

PORT PHILLIP EMERGENCY CLIMATE ACTION NETWORK

GLEN EIRA Emergency Climate Action Network



### SANDRINGHAM RAIL CORRIDOR

### **BIRRARUNG - GARDENVALE**

### SECTION PLAN

## 28/08/2022

### **GREEN LINE ROUTE AND SECTIONS**

The Green Line runs through three local government areas, the City of Stonnington, the City of Port Phillip, and the City of Glen Eira.

#### STONNINGTON SECTIONS (PAGES 3 - 21)

The Stonnington section runs from Birrarung to Windsor Station:

- Darling St (between Yarra River and Toorak Rd)
- South Yarra Siding and Osborne St (between Toorak Rd and Falkner St)
- Portland Plc (between South Yarra Siding and Portland Ln)
- Balmoral St (between Portland Ln and Commercial Rd)
- Porter St North (between Commercial Rd and Greville St)
- Prahran Station (between Greville St and High St)
- St John St/Thomas St (between High St and Windsor Siding)
- Windsor Siding

#### PORT PHILLIP SECTIONS (PAGES 22 - 36)

The Port Phillip section runs from Alma Park to Hotham St:

- Alma Park (between Dandenong Rd and Alma Rd)
- Raglan St (between Alma Rd and Inkerman St)
- Nelson St (between Inkerman St and Balaclava Rd)
- Balaclava Station precinct/Railway Place (between Balaclava Rd and Grosvernor St)
- Gibbs St/Brunning St/Summers St/Albion St diversion
- Albion St/Monkstadt Path (between Albion St and Glen Eira Rd)
- Lyndon St (between Glen Eira Rd and Hotham St)

#### GLEN EIRA SECTIONS (PAGES 37 - 47)

The Glen Eira section runs from Hotham St to Gardenvale Station.

- Ripon Grove (between Hotham St and Glen Huntly Rd)
- Riddell Pde (from Elsternwick Rd to
- Elm Ln (From Oak Avenue to Elm Ave)
- Nepean Highway (from Marmara Dr to Nepean Hwy)



### STONNINGTON PRECINCT BACKGROUND

The Stonnington Precinct runs along the Sandringham railway verge from the Yarra River/Birrarung to Windsor Siding. Over its course of just under 3km, the Stonnington Precinct incorporates some of Melbourne's earliest railway cuttings by the Melbourne and Suburban Railway Company from 1858-1860; following a series of mergers the line was acquired by the Victorian Government in 1867 and extended to Sandringham in 1887.

#### **ABORIGINAL HERITAGE AREA**

The discovery in 2016 of previously unknown pre-contact stone artefacts at South Yarra Sidings, now a registered Victorian Aboriginal Heritage Site, as part of work on the Metro Tunnel, underlies the significance of this country to its Aboriginal Traditional Owners, the Wurundjeri Woi-Wurrung and Bunurong people of the Kulin Nation.

#### **INCREASING LOCAL PUBLIC OPEN SPACE**

The City of Stonnington has made significant investments in recent years to increase available green space, promote biodiversity and reduce the urban heat island effect in this highly built up area, through the Yarra River Biodiversity Project, purchase of land for pocket parks and the Chapel St Vision planning initiative. The status and potential of the Sandringham railway verge as a vital green corridor and community resource has however been under constant threat over the same period by inappropriate development proposals, with good decision-making made more difficult by the complex of government and statutory authorities responsible for different aspects of its operation and management.

#### REWILDING STONNINGTON COMMUNITY INVOLVEMENT

The Green Line proposal from PECAN, in association with Rewilding Stonnington and other community groups and engaging with relevant local and other government and statutory authorities, aims to resolve these anomalies with a clear vision to preserve and enhance the Sandringham railway verge as green space for the future, harnessing a demonstrated reservoir of local support for action to combat climate change and increase biodiversity, at this crucial point in Australia's and Victoria's history.

#### INDIGENOUS HERITAGE WALK

The announcement of support for Rewilding Stonnington's proposal for an Indigenous Heritage Walk along the railway verge from SY to Windsor Sidings during the recent Federal election campaign, follows on from years of informal community involvement in sustaining this corridor.

This is an unmissable opportunity to engage with our colonial history, to acknowledge traditional knowledge, to improve public understanding of the contribution that the restitution of indigenous species can make to our natural environment and to move forward on the path of reconciliation, as well as to make a practical contribution to much-needed green space in a highly urbanised environment.

### STONNINGTON PRECINCT (South Yarra - Windsor)

The Stonnington Precinct section of the Green Line runs for 2 kilometres from Darling Gardens to Windsor Station.

Many sections of that corridor are already high value diverse habitat. There is already a lot of informal community involvement in sustaining, rewilding, and improving this corridor.

