**APPENDIX C** 

# **CAMPBELL STREET GREEN LINK SUB-PLAN**



Project:

WestConnex New M5

Urban Design and Landscape Plan

Document Number:

M5N-HSL-MNP-100-110-TR-1970\_C

Appendix C: Campbell Street Green Link Sub-plan

Client:

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## C1 Introduction

This Urban Design and Landscape Plan Sub-Plan has been prepared to satisfy the Ministers Condition of Approval B62(c) (SSI6788). The plan provides a comprehensive outline of the Urban Design and Landscape strategies for the WestConnex New M5 Project.

### Campbell Street Green Link

The Campbell Street Green Link will become an active, treelined, open space corridor that will offer amenity for local residents, create a high quality environment for pedestrians and cyclists, and integrate the local streetscape with adjacent open space and parkland.

The overall design intent is to ensure that the Green Link becomes a cohesive element that connects the key public parks (Camdenville Park, Simpson Park and Sydney Park) via new pedestrian and cyclist infrastructure. This will be achieved through the implementation of dedicated cycle paths, shared paths and footpaths to create new connections for the regional cycleway network. This is explained in more detail in the landscape strategies in section C7.

The outcomes for the Green Link have been achieved largely through the detailed design process which involved optimisation of the road design to shift the alignment further south approximately 4m (from what was shown in the EIS). This has allowed for a wider verge on the northern side and the implementation of planted verges and a consistent street tree canopy.

Tree and landscape plantings will be designed to match in with City of Sydney, Inner West Council guidelines, whilst vegetation and tree plantings will be used to screen visually intrusive elements from nearby residents, and create a sense of visual separation for pedestrians and cyclists from the road edge. The landscape treatments are described in the landscape concept in section C8.



Figure C-1 - Campbell Street Green Link - View west along Campbell Road (Artist's impression only)









# C1.1 Ministers condition of approval B62(c)

An Environmental Impact Statement (EIS) for the Project was submitted on 23 November 2015 for public exhibition and comment. On 4 March 2016, a Submissions Report was prepared in response to submissions received during the EIS exhibition period. The Plan was considered by the Department of Planning and Environment (DP&E) and informed the Minister for Planning, in the projects approval assessment.

On 20 April 2016, planning approval for the WestConnex New M5 project was received from the Minister for Planning. The approval was subject to Conditions of Approval, including B34, B35, B36, B38, B60, B61, B62 and B63 which are specific to Urban and Landscape Design.

The Minister's Conditions of Approval relevant to MCoA B62(c) are listed below along with a reference to where each condition is addressed within this Plan.

Table 01 Conditions of approval

## Condition of approval Reference

plan. All facilities must be provided within 12 months of operation.

Campbell Street Green Link Sub-plan				
A Campbell Street Green Link Sub-plan to provide an enhanced and unified landscaped green link between Sydney Park, Simpson Park and Camdenville Park. The objective of the green link is to facilitate a more legible and navigable open space network by providing a high quality open space link to the northern side of Campbell Street between the three parks.	Refer Section C1.4 for design intent and philosophy Refer Section C4 for Green Link Objectives Refer Section C7 - for Campbell Street Green Link Strategies Refer Section C8 - for Landscape Concept			
The Plan must be prepared by an experienced and qualified person(s) in the design and provision of open space and in consultation with the relevant councils and the community	HASSELL is the author of the UDLP. HASSELL is on the Approved RMS Register of Urban Design Consultants.			
The Plan to take into account the following considerations -	Note			
(i) the provision of a consistent and coherent landscaping theme between Sydney Park, Simpson Park and Camdenville Park	Refer Section C7 for overall landscape concept			
(ii) the establishment of local street conditions	Refer Section C3 for existing context Refer Section C4 for Green Link Objectives Refer Section C5 and C6 for integration with local area government guidelines, policies and masterplans Refer Section C7.8 for retaining wall treatments in keeping with existing character of local areas Refer Section C7.10 for reuse of existing brick pavers infront of the Town & Country Hotel			
(iii) the provision of enhanced footpath and shared path widths and the separation of walking and cycling paths from the roadway with planted verges or on street car parking	Refer Pedestrian and Cycle Implementation Strategy (MCoA B51) Refer Section C7.1 for pedestrian & cycle paths Refer Section C8 for landscaping treatments including planted verges.			
(iv) the provision of crossings along the length of the green link, and	Refer Section C.7.1 for locations of crossings including traffic calming measures such as raised crossing to reinforce pedestrian / cyclist priority			
(v) reviewing on-street car parking and proposed off-street parking on the southern side of Campbell Road to maximise landscaping, pedestrian and cycling facilities.	Refer Section C7.6 for on-street and off-street parking locations			
The Plan must be consistent with and integrate with the requirements of the UDLP and the Campbell Road Crossing Sub-	This plan is consistent with the UDLP (also prepared by HASSELL) and Campbell Road Sub-plan (prepared by RMS) and will be delivered in the specified time frame.			



### C1.2 Revised Environmental **Management Measures**

This section of the sub-plan addresses issues raised during the consultation process and the Revised Environmental Management Measures (REMM) raised in the Submissions and Preferred Infrastructure Report (SPIR) listed below.

Table 02	Revised	Environmental	Managemei	nt Measures
Table 02	reviseu		ivialiayeme	it ivicasures

		Table 02         Revised Environmental Management Measures
Ref#	REMM	Response
Visual	Impacts and Urban Design	
OpV01	Vegetated batters would be limited to 1:3 and 1:4 where possible in order to maximise the impact of vegetation on these batters and minimise maintenance	Extent of batters have been minimised as much as possible along Campbell Street. Where bioswales are proposed, batters will not exceed 1:3.
OpV02	Chain link fencing for sites would only be used where these would not be viewed by sensitive receivers, such as residents and users of recreational spaces. At these locations, high quality fencing suitable for parks and public spaces would be considered	Existing chain link fencing along Camdenville Basin will be replaced with a higher quality palisade fence.
OpV03	Where large ares or structures are designed, such as car parks, consideration of shade trees within these spaces would be considered where reasonable and feasible to soften views and provide shade and visual amenity.	New, large, native street trees will be planted adjacent to the proposed car park between Florence Street and St Peters Street.
OpV10	Opportunities to maximise the green canopy throughout the local road upgrades to St Peters with tree planting in medians where safety barriers and / or speed limits permit would be explored during detailed design, and implemented where reasonable and feasible	An extensive line of street and parkland trees are proposed within the wide verges of Campbell Street to form a continuous canopy and comfortable microclimate. Trees are currently being considered within wide median adjacent to Sydney Park which is subject to a road safety assessment.

## C1.3 Urban Design policy

Work leading to the presentation of the Urban and Landscape Design has been an iterative process and has included:

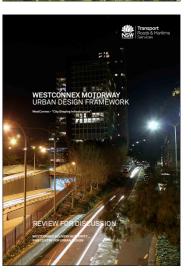
- A thorough review of briefing materials and associated working papers including the WestConnex Urban Design Framework
- Inspections of the route and its environs
- Numerous design workshops and meetings involving the project design team members. Consultation with the Urban Design Review Panel, including councils and residents adjacent to the proposed structures; and
- · A review of current WestConnex and RMS design standards and industry construction methods.

The Urban and Landscape Design proposals for the project has been prepared in reference to the objectives and design principles of:

- · RMS landscape guideline Landscape design and maintenance guidelines to improve the quality, safety and cost effectiveness of road corridor planting and seeding
- WestConnex Urban Design Framework
- RMS Beyond the Pavement
- · SWTC Appendix B.11 Urban Design and Landscaping; and
- · A review of current WestConnex and RMS design standards and industry construction methods.













## C1.4 Design philosophy

The design of the Green Link aligns with the following key design principles and objectives as outlined in the Urban Design Vision for the project (refer Section 2.2 of the UDLP).

### Connectivity and legibility

• Enhance shared paths to provide safe and seamless journeys for pedestrians safety

#### Place making

- Use high quality and functional materials
- Activating the edges of public spaces through the design by considering pedestrians and cyclists and adjacent land uses
- Incorporate quality and informative heritage interpretation devices to mitigate heritage impacts of the project.

#### Urban renewal and liveability

- Widening footpaths to improve amenity for pedestrians and cyclists
- Providing extensive tree planting of endemic species to achieve tree canopy for shade, shelter and habitat
- Maintaining vegetated screening by reducing existing vegetation loss and enhancing existing vegetation screen by utilising similar plant species where possible.

### C1.5 Safer by design

The Legislative requirement for Safer by Design principles has been incorporated during development of the Green Link sub plan. Consideration has been given to safety during the construction, operation, maintenance and replacement of all road and verge elements which have been designed in accordance with the relevant Austroads Guidelines, Australian Standards and RMS specifications.

The design of the Green Link takes into consideration the safety of all users and maintenance workers as follows:

- · Safe and compliant path grades are provided longitudinally.
- Low-height massed planting areas have been considered to facilitate natural surveillance to all publicly accessible areas
- Additional path lighting has been provided (where road lighting levels are insufficient)
- Clear sight lines are provided with trees setback for safe pedestrian and vehicular access to properties fronting Campbell Street.
- Additional linemarking on cycle paths is provided at all road and driveway crossing points in accordance with Austroads Guidelines and best-practice methods.
- Traffic calming measures in the form of raised crossings are provided at minor streets to reinforce pedestrian and cyclist priority.

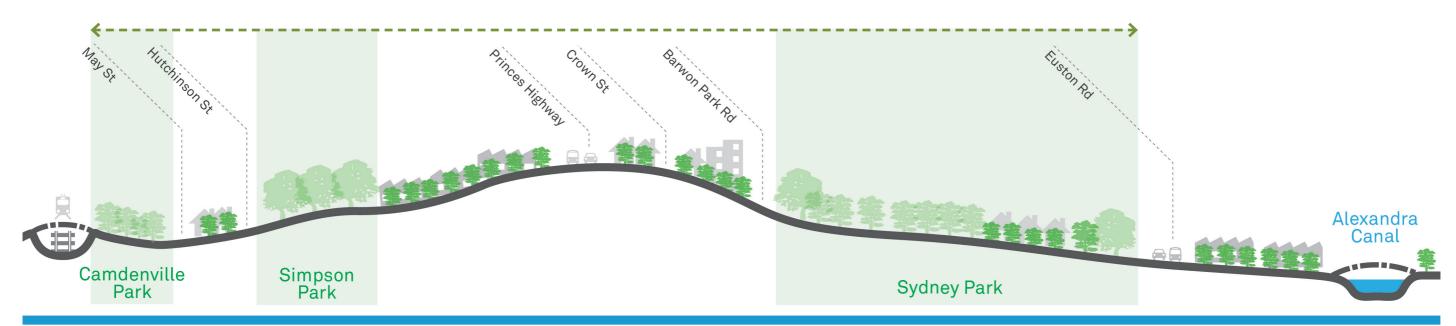


Figure C-2 - Indicative section illustrating the major landscape features along the Green Link

## C2 Community and Stakeholder Consultation

Consultation was based on the principles and processes outlined in the approved Community Communication Strategy (CCS).

In summary, the following stakeholders have been specifically consulted in regards to the Urban Design and Landscaping proposed within the study area:

- · Urban Design Review Panel (UDRP).
- · Surrounding residents and community
- · City of Sydney Council
- · Inner West Council
- · SMC. and
- RMS:

### C2.1 Urban Design Review Panel

An Urban Design Review Panel (UDRP) was been established to provide advice and guidance during detailed design and the preparation of the Urban Design and Landscape Plan and its component sub-plans as required by Planning Approval conditions B60, B61 and B62, respectively.

UDRP sessions in which items related to the Green Link sub plan have been discussed are as follows:

- 15-04-2016 St Peters Local Roads (M5AT Offices)
- 13-09-2016 St Peters Local Roads (M5AT Offices)
- 22-12-2016 St Peters Local Roads (M5AT Offices)
- 14-02-2017 St Peters Local Roads (M5AT Offices)
- 17-04-2017 St Peters Local Roads (M5AT Offices)

Feedback obtained from these sessions has included endorsements of adjustments as follows:

- · Endorsement of the lateral shift of Campbell Road by approximately 3.5m to the south to provided space for the Green Link
- Endorsement of the lateral shift of the separated path adjacent to Simpson Park to provide greater separation from the existing fig tree roots
- · Endorsement of raised pedestrian crossings for the Green Link on local streets.
- · Endorsed general concepts and details.

Notes of the meeting sessions are contained in the UDLP Consultation Register.

### C2.2 Stakeholder & Community Consultation

In summary, stakeholder consultation has included the following:

- · Regular monthly interface meetings with Councils, SMC and RMS representatives also in attendance.
- · 13-10-2016 Green Link Presentation to Inner West Council
- 13-10-2016 Green Link Presentation to City of Sydney Council
- 19-12-2017 Inner West Council consultation meeting
- 19-04-2017 UDLP Presentation to City of Sydney Council
- · 28-04-2017 UDLP Presentation to Inner West Council
- UDRP Meetings as described in Section C2.1

In summary, community consultation has included the following:

- · UDLP Community Information Exhibition throughout April
- One on one briefings at the Community Information Centre and street meetings (as required) throughout April 2017,
- Specific sessions with subject matter experts (06/04/2017, 08/04/2017 and 12/04/2017)
- · Public exhibition of the Main UDLP (03/04/2017 to 30/04/2017)

#### Consultation outcomes

Adjustments have been made to the Green Link following consultation with community and stakeholders:

- · Lateral shift of Campbell Road by approximately 3.5m to the south to provided space for the Green Link.
- Lateral shift of the separated path adjacent to Simpson Park to provide greater separation from the existing fig tree roots,
- · New stair access to Camdenville Park from Bedwin Road as requested by Inner West Council,
- · Raised crossings on local streets requested by City of Sydney Council and Inner West Council to reinforce pedestrian and cyclist priority,
- Massed planting on the boundary of Simpson Park as requested by Inner West Council,
- · Adjustment to landscaping adjacent to 130 May Street in response to property owner consultation, and
- Adjustment to landscaping on the corner of Bedwin and Unwins Bridge Roads in response to property owner consultation.







# C3 Existing character and context

The Campbell Street Green Link corridor comprises Campbell Road and Campbell Street. The corridor stretches from Euston Road intersection and the Inner West Train Line. It falls within a broader strategic framework providing an important link across the train line to Marrickvile and the Alexandra Canal to Mascot.

Based on the WestConnex St Peters Interchange - Urban Design Concept Report, the SPI and Local Roads area has a number of distinct character zones that have been created based upon a mix of existing and proposed character features of the area.

The corridor passes through a number of landscape character zones, namely residential, industrial, commercial and recreational. For the purposes of this report, the existing character of the corridor has been classified in two main types:

- · Campbell Street Residential / Mixed Use; and
- · Campbell Road Parkland Extension.

The two character zones are divided near the enterprise corridor of Princes Highway, which indicatively follows a low ridge line. Each end of the corridor sits within an industrial landscape character zone, with heritage items of state/local significance. Rudders Bond Store, located at the Euston Road intersection, sits within the St Peters Interchange project site. The Waugh and Joseph industrial buildings are located on the corner of Bedwin and Unwins Bridge Roads.

The following section of the report details each of these character zones, with a description and site photos.



Figure C-3 - Campbell Street Green Link - Precinct Strategy and Character Zones

### Campbell Street Residential / Mixed Use

This zone extends between Barwon Park Road and the Inner West Train Line. It is characterised by the compact urban grain and strong built edge comprised of a mix of single and double storey brick and rendered terrace homes and light industrial buildings.

Campbell Street is extremely narrow, with a single lane in either direction, narrow footpaths and is dominated by hard pavements and overhead wires. There are no street trees along its length with the only relief provided by the well established Fig trees in Simpson Park. West of the Princes Highway Enterprise Corridor, the narrow street continues with a combination of low-rise apartment blocks, commercial and light industrial buildings defining the streetscape.

Within this zone, there are items of local heritage significance that were identified in the EIS. They were:

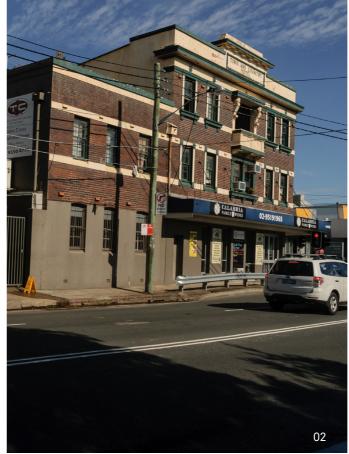
- Town & Country Hotel on the southern side of the street (to be retained)
- Terrace House (82) on the southern side of the street which is required to be demolished.
- · Camdenville Park (as part of the Goodsell Estate Conservation Aea). This is discussed further in section C5.4
- · Waugh and Josephson Industrial Buildings (nil impact by project works)

As part of the project works, all properties along the southern side of Campbell Street have been acquired are required to be demolished. It is envisioned that this will lead to a distinctive re-characterisation of this street as it becomes a considerably wider, landscaped boulevard and is described further in Section C9.

- 01 View east on Campbell Street adjacent to Sydney Park
- 02 Town and Country Hotel
- 03 Campbell Street and Princes Highway intersection
- 04 View west on Campbell Street looking across Princes Highway
- 05 Existing residential character along Campbell Street





















### Campbell Road Parkland Extension

Beyond Barwon Park Road, the local character transforms into an open recreation parkland and is dominated by the established groves of Melaleuca's along the edge of Sydney Park

Sydney Park, is the largest park in the City of Sydney LGA.At approx 40 hectares in size it comprises a series of constructed landforms. It is a regionally significant open space and highly valued community asset that provide a high level of amenity for the region. Along Campbell Road, the park generally sits at an elevated position relative to the street with a tall, vegetated slope along the park edge.

Within this zone, there are items of local heritage significance that were identified in the EIS. They were:

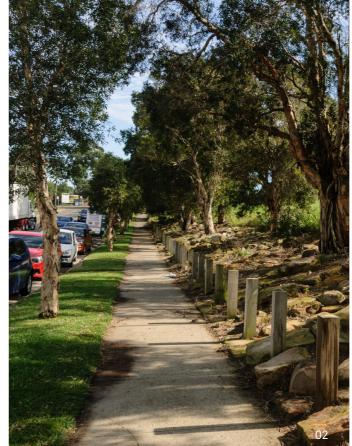
- a group of terrace houses (2-34) located on the northern side of Campbell Road which are to be retained.
- a group of terrace house (28-44) on the southern side of Campbell Road which will be demolished as part of the project.
- the 'Rudders Bond Store' warehouse (53-57) located on the southern side of Campbell Road. This building is required to be demolished as part of the project works. The potential reuse of parts of this building is subject to a separate approval under MCoA B34.

A combination of detached federation houses and industrial buildings address this section of Campbell Road. As part of the project works, all adjacent properties on the southern side are required to be demolished in order to facilitate the local roads and interchange parkland works.

- 01 Existing residences opposite Sydney Park
- 02 Existing edge condition and plantings along Sydney Park
- 03 Existing parkland character of Sydney Park
- 04 View of Rudders Bond Store on Campbell Road
- 05 Existing heritage terraces (2-34 Campbell Road)















# C4 Green Link objectives

### C4.1 Design objectives

The Green Link will be an integrated urban design and transport solution that will re-shape the way people move through this area of inner Sydney. Its fundamental purpose is to create a tree-lined boulevard that offers amenity for local residents, creates a high quality environment for pedestrians and cyclists and integrates local streetscape with adjacent open space and parklands.

To ensure this is achieved, the following Green Link objectives were established to form the basis of design for the elements of the Campbell Street Green Link described in the plan. These objectives underpin the Green Link Strategies described in Section C7 of this plan.

### Connecting the parks

The Green Link will provide enhanced connectivity between Sydney Park, Simpson Park and Camdenville Park. Pedestrian and cyclist priority will be reinforced through the implementation of upgraded footpaths, shared paths, dedicated cycle paths and raised crossings.

Existing access to parks and edge conditions will be reinstated and new access points provided in Camdenville Park. The inclusion of on-street and off-street parking will improve access to parks and nearby amenities such as nearby schools.

Access to future open space areas has also been considered and implemented to facilitate outcomes of future stages of the WestConnex Motorway.

Refer adjacent figures which represent the main objectives for the Green Link, which is to connect these three key parks along the northern alignment of Campbell Street / Campbell Road.

### A landscaped boulevard

The Green Link will become a consistent, tree-lined boulevard with wide landscaped verges that will provide a memorable, safe and enjoyable experience for road users, cyclists and pedestrians.

The Green link will contribute to the broader urban forest strategy as described in Section 3.4 of the UDLP, providing a high degree of visual relief to neighbouring residents. Trees and other urban elements will be considered and arranged to minimise visual clutter and improve livability.

### A sequence of quality open spaces

The Green Link will become a sequence of connected, linear, open spaces. Much of this has been enabled by the widening of the northern verge (since the EIS stage) by approximately 4m providing a more legible and navigable opens space network.

On the southern side of Campbell Street, a series of wide pocket parks will offer new opportunities for passive recreation whilst providing important visual amenity and screening to adjacent residential properties.

# Linking the neighbourhood, integrating the region

While the Green Link will become a major contributor to regional connectivity, a key consideration has been to reestablish local street conditions ensuring that the Green Link becomes an enabling element for the community rather than a divisive one.

