## **GPV** Properties Pty Ltd

## LANDSCAPE DESIGN REPORT

### **Proposed Medical Centre**

31-33 Smith St, Charlestown

April 2023





#### Prepared by:

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#### **1.0 INTRODUCTION**

Conus Landscape Architecture has been engaged by Archadia Projects, on behalf of GPV Property Pty Ltd to prepare a Landscape Design Report and Landscape Plan for a Development Application (DA) for a Category 3 Landscape Development, a Proposed Medical Centre, 31-33 Smith St, Charlestown. The development consists of a single 4 storey building with a separate multi-storey car park as well as open car parking.

This development is classified as a Category 3 Development under Lake Macquarie City Council's (LMCC's) DCP 2014 Rev 3, dated 10.02.14 and Landscape Design Guideline, dated June 2017. As part of a Category 3 Development, the Landscape Design Report is to accompany the Landscape Concept Plan, including the Site Analysis Plan.

The proposed development site, 31-33 Smith St, Charlestown, which will be referred to as the Site falls under several LMCC planning control documents: DCP 2014 Revision 27 Part 10 Town Centre Area Plans Charlestown Town Centre Area Plan Adopted 9 August 2021 in addition to the earlier Charlestown Streetscape Master Plan Vers. O4, adopted in 2017. This Master Plan identified Block Plans within Charlestown and the Site was designated as Block N.

The purpose of this report is to provide written explanation for the landscape design intent, provide guidelines for maintenance, plant selection and to encourage a high standard of landscape design within the development. It is to accompany Landscape DA Documentation LDA00 - 04 Rev F, dated 25.04.23

#### 2.0 SITE LOCATION & ANALYSIS

The Site is situated on the former Charlestown Primary School site. It is found on the eastern side of the Pacific Hwy, bounded by Frederick St to the south and Smith St to the east.



Figure 1: Location of the Site: 31-33 Smith St (cnr Smith St & Frederick St), Charlestown. (source: Google Maps 2022).

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The Site is for the most part cleared, except for a strip of planting, comprising miscellaneous trees along the Pacific Hwy, Frederick and Smith St frontages.



Photo 1: View looking northeast from the Pacific Hwy frontage, cleared and disturbed land sloping up from south to north (Photo: A.Conus 2022)



Photo 2: View looking southwest from Smith St showing cleared and disturbed land with miscellaneous vegetation along the street frontages. (Photo: A. Conus 2022)



Photo 3: View looking north from Pacific Hwy frontage showing prominent masonry wall of the adjoining McDonalds restaurant. (Photo: A. Conus 2022)

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#### 3.0 CLIMATE AND SOIL GEOLOGY DESCRIPTION

#### 3.1 Climate

The climate of the site is characterised by warm temperate weather, with only two real distinct seasons: warm to hot summers merge into a warm autumn and mild winters merge into a warmer spring.

Rainfall occurs predominantly in the summer and autumn (Bureau of Meteorology weather station at Newcastle Nobbys.

#### 3.2 Soil and geology

Matthei describes the soil type of the site as comprising of 'Warners Bay' series of Residual Landscapes.

'Warners Bay' is described in the Sheet Report as:

- Landscape undulating to rolling low hills and rises on fine-grained sediments of the Newcastle Coal Measures. Crests are broad; slopes are long and gentle and drainage lines are broad
- **Soils** moderately deep (100 cm) to deep (>150 cm), imperfectly to poorly drained Gleyed Podzolic Soils, moderately well drained Yellow Podzolics, yellow Soloths.

Matthei cites this landscape as being limited by by:

high water erosion hazard, foundation hazard, steep slopes (localised), mass movement hazard (localised), Mine Subsidence District, seasonal waterlogging and high run-on (localised, lower slopes), moderate to high shrink-swell, plastic subsoils, strongly acid soils of low fertility.

(Ref: Matthei, LE Soil Landscapes of Newcastle 1:100000 and Sheet Report 1995).

#### **4.0 VEGETATION**

The Site is predominantly cleared of vegetation, except for a strip of introduced trees and weed species undergrowth around the perimetres. There are no remnant trees, except for one Angophora costata (Smooth-barked Apple) in the southwest corner. The Site would previously have consisted of MU12 Hunter Moist Valley Forest. Other trees include: Lophostemon confertus (Brush Box), Melaleuca quinquenervia (Broad-leaved Paperbark), Grevillea robusta (Silky Oak), Banksia serrata (Old Man Banksia) and Cupressus sempervirens (Pencil Pine), Auranticarpa rhombifolia (Diamond-leaved pittosporum) and Cinnamomum camphora (Camphor Laurel).