The Stonnington section runs from the Birrarung (the Yarra River) to Windsor Station:

- Darling St (between Darling Gardens and Toorak Rd)
- South Yarra Siding and Osborne St (between Toorak Rd and Falkner St)
- Portland Plc (between South Yarra Siding and Portland Ln)
- Balmoral St (between Portland Ln and Commercial Rd)
- Porter St North (between Commercial Rd and Greville St)
- Prahran Station (between Greville St and High St)
- St John St/Thomas St (between High St and Windsor Siding)
- Windsor Siding



### DARLING ST

The Stonnington section of the Green Line starts at the Yarra River, and immediately connects to Darling Gardens, the local park adjacent to the rail embankment. From Darling Gardens, the Green Line runs south along Darling Street to Toorak Road.



The area around Darling Gardens is a key walking and cycling interchange, connecting the southern path of the Main Yarra Trail and offering a pedestrian access across the Cremorne Railway Bridge.



#### **PUBLIC ACCESSIBILITY**

Darling Street has relatively poor pedestrian and cycling accessibility. The wide road features a central median, while the footpaths are narrow, without nature strips, and there are no cycling paths.

Actions Required:

- Widen footpaths on west and east sides of Darling Street.
- Designate Darling Street as a cycling corridor.



#### PUBLIC OPEN SPACE

Darling Gardens and the Yarra River are the only significant areas of public open space in this section. Beyond these, there are opportunities to increasing public space and greening by expanding road verges in conjunction with traffic calming measures along Darling Street.

Actions Required:

• Install pocket green verges along Darling Street.

#### **TREE CANOPY**

The north end of Darling Street, closest to the Yarra River, features a short road section that is planted with mature trees. However, the remainder of Darling Street, from Domain Road to Toorak Road, has only a handful of tree plantings.

Actions Required:

• Plant appropriate canopy trees in widened footpaths on west and east sides of Darling Street.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity in Darling Street by creating nature strips along either side of the road, allowing new tree planting and grassy meadow-style nature strip undergrowth.

- Revegetate and regenerate indigenous species along the road.
- Improve landscaping along Darling St to support indigenous species.

# SOUTH YARRA SIDING AND OSBORNE

Starting from the restored South Yarra Siding Reserve parklands following completion of the Metro Tunnel Eastern Portal, Rewilding Stonnington's Indigenous Heritage Walk proposal is a feature of this section of the Green Line. In a co-design process with Traditional Owners, the Walk presents an opportunity for connection with traditional knowledge about Country, including a significant Aboriginal Heritage site in the new reserve.

The route along Osborne St to Fawkner St currently features new and old footbridges across the railway cutting.



The rehabilitation of this section is an ideal opportunity to create a first class walking track and nature corridor alongside the train line.



Restitution of the South Yarra Siding parklands includes construction of a new bridge connecting pedestrian and cycle traffic between Toorak Rd and Chapel St, via Osborne St; the Walk continues through open spaces along both sides of the railway corridor through to Commercial Rd.

This area also has some of the largest gaps in rail-side planting, as well as the best adjacent Stonnington 'pocket parks' that could be incorporated into the corridor.

#### **PUBLIC ACCESSIBILITY**

The rail reserve previously afforded good public accessibility along Osborne Street. Reinstating and rehabilitating the rail reserve, and keeping Osborne Street one-way would allow Osborne Street to become an exemplar of a nature and people centred environment.

Actions Required:

- Install a walking path along east side of Osborne Street.
- Install two-way cycling path along Osborne Street.



#### PUBLIC OPEN SPACE

The rail reserve along the east side of Osborne Street and the rehabilitated South Yarra Siding Reserve will reinstate the major areas of public space in this area. Noting that the works around the South Yarra Siding have significantly reduced public open space in this area.

Actions Required:

- Rehabilitate Osborne Street rail reserve as a linear park.
- Rehabilitate South Yarra Siding Reserve as major public open space.

#### **TREE CANOPY**

Until recently, Osborne Street had good canopy cover on the residential and the reserve sides of the street. However, the rail works have removed all of the mature trees along the east side of Osborne Street.

Actions Required:

• Re-landscape Osborne Street rail reserve and South Yarra Siding Reserve with indigenous trees, shrubs, and ground covers.





#### **BIO-DIVERSITY**

The rehabilitation of this area is a key opportunity to support bio-diversity. Actions Required:

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.

### **PORTLAND PLACE**

With access from both Osborne St and Arthur St/William St following restoration of the South Yarra Siding Reserve, the route along Portland Place and Portland Lane is a well-used pedestrian access pathway along the East side of the rail corridor.



The Portland Place face to the east side of the railway is well maintained by residents. The range of species is less diverse and less strictly 'indigenous' than Porter Street, but birdlife is busy, and trees and bushes healthy, except for some old eucalypts at the northern end around the footbridge, which were sick and have been removed.



The south end of Portland Place connects to Portland Lane, a narrow pedestrian-only laneway approximately 100m long, connecting Portland Place to Balmoral St.



#### **PUBLIC ACCESSIBILITY**

Portland Place is a relatively narrow two-lane street, with a narrow nature strip on the west side (adjacent to the rail cutting), and a narrow footpath on the east side (the residential side). This street should be considered for one-way travel (from north to south) to improve residential amenity.

