metres.</p> <p>Note – Height is inclusive of the roof height.</p>	<p>N/A</p>



Performance outcomes	Acceptable outcomes	Applicant response
(c) ensure a high quality appearance when viewed from both within the town centre sub-precinct and external to the town centre sub-precinct; (d) remain subservient to the natural environment and the backdrop of Flagstaff Hill. (e) do not exceed 3 storeys.		
<b>PO10</b> Building design, the streetscape, pedestrian paths and street front spaces promote integration with the surrounding area and the rest of Precinct 1 – Port Douglas Precinct.	<b>AO10</b> No acceptable outcomes are prescribed.	N/A
<b>PO11</b> Buildings: (a) address street frontages; (b) ensure main entrances front the street or public spaces; (c) do not focus principally on internal spaces or parking areas.	<b>AO11</b> No acceptable outcomes are prescribed.	N/A
<b>PO12</b> Setbacks at ground level provide for: (a) connection between pedestrian paths and public places; (b) areas for convenient movement of pedestrians; (c) changes in gradient of the street.	<b>AO12</b> Setbacks at ground level: (a) are clear of columns and other obstructions; (b) have pavement matching the gradient of adjoining footpaths and connecting pedestrian areas on adjoining sites; (c) connect without any lip or step to adjoining footpaths.	N/A
<b>AO13</b> Buildings do not result in a reduction of views and vistas from public places to: (a) Flagstaff Hill; (b) Dickson Inlet; (c) public open space; (d) places of significance.	<b>AO13</b> No acceptable outcomes are prescribed.	N/A

Performance outcomes	Acceptable outcomes	Applicant response
<b>PO14</b> Development enhances the distinctive tropical resort town and identity of Port Douglas and encourages pedestrian activity at street level including shade protection across the footpath for the length of the building.	<b>AO14</b> Development is built up to the street frontage/s at the street level and incorporates a light frame awning, a minimum of 3 metres in width for the length of the street frontage/s;  Or  If a development includes an outdoor dining area at ground/footpath level, the dining area has a maximum setback of 3 metres and the required awning is still maintained along the length of the street frontage/s.  Note – PO24 provides more detail on awning design.	N/A
<b>PO15</b> Development is predominantly commercial in nature with any tourist accommodation having a secondary focus and not located on the street-level frontage where active frontages are encouraged as identified the Port Douglas local plan maps contained in Schedule 2.	<b>AO15.1</b> Centre activities establish: at street level on active street frontages; a maximum of one level above street level.  <b>AO15.2</b> Any residential development activities or short term accommodation is located above street level of the active frontage, but not on or up to the street frontage in any development, including mixed use development.	N/A   N/A
<b>PO16</b> Detailed building design: (a) enhances the visual amenity of the streetscape; (b) has a legible and attractive built form that is visually enhanced by architectural elements; (c) contributes to a distinctive tropical north Queensland, seaside tourist town character; (d) integrates major landscaping elements to maximise their aesthetic value to ensure that the	<b>AO16</b> No acceptable outcomes are prescribed.	N/A

Performance outcomes	Acceptable outcomes	Applicant response
lush, vegetated character of the Town Centre sub-precinct is maintained.		
<b>P017</b> Buildings exhibit variations to their external appearance and the shape of the built form to provide visual interest through: <ul style="list-style-type: none"> <li>(a) surface decoration;</li> <li>(b) wall recesses and projections;</li> <li>(c) a variation in wall finishes; windows, balconies, awnings and other visible structural elements.</li> <li>(d) differentiating between the lower, middle and upper parts of the building by varying the façade and/or the shape of the built form, where comprised of more than two storeys.</li> </ul>	<b>AO17</b> No acceptable outcomes are prescribed.	N/A
<b>P018</b> Roofs are not characterised by a cluttered display of plant and equipment, in particular: <ul style="list-style-type: none"> <li>(a) building caps and rooftops contribute to the architectural distinction of the building and create a coherent roofscape for the Town Centre sub-precinct;</li> <li>(b) service structures, lift motor rooms and mechanical plant and equipment are designed as an architectural feature of the building or are screened from public view;</li> <li>(c) rooftops are not used for advertising.</li> </ul>	<b>AO18</b> No acceptable outcomes are prescribed.	N/A
<b>P019</b> Windows and sun/rain control devices are used in the building form, in particular, sun shading devices are provided to: <ul style="list-style-type: none"> <li>(a) shade windows;</li> <li>(b) reduce glare;</li> <li>(c) assist in maintaining comfortable indoor temperatures;</li> <li>(d) minimising heat loads;</li> </ul>	<b>AO19</b> No acceptable outcomes are prescribed.	N/A





Performance outcomes	Acceptable outcomes	Applicant response
	(d) a horizontal or vertical change in the wall plane; or (e) a change in the exterior finishes and exterior colours of the development.	
<b>PO23</b> Building facades that face public spaces at ground level: (a) complement the appearance of the development and surrounding streetscape; (b) enhance the visual amenity of the public place; (c) include a variety of human scale architectural elements and details; (d) provide an opportunity for the casual and convenient surveillance of public space from within the development.	<b>AO23</b> Building facades at the ground floor of development that face public space are designed to ensure: (a) a minimum of 70% of the façade area is comprised of windows, wall openings or shop fronts that permit the casual surveillance of the public space from the development; (b) a visually prominent main entrance that faces the principal public place; (c) vertical architectural elements and features are incorporated at 3 metre or less intervals along the length of the façade.	N/A
<b>PO24</b> Awnings for pedestrian shelter are consistent with the character setting of the Town Centre sub-precinct and: (a) extend and cover the footpath to provide protection from the sun and rain; (b) include lighting under the awning; (c) are continuous across the frontage of the site; (d) align to provide continuity with existing or future awnings on adjoining sites; (e) are a minimum of 3.0 metres in width and generally not more than 3.5 metres above pavement height; (f) do not extend past a vertical plane, 1.2 metres inside the kerb-line to enable street trees to be planted and grow;	<b>AO24</b> No acceptable outcomes are prescribed.	N/A

Performance outcomes	Acceptable outcomes	Applicant response
(g) are cantilevered from the main building with any posts within the footpath being non load-bearing.		
<b>PO25</b> Development integrates with the streetscape and landscaping improvements for Port Douglas.	<b>AO25</b> Development fronting Davidson Street, Macrossan Street, Wharf Street, Mowbray Street and Warner Street is designed to integrate with the on-street landscaping and design improvements as outlined within the Port Douglas landscape master plan contained within Planning scheme policy SC6.7 – Landscaping.  Note - Planning scheme policy SC6.7 - Landscaping provides guidance on meeting the Performance Outcome.	N/A
<b>Additional requirements for Sub-precinct 1b – Waterfront North sub-precinct</b>		
<b>PO26</b> The establishment of uses is consistent with the outcomes sought for sub-precinct 1b – Waterfront North.	<b>AO26</b> Uses identified as inconsistent uses in <b>Table Error! No text of specified style in document..b — Inconsistent uses in sub-precinct 1b - Waterfront North sub-precinct</b> are not established in sub-precinct 1b - Waterfront North	N/A
<b>PO27</b> The bulk and scale of buildings is consistent with surrounding development and steps down to complement the open space areas in the adjoining limited development sub-precinct.	<b>AO27</b> Buildings and structures are not more than: (a) 3 storeys and 13.5 metres in height , with a roof height of not less than 3 metres, in those parts of the precinct south of Inlet Street; (b) 2 storeys and 8.5 metres in height, with a roof height of not less than 3 metres, in those parts of the precinct north of Inlet Street.  Note – Height is inclusive of roof height.	N/A
<b>PO28</b>	<b>AO28</b>	N/A



Performance outcomes	Acceptable outcomes	Applicant response
	(b) have pavement matching the gradient of adjoining footpaths and connecting pedestrian areas on adjoining sites; (c) connect without any lip or step to adjoining footpaths.	
<b>PO32</b> Buildings do not result in a reduction of views and vistas from public places to: (a) Dickson Inlet; (b) public open space; (c) places of significance.	<b>AO32</b> No acceptable outcomes are prescribed.	N/A
<b>PO33</b> Development enhances the distinctive tropical resort town and identity of Port Douglas and encourages pedestrian activity at ground level including shade protection across the footpath and open space areas.	<b>AO33</b> No acceptable outcomes are prescribed.	N/A
<b>PO34</b> Development is predominantly commercial in nature with any tourist accommodation having a secondary focus and not located on the street-level frontage where active frontages are encouraged as identified the Port Douglas local plan maps contained in Schedule 2.	<b>AO34.1</b> Centre activities establish: (a) at street level on active street frontages; (b) a maximum of one level above street level.  <b>AO34.2</b> Residential development activities or short term accommodation is located above street /ground floor level of the active frontage, but not on or up to the street / public frontage in any development, including mixed use development.	N/A
<b>PO35</b> Detailed building design: (a) enhances the visual amenity of the streetscape; (b) has a legible and attractive built form that is visually enhanced by architectural elements;	<b>AO35</b> No acceptable outcomes are prescribed.	N/A

Performance outcomes	Acceptable outcomes	Applicant response
(c) contributes to a distinctive tropical north Queensland, seaside tourist town character; (d) integrates major landscaping elements to maximise their aesthetic value to ensure that the lush, vegetated character of the Waterfront North sub-precinct is maintained.		
<b>PO36</b> Buildings exhibit variations to their external appearance and the shape of the built form to provide visual interest through: (a) surface decoration; (b) wall recesses and projections; (c) a variation in wall finishes; windows, balconies, awnings and other visible structural elements. (d) differentiating between the lower, middle and upper parts of the building by varying the façade and/or the shape of the built form, where comprised of more than two storeys.	<b>AO36</b> No acceptable outcomes are prescribed.	N/A
<b>PO37</b> Roofs are not characterised by a cluttered display of plant and equipment, in particular: (a) building caps and rooftops contribute to the architectural distinction of the building and create a coherent roofscape for the Waterfront North sub-precinct; (b) service structures, lift motor rooms and mechanical plant and equipment are designed as an architectural feature of the building or are screened from public view; (c) rooftops are not used for advertising.	<b>AO37</b> No acceptable outcomes are prescribed.	N/A
<b>PO38</b> Windows and sun/rain control devices are used in the building form, in particular, sun shading devices are provided to: (a) shade windows;	<b>AO38</b> No acceptable outcomes are prescribed.	N/A



Performance outcomes	Acceptable outcomes	Applicant response
(b) reduce glare; (c) assist in maintaining comfortable indoor temperatures; (d) minimising heat loads; (e) enriching the North Queensland tropical character of the Waterfront North sub-precinct; (f) architectural interest to building façades.		
<b>PO39</b> Buildings are finished with high quality materials, selected for: (a) their ability to contribute the character of Waterfront North sub-precinct; (b) easy maintenance, durability and an ability not to readily stain, discolour or deteriorate.	<b>AO39</b> No acceptable outcomes are prescribed.	N/A
<b>PO40</b> Buildings do not incorporate any type of glass or other materials that are likely to reflect the sun's rays in a manner that may create a nuisance, discomfort or a hazard.	<b>AO40</b> No acceptable outcomes are prescribed.	N/A
<b>PO41</b> Façades and elevations do not include large blank walls and openings and setbacks are used to articulate vertical building surfaces.	<b>AO41.1</b> Development has a maximum length of unbroken building facade of 20 metres and a maximum extent of overall development in the same style/design along the street frontage/s of 40 metres.  <b>AO41.2</b> Any break in the building façade varies the alignment by a 1 metre minimum deviation.  <b>AO41.3</b> A minimum of three of the following building design features and architectural elements	N/A

Performance outcomes	Acceptable outcomes	Applicant response
	<p>detailed below are incorporated to break the extended facade of a development:</p> <ul style="list-style-type: none"> <li>(a) a change in roof profile;</li> <li>(b) a change in parapet coping;</li> <li>(c) a change in awning design;</li> <li>(d) a horizontal or vertical change in the wall plane; or</li> <li>(e) a change in the exterior finishes and exterior colours of the development.</li> </ul>	
<p><b>PO42</b> Building facades that face public spaces at ground level:</p> <ul style="list-style-type: none"> <li>(a) complement the appearance of the development and surrounding streetscape;</li> <li>(b) enhance the visual amenity of the public place;</li> <li>(c) include a variety of human scale architectural elements and details;</li> <li>(d) provide an opportunity for the casual and convenient surveillance of public space from within the development.</li> </ul>	<p><b>AO42</b> Building facades at the ground floor of development that face public space are designed to ensure:</p> <ul style="list-style-type: none"> <li>(a) a minimum of 70% of the façade area is comprised of windows, wall openings or shop fronts that permit the casual surveillance of the public space from the development;</li> <li>(b) a visually prominent main entrance that faces the principal public place;</li> <li>(c) vertical architectural elements and features are incorporated at 3 metre or less intervals along the length of the façade.</li> </ul>	N/A
<p><b>PO43</b> Awnings for pedestrian shelter are consistent with the character setting of the Waterfront North sub-precinct and:</p> <ul style="list-style-type: none"> <li>(a) extend and cover the footpath to provide protection from the sun and rain;</li> <li>(b) include lighting under the awning;</li> <li>(c) are continuous across pedestrian circulation areas;</li> <li>(d) align to provide continuity with existing or future awnings on adjoining sites;</li> </ul>	<p><b>AO43</b> No acceptable outcomes are prescribed.</p>	N/A

Performance outcomes	Acceptable outcomes	Applicant response
(e) are a minimum of 3 metres in width and generally not more than 3.5 metres above pavement height; (f) do not extend past a vertical plane, 1.2 metres inside the street kerb-line to enable street trees to be planted and grow; (g) are cantilevered from the main building with any posts within the footpath being non load-bearing.		
<b>PO44</b> The Balley Hooley rail line and turn-table is retained and incorporated into development and maintains its functionality.	<b>AO44.1</b> Bally Hooley rail line and turn-table is retained and incorporated into development to maintain its functionality.  <b>AO44.2</b> Where development provides floor area for the Bally Hooley rail station, the gross floor area of the rail line and station does not generate a requirement for additional vehicle parking.	N/A   N/A
<b>PO45</b> Development recognises the importance of and relationship between the marina, commercial and residential development in the Waterfront North sub-precinct, and includes measures to mitigate the impact of: (a) noise; (b) odour; (c) hazardous materials; (d) waste and recyclable material storage.	<b>AO45</b> No acceptable outcomes are prescribed.	N/A
<b>PO46</b> Formalised public spaces and pedestrian paths/areas on freehold land are made accessible to the public.	<b>AO46</b> No acceptable outcomes are prescribed.	N/A

Performance outcomes	Acceptable outcomes	Applicant response
<b>PO47</b> Buildings, civic spaces, roads and pedestrian links are enhanced by: (a) appropriate landscape design and planting; (b) themed planting that defines entry points, and creates strong 'entry corridors' into the waterfront; (c) lighting and well-considered discrete signage that complements building and landscape design; (d) public artwork and other similar features that reflect the heritage and character of the Port Douglas Waterfront.	<b>AO47</b> No acceptable outcomes are prescribed.	N/A
<b>PO48</b> Buildings are designed and sited to provide vistas along shared pedestrian/open space and movement areas in suitable locations.	<b>AO48</b> No acceptable outcomes are prescribed.	N/A
<b>PO49</b> Development does not diminish the viability of marine-based industrial uses that directly serve the Port Douglas tourist and fishing operators and private boat owners, particularly with respect to the slipway operation.	<b>AO49</b> No acceptable outcomes are prescribed.	N/A
<b>PO50</b> Marine infrastructure to service the tourism, fishing and private boating community is provided.	<b>AO50</b> No acceptable outcomes are prescribed.	N/A
<b>PO51</b> Changes to the Port Douglas Waterfront quay-line do not cause adverse impacts to the environmentally sensitive Dickson Inlet.	<b>AO51</b> Development that results in changes to the Port Douglas Waterfront quay-line is only established where an Ecological assessment report provides support to the changes.  Note - Planning scheme policy SC6.8 – Natural environment provides guidance on preparing an ecological assessment report.	N/A
<b>Additional requirements for Sub-precinct 1c – Waterfront South sub-precinct</b>		

Performance outcomes	Acceptable outcomes	Applicant response
<b>PO52</b> The establishment of uses is consistent with the outcomes sought for Precinct 1c – Waterfront South.	<b>AO52</b> Uses identified as inconsistent uses <b>Table Error!</b> <b>No text of specified style in document..c</b> are not established in Precinct 1c – Waterfront South.	N/A
<b>PO53</b> Development does not adversely impact on the natural environment, natural vegetation or watercourses.	<b>AO53.1</b> An Ecological assessment report is prepared identifying the environmental qualities of the surrounding natural and built features which are to be managed.  Note - Planning scheme policy SC6.8 – Natural environment provides guidance on preparing an ecological assessment report.  <b>AO53.2</b> An Environmental Management Plan is prepared to manage potential impacts of the operation of the development on surrounding natural areas.  Note - Planning scheme policy SC6.4 – Environmental management plans contains information to demonstrate compliance and guidance on preparing an Environmental Management Plan.	N/A
<b>PO54</b> Development of land at the end of Port Street adjacent to Dickson Inlet incorporates a slipway, or an alternative functioning facility, with capacity to service the Port Douglas marine and tourism industry.	<b>AO54</b> A master plan for the development is provided and implemented to demonstrate the integration of the slipway, or an alternative functioning facility, with other supporting service industry activities that service the marine and tourism industry of Port Douglas.	N/A
<b>PO55</b>	<b>AO55.1</b>	N/A



Performance outcomes	Acceptable outcomes	Applicant response
Buildings and structures are of a height, and are set back from side boundaries and other sensitive areas to ensure the scenic amenity and environmental qualities of the adjacent area are not adversely affected.	Development has a height of not more than 10 metres.  <b>AO55.2</b> Development is setback from all property boundaries not less than 3 metres.	
<b>PO56</b> The site coverage of all buildings and structures ensures development: (a) is sited in an existing cleared area or in an area approved for clearing; (b) has sufficient area for the provision of services; (c) development does not have an adverse effect on the environmental, habitat, conservation or landscape values of the on-site and surrounding sensitive areas.	<b>AO56</b> No acceptable outcomes are prescribed.	N/A
<b>PO57</b> Premises include adequate provision for service vehicles, to cater for generated demand. Loading areas for service vehicles are designed to: (a) be accommodated on-site; (b) maximise safety and efficiency of loading; (c) protect the visual and acoustic amenity of sensitive land use activities; (d) minimise adverse impacts on natural characteristics of adjacent areas.	<b>AO57.1</b> Sufficient manoeuvring area is provided on-site to allow a Medium Rigid Vehicle to enter and leave the site in a forward gear.  <b>AO57.2</b> Development is designed to ensure all service vehicles are contained within the site when being loaded/unloaded.  <b>AO57.3</b> Driveways, parking and manoeuvring areas are constructed and maintained to: (a) minimise erosion from storm water runoff; (a) retain all existing vegetation.	N/A  N/A  N/A
<b>PO58</b>	<b>AO58</b>	N/A

