

Appendix 12



TOWNSVILLE CITY PLAN 2014 – LANDSCAPE CODE

Performance Outcomes/Acceptable Outcomes		Response
Landscape design and character		
<p>PO1</p> <p>The overall landscape design of both public and private spaces:</p> <p>(a) creates a sense of place that is consistent with the intended character of the streetscape, city or locality; and</p> <p>(b) is functional and designed to be visually appealing in the long-term as well as when first constructed.</p>	<p>AO1</p> <p>When the development is in an identified locality in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy, landscape design is in accordance with the requirements for that area.</p> <p>Otherwise, no acceptable outcome is nominated.</p>	<p>R1: Complies</p> <p>The landscape design within the proposed site will be functional to the site and will be designed to be visually appealing when first constructed and for the lifetime of the development.</p> <p>Landscaping is proposed along the road frontage and around the perimeter of the car parking area, given the location of the subject site within a newly established industrial precinct and maximise the total use area of the site efficiently.</p>
<p>PO2</p> <p>Tree and plant selection ensures:</p> <p>(a) climatically appropriate landscaping;</p> <p>(b) creation of a diverse palette: in form, texture and seasonal colour;</p> <p>(c) longevity of plants and the form and function of landscaped areas; and</p> <p>(d) cost effective and convenient maintenance over the long-term.</p>	<p>AO2.1</p> <p>Species are selected from those listed in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p> <p>AO2.2</p> <p>Plant species do not include undesirable species as listed in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R2: Complies</p> <p>The species selection for the site will include those listed in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p> <p>There will not be any plant species that are deemed undesirable per the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>
<p>PO3</p> <p>Where appropriate, provision is made for on-street planting that:</p> <p>(a) complements the local streetscape;</p> <p>(b) ensures visibility is maintained from entrances and exits to properties and at intersections;</p> <p>(c) establishes healthy vegetation of suitable species;</p> <p>(d) minimises the potential for vegetation to cause damage to persons, property or infrastructure; and</p> <p>(e) does not limit or hinder pedestrian or vehicular flow and movement.</p>	<p>AO3</p> <p>Street planting is provided that is consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R3: Alternative Acceptable Outcome</p> <p>The proposed development does not propose to incorporate street planting external to the property boundary.</p> <p>At no stage during the RAL Development Approval for CBIP's western precinct were street trees mentioned or conditioned to be installed. At this stage of the development due to their never being a requirement for trees previously a corridor for street trees has not been allowed for. In addition, this development also has a pressure sewer main in the footpath.</p> <p>Based on TCC standard drawing SD-005 street trees are</p>



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		<p>nominated to be installed on the alignment the street lights (i.e. 1.05 m from the kerb with 1.0 m separation to the nearest service). Please note that the pressure sewer location is only 500 mm from the streetlights. Hence there is the risk of tree roots damaging the pressure sewer service.</p> <p style="text-align: center;">TYPICAL SERVICE CORRIDOR 1:2000</p> <p>In addition, eventually the tree canopy will extend out into the road formation and driveways. This subdivision is designed to accommodate Type 2 road trains. Please note that the tree canopy will be continually damaged by passing Type 2 Road Trains. The trees will more than likely also effect the sightlines of these Type 2 Road trains entering and leaving the lots.</p> <p>No irrigation has been installed in the footpath and there is no room to do so.</p>
<p>PO4</p> <p>Streetscape treatments and paving form a functional and attractive component of the overall landscape scheme.</p>	<p>A04.1</p> <p>All general streetscape elements are provided in accordance with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R4: Complies</p> <p>Any general streetscape elements and streetscape pavement, within the proposed development will be in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and will be appropriate for the industrial setting of the subject site.</p>
	<p>A04.2</p> <p>Streetscape pavements are provided in accordance with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	
	<p>A04.3</p> <p>Streetscape furniture is provided in accordance with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	