Actions Required:

• Consider reverting Portland Place to one-way vehicle travel, allowing widened footpath and nature strip alongside the rail reserve.



#### PUBLIC OPEN SPACE

The Portland Place area will have good access to the rehabilitated South Yarra Siding Reserve, and to the Osborne Street rail reserve linear park.

Actions Required:

- Rehabilitate Osborne Street rail reserve as a linear park.
- Rehabilitate South Yarra Siding Reserve as major public open space.

#### **TREE CANOPY**

This section of the Green Line features significant tree canopy along the edge of the rail cutting, giving relatively good tree canopy cover along Portland Place.

Actions Required:

• Widen nature strip on west side of Portland Place to further improve tree canopy.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity in Portland Place by protecting and expanding habitat areas alongside the rail line.

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.

### **BALMORAL STREET**

The north end of Balmoral Street is accessed via Portland Lane, or across the Argo Street bridge.



The east bank of the railway verge in this section was planted in the late 1990s, over a similar time period to the section further south in Porter St, by Metro Trains subcontractors and through resident action. Plantings include a number of Australian native, if not locally indigenous, eucalypts and other trees.

There are three pocket parks on the West side of the track (Argo Reserve, Osborne Street Playground, and a new pocket park on the north-east of the Osborne St and Argo St intersection). Additionally, there is a new pocket park on Balmoral St, on the corner of Balmoral St and Perry St.

These parks all feature a range of plantings; and could be augmented with indigenous plantings integrated with new plantings along the rail corridor.



#### **PUBLIC ACCESSIBILITY**

Balmoral Street is an unpleasant street for pedestrians, cyclists, and drivers. This street is a major traffic thoroughfare to the residential and commercial properties between Balmoral Street and Chapel Street.

The footpath on the east side of the street is narrow and encroached, and the rail reserve on west side of the street is similarly narrow and cramped.

The intersection of Argo St and Balmoral St offers poor pedestrian amenity, lacking a formal pedestrian crossing.

Actions Required:

- Consider removal of on-street parking from south end of Balmoral St.
- Install a pedestrian crossing at the intersection of Balmoral and Argo.



#### PUBLIC OPEN SPACE

Balmoral Street features a new pocket park at the corner of Balmoral and Perry streets, and the larger Grosvenor Street Reserve is within walking distance (without crossing major roads). Furthermore, several pocket parks are situated on the west of the rail line, accessed via the Argo St bridge.

Actions Required:

• Further landscape and improve the pocket park on Balmoral Street.

#### **TREE CANOPY**

The tree canopy along Balmoral Street is good given the narrow rail embankment here. However, the canopy here would benefit from widening the reserve to afford the growth of larger trees.

Actions Required:

• Widen rail reserve to improve tree canopy.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity along Balmoral Street by protecting and expanding habitat areas alongside the rail line.

Actions Required:

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.

#### Green Line Alliance

### **PORTER STREET NORTH**

Across Commercial Road from the south end of Balmoral Street, the Green Line continues along Porter Street. Porter Street runs from Commercial Road to Greville Street, where the Green Line continues alongside Prahran Station.

Porter Street is extremely narrow and only appropriate for careful local vehicle traffic.





#### **PUBLIC ACCESSIBILITY**

Due to its narrow width and cluttered footpath (also narrow), Porter Street has very poor pedestrian accessibility. Residents have petitioned Council to convert this street to shared use, to improve amenity and greening.

Actions Required:

• Convert Porter St to shared use, widen footpath and plant east side.



#### PUBLIC OPEN SPACE

Porter Street, like Balmoral Street, has recently gained a small pocket park that connects Porter Street to Grattan Street and Grattan Gardens.

Actions Required:

• Landscape the Porter Street pocket park with indigenous species.



#### **TREE CANOPY**

The tree canopy along Porter Street is constrained by the narrow reserve alongside the rail line. The trees along this section are often sparse, and divided by sections where trees are entirely absent.

The west side of the rail reserve is inaccessible along this section, and is ideal for additional plantings to improve tree canopy.

Actions Required:

- Widen rail reserve to improve tree canopy.
- Plant new trees along west side of the rail reserve.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity by protecting and expanding habitat areas alongside the rail line.

Actions Required:

- Revegetate and regenerate indigenous species along rail reserve.
- Improve landscaping along rail reserve to support indigenous species.
- Coordinate Council and rail authority maintenance activities to avoid nesting seasons and the use of herbicides.

Green Line Alliance

### **PRAHRAN STATION**

Local residents have been working, through the Metro Trains/Keep Victoria Beautiful Stationeers program and independently, to plant out garden beds on the West side of the track and are now working on adding understory to the older vegetation on the East side. Public response has been great, with the formerly messy entrance to the station now looking loved. Removal of the charity clothes bins has made a big difference to rubbish levels.