Performance outcomes	Acceptable outcomes	Applicant response
Development ensures adverse impacts from service vehicles on the road network, external to the site, are minimised.	No acceptable outcomes are prescribed.	
<b>PO59</b> Entry to the site is landscaped to enhance the amenity of the area and provide a pleasant working environment.	<b>AO59</b> Areas used for loading and unloading, storage, utilities and car parking are screened from public view: (a) by a combination of landscaping and screen fencing; (b) dense planting along any road frontage is a minimum width of 3 metres.	N/A
<b>PO60</b> Landscaping is informal in character and complementary to the existing natural environment, provides screening and enhances the visual appearance of the development.	<b>AO60</b> For any development landscaping is in accordance with the Plant species schedule in Planning scheme policy SC6.7– Landscaping.	N/A
<b>Additional requirements for Sub-precinct 1d – Limited Development sub-precinct</b>		
<b>PO61</b> The height of buildings and structures contributes to the desired form and outcomes for the sub-precinct and are limited to a single storey.	<b>AO61</b> Buildings and structures are not more than one storey and 4 metres in height.  Note - Height is inclusive of the roof height.	N/A
<b>Additional requirements for Sub-precinct 1e – Community and recreation sub-precinct</b>		
<b>PO62</b> The precinct is developed for organised sporting activities and other community uses.	<b>AO62</b> No acceptable outcomes are prescribed.	N/A
<b>Additional requirements for Sub-precinct 1f – Flagstaff Hill sub-precinct</b>		
<b>PO63</b> Flagstaff Hill is protected from inappropriate development to protect the hill as an important natural landmark feature of Port Douglas and as a vegetated backdrop to the Town centre.	<b>AO63</b> No acceptable outcomes are prescribed.	N/A

Performance outcomes	Acceptable outcomes	Applicant response
<p><b>PO64</b> All development on Flagstaff Hill is designed to minimise the visibility of the development and to ensure development is subservient to the natural landscape and topography of the site, including through:</p> <ul style="list-style-type: none"> <li>(a) building design which minimises excavation and filling;</li> <li>(b) buildings being designed to step down the site and incorporate foundations and footings on piers or poles;</li> <li>(c) buildings being visually unobtrusive and incorporating exterior finishes and muted colours which are non-reflective and complement the colours of the surrounding vegetation and view-shed;</li> <li>(d) protection of the views from public viewing points in the Port Douglas precinct.</li> </ul>	<p><b>AO64</b> No acceptable outcomes are prescribed.</p>	N/A
<b>Additional requirements for Precinct 3 – Craiglie Commercial and Light Industry precinct</b>		
<p><b>PO65</b> Development supports the tourism and marine industries in Port Douglas, along with the small-scale commercial and light industry land uses that support the local economy that would otherwise be better suited to a location outside the Port Douglas Town Centre Precinct.</p>	<p><b>AO65</b> Development consists of service and light industries and associated small scale commercial activities.</p>	N/A
<p><b>PO66</b> Development on lots adjacent to the Captain Cook Highway is sited, designed and landscaped to provide an attractive visual approach to Port Douglas with all buildings, structures and car parking areas setback a sufficient distance from the frontage to enable landscaping to soften or screen the appearance of the development.</p>	<p><b>AO66.1</b> Buildings and structures are setback 8 metres from the Captain Cook Highway frontage, or no closer to the Captain Cook Highway frontage than buildings and structures on adjoining sites (averaged), whichever is the greater.</p> <p><b>AO66.2</b></p>	<p>N/A</p> <p>N/A</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>The setback area to the Captain Cook Highway frontage is landscaped with advanced dense planting including tree species (100 litre bag stock), which will, at maturity, exceed the height of the building(s) on the site.</p> <p><b>AO66.3</b> Advertising signs are discreet in appearance with no large advertising signs, including tenancy signs, located on or near the Captain Cook Highway frontage, or within any landscaped setback area.</p> <p><b>AO66.4</b> Car parking areas, loading and other service areas are designed to be screened from the Captain Cook Highway and are located so as to not be visually prominent from the Captain Cook Highway.</p>	<p>N/A</p> <p>N/A</p>
<b>Additional requirements for Precinct 6 – Very Low Residential Density / Low Scale Recreation / Low Scale Educational / Low Scale Entertainment Uses precinct</b>		
<b>PO67</b> No additional lots are created within the precinct.	<b>AO67</b> No acceptable outcomes are prescribed.	N/A
<b>PO68</b> Reconfigured lots have a minimum lot size of 2 hectares, unless the lot reconfiguration transfers lots to the higher parts of the land, to avoid the need to fill existing lots to accommodate dwelling houses.	<b>AO68</b> No acceptable outcomes are prescribed.	N/A

**Table Error! No text of specified style in document..b — Inconsistent uses in sub-precinct 1b - Waterfront North sub-precinct**

## Inconsistent uses

<ul style="list-style-type: none"> <li>• Agricultural supplies store</li> <li>• Air services</li> <li>• Animal husbandry</li> <li>• Animal keeping</li> <li>• Aquaculture</li> <li>• Brothel</li> <li>• Bulk landscape supplies</li> <li>• Car wash</li> <li>• Cemetery</li> <li>• Crematorium</li> <li>• Cropping</li> <li>• Detention facility</li> <li>• Dual occupancy</li> <li>• Dwelling house</li> </ul>	<ul style="list-style-type: none"> <li>• Extractive industry</li> <li>• Funeral parlour</li> <li>• High impact industry</li> <li>• Intensive animal industry</li> <li>• Intensive horticulture</li> <li>• Major electricity infrastructure</li> <li>• Major sport, recreation and entertainment facility</li> <li>• Medium impact industry</li> <li>• Motor sport facility,</li> <li>• Outstation</li> <li>• Permanent plantation</li> </ul>	<ul style="list-style-type: none"> <li>• Relocatable home park</li> <li>• Roadside stall</li> <li>• Rural industry</li> <li>• Rural workers accommodation</li> <li>• Service station</li> <li>• Showroom</li> <li>• Special industry</li> <li>• Tourist park</li> <li>• Transport depot</li> <li>• Veterinary services</li> <li>• Warehouse</li> <li>• Wholesale nursery</li> <li>• Winery</li> </ul>
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**Table Error! No text of specified style in document..c — Inconsistent uses in sub-precinct 1c - Waterfront South sub-precinct**

Inconsistent uses		
<ul style="list-style-type: none"> <li>• Adult store</li> <li>• Agricultural supplies store</li> <li>• Air services</li> <li>• Animal husbandry</li> <li>• Animal keeping</li> <li>• Brothel</li> <li>• Bulk landscape supplies</li> <li>• Car wash</li> <li>• Cemetery</li> <li>• Child care centre</li> <li>• Community care centre</li> <li>• Community residence</li> <li>• Community use</li> <li>• Crematorium</li> <li>• Cropping</li> <li>• Detention facility</li> <li>• Dual occupancy</li> </ul>	<ul style="list-style-type: none"> <li>• Hardware and trade supplies</li> <li>• Health care services</li> <li>• Home based business</li> <li>• Hospital</li> <li>• Hotel</li> <li>• Indoor sport and recreation</li> <li>• Intensive animal industry</li> <li>• Intensive horticulture</li> <li>• Major electricity infrastructure</li> <li>• Major sport, recreation and entertainment facility</li> <li>• Market</li> <li>• Motor sport facility</li> <li>• Multiple dwelling</li> <li>• Nature-based tourism</li> <li>• Nightclub entertainment facility</li> <li>• Outdoor sales</li> </ul>	<ul style="list-style-type: none"> <li>• Permanent plantation</li> <li>• Place of worship</li> <li>• Relocatable home park</li> <li>• Residential care facility</li> <li>• Resort complex</li> <li>• Retirement facility</li> <li>• Roadside stall</li> <li>• Rooming accommodation</li> <li>• Rural industry</li> <li>• Rural workers accommodation</li> <li>• Sales office</li> <li>• Shopping centre</li> <li>• Short-term accommodation</li> <li>• Showroom</li> <li>• Special industry</li> <li>• Theatre</li> <li>• Tourist attraction</li> </ul>



<ul style="list-style-type: none"> <li>• Dwelling house</li> <li>• Dwelling unit</li> <li>• Extractive industry</li> <li>• Function facility</li> <li>• Funeral parlour</li> <li>• Garden centre</li> </ul>	<ul style="list-style-type: none"> <li>• Outdoor sport and recreation</li> <li>• Outstation</li> </ul>	<ul style="list-style-type: none"> <li>• Tourist park</li> <li>• Transport depot</li> <li>• Veterinary services</li> <li>• Warehouse</li> <li>• Wholesale nursery</li> <li>• Winery</li> </ul>
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Note - **Table Error! No text of specified style in document..b** or **Table Error! No text of specified style in document..c** do not imply that all other uses not listed in the table are automatically consistent uses within the zone. Assessable development must still demonstrate consistency through the assessment process.

## Tourist accommodation zone code

### Application

- (1) This code applies to assessing development in the Tourist accommodation zone.
- (2) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Tourist accommodation zone code is to provide for short-term accommodation supported by community uses and small-scale services and facilities in locations where there are tourist attractions.
- (2) The local government purpose of the code is to:
  - (a) implement the policy direction set in the Strategic Framework, in particular:
    - (i) Theme 4 : Strong communities and identity, Element 3.7.4 – Sense of place, community and identity.
    - (ii) Theme 5 – Economy. Element 3.8.2 – Economic growth and diversification, Element 3.8.2 – Tourism.
  - (b) provide for tourist accommodation development to establish in areas close to commercial and recreational services and facilities.
- (3) The purpose of the code will be achieved through the following overall outcomes:
  - (a) A range of accommodation activities, with an emphasis on short-term accommodation is established at a scale and density to service tourist needs.
  - (b) Tourist development is of an appropriate scale and achieves an attractive built form which incorporates the character and natural attributes of the site and the surrounding area as integral features of the theme and design of the development.
  - (c) Development facilitates opportunities for establishing tourist facilities and services within, or adjacent to, tourist accommodation to complement the tourist accommodation and enhance the attractiveness of tourist areas.
  - (d) Development is designed to take into account the tropical climate by incorporating appropriate architectural elements and design features.
  - (e) Landscaping of tourist development is of a high quality and contributes to the visual dominance of tropical vegetation and the local streetscape.
  - (f) Community facilities, open space and recreational areas and appropriate infrastructure to support the needs of the local community are provided.

### Criteria for assessment

Table 0.a – Tourist accommodation zone code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assessable development		

Performance outcomes	Acceptable outcomes	Applicant response
<b>PO1</b> The height of all buildings and structures must be in keeping with the residential character of the area.	<b>A01</b> Buildings and structures are not more than 13.5 metres and 3 storeys in height.  Note – Height is inclusive of roof height.	Refer to Section 4.0 of the Planning Report for discussion.
<b>Setbacks (other than for a dwelling house)</b>		
<b>PO1</b> Buildings are setback to: (a) maintain the character and amenity of the area; (b) achieve separation from neighbouring buildings and from road frontages.	<b>A01</b> Buildings are setback: (a) a minimum of 6 metres from the main street frontage; (b) a minimum of 4 metres from any secondary street frontage; (c) 4.5 metres from a rear boundary; (d) 2 metres from a side or an average of half of the height of the building at the side setback, whichever is the greater.	Proposal includes 4m – 6m setbacks to the road frontages. Given the limited / non-existent traffic function of the sections of Murphy Street and the Esplanade road reserve which adjoin the site, this treatment is considered appropriate. Rear boundary is hard to define given dual road frontages, however side/rear setbacks are a minimum of 4m and are considered appropriate to maintain adequate separation and are consistent with the character of the area.
<b>Site coverage (other than for a dwelling house)</b>		
<b>PO2</b> The site coverage of all buildings does not result in a built form that is bulky or visually obtrusive.	<b>A02</b> The site coverage of any building is limited to 50%	Site cover = 54%  This minor exceedance is not considered to compromise PO2 particularly considering that much of the overall building footprint is single level and will be screened from view from almost all surrounding viewpoints.
<b>Building proportions and scale (other than for a dwelling house)</b>		
<b>PO3</b> The proportions and scale of any development are in character with the area and local streetscape.	<b>A03.1</b> The overall length of a building does not exceed 30 metres and the overall length of any continuous wall does not exceed 15 metres.	Single level building at the bottom of the site includes only a small gap between dwellings so could be considered to exceed 30m in length however does not compromise PO3 in that this building is well articulated and will be screened from view from almost all

Performance outcomes	Acceptable outcomes	Applicant response
	<p><b>AO3.2</b> Balconies, patios and similar spaces are not enclosed or capable of being enclosed and used as a habitable room.</p> <p><b>AO3.3</b> Balconies, patios and similar spaces are designed to be open and light weight in appearance with a maximum of 20% of the façade being fully enclosed.</p> <p><b>AO3.4</b> Roof forms, materials and colours of buildings enhance the amenity of the street and locality, including: (a) the roofs of buildings are light coloured and non-reflecting; (b) white and shining metallic finishes are avoided on external surfaces in prominent view. Note – The building incorporates building design features and architectural elements detailed in Planning scheme policy SC 6.2 – Building design and architectural elements.</p>	<p>surrounding viewpoints. Further, many existing developments in the locality exceed this building length, therefore the proposal is consistent with the existing character.</p> <p>Proposal complies.</p> <p>Proposal complies.</p> <p>Proposal complies.</p>
<b>Landscaping (other than for a dwelling house)</b>		
<p><b>PO4</b> Landscape planting is provided for the recreational amenity of residents/guests and incorporates dominant tropical vegetation which enhances the streetscape and the amenity of the area.</p>	<p><b>AO4.1</b> A minimum of 35% of the site is provided as open space and recreation area with a minimum of 30% of this total; area provided for landscape planting.</p>	<p>Proposal complies.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p><b>A04.2</b> Within the frontage setback area, a minimum width of 2 metres of landscape area includes a minimum 75% dense planting.</p> <p><b>A04.3</b> Within the side and rear setback areas, a minimum width of 1.5 metres of landscape area includes 75% dense planting.</p>	<p>Proposal complies. Further detailed landscape plans will be provided at a later stage of the development process.</p> <p>Proposal complies. Further detailed landscape plans will be provided at a later stage of the development process.</p>
<b>For assessable development</b>		
<p><b>P05</b> The establishment of uses is consistent with the outcomes sought for the Tourist accommodation zone and protects the zone from the intrusion of inconsistent uses.</p>	<p><b>A05</b> Inconsistent uses as identified in Table 0.b are not established in the Tourist accommodation zone.</p>	N/A
<p><b>P06</b> Development is located, designed, operated and managed to respond to the characteristics, features and constraints of the site and surrounds.</p> <p>Note – Planning scheme policy – Site assessments provides guidance on identifying the characteristics, features and constraints of a site and its surrounds.</p>	<p><b>A06</b> No acceptable outcomes are prescribed.</p>	<p>Site is subject to extensive past earthworks and the proposal seeks to integrate with the unique topography and take advantage of its ability to absorb the built form and maintain the character and visual amenity of the area.</p>
<p><b>P07</b> Development does not adversely affect the tropical, tourist and residential character and amenity of the area in terms of traffic, noise, dust, odour, lighting or other physical or environmental impacts.</p>	<p><b>A07</b> No acceptable outcomes are prescribed.</p>	<p>Proposal is consistent with the type of development that is characteristic of the area.</p>
<b>P08</b>	<b>A08</b>	N/A





Performance outcomes	Acceptable outcomes	Applicant response
<b>PO11</b> New lots have a minimum road frontage of 20 metres.	<b>AO11</b> No acceptable outcomes are prescribed.	N/A
<b>PO12</b> New lots contain a 25 metre x 20 metre rectangle.	<b>AO12</b> No acceptable outcomes are prescribed.	N/A

**Table 0.b — Inconsistent uses within the Tourist accommodation zone**

Inconsistent uses		
<ul style="list-style-type: none"> <li>• Adult store</li> <li>• Agricultural supplies store</li> <li>• Air services</li> <li>• Animal husbandry</li> <li>• Animal keeping</li> <li>• Aquaculture</li> <li>• Brothel</li> <li>• Bulk landscape supplies</li> <li>• Cropping</li> <li>• Detention facility</li> <li>• Extractive industry</li> <li>• Funeral parlour</li> <li>• Garden centre</li> <li>• Hardware and trade supplies</li> <li>• Health care services</li> <li>• High impact industry</li> <li>• Indoor sport and recreation</li> <li>• Intensive animal industry</li> </ul>	<ul style="list-style-type: none"> <li>• Intensive horticulture</li> <li>• Landing</li> <li>• Low impact industry</li> <li>• Major electricity infrastructure</li> <li>• Major sport, recreation and entertainment facility</li> <li>• Marine industry</li> <li>• Market</li> <li>• Medium impact industry</li> <li>• Motor sport facility</li> <li>• Nightclub entertainment facility</li> <li>• Office</li> <li>• Outdoor sales</li> <li>• Outdoor sport and recreation</li> <li>• Outstation</li> <li>• Park</li> <li>• Parking station</li> </ul>	<ul style="list-style-type: none"> <li>• Permanent plantation</li> <li>• Port services</li> <li>• Renewable energy facility</li> <li>• Roadside stall</li> <li>• Rural industry</li> <li>• Rural workers accommodation</li> <li>• Service station</li> <li>• Shopping centre</li> <li>• Showroom</li> <li>• Special industry</li> <li>• Substation</li> <li>• Theatre</li> <li>• Transport depot</li> <li>• Veterinary services</li> <li>• Warehouse</li> <li>• Wholesale nursery</li> <li>• Winery</li> </ul>

Note – This table does not imply that all other uses not listed in the table are automatically consistent uses within the zone. Assessable development must still demonstrate consistency through the assessment process.