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Photo 4: View looking east along Frederick St from the corner of Pacific Hwy showing remnant Angophora costata (Smooth-barked Apple) and Eucalyptus pilularis (Blackbutt) in the foreground with Lophostemon confertus (Brush Box) in background. (Photo: A. Conus 2022).



Photo 5: View looking northeast along Frederick St towards Smith St showing Lophostemon confertus (Brush Box) with part of a Cinnamomum camphora (Camphor Laurel) to the left handside foreground. (Photo: A. Conus 2022).

#### **5.0 DESCRIPTION OF DESIGN INTENT**

The following outlines the proposed landscape design intent, as graphically illustrated in the attached Appendix Landscape DA Plan LDA02 and Elevations LDA04 Rev F, dated 25.04.23.

#### 5.1 Street trees

#### 5.12 Frederick St

Overhead powerlines partially exist along Frederick St, which determine the type of street trees. Where there are no overhead powerlines, 4 x Pyrus calleryana 'Capital' (Narrow Ornamental Flowering Pear) are proposed to match the same species planted across the road on the adjacent medical development (PRP Imaging/95 Pacific Hwy). This tall exotic tree features a narrow conical canopy whose mid green summer foliage turns to a brilliant display of autumnal oranges and reds. It then displays a mass of white

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flowers on bare branches in early spring. Where overhead powerlines exist, smaller *Buckinghamia celcissima* (Ivory Curl Tree) are proposed. This hardy native rainforest tree features a rounded canopy of glossy green leaves and masses of cream flowers in summer and autumn. Beneath these is a groundcover of massplanted Hibbertia scandens (Snake Vine). This locally-occurring climber with glossy green foliage and yellow flowers is to be maintained as a groundcover.

#### 5.12 Smith St

Overhead powerlines exist along Smith St, so consequently, a smaller street tree species has been proposed: *Syzygium australe 'Resilience'* (Dwarf Lilly Pilly). Usually seen as a clipped hedge, this small native rainforest tree is a smaller cultivar of the larger growing parent. It features glossy foliage with bronze new growth turning midgreen. It displays cream gum tree-like flowers with magenta-coloured fruit. Beneath the street trees is a garden bed of massplanted hardy native ornamental grass *Lomandra longifolia 'Tanika'* (Fine-leaved Mattrush Grass).

#### 5.2 Corner markers

On 3 of the 4 corners of the Site (ie, Northwestern, Southwestern and Southeastern), a feature *Brachychiton acerfolius* (Illawarra Flame tree) is proposed. This iconic Australian native tree can be found in locally-occurring gullies in the region. The tree has a broadly conical canopy with large lobed green leaves, a feature greenish smooth trunk which develops into a bottle shape. However, it's main feature are the masses of bright red bell-shaped flowers which occur on red branches when the tree becomes deciduous in late Spring and throughout the warmer Summer months. This tree will provide prominent markers to the Site from each of the major accessways.

#### 5.3 Pacific Hwy/Western treatment

A row of 6 of the feature deciduous tree *Pyrus calleryana 'Capital'* (Ornamental Flowering Pear) is proposed in the Northwestern corner of the Site. This tall exotic tree features a narrow upright canopy whose mid green summer foliage turns to a brilliant display of autumnal oranges and reds. It then displays a mass of white flowers on bare branches in early spring. It will provide a softening of the vertical scale of the Northwestern façade of the building.

To provide privacy from the consulting rooms from the higher Pacific Hwy footpath, a clipped hedge beneath the Pyrus calleryana 'Capital' is proposed. This will be the small native shrub Syzygium australe 'Tiny Trev' (Dwarf Lilly Pilly). Additional raised masonry planters adjacent to the Western/Pacific Hwy frontage will contain the feature massplanted Sanserveria trifasciata 'Laurentii' (Snake Plant). This treatment will also provide a visual buffer from the footpath.