Previously, the confined corridor was an unfriendly pedestrian environment, will little amenity for roadside vegetation. With the widened Green Link, residents, pedestrians and cyclists will be able to enjoy a landscaped buffer to Campbell Street / Campbell Road, shade and amenity provided by vegetation, pocket parks and path networks.

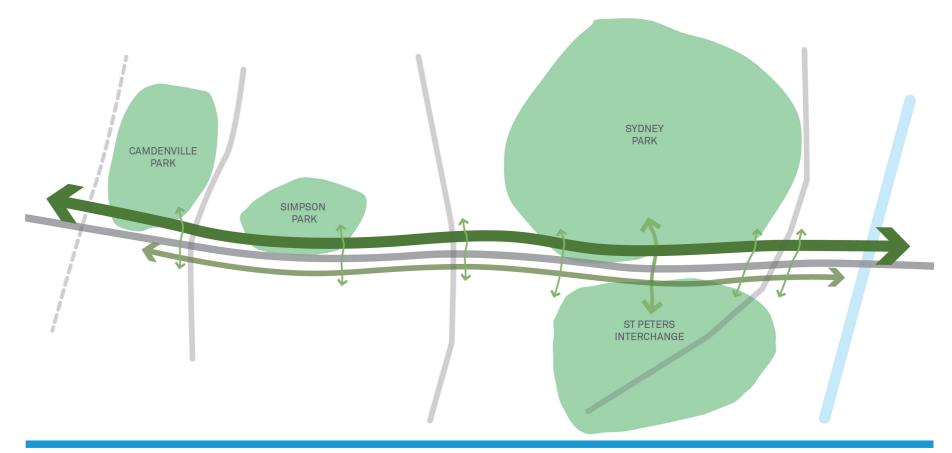


Figure C-4 - Green Link - Strategy diagram







The landscape character and material selection has been designed to reflect local street character/s and respond to localised edge conditions such as local heritage items.

All controlled crossing points across Campbell Street have been maintained with new crossings provided at key desire lines. Any



Figure C-5 - Green Link - Detailed strategy diagram

## C4.2 Green Link master plan

The final design of the Green Link is represented in the adjacent Figure. It encapsulates the Green Link objectives described in section C4 of this plan.

Several landscape strategies have been developed to support the Green Link objectives and the master plan and are provided in section C7 of this plan.







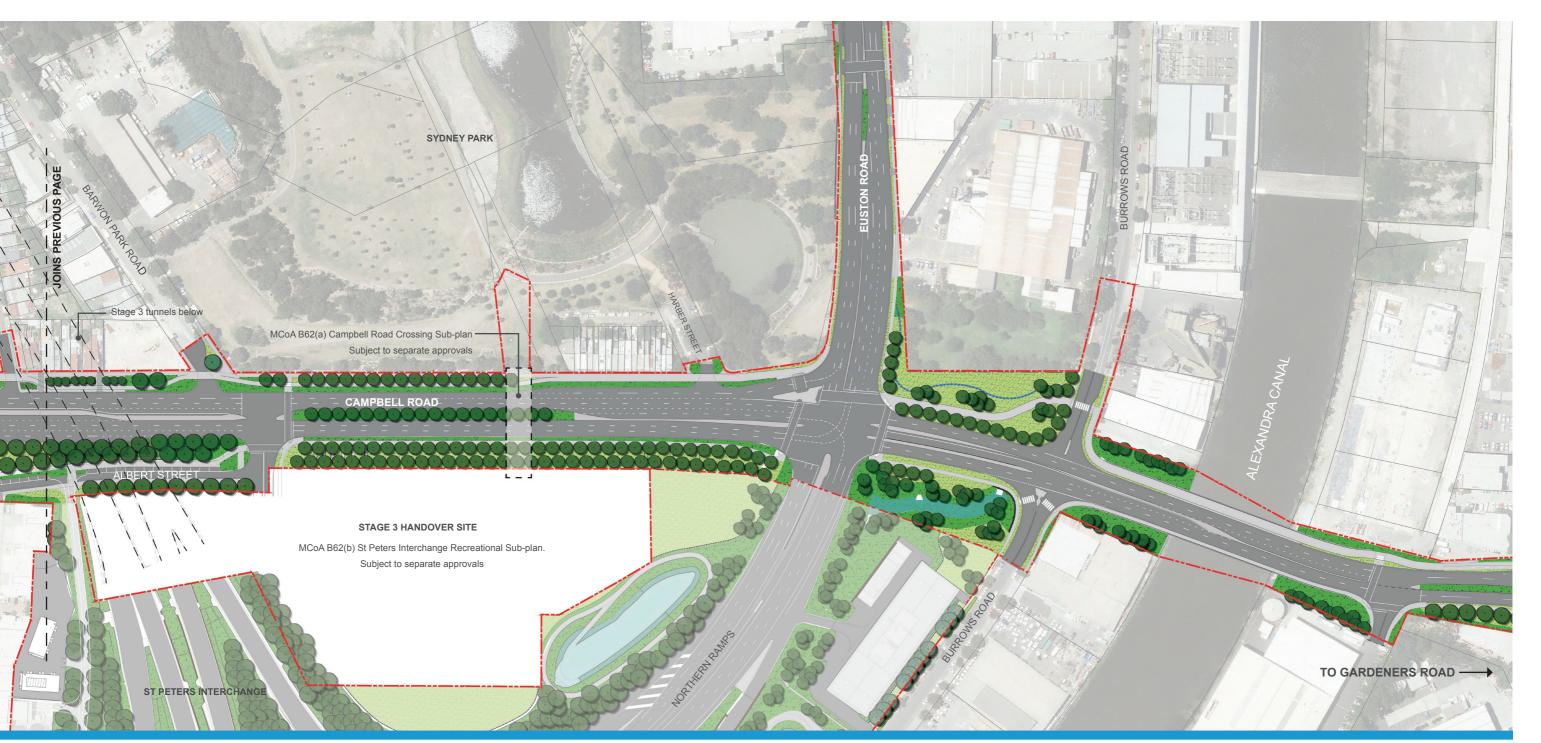


Figure C-6 - Green Link - Illustrative Masterplan

# C5 Inner West Council Open Space Guidelines

This sub-plan is sympathetic to the Inner West Council's local open space design guidelines, policies and strategies.

#### Policies and guidelines

The main policies and plans considered by the proposed works are as follows:

- Marrickville Street Tree Master plan (2014)
- · Camdenville Park Draft Master Plan (2014)
- Marrickville Urban Strategy (2007)
- · Marrickville Bicycle Strategy (2007)
- Marrickville Urban Forest Strategy (2011)
- Marrickville Local Environmental Plan Land Zoning Map (2011).
- Marrickville Development Control Plan (2011); and
- Marrickville Draft Public Domain Design Guide (September 2016).

# Impacts and opportunities on open space guidelines

The following section of the report outlines the following main documents listed above and the impacts and opportunities that the Green Link will create:

- · Marrickville Urban Strategy
- · Marrickville Bicycle Strategy
- · Marrickville Street Tree Master plan
- · Camdenville Park Master Plan; and
- Marrickville Development Control Plan St Peters Triangle Precinct.

# C5.1 Marrickville Urban Strategy

The Project has the opportunity to enhance the Inner West Council's Urban Strategy (refer adjacent Figure) which provides the planning context for future development across the Marrickville LGA.

The Green Link will provide improved east-west and north-south connections within the Project scope that will assist with the following strategic directions noted in the document:

- Strengthen connections to the Marrickville/Sydenham strategic employment lands with improved pedestrian and cyclist links
- Improve local public transport, walking and cycling connections to centres
- · Improve local parks and public domain
- Provide opportunities to increase community facilities; and
- Creating new "green corridors" linking the River and Sydney Park.

Within the context of the Urban Strategy Map, the major opportunity that the Green Link will provide will be to enhance the connections between the Strategic Employment Area and the Princes Highway Enterprise Corridor with Camdenville Park, Simpson Park and Sydney Park, as well as connections across Alexandra Canal to Mascot Town Centre and beyond.

Refer adjacent Figure which shows the indicative project boundary (shown dashed in red) overlaid to show the potential opportunities that the Green Link will provide.

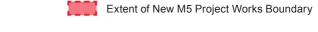




Figure C-7 - Inner West Council Urban Strategy Map - 2007









## C5.2 Marrickville Bicycle Strategy

The Marrickville Bicycle Strategy aims to facilitate increased bicycle use within the local government area.

The Green Link will enhance the Inner West Council's and wider city bicycle network by providing improved east-west and northsouth connections within the Project scope and help complete missing links between employment centres, regional parks, and new connections across Alexandra Canal.

This will be achieved through the implementation of dedicated cycle paths, shared paths and footpaths to create new connections for the regional cycleway network.

Refer below Figures which shows the indicative project boundary (shown dashed in red) overlaid with the Marrickville Bicycle Strategy map, including the Marrickville Bicycle Strategy Map with proposed Project connections shown to highlight the improved connection opportunities that the Green Link will

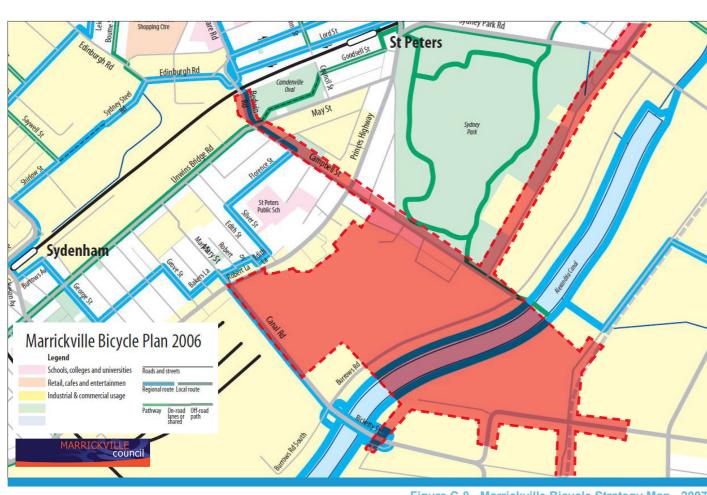


Figure C-8 - Marrickville Bicycle Strategy Map - 2007



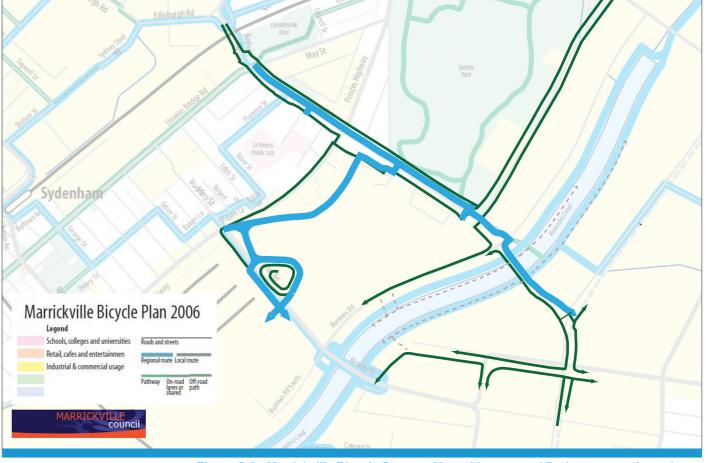


Figure C-9 - Marrickville Bicycle Strategy Map with proposed Project connections shown

# C5.3 Marrickville Street Tree Master Plan

The Project scope and Green Link area falls within the 'Sydenham & St Peters precinct plan' as part of the Marrickville Street Tree Master Plan (STMP).

One of the main principles of the Street Tree Master Plan is to increase the urban tree canopy within the LGA through new and replacement tree plantings and maintain street trees throughout the local area.

As noted within the document, the existing streetscape character has tree canopy cover that is relatively sparse, with most trees that are planted being small trees. The precinct has an over reliance on Callistemon viminalis (Bottlebrush) which contributes to a quarter of the total species mix. Over 50% of trees within the precinct are considered to be in only fair or poor condition, which could well be a reflection of the relatively harsh urban environment.

The Green Link provides the opportunity for increased verge width through the Campbell Street Green Link corridor to over 5m in width, and therefore the opportunity to plant larger trees, reflective of the scale of the street.

In the vicinity of the Green Link, the following street trees are proposed by the Marrickville STMP which has formed the basis for tree selection during detailed design:

- Albert Street Tristaniopsis laurina
- Barwon Park Road Syzygium paniculatum, Angophora floribunda, Tristaniopsis laurina, Angophora hispida
- Bedwin Road Pyrus ussuriensis
- · Brown Street Zelkova serrat 'Green Vase'
- · Campbell Street nil
- · Church Street- nil
- Crown Street- Cupaniopsis anacardioides, Angophora hispida, Synoum glandulosum
- Hutchinson Street Cupaniospsis anacardiodes, Caesalpinia ferrea, Lagerstroemia indica, Buckinhamia celsissima
- May Street Pyrus ussuriensis
- Princes Highway Lophostemon confertus
- Unwins Bridge Roads Pyrus ussuriensis
- · St Peters Street Tristaniopsis laurina

Refer adjacent Figure which shows the indicative project boundary (shown dashed in red) overlaid to show the potential opportunities that the Green Link will provide in terms of street tree planting areas.

Refer also to sections C7.3 and C7.4 which describes the Tree Canopy and Street Tree Green Link concepts in further detail.





Figure C-10 - Marrickville Street Tree Master Plan - Sydenham & St Peters precinct plan - 2014





Extent of New M5 Project Works Boundary

# C5.4 Camdenville Park Master Plan

The Camdenville Park Master Plan outlines a future vision and working plan for the park to establish it as a unique and important recreation destination for the local area.

At approximately 3.5 hectares in size, Camdenville Park is a a significant area of open space located within the St Peters Triangle Precinct. It is of local heritage significance as a former brickworks site and part of the Goodsell Estate.

The vision of the master plan is to create a dynamic and engaging park that optimises the potential of its rich layers of history, its unique setting, and its intriguing topography, as well as satisfying a wide variety of social and recreational opportunities.

Sporting and recreational facilities would be embedded into the park and provide a diverse range of structured and informal recreation opportunities, catering for increasing recreation demand.

The park would continue to develop a strong ecological framework contributing to the regional ecological values. Improvements to the water management systems would benefit water quality leaving the site and facilitate reuse.

The overall master plan is shown in the adjacent Figure and would include the following:

- Field upgrade
- Circuit paths
- · Ephemeral wetlands
- Detention basin
- Pump track and BMX track
- Activity space
- Playground upgrade
- · Amenities building upgrade
- May Street crossing



Figure C-11 - Camdenville Park Master Plan, 2014

### Campbell Street Green Link interface with the Camdenville Park Master Plan

The proposed works will encroach into the Camdenville Park Master Plan due to the realignment and widening of Bedwin Road, Campbell Street and May Street to accommodate the Project requirements.

Overall, the key design approach is to minimise impacts to the existing park and to re-establish the provisions set out in the master plan within the geometrical requirements of the New M5 Project Works.

In order to minimise the extent of encroachment into the park and maximise available open space, a new retaining wall will be implemented on the project boundary along Bedwin Road. Details of the retaining wall are provided in Section 8.7.1 of the UDLP.

Connections to the park will be provided off Bedwin Road in the form of stair and path access, similarly located to the ones represented in the master plan.

The stair shown in the master plan is located within RailCorp owned land. As a result the final stair has been adjusted to sit within the project boundary, slightly east of its original location.

The arrangement of paths is subject to ongoing consultation with Inner West Council as part of the consultation process described in section C1.7 of this plan. Details of these elements along with a revised concept master plan will be provided in future revisions of this plan.

Consequently, it is considered that the impacts to the Camdenville Park Master Plan as a result of the project will be negligible, as any impacts are primarily confined along the boundary of the park and all key components of the master plan will be re-implemented, in a modified arrangement.

The adjacent Figure illustrates the extent of encroachment into Camdenville Park as a result of the New M5 Project works.





Figure C-12 - Campbell Street Green Link - Landscape Plan and Camdenville Master Plans overlay

Extent of New M5 Project Works







## C5.5 Marrickville Development Control Plan - St Peters Triangle Precinct

St Peters Triangle Precinct comprises the area of the St Peters Triangle Master Plan incorporated within Section 9.25 of Marrickville Development Control Plan 2011 (MDCP 2011). The precinct is bound by Campbell Street, Princes Highway and the Inner West Train Line.

The DCP establishes a vision for the precinct that supports an active urban community - a mixed-use neighbourhood that perpetuates its existing raw working and creative character into new spaces for an energetic and diverse community. Some of the key initiatives within the master plan involve:

- Creating a pedestrianised precinct through the implementation of tree-lined street upgrades including traffic calming measures such as shared streets and laneways,
- · Increasing the number of through site links,
- · Improving the quality and diversity of existing open spaces,
- Establishing entry nodes on the corner of May Street and Campbell Street.

Refer adjacent Figures which shows the indicative project boundary overlaid to show the potential opportunities that the Green Link will provide.



Figure C-14 - St Peters Triangle Key plan



Figure C-13 - St Peters Triangle Precinct Master Plan, 2012

### Campbell Street Green Link Impacts on St Peters Triangle Precinct

The proposed works will have minor impacts to the St Peters Triangle Precincts, confined to the boundary along Campbell Street.

Campbell Street will no longer be a narrow corridor, and will be transformed into a wide, landscaped boulevard offering a significant increase in public open space through the implementation of the Green Link as a consistent linear park element. The Green Link allow for the initiatives of the master plan retained as well as provide opportunities for improvements and re-interpretation of the master plan.

Access and connectivity to Simpson Park will be reinstated. A widened verge comprising of footpath, dedicated cycle paths and massed planting areas will provide a favourable outcome for the park and safer outcome for its users. Path alignments have been located away from the existing fig trees bordering the park to minimise impacts. The existing chain-wire pedestrian fence will be removed from the park boundary (in consultation with Inner West Council) and on-street parking along Campbell street will provide direct and convenient access to the park.

Pedestrian priority, a key consideration of the master plan, will be upheld through the implementation of a raised pedestrian and cycle crossing (described further in section C7) along Hutchinson Street, enabling the master plan vision for a shared 'cobble street' condition.

The importance of providing a 'gateway entry' treatment on the corner of May and Campbell Street has remained a key consideration during detailed design and consultation with Inner West Council (refer to section C1.7 for description of the consultation process and outcomes). A combination of recycled brick paving, massed planting and feature trees of Hoop Pines (Araucaria cunninghamii) will create visual marker upon entering the precinct.

Refer the adjacent Figure which shows the Green Link overload with the St Peters Triangle master plan. It highlights how the Green Link will provide significant parcels of open space and tree planting which will strengthen the St Peters Triangle Precinct southern boundary as a tree lined boulevard and is reflective of the vision of the master plan.

Further details are provided in section C9 of this plan.



Extent of New M5 Project Works Boundary

Figure C-15 - Campbell Street Green Link Landscape Plan overlaid onto St Peters Triangle Precinct Master Plan

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# C6 City of Sydney Council Open Space Guidelines

This sub-plan is sympathetic to the City of Sydney Council's local open space design guidelines, policies and strategies.

### Policies and guidelines

The main policies and plans considered by the proposed works are as follows:

- Sydney Park Detailed Master Plan (2006)
- Street Tree Master Plan (2015)
- City of Sydney Development Control Plan No 004 (2012)
- City of Sydney Local Environmental Plan Land Zoning Map (2012).
- Sydney Streets Code (2013)
- Sydney Signage Code (2013)
- Sydney Lights Public Domain Design Code (2015)
- City of Sydney Cycle Strategy and Action Plan (2007-2017)
- Sydney Streets Technical Specifications (2013)
- Sydney Park Plan of Management (2014)
- Urban Ecology Strategic Action Plan (2015)

# Impacts and opportunities on open space guidelines

The following section of the report outlines the following main documents listed above in relation to the impacts and opportunities provided by the Green Link:

- · City of Sydney Cycle Strategy and Action Plan
- Street Tree Master Plan
- · Sydney Park Detailed Master Plan
- · Sydney Park Plan of Management

# C6.1 City of Sydney Cycle Strategy and Action Plan

The City of Sydney guideline documents the Councils commitment to making cycling an equal first choice transport model along with walking and using public transport.

The Green Link facilities a new, regional connection linking the areas west of the Inner West Train Line to existing cycle routes east of Alexandra Canal on Bourke Road and Gardeners Road.

The Green Link also provides an important north-south between existing pedestrian and recreational cycle routes in Sydney Park to new facilities within the St Peters Interchange.

The integration of this policy is described further in the landscape strategies in section C7.



Figure C-16 - City of Sydney - Cycle Strategy (February 2017)

# C6.2 City of Sydney Street Tree Masterplan

The City of Sydney Street Tree Master Plan (STMP) provides a blueprint for the provision of street trees across the City of Sydney. The objectives of the STMP are to improve and develop the number, health, longevity and form of street tree species; and to enhance the distinct character of the various City precincts.

The WestConnex New M5 projects lies within the areas identified as the 'Southern Industrial Precinct' of the master plan. In relation to the Green Link, the following street trees are proposed by the City of Sydney STMP which has formed the basis for tree selection during detailed design:

- Barwon Park Road Angophora costata
- Burrows Road Angophora costata / Cupaniopsis anacardiodes
- · Campbell Road Angophora costata
- Euston Road Melaleuca quinquenervia
- Holland Street Corymbia gummifera

Further detail on the street tree strategies for the Green Link is provided in section C7 of this plan.