## Multiple dwelling, short term accommodation and retirement facility code

### Application

- (1) This code applies to assessing development for a Multiple dwelling, short term accommodation, residential care facility or retirement facility if:
  - (a) assessable development where the code is an applicable code identified in the assessment criteria column of a table of assessment for a material change of use; or
  - (b) impact assessable development.
- (2) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Multiple dwelling, short term accommodation and retirement facility code is to assess the suitability of development to which this code applies.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) development is compatible with and complementary to surrounding development, with regard to scale, bulk, and streetscape patterns;
  - (b) master planning is undertaken for larger developments to ensure connectivity and integration with adjoining uses and the wider neighbourhood;
  - (c) development does not adversely impact on the natural features on the site;
  - (d) the design of development creates a pleasant living environment and is appropriate for the tropical climate of the region;
  - (e) the impacts of development on adjoining premises are managed.

### Criteria for assessment

Table Error! No text of specified style in document..a – Multiple dwelling, short term accommodation and retirement facility code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		
<b>PO1</b> The site has sufficient area and frontage to: (a) accommodate the scale and form of buildings considering site features; (b) achieve communal open space areas and private outdoor spaces;	<b>AO1.1</b> The site has a minimum area of 1000m <sup>2</sup> .  <b>AO1.2</b> The site has a minimum frontage of 25 metres.	Proposal complies.  Proposal complies.

Performance outcomes	Acceptable outcomes	Applicant response
(c) deliver viable areas of deep planting and landscaping to retain vegetation and protect or establish tropical planting; (d) achieve safe and convenient vehicle and pedestrian access; (e) accommodate on-site car parking and manoeuvring for residents, visitors and service providers.		
<b>PO2</b> Development for large-scale multiple dwellings, short term accommodation and retirement villages contributes to the neighbourhood structure and integrates with the existing neighbourhood through: (a) the establishment and extension of public streets and pathways; (b) the provision of parks and other public spaces as appropriate to the scale of the development; (c) inclusion of a mix of dwelling types and tenures and forms; (d) buildings that address the street; (e) building height and setback transitions to adjoining development of a lower density or scale.	<b>AO2</b> Development on a site 5,000m <sup>2</sup> or greater is in accordance with a structure plan.  Note – Guidance on preparing a structure plan is provided within Planning scheme policy SC6.14 – Structure planning.	N/A

Performance outcomes	Acceptable outcomes	Applicant response										
<p><b>PO3</b> Development ensures that the proportion of buildings to open space is:</p> <p>(a) in keeping with the intended form and character of the local area and immediate streetscape;</p> <p>(b) contributes to the modulation of built form;</p> <p>(c) supports residential amenity including access to breezes, natural light and sunlight;</p> <p>(d) supports outdoor tropical living;</p> <p>(e) provides areas for deep tropical planting and / or for the retention of mature vegetation.</p>	<p><b>AO3.1</b> The site cover is not more than 40%.</p> <p><b>AO3.2</b> The development has a gross floor area of not more than:</p> <table><tr><th>Zone</th><th>Maximum GFA</th></tr><tr><td>Low-medium density residential</td><td>0.8 x site area</td></tr><tr><td>Medium density residential</td><td>1.2 x site area</td></tr><tr><td>Tourist accommodation</td><td>1.2 x site area</td></tr><tr><td>All other zones</td><td>No acceptable outcome specified</td></tr></table>	Zone	Maximum GFA	Low-medium density residential	0.8 x site area	Medium density residential	1.2 x site area	Tourist accommodation	1.2 x site area	All other zones	No acceptable outcome specified	<p>Refer to Tourist Accommodation Zone Code (site cover provision prevails in that code).</p> <p>Plot ratio = 0.71:1</p>
Zone	Maximum GFA											
Low-medium density residential	0.8 x site area											
Medium density residential	1.2 x site area											
Tourist accommodation	1.2 x site area											
All other zones	No acceptable outcome specified											
<p><b>PO4</b> Development is sited so that the setback from boundaries:</p> <p>(a) provides for natural light, sunlight and breezes;</p> <p>(b) minimises the impact of the development on the amenity and privacy of neighbouring residents;</p> <p>(c) provides for adequate landscaping.</p>	<p><b>AO4.1</b> Buildings and structures are set back not less than 6 metres from a road frontage.</p> <p><b>AO4.2</b> Buildings and structures are setback not less than 4 metres to the rear boundary.</p> <p><b>AO4.3</b> The side boundary setback for buildings and structures is:</p> <p>(a) for buildings up to 2 storeys not less than 2.5 metres for the entire building;</p> <p>(b) for buildings up to 3 storeys not less than 3.5 metres for the entire building.</p>	<p>Refer to Tourist Accommodation Zone Code (setback provisions prevails in that code).</p> <p>Refer to Tourist Accommodation Zone Code (setback provisions prevails in that code).</p> <p>Refer to Tourist Accommodation Zone Code (setback provisions prevails in that code).</p>										
<p><b>PO5</b> Building depth and form must be articulated to</p>	<p><b>AO5.1</b></p>	<p>Single level building at the bottom of the site includes only a small gap between dwellings so could be considered to exceed 30m in length</p>										

Performance outcomes	Acceptable outcomes	Applicant response
<p>(a) ensure that the bulk of the development is in keeping with the form and character intent of the area;</p> <p>(b) provide adequate amenity for residents in terms of natural light and ventilation.</p> <p>Note – Planning scheme policy SC6.1 – Building design and architectural elements provides guidance on reducing building bulk.</p>	<p>(a) The maximum length of a wall in any direction is 30 metres with substantial articulation provided every 15 metres.</p> <p>(b) The minimum distance between buildings on a site is not less than 6 metres;</p> <p><b>AO5.2</b> The length of any continuous eave line does not exceed 18 metres.</p>	<p>however does not compromise PO5 in that this building is well articulated and will be screened from view from almost all surrounding viewpoints. Further, many existing developments in the locality exceed this building length, therefore the proposal is consistent with the existing character. The proposal also achieves appropriate natural light and ventilation.</p> <p>Proposal complies in all cases except the northern eave line of Dwelling 1 which faces bushland and is not visible from any significant viewpoints.</p>
<p><b>PO6</b> Development reduces the appearance of building bulk, ensures a human-scale, demonstrates variations in horizontal and vertical profile and supports streetscape character.</p>	<p><b>AO6.1</b> Development incorporates a number of the following design elements:</p> <p>(a) balconies;</p> <p>(b) verandahs;</p> <p>(c) terraces;</p> <p>(d) recesses.</p> <p><b>AO6.2</b> Development reduces building bulk by:</p> <p>(a) variation in building colours, materials and textures;</p> <p>(b) the use of curves, recesses, projections or variations in plan and elevation;</p> <p>(c) recession and projection of rooflines and the inclusion of interesting roof forms, such as cascading roof levels, gables, skillions or variations in pitch;</p> <p>(d) use of sun-shading devices and other façade features;</p> <p>(e) use of elements at a finer scale than the main structural framing of the building.</p>	<p>Proposal complies.</p> <p>Proposal complies.</p>



Performance outcomes	Acceptable outcomes	Applicant response
<b>PO7</b> Development provides a building that must define the street to facilitate casual surveillance and enhance the amenity of the street through: <ul style="list-style-type: none"> <li>(a) orientation to the street;</li> <li>(b) front boundary setback;</li> <li>(c) balconies and windows to provide overlooking and casual surveillance;</li> <li>(d) building entrances.</li> </ul>	<b>AO7.1</b> Development provides a building that is not set back further than 2m beyond the minimum required street front setback.  <b>AO7.2</b> Development provides balconies and windows from the primary living area that face and overlook the street or public space.	Proposal complies.   Proposal complies.
<b>PO8</b> Buildings exhibit tropical design elements to support Douglas Shire's tropical climate, character and lifestyle.	<b>AO8.1</b> Development has floor to ceiling heights of 2.7 metres;  <b>AO8.2</b> Buildings include weather protection and sun shading to all windows to all external doors and windows of habitable rooms.  <b>AO8.3</b> Development incorporates deep recesses, eaves and sun-shading devices  <b>AO8.4</b> Western orientated facades are shaded using building and landscape elements, such as adjustable screens, awnings or pergolas or dense tropical planting.  <b>AO8.5</b> Individual dwelling units are not located on both sides of an enclosed central corridor (i.e. not double banked).	Proposal complies.   Proposal complies.   Proposal complies.   Proposal complies.   Proposal complies.
<b>PO9</b> Development minimises direct overlooking between buildings through appropriate building	<b>AO9.1</b> Development where the dwelling is located within 2 metres at ground level or 9 metres above	Proposal includes various screening elements to minimise overlooking.

Performance outcomes	Acceptable outcomes	Applicant response
<p>layout, location and the design of windows and balconies or screening devices.</p> <p>Note—Siting and building separation is used to minimise privacy screening requirements.</p>	<p>ground level of a habitable room window or private open space of an existing dwelling house, ensures habitable rooms and any private outdoor spaces have:</p> <ul style="list-style-type: none"> <li>(a) an offset from the habitable room or private open space of the existing dwelling to limit direct outlook; or</li> <li>(b) sill heights a minimum of 1.5m above floor level; or</li> <li>(c) fixed obscure glazing in any part of the window below 1.5m above floor level; or</li> <li>(d) fixed external screens; or</li> <li>(e) in the case of screening for a ground floor level unit, fencing to a minimum 1.8m above the ground storey floor level.</li> </ul> <p><b>AO9.2</b> Development where a direct view is available from balconies, terraces, decks or roof decks into windows of habitable rooms, balconies, terraces or decks in an adjacent existing dwelling house, is screened from floor level to a height above 1.5m above floor level.</p> <p><b>AO9.3</b> Development provides screening devices that are solid translucent screens, perforated or slatted panels or fixed louvres that have a maximum of 25% openings, with a maximum opening dimension of 50mm, and that are permanent and durable.</p> <p>Note—The screening device is offset a minimum of 0.3m from the wall around any window.</p> <p>Note—Screening devices are hinged or otherwise attached to facilitate emergency egress</p>	<p>Proposal includes various screening elements to minimise overlooking.</p> <p>Proposal includes various screening elements to minimise overlooking.</p>

Performance outcomes	Acceptable outcomes	Applicant response
<b>PO10</b> Development provides accessible and functional landscaping and recreation area for the benefit of residents/guests.	<b>AO10</b> A minimum of 35% of the site is allocated as landscaping and recreation area.	Proposal includes 36% of the site as landscaped area.
<b>PO11</b> Landscaping must contribute positively to the amenity of the area, streetscape and public spaces.	<b>AO11</b> Development provides landscaping as follows: (a) A dense landscape planting strip of at least 2 metres width suitable for deep planting is provided and maintained along all street frontages; (b) A dense landscape planting strip of at least 1.5 metres width suitable for deep planting is provided along all side and rear boundaries.	Proposal complies.
<b>PO12</b> The landscaping and recreation area provides for functional communal open space for all developments exceeding five dwellings on one site.	<b>AO12.1</b> Communal open space is provided at: (a) a minimum of 5% of site area of 50m <sup>2</sup> whichever is the greater; and (b) a minimum dimension of 5 metres.  <b>AO12.2</b> Development provides communal open space that: (a) is consolidated into one useable space; (b) where communal open space exceeds 100m <sup>2</sup> , the communal open space may be split into two, and so forth incrementally.  <b>AO12.3</b> Communal open space: (a) is a minimum of 50% open to the sky; (b) achieves 25% shading by trees in 5 years; (c) does not include vehicle driveways and manoeuvring; (d) does not contain surface structures such as rainwater tanks, fire hydrants, transformers or water boosters.	Not applicable as proposal consists of 4 dwellings and they each have significant private open space.





Performance outcomes	Acceptable outcomes	Applicant response
	<p>(c) provided with adjustable, moveable or operable privacy screening where appropriate.</p> <p><b>AO13.3</b> Development provides balconies that are located to the front or rear of the building except where adequate building separation can be achieved to maintain privacy.</p> <p><b>AO13.4</b> Where secondary balconies are provided to a side of a building for additional amenity or services, such as clothes drying or to articulate facades, the setback may be reduced to the minimum setback, but these areas are not included in the calculation of private open space requirements.</p> <p><b>AO13.5</b> Private open space: (a) does not include vehicle driveways and manoeuvring; (b) does not contain surface structures such as rainwater tanks, fire hydrants, transformers or water boosters.</p>	<p>Proposal complies.</p> <p>Proposal includes secondary balconies however these are not required to make up the private open space requirements.</p> <p>Proposal complies.</p>
<p><b>PO14</b> Development provides front fencing and retaining walls that must:</p> <ul style="list-style-type: none"> <li>(a) facilitate casual surveillance of the street and public space;</li> <li>(b) enable use of private open space;</li> <li>(c) assist in highlighting entrances to the property;</li> <li>(d) provide a positive interface to the streetscape.</li> </ul>	<p><b>AO14.1</b> Development ensures that, where fencing is provided, the height of any new fence located on any common boundary to a street or public space is a maximum of:</p> <ul style="list-style-type: none"> <li>(a) 1.2m, where fence construction is solid or less than 50% transparent;</li> <li>(b) 1.5m, where fence construction is at least 50% transparent;</li> </ul>	<p>Proposed fencing to Murphy Street is considered appropriate given the nature of the interface.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(c) 1.8m and solid only where the site is on an arterial road or higher order road.</p> <p><b>AO14.2</b> Development incorporating solid front fences or walls that front the street or other public spaces and are longer than 10m, indentations, material variation or landscaping is provided to add visual interest and soften the visual impact</p> <p><b>AO14.3</b> Development for a retaining wall is: (a) stepped to minimise impact on the streetscape and pedestrian environment; (b) a maximum of 0.6m in height if directly abutting the edge of the adjoining road reserve verge</p>	<p>As above.</p> <p>Proposed retaining walls do not negatively impact the streetscape or pedestrian environment.</p>
<p><b>PO15</b> Development minimises light nuisances.</p>	<p><b>AO15</b> Outdoor lighting is in accordance with AS 4282-1997 Control of the obtrusive effects of outdoor lighting.</p>	<p>Proposal is capable of complying.</p>
<p><b>PO16</b> Waste and recyclable material storage areas are: (a) convenient and accessible to residents and waste and recyclable material collection services; (b) located and designed to mitigate adverse impacts: (i) within the site; (ii) on adjoining properties; (iii) to the street.</p>	<p><b>AO16</b> Waste and recyclable material storage areas: (a) are located on site; (b) are sited and designed to be unobtrusive and screened from view from the street frontage; (c) are imperviously sealed roofed and bunded, and contain a hose down area draining to Council's sewer network; (d) are of a sufficient size to accommodate bulk (skip) bins; (e) have appropriate access and sufficient on site manoeuvrability area for waste and recyclable material collection services.</p>	<p>Proposal complies.</p>



Performance outcomes	Acceptable outcomes	Applicant response
	Note - The Environmental performance code contains requirements for waste and recyclable material storage.	
<b>PO17</b> Development provides a secure storage area for each dwelling.	<b>AO17</b> A secure storage area for each dwelling: (a) is located to enable access by a motor vehicle or be near to vehicle parking; (b) has a minimum space of 3.5m <sup>2</sup> per dwelling; (c) has a minimum height of 2 metres; (d) is weather proof; (e) is lockable; (f) has immunity to the 1% AEP inundation event.  Note – A cupboard within a unit will not satisfy this requirement.	Proposal includes private garages which include storage opportunities.
<b>Additional requirements for a Retirement facility</b>		
<b>PO18</b> Retirement facilities are located in areas which offer convenience to residents, and are designed to be compatible with the locality and surrounding area in which they are located.	<b>AO18</b> Retirement facilities are conveniently located in established areas close to public transport, shopping facilities and health care services.	N/A
<b>PO19</b> Retirement facilities are designed to provide for the amenity and security of residents.	<b>AO19.1</b> The Retirement facility incorporates covered walkways wide enough to accommodate wheel chairs and ramps, and where necessary, provide on-site weather protection between all parts of the complex.  <b>AO19.2</b> Internal pathways have firm, well drained and non-slip surfaces.  <b>AO19.2</b>	N/A   N/A  N/A

Performance outcomes	Acceptable outcomes	Applicant response
	<p>Security screens are provided to all dwelling units or residential rooms to ensure the safety and security of residents.</p> <p><b>AO19.3</b> An illuminated sign and site map of the layout of the development is located near the main entrance to the facility.</p>	N/A
<p><b>PO20</b> The internal layout of a Retirement facility and the location of the retirement facility allows for safe evacuation of residents in an emergency and provides emergency services to efficiently access the site.</p>	<p><b>AO20.1</b> The design of the Retirement facility ensures that external circulation and access and egress points on the site facilitate the evacuation of the site in an efficient manner.</p> <p><b>AO20.2</b> The site of a Retirement facility is not prone to inundation.</p> <p><b>AO20.3</b> The location of the Retirement facility is readily accessible to emergency vehicles.</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<p><b>PO21</b> The development is designed for the needs of the age group, and to allow 'aging in place' to occur.</p>	<p><b>AO21.1</b> Development applies adaptable housing principles.</p> <p><b>AO21.2</b> A range of housing designs and sizes are provided in the development to cater for different individual and household needs.</p>	<p>N/A</p> <p>N/A</p>

## Acid sulfate soils overlay code

### Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Acid sulfate soils overlay, if:
  - (a) self-assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
  - (b) impact assessable development.
- (2) Land in the Acid sulphate soils overlay is identified on the Acid sulfate soils overlay map in Schedule 2 and includes the following sub-categories:
  - (a) Land at or below the 5m AHD sub-category;
  - (b) Land above the 5m AHD and below the 20m AHD sub-category.
- (3) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the acid sulfate soils overlay code is to:
  - (a) implement the policy direction in the Strategic Framework, in particular:
    - (i) Theme 2: Environment and landscape values, Element 3.5.4 Coastal zones.
    - (ii) Theme 3: Natural resource management, Element 3.6.2 land and catchment management, Element 3.6.3 Primary production, forestry and fisheries.
- (2) enable an assessment of whether development is suitable on land within the Acid sulfate soils overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) Development ensures that the release of any acid and associated metal contaminant is avoided by not disturbing acid sulfate soils when excavating, removing soil or extracting ground water or filling land;
  - (b) Development ensures that disturbed acid sulfate soils, or drainage waters, are treated and, if required, on-going management practices are adopted that minimise the potential for environmental harm from acid sulfate soil and protect corrodible assets from acid sulfate soil.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Acid sulfate soils overlay code – assessable development**

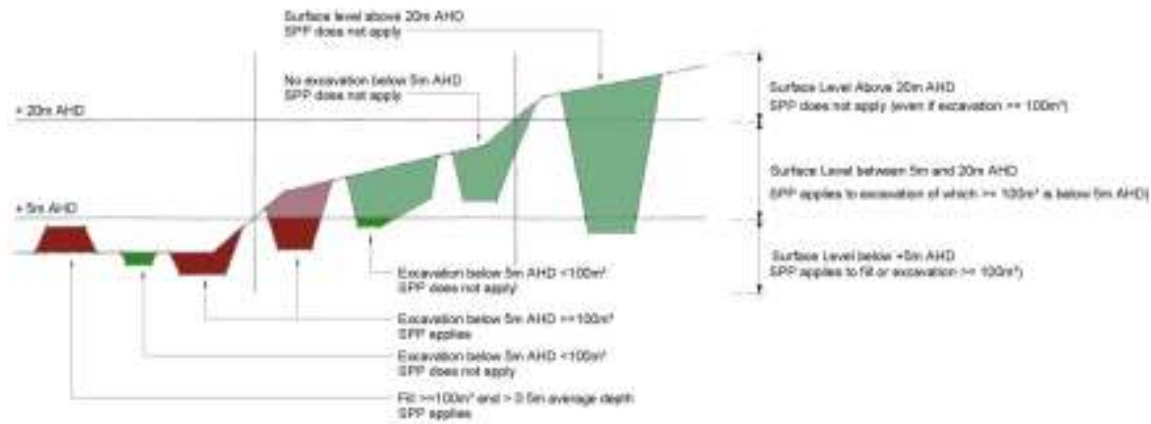
Performance outcomes	Acceptable outcomes	Applicant response
For assessable development		





Performance outcomes	Acceptable outcomes	Applicant response
	<ul style="list-style-type: none"> <li>(a) neutralising existing acidity and preventing the generation of acid and metal contaminants;</li> <li>(b) preventing the release of surface or groundwater flows containing acid and metal contaminants into the environment;</li> <li>(c) preventing the in situ oxidisation of potential acid sulfate soils and actual acid sulfate soils through ground water level management;</li> <li>(d) appropriately treating acid sulfate soils before disposal occurs on or off site;</li> <li>(e) documenting strategies and reporting requirements in an acid sulfate soils environmental management plan.</li> </ul> <p>Note - Planning scheme policy SC 6.12 – Acid sulfate soils provides guidance on preparing an acid sulfate soils management plan.</p>	
<b>PO3</b> No environmental harm is caused as a result of exposure to potential acid sulfate soils or actual acid sulfate soils.	<b>AO3</b> No acceptable outcomes are prescribed.	Refer to Geotechnical Investigation Report prepared by GEO Design.