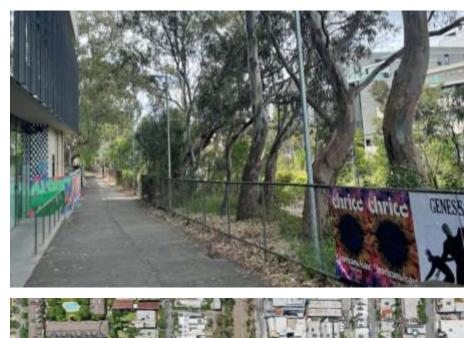
#### **PUBLIC ACCESSIBILITY**

Public accessibility is good throughout the Prahran Station Precinct. Notably, there is a dedicated walking path along the west side of the station, connecting Greville Street to High Street.

While this walking path is easily accessible from Greville Street, crossing south across High Street is more difficult, with crossings approximately 200m to the west or east along High street.

Actions Required:

• Install a pedestrian crossing over High Street between Porter St and St John Street.



#### PUBLIC OPEN SPACE

This area of Prahran has little public open space, with the nearest spaces being Grattan Gardens (accessible without crossing major roads) and Windsor Siding (which requires pedestrians to cross High Street).

An opportunity exists in this area to purchase a small, but important, section of land for public space adjacent to the walking path.

Actions Required:

• Investigate purchase land at rear of 10-16 Charles St.





#### **TREE CANOPY**

The tree canopy alongside Prahran Station and the adjacent walking path are well established.

The land parcel available for purchase at the rear of 10-16 Charles Street includes three established eucalypts, which provide significant tree canopy cover. The adjacent river red gum likely predates European settlement, and would be isolated if the approved development proceeded and the three trees removed, per the planning approval.

Actions Required:

• Ensure protection of established tree at rear of 10-16 Charles Street, either through land parcel purchase or specific protection.





#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity by protecting and expanding habitat areas alongside the rail line.

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.

### ST JOHN ST/THOMAS ST

This 300m section of track is the least accessible and least tree-covered section of the corridor. Because the track bends, it is off-line with the road grid, meaning there is only a short section where the road (St. John Street) follows the line.

This section of the line offers a significant opportunity to install a walking path or boardwalk along the rail reserve to connect from High Street to Windsor Siding (the dotted route below).









#### **PUBLIC ACCESSIBILITY**

Public accessibility through this area is poor. The established footpath walking routes through here are narrow and frequently encroached. Public accessibility would be better served by installing a walking path along the rail corridor, rather than following the roads.

Actions Required:

• Install a dedicated walking path along the rail reserve.





Green Line Alliance

#### PUBLIC OPEN SPACE

There is limited public open space along this section, but Windsor Siding is situated immediately to the south of the section of the Green Line.

Actions Required:

• Install a pedestrian crossing across Union Street to Windsor Siding.

#### **TREE CANOPY**

This section of the rail corridor has very low tree canopy cover.

Actions Required:

• Re-landscape the rail reserve with trees, shrubs, and ground cover.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity by protecting and expanding habitat areas alongside the rail line.

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.





### WINDSOR SIDING & STATION

The City of Stonnington has undertaken a successful redevelopment of the Windsor Siding park in recent years. They plan more planting along with the resurfacing of the bike jumps adjacent to the railway, which will be an opportunity to extend the indigenous corridor. The Eastern side of the track in this area has reasonably well-established low bush, which could be augmented.





#### **PUBLIC ACCESSIBILITY**

Public accessibility in this section of the Green Line is variable. There is an existing walking path along the north side of the rail line; but this path is desperately in need of revitalisation. Furthermore, the area around the rail crossing over Union St is poorly maintained, and requires improvement.

Actions Required:

Revitalise walking paths around Windsor Station and Windsor Siding.





#### PUBLIC OPEN SPACE

Windsor Siding is a significant area of public space for the Windsor area. Redevelopment of the park under the City of Stonnington's Masterplan began in 2015 and it is earmarked for further improvement in conjunction with state government plans for Windsor Station and surrounds.

Windsor Siding park is an ideal location for an artwork that celebrate and connect with traditional knowledge about country, echoing the artwork commissioned by the Rail Infrastructure Alliance for the South Yarra Siding Reserve and marking the conclusion of the Indigenous Heritage Walk in the Stonnington Precinct of the Green Line.

Actions Required:

- Continue improvement of Windsor Siding park and its amenities.
- Commission a feature Aboriginal artwork/landscape installation.



#### **TREE CANOPY**

The rail reserve and Windsor Siding have generally poor tree canopy cover, with few established trees.

Actions Required:

• Re-landscape the Windsor Siding to improve tree canopy cover.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity by protecting and expanding habitat areas alongside the rail line.

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.

### PORT PHILLIP PRECINCT (ST KILDA - RIPPONLEA)

The route of the Green Line in Port Phillip uses existing public open space and walking paths, and expands these by connecting, linking and rehabilitating.