Figure C-17 - City of Sydney Street Tree Masterplan - 2011







# C6.3 Sydney Park Detailed Master Plan

This master plan recognises the enduring value of Sydney Park as a "landscape retreat". For an increasingly urbanised community, it offers experiences not available within smaller local or district parks. Retaining and developing this value relies on a significant portion of the park remaining unstructured. At the same time, community demand is clear for improved landscape quality in aesthetic, ecological and amenity terms.

The master plan has therefore focussed on developing the quality and complexity of the park's landscapes. The Plan has also sought to better integrate existing structured uses, such as the car parks, C.A.R.E.S facility and the Oval into the larger park landscape. New sites of activity are carefully composed to ensure the parkland setting continues to predominate.

In parallel, the master plan contains a substantial supportive proposal for the development of ancillary infrastructure (seating, shelters, bbq's, cafe/kiosk, lighting and play environments). These are sited within the landscape to flexibly support the wide range of informal passive/active recreation and cultural activity that can be enjoyed.

Refer adjacent Figure which shows the indicative project boundary (shown dashed in red) overlaid to the overall master plan. The New M5 Project works will encroach into Sydney Park along Campbell Road and Euston Road. The extent of is encroachment is contained within the project boundary which is generally defined by the RMS land reservation in Sydney Park (described further in section C6.2).

The proposed works will not significantly impact the proposed Master plan in terms of public access and amenity. The Project will reinstate all access and edge conditions along the new park boundary, with any additional modifications beyond the project boundary being subject to consultation outcomes which is provided in Appendix G of the UDLP.





Figure C-18 - Sydney Park Detailed Master Plan, 2006

# C6.4 Sydney Park Plan of Management

The Sydney Park Plan of Management sets out to protect the existing cultural heritage and ecology, whilst providing increased recreational, community and cultural activities

Several new projects and focus areas are covered in this plan of management and also advancements when compared to the 2006 Master Plan:

- City farm concepts including farmers market
- Urban ecology strategy
- New frog ponds and habitats
- A leachate management plan
- · Improvements to the cycling centre
- · Conservation of the Bedford Brickworks; and
- Sydney's largest stormwater harvesting and water re-use facility.

The adjacent Figure illustrates the initiatives of the Sydney Park Plan of Management. It also identifies the RMS reservation of which generally forms the project boundary along the edge of Sydney Park.



Figure C-19 - Sydney Park Plan of Management, showing the current status of the park's development since the 2006 master plan









# Campbell Street Green Link Interface with Sydney Park

The proposed works will result in minor impacts along Sydney Park. The proposed Green Link works will include a widened verge (approximately 7m to 8m wide) with new street trees, paths as well as planting and turfed areas. The character of new street trees and planting will reinforce the existing parkland character established by the master plan as shown in the Figure below.

The open space structure, including access and circulation of the park will remain unchanged. Access to the park via Harber street and to the Heritage Terraces (2-34 Campbell Road) will be reinstated. A future land bridge (refer to MCoA B62(a) Campbell Road Crossing Sub-plan) will be constructed by RMS within 4 years of operation of the New M5 Project to facilitate improved connectivity across Campbell Road to the future recreational areas (refer MCoA B62(b) St Peters Recreational Area Sub-plan).

Encroachments within Sydney Park along Campbell Road are confined to the intersection of Euston Road. A small section of land has been acquired by RMS for the project at this location.

Sydney Park Area after completion of Project

Sydney Park Area prior to commencement of Project.

MCoA B62(a) Campbell Road Crossing Sub-plan. Subject to separate approvals



Figure C-20 - Green Link concept design with Sydney Park Master Plan overlay

# C6.5 City of Sydney Streets Code

The City of Sydney Streets Code sets the guidelines, design coordination and material palettes for public domain works in the Local Government Area. It promotes a balanced idea of street design that recognises the need to accommodate public life and amenity as well as cater for traditional linking and transport corridor functions.

The Green Link lies within areas identified as 'Local Areas' by the code. Local areas consist of primarily residential and industrial land uses areas. The material palette for Local Areas includes in-situ concrete, asphalt and brick. Selection of the these materials must respond to local context, fabric and potential heritage that may provide opportunity to highlight key pedestrian links and local hubs with brick paving.



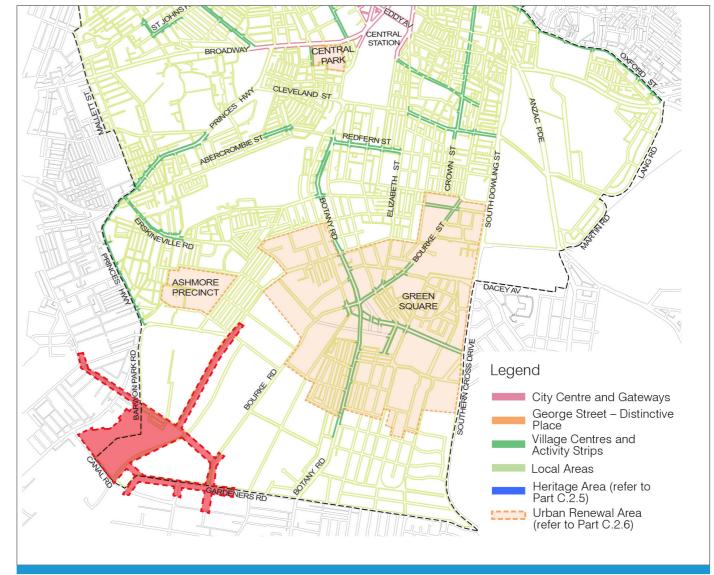


Figure C-21 - City of Sydney Streets Code - 2013



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# C7 Campbell Street Green Link Strategies

Campbell Street Green Link is an enhanced and unified landscaped green link between Sydney, Simpson and Camdenville Parks. The green link facilitates a more legible and navigable open space network by providing a high quality open space link to the northern side of Campbell Street between the three parks.

The following section outlines the urban design and landscape strategies that reinforce the objectives and policies described in section C4 of this plan and is consistent with section 3.5 of the UDLP.



Figure C-22 - Green Link - Artists Impression of Campbell Street adjacent to Simpsons Park

### C7.1 Pedestrian and Cycle Strategy

The proposed works will add significantly to the local and regional network for cyclists and pedestrians. The Green Link extends from Sydney Park to Camdenville Park as a tree lined road corridor, which incorporates footpaths, shared user paths, landscaped verges, street furniture and on street car parking. The proposed green link provides a local street condition, with crossings along its length to facilitate safe passage of pedestrians and cyclists.

The adjacent Figures outlines the connectivity strategy which comprises of:

- Dedicated off-road cycle paths (minimum 2.5m wide) along Campbell Street and Campbell Road continuing across Alexandra Canal and tieing into existing cycle paths on Bourke Street and Bourke Road.
- Shared paths (minimum 3m wide) through the public parkland in St Peters Interchange connecting Campbell Road and Sydney Park to Canal Road and the future gateway works
- · Footpaths (minimum 1.8m wide) along all street edges.
- Raised crossings to improve pedestrian and cyclist priority at minor streets.

The New M5 Project team has undertaken a thorough review of existing and proposed active transport network (ATN) routes as required under MCoA B50. This has led to the determinations of the the Pedestrian and Cycle Network Implementation Strategy under MCoA B51 identifying the following key changes to the network as part of the project works in relation to the Green

 Upgrades of footpaths to shared paths along the southern side of Campbell Street and Campbell Road.

The changes required to align with the outcomes of the pedestrian and Cycle Network Implementation Strategy will be incorporated in future revisions of this plan.

The outcomes of the Cycle & Network Implementation Strategy are as a result of consultation undertaken with Councils and other stakeholders by RMS as part of the requirements of MCoA B51.

Further detail is provided in the Landscape Concept Plans provided in Section C8.

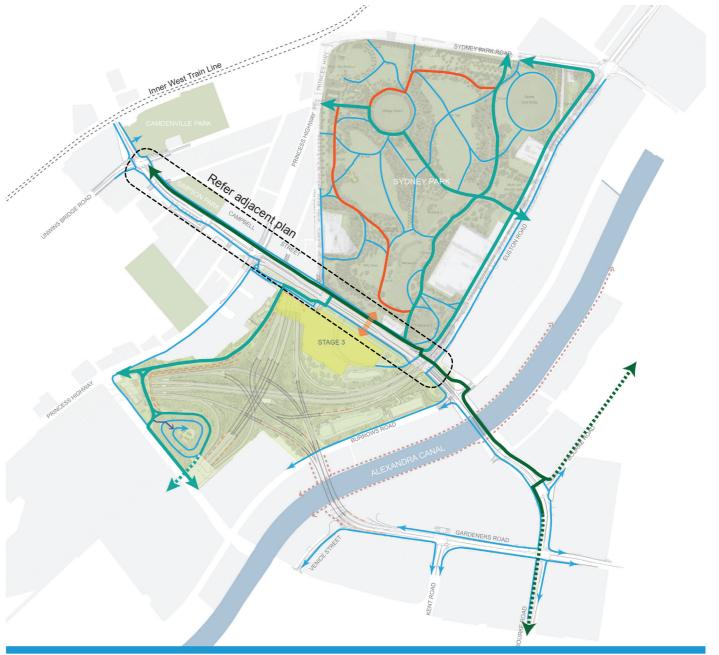


Figure C-23 - Campbell Street Green Link - Regional Access Strategy







### **Provision of Crossings**

In addition to the enhanced pedestrian and cycle infrastructure, the provision of crossings will provide further benefit to users along the Green Link.

Formalised crossings at key signalised intersections will facilitate movement across Campbell Street. Informal crossings will generally be provided at all other unsignalised cross streets.

Pedestrian and cyclist priority will be reinforced along the Green Link through the introduction of raised, at-grade crossings at the following streets:

- · Hutchinson Street,
- · Crown Street,
- · Barwon Park Road,
- · Harber Street, and
- · Albert Street.

The adjacent Figure illustrates the typical layout for raised crossings on Campbell Street which has been designed in accordance with Austroads Guidelines. Crossings have been configured to slow down cyclists and motorist alike, supported by additional linemarking and signage, promoting a safe environment for all users.



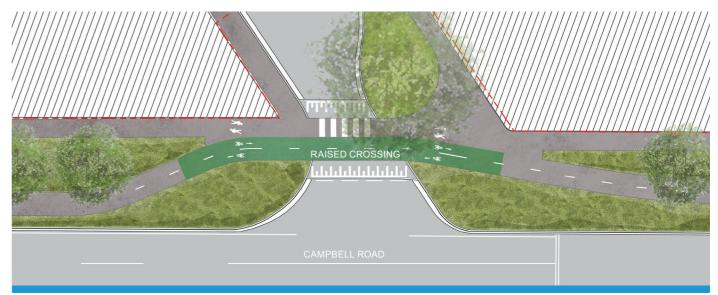


Figure C-25 - Campbell Street Green Link - Typical Raised Crossing (Barwon Park Road example)



Figure C-24 - Campbell Street Green Link - Access Strategy - Plan

## C7.2 Open Space Network

The green link corridor will contribute to major open space opportunities along Campbell Street / Road, where residual land will be transformed into a series of pocket parks linked by an enhanced networks of shared paths, footpaths and cycleways. These will greatly increase the amenity and connectivity of the open space network.

As described in section 3.5 of the UDLP, the adjacent Figure illustrates the general increase of passive open parkland areas along the Green Link connecting major open space destinations of Camdenville Park, Simpson, Park, Sydney Park and St Peters Interchange.



Figure C-26 - Campbell Street Green Link - Open Space Network - Strategy





Legend

Active - play

Active - recreation

Vegetation

Carpark

Passive - open parkland
Passive - viewing / lookout
Passive - waters edge
Passive - heritage curtilage

Motorway Landscape (non-accessible opens space)

Legend

Active - play

Active - Green Link Commuter Corridor

Passive - open parkland

Passive - linear parkland
Passive - waters edge
Passive - heritage curtilage
Active Edge / Outdoor Dining
On and off road car parking

When compared to the EIS concept, the design now features significantly wider verge widths to accommodate the Green Link. At the EIS stage, the northern edge of Campbell Street / Campbell Road generally had an approximate 2-4m verge. Through design development, the widths along this area have been increased to approximately 4-10m. With the widened landscaped spaces now available, it is now possible to provide a more legible and navigable open space network of links to the northern side of Campbell Street / Campbell Road between the three parks.

The plan below illustrates the general open space structure along the Green Link which generally comprises of:

- an active commuter corridor on the northern side of Campbell street / Campbell Road
- a linear parkland suitable for passive recreation along the souther side of Campbell Street / Campbell Road.



Figure C-27 - Campbell Street Green Link - Open Space Network - Plan

## C7.3 Tree Canopy

Building upon the project vision for the creation of an 'Urban Forest' at St Peters, the Green Link will be a unifying element with a consistent tree canopy, providing 'green relief' to all users.

The arrangement of the tree canopy will support the open space structure described in section C7.2 and will be sympathetic to local street conditions.

The adjacent Figures detail the extent of existing tree canopies in nearby open spaces such as Sydney Park, Camdenville Park and Simpson Park and highlights the proposed extent of new tree plantings to create an enhanced and unified landscaped link.

The existing canopy cover across the precinct is relatively sparse, with most trees planted being small tree species. The opportunity for planting larger trees is very dependent on the verge width. Because the proposed verge widths through the Campbell Street Green Link corridor are over 5m in width, the opportunity to plant larger trees now exists.

Considering that there were few existing street trees along Campbell Street and Campbell Road, the implementation of the tree canopy along the Green Link contributes to the requirements of MCoA B63 which is to achieve a net increase of trees as a result of the entire project.



Figure C-28 - Campbell Street Green Link - Urban Forest - Strategy

#### Legend



Proposed trees - Local Road Upgrades

Proposed trees - St Peters Interchange







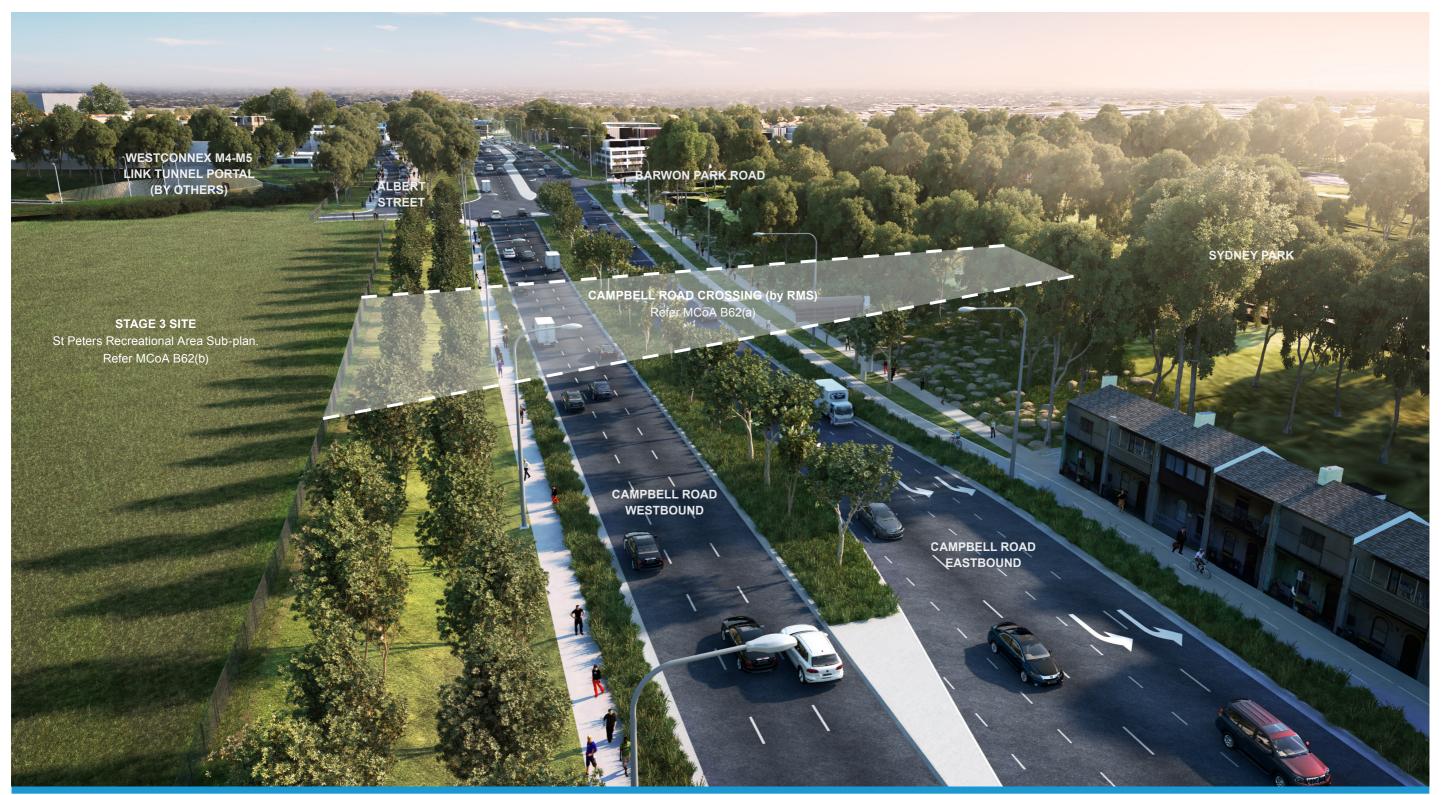


Figure C-29 - Campbell Street Green Link - View west along Campbell Road (Artist's impression only)

# C7.4 Street Tree Strategy

As described in section C5 and C6 of this plan, the approach to tree species selection has been considered holistically as outlined in section 3.5 of the UDLP and informed by the following council guidelines:

- Inner West Council Street Tree Master Plan
- · City of Sydney Council Inner West Master Plan
- Sydney Park Detailed Master Plan
- Sydney Park Plan of Management

The adjacent figure represents the Street Tree Strategy for the entire St Peters Precinct and described in more detail on the following page.

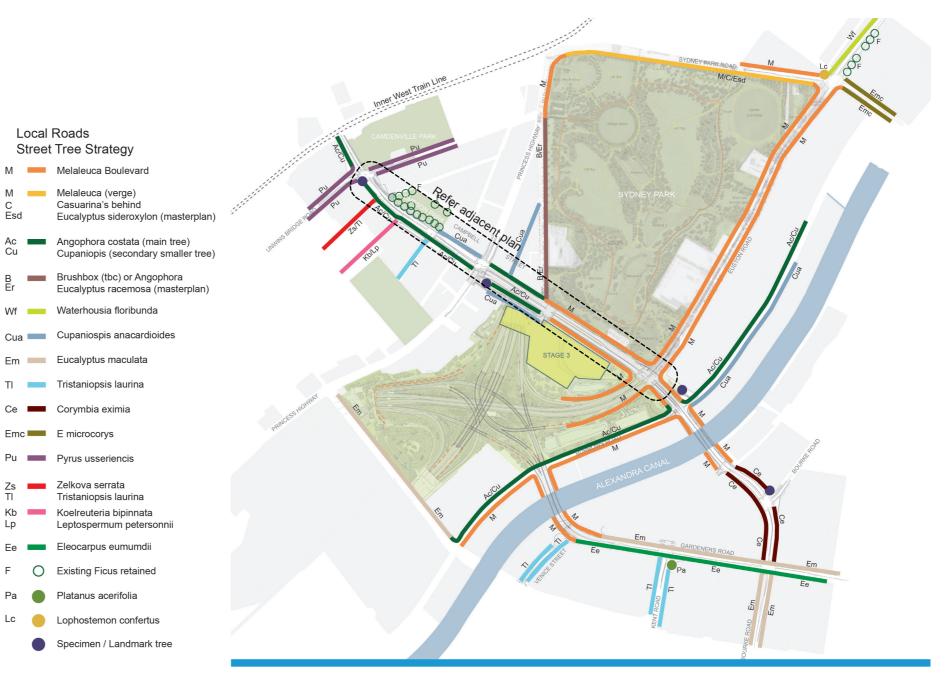


Figure C-30 - Campbell Street Green Link - Street Tree Strategy - Keyplan









#### **Green Link Street Trees**

The Green Link will feature a consistent line of street and parkland trees along its length to establish a landscape boulevard character that reflects local identity.

Since no tree species is nominated for Campbell Street by Inner West Council, a dominant street tree of Smooth Barked Apple (*Angophora costata*) will feature along majority of Campbell Street, aligning to City of Sydney guidelines and achieving consistency across council boundaries.

Existing trees such as the mature fig trees within Simpson Park will be retained, reinforcing local identity.

Where space has been limited, and safe sight line distances an issue, smaller street trees of Tuckeroo (*Cupaniopsis anacardiodes*) have been selected, aligning with Council guidelines on neighbouring streets of Crown Street, Hutchinson Street and Barwon Park Road.

Gateway tree plantings of Hoop Pine (*Araucaria cunninghamii*) have been selected in accordance with Inner West Council recommendations and will be planted on the corners of Unwins Bridge Road and Campbell Street to reinforce the St Peters Triangle Master Plan.

Adjacent to Sydney Park, the key design approach has been to reinforce the existing character of the Melaleuca boulevard (featuring *Melaleuca quinquenervia*) established by the Sydney Park Master Plan. The character of Sydney Park will extend across Campbell Road through multiple rows of trees, integrating with the landscape typologies proposed in the St Peters Interchange (Flood Plain Swamp Forest - refer section 10 of the UDLP).