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<p>PO5 Landscaping within on-site open space areas is well-designed, having regard to its purpose and the provision of shading, climatic response, and the proportion of soft and hard elements.</p>	<p>A05.1 Selected tree species within communal recreation areas are to provide at least 30% shade coverage within 5 – 10 years of planting.</p>	<p>R5: Not applicable Communal recreation areas are not proposed to be included within the development, given the industrial nature of the proposed use.</p>
	<p>A05.2 A minimum of 50% of landscaped areas are to be covered in soft landscaping (turf areas and planting beds), with at least 25% of that area being planting.</p>	
<p>PO6 Landscaping and embellishments in local recreational parks is fit for purpose and well-designed, having regard to shading, climatic response, and the proportion of soft and hard elements. Landscaping softens edges and creates an attractive interface with adjoining land.</p>	<p>A06 Landscaping and embellishments are provided that are consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R6: Not applicable The proposed development does not involve a local recreational park space, given the industrial nature of the proposed use.</p>
<p>PO7 The use of hard surface treatments within private and public spaces do not detract from a high standard of amenity, and large unbroken areas of hardstand material is avoided.</p>	<p>A07 Surface treatments are provided that are consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R7: Complies Surface treatments to be used within the proposed landscaped areas of the proposed development will remain consistent with the standards set out in the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and will be appropriate for the industrial setting.</p>
<p>Edge Treatments</p>		
<p>PO8 Where provided, landscape design along site frontages is used to mitigate adverse aesthetic elements, provide privacy and reduce illumination impacts, while maintaining a safe environment for users.</p>	<p>A08 Landscaped areas along the frontage of a site consists of:</p> <ul style="list-style-type: none"> (a) shade or rounded canopy trees that will provide a minimum of 50% shade to the frontage of the site within 5 years of planting; (b) shrubs that provide screening to blank walls and privacy as required; and (c) low shrubs and ground covers that reach a maximum height of 750mm at maturity. 	<p>R8: Alternative Outcome The proposed landscaping area along the frontage of the proposed development will include shrubs and low shrubs.</p> <p>The landscaping will allow for aesthetic elements, privacy, and will maintain a safe environment for the site's end users.</p> <p>The site layout has been informed by the use and on site operations and activities. Landscaping is proposed along the internal frontage of the subject site where feasible. Shade trees are proposed within the car parking area.</p> <p>Refer to the response to R3, in terms the proposed development not providing street trees.</p>



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<p>PO9</p> <p>Where appropriate, acoustic barriers and long fences along road frontages and within the development are screened or softened by landscaping or architectural embellishment to improve visual amenity of the development.</p>	<p>No acceptable outcome is nominated.</p>	<p>R9: Not Applicable</p> <p>The proposed development is industrial in nature and will be located within a newly established industrial precinct. As such, it is not considered that an acoustic barrier or fence will be required.</p>
<p>PO10</p> <p>Where provided, landscaping along a side or rear boundary assists in maintaining privacy, screening unsightly or service elements and enhancing the appearance of the development from nearby premises.</p>	<p>AO10.1</p> <p>Screen planting is provided along the side or rear boundary of a site, which consists of:</p> <p>(a) either trees with a maximum spacing of 3m (measured from centres) and capable of providing a dense screen within 3 years of planting or screening shrubs capable of growing to a height of 3m within 2 years of planting; and</p> <p>(b) low shrubs and ground covers, where appropriate, to allow for complete covering of planting area.</p>	<p>R10: Alternative Outcome</p> <p>The proposed development does not anticipate incorporating landscaping along the side and rear boundaries of the site, as on site operations require the use of the whole site, in particular for truck movements.</p> <p>The subject site is surrounded by industrial vacant lots or medium industry uses.</p>
	<p>AO10.2</p> <p>A minimum of 25% of all trees are to grow above the height of the eaves of the equivalent second storey of the building.</p>	
<p>PO11</p> <p>Landscaped areas along or near retaining walls, long unbroken walls, service areas and parking areas consist of an appropriate combination and species of trees, shrubs and groundcovers to minimise the visual impact of these elements.</p>	<p>AO11</p> <p>No acceptable outcome is nominated.</p>	<p>R11: Not Applicable</p> <p>The proposed development does not contain any retaining walls.</p>
<p>PO12</p> <p>Screening trees, shrubs, low shrubs, ground covers and vertical accent plants are appropriate for the space available, orientation and functional requirements of the area.</p>	<p>No acceptable outcome is nominated.</p>	<p>R12: Complies</p> <p>The proposed landscaping area for the proposed development will use a combination of trees, shrubs and low shrubs that are deemed appropriate for the space and will not result in overgrowth in these areas.</p>
<p>Maintenance, drainage, utilities, services and construction</p>		
<p>PO13</p> <p>Plant selection and location protects the integrity and function of overhead and underground services.</p>	<p>Plant selection and location complies with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R13: Complies</p> <p>The proposed landscaping area for the proposed development will comply with the plant selection and location requirements, per the Development manual planning scheme policy no. SC6.4 -</p>