Figure 0.a – Acid sulfate soils (SPP triggers)



## Bushfire hazard overlay code

Note - Land shown on the bushfire hazard overlay map is designated as the bushfire prone area for the purposes of section 12 of the Building Regulations 2006. The bushfire hazard area (bushfire prone area) includes land covered by the high and medium hazard areas as well as the buffer area category on the overlay map.

### Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational works or building work in the Bushfire hazard overlay, if:
  - (a) self-assessable or assessable where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
  - (b) impact assessable development.
- (2) Land in the Bushfire hazard overlay is identified on the Bushfire hazard overlay map in Schedule 2 and includes the following sub-categories:
  - (a) Medium bushfire risk sub-category;
  - (b) High bushfire risk sub-category;
  - (c) Very high bushfire risk sub-category;
  - (d) Potential impact buffer sub-category.
- (3) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Bushfire overlay code is to:
  - (a) implement the policy direction in the Strategic Framework, in particular:
    - (i) Theme 1 Settlement pattern: Element 3.4.7 Mitigation of hazards;
    - (ii) Theme 6 Infrastructure and transport: Element 3.9.2 Energy.
  - (b) enable an assessment of whether development is suitable on land within the Bushfire risk overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) development avoids the establishment or intensification of vulnerable activities within or near areas that are subject to bushfire hazard;
  - (b) development is designed and located to minimise risks to people and property from bushfires;
  - (c) bushfire risk mitigation treatments are accommodated in a manner that avoids or minimises impacts on the natural environment and ecological processes;
  - (d) development involving the manufacture or storage of hazardous materials does not increase the risk to public safety or the environment in a bushfire event;
  - (e) development contributes to effective and efficient disaster management response and recovery capabilities.

Note - A site based assessment may ground-truth the extent of hazardous vegetation and extent and nature of the bushfire hazard area (bushfire prone area). Such assessments should be undertaken using the methodology set out in Planning scheme policy SC6.9 - Natural Hazards.



## Criteria for assessment

**Table Error! No text of specified style in document..a – Bushfire hazard overlay code –assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
<b>For self-assessable and assessable development</b>		
<b>Compatible development</b>		
<b>PO1</b> A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances.  Note - See the end of this code for examples of vulnerable uses.	<b>AO1</b> Vulnerable uses are not established or expanded.  Note – Where, following site inspection and consultation with Council, it is clear that the mapping is in error in identifying a premises as being subject to a medium, high, very high bushfire hazard or potential impact buffer sub-category, Council may supply a letter exempting the need for a Bushfire Management Plan. Note – Where the assessment manager has not previously approved a Bushfire Management Plan (either by condition of a previous development approval), the development proponent will be expected to prepare such a plan. Note – Planning scheme policy SC6.9 - Natural hazards, provides a guide to the preparation of a Bushfire Management Plan.	Proposal is located on the edge of the potential impact buffer area, at the base of a slope and within an urban area. The risk of bushfire to the site is considered minimal and the proposal includes appropriate emergency access and water supply to mitigate any risk that does exist.
<b>PO2</b> Emergency services and uses providing community support services are able to function effectively during and immediately after a bushfire hazard event.	<b>AO2</b> Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.	N/A
<b>PO3</b> Development involving hazardous materials manufactured or stored in bulk is not located in bushfire hazard sub-category.	<b>AO3</b> The manufacture or storage of hazardous material in bulk does not occur within bushfire hazard sub-category.	N/A
<b>Development design and separation from bushfire hazard – reconfiguration of lots</b>		

Performance outcomes	Acceptable outcomes	Applicant response
<p><b>PO4.1</b> Where reconfiguration is undertaken in an urban area or is for urban purposes or smaller scale rural residential purposes, a separation distance from hazardous vegetation is provided to achieve a radiant heat flux level of 29kW/m<sup>2</sup> at the edge of the proposed lot(s).</p> <p>Note - "Urban purposes" and "urban area" are defined in the <i>Sustainable Planning Regulations 2009</i>. Reconfiguration will be taken to be for rural residential purposes where proposed lots are between 2000m<sup>2</sup> and 2ha in area. "Smaller scale" rural residential purposes will be taken to be where the average proposed lot size is 6000m<sup>2</sup> or less.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p> <p><b>PO4.2</b> Where reconfiguration is undertaken for other purposes, a building envelope of reasonable dimensions is provided on each lot which achieves radiant heat flux level of 29kW/m<sup>2</sup> at any point.</p>	<p><b>AO4.1</b> No new lots are created within a bushfire hazard sub-category.</p> <p>or</p> <p><b>AO4.2</b> Lots are separated from hazardous vegetation by a distance that: (a) achieves radiant heat flux level of 29kW/m<sup>2</sup> at all boundaries; and (b) is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation. For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages. Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>	<p>N/A</p>
<p><b>PO5</b> Where reconfiguration is undertaken in an urban area or is for urban purposes, a constructed perimeter road with reticulated water supply is established between the lots and the hazardous vegetation and is readily accessible at all times for urban fire fighting vehicles.</p> <p>The access is available for both fire fighting and maintenance/defensive works.</p>	<p><b>AO5.1</b> Lot boundaries are separated from hazardous vegetation by a public road which: (a) has a two lane sealed carriageway; (b) contains a reticulated water supply; (c) is connected to other public roads at both ends and at intervals of no more than 500m; (d) accommodates geometry and turning radii in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;</p>	<p>N/A</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(e) has a minimum of 4.8m vertical clearance above the road;</p> <p>(f) is designed to ensure hydrants and water access points are not located within parking bay allocations; and</p> <p>(g) incorporates roll-over kerbing.</p> <p><b>AO5.2</b> Fire hydrants are designed and installed in accordance with AS2419.1 2005, unless otherwise specified by the relevant water entity.</p> <p>Note - Applicants should have regard to the relevant standards set out in the reconfiguration of a lot code and works codes in this planning scheme.</p>	
<p><b>PO6</b> Where reconfiguration is undertaken for smaller scale rural residential purposes, either a constructed perimeter road or a formed, all weather fire trail is established between the lots and the hazardous vegetation and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>The access is available for both fire fighting and maintenance/hazard reduction works.</p>	<p><b>AO6</b> Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has:</p> <p>(a) a reserve or easement width of at least 20m;</p> <p>(b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;</p> <p>(c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path;</p> <p>(d) a minimum of 4.8m vertical clearance;</p> <p>(e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;</p> <p>(f) a maximum gradient of 12.5%;</p> <p>(g) a cross fall of no greater than 10 degrees;</p> <p>(h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy;</p>	N/A

Performance outcomes	Acceptable outcomes	Applicant response
	<ul style="list-style-type: none"> <li>(i) vehicular access at each end which is connected to the public road network at intervals of no more than 500m;</li> <li>(j) designated fire trail signage;</li> <li>(k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and</li> <li>(l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.</li> </ul>	
<p><b>PO7</b> Where reconfiguration is undertaken for other purposes, a formed, all weather fire trail is provided between the hazardous vegetation and either the lot boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p>	<p><b>AO7</b> Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has:</p> <ul style="list-style-type: none"> <li>(a) a reserve or easement width of at least 20m;</li> <li>(b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;</li> <li>(c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path;</li> <li>(d) a minimum of 4.8m vertical clearance;</li> <li>(e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;</li> <li>(f) a maximum gradient of 12.5%;</li> <li>(g) a cross fall of no greater than 10 degrees;</li> <li>(h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy;</li> <li>(i) vehicular access at each end which is connected to the public road network;</li> <li>(j) designated fire trail signage;</li> <li>if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and</li> </ul>	N/A



Performance outcomes	Acceptable outcomes	Applicant response
	if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.	
<b>PO8</b> The development design responds to the potential threat of bushfire and establishes clear evacuation routes which demonstrate an acceptable or tolerable risk to people.	<b>AO8</b> The lot layout: (a) minimises the length of the development perimeter exposed to, or adjoining hazardous vegetation; (b) avoids the creation of potential bottle-neck points in the movement network; (c) establishes direct access to a safe assembly /evacuation area in the event of an approaching bushfire; and (d) ensures roads likely to be used in the event of a fire are designed to minimise traffic congestion.  Note - For example, developments should avoid finger-like or hour-glass subdivision patterns or substantive vegetated corridors between lots. In order to demonstrate compliance with the performance outcome, a bushfire management plan prepared by a suitably qualified person may be required. The bushfire management plan should be developed in accordance with the Public Safety Business Agency (PSBA) guideline entitled "Undertaking a Bushfire Protection Plan. Advice from the Queensland Fire and Emergency Services (QFES) should be sought as appropriate	N/A
<b>PO9</b> Critical infrastructure does not increase the potential bushfire hazard.	<b>AO9</b> Critical or potentially hazardous infrastructure such as water supply, electricity, gas and telecommunications are placed underground.	N/A
<b>Development design and separation from bushfire hazard – material change of use</b>		
<b>PO10</b>	<b>AO10</b>	Proposal is located on the edge of the potential impact buffer area, at the base of a slope and

Performance outcomes	Acceptable outcomes	Applicant response
<p>Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of:</p> <p>(a) 10kW/m<sup>2</sup> where involving a vulnerable use; or 29kW/m<sup>2</sup> otherwise.</p> <p>The radiant heat flux level is achieved by separation unless this is not practically achievable.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p>	<p>Buildings or building envelopes are separated from hazardous vegetation by a distance that:</p> <p>(a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m<sup>2</sup> for a vulnerable use or 29kW/m<sup>2</sup> otherwise; and</p> <p>(b) is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> <p>For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.</p> <p>Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>	<p>within an urban area. The risk of bushfire to the site is considered minimal and the proposal includes appropriate emergency access and water supply to mitigate any risk that does exist.</p>
<p><b>PO11</b></p> <p>A formed, all weather fire trail is provided between the hazardous vegetation and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p> <p>Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha</p>	<p><b>AO11</b></p> <p>Development sites are separated from hazardous vegetation by a public road or fire trail which has:</p> <p>(a) a reserve or easement width of at least 20m;</p> <p>(b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;</p> <p>(c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path;</p> <p>(d) a minimum of 4.8m vertical clearance;</p> <p>(e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;</p>	<p>Proposal is located on the edge of the potential impact buffer area, at the base of a slope and within an urban area. The risk of bushfire to the site is considered minimal and the proposal includes appropriate emergency access and water supply to mitigate any risk that does exist.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<ul style="list-style-type: none"> <li>(f) a maximum gradient of 12.5%;</li> <li>(g) a cross fall of no greater than 10 degrees;</li> <li>(h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy;</li> <li>(i) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m;</li> <li>(j) designated fire trail signage; if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.</li> </ul>	
<b>All development</b>		
<b>PO12</b> All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.	<b>AO12</b> Private driveways: <ul style="list-style-type: none"> <li>(a) do not exceed a length of 60m from the street to the building;</li> <li>(b) do not exceed a gradient of 12.5%;</li> <li>(c) have a minimum width of 3.5m;</li> <li>(d) have a minimum of 4.8m vertical clearance;</li> <li>(e) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and</li> <li>(f) serve no more than 3 dwellings or buildings.</li> </ul>	Proposal complies.
<b>PO13</b> Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.	<b>AO13</b> A water tank is provided within 10m of each building (other than a class 10 building) which: <ul style="list-style-type: none"> <li>(a) is either below ground level or of non-flammable construction;</li> </ul>	Proposal includes access to reticulated water supply.

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(b) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters:</p> <p>(i) 10,000l for residential buildings</p> <p>Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams.</p> <p>(ii) 45,000l for industrial buildings; and</p> <p>(iii) 20,000l for other buildings;</p> <p>(c) includes shielding of tanks and pumps in accordance with the relevant standards;</p> <p>(d) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank;</p> <p>(e) is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and</p> <p>(f) is clearly identified by directional signage provided at the street frontage.</p>	
<p><b>PO14</b></p> <p>Landscaping does not increase the potential bushfire risk.</p>	<p><b>AO14</b></p> <p>Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.</p>	Proposal is capable of complying.
<p><b>PO15</b></p> <p>The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).</p>	<p><b>AO15</b></p> <p>Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.</p>	Proposal is not considered to require bushfire risk mitigation treatments.

Note – 'Vulnerable activities' are those involving:



- (1) the accommodation or congregation of vulnerable sectors of the community such as child care centres, community care centre, educational establishments, detention facilities, hospitals, rooming accommodation, retirement facilities or residential care facilities; or
- (2) the provision of essential services including community uses, emergency services, utility installation, telecommunications facility, substations and major electricity infrastructure.

## Hillslopes overlay code

### Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Hillslopes overlay, if:
  - (a) self assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
  - (b) impact assessable development.
- (2) Land in the Hillslopes overlay is identified on the Hillslopes overlay map in Schedule 2 and includes the following sub-categories:
  - (a) Hillslopes constraint sub-category.
- (3) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Hillslopes overlay code is to:
  - (a) implement the policy direction in the Strategic Framework, in particular:
    - (i) Theme 1 - Settlement pattern: Element 3.4.7 Mitigation of hazards;
    - (ii) Theme 2 – Environment and landscape values: Element 3.5.5 Scenic amenity.
  - (b) enable an assessment of whether development is suitable on land within the Hillslopes sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) development on hillslopes is safe, serviceable and accessible;
  - (b) the ecological values, landscape character and visual quality of the hillslopes are protected from development so as to retain the scenic backdrop to the region;
  - (c) Development on hillslopes is appropriate, having regard to the topographic constraints and environmental characteristics of the land;
  - (d) Development responds to the constraints of the site including gradient and slope stability;
  - (e) Works do not involve complex engineering solutions.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Hillslopes overlay code –assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable development		

Performance outcomes	Acceptable outcomes	Applicant response
<b>PO1</b> The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	<b>AO1.1</b> Development is located on parts of the site that are not within the Hillslopes constraint sub-category as shown on the Hillslopes overlay Maps contained in schedule 2.	N/A
For assessable development		

<p><b>PO2</b> The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.</p>	<p><b>AO2.1</b> Development does not occur on land with a gradient in excess of 1 in 6 (16.6%)</p> <p>or</p> <p><b>AO2.2</b> Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the site.</p> <p><b>AO2.3</b> Access ways and driveways are: (a) constructed with surface materials that blend with the surrounding environment; (b) landscaped with dense planting to minimise the visual impact of the construction; (c) provided with erosion control measures immediately after construction.</p> <p><b>AO2.4</b> The clearing or disturbance of vegetation is limited to clearing and disturbance that: (a) is necessary for the construction of driveways; (b) is necessary to contain the proposed development; (c) minimises canopy clearing or disturbance; (d) minimises riparian clearing or disturbance.</p> <p><b>AO2.5</b> On land with slopes greater than 1 in 6 (16.6%) or greater, alternative construction methods to concrete slab on ground are utilised (i.e. split level or post and beam constructed buildings that minimise modification to the natural terrain of the land).</p>	<p>Site is subject to extensive past earthworks and the proposal seeks to integrate with the unique topography and take advantage of its ability to absorb the built form and maintain the character and visual amenity of the area. Proposed access driveway will be subject to detailed design at the Operational Works stage but is capable of complying with this criteria.</p> <p>Proposal is capable of complying.</p> <p>Refer to Geotechnical Investigation Report prepared by GEO Design.</p>
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Performance outcomes	Acceptable outcomes	Applicant response
	<p><b>AO2.6</b> Development does not alter the sky line.</p> <p><b>AO2.7</b> Buildings and structures: (a) are finished predominantly in the following exterior colours or surfaces:  <ul style="list-style-type: none"> <li>(i) moderately dark to darker shades of olive green, brown, green, blue, or charcoal; or</li> <li>(ii) moderately dark to darker wood stains that blend with the colour and hues of the surrounding vegetation and landscape;</li> </ul> </p> <p>(b) are not finished in the following exterior colours or surfaces:  <ul style="list-style-type: none"> <li>(i) pastel or terracotta colours, reds, yellows, shades of white or beige, or other bright colours that do not blend with the surrounding vegetation and landscape;</li> <li>(ii) reflective surfaces.</li> </ul> </p> <p><b>AO2.8</b> Exterior colour schemes limit the use of white or other light colours to exterior trim and highlighting of architectural features.</p> <p><b>AO2.9</b> Areas between the first floor (including outdoor deck areas) and ground level are screened from view.</p> <p><b>AO2.10</b> Recreational or ornamental features (including tennis courts, ponds or swimming pools) do not occur on land:</p>	<p>Proposal does not break the ridgeline of Flagstaff Hill.</p> <p>Proposal comprises appropriate materials and earthy tones which are consistent with the existing character of the area.</p> <p>Proposal complies.</p> <p>Proposal complies.</p> <p>Proposal complies.</p>