Further detail of planting strategy and species selection along the Green Link is provided in Section C9 of this plan.

# Angophora costata Araucaria cunninghamii Cupaniospis anacardioides Ficus rubiginosa Melaleuca quinquenervia Existing Ficus retained



Figure C-31 - Campbell Street Green Link - Street Tree Strategy

# C7.5 Landform and Drainage

Direction of water flow along Campbell Street / Road is divided into two catchments as Princes Highway follows the natural ridge line of the area. East of Princes Highway, the direction of water heads to Alexandra Canal where it is treated through a network of swales and drains.

The adjacent Figure illustrates the holistic drainage strategy and water catchments for the St Peters area.

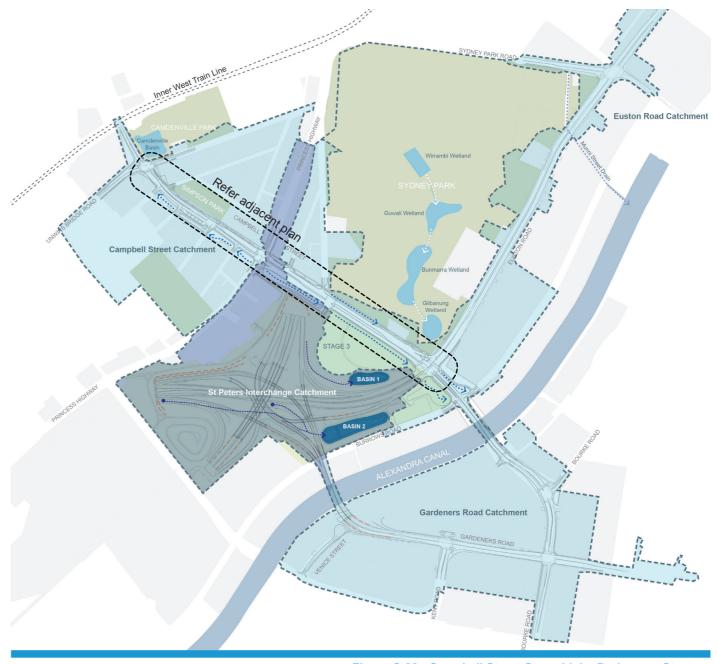


Figure C-32 - Campbell Street Green Link - Drainage - Strategy





Legend

Sydne Park Catchment
Local Roads Catchment

---> Bioswale network

St Peters Interchange Catchment

Campbell Street Drain Storage Cell

Existing Water Quality Basin

Proposed Water Quality Basin

#### **Green Link Drainage**

Along the Green Link, a network of swales will be implemented to capture and treat low-flow runoff where feasible. In general, swales will be made as shallow as possible to appear as part of the profiled street verge rather than a basin.

As a result of limitations and constraints in Camdenville Basin, a series of underground storage tanks have been determined during detailed design to manage stormwater flow. The storage capacity of the tanks are based on the requirements to not increase stormwater flows to the eastern channel for all events up to the 1:100 year ARI flood. The stormwater tanks have been located in the near vicinity of Camdenville Basin within the Project footprint under Campbell Street.

In some locations the tanks will be underneath verge areas. The depth of the tanks have been designed to maintain a consistent landscape treatment along Campbell Street.

The plan below illustrates the location of these tanks.

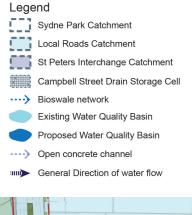




Figure C-33 - Campbell Street Green Link - Catchments - Plan

# C7.6 Street Parking

The Green Link will maximise landscaping, pedestrian and cycling facilities, but there has also been consideration given to the provision of on-street and off-street parking which remains generally consistent with the EIS and is represented in the adjacent Figure.

The design provides a total of 57 on-street (parallel) parking spaces comprising of:

- · 16 spaces adjacent to Simpson Park on Campbell Street,
- 9 spaces opposite Simpson Park on Campbell Street between Florence Street and St Peters Street,
- 8 spaces on Campbell Street between St Peters Street and Church Street, and
- 24 spaces on Albert Street (added since the EIS)

The amount of car parking on Albert Street will be increased to 53 spaces to facilitate outcomes of the St Peters Recreational Area Sub-plan (refer MCoA B62b) and will be included in future revisions of this plan.

The design also provides 27 off-street (90 degree) parking spaces on the southern side of Campbell Street between Florence Street and St Peters Street. Since the EIS the location of the off-street parking facility has been relocated one block west (originally located between St Peters Street and Church Street) to facilitate improved urban design and engineering outcomes including:

- · improved pedestrian access and circulation
- · provision of wider verges for street tree plantings
- provision of offsets from residential neighbours to allow for buffer and screen planting
- · improved traffic movements

The off-street parking has been relocated during detailed design to provide a more functional layout, safer exit from the carpark, and improved landscaping areas. Numerous meeting were held with the Department of Education, St Peters Public School Principal, the school P&C and Inner West Council, will all endorsing the relocation. A consistency review for the relocation has been approved by RMS.

For further information regarding the consultation process refer to the UDLP Consultation Register.

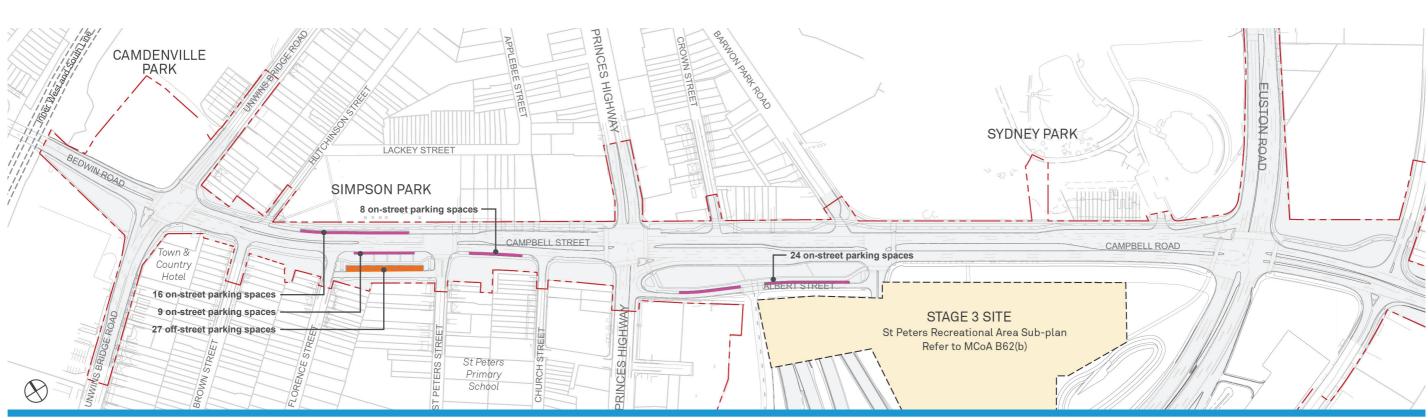


Figure C-34 - Campbell Street Green Link - Catchments - Plan

Legend

On-street parking locations

Off-sreet parking locations









# C7.7 Cut and Cover Structure

A cut and cover structure will be constructed along Campbell Road between Princes Highway and Barwon Park Road.

Generally, on the southern edge of Campbell Road, provision for 1000mm of soil depths has been allowed for above the structure to facilitate tree plantings and parkland above.

On the northern side of the road, a series of raised planters are proposed in response to the structure below and the residential character of the adjacent terrace houses. This is further explained in section C7.8

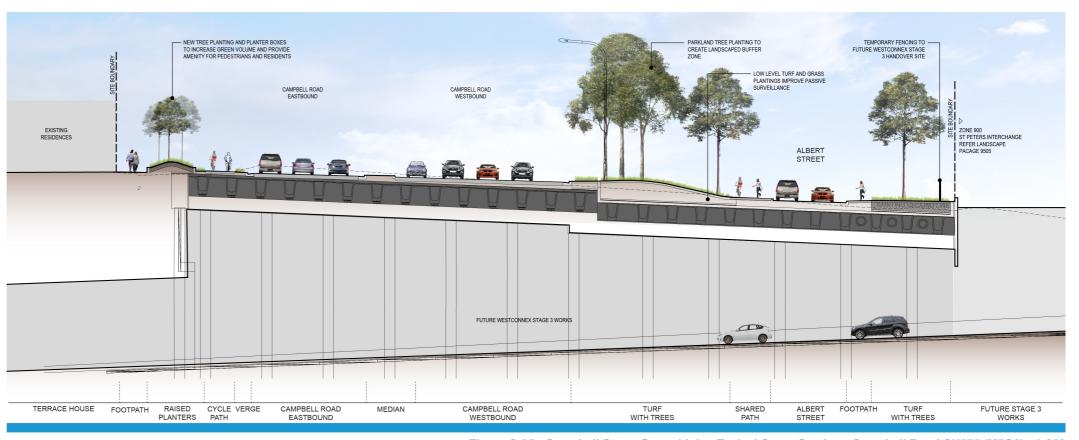


Figure C-35 - Campbell Street Green Link - Typical Cross Section - Campbell Road CH675 (M7Q0) - 1:250



Figure C-36 - Campbell Street Green Link - Cut and Cover Structure - Plan

# C7.8 Retaining walls

The approach to retaining walls has been considered in context of the local character/s and conditions along the Campbell Street Green Link Corridor. Section 8.7 of the UDLP addresses all project retaining walls for the project. The following section of this plan provides a summary of the UDLP in relation to walls to be constructed along the Green Link Corridor.

#### Major retaining wall types

Similar to the adjacent St Peters Interchange, major retaining walls and bridge abutment retaining walls are consistent with the detailing adopted for the wider Project retaining walls as a suite of elements, neutral in colour and with a simple vertical banding pattern to accentuate the vertical joints. The following wall types are to be constructed in the vicinity of the Green Link (refer adjacent Figure):

• Type 4A - Insitu Concrete Walls

#### Minor retaining wall types

Minor retaining walls will be required to reconcile local street conditions and provide adequate soil depths suitable for landscaping purposes along the Green Link.

These walls will feature recycled brick cladding, blending in with the surrounding context. They will generally be less than 900mm in height to maintain sight lines and avoid any potential unsafe fall heights. The following wall types are to be constructed in the vicinity of the Green Link:

· Type 5 - Core filled block walls with recycled brick cladding

 Table 04
 Green Link Retaining Walls

No.	Location	Description
RW 700-01	Adjacent Camdenville Park on Bedwin Road	Type 4A - Insitu concrete wall with vertical rebates
-	Stage 3 cut and cover planter boxes on Campbell Street	Type 5 - Core filled block walls with recycled brick cladding

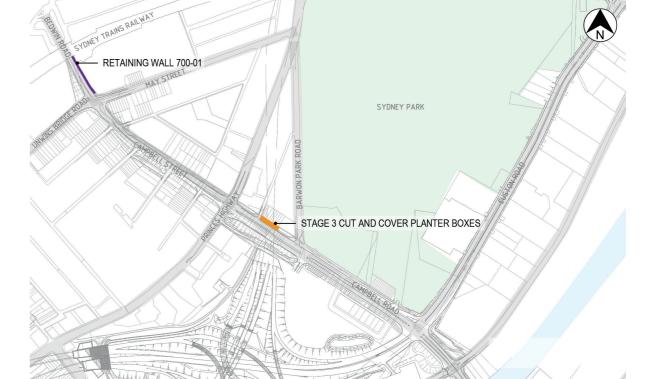


Figure C-37 - Campbell Street Green Link- Retaining Walls - Key plan

**LEGEND** 

RETAINING WALL - TYPE 4A

RETAINING WALL - TYPE 5







### Retaining wall RW700-01

The elevation below illustrates the design intent for the retaining wall along the edge of Camdenville Park. It will become a visually recessive structure with uncomplicated detailing and charcoal in colour.

A new stair access has been provided from Bedwin Road to Camdenville Park in accordance with the Camdenville Park Master Plan and consultation with Inner West Council.

Refer to section C8 of this plan for concept plans showing the general arrangement and configuration of this element.

#### LEGEND

- (01) GROUND LINE
- ROAD LEVEL
- (33 INSITU REINFORCED CONCRETE RETAINING WALL.
- CONTROLLED ACCESS
  BOUNDARY BALUSTRADE
- ROAD LIGHTING MOUNTED TO RETAINING WALL
- **66** GRADED EARTHWORKS
- 07 VERTICAL REBATES AT 1000mm CTRS



Figure C-38 - Campbell Street Green Link- Retaining Walls - RW700-01

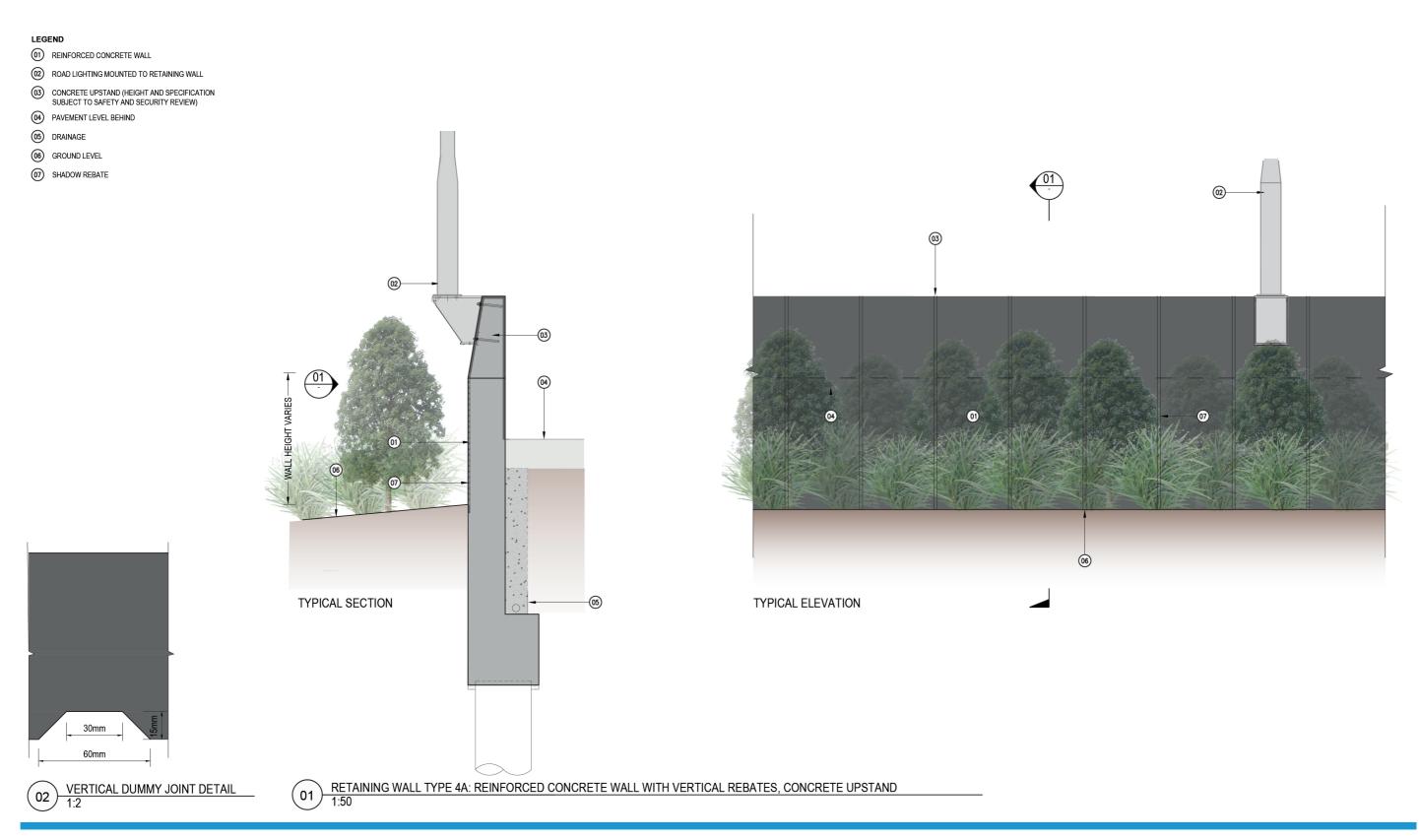


Figure C-39 - Campbell Street Green Link- Retaining Wall - Type 4A





## Recycled brick retaining walls

As described in section C7.7, areas over the cut and cover structure will not have sufficient depths to allow for landscaping and tree plantings. To remedy this, a series of low, brick-faced retaining walls will be implemented to ensure a consistent and coherent landscape theme along the Green Link.

The plan and elevation below illustrates the general arrangement of these elements.

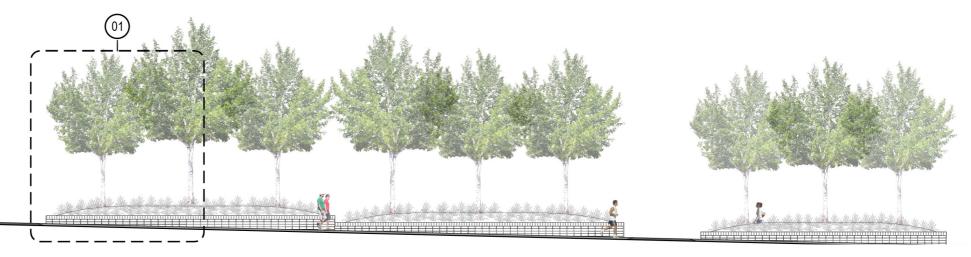




Figure C-40 - Campbell Street Green Link- Retaining Wall - Recycled Brick Walls - Plan

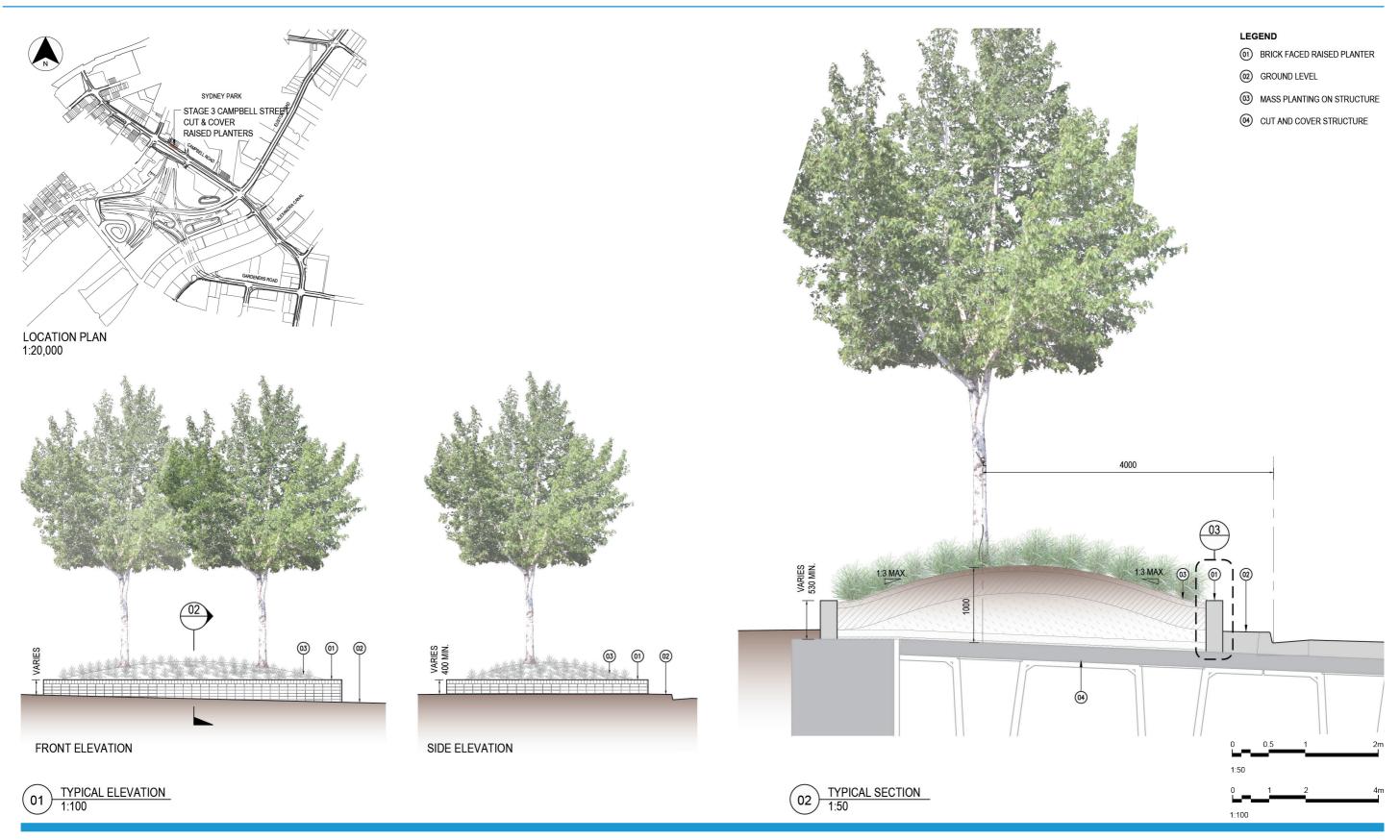


Figure C-41 - Campbell Street Green Link - Retaining walls - Sheet 01 of 02





(1) RECYCLED BRICK WALL HEADER FINISH
(2) RECYCLED BRICK WALL FINISH

©3 CORE FILLED BLOCK WORK RETAINING WALL TO ENGINEERS DETAIL.