The Port Phillip section runs from Alma Park to Hotham St:

- Alma Park (between Dandenong Rd and Alma Rd)
- Raglan St (between Alma Rd and Inkerman St)
- Nelson St (between Inkerman St and Balaclava Rd)
- Balaclava Station precinct/Railway Place (between Balaclava Rd and Grosvernor St)
- Gibbs St/Brunning St/Summers St/Albion St diversion
- Albion St/Monkstadt Path (between Albion St and Glen Eira Rd)
- Lyndon St (between Glen Eira Rd and Hotham St)



### ALMA PARK

The Port Phillip section of the Green Line starts in Alma Park, St Kilda East's most significant green space. Alma Park has extensive walking paths, including paths on the west and east sides of the rail line.



Alma Park is home to some of the last remnant stands of indigenous vegetation, including spear grass, yellow box and lightwood. Additionally, the park provides valuable habitat to indigenous bird and animal species.



The path on the west side of the rail line is used as a bike path, and runs under established peppercorn trees.



The path on the east side runs alongside Alma Playground and Alma oval.

The west side of the Alma Park rail cutting is characterized by introduced grasses, peppercorns, cork oaks.



#### **PUBLIC ACCESSIBILITY**

Public accessibility in this section of the Green Line is generally good. The existing walking and cycling paths to the west and east of the rail line are well situated, well used, and well maintained. However, access to Alma Park is difficult here, because there is no formal pedestrian crossing nearby. Pedestrians and cyclists cross at the intersection of Alma Rd and Raglan St.

Actions Required:

• Install a pedestrian crossing at the Alma Rd/Raglan St intersection.



#### PUBLIC OPEN SPACE

There are limited opportunities to increase public open space in Alma Park. However, the derelict caretaker's building at the north end of the park is an opportunity to increase the public open space in the City of Port Phillip.

Actions Required:

- Renovate/remove caretaker building at north end of Alma Park West.
- Negotiate with army to acquire land for west access to Alma Park
- Negotiate with CBC college to acquire land for east access to Alma Park

#### **TREE CANOPY**

The Green Line will increase tree canopy in Alma Park by regenerating Alma Park with indigenous park trees.

Actions Required:

- Plant replacement yellowbox park trees for aging existing trees.
- Propagate lightwood acacia trees along Green Line.
- Identify fauna-supporting trees for propagation along Green Line.
- Remove recently planted pines and replace with indigenous trees.



#### **BIO-DIVERSITY**

The Green Line will increase bio-diversity in Alma Park by protecting and expanding habitat areas alongside the rail line.

- Revegetate and regenerate indigenous species along rail cutting.
- Improve landscaping along rail cutting to support indigenous species.

### **RAGLAN ST**

The Raglan St section of the Green Line runs between Alma Road and Inkerman St. This section of the Green Line is widely used, and offers significant opportunities to quickly increase public amenity and accessibility and to increase public open space.

The path here follows the existing nature strip, which is already used as an informal walking path. This informal walking path is used for north-south access until interrupted by the railway substation half way along Raglan St.

Raglan St residents predominantly have access to on title car parking. Much of the on-street parking here is likely used opportunistically, such as by park and sports club visitors and non-residents.



The nature strip is interrupted several times, including by a power substation that blocks continuous north/south walking access.



At the south end of Raglan St, this nature strip is often used to dump rubbish.



#### IMPROVING PUBLIC ACCESSIBILITY

The Green Line increases public accessibility in Raglan St. First, it will encourage the use of Raglan St as a walking route through improved walking access and appeal. Second, the Green Line will reduce rubbish dumping in Raglan St by improving maintenance and appeal of the nature strips.

Actions Required:

- Widen nature strip on east side of Raglan St by removing some or all parking from the east side of Raglan St.
- Formalize a continuous walking path from Alma Rd to Inkerman St.

#### **INCREASING PUBLIC OPEN SPACE**

The Green Line increases public open space by widening the nature strip on east side of Raglan St.



#### **BUILDING TREE CANOPY**

Raglan St has extensive tree cover over sections of the west of the rail corridor, but only light canopy on the east side of the railway lines.

Actions Required:

- Replant indigenous species on both sides of the rail embankment.
- Replace invasive/introduced plants and with indigenous species.



#### SUPPORTING BIO-DIVERSITY

Raglan St has extensive tree cover to the west of the rail corridor, but only light canopy on the east side of the railway lines.

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.

### NELSON ST

In this section, the pedestrian route runs along Nelson St, adjacent to the rail corridor. The rail embankment runs behind the houses facing Nelson St and Blenheim St, making it effectively inaccessible to pedestrian access.



The rail embankment along this section has isolated stands of vegetation, including invasive species, but is otherwise mainly grassy inclines.

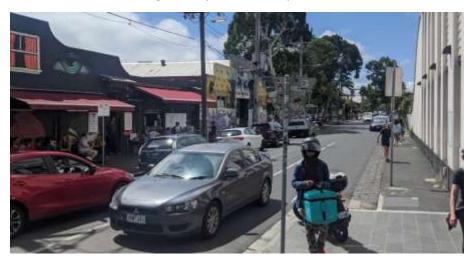
The walking route follows Nelson St, to the west of the rail corridor. Nelson St is a major pedestrian thoroughfare, despite its lack of amenity.