Performance outcomes	Acceptable outcomes	Applicant response
	<p>balance left in its natural state to the greatest extent possible.</p> <p>Note – The size of rectangular areas is outlined within each zone code.</p> <p><b>AO4.3</b> Development does not alter ridgelines.</p> <p><b>AO4.4</b> Lots are designed to ensure rooflines of future buildings and structures do not protrude above a ridgeline.</p>	<p>N/A</p> <p>N/A</p>

## Landscape values overlay code

### Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Landscape values overlay, if:
  - (a) self-assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
  - (b) impact assessable development.
- (2) Land in the Landscape values overlay is identified on the Landscape values overlay map in Schedule 2 and includes in following sub-categories:
  - (a) High landscape value sub-category;
  - (b) Medium landscape value sub-category;
  - (c) Scenic route buffer / view corridor area sub-category;
  - (d) Coastal scenery area sub-category.
- (3) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Landscape values overlay code is to:
  - (a) implement the policy direction of the Strategic Framework, in particular:
    - (i) Theme 2: Environment and landscape values Element 3.5.5 Scenic amenity;
    - (ii) Theme 3: Natural resource management Element 3.6.4 – Resource extraction.
  - (b) enable an assessment of whether development is suitable on land within the Landscape values overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) areas of High landscape value are protected, retained and enhanced;
  - (b) areas of Medium landscape value are managed to integrate and limit the visual impact of development;
  - (c) the landscape values of the Coastal scenery area are managed to integrate and limit the visual impact of development;
  - (d) development maintains and enhances the significant landscape elements and features which contribute to the distinctive character and identity of Douglas Shire;
  - (e) ridges and vegetated hillslopes are not developed in a way that adversely impacts on landscape values;
  - (f) watercourses, forested mountains and coastal landscape character types remain predominantly natural in appearance in order to maintain the region's diverse character and distinctive tropical image, in particular:
    - (i) areas in the coastal landscape character type which are predominantly natural and undeveloped in appearance retain this natural



- (ii) watercourses which are predominantly natural and undeveloped in appearance retain this natural landscape character;
  - (iii) the rural character of cane fields and lowlands landscape character types which are predominantly rural or natural in appearance are maintained;
  - (iv) landscape values are maintained when viewed from lookouts, scenic routes, gateways and public places.
- (g) views towards High landscape value areas and the Coral Sea are not diminished;
- (h) development is consistent with the prevailing landscape character of its setting, and is neither visually dominant nor visually intrusive;
- (i) advertising devices do not detract from the landscape values, character types or amenity of an area.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Landscape values overlay code – assessable development**

[illegible]

Performance outcomes	Acceptable outcomes	Applicant response
<p>a result of the location, position on site, scale, design, extent and alignment of earthworks, roads, driveways, retaining walls and other on-ground or in-ground infrastructure;</p> <p>(f) avoids detrimental impacts on landscape values and views as a result of the location, position on site, scale, design and alignment of telecommunications facilities, electricity towers, poles and lines and other tall infrastructure;</p> <p>(g) extractive industry operations are avoided.</p> <p>Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.</p>	<p>(b) buildings are split level or suspended floor construction, or a combination of the two;</p> <p>(c) lightweight materials are used to areas with suspended floors.</p> <p>Note - Examples of suitable lightweight materials include timber or fibre cement boards or sheeting for walls and factory treated metal sheeting for walls and roofs.</p> <p><b>AO1.5</b> The external features, walls and roofs of buildings and structures have a subdued and non-reflective palette.</p> <p>Note - Examples of suitable colours include shades of green, olive green, blue green, grey green, green blue, indigo, brown, blue grey, and green yellow.</p> <p><b>AO1.6</b> No clearing of native vegetation occurs on land with a slope greater than 1 in 6 (16.5%).</p> <p><b>AO1.7</b> Where for accommodation activities or reconfiguration of a lot in a High landscape value area, development demonstrates that the height, design, scale, positioning on-site, proposed construction materials and external finishes are compatible with the landscape values.</p> <p>Note - A visual impact assessment undertaken in accordance with Planning scheme policy SC6.6 – Landscape values may be required.</p> <p><b>AO1.8</b> Advertising devices do not occur.</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>

Performance outcomes	Acceptable outcomes	Applicant response
<b>Development within the Medium landscape value area</b>		
<p><b>PO2</b> Development within Medium landscape value areas identified on the Landscape values overlay maps contained in Schedule 2:</p> <p>(a) avoids detrimental impacts on the landscape values of forested skylines, visible hillslopes, ridgelines, the coastal foreshore or the shoreline of other water bodies through the loss of vegetation;</p> <p>(b) is effectively screened from view from a road, lookout or other public place by an existing natural landform or native vegetation, or will be effectively screened by native vegetation within 5 years of construction;</p> <p>(c) retains existing vegetation and incorporates new landscaping to enhance existing vegetation and visually soften built form elements;</p> <p>(d) incorporates development of a scale, design, height, position on site, construction materials and external finishes that are compatible with the landscape values of the locality;</p> <p>(e) avoids detrimental impacts on landscape values and excessive changes to the natural landform as a result of the location, position on site, scale, design and alignment of earthworks, roads, driveways, retaining walls and other on-ground or in-ground infrastructure;</p> <p>(f) avoids detrimental impacts on landscape values and views as a result of the location, position on site, scale, design and alignment of telecommunications facilities, electricity towers, poles and lines and other tall infrastructure;</p> <p>(g) extractive industry operations are avoided, or where they cannot be avoided, are screened from view.</p>	<p><b>AO2.1</b> Buildings and structures are not more than 8.5 metres and two storeys in height.</p> <p>Note - Height is inclusive of the roof height.</p>	N/A
	<p><b>AO2.2</b> Development is screened from view from roads or other public places by an existing natural landform or an existing native vegetation buffer.</p>	N/A
	<p><b>AO2.3</b> Where development on land steeper than 1 in 6 (16.6%) cannot be avoided:</p> <p>(a) development follows the natural; contours of the site;</p> <p>(b) buildings are split level or suspended floor construction, or a combination of the two;</p> <p>(c) lightweight materials are used to areas with suspended floors.</p> <p>Note - Examples of suitable lightweight materials include timber or fibre cement boards or sheeting for walls and factory treated metal sheeting for walls and roofs.</p>	N/A
	<p><b>AO2.4</b> The external features, walls and roofs of buildings and structures have a subdued and non-reflective palette.</p> <p>Note - Examples of suitable colours include shades of green, olive green, blue green, grey green, green blue, indigo, brown, blue grey, and green yellow.</p>	N/A
	<b>AO2.5</b>	N/A

Performance outcomes	Acceptable outcomes	Applicant response
<p>Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.</p>	<p>No clearing of native vegetation occurs on land with a slope greater than 1 in 6 (16.6%).</p> <p><b>AO2.6</b> Advertising devices do not occur.</p>	N/A
<b>Development within a Scenic route buffer / view corridor area</b>		
<p><b>PO3</b> Development within a Scenic route buffer / view corridor area as identified on the Landscape values overlay maps contained in Schedule 2:</p> <ul style="list-style-type: none"> <li>(a) retains visual access to views of the surrounding landscape, the sea and other water bodies;</li> <li>(b) retains existing vegetation and incorporates landscaping to visually screen and soften built form elements whilst not impeding distant views or view corridors;</li> <li>(c) incorporates building materials and external finishes that are compatible with the visual amenity and the landscape character;</li> <li>(d) minimises visual impacts on the setting and views in terms of: <ul style="list-style-type: none"> <li>(i) the scale, height and setback of buildings;</li> <li>(ii) the extent of earthworks and impacts on the landform including the location and configuration of access roads and driveways;</li> <li>(iii) the scale, extent and visual prominence of advertising devices.</li> </ul> </li> </ul> <p>Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.</p>	<p><b>AO3.1</b> Where within a Scenic route buffer / view corridor area, the height of buildings and structures is not more than identified within the acceptable outcomes of the applicable zone code.</p> <p><b>AO3.2</b> No clearing of native vegetation is undertaken within a Scenic route buffer area.</p> <p><b>AO3.3</b> Where within a Scenic route buffer / view corridor area development is set back and screened from view from a scenic route by existing native vegetation with a width of at least 10 metres and landscaped in accordance with the requirements of the landscaping code.</p> <p><b>AO3.4</b> Development does not result in the replacement of, or creation of new, additional, or enlarged advertising devices.</p>	<p>It is understood that the view corridor area which affects the site is associated with the lookout on Flagstaff Hill. The proposal, while exceeding the AO for building height in the Tourist Accommodation Zone, is not visible in this view corridor. Also, refer to Visual Impact Assessment prepared by Planning Plus.</p> <p>As above, clearing of vegetation does not impact the view corridor.</p> <p>The proposal is not located within a scenic route buffer and is not visible from Davidson Street/Macrossan Street intersection.</p> <p>N/A</p>
<b>Development within the Coastal scenery area</b>		



Performance outcomes	Acceptable outcomes	Applicant response
<p><b>PO4</b> The landscape values of the Coastal scenery zone as identified on the Landscape values overlay maps contained in Schedule 2 are managed to integrated and limit the visual impact of development.</p> <p>Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.</p>	<p><b>AO4.1</b> The dominance of the natural character of the coast is maintained or enhanced when viewed from the foreshore.</p> <p><b>AO4.2</b> Where located adjacent to the foreshore buildings and structures are setback: (a) Where no adjoining development, a minimum of 50 metres from the coastal high water mark and the setback area is landscaped with a native vegetation buffer that has a minimum width of 25 metres; or (b) Where there is adjoining development, setbacks will be consistent with that of adjoining buildings and structures, but not less than 10 metres from the coastal high water mark. The setback area is landscaped in accordance with the requirements of the Landscaping code.</p> <p><b>AO4.3</b> Where separated from the foreshore by land contained within public ownership (e.g. unallocated State land, esplanade or other public open space), buildings and structures area setback: (a) where no adjoining development, a minimum of 6 metres from the coastward property boundary. The setback area is landscaped in accordance with the requirements of the Landscaping code; or (b) where there is adjoining development, setbacks will be consistent with that of adjoining buildings and structures. The</p>	<p>The proposal will be screened by significant amounts of vegetation to the east of the Esplanade road reserve when viewed from the shoreline.</p> <p>Proposal is set back greater than 50m from the shoreline.</p> <p>Proposed setbacks are consistent with adjoining development to the south.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	setback area is landscaped in accordance with the requirements of the Landscaping code.	
<p><b>PO5</b> Development is to maximise opportunities to maintain and/or enhance natural landscape values through the maintenance and restoration of vegetated buffers between development and coastal waters, where practical.</p> <p>Note – A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in satisfaction of a performance outcome.</p>	<p><b>AO5</b> No clearing of native vegetation is undertaken within a Coastal scenery area zone, except for exempt vegetation damage undertaken in accordance with the Vegetation management code.</p>	<p>The subject site is included in the Tourist Accommodation Zone and is therefore anticipated for urban development, so AO5 is impractical in this instance. It is noted however that the proposal will include significant landscaping of the Esplanade road reserve to the east of the site so as to enhance natural landscape values of the buffer between the development and the coast.</p>

## Potential landslide hazard overlay code

### Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Potential landslide hazard overlay; if
  - (a) self-assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
  - (b) impact assessable development.
- (2) Land in the Potential landslip hazard overlay is identified on the Potential landslide hazard overlay maps in Schedule 2 and includes the following sub-categories:
  - (a) Places of potential landslide hazard sub-category.
- (3) When using this code, reference should be made to Part 5.

Note – The Potential landslide hazard overlay shows modelled areas where the factors contributing to landslip potential accumulate to provide a moderate or higher risk if certain factors are exacerbated (e.g. factors include significant vegetation clearing, filling and excavation, changes to soil characteristics, changes to overland water flow, or changes to sub-surface water flow). It shows areas that the Council has identified where landslides may occur and where land may be impacted by a landslide, but does not mean that landslides will occur or that the land will be impacted by a landslide. Other areas not contained within the potential landslide hazard overlay may sustain landslides or be impacted by landslides and consideration should be given to this issue, where appropriate.

### Purpose

- (1) The purpose of the Potential landslide hazard overlay code is:
  - (a) implement the policy direction of the Strategic Framework, in particular:
    - (i) Theme 1: Settlement pattern Element 3.4.7 Mitigation of hazards.
  - (b) enable an assessment of whether development is suitable on land within the Potential landslip hazard overlay.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) development is located, designed and constructed to not put at risk the safety of people, property and the environment;
  - (b) development is not at risk from and does not pose a risk to adjacent and nearby sites from landslides;
  - (c) ensures that community infrastructure is protected from the effects of potential landslides;
  - (d) ensures that vegetation clearing, stormwater management and filling and/or excavation does not create a landslide hazard and/or rectifies potential pre-existing landslide risks;

- (e) development does not occur where works to provide a solution for safety of people, property or the environment involves complex engineering solutions to overcome the risk, or would result in a built form or outcome that causes an adverse visual impact on the Hillslopes or Landscape values of Douglas Shire.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Potential landslide hazard overlay code – assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
<b>For self-assessable and assessable development</b>		
<b>PO1</b> The siting and design of development does not involve complex engineering solutions and does not create or increase the potential landslide hazard risk to the site or adjoining premises through: (a) building design; (b) increased slope; (c) removal of vegetation; (d) stability of soil; (e) earthworks; (f) alteration of existing ground water or surface water paths; (g) waste disposal areas.	<b>AO1.1</b> Development is located on that part of the site not affected by the Potential landslide hazard overlay.  or  <b>AO1.2</b> Development is on an existing stable, benched site and requires no further earthworks  or  <b>AO1.3</b> A competent person certifies that: (a) the stability of the site, including associated buildings and infrastructure, will be maintained during the course of the development and will remain stable for the life of the development; (b) development of the site will not increase the risk of landslide hazard activity on other land, including land above the site; (c) the site is not subject to the risk of landslide activity on other land; (d) any measures identified in a site-specific geotechnical report for stabilising the site or development have been fully implemented;	Refer to Geotechnical Investigation Report prepared by GEO Design.

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(e) development does not concentrate existing ground water and surface water paths;</p> <p>(f) development does not incorporate on-site waste water disposal.</p> <p>Note – Planning scheme policy SC6.9 – Natural hazards provides guidance on preparing a site specific geo-technical assessment.</p> <p>Note – Development may alter the conditions of ground water and surface water paths in accordance with a site-specific geotechnical report, but should ensure that its final disbursement is as-per pre-developed conditions.</p> <p>Consideration for location, velocity, volume and quality should be given.</p>	
<p><b>PO2</b></p> <p>The siting and design of necessary retaining structures does not cause an adverse visual impact on landscape character or scenic amenity quality of the area.</p>	<p><b>A02</b></p> <p>Excavation or fill:</p> <p>(a) is not more than 1.2 metres in height for each batter or retaining wall;</p> <p>(b) is setback a minimum of 2 metres from property boundaries;</p> <p>(c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping;</p> <p>(d) does not exceed a maximum of 3 batters and 3 berms (i.e. Not greater than 3.6 metres in height) on any one lot.</p>	<p>Refer to Geotechnical Investigation Report prepared by GEO Design and Visual Impact Assessment prepared by Planning Plus.</p>
Additional requirements for Community infrastructure		



Performance outcomes	Acceptable outcomes	Applicant response
<b>PO3</b> Development for community infrastructure: (a) is not at risk from the potential landslide hazard areas; (b) will function without impediment from a landslide; (c) provides access to the infrastructure without impediment from the effects of a landslide; (d) does not contribute to an elevated risk of a landslide to adjoining properties.	<b>AO3</b> Development is designed in accordance with the recommendations of a site-specific geotechnical assessment which makes reference to the community infrastructure and its needs and function.  Note - A site specific geotechnical assessment will detail requirements that will address the Acceptable Outcomes of this Performance Outcome. Planning scheme policy SC6.9 – Natural hazards provides guidance on preparing a site specific geotechnical assessment.	N/A

## Transport network overlay code

### Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Transport network overlay; if:
  - (a) self-assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
  - (b) impact assessable development.
- (2) Land within the Transport network overlay is identified on the Transport network (Road Hierarchy) overlay map and the Transport network (Pedestrian and Cycle) overlay map in Schedule 2 and includes the following sub-categories:
  - (a) Transport network (Road Hierarchy) overlay sub-categories:
    - (i) State controlled road sub-category;
    - (ii) Sub-arterial road sub-category;
    - (iii) Collector road sub-category;
    - (iv) Access road sub-category;
    - (v) Industrial road sub-category;
    - (vi) Major rural road sub-category;
    - (vii) Minor rural road sub-category;
    - (viii) Unformed road sub-category;
    - (ix) Major transport corridor buffer area sub-category.
  - (b) Transport network (Pedestrian and Cycle) overlay sub-categories:
    - (i) Principal route;
    - (ii) Future principal route;
    - (iii) District route;
    - (iv) Neighbourhood route;
    - (v) Strategic investigation route.
- (3) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Transport network overlay code is to:
  - (a) implement the policy direction of the Strategic Framework, in particular:

- (i) Theme 1: Settlement pattern Element 3.4.2 Urban settlement, Element 3.4.3 Activity centres;
- (ii) Theme 6: Infrastructure and transport Element 3.9.4 Transport;
- (b) enable an assessment of whether development is suitable on land within the Transport network overlay.