06 SUBSOIL DRAINAGE TO ENGINEERS DETAIL

05 WATERPROOFING AS REQUIRED TO ENGINEERS DETAIL

GROUND LEVEL

(04) FOOTING AND REINFORCEMENT TO ENGINEERS DETAIL

LEGEND

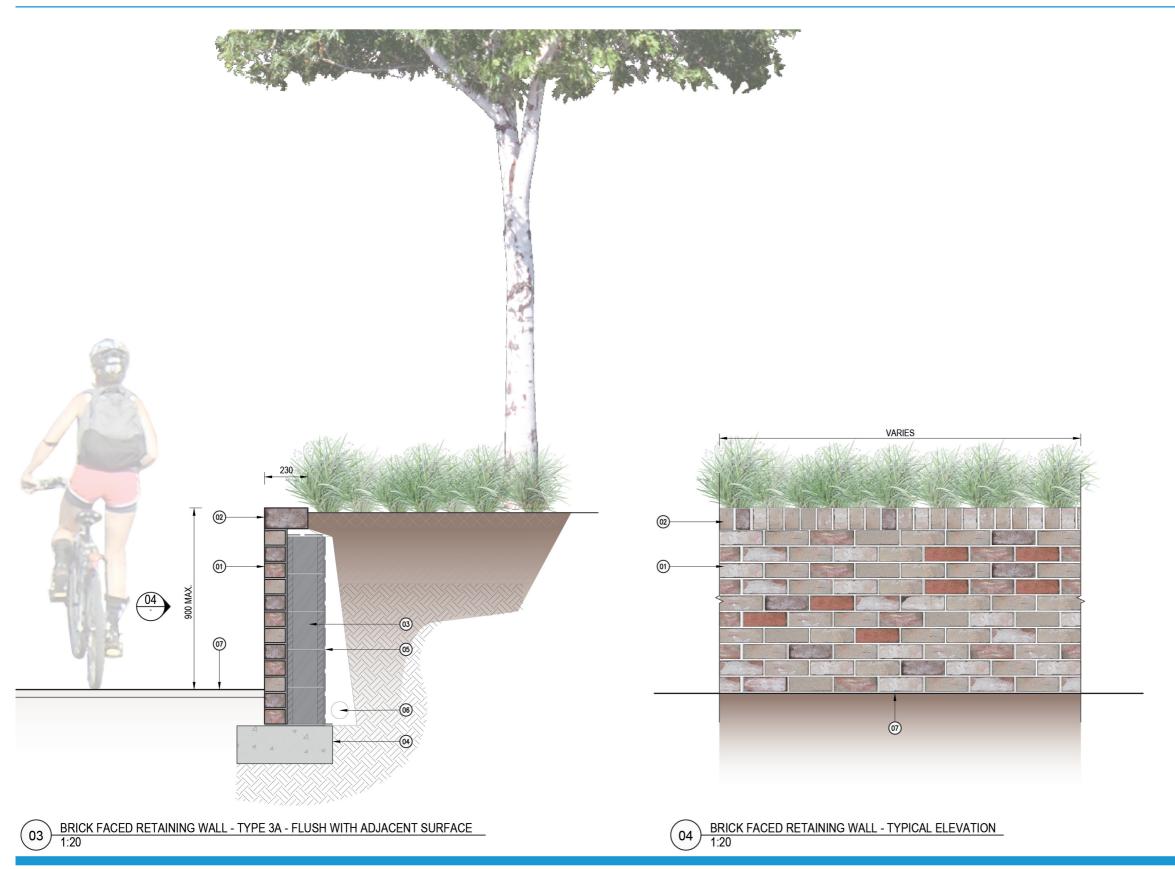


Figure C-42 - Campbell Street Green Link - Retaining walls - Sheet 02 of 02

# **C7.9 Heritage Integration**

The EIS identified the following items of local heritage significance in the vicinity of the Green Link which are located on the plan below:

- The Waugh and Josephson Industrial Buildings (01)
- · Camdenville Park as part of the Goodsell Estate Heritage Conservation Area (02)
- May Street Terrace Houses (03)
- St Peters Public School (04)
- Group of Terraces, 2-34 Campbell Road (05)
- Town and Country Hotel (06)
- Terrace House, 82 Campbell Street (07)
- Group of Terraces, 28-44 Campbell Road (08)
- Rudders Bond Store Warehouse, 53-57 Campbell Road (09)

The Heritage Interpretation Plan (HIP) required under Ministers Condition of Approval B40 will provide an assessment of key interpretation themes to be implemented throughout the project in relation to archeological relics, heritage items and conservations areas affected by the project works.

Outcomes from the Heritage Interpretation Plan are yet to be confirmed. Once known, determination and integration of these outcomes will be included in future revisions of this plan if required.



Figure C-43 - Campbell Street Green Link - Heritage Intepretation Strategy - plan







# C7.10 Gateway Strategy

The widening of Campbell Street presents the opportunity to establish a 'gateway' treatment Town and Country Hotel in response to its local heritage significance and the 'entry node; envisioned by the St Peters Triangle Master Plan.

The widened footpaths will feature recycled brick paving sourced from works elsewhere in the local roads area (on Albert Street). The pavers will be laid in the original herringbone pattern adopted in the area since the 1920's.

A feature tree (Hoop Pine) will be planted in front of the Hotel to also reinforce the gateway identity.





**Existing brick paving on Albert Street** 

Figure C-44 - Campbell Street Green Link - Town and Country Hotel - Gateway Treatment - Plan

# C8 Landscape Concept

#### General Design Approach

The key objective for Campbell Street / Road is to create a 'Green Link' in accordance with MCoA B62 (c) comprising a unified streetscape with a consistent and coherent landscape theme that reflects the local character of the compact urban grain of the adjacent suburbs as well as extending the landscape character of adjacent parklands such as Sydney Park

The following section includes concept plans and sections at 1:1000 scale for landscape works related to the Campbell Street Green Link.

The drawings illustrate the scope of landscape works within the project boundary in relation to the project road alignment, existing street network, new service facilities, existing vegetation, existing adjoining properties, existing vegetation and existing features generally.

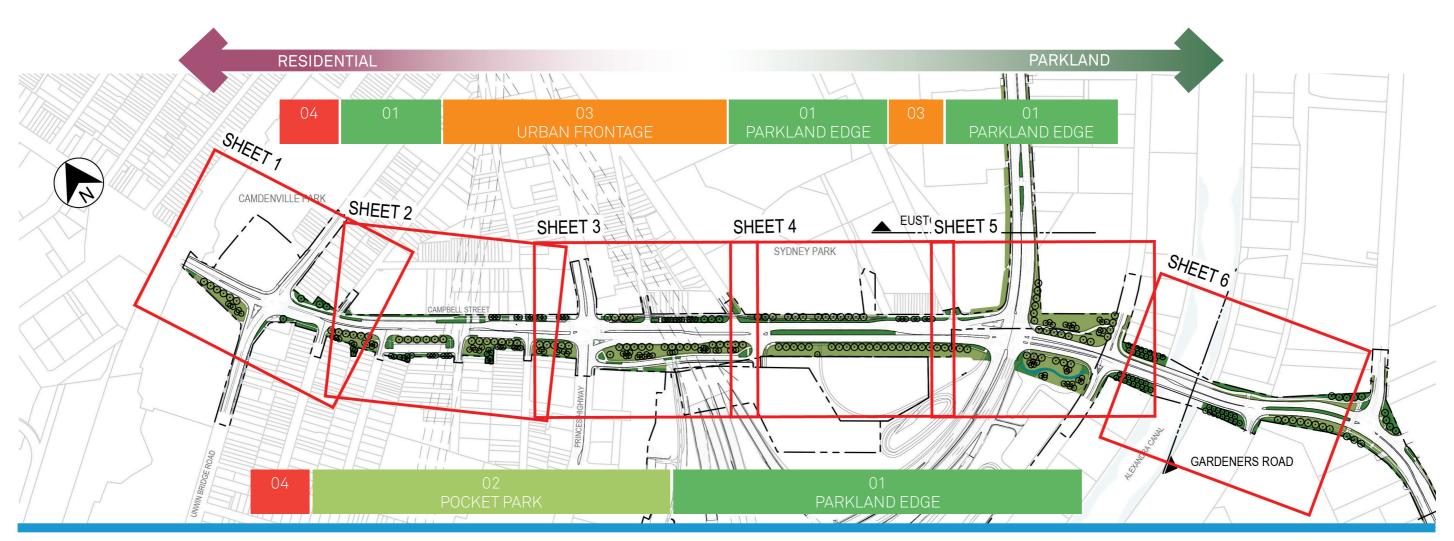


Figure C-45 - Campbell Street Green Link - Urban Design Concept Strategy - Plan







# Campbell Street Verge Treatments

To achieve a unified landscape outcome along Campbell Street the following four main verge treatments have been identified and adopted:

# 01 Parkland Edge

Extension of the landscape character of Sydney and Simpson Park across Campbell Road. Avoid impact to existing parkland trees and maintain permeable edge along park boundary. Amenity created with wide verge plantings and turf areas.

# 02 Pocket Park

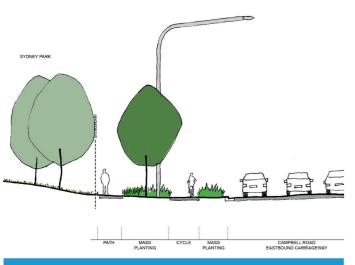
Pocket parks creating visual amenity for pedestrians. Parks will incorporate screen planting to boundaries. Planted bioswales seamlessly integrated within the landscape.

# 03 Urban Frontage

Planted verges to provide separation from street and visual amenity. Planting character that reflects the compact urban grain of the existing built environment.

# 04 Gateway

Feature planting to identify the gateway entrance to Campbell Street at the Town and Country Hotel intersection.

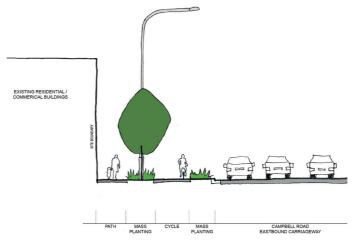


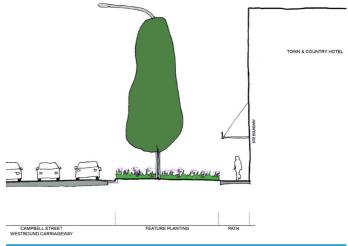
Parkland edge - Typical section

CAMPRELL STREET
WESTBOUND CARRIAGEWAY

FEATURE PLANTING

FATH





Pocket park - Typical section

**Urban frontage - Typical section** 

Gateway - Typical section

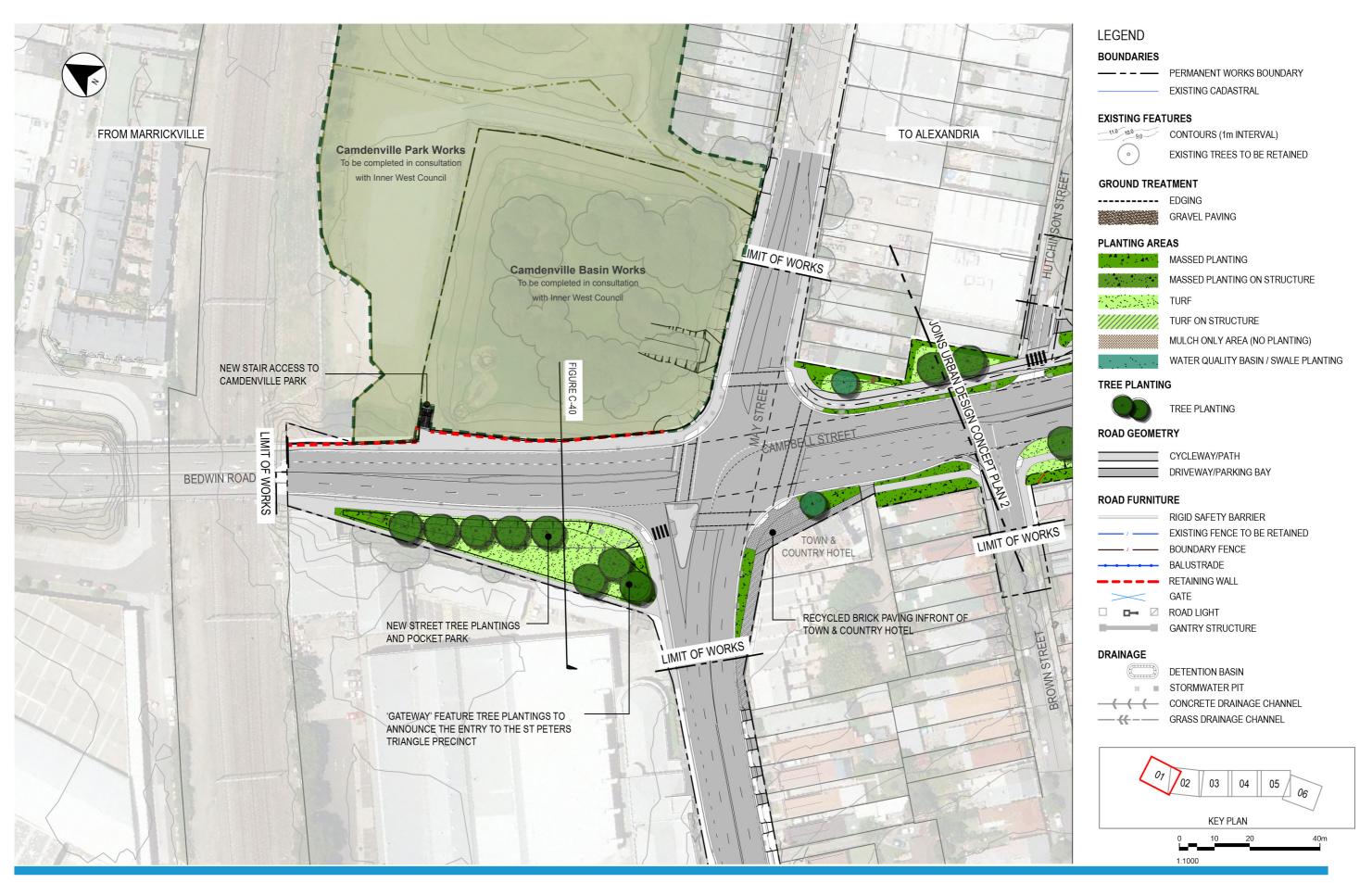


Figure C-46 - Campbell Street Green Link - Urban Design Concept Plan - Campbell Street / Campbell Road - Sheet 1 of 6 - 1:1000







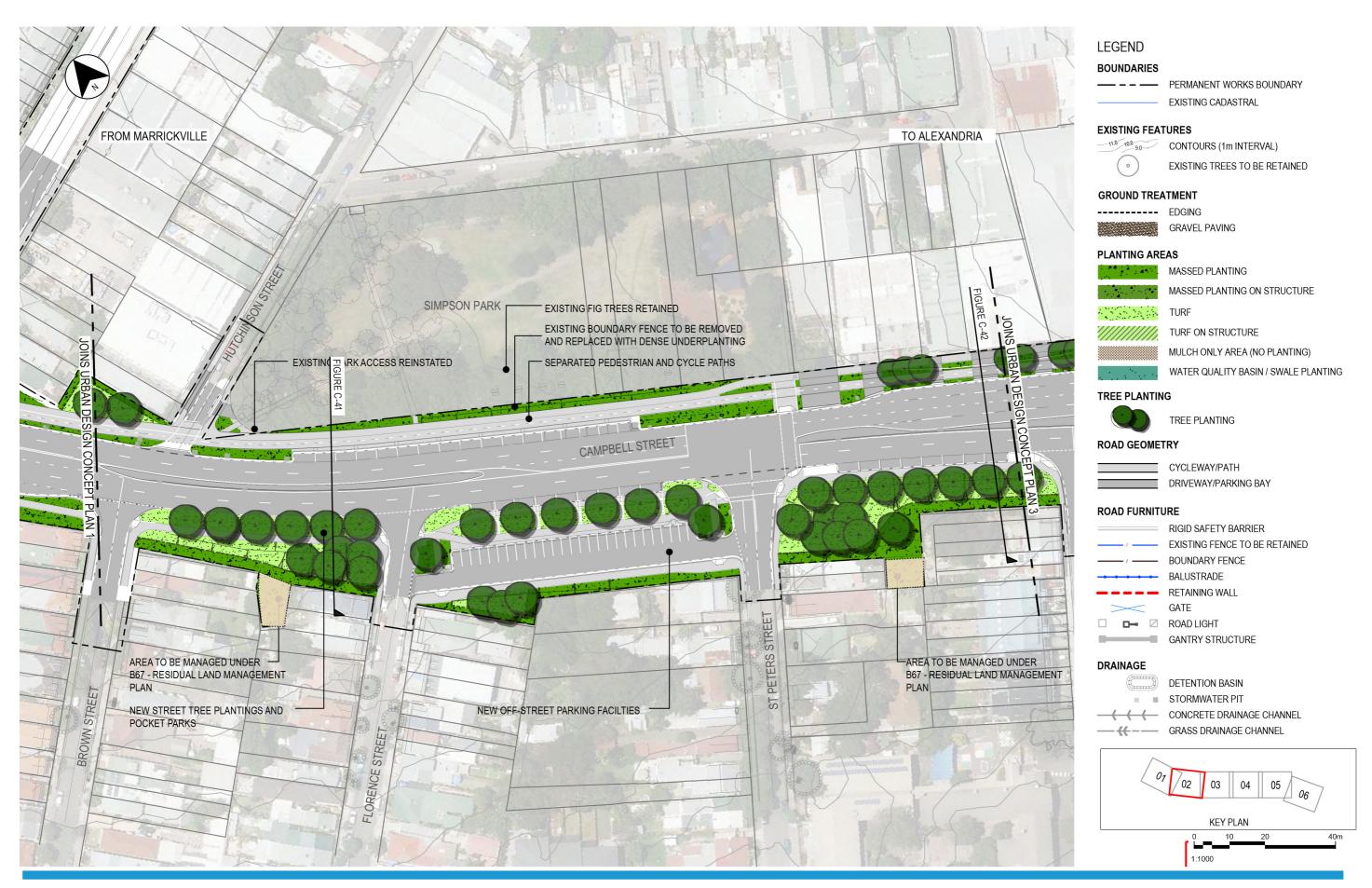


Figure C-47 - Campbell Street Green Link - Urban Design Concept Plan - Campbell Street / Campbell Road - Sheet 2 of 6 - 1:1000

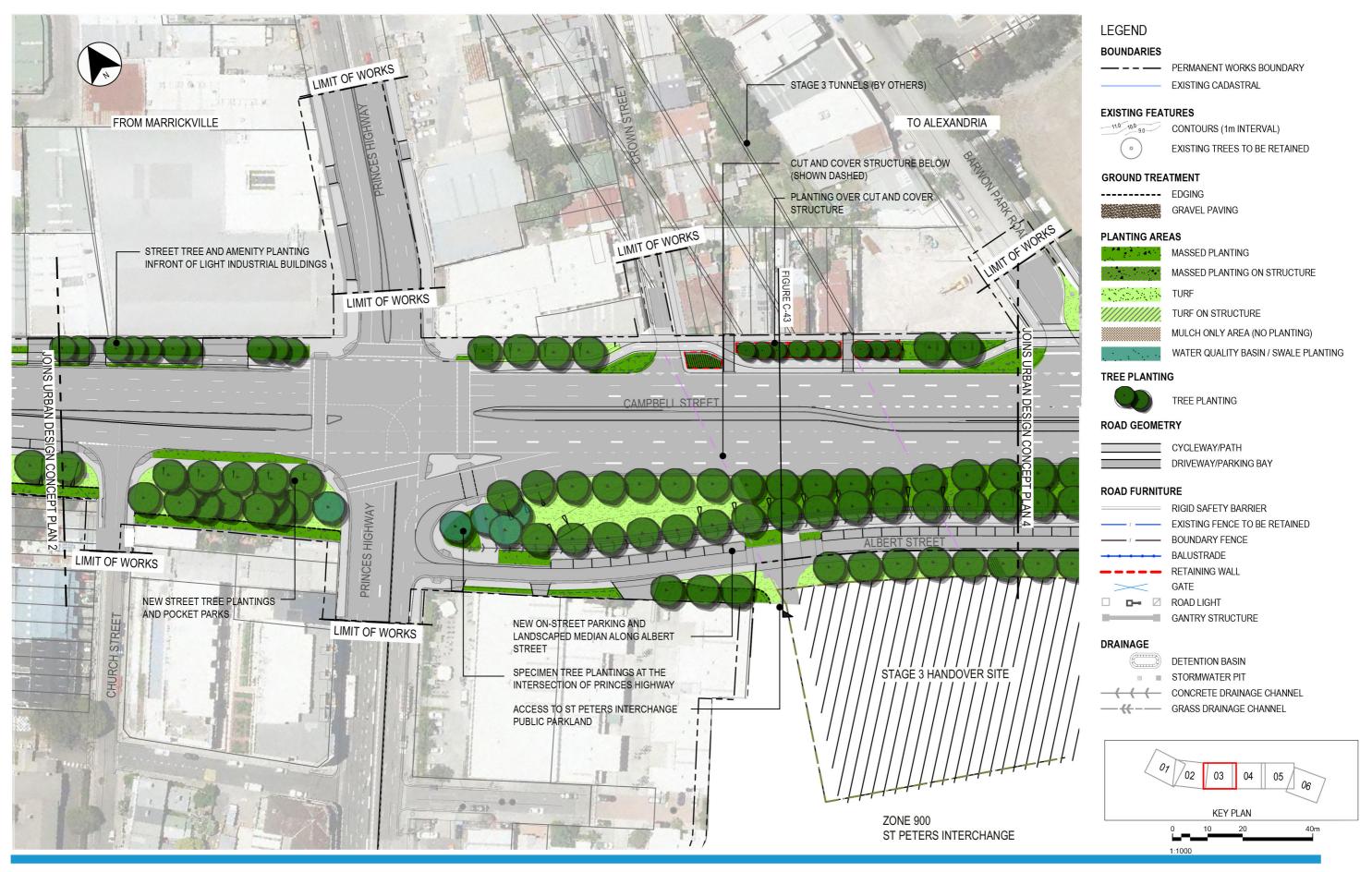


Figure C-48 - Campbell Street Green Link - Urban Design Concept Plan - Campbell Street / Campbell Road - Sheet 3 of 6 - 1:1000