The footpaths along Nelson Street do not meet community access standards. That are narrow, do not feature nature strips, frequently interrupted by tree plantings, signage and obstacles (motorbikes, bins, etc), and uneven driveways.



Revitalisation of Nelson St can be aligned with the redevelopment of the Coles car park precinct behind Balaclava Rd. For example, the south end of Nelson St (beyond Alfred St) could be converted to a one-way road. This would allow the widening of footpaths, and improvements to traffic flow.



#### Green Line Alliance

#### IMPROVING PUBLIC ACCESSIBILITY

The Green Line increases public accessibility in Nelson St by removing pedestrian obstacles and impediments along one or both footpaths.

Actions Required:

- Designate Nelson St east or west side as the primary pedestrian route.
- Remove in-footpath plantings and replace with on-street plantings.
- Remove redundant signage intruding onto pedestrian pathways.
- Widen primary pedestrian footpath by narrowing road.
- Replace driveway crossovers with elevated 'flat' crossovers.
- Continue practise of landscaped setbacks from footpath for all developments along Nelson Street.
- Upcoming Balaclava Structure plan must address Nelson St's pedestrian access and amenity issues.



#### **INCREASING PUBLIC OPEN SPACE**

Integration of the Nelson St route with the redevelopment of the Coles car park area is the best opportunity to increase public open space as proposed, in part at least, in the draft Public Spaces Strategy report.

#### **BUILDING TREE CANOPY**

The Green Line increases tree canopy in the Nelson St section by improving planting on railway embankment and along Nelson St proper.

Actions Required:

- Plant indigenous trees and grasses along rail embankment.
- Continue planting large eucalypts in on-street reserves.
- Protect large existing native trees alongside Coles car park and renew commitment to a reserve in this area.



#### SUPPORTING BIO-DIVERSITY

The Green Line builds bio-diversity by connecting habitat along the corridor. Actions Required:

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.

### BALACLAVA STATION/RAILWAY PLACE

The Green Line runs alongside the rail line through the pedestrian concourse to the west of the station. South of Nightingale St, the Green Line continues along Railway Place, a pedestrian laneway that runs adjacent to the rail embankment, to the Gibbs St and Grosvenor Rd intersection.



Balaclava Station runs from Balaclava Rd to Nightingale St. This area has good pedestrian access on both the west and (to a lesser extent) east sides of the rail line. However, the embankment here is poorly vegetated with some sections have been covered in spray-on concrete.



Across Nightingale St, the Green Line continues alongside the embankment, where it passes the St Kilda Community Gardens Club.



The west side of embankment here has been rehabilitated by members of the community garden, and is generally well vegetated. On the other side of the rail line, the east embankment runs alongside the William St Reserve, which has been recently rehabilitated.



#### IMPROVING PUBLIC ACCESSIBILITY

The Balaclava Station and Railway Place section supports public access. Pedestrian safety and general amenity requires action to upgrade the crossing at Nightingale St.

Actions Required:

• Undertake the street planting and pedestrian crossing as identified in the Balaclava Walk Masterplan 2012 (see appendix attachment).





#### **INCREASING PUBLIC OPEN SPACE**

This section of the Green Line is supported by public open space, including the Balaclava Station precinct, and the pedestrian friendly Railway Place, and William St Reserve.

#### **BUILDING TREE CANOPY**

The Balaclava Station redevelopment resulted in significant canopy loss whilst the understory is sparse or absent, and needs regenerative planting. Actions Required:

• Implementation of the Balaclava Walk Masterplan 2012.



#### SUPPORTING BIO-DIVERSITY

Beyond the railway station area a previous effort to rehabilitate the west embankment has been highly successful. The St Kilda Community Gardens Club has a small community grant to assist in a vegetation review. It has however met many bureaucratic obstacles in accessing the embankment and doing the infrastructure work needed to hold the embankment in place. The Grosvenor Street end has been infested with Ash trees.

Actions Required:

• Remove non indigenous invasive species and facilitate the planting of replacement indigenous trees and grasses along the rail embankment

### GIBBS/BRUNNING/SOMERS/ALBION Diversion

The section of the Green Line from Grosvenor St to Albion St has significant access issues. There is an existing walking path along the west side of the railway embankment. However, the path is narrow, and in its current state is unsuitable for pedestrian access.

Ideally, council would work with local property owners to acquire land adjacent to the path, allowing it to be widened enough to allow pedestrian access. Alternatively, the railway embankments could be narrowed by moving retaining walls approximately 60cm towards the rail line.



Until this land is acquired, or the embankments are narrowed, the Green Line must divert south along the continuation of Gibbs St, west along Brunning St, south down Somers St, then east along Albion St.





#### IMPROVING PUBLIC ACCESSIBILITY

The Green Line increases public accessibility by reopening the walking path along the railway embankment.

Actions Required:

• Reopen the existing path alongside the railway embankment





#### **INCREASING PUBLIC OPEN SPACE**

The Green Line increases public open space by revitalising this poorly maintained section of the existing walking path and returning it to the public realm.