- (2) The purpose of the code will be achieved through the following overall outcomes:
- (a) development provides for transport infrastructure (including active transport infrastructure);
  - (b) development contributes to a safe and efficient transport network;
  - (c) development supports the existing and future role and function of the transport network;
  - (d) development does not compromise the safety and efficiency of major transport infrastructure and facilities.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Transport network overlay code – assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
<b>For assessable development</b>		
<p><b>PO1</b> Development supports the road hierarchy for the region.</p> <p>Note -A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.</p>	<p><b>AO1.1</b> Development is compatible with the intended role and function of the transport network as identified on the Transport network overlay maps contained in Schedule 2.</p> <p><b>AO1.2</b> Development does not compromise the safety and efficiency of the transport network.</p> <p><b>AO1.3</b> Development is designed to provide access via the lowest order road, where legal and practicable access can be provided to that road.</p>	<p>Proposal complies.</p> <p>Proposal complies.</p> <p>Proposal complies.</p>
<p><b>PO2</b> Transport infrastructure is provided in an integrated and timely manner.</p>	<p><b>AO2</b> Development provides infrastructure (including improvements to existing infrastructure) in accordance with:</p>	<p>Proposal complies.</p>

Performance outcomes	Acceptable outcomes	Applicant response
Note - A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.	<p>(a) the Transport network overlay maps contained in Schedule 2;</p> <p>(b) any relevant Local Plan.</p> <p>Note – The Translink Public Transport Infrastructure Manual provides guidance on the design of public transport facilities.</p>	
<p><b>PO3</b></p> <p>Development involving sensitive land uses within a major transport corridor buffer area is located, designed and maintained to avoid or mitigate adverse impacts on amenity for the sensitive land use.</p>	<p><b>AO3</b></p> <p>No acceptable outcomes are prescribed.</p> <p>Note – Part 4.4 of the Queensland Development Code provides requirements for residential building design in a designated transport noise corridor.</p>	N/A
<p><b>PO4</b></p> <p>Development does not compromise the intended role and function or safety and efficiency of major transport corridors.</p> <p>Note - A Traffic impact assessment report prepared in accordance with Planning scheme policy SC6.10 - Parking and access is one way to demonstrate achievement of the Performance Outcomes.</p>	<p><b>AO4.1</b></p> <p>Development is compatible with the role and function (including the future role and function) of major transport corridors.</p> <p><b>AO4.2</b></p> <p>Direct access is not provided to a major transport corridor where legal and practical access from another road is available.</p> <p><b>AO4.3</b></p> <p>Intersection and access points associated with major transport corridors are located in accordance with:</p> <p>(a) the Transport network overlay maps contained in Schedule 2; and</p> <p>(b) any relevant Local Plan.</p> <p><b>AO4.4</b></p> <p>The layout of development and the design of the associated access is compatible with</p>	<p>N/A</p> <p>.</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>





## Access, parking and servicing code

### Application

- (1) This code applies to assessing:
  - (a) operational work which requires a compliance assessment as a condition of a development permit; or
  - (b) a material change of use or reconfiguring a lot if:
    - (i) self-assessable or assessable development where this code is identified in the assessment criteria column of the table of assessment;
    - (ii) impact assessable development, to the extent relevant.
- (2) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Access, parking and servicing code is to assess the suitability of access, parking and associated servicing aspects of a development.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) sufficient vehicle parking is provided on-site to cater for all types of vehicular traffic accessing and parking on-site, including staff, guests, patrons, residents and short term delivery vehicles;
  - (b) sufficient bicycle parking and end of trip facilities are provided on-site to cater for customer and service staff;
  - (c) on-site parking is provided so as to be accessible and convenient, particularly for any short term uses;
  - (d) development provides walking and cycle routes through the site which link the development to the external walking and cycling network;
  - (e) the provision of on-site parking, loading / unloading facilities and the provision of access to the site do not impact on the efficient function of street network or on the area in which the development is located;
  - (f) new vehicular access points are safely located and are not in conflict with the preferred ultimate streetscape character and local character and do not unduly disrupt any current or future on-street parking arrangements.

### Criteria for assessment

Table Error! No text of specified style in document..a – Access, parking and servicing code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
<b>For self-assessable and assessable development</b>		
<b>PO1</b> Sufficient on-site car parking is provided to cater for the amount and type of vehicle traffic expected to be	<b>AO1.1</b> The minimum number of on-site vehicle parking spaces is not less than the number prescribed in	Proposal exceeds requirements of  Table Error! No text of specified style in document..b.

Performance outcomes	Acceptable outcomes	Applicant response
<p>generated by the use or uses of the site, having particular regard to:</p> <ul style="list-style-type: none"> <li>(a) the desired character of the area;</li> <li>(b) the nature of the particular use and its specific characteristics and scale;</li> <li>(c) the number of employees and the likely number of visitors to the site;</li> <li>(d) the level of local accessibility;</li> <li>(e) the nature and frequency of any public transport serving the area;</li> <li>(f) whether or not the use involves the retention of an existing building and the previous requirements for car parking for the building;</li> <li>(g) whether or not the use involves a heritage building or place of local significance;</li> <li>(h) whether or not the proposed use involves the retention of significant vegetation.</li> </ul>	<p>Table <b>Error! No text of specified style in document..b</b> for that particular use or uses.</p> <p>Note - Where the number of spaces calculated from the table is not a whole number, the number of spaces provided is the next highest whole number.</p> <p><b>AO1.2</b> Car parking spaces are freely available for the parking of vehicles at all times and are not used for external storage purposes, the display of products or rented/sub-leased.</p> <p><b>AO1.3</b> Parking for motorcycles is substituted for ordinary vehicle parking to a maximum level of 2% of total ordinary vehicle parking.</p> <p><b>AO1.4</b> For parking areas exceeding 50 spaces parking, is provided for recreational vehicles as a substitute for ordinary vehicle parking to a maximum of 5% of total ordinary vehicle parking rate.</p>	<p>Proposal complies,</p> <p>N/A</p> <p>N/A</p>
<p><b>PO2</b> Vehicle parking areas are designed and constructed in accordance with relevant standards.</p>	<p><b>AO2</b> Vehicle parking areas are designed and constructed in accordance with Australian Standard: (a) AS2890.1; AS2890.3; AS2890.6.</p>	<p>Proposal complies or is capable of complying.</p>
<p><b>PO3</b> Access points are designed and constructed: (a) to operate safely and efficiently;</p>	<p><b>AO3.1</b></p>	<p>Proposal complies or is capable of complying.</p>



Performance outcomes	Acceptable outcomes	Applicant response
	<p>directed into the hill, for vehicle safety and drainage purposes;</p> <p>(d) constructed such that the transitional change in grade from the road to the lot is fully contained within the lot and not within the road reserve;</p> <p>(e) designed to include all necessary associated drainage that intercepts and directs storm water runoff to the storm water drainage system.</p> <p><b>AO3.4</b> Surface construction materials are consistent with the current or intended future streetscape or character of the area and contrast with the surface construction materials of any adjacent footpath.</p>	Proposal is capable of complying.
<p><b>P04</b> Sufficient on-site wheel chair accessible car parking spaces are provided and are identified and reserved for such purposes.</p>	<p><b>AO4</b> The number of on-site wheel chair accessible car parking spaces complies with the rates specified in AS2890 Parking Facilities.</p>	N/A
<p><b>P05</b> Access for people with disabilities is provided to the building from the parking area and from the street.</p>	<p><b>AO5</b> Access for people with disabilities is provided in accordance with the relevant Australian Standard.</p>	N/A
<p><b>P06</b> Sufficient on-site bicycle parking is provided to cater for the anticipated demand generated by the development.</p>	<p><b>AO6</b> The number of on-site bicycle parking spaces complies with the rates specified in</p> <p>Table <a href="#">Error! No text of specified style in document..b.</a></p>	Proposal complies or is capable of complying.
<b>P07</b>	<b>AO7.1</b>	N/A

Performance outcomes	Acceptable outcomes	Applicant response
<p>Development provides secure and convenient bicycle parking which:</p> <ul style="list-style-type: none"> <li>(a) for visitors is obvious and located close to the building's main entrance;</li> <li>(b) for employees is conveniently located to provide secure and convenient access between the bicycle storage area, end-of-trip facilities and the main area of the building;</li> <li>(c) is easily and safely accessible from outside the site.</li> </ul>	<p>Development provides bicycle parking spaces for employees which are co-located with end-of-trip facilities (shower cubicles and lockers);</p> <p><b>A07.2</b> Development ensures that the location of visitor bicycle parking is discernible either by direct view or using signs from the street.</p> <p><b>A07.3</b> Development provides visitor bicycle parking which does not impede pedestrian movement.</p>	<p>N/A</p> <p>N/A</p>
<p><b>PO8</b> Development provides walking and cycle routes through the site which:</p> <ul style="list-style-type: none"> <li>(a) link to the external network and pedestrian and cyclist destinations such as schools, shopping centres, open space, public transport stations, shops and local activity centres along the safest, most direct and convenient routes;</li> <li>(b) encourage walking and cycling;</li> <li>(c) ensure pedestrian and cyclist safety.</li> </ul>	<p><b>A08</b> Development provides walking and cycle routes which are constructed on the carriageway or through the site to:</p> <ul style="list-style-type: none"> <li>(a) create a walking or cycle route along the full frontage of the site;</li> <li>(b) connect to public transport and existing cycle and walking routes at the frontage or boundary of the site.</li> </ul>	<p>Proposal complies.</p>
<p><b>PO9</b> Access, internal circulation and on-site parking for service vehicles are designed and constructed:</p> <ul style="list-style-type: none"> <li>(a) in accordance with relevant standards;</li> <li>(b) so that they do not interfere with the amenity of the surrounding area;</li> <li>(c) so that they allow for the safe and convenient movement of pedestrians, cyclists and other vehicles.</li> </ul>	<p><b>A09.1</b> Access driveways, vehicle manoeuvring and on-site parking for service vehicles are designed and constructed in accordance with AS2890.1 and AS2890.2.</p> <p><b>A09.2</b> Service and loading areas are contained fully within the site.</p> <p><b>A09.3</b> The movement of service vehicles and service operations are designed so they:</p>	<p>Proposal complies or is capable of complying.</p> <p>N/A</p> <p>N/A</p>





Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
Agricultural supplies store	1 space per 50m <sup>2</sup> of GFA and outdoor display area.	1 space per 200m <sup>2</sup> of GFA.	n/a	LRV
Air services	1 car space per 20m <sup>2</sup> of covered reception area, plus 1 car space per 2 staff, plus a covered bus set down area adjacent to the entry of the reception area and 2 bus parking spaces.	n/a	n/a	LRV
Bulk landscape supplies	1 space per 50m <sup>2</sup> GFA and outdoor display area.	1 space per 200m <sup>2</sup> of GFA.	n/a	MRV
Caretaker's accommodation	A minimum of 1 space	n/a	n/a	n/a
Child care centre	1 space per 10 children to be used for setting down and picking up of children, with a minimum of 3 car spaces to be provided for set down and collection; plus 1 space per employee. Any drive-through facility can provide tandem short term parking for 3 car spaces for setting down/picking up of children, on the basis that a passing lane is provided and line-marked to be kept clear of standing vehicles at all times.	n/a	n/a	VAN
Club	Unlicensed clubrooms: 1 space per 45m <sup>2</sup> of GFA. Licensed clubrooms: 1 space per 15m <sup>2</sup> of GFA.	1 space per 4 employees.	n/a	Licensed and equal or greater than 1500m <sup>2</sup> : RCV Other: VAN
Community care centre	1 space per 20m <sup>2</sup> of GFA.	A minimum of 1 space.	n/a	RCV
Community residence	A minimum of 2 spaces.	A minimum of 1 space.	n/a	VAN
Community use	1 space per 15m <sup>2</sup> GFA.	1 space per 100m <sup>2</sup> of GFA.	n/a	RCV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
Dual occupancy	A minimum of 2 spaces per dwelling unit which may be in tandem with a minimum of 1 covered space per dwelling unit.	n/a	n/a	n/a
Dwelling house	A minimum of 2 spaces which may be in tandem plus 1 space for a secondary dwelling	n/a	n/a	n/a
Dwelling unit	1.5 spaces per one or two bedroom unit; or 2 spaces per three bedroom unit.	n/a	n/a	n/a
Educational establishment	Primary school or secondary schools: 1 car space per 2 staff members, plus provision of space to be used for setting down and picking up of students. Tertiary and further education: 1 car space per 2 staff members, plus 1 car space per 10 students, plus provision of space to be used for setting down and picking up of students.	Primary school or secondary schools: 1 space per 5 students over year 4. Tertiary and further education: 2 spaces per 50 full time students.	Required for all educational establishments with a GFA greater than 2000m <sup>2</sup> .	RCV
Food and drink outlet	1 space per 25m <sup>2</sup> GFA and outdoor dining area. or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m <sup>2</sup> of GFA, and outdoor dining area.	1 space per 100m <sup>2</sup> of GFA, and outdoor dining area.	n/a	See Table Error! No text of specified style in document..d
Function facility	1 space per 15m <sup>2</sup> GFA.	1 space per 100m <sup>2</sup> of GFA.	n/a	RCV
Funeral parlour	1 space per 15m <sup>2</sup> GFA.	n/a	n/a	RCV
Garden centre	1 space per 50m <sup>2</sup> GFA and outdoor display area	1 space per 200m <sup>2</sup> of GFA.	n/a	AV
Hardware and trade supplies	1 space per 50m <sup>2</sup> GFA and outdoor display area	1 space per 200m <sup>2</sup> of GFA.	n/a	AV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
Health care services	1 space per 20m <sup>2</sup> of GFA.	1 space per 100m <sup>2</sup> of GFA.	Required for all health care services with a GFA greater than 2000m <sup>2</sup> .	VAN
High impact industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	AV
Home based business	The parking required for the dwelling house, plus 1 space per bedroom where the Home based business involves the provision of accommodation; or 1 space per 25m <sup>2</sup> GFA for any other Home Based Business.	n/a	n/a	n/a
Hospital	The greater of 1 space per 2 bedrooms or 1 space per 4 beds; plus 1 car space for ambulance parking, designated accordingly.	1 space per 100m <sup>2</sup> of GFA.	Required for all hospitals with a GFA greater than 2000m <sup>2</sup> .	RCV
Hotel	1 space per 10m <sup>2</sup> GFA and licensed outdoor area; plus For 1 space per 50m <sup>2</sup> GFA of floor area of liquor barn or bulk liquor sales area; plus, if a drive in bottle shop is provided, queuing lane/s on site for 12 vehicles. Note - Use standard for any Short Term Accommodation for hotel accommodation use.	1 space per 100m <sup>2</sup> of GFA.	n/a	LRV
Indoor sport and recreation	Squash court or another court game: 4 spaces per court. Basketball, netball, soccer, cricket: 25 spaces per court / pitch. Ten pin bowling: 3 spaces per bowling lane. Gymnasium: 1 space per 15m <sup>2</sup> of GFA.	1 space per 4 employees.	n/a	RCV
Low impact industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	AV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
Marine industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	AV
Medium impact industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	AV
Multiple dwelling	If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie Local plan: 1 car space per dwelling unit. If outside Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie Local plan: 1.5 car spaces per dwelling unit In all cases 60% of the car parking area is to be covered.	1 bicycle space per 3 units and 1 visitor bicycle space per 12 units.	n/a	RCV (over 10 units)
Office	1 space per 25m <sup>2</sup> of GFA or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m <sup>2</sup> of GFA	1 space per 200m <sup>2</sup> GFA	Required for all office development with a GFA greater than 2000m <sup>2</sup> .	See Table Error! No text of specified style in document..e
Outdoor sales	1 space per 50m <sup>2</sup> GFA and outdoor display area	1 space per 200m <sup>2</sup> of GFA.	n/a	AV
Outdoor sport and recreation	Coursing, horse racing, pacing, trotting: 1 space per 5 seated spectators, plus 1 space per 5m <sup>2</sup> of other spectator areas.  Football: 50 spaces per field.  Lawn bowls: 30 spaces per green.  Swimming pool: 15 spaces; plus	Football: 5 space per field.  Lawn bowls: 5 spaces per green.  Swimming pool: 1 space per swimming lane.  Tennis court or other court game:	n/a	RCV



Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	<p>1 space per 100m<sup>2</sup> of useable site area.</p> <p>Tennis court or other court game: 4 spaces per court. Golf course: 4 spaces per tee on the course.</p> <p>Note - Use standard for Club for clubhouse component.</p>	<p>4 space per court.</p> <p>Golf course: 1 space per 15m<sup>2</sup> of GFA for clubhouse component.</p>		
Place of worship	1 space per 15m <sup>2</sup> of GFA.	1 space per 100m <sup>2</sup> of GFA.	n/a	LRV
Relocatable home park	1 space per relocatable home site; plus 0.1 space per relocatable home site for visitor parking; plus 1 space for an on-site manager	n/a	n/a	LRV
Research and technology industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	MRV
Residential care facility	1 visitor car space per 5 bedroom units; plus 1 car space per 2 staff members	n/a	n/a	LRV
Resort complex	<p>Use standard for relevant standard for each component.</p> <p>For example: Use Short Term Accommodation standard for accommodation component and Food and Drink Outlet for restaurant component.</p>	<p>Use standard for relevant standard for each component.</p> <p>For example: Use Short Term Accommodation standard for accommodation component and Food and Drink Outlet for restaurant component.</p>	n/a	RCV
Retirement facility	1 space per dwelling unit;	n/a	n/a	LRV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	plus 1 visitor space per 5 dwelling units; plus 1 visitor car space per 10 hostel units, nursing home or similar beds, plus 1 car space per 2 staff members; plus 1 car parking space for ambulance parking.			
Sales office	A minimum of 1 space.	n/a	n/a	n/a
Service industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	SRV
Service station	1 space per 25m <sup>2</sup> of GFA	n/a	n/a	AV
Shop	1 space per 25m <sup>2</sup> of GFA. or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m <sup>2</sup> of GFA.	1 space per 100m <sup>2</sup> of GFA.	Required for all shops with a GFA greater than 2000m <sup>2</sup> .	See Table Error! No text of specified style in document..d
Shopping centre	1 space per 25m <sup>2</sup> of GFA. or If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan or if with Precinct 5: Town centre precinct in the Mossman local plan: 1 space per 50m <sup>2</sup> of GFA.	1 space per 200m <sup>2</sup> GFA.	Required for all shopping centres with a GFA greater than 2000m <sup>2</sup> .	See Table Error! No text of specified style in document..d
Short term accommodation	If within Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan: 0.5 car spaces per dwelling unit.  If outside Precinct 1 : Port Douglas precinct in the Port Douglas / Craiglie local plan: For up to 5 units: 1 car space per dwelling unit, plus 1 space for visitors and 1 service/staff spaces. For 5 – 10 units: 1 car space per dwelling unit, plus 2 spaces for visitors and 1 service/staff spaces.	1 space per 10 rooms	n/a	SRV

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
	<p>For over 10 units: 0.75 car spaces per dwelling unit, plus 3 spaces for visitors and 2 service/staff parking for the first 10 units and 0.5 additional service/staff space per 10 units, there-above.</p> <p>In all cases 60% of the car parking area is to be covered.</p> <p>Note: Where Short term accommodation is to be inter-changeable with a Multiple dwelling land use, multiple dwelling parking rates apply.</p>			
Showroom	1 space per 50m <sup>2</sup> GFA.	1 space per 200m <sup>2</sup> GFA.	n/a	AV
Special industry	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	AV
Tourist park	1 car space per caravan site, tent site or cabin; plus 1 visitor car space per 10 caravan sites, tent sites or cabins; plus 1 car space for an on-site manager.	n/a	n/a	LRV
Theatre	<p>Indoor: 1 space per 15m<sup>2</sup> of GFA.</p> <p>Outdoor cinema: 1 space per 5m<sup>2</sup> of designated viewing area, plus 1 car space per 2 employees.</p>	1 space per 200m <sup>2</sup> GFA.	n/a	VAN
Veterinary services	1 space per 50m <sup>2</sup> of GFA.	n/a	n/a	VAN
Warehouse	1 space per 90m <sup>2</sup> of GFA.	n/a	n/a	Where self-storage: RCV Other: AV
Any use not otherwise specified in this table.	Sufficient spaces to accommodate number of vehicles likely to be parked at any one time.	Sufficient spaces to accommodate number		To be determined

Land use	Minimum number of ordinary vehicle parking spaces	Minimum number of bicycle spaces	End of trip facilities	Minimum standard design service vehicle (refer to Table 9.4.1.3c)
		of vehicles likely to be parked at any one time.		