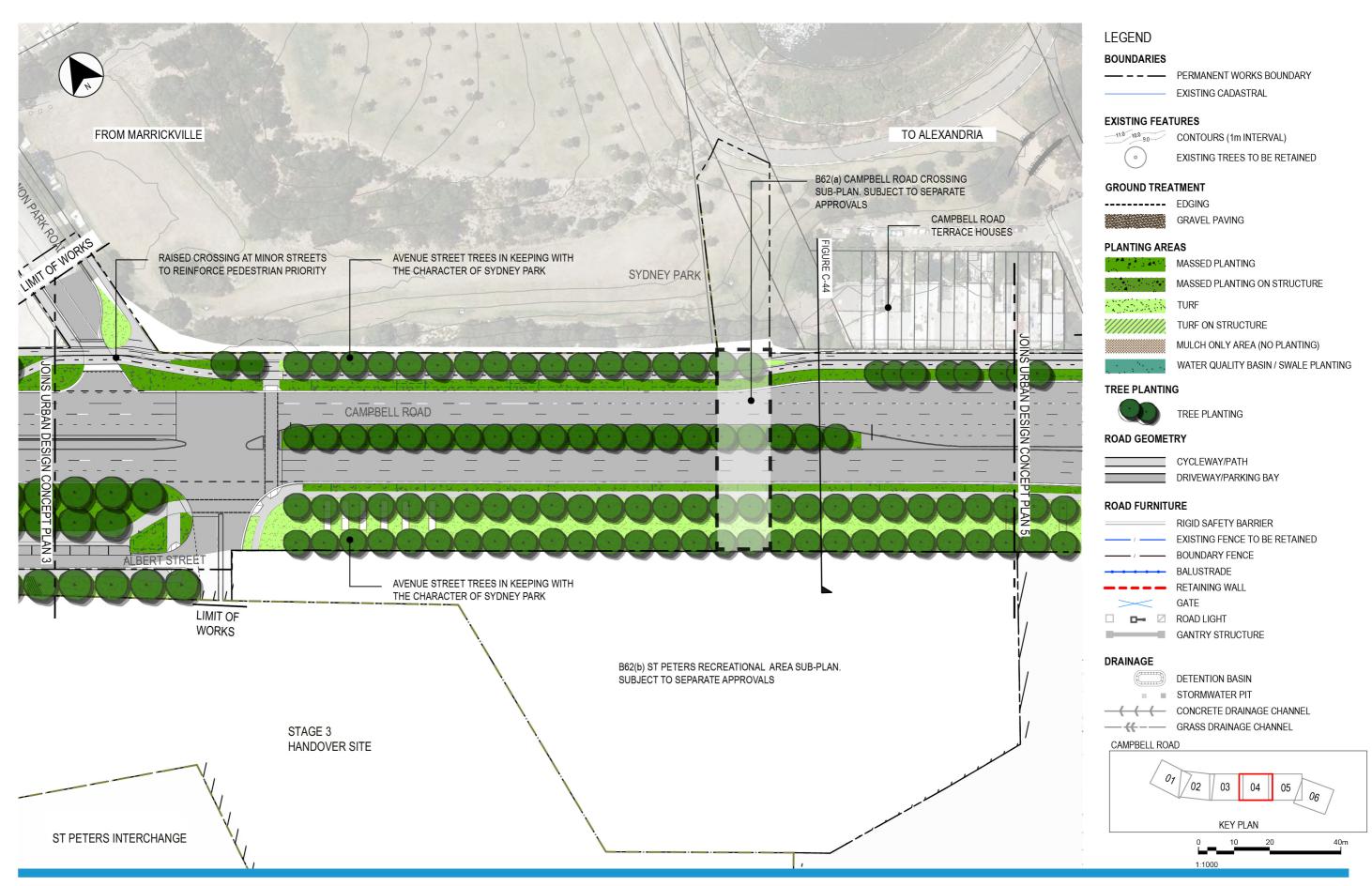


Figure C-49 - Campbell Street Green Link - Urban Design Concept Plan - Campbell Street / Campbell Road - Sheet 4 of 6 - 1:1000



Figure C-50 - Campbell Street Green Link - Urban Design Concept Plan - Campbell Street / Campbell Road - Sheet 5 of 6 - 1:1000







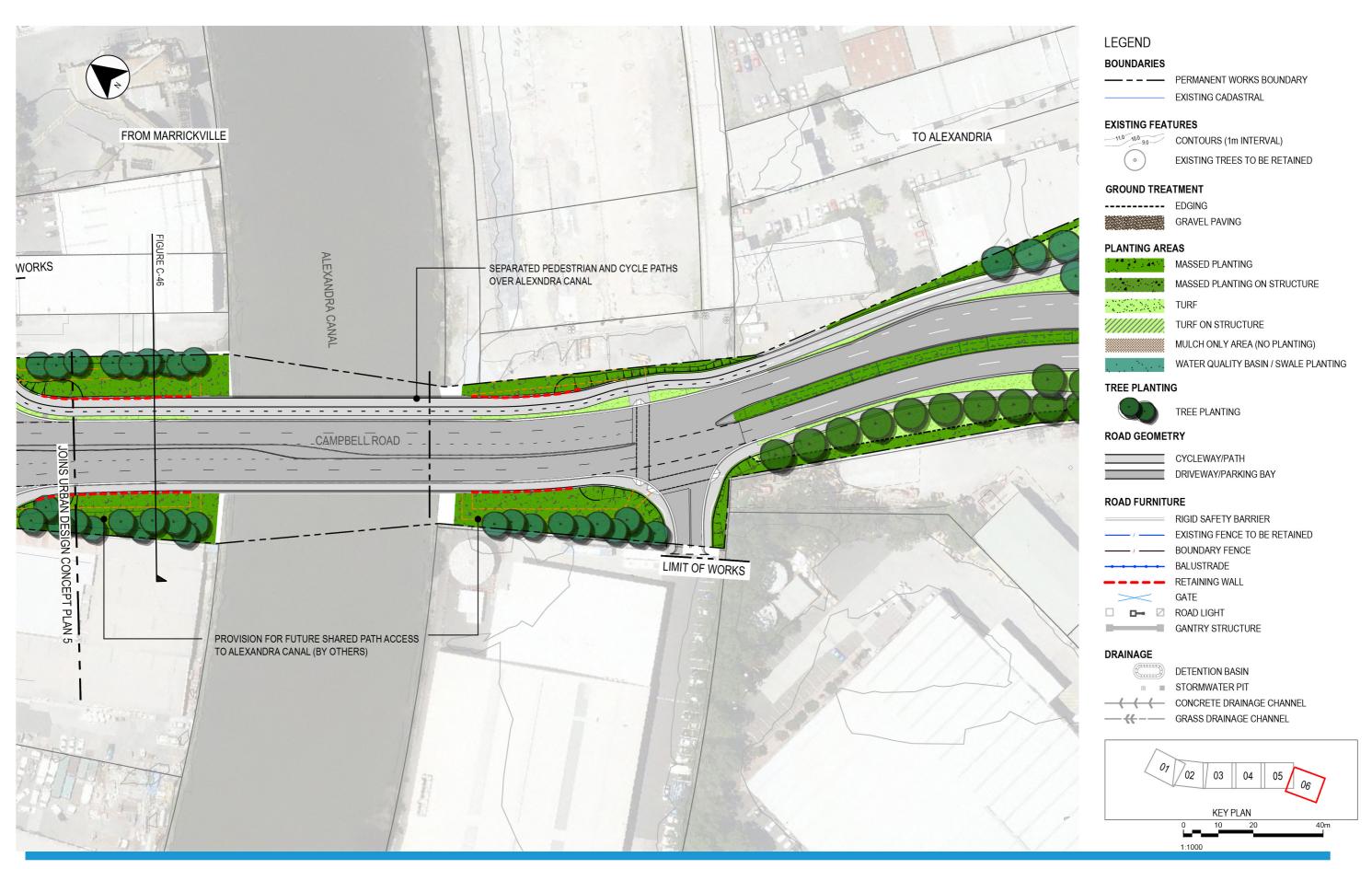


Figure C-51 - Campbell Street Green Link - Urban Design Concept Plan - Campbell Street / Campbell Road - Sheet 6 of 6 - 1:1000

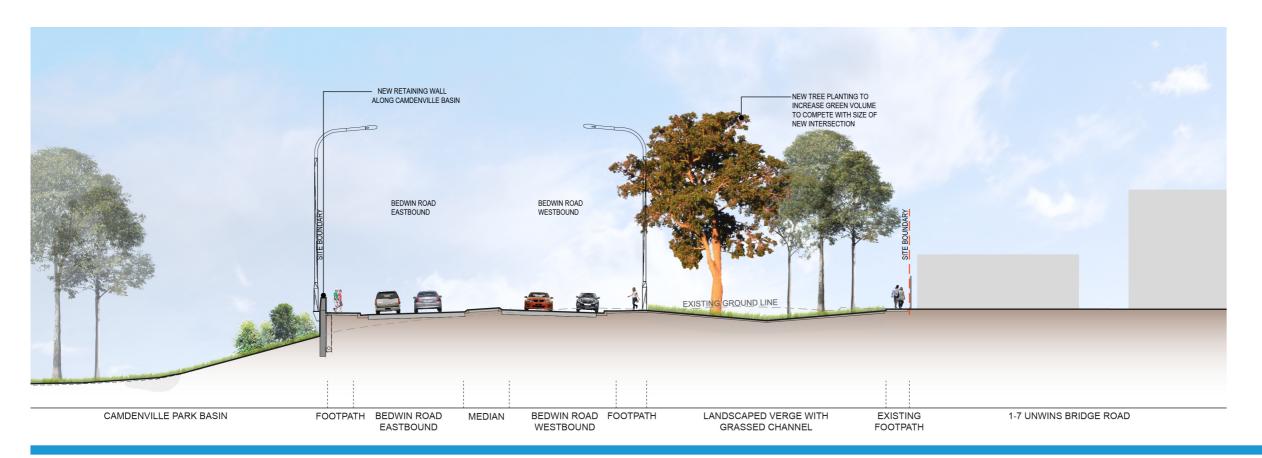


Figure C-52 - Typical Cross Section - Camdenville Park and Bedwin Road - 1:250

1:250

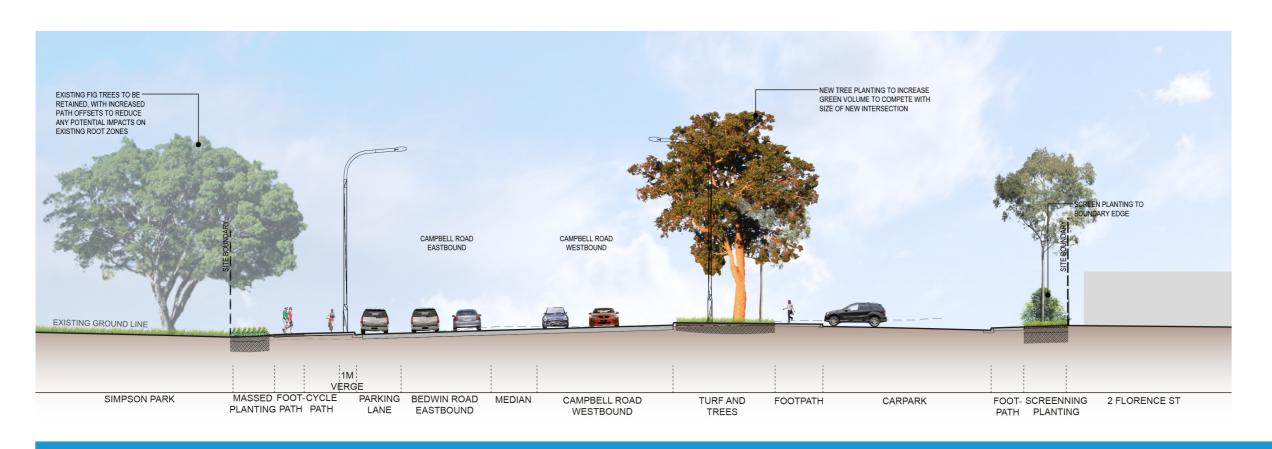




Figure C-53 - Typical Cross Section - Campbell Street and Simpson Park - 1:250







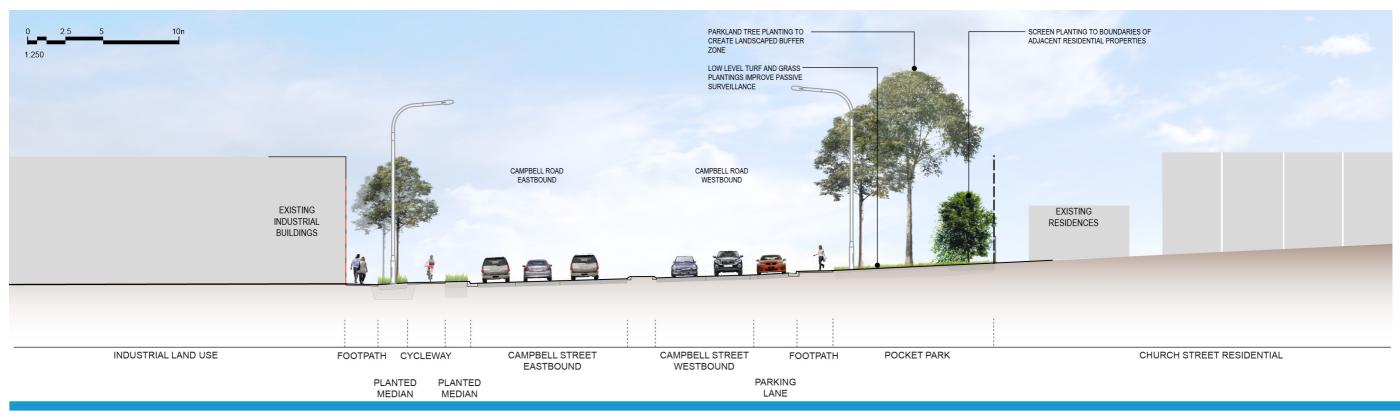
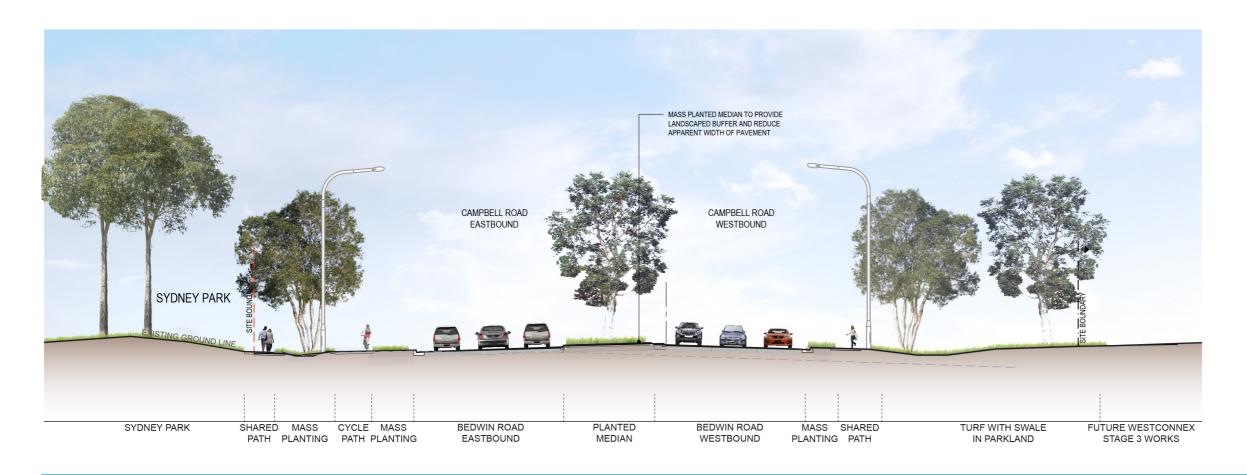


Figure C-54 - Typical Cross Section - Campbell Street - 1:250



Figure C-55 - Typical Cross Section - Campbell Street and M4/M5 link tunnel - 1:250



1:250

Figure C-56 - Typical Cross Section - Campbell Road and Sydney Park - 1:250

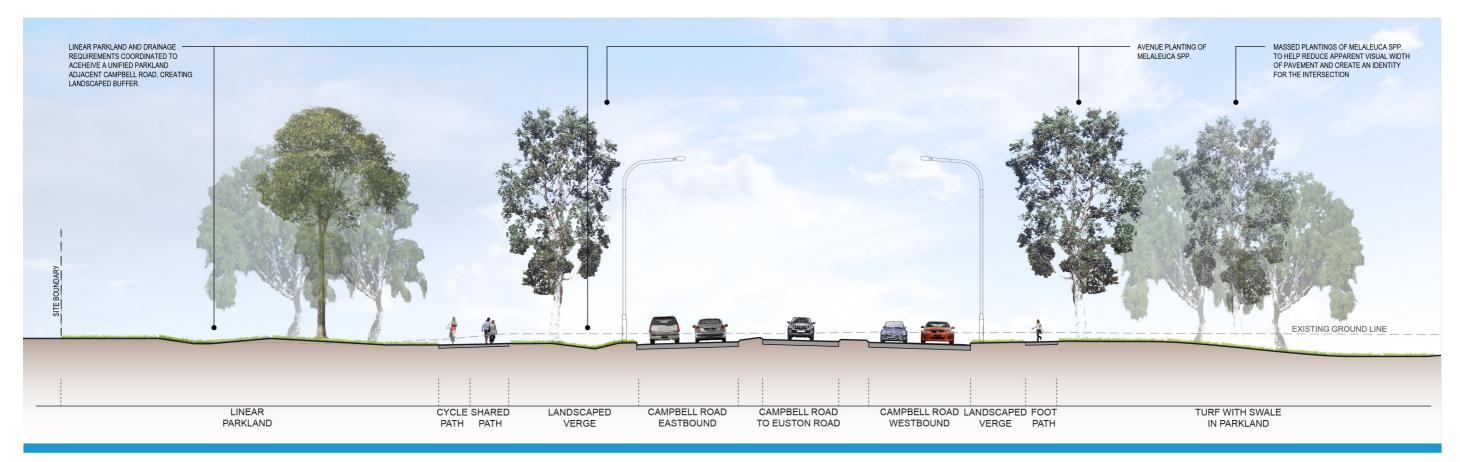
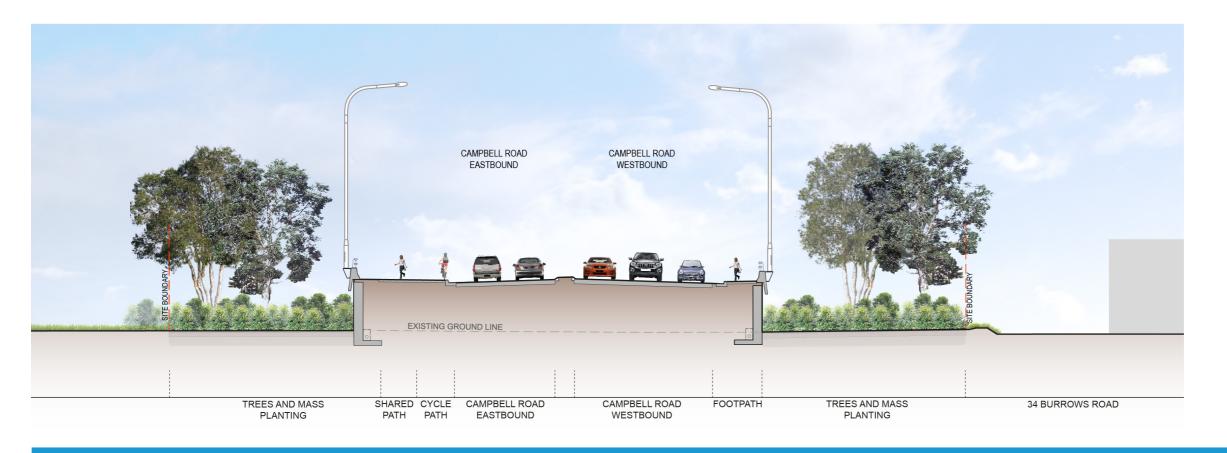


Figure C-57 - Typical Cross Section - Between Euston and Burrows Road - 1:250









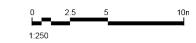


Figure C-58 - Typical Cross Section - Approach to Alexandra Canal - 1:250



Figure C-59 - Campbell Street Green Link - Aerial view west along Campbell Road - (Indicative Land Bridge location shown dashed and will be delivered by RMS) (Artist's impression only)







# C9 Planting strategy and plant selection

The following typical planting typologies will be utilised on this section of the Project:

- Turf areas
- Tree planting
- Massed planting
- Native Grasses
- Shrubs
- Vines & accent planting
- Bio-retention planting

An outline of the plant species and a planting palette are provided in the following tables.