#### 5.4 Frederick St/Southern treatment

On the Southern side of the building, a row of 4 of the native evergreen, medium-large *Corymbia maculata* (Spotted Gum) is proposed for the raised garden bed fronting the southern boundary and Frederick St footpath. This locally-occurring tree is characterised by an open canopy and smooth mottled grey trunk, which develops spots of darker bark when it sheds its previous season's bark. The strong vertical structure will provide some softening to the vertical scale of the southern face of the building. Beneath the *Corymbia maculata*, clumps of feature accent plants include the locally-occurring native *Crinum pedunculatum* (Swamp Lily) and *Alpinia caerulea* '*Redback*' (Redback Native Ginger) as well as the exotic cycad *Zamia furfuracea* (Cardboard Plant) and clumps of the native Westringia fruiticosa '*Zena*' (Dwarf Native Rosemary) and *Syzygium australe* '*Tiny Trev*' (Dwarf Lilly Pilly). A massplanted groundcover of *Lomandra longifolia* '*Tanika*' (Fine-leaved Mattrush Grass) and *Hibbertia scandens* 

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(Snake Vine) also occurs. To screen several services/utilities, clumps of the native Alpinia caerulea 'Redback' (Red-backed Native Ginger). This feature clumping plant is found locally in gully situations such as Glenrock State Recreation Area and features long stems with long green leaves with red undersides, blue flowers and blue fruit.

A row of *Elaeocarpus eumundi* (Eumundi Quandong) is proposed. This native evergreen rainforest tree features an upright conical canopy with glossy foliage, going from bronze new growth to dark green. Its bell-shaped flowers and pale greenish purple fruit occur on the inside of the canopy. These trees will soften the vertical scale of the southern façade of the multi-storey carpark structure whilst still providing views of the digital image of former Charlestown Primary School on the perforated steel panels and sections of 'green wall'. It is a Northern cousin of the locally-occurring *Elaeocarpus reticulatus 'Prima Donna'* (Pink Blueberry Ash) which `is used along the Eastern side of the carpark/boundary

On both the Western, Southern and Eastern façade of lower carpark, sections of aluminium battens with metal mesh will provide a frame for climbers to screen the sections of the carpark. On this, a 'green wall' of *Trachelospermum jasminoides* (Chinese Star Jasmine) will occur. This will provide a softer streetscape interface with the ground level users as well as reducing bulk and vertical scale of carpark.

#### 5.5 Smith St/Eastern frontage treatment

Running along the eastern side of the storey carpark structure is a row of *Elaeocarpus reticulatus* '*Prima Donna*' (Pink Blueberry Ash). This locally-occurring small-medium evergreen tree has an upright conical form and masses of pink fringed bell-shaped flowers in Summer and blue fruits. These trees will soften the vertical scale of the eastern façade of the multi-storey carpark structure whilst still providing views of the digital image of former Charlestown Primary School on the perforated steel panels and sections of 'green wall'.

#### 5.6 Central greenspace treatment

Alloxylon flammeum (Tree Waratah) is proposed either side of the Frederick St entry sign. They will act a marker to the entry in a similar fashion to that of the Brachychiton acerfolius corner marker. This medium sized native rainforest tree features dark areen glossy foliage, showy large red Waratah flowers in late Spring and early Summer. Additionally, clumps of the feature accent plant Doryanthes excelsa (Gymea Lily) are proposed. These locally-occurring native accent plants features long sword-like leaves and feature red flowers on a long straight vertical shaft. Massplanted hardy native ornamental grass Lomandra longifolia 'Tanika' (Fine-leaved Mattrush Grass) occurs under. The medium-large Corymbia maculata (Spotted Gum) is proposed in groups of 2 as the internal open carpark canopy tree. This upright open-canopied locallyoccurring tree displays an open canopy and smottled mottled grey trunk. In between these groupings occurs Tristaniopsis laurina 'Luscious' (Broad-leaved water Gum. This feature broad-leaved form of the Water Gum occurs in local gullies, such as the nearby Glenrock State Recreation Area. It features a dense rounded canopy of glossy green leaves which display burgundy new growth. The trunk and branches begin burgundy to then peel away to a powdery white trunk and branches. It displayed yellow flowers over Spring and Summer.

Located as a focal point from the front entry to the building on the Pacific Hwy is a single *Syzygium paniculatum (Magenta Cherry*). This is a medium sized evergreen tree is classified as a Threatened Species in NSW, however, it occurs locally in coastal and littoral rainforest in nearby Glenrock State Recreation Area. It features a broad canopy of glossy green leaves with burgundy/bronze new growth and cream flowers. Its magenta-coloured fruit is known to be a source of indigenous bush tucker. Around this central featured paved area will be some bench seats side. Together with bench seats

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under the adjacent Tristaniopsis laurina 'Luscious, these seats will provide a place to rest for both the visiting clients as well as staff.