**Table Error! No text of specified style in document..c – Design vehicles**

<b>VAN</b>	A 99.8th percentile vehicle equivalent to a large car.
<b>SRV</b>	Small rigid vehicle as in AS2890.2-2002 parking facilities – Off-street commercial vehicle facilities, but incorporating a body width of 2.33m
<b>MRV</b>	Medium rigid vehicle equivalent to an 8-tonne truck.
<b>LRV</b>	Large rigid vehicle described by AS2890.2-2002 parking facilities – Off-street commercial vehicle facilities as heavy rigid vehicle.
<b>RCV</b>	Industrial refuse collection vehicle
<b>AV</b>	19 metre articulated vehicle from AUSTROADS

**Table Error! No text of specified style in document..d – Standard number of service bays required for Food and drink outlet, Shop or Shopping centre**

Gross floor area (m <sup>2</sup> )	Service bays required			
	<b>VAN</b>	<b>SRV</b>	<b>MRV</b>	<b>LRV</b>
0-199	-	1	-	-
200 – 599	1	-	1	-
600 – 999	1	1	1	-
1000 – 1499	2	1	1	-
1500 – 1999	2	2	1	-
2000 – 2799	2	2	2	-
2800 – 3599	2	2	2	1
3600 and over	To be determined via a parking study.			

**Table Error! No text of specified style in document..e – Standard number of service bays required for Office**

Gross floor area (m <sup>2</sup> )	Service bays required			
	VAN	SRV	MRV	LRV
0-999	-	1	-	-
1000 – 2499	1	-	1	-
2500 – 3999	2	1	1	-
4000 – 5999	3	1	1	-
6000 – 7999	4	1	1	-
8000 – 9999	4	2	1	-
10000 and over	To be determined via a parking study.			



## Environmental performance code

### Application

- (1) This code applies to assessing:
  - (a) building work for outdoor lighting;
  - (b) a material change of use or reconfiguring a lot if:
    - (i) assessable development where the code is identified in the assessment criteria column of a table of assessment; or
    - (ii) impact assessable development, to the extent relevant.

Note – Where for the purpose of lighting a tennis court in a Residential zone, a compliance statement prepared by a suitably qualified person must be submitted to Council with the development application for building work.

- (2) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Environmental performance code is to ensure development is designed and operated to avoid or mitigate impacts on sensitive receiving environments.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) activities that have potential to cause an adverse impact on amenity of adjacent and surrounding land, or environmental harm is avoided through location, design and operation of the development;
  - (b) sensitive land uses are protected from amenity related impacts of lighting, odour, airborne particles and noise, through design and operation of the development;
  - (c) stormwater flowing over, captured or discharged from development sites is of a quality adequate to enter receiving waters and downstream environments;
  - (d) development contributes to the removal and ongoing management of weed species.

### Criteria for assessment

Table Error! No text of specified style in document..a – Environmental performance code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
<b>Lighting</b>		
<b>PO1</b>	<b>AO1.1</b>	Proposal is capable of complying.

Performance outcomes	Acceptable outcomes	Applicant response
Lighting incorporated within development does not cause an adverse impact on the amenity of adjacent uses and nearby sensitive land uses.	<p>Technical parameters, design, installation, operation and maintenance of outdoor lighting comply with the requirements of Australian standard AS4282-1997 Control of the obtrusive effects of outdoor lighting.</p> <p><b>AO1.2</b> Development that involves flood lighting is restricted to a type that gives no upward component of light where mounted horizontally.</p> <p><b>AO1.3</b> Access, car parking and manoeuvring areas are designed to shield nearby residential premises from impacts of vehicle headlights.</p>	<p>Proposal is capable of complying.</p> <p>Proposal complies.</p>
<b>Noise</b>		
<p><b>PO2</b> Potential noise generated from the development is avoided through design, location and operation of the activity. Note – Planning Scheme Policy SC6.4 – Environmental management plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the code.</p>	<p><b>AO2.1</b> Development does not involve activities that would cause noise related environmental harm or nuisance; or <b>AO2.2</b> Development ensures noise does not emanate from the site through the use of materials, structures and architectural features to not cause an adverse noise impact on adjacent uses.</p> <p><b>AO2.3</b> The design and layout of development ensures car parking areas avoid noise impacting directly on adjacent sensitive land uses through one or more of the following: (a) car parking is located away from adjacent sensitive land uses;</p>	<p>Proposal complies.</p> <p>Proposal complies.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>(b) car parking is enclosed within a building;</p> <p>(c) a noise ameliorating fence or structure is established adjacent to car parking areas where the fence or structure will not have a visual amenity impact on the adjoining premises;</p> <p>(d) buffered with dense landscaping.</p> <p>Editor's note - The <i>Environmental Protection (Noise) Policy 2008</i>, Schedule 1 provides guidance on acoustic quality objectives to ensure environmental harm (including nuisance) is avoided.</p>	
<b>Airborne particles and other emissions</b>		
<p><b>PO3</b> Potential airborne particles and emissions generated from the development are avoided through design, location and operation of the activity.</p> <p>Note – Planning Scheme Policy SC6.4 – Environmental management plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the code.</p>	<p><b>AO3.1</b> Development does not involve activities that will result in airborne particles or emissions being generated;</p> <p>or</p> <p><b>AO3.2</b> The design, layout and operation of the development activity ensures that no airborne particles or emissions cause environmental harm or nuisance.</p> <p>Note - examples of activities which generally cause airborne particles include spray painting, abrasive blasting, manufacturing activities and car wash facilities.</p> <p>Examples of emissions include exhaust ventilation from basement or enclosed parking structures, air conditioning/refrigeration ventilation and exhaustion.</p> <p>The <i>Environmental Protection (Air) Policy 2008</i>, Schedule 1 provides guidance on air quality objectives to ensure environmental harm (including nuisance) is avoided.</p>	<p>Proposal complies.</p>

Performance outcomes	Acceptable outcomes	Applicant response
<b>Odours</b>		
<p><b>PO4</b> Potential odour causing activities associated with the development are avoided through design, location and operation of the activity.</p> <p>Note – Planning Scheme Policy SC6.4 – Environmental management plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the code.</p>	<p><b>AO4.1</b> The development does not involve activities that create odorous emissions;</p> <p>or</p> <p><b>AO4.2</b> The use does not result in odour that causes environmental harm or nuisance with respect to surrounding land uses.</p>	<p>Proposal complies.</p>
<b>Waste and recyclable material storage</b>		
<p><b>PO5</b> Waste and recyclable material storage facilities are located and maintained to not cause adverse impacts on adjacent uses.</p> <p>Note – Planning Scheme Policy SC6.4 – Environmental management plans provides guidance on preparing a report to demonstrate compliance with the purpose and outcomes of the code.</p>	<p><b>AO5.1</b> The use ensures that all putrescent waste is stored in a manner that prevents odour nuisance and is disposed of at regular intervals.</p> <p><b>AO5.2</b> Waste and recyclable material storage facilities are located, designed and maintained to not cause an adverse impact on users of the premises and adjacent uses through consideration of:</p> <ul style="list-style-type: none"> <li>(a) the location of the waste and recyclable material storage areas in relation to the noise and odour generated;</li> <li>(b) the number of receptacles provided in relation to the collection, maintenance and use of the receptacles;</li> <li>(c) the durability of the receptacles, sheltering and potential impacts of local climatic conditions;</li> <li>(d) the ability to mitigate spillage, seepage or leakage from receptacles into adjacent</li> </ul>	<p>Proposal complies.</p> <p>Proposal complies.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>areas and sensitive receiving waters and environments.</p> <p>Editor's note - the <i>Environmental Protection (Waste Management) Policy 2008</i> provides guidance on the design of waste containers (receptacles) to ensure environmental harm (including nuisance) is avoided.</p>	
<b>Sensitive land use activities</b>		
<p><b>PO6</b></p> <p>Sensitive land use activities are not established in areas which will receive potentially incompatible impacts on amenity from surrounding, existing development activities and land uses.</p>	<p><b>AO6.1</b></p> <p>Sensitive land use activities are not established in areas that will be adversely impacted upon by existing land uses, activities and potential development possible in an area;</p> <p>or</p> <p><b>AO6.2</b></p> <p>Sensitive land activities are located in areas where potential adverse amenity impacts mitigate all potential impacts through layout, design, operation and maintenance.</p>	<p>Proposed sensitive land uses are appropriately located.</p>
<b>Stormwater quality</b>		
<p><b>PO7</b></p> <p>The quality of stormwater flowing over, through or being discharged from development activities into watercourses and drainage lines is of adequate quality for downstream environments, with respect to:</p> <p>(a) the amount and type of pollutants borne from the activity;</p> <p>(b) maintaining natural stream flows;</p> <p>(c) the amount and type of site disturbance;</p> <p>(d) site management and control measures.</p>	<p><b>AO7.1</b></p> <p>Development activities are designed to ensure stormwater over roofed and hard stand areas is directed to a lawful point of discharge.</p> <p><b>AO7.2</b></p> <p>Development ensures movement of stormwater over the site is not impeded or directed through potentially polluting activities.</p> <p><b>AO7.3</b></p>	<p>Lawful point of discharge is the Esplanade road reserve which includes appropriate stormwater infrastructure.</p> <p>Proposal complies.</p> <p>Proposal is capable of complying.</p>





## Infrastructure works code

### Application

- (1) This code applies to assessing:
  - (a) operational work which requires an assessment as a condition of a development permit or is assessable development if this code is identified in the assessment criteria column of a table of assessment;
  - (b) a material change of use or reconfiguring a lot if:
    - (i) assessable development where this code is identified in the assessment criteria column of the table of assessment;
    - (ii) impact assessable development, to the extent relevant.

Note – The Filling and excavation code applies to operational work for filling and excavation.

- (2) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Infrastructure works code is to ensure that development is safely and efficiently serviced by, and connected to, infrastructure.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) the standards of water supply, waste water treatment and disposal, stormwater drainage, local electricity supply, telecommunications, footpaths and road construction meet the needs of development and are safe and efficient;
  - (b) development maintains high environmental standards;
  - (c) development is located, designed, constructed and managed to avoid or minimise impacts arising from altered stormwater quality or flow, wastewater discharge, and the creation of non-tidal artificial waterways;
  - (d) the integrity of existing infrastructure is maintained;
  - (e) development does not detract from environmental values or the desired character and amenity of an area.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Infrastructure works code –assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
<b>For self-assessable and assessable development</b>		
<b>Works on a local government road</b>		

Performance outcomes	Acceptable outcomes	Applicant response
<p><b>PO1</b> Works on a local government road do not adversely impact on footpaths or existing infrastructure within the road verge and maintain the flow, safety and efficiency of pedestrians, cyclists and vehicles.</p>	<p><b>AO1.1</b> Footpaths/pathways are located in the road verge and are provided for the hierarchy of the road and located and designed and constructed in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual.</p>	Proposal is capable of complying.
	<p><b>AO1.2</b> Kerb ramp crossovers are constructed in accordance with Planning scheme policy SC 5 – FNQROC Regional Development Manual.</p>	Proposal is capable of complying.
	<p><b>AO1.3</b> New pipes, cables, conduits or other similar infrastructure required to cross existing footpaths: (a) are installed via trenchless methods; or (b) where footpath infrastructure is removed to install infrastructure, the new section of footpath is installed to the standard detailed in the Planning scheme policy SC5 – FNQROC Regional Development Manual, and is not less than a 1.2 metre section.</p>	Proposal is capable of complying.
	<p><b>AO1.4</b> Where existing footpaths are damaged as a result of development, footpaths are reinstated ensuring: (a) similar surface finishes are used; (b) there is no change in level at joins of new and existing sections; (c) new sections are matched to existing in terms of dimension and reinforcement.</p>	Proposal is capable of complying.

Performance outcomes	Acceptable outcomes	Applicant response
	<p>Note – Figure Error! No text of specified style in document..a provides guidance on meeting the outcomes.</p> <p><b>A01.5</b> Decks, verandahs, stairs, posts and other structures located in the road reserve do not restrict or impede pedestrian movement on footpaths or change the level of the road verges.</p>	Proposal complies.
<b>Accessibility structures</b>		
<p><b>PO2</b> Development is designed to ensure it is accessible for people of all abilities and accessibility features do not impact on the efficient and safe use of footpaths.</p> <p>Note – Accessibility features are those features required to ensure access to premises is provided for people of all abilities and include ramps and lifts.</p>	<p><b>A02.1</b> Accessibility structures are not located within the road reserve.</p> <p><b>A02.2</b> Accessibility structures are designed in accordance with AS1428.3.</p> <p><b>A02.3</b> When retrofitting accessibility features in existing buildings, all structures and changes in grade are contained within the boundaries of the lot and not within the road reserve.</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p>
<b>Water supply</b>		
<p><b>PO3</b> An adequate, safe and reliable supply of potable, fire fighting and general use water is provided.</p>	<p><b>A03.1</b> The premises is connected to Council's reticulated water supply system in accordance with the Design Guidelines set out in Section D6 of the Planning scheme policy SC5 – FNQROC Regional Development Manual;</p> <p>or</p> <p><b>A03.2</b></p>	Proposal is capable of complying. Details of connection are to be provided as part of an Operational Works application.





Performance outcomes	Acceptable outcomes	Applicant response
<p><b>PO5</b> Development is planned, designed, constructed and operated to avoid or minimise adverse impacts on stormwater quality in natural and developed catchments by:</p> <ul style="list-style-type: none"> <li>(a) achieving stormwater quality objectives;</li> <li>(b) protecting water environmental values;</li> <li>(c) maintaining waterway hydrology.</li> </ul>	<p><b>AO5.1</b> A connection is provided from the premises to Council's drainage system;</p> <p>or</p> <p><b>AO5.2</b> An underground drainage system is constructed to convey stormwater from the premises to Council's drainage system in accordance with the Design Guidelines set out in Sections D4 and D5 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p><b>AO5.3</b> A stormwater quality management plan is prepared, and provides for achievable stormwater quality treatment measures meeting design objectives listed in Table Error! No text of specified style in document..b and Table Error! No text of specified style in document..c, reflecting land use constraints, such as:</p> <ul style="list-style-type: none"> <li>(a) erosive, dispersive and/or saline soil types;</li> <li>(b) landscape features (including landform);</li> <li>(c) acid sulfate soil and management of nutrients of concern;</li> <li>(d) rainfall erosivity.</li> </ul> <p><b>AO5.4</b> Erosion and sediment control practices are designed, installed, constructed, monitored, maintained, and carried out in accordance with an erosion and sediment control plan.</p> <p><b>AO5.5</b></p>	<p>Proposal is capable of complying. Details of connection are to be provided as part of an Operational Works application.</p> <p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p> <p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p>



Performance outcomes	Acceptable outcomes	Applicant response
	<p>(c) to avoid altering the natural hydrologic regime in acid sulfate soil and nutrient hazardous areas.</p> <p><b>AO6.3</b> Non-tidal artificial waterways located adjacent to, or connected to a tidal waterway by means of a weir, lock, pumping system or similar ensures:</p> <p>(a) there is sufficient flushing or a tidal range of &gt;0.3 m; or</p> <p>(b) any tidal flow alteration does not adversely impact on the tidal waterway; or</p> <p>(c) there is no introduction of salt water into freshwater environments.</p> <p><b>AO6.4</b> Non-tidal artificial waterways are designed and managed for any of the following end-use purposes:</p> <p>(a) amenity (including aesthetics), landscaping or recreation; or</p> <p>(b) flood management, in accordance with a drainage catchment management plan; or</p> <p>(c) stormwater harvesting plan as part of an integrated water cycle management plan; or</p> <p>(d) aquatic habitat.</p> <p><b>AO6.5</b> The end-use purpose of the non-tidal artificial waterway is designed and operated in a way that protects water environmental values.</p> <p><b>AO6.6</b> Monitoring and maintenance programs adaptively manage water quality to achieve</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p>relevant water quality objectives downstream of the waterway.</p> <p><b>AO6.7</b> Aquatic weeds are managed to achieve a low percentage of coverage of the water surface area, and pests and vectors are managed through design and maintenance.</p>	N/A
<b>Wastewater discharge</b>		
<p><b>P07</b> Discharge of wastewater to waterways, or off site: (a) meets best practice environmental management; (b) is treated to:</p> <ul style="list-style-type: none"> <li>(i) meet water quality objectives for its receiving waters;</li> <li>(ii) avoid adverse impact on ecosystem health or waterway health;</li> <li>(iii) maintain ecological processes, riparian vegetation and waterway integrity;</li> <li>(iv) offset impacts on high ecological value waters.</li> </ul>	<p><b>AO7.1</b> A wastewater management plan is prepared and addresses: (a) wastewater type; (b) climatic conditions; (c) water quality objectives; (d) best practice environmental management.</p> <p><b>AO7.2</b> The waste water management plan is managed in accordance with a waste management hierarchy that: (a) avoids wastewater discharge to waterways; or (b) if wastewater discharge cannot practicably be avoided, minimises wastewater discharge to waterways by re-use, recycling, recovery and treatment for disposal to sewer, surface water and ground water.</p> <p><b>AO7.3</b> Wastewater discharge is managed to avoid or minimise the release of nutrients of concern so as to minimise the occurrence, frequency and intensity of algal blooms.</p>	<p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p> <p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p> <p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p><b>A07.4</b> Development in coastal catchments avoids or minimises and appropriately manages soil disturbance or altering natural hydrology and:</p> <ul style="list-style-type: none"> <li>(a) avoids lowering ground water levels where potential or actual acid sulfate soils are present;</li> <li>(b) manages wastewater so that: <ul style="list-style-type: none"> <li>(i) the pH of any wastewater discharges is maintained between 6.5 and 8.5 to avoid mobilisation of acid, iron, aluminium and other metals;</li> <li>(ii) holding times of neutralised wastewater ensures the flocculation and removal of any dissolved iron prior to release;</li> <li>(iii) visible iron floc is not present in any discharge;</li> <li>(iv) precipitated iron floc is contained and disposed of;</li> <li>(v) wastewater and precipitates that cannot be contained and treated for discharge on site are removed and disposed of through trade waste or another lawful method.</li> </ul> </li> </ul>	Proposal is capable of complying. Details are to be provided as part of an Operational Works application.
<b>Electricity supply</b>		
<p><b>PO8</b> Development is provided with a source of power that will meet its energy needs.</p>	<p><b>A08.1</b> A connection is provided from the premises to the electricity distribution network;</p> <p>or</p> <p><b>A08.2</b> The premises is connected to the electricity distribution network in accordance with the Design Guidelines set out in Section D8 of the</p>	Proposal is capable of complying. Details of connection are to be provided as part of an Operational Works application.