# Tree planting

Angophora costataSydney Red GumAraucaria cunninghamiiHoop PineCupaniopsis anacardiodesTuckerooFicus rubiginosaPort Jackson FigMelaleuca quinquenerviaBroad-leaved PaperbarkSyncarpia glomuliferaTurpentine

### Strategy

A combination of street trees associated with roadside verges/ medians and general tree planting throughout.

#### Location

Throughout









Araucaria cunninghamii



Cupaniopsis anacardiodes



Ficus rubiginosa



Melaleuca quinquenervia



Syncarpia glomulifer

# Vines & accent planting

Heath Myrtle Baeckea imbricate Crinum pedunculatuom Swamp lilly Correa reflexa Native fuscia Peacock Flower Dietes bicolor Canary Island Ivy Hedera canariensis Snake Vine Hibbertia scandens

Isopogon anemonifolius Broad leaved drumsticks

Liriope 'Evergreen Giant' Evergreen Giant Liriope muscari 'Just Right' Just Right Rhapiolepis 'Cosmic White' Indian Hawthorn

Trachelospermum asiaticum Flat Mat Trachelospermum jasminoides Star Jasmine

#### Strategy

Mass planting with accented seasonal colour and texture.

#### Location

Strategic key identified locations throughout.

























# Native grasses

Dianella caerulea Blue flax lilly Dianella revoluta Flax Lilly Lomandra hystrix Slender Mat rush Lomandra longifolia Mat rush

Lomandra 'Shara' Mat rush Lomandra Tanika Tanika

#### Strategy

Native grasses creating mass planting structure.

#### Location

Roadside verges, medians, and pocket parks.





















# Bioretention area planting

Carex appressa Tall Sedge Carex fascicularis Tassel Sedge Dianella caerulea 'Little Jess' Blue Flax Lily Dianella revoluta Blueberry Lily Ficinia nodosa Knobby Club Rush

Juncus continuus Rush

Common Rush Juncus usitatus Lepironia articulata Grey Sedge

#### Strategy

A mix of native grasses and water tolerant planting for bioswales.

#### Location

Bioswales along Campbell Street / Campbell Road



















# Shrub planting

Acmena smithii var 'Minor' Lilly Pilly Callistemon salignus Bottle Brush Elaeocarpus reticulatus Blueberry Ash Grevillea speciosa Red Spider Flower

#### Strategy

Native shrubs to provide structure, texture, and screening.

#### Location

Verges, pocket parks, and boundary edges.













### Turf areas

'Empire' Zoysia Zoysia

#### Strategy

Amenity turf areas provide amenity open space with clear lines of sight

#### Location

Pocket parks and verges throughout





# C10 Landscape Plans

The following section includes detailed landscape plans at 1:500 scale for landscape works related to the local road upgrades, which include the Campbell Street Green Link.

The drawings illustrate the extent and scope of landscape works within the project boundary in relation to the project road alignment, existing street network, new service facilities, existing vegetation, existing adjoining properties, existing vegetation and existing features generally.

Detailed planting design including selection and arrangement of plant species is currently being developed for review and consultation with relevant local councils. Final planting plan layout will be included in subsequent issues of this Urban Design and Landscape Plan Appendix (UDLP).