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		SC6.4.3.6 Landscape policy, and will not compromise the integrity or function of any overhead and underground services within the area.
<p>PO14 Landscape elements do not adversely affect stormwater quantity or quality by ensuring:</p> <p>(a) the flow of water along overland flow paths is not restricted;</p> <p>(b) opportunities for water infiltration are maximised; and</p> <p>(c) areas of pavement, turf and mulched garden beds are appropriately located and adequately drained.</p>	No acceptable outcome is nominated.	<p>R14: Complies</p> <p>The proposed landscaping area within the proposed development are spaced appropriately apart and will be designed so they drain appropriately.</p>
<p>PO15 Landscaping works, design and materials used minimise maintenance costs and whole of life cycle costs.</p>	No acceptable outcome is nominated.	<p>R15: Complies</p> <p>The proposed landscaping to occur on site will utilise relevant works, designs and materials so that life cycle costs are minimised.</p>
<p>PO16 All turf areas on-site are accessible externally by standard lawn maintenance equipment and receive adequate sunlight for the turf species used.</p>	<p>No acceptable outcome is nominated.</p> <p>Editor's note—Applicants should refer to the Development manual planning scheme policy no. SC6.4 including SC6.4.3.6 Landscape policy to assist in demonstrating the outcome.</p>	<p>R16: Not applicable</p> <p>The proposed development does anticipate some limited turfed areas around buildings. All turfed areas will be planted with appropriate turf species and will be appropriately accessible for maintenance.</p>
<p>PO17 Drainage of podium planters allows for flush out in future and are adequately drained.</p>	No acceptable outcome is nominated.	<p>R17: Not Applicable</p> <p>Podium planters are not proposed.</p>
<p>PO18 Irrigation is installed within private and public spaces to ensure the long-term viability and integrity of landscaped areas. Where provided, irrigation is designed to facilitate the efficient supply of water in accordance with micro-climatic conditions.</p>	<p>AO18</p> <p>Irrigation is provided accordance with the Development manual planning scheme policy no. SC6.4 including - SC6.4.3.6 Landscape policy.</p>	<p>R18: Complies</p> <p>The proposed landscaping along the frontage of the development will include necessary irrigation as per the Development manual planning scheme policy no. SC6.4 including - SC6.4.3.6 Landscape policy, so too ensure long-term viability of the landscaped areas.</p>
<p>PO19 Limited on-site maintenance is achieved for private and public landscaping, by selecting plant species having regard to long life expectancy and minimal leaf litter drop, pruning, watering and fertilising requirements.</p>	No acceptable outcome is nominated.	<p>R20: Complies</p> <p>The plant species selected for the proposed landscaping area within the proposed development will have regards to long life expectancy and minimal leaf drop, pruning, watering and fertilizing requirements, reducing the on-site maintenance.</p>



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<p>PO20 Container sizes and planting stock maturity is consistent with the intended role of the landscaping.</p>	<p>AO20 Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R20: Complies Container sizes and planting stock maturity will remain consistent with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>
<p>PO21 Planting stocks are of a quality to ensure vigorous growth.</p>	<p>AO21 Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.</p>	<p>R21: Complies Planting stocks included in the proposed landscaping area will be undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping, so too ensure vigorous growth.</p>
<p>PO22 Plants are protected and maintained to facilitate in-situ growth, vigour and quality form.</p>	<p>AO22 Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.</p>	<p>R22: Complies Plants used for the proposed landscaping areas will be protected and maintained so too maintain longevity and quality form, through compliance of the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.</p>
<p>PO23 Site preparation works ensure a stable and enhanced landscape form.</p>	<p>AO23 Landscaping is undertaken in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.</p>	<p>R23: Complies Preparation for the proposed landscaping areas within the proposed development ensures a stable and enhanced landscape form, through compliance of the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy and SC6.4.6.26 Landscaping.</p>
Sustainability		
<p>PO24 Wherever possible, landscape design facilitates the retention of significant existing vegetation, both within and external to the site.</p>	<p>AO24.1 Site design integrates and incorporates retained and significant trees and vegetation within and external to the site.</p>	<p>R24: Complies The proposed landscaping area within the proposed development will incorporate locally established trees and vegetation used previously within the surrounding region.</p>
	<p>AO24.2 Removed or damaged significant vegetation is replaced with mature vegetation of a comparable quantity and species.</p>	
<p>PO25 Appropriate site planning and construction management is undertaken to ensure the longevity and health of retained and significant trees and vegetation.</p>	<p>AO25.1 Retained trees are protected by a tree protection zone (TPZ) and fenced along the canopy/drip line to comply with AS4970- 2009 Protection of Trees on Development Sites.</p>	<p>R25: Complies Where pruning and/or trimming work needs to occur, such works will be undertaken in accordance with AS4373 — Pruning of Amenity Trees and carried out by a qualified arborist.</p>
	<p>AO25.2 Any required pruning or trimming work is undertaken in accordance with AS4373 — Pruning of Amenity</p>	