Performance outcomes	Acceptable outcomes	Applicant response
	<p>Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p>Note - Areas north of the Daintree River have a different standard.</p>	
<p><b>PO9</b> Development incorporating pad-mount electricity infrastructure does not cause an adverse impact on amenity.</p>	<p><b>AO9.1</b> Pad-mount electricity infrastructure is: (a) not located in land for open space or sport and recreation purposes; (b) screened from view by landscaping or fencing; (c) accessible for maintenance.</p> <p><b>AO9.2</b> Pad-mount electricity infrastructure within a building, in a Town Centre is designed and located to enable an active street frontage.</p> <p>Note – Pad-mounts in buildings in activity centres should not be located on the street frontage.</p>	<p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p> <p>N/A</p>
<b>Telecommunications</b>		
<p><b>PO10</b> Development is connected to a telecommunications service approved by the relevant telecommunication regulatory authority.</p>	<p><b>AO10</b> The development is connected to telecommunications infrastructure in accordance with the standards of the relevant regulatory authority.</p>	<p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p>
<p><b>PO11</b> Provision is made for future telecommunications services (e.g. fibre optic cable).</p>	<p><b>AO11</b> Conduits are provided in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual.</p>	<p>Proposal is capable of complying. Details are to be provided as part of an Operational Works application.</p>
<b>Road construction</b>		
<p><b>PO12</b></p>	<p><b>AO12.1</b></p>	<p>Proposal seeks to establish a driveway access to the site which may vary from</p>

Performance outcomes	Acceptable outcomes	Applicant response
<p>The road to the frontage of the premises is constructed to provide for the safe and efficient movement of:</p> <ul style="list-style-type: none"> <li>(a) pedestrians and cyclists to and from the site;</li> <li>(b) pedestrians and cyclists adjacent to the site;</li> <li>(c) vehicles on the road adjacent to the site;</li> <li>(d) vehicles to and from the site;</li> <li>(e) emergency vehicles.</li> </ul>	<p>The road to the frontage of the site is constructed in accordance with the Design Guidelines set out in Sections D1 and D3 of the Planning scheme policy SC5 – FNQROC Regional Development Manual, for the particular class of road, as identified in the road hierarchy.</p> <p><b>AO12.2</b> There is existing road, kerb and channel for the full road frontage of the site.</p> <p><b>AO12.3</b> Road access minimum clearances of 3.5 metres wide and 4.8 metres high are provided for the safe passage of emergency vehicles.</p>	<p>FNQROC requirements given the location at the end of the road network and desire to create a more aesthetic treatment which will compliment the adjoining esplanade open space. The proposed access is shown conceptually on the Proposed Site Plan and will be subject to further detailed design at Operational Works stage.</p> <p>N/A</p> <p>Proposal complies.</p>
<b>Alterations and repairs to public utility services</b>		
<p><b>PO13</b> Infrastructure is integrated with, and efficiently extends, existing networks.</p>	<p><b>AO13</b> Development is designed to allow for efficient connection to existing infrastructure networks.</p>	<p>Proposal complies.</p>
<p><b>PO14</b> Development and works do not affect the efficient functioning of public utility mains, services or installations.</p>	<p><b>AO14.1</b> Public utility mains, services and installations are not required to be altered or repaired as a result of the development;</p> <p>or</p> <p><b>AO14.2</b> Public utility mains, services and installations are altered or repaired in association with the works so that they continue to function and satisfy the relevant Design Guidelines set out in Section D8 of the Planning scheme policy</p>	<p>Proposal is capable of complying.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	SC5 – FNQROC Regional Development Manual.	
<b>Construction management</b>		
<b>PO15</b> Work is undertaken in a manner which minimises adverse impacts on vegetation that is to be retained.	<b>AO15</b> Works include, at a minimum: (a) installation of protective fencing around retained vegetation during construction; (b) erection of advisory signage; (c) no disturbance, due to earthworks or storage of plant, materials and equipment, of ground level and soils below the canopy of any retained vegetation; (d) removal from the site of all declared noxious weeds.	Proposal is capable of complying.
<b>PO16</b> Existing infrastructure is not damaged by construction activities.	<b>AO16</b> Construction, alterations and any repairs to infrastructure is undertaken in accordance with the Planning scheme policy SC5 – FNQROC Regional Development Manual.  Note - Construction, alterations and any repairs to State-controlled roads and rail corridors are undertaken in accordance with the Transport Infrastructure Act 1994.	Proposal is capable of complying.
<b>For assessable development</b>		
<b>High speed telecommunication infrastructure</b>		
<b>PO17</b> Development provides infrastructure to facilitate the roll out of high speed telecommunications infrastructure.	<b>AO17</b> No acceptable outcomes are prescribed.	Proposal is capable of complying.
<b>Trade waste</b>		
<b>PO18</b>	<b>AO18</b>	N/A



**Table Error! No text of specified style in document..b – Stormwater management design objectives (Construction phase).**

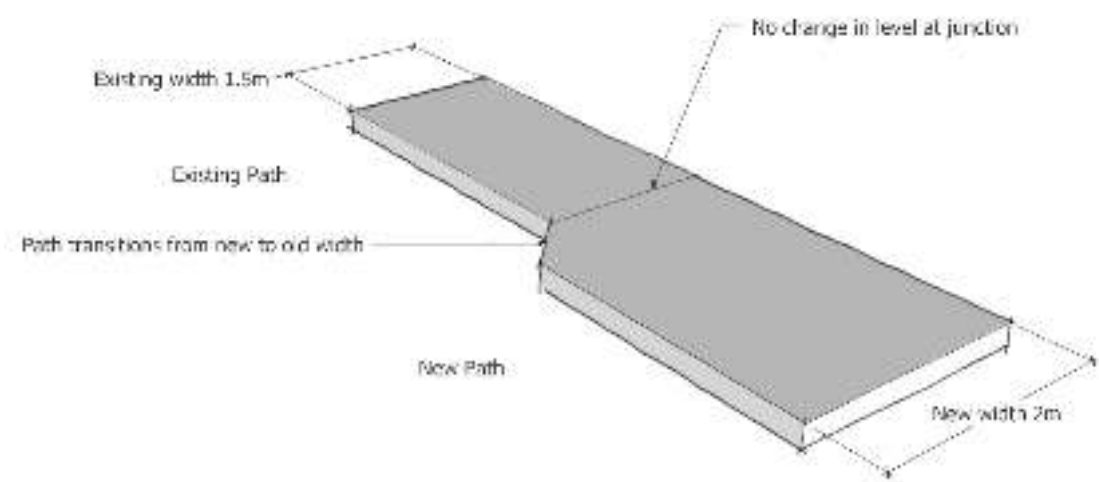
Issue	Design objectives
<b>Drainage control</b> (Temporary drainage works)	(a) Design life and design storm for temporary drainage works: (vi) Disturbed open area for <12 months – 1 in 2 year ARI event; (vii) Disturbed open area for 12-24 months – 1 in 5 year ARI event; (viii) Disturbed open area for >24 months – 1 in 10 year ARI event. (b) Design capacity excludes minimum 150mm freeboard. (c) Temporary culvert crossing – minimum of 1 in 1-year ARI hydraulic capacity.
<b>Erosion control</b> (Erosion control measures)	(a) Minimise exposure of disturbed soils at any time. (b) Divert water run-off from undisturbed areas around disturbed areas. (c) Determine erosion risk rating using local rainfall erosivity, rainfall depth, soil loss rate or other acceptable methods. (d) Implement erosion control methods corresponding to identified erosion risk rating.
<b>Sediment control measures</b> (sediment control measures, design storm for sediment control basins, Sediment basin dewatering)	(a) Determine appropriate sediment control measures using: (i) potential soil loss rate; or (ii) monthly erosivity; or (iii) average monthly rainfall. (b) Collect and drain stormwater from disturbed soils to sediment basin for design storm event: (i) design storm for sediment basin sizing is 80th% five-day event or similar. (c) Site discharge during sediment basin dewatering: (i) TSS < 50mg/L TSS; (ii) Turbidity not > 10% receiving water's turbidity; (iii) pH 6.5-8.5.
<b>Water quality</b> (Litter and other waste, hydrocarbons and other contaminants)	(a) Avoid wind-blown litter; remove grass pollutants. (b) Ensure there is no visible oil or grease sheen on released waters. (c) Dispose of waste containing contaminants at authorised facilities.
<b>Waterway stability and flood flow management</b> (Changes to the natural hydraulics and hydrology)	(a) For peak flow for the 100% AEP event and 1% AEP event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site.



**Table Error! No text of specified style in document..c – Stormwater management design objectives (post-construction phase)**

Design objectives				Application
Minimum reductions in mean annual load from unmitigated development (%)				
Total suspended solids (TSS)	Total phosphorus (TP)	Total nitrogen (TN)	Gross pollutants >5mm	
80	60	40	90	<p>Development for urban purposes</p> <p>Excludes development that is less than 25% pervious.</p> <p>In lieu of modelling, the default bio-retention treatment area to comply with load reduction targets of 1.5% of contributing catchment area.</p>
<p>Water stability management</p> <p>(2) Limit peak 100% AEP event discharge within the receiving waterway to the pre-development peak 100% AEP event discharge.</p>				<p>Catchments contributing to un-lined receiving waterway. Degraded waterways may seek alternative discharge management objectives to achieve waterway stability.</p> <p>For peak flow for the 100% AEP event, use co-located storages to attenuate site discharge rate of stormwater.</p>

**Figure** Error! No text of specified style in document..a – New footpath sections



## Landscaping code

### Application

- (1) This code applies to assessing:
  - (a) operational work which requires a compliance assessment as a condition of a development permit; or
  - (b) a material change of use or reconfiguring a lot if:
    - (i) assessable development where this code is identified in the assessment criteria column of the table of assessment;
    - (ii) impact assessable development, to the extent relevant.
- (2) When using this code, reference should be made to Part 5.

### Purpose

- (1) The purpose of the Landscaping code is to assess the landscaping aspects of a development.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) The tropical, lush landscape character of the region is retained, promoted and enhanced through high quality landscape works;
  - (b) The natural environment of the region is enhanced;
  - (c) The visual quality, amenity and identity of the region is enhanced;
  - (d) Attractive streetscapes and public places are created through landscape design;
  - (e) As far as practical, existing vegetation on site is retained, and protected during works and integrated with the built environment;
  - (f) Landscaping is provided to enhance the tropical landscape character of development and the region;
  - (g) Landscaping is functional, durable, contributes to passive energy conservation and provides for the efficient use of water and ease of ongoing maintenance;
  - (h) Landscaping takes into account utility service protection;
  - (i) Weed species and invasive species are eliminated from development sites;
  - (j) Landscape design enhances personal safety and incorporates CPTED principles.

### Criteria for assessment

**Table Error! No text of specified style in document..a – Landscaping code –assessable development**

Performance outcomes	Acceptable outcomes	Applicant response
<b>For self-assessable and assessable development</b>		
<b>Landscape design</b>		

Performance outcomes	Acceptable outcomes	Applicant response
<p><b>PO1</b> Development provides landscaping that contributes to and creates a high quality landscape character for the site, street and local areas of the Shire by:</p> <ul style="list-style-type: none"> <li>(a) promoting the Shire's character as a tropical environment;</li> <li>(b) softening the built form of development;</li> <li>(c) enhancing the appearance of the development from within and outside the development and makes a positive contribution to the streetscape;</li> <li>(d) screening the view of buildings, structures, open storage areas, service equipment, machinery plant and the like from public places, residences and other sensitive development;</li> <li>(e) where necessary, ensuring the privacy of habitable rooms and private outdoor recreation areas;</li> <li>(f) contributing to a comfortable living environment and improved energy efficiency, by providing shade to reduce glare and heat absorption and re-radiation from buildings, parking areas and other hard surfaces;</li> <li>(g) ensuring private outdoor recreation space is useable;</li> <li>(h) providing long term soil erosion protection;</li> <li>(i) providing a safe environment;</li> <li>(j) integrating existing vegetation and other natural features of the premises into the development;</li> <li>(k) not adversely affecting vehicular and pedestrian sightlines and road safety.</li> </ul>	<p><b>AO1</b> Development provides landscaping:</p> <ul style="list-style-type: none"> <li>(a) in accordance with the minimum area, dimensions and other requirements of applicable development codes;</li> <li>(b) that is designed and planned in a way that meets the guidelines for landscaping outlined in Planning Scheme Policy SC6.7 – Landscaping;</li> <li>(c) that is carried out and maintained in accordance with a landscaping plan that meets the guidelines for landscaping outlined in Planning Scheme Policy SC6.7 – Landscaping.</li> </ul> <p>Note - Planning scheme policy SC6.7 – Landscaping provides guidance on meeting the outcomes of this code. A landscape plan submitted for approval in accordance with the Planning policy is one way to achieve this outcome.</p>	<p>Proposal complies with Multiple Dwelling, Short Term Accommodation and Retirement Facility Code requirements and further detailed design will comply with Planning Scheme Policy SC6.7 – Landscaping.</p>
<b>For assessable development</b>		
<p><b>PO2</b> Landscaping contributes to a sense of place, is functional to the surroundings and enhances the streetscape and visual appearance of the development.</p>	<p><b>AO2.1</b> No acceptable outcomes are specified.</p> <p>Note - Landscaping is in accordance with the requirements specified in Planning scheme policy SC6.7 – Landscaping.</p>	<p>Detailed landscaping design will comply with Planning Scheme Policy SC6.7 – Landscaping.</p>

Performance outcomes	Acceptable outcomes	Applicant response
	<p><b>A02.2</b> Tropical urbanism is incorporated into building design.</p> <p>Note – 'Tropical urbanism' includes many things such as green walls, green roofs, podium planting and vegetation incorporated into the design of a building.</p>	Proposal complies.
<p><b>P03</b> Development provides landscaping that is, as far as practical, consistent with the existing desirable landscape character of the area and protects trees, vegetation and other features of ecological, recreational, aesthetic and cultural value.</p>	<p><b>A03.1</b> Existing vegetation on site is retained and incorporated into the site design, wherever possible, utilising the methodologies and principles outline in AS4970-2009 Protection of Trees on Development Sites.</p> <p><b>A03.2</b> Mature vegetation on the site that is removed or damaged during development is replaced with advanced species.</p> <p><b>A03.3</b> Where there is an existing landscape character in a street or locality which results from existing vegetation, similar species are incorporated into new development.</p> <p><b>A03.4</b> Street trees are species which enhance the landscape character of the streetscape, with species chosen from the Planning scheme policy SC6.7 – Landscaping.</p>	<p>Given the site's existing topography and need for earthworks, retention of vegetation is challenging. Instead, the proposal will achieve a high level of landscaping to provide a desirable outcome that fits the existing character of the area.</p> <p>Proposal is capable of complying where practical to use advanced species.</p> <p>Proposal is capable of complying.</p> <p>Proposal is capable of complying.</p>
<p><b>P04</b> Plant species are selected with consideration to the scale and form of development, screening, buffering, streetscape, shading and the locality of the area.</p>	<p><b>A04</b> Species are selected in accordance with Planning scheme policy SC6.7 – Landscaping.</p>	Proposal is capable of complying.
<b>P05</b>	<b>A05</b>	Proposal is capable of complying.



Performance outcomes	Acceptable outcomes	Applicant response
Shade planting is provided in car parking areas where uncovered or open, and adjacent to driveways and internal roadways.	Species are selected in accordance with Planning scheme policy SC6.7 – Landscaping.	
<b>P06</b> Landscaped areas are designed in order to allow for efficient maintenance.	<b>A06.1</b> A maintenance program is undertaken in accordance with Planning scheme policy SC6.7 – Landscaping.  <b>A06.2</b> Tree maintenance is to have regard to the 'Safe Useful Life Expectancy of Trees (SULE).  Note – It may be more appropriate to replace trees with a SULE of less than 20 years (as an example), and replant with younger healthy species.	Proposal is capable of complying.   Proposal is capable of complying.
<b>P07</b> Podium planting is provided with appropriate species for long term survival and ease of maintenance, with beds capable of proper drainage.	<b>A07.1</b> Podium planting beds are provided with irrigation and are connected to stormwater infrastructure to permit flush out.  <b>A07.2</b> Species of plants are selected for long term performance designed to suit the degree of access to podiums and roof tops for maintenance.	Proposal is capable of complying.   Proposal is capable of complying.
<b>P08</b> Development provides for the removal of all weed and invasive species and implement on-going measures to ensure that weeds and invasive species do not reinfest the site and nearby premises.	<b>A08</b> Weed and invasive species detected on a development site are removed in accordance with a management plan prepared by an appropriately qualified person.	Proposal is capable of complying.
<b>P09</b> The landscape design enhances personal safety and reduces the potential for crime and vandalism.	<b>A09</b> No acceptable outcomes are specified.	Proposal is capable of complying.

Performance outcomes	Acceptable outcomes	Applicant response
	Note - Planning scheme policy SC6.3 – Crime prevention through environmental design (CPTED) provides guidance on meeting this outcome.	
<b>PO10</b> The location and type of plant species does not adversely affect the function and accessibility of services and facilities and service areas.	<b>AO10</b> Species are selected in accordance with Planning scheme policy SC6.7 – Landscaping.	Proposal is capable of complying.