Figure C-60 - Campbell Street Urban Design and Landscape Plan - Key Plan







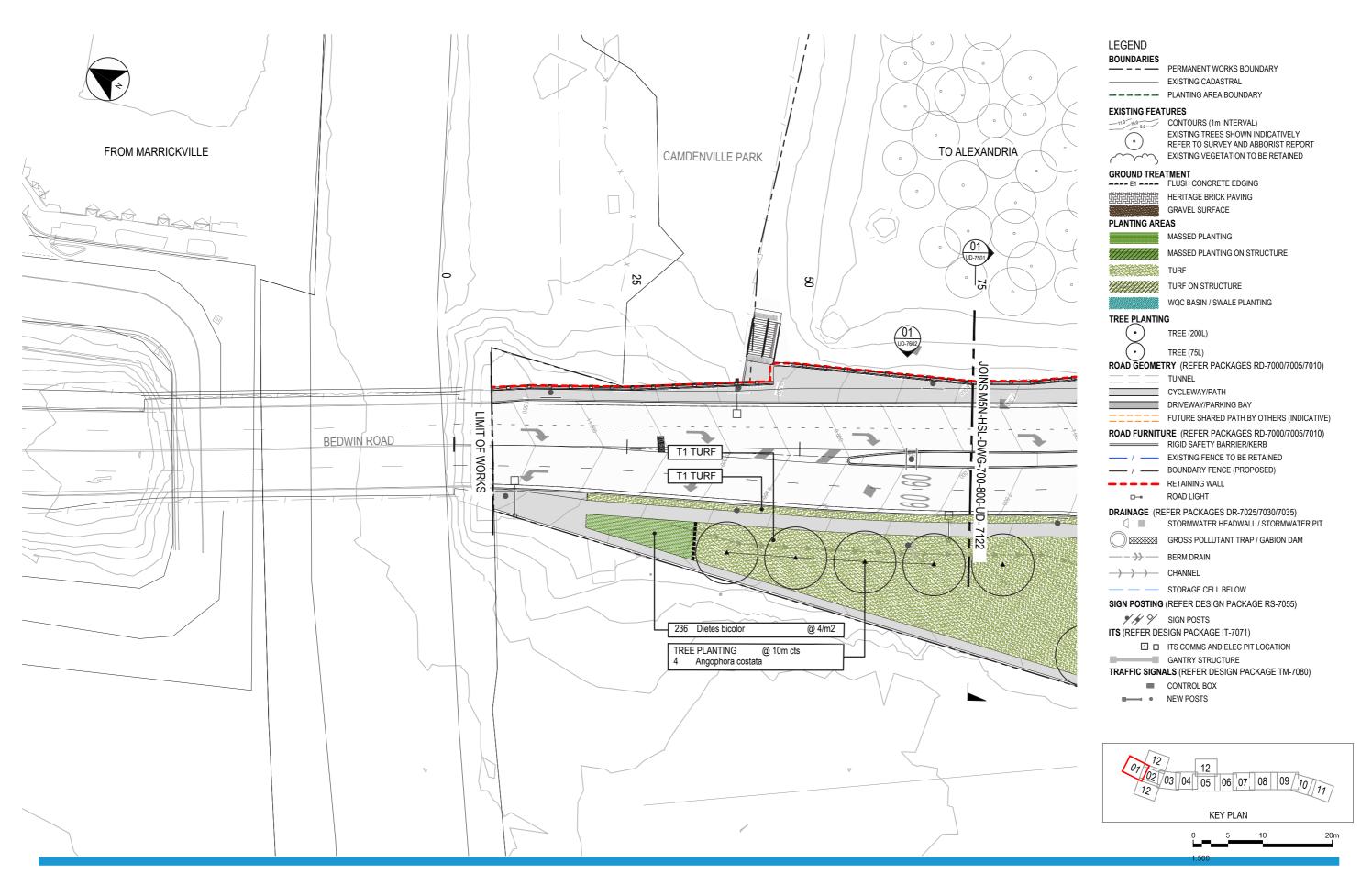


Figure C-61 - Campbell Street Green Link - Landscape Plans - Sheet 1 of 10

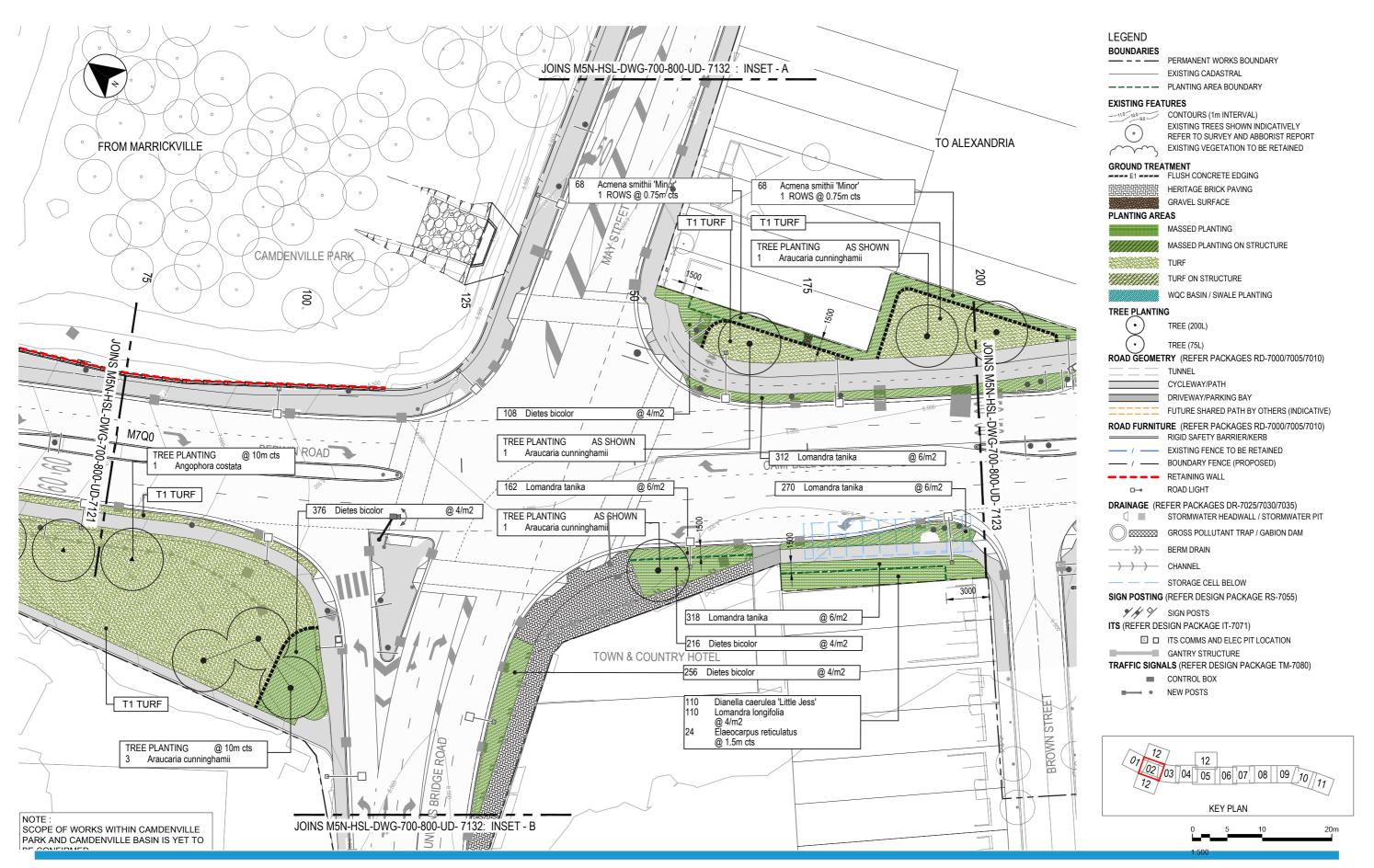


Figure C-62 - Campbell Street Green Link - Landscape Plans - Sheet 2 of 10







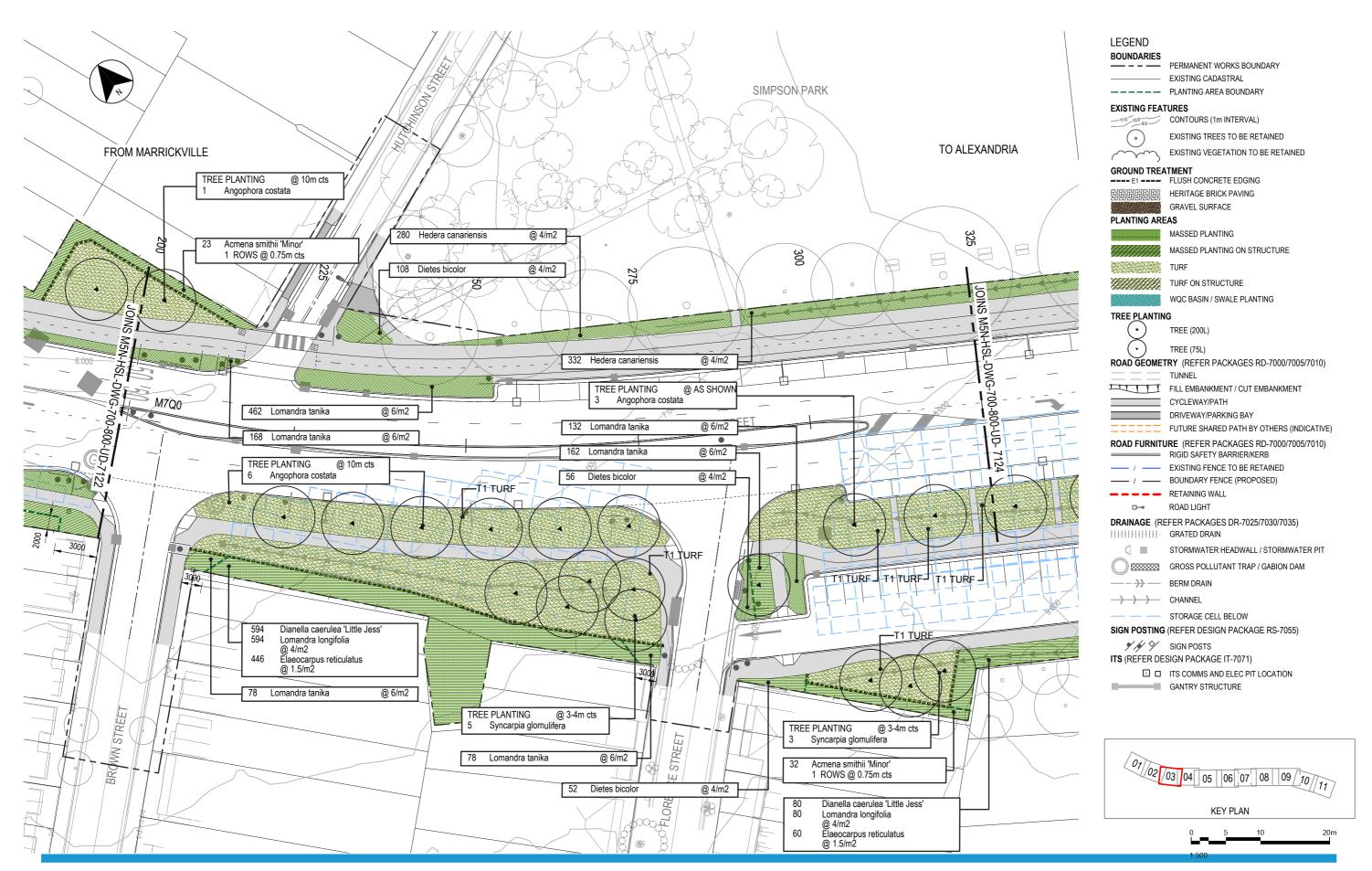


Figure C-63 - Campbell Street Green Link - Landscape Plans - Sheet 3 of 10

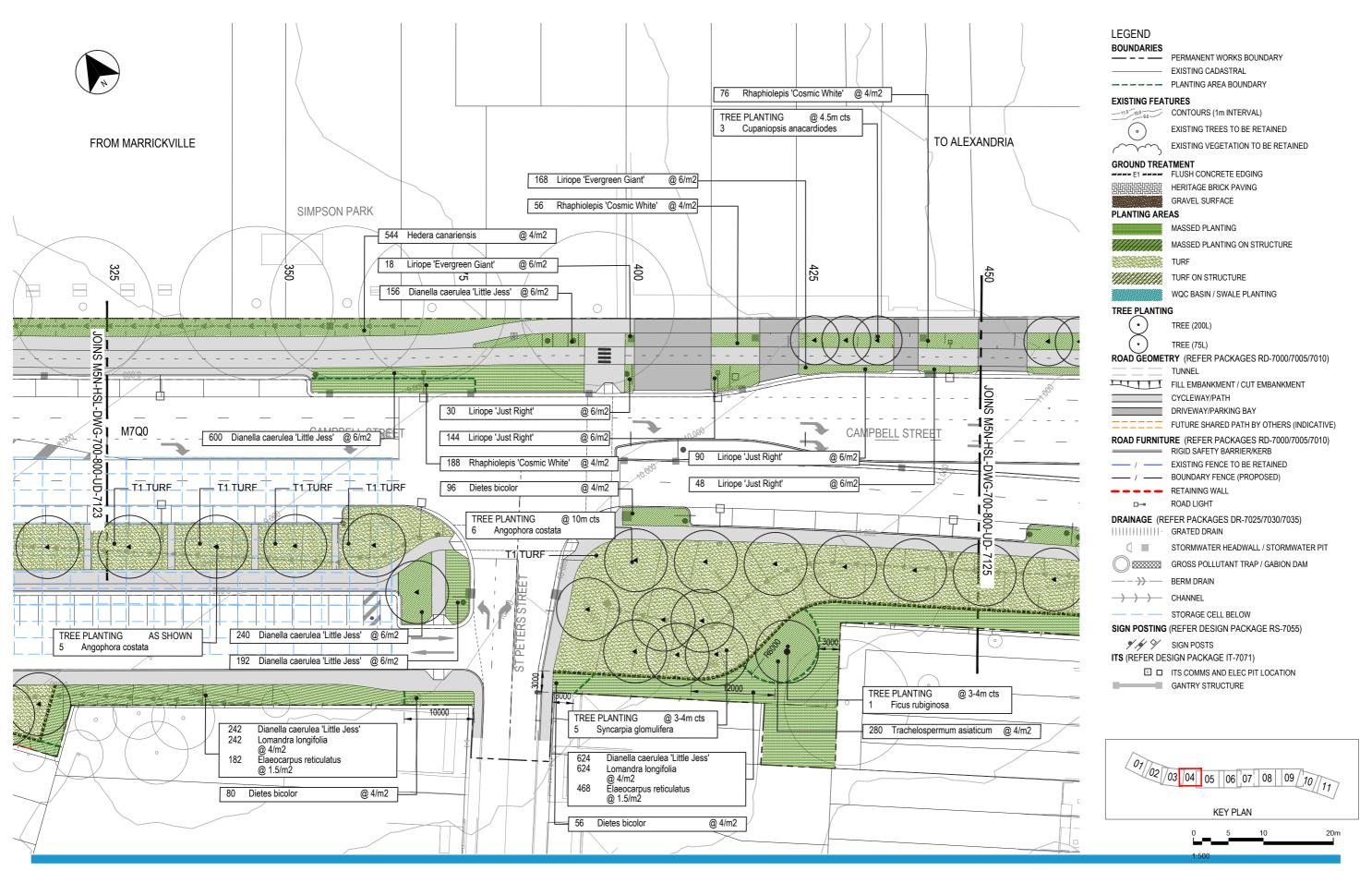


Figure C-64 - Campbell Street Green Link - Landscape Plans - Sheet 4 of 10







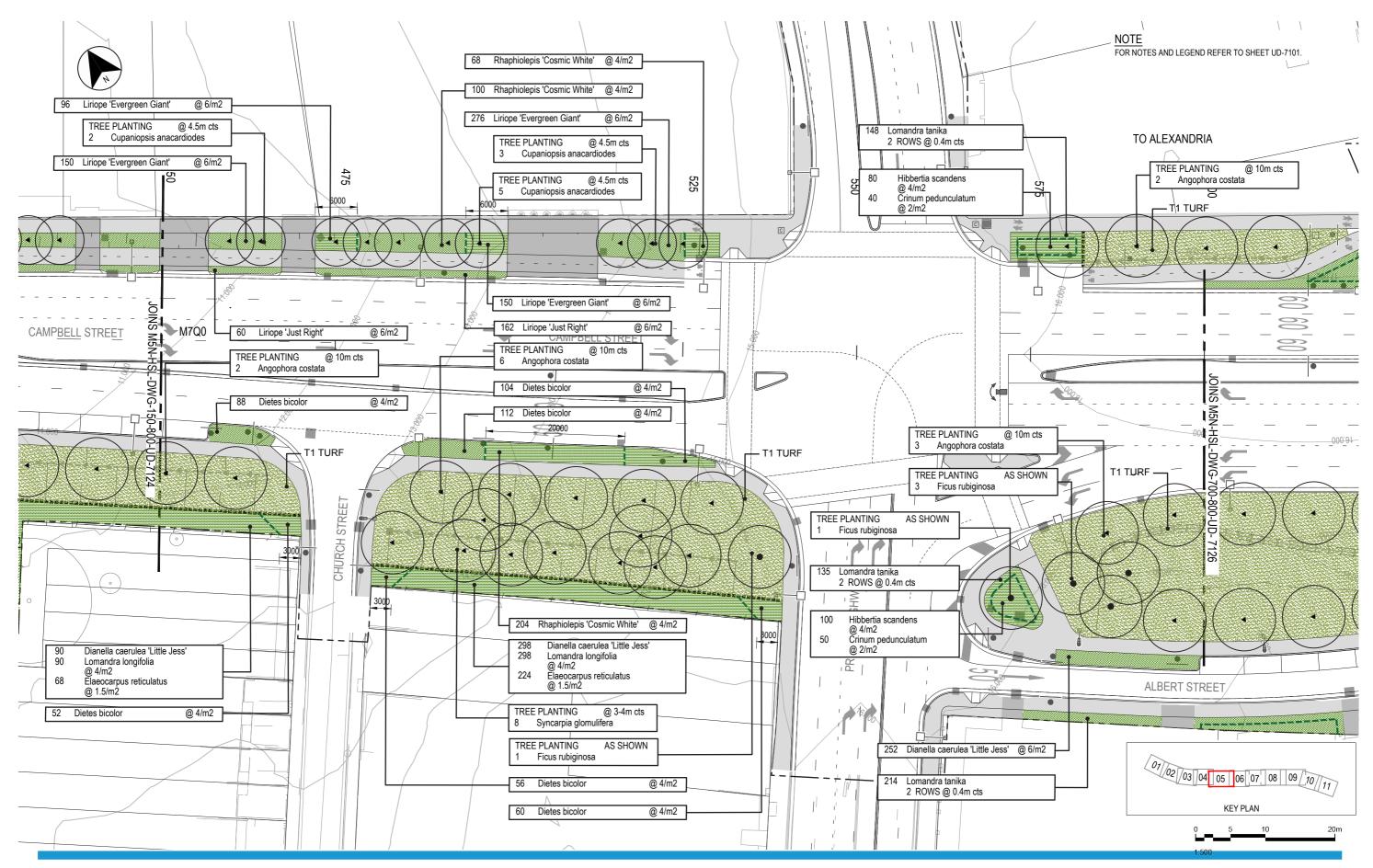


Figure C-65 - Campbell Street Green Link - Landscape Plans - Sheet 5 of 10

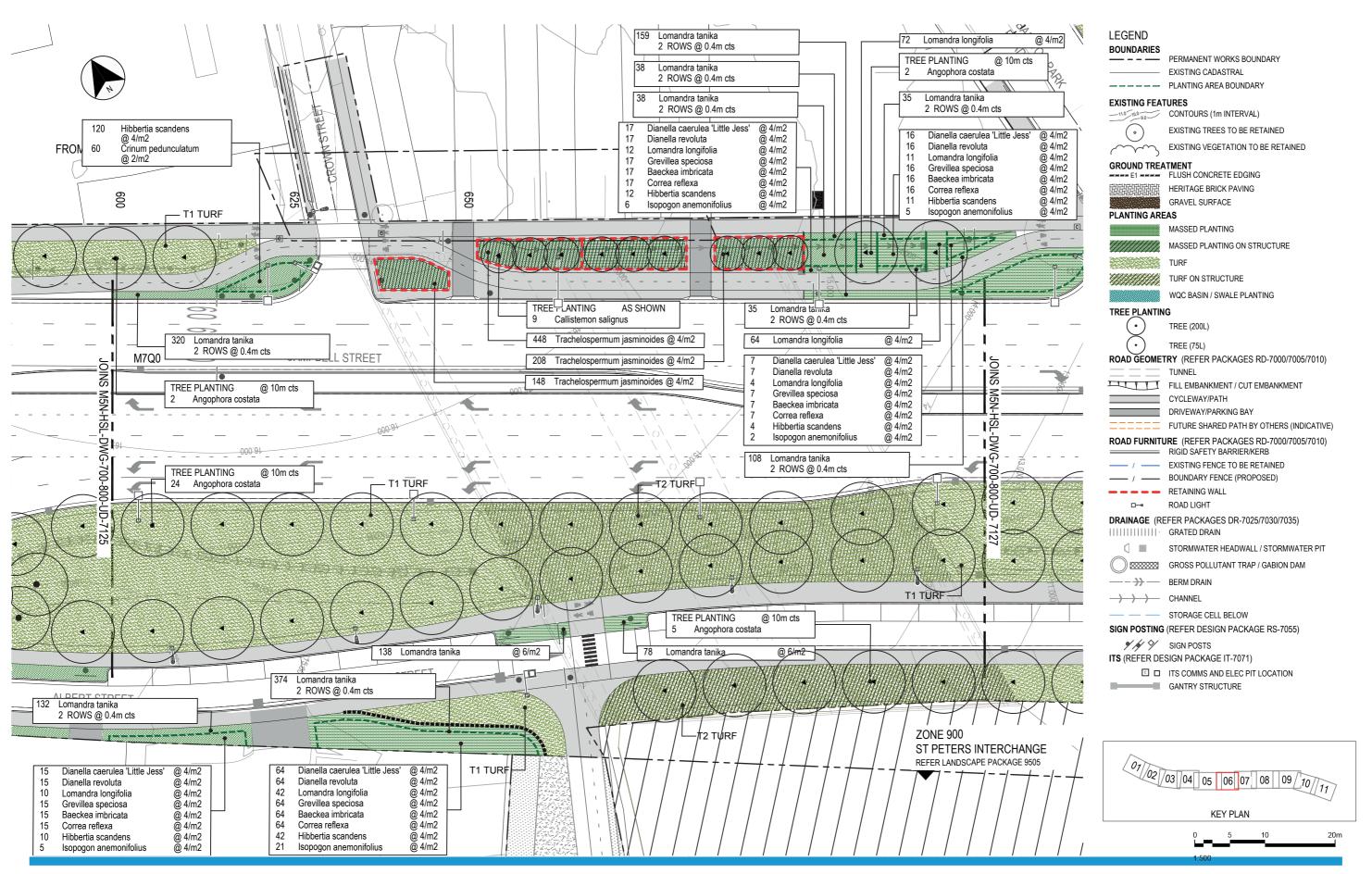


Figure C-66 - Campbell Street Green Link - Landscape Plans - Sheet 6 of 10







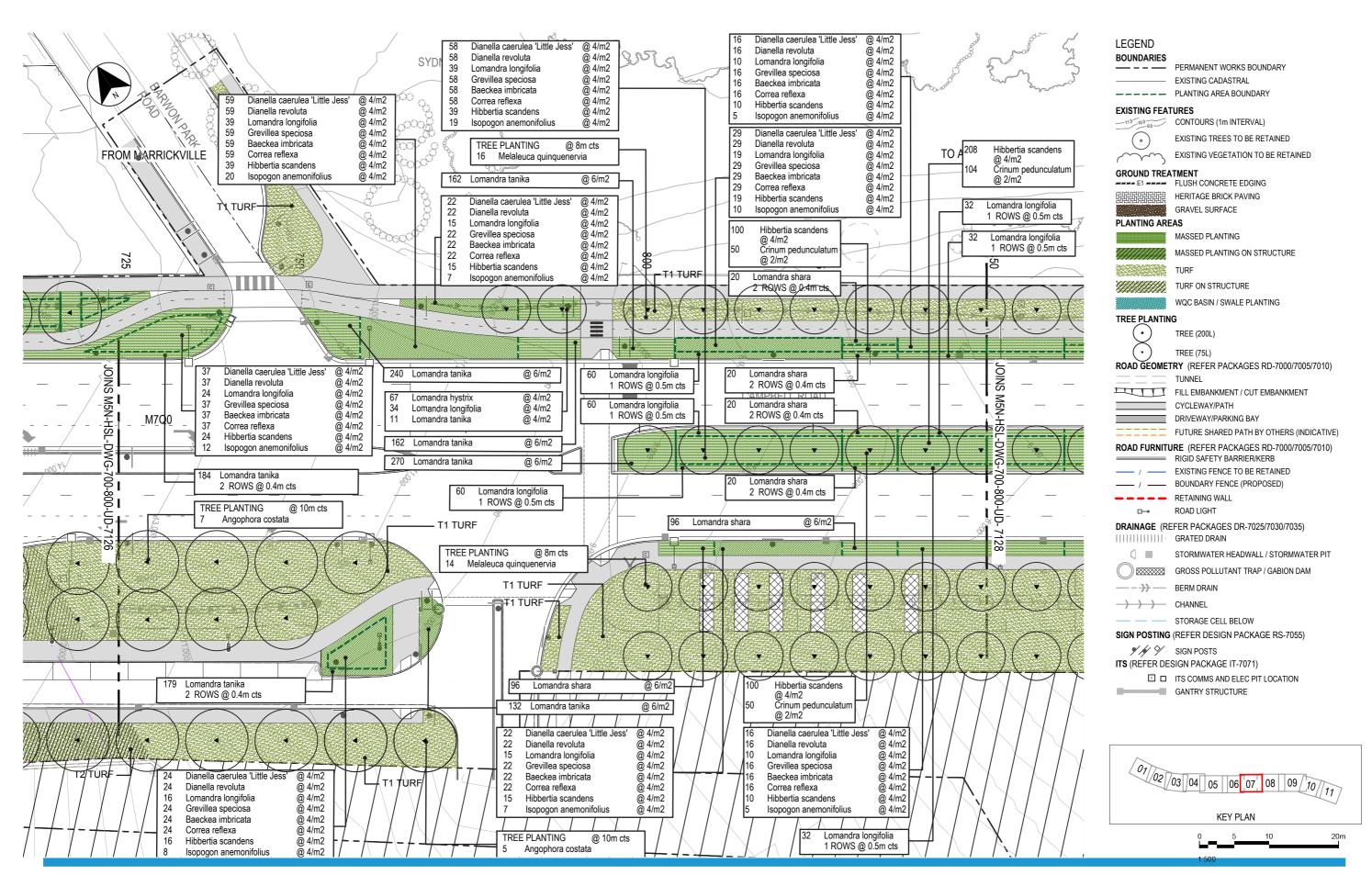


Figure C-67 - Campbell Street Green Link - Landscape Plans - Sheet 7 of 10

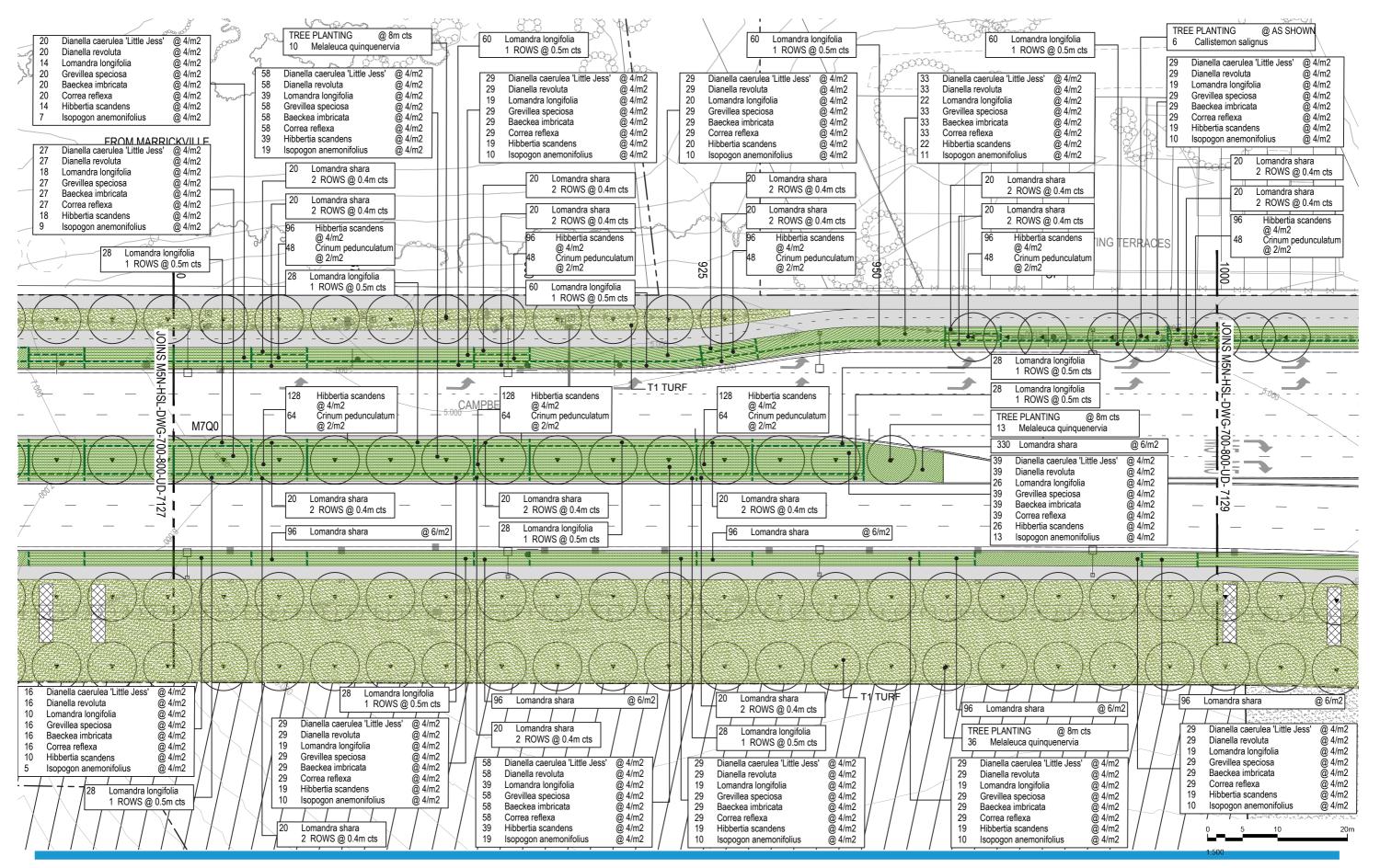


Figure C-68 - Campbell Street Green Link - Landscape Plans - Sheet 8 of 10







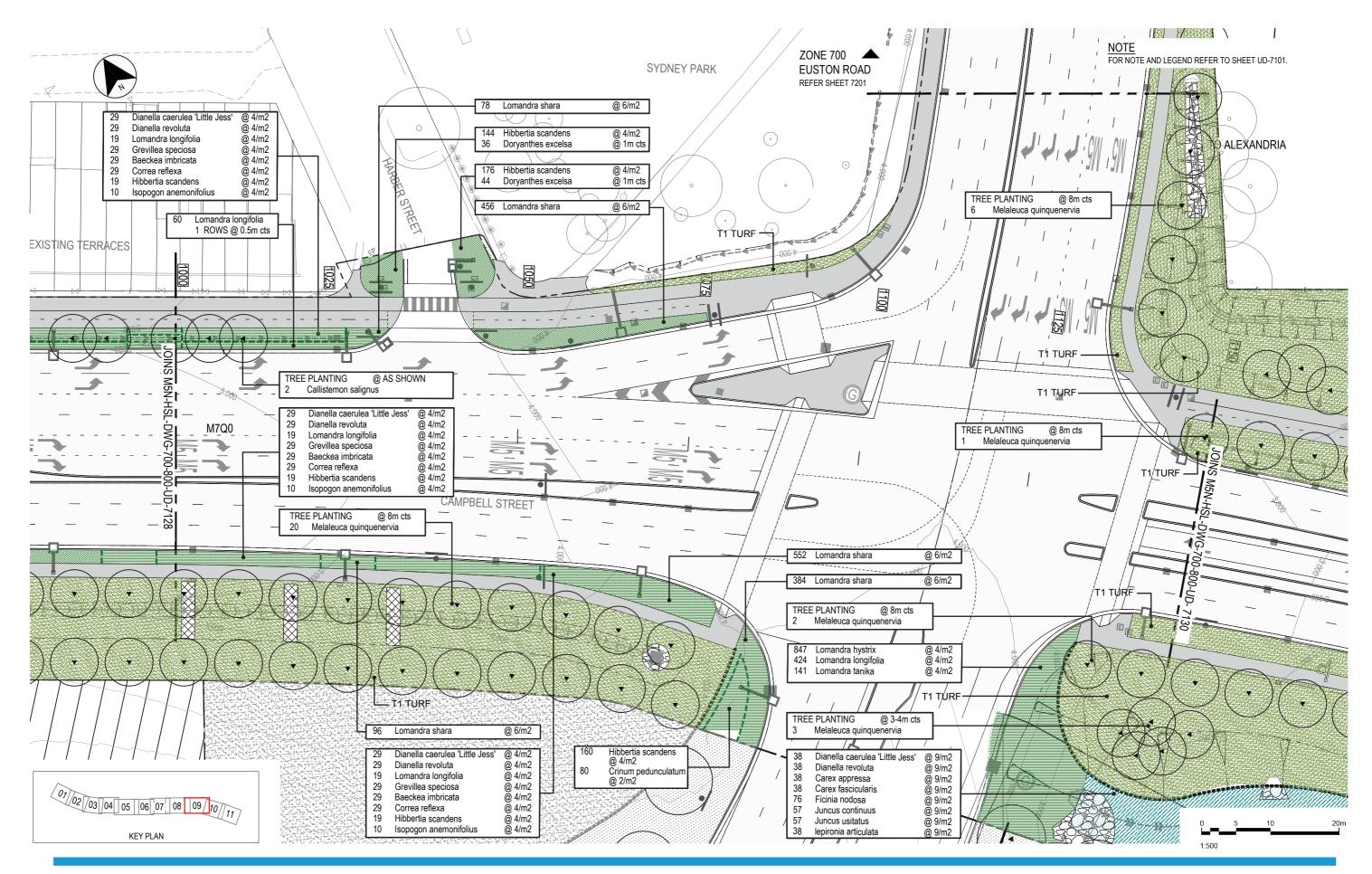


Figure C-69 - Campbell Street Green Link - Landscape Plans - Sheet 9 of 10

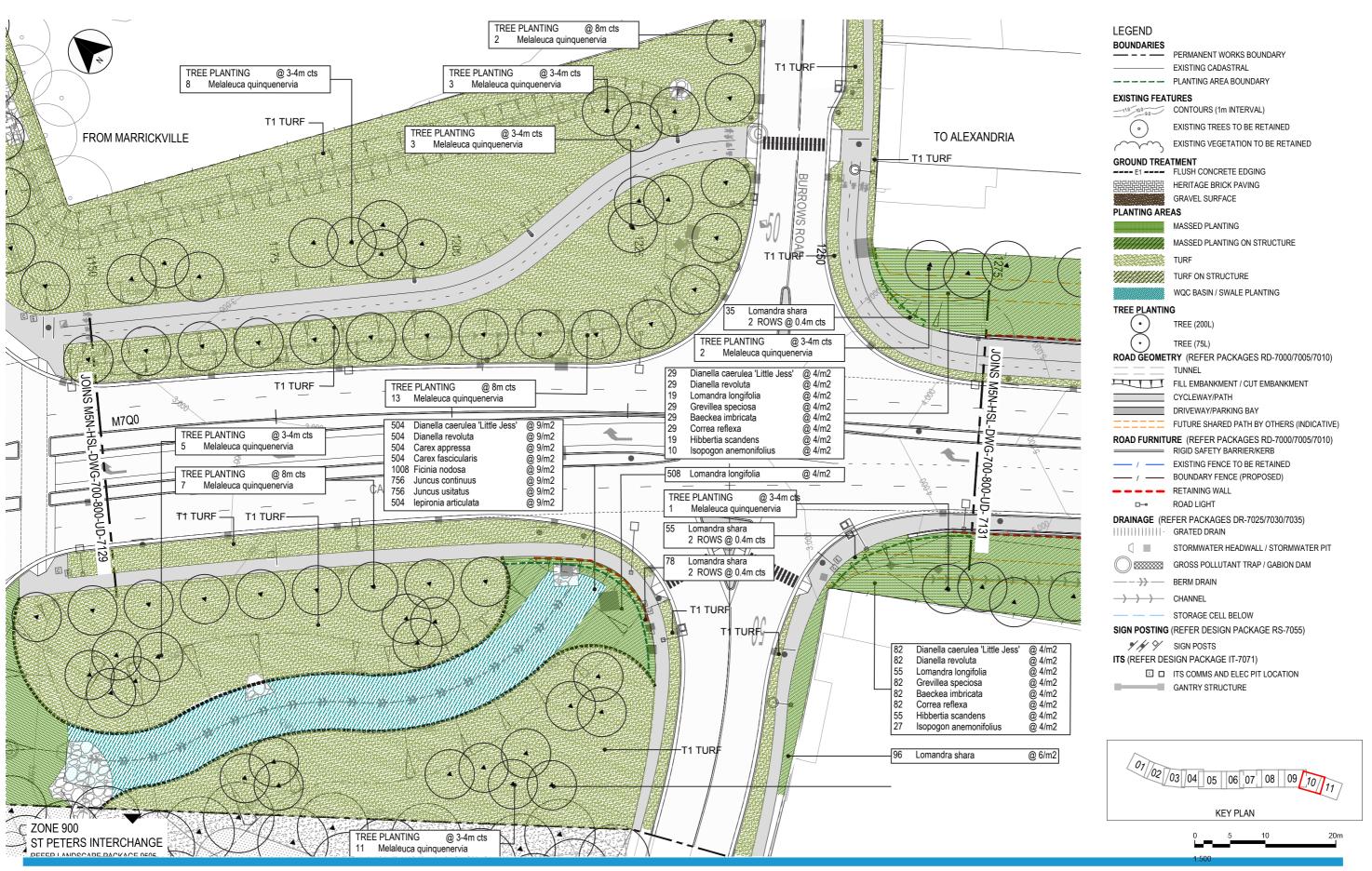


Figure C-70 - Campbell Street Green Link - Landscape Plans - Sheet 10 of 10

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