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	<p>Trees and is carried out by a qualified arborist.</p> <p>A025.3 Retained and significant vegetation damaged during development or construction is treated to repair any damage to the extent practicable by a qualified arborist.</p> <p>A025.4 Protective measures and practices are employed for work adjacent to trees in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.5 Construction management.</p>	
<p>PO26 Landscape design optimises water and energy efficiency and responds appropriately to local conditions, by:</p> <p>(a) maximising the exposure to the prevailing summer breezes and the north-east winter morning sun;</p> <p>(b) minimising exposure to the prevailing winter winds and western summer sun; and</p> <p>(c) optimising shade to create useable and comfortable areas;</p> <p>(d) hydro-zoning planting.</p>	<p>No acceptable outcome is nominated.</p>	<p>R26: Complies The proposed landscaping areas within the proposed development site will be situated along the frontage of the site where maximization of exposure to the prevailing summer breezes and north-east winter morning sun occurs. Minimisation of exposure to prevailing winter winds and western summer sun will also occur as a result of the location of the proposed landscaping area.</p>
<p>PO27 Planting bed profiles and edging encourage plant viability, reduce erosion, control weed invasion, provide adequate water infiltration and ease of maintenance to support long-term plant viability and vigorous growth.</p>	<p>A027 Planting beds are designed in accordance with the Development manual planning scheme policy no. 6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R27: Complies Planting beds are designed in accordance with the Development manual planning scheme policy no. 6.4 - SC6.4.3.6 Landscape policy.</p>
<p>PO28 Landscape buffering and species selection is consistent and compatible with any ecological values on or adjoining the site.</p>	<p>No acceptable outcome is nominated.</p>	<p>R28: Complies The proposed landscaping within the proposed development site will maintain species selection that is considered consistent and compatible with the ecological values surrounding the site.</p>
<p>PO29 Landscaping elements are provided within parking areas, along driveways and internal roadways to provide adequate shading, and safe and legible parking areas.</p>	<p>A029 Landscaping is provided in accordance with the Development manual planning scheme policy no. SC6.4 - SC6.4.3.6 Landscape policy.</p>	<p>R29: Complies The proposed landscaping areas within the proposed development will be situated in areas that are within close proximity to driveways and parking areas.</p>



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Safety		
<p>PO30</p> <p>Landscape design enhances community safety and reduces the potential for crime and antisocial behaviour.</p> <p>Editor's note—Applicants may find useful guidance in the Queensland Government's Crime Prevention through Environmental Design Guidelines for Queensland.</p>	<p>AO30.1</p> <p>Access to a site, parking area, buildings or public open space is well lit, free from obstructions and clearly defined by landscape treatments.</p>	<p>R30: Complies</p> <p>Access to the proposed development site, parking areas and buildings will be well lit and obstruction free. Such infrastructure will remain clearly defined with the incorporation of landscaping.</p>
	<p>AO30.2</p> <p>Trees with a minimum 1.8m of clear trunk (at maturity) are located along pathways, at building entries, within parking areas, on street corners, adjacent to street lighting and along driveways. Garden beds within the aforementioned areas consist of low shrubs and groundcovers that do not exceed 750mm in height.</p>	
	<p>AO30.3</p> <p>Any solid wall or semi permeable fence is protected from graffiti through means of vertical landscaping or vandal resistant paint or artwork.</p>	
<p>PO31</p> <p>Where appropriate and practicable, all elements of the landscape design are safe and provide accessibility for all abilities.</p>	<p>AO31.1</p> <p>Paving material, tactile indicators and construction complies with AS1428 - Design for Access and Mobility.</p>	<p>R31: Complies</p> <p>The site will be designed so that it is accessible for all abilities. Given the nature of the use it is not anticipated that there will be much foot traffic or pedestrians visiting the subject site.</p>
	<p>AO31.2</p> <p>Pavement material or treatment clearly delineates between pedestrian and vehicular movement systems through contrasting materials, colours or level changes.</p>	
	<p>AO31.3</p> <p>Hard landscaping materials are not highly reflective, or likely to create glare, slipperiness or other hazardous conditions.</p>	