Actions Required:

• Acquire land adjacent to the rail corridor or move embankments to widen existing path

#### **BUILDING TREE CANOPY**

The Green Line increases tree canopy in this section by improving planting along both sides of the rail embankment.

Actions Required:

• Plant indigenous trees and grasses along rail embankment.

#### SUPPORTING BIO-DIVERSITY

The Green Line builds bio-diversity by connecting habitat along the corridor.

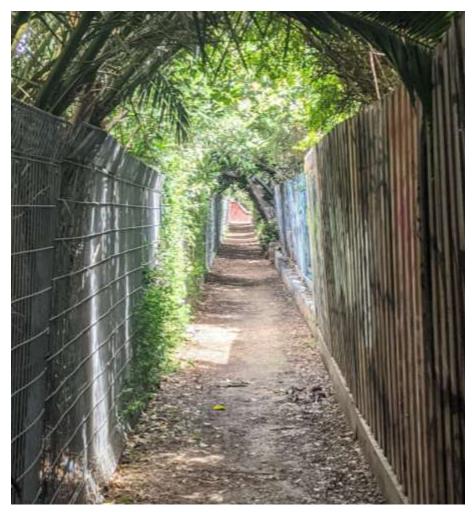
- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.



### ALBION/MONKSTADT ST

The Green Line proper continues at the east end of Albion St. A dedicated walking path runs along the west side of the railway embankment and connects to Monkstadt St and then continues through the park adjacent to Riponlea Station.

This section of the existing walking path is relatively well-maintained. The path is narrow, and features overarching vegetation, giving a tunnel-like experience.







#### IMPROVING PUBLIC ACCESSIBILITY

The Green Line increases public accessibility from Albion St to Monkstadt St by opening the overarching vegetation canopy along the walking path.

Actions Required:

- Prune the trees above the walking path to open the canopy.
- Widen existing walking path by repositioning the metal mesh fence.
- Install pedestrian crossing at the Glen Eira Rd/Lyndon St intersection.
- Remove the wooden paling fence from the south end of this path to open the path to Monkstadt St

#### **INCREASING PUBLIC OPEN SPACE**

The Green Line increases public open space by repositioning the metal mesh fence that runs alongside the walking path, approximately 30cm from the retaining wall.

Actions Required:

- Reposition the metal mesh fence to widen the walking path.
- Work with owners of 23 Monkstadt St to either acquire the wedge of land adjacent to the walking path or remove the paling fence.



#### **BUILDING TREE CANOPY**

The Green Line increases tree canopy in this section by improving planting along both sides of the rail embankment.

Actions Required:

- Plant indigenous trees and grasses along rail embankment.
- Removal of palms and other invasive species.



#### SUPPORTING BIO-DIVERSITY

The Green Line builds bio-diversity by connecting habitat along the corridor.

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.

### LYNDON ST

Lyndon St, which runs alongside the rail line from Glen Eira Rd to Hotham St, offers significant opportunities for expansion of public open space, revegetation, and creation of an upgraded Green Line walking route.



Lyndon St's configuration offers opportunities for the Green Line and public open space in general. While all of Lyndon St is two-way, the north end of Lyndon St is wider than the south end. The south end is generally used as a one-way street, with occupants continuing out onto Hotham St, rather than performing a difficult u-turn to return to Glen Eira Rd.



Further, the open space at the intersection of Lyndon St and Victoria Ave is the ideal for formalised public open space. This area could be used as a public playground, small park, or habitat for indigenous species.

The new reserve in Riddell Pde Elsternwick provides a benchmark for the effective use of land at the intersection of multiple roads.



Lyndon St has significant surplus on-street parking. One lane of this parking should be removed to expand the reserve adjacent to the established walking path along the east side of Lyndon St.



#### IMPROVING PUBLIC ACCESSIBILITY

The Green Line increases public accessibility along Lyndon St by installing a pedestrian crossing across Glen Eira Rd (from Riponlea Station) and widening the nature strip alongside the walking path,

Actions Required:

- Install pedestrian crossing at the Glen Eira Rd/Lyndon St intersection.
- Investigate road and traffic movement along Lyndon St to reuse surplus road space for open space, maximize car parking and improve safe access from Hotham Street.

#### **INCREASING PUBLIC OPEN SPACE**

The Green Line increases public open space in the Lyndon St section by removing surplus road and rationalizing on-street car parking at the Lyndon St/Victoria Ave intersection to create a pocket park, playground.

Actions Required:

- Expand nature strip on east side of Lyndon St through road narrowing.
- Create local park/playground/habitat at Lyndon St/Victoria Ave intersection.



#### **BUILDING TREE CANOPY**

The Green Line increases tree canopy in this section by improving planting along both sides of the rail embankment.

Actions Required:

• Plant indigenous trees and grasses along rail embankment.



### SUPPORTING BIO-DIVERSITY

The Green Line builds bio-diversity by connecting habitat along the corridor.