#### 5.6 Northern treatment

Adjacent to the high blank masonry wall of the adjoining McDonalds restaurant, a row of the feature deciduous tree *Pyrus calleryana* 'Capital' (Ornamental Flowering Pear) is proposed. This tall exotic tree features a narrow upright canopy whose mid green summer foliage turns to a brilliant display of autumnal oranges and reds. It then displays a mass of white flowers on bare branches in early spring. It will reinforced the trees at the Pacific Hwy main building entry. Beneath the trees, massplanted *Trachelospermum jasminoides* (Chinese Star Jasmine) groundcover is proposed. A clipped *Teucrinum fruiticans* (Shrub Germander) hedge is proposed on the other/southern side of the retaining wall.

Below the retaining wall, a staff breakout area, in full display of the north-facing ground floor windows, several long on-grade and raised masonry planters will contain clumps

of the feature ornamental gingers Alpinia caerulea 'Redback' (Redback Native Ginger) and Alpinia zerumbet 'Variegata' (Variegated Shell Ginger). On the blank wall above, several decorative metal screens will punctuate the ginger massplantings. Seating in this area will be both bench style and informal edge of 0.5m height raised masonry garden beds.

The remainder of the Northern boundary features a row of Xanthostemon chrysanthos (Golden Penda) with massplanted hardy native ornamental grass Lomandra longifolia 'Tanika' (Fine-leaved Mattrush Grass) under. The Xanthostemon chrysanthos is a northern-occurring cousin of the locally-occurring Tristaniopsis laurina'. It features a more-rounded canopy of glossy green leaves and masses of yellow pom-pom like flowers in summer.

#### 5.7 Streetscape paving treatment

The streetscape treatment along Pacific Hwy, Frederick St and Smith St and the corners of Pacific Hwy and Frederick St and Smith St and Frederick St are all consistent with Charlestown Streetscape Master Plan Version 04, 2017.

Along the Pacific Hwy (Western) and Frederick St (Southern) verges, Type 1 paving is proposed. This consists of a header course running along the kerb or the inside part of the garden bed with perpendicular rectangular segmented concrete paver infill. Note that along the Pacific Hwy frontage, Hunter Water has a water main close to the existing surface which may affect proposed paving. The corner of Pacific Hwy and Frederick St as well as Frederick St and Smith St have paver header course with an infill of square segmented concrete paver infill. Pram ramps are concrete. Along Smith St, Type 2/3 paving is proposed. This comprises of a paver header with concrete infill. Along Frederick St and Smith St, the minimum width of paving is 1.8m wide.

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#### APPENDIX 1 – LANDSCAPE CONCEPT PLAN LDA02 Rev F, dated 25.04.23



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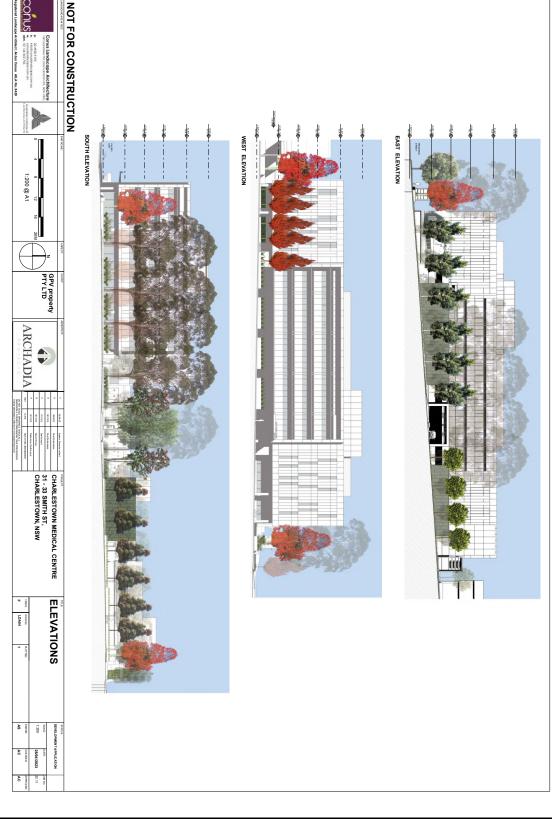
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APPENDIX 2 - ELEVATIONS LDA04 Rev F, dated 25.04.23



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