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.

### GLEN EIRA PRECINCT (Elsternwick – Gardenvale)

The Glen Eira precinct is set to undergo significant population growth in the coming year. The precinct will need to balance densification along with the need to preserve existing community character, amenity and spirit.

The Glen Eira section runs from Hotham St to Gardenvale Station.

- Ripon Grove (between Hotham St and Glen Huntly Rd)
- Riddell Pde (from Glen Huntly Rd to Oak Ave)
- Elm Ln (From Oak Ave to Elm Ave)
- Nepean Highway (from Marmara Dr to Nepean Hwy)

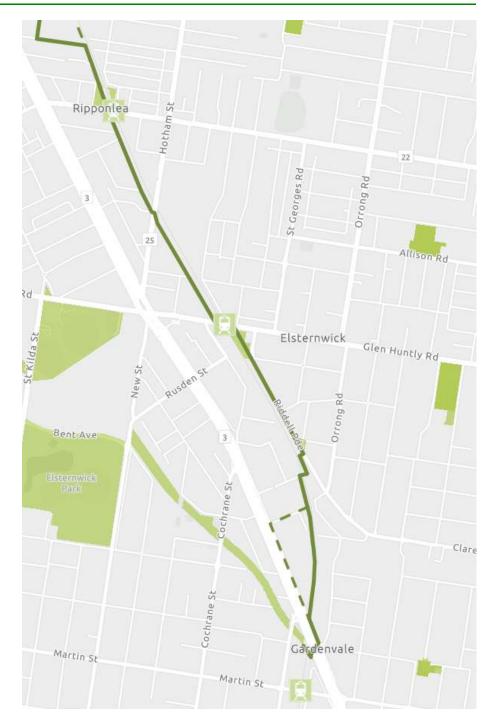
#### SHORT TERM OPPORTUNITIES

Glen Eira council is currently working on a Draft Elsternwick Structure Plan, planned for release in November 2022. The new Structure Plan may incorporate the development of a plaza above the rail line adjacent to Ripon Grove.

The planned plaza spanning the rail line would turn the intersection of Glen Huntly Rd, Ripon Grove and Gordon Street will function as a significant civic space, connecting Elsternwick Station and the Elsternwick Station Reserve.

At the southern-most end of the Green Line, the rail corridor is currently 'boxed in' behind large walls, but the rail embankment behind the walls includes a line of historic river red gums. The redevelopment of this site offers a once-only opportunity to create a linear park alongside the rail embankment.





### **RIPON GROVE**

Beyond Hotham St the Green Line leaves the City of Port Phillip and enters Glen Eira. The Green Line has the potential to continue along Ripon Grove, along the south-west of the rail line.

Along this section, the rail corridor runs along a shallow cutting. On the north-east side, an existing narrow walking path runs between the railway cutting and the boundary of Rippon Lea Estate. On the south-west side of the rail lines, the shallow cutting blends directly into the verge of Ripon Grove. Since Ripon Grove was closed to through traffic, it has been neglected.





The north-east side of Ripon Grove, adjacent to the rail line, has ample space for a formal pedestrian path and an adjacent nature strip.



Many sections of Ripon Grove's embankment transition are in very poor condition with broken tarmac verges, unplanned plantings, dumped rubbish, rail tracks, and concrete beams.



#### IMPROVING PUBLIC ACCESSIBILITY

The Green Line increases public accessibility by revitalising the nature strip on the south-west side of the rail line

Actions Required:

- Install formal walking path alongside rail embankment.
- Consider safety issues



#### **INCREASING PUBLIC OPEN SPACE**

The Green Line increases public open space revitalising the derelict embankments south-west side of the rail line.

Actions Required:

- Install walking path adjacent to rail embankment.
- Connect to the planned plaza redevelopment on Glen Huntly Rd.



#### **BUILDING TREE CANOPY**

The Green Line increases tree canopy by replanting the derelict embankments on either side of the rail line.

Actions Required:

• Plant indigenous trees and grasses along rail embankment.



#### SUPPORTING BIO-DIVERSITY

The Green Line supports bio-diversity by linking habitat along the rail line. Actions Required:

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.



### RIDDELL PARADE

Riddell Parade section begins at the recently refreshed Elsternwick Station Reserve. From here, the Green Line continues south, along the east side of the rail line, until it reaches the pedestrian bridge that connects Riddell Parade to Elm Lane on the west side of the line.

This section of the railway corridor is home to large sections of extant indigenous vegetation and wildlife, underlining the value of the rail corridor for the preservation of historic ecosystems.





At the south of the reserve, the Green Line follows the west side of Riddell Parade, adjacent to the railway line. The existing footpath here has recently been replanted with plane trees, and large sections of the rail reserve are in general disrepair.



#### IMPROVING PUBLIC ACCESSIBILITY

While this section of the Green Line has generally good accessibility, the Green Line project offers opportunities to rethink the existing walking routes, improving pedestrian connection to the Elsternwick shopping precinct, and creating new walking routes that connect to the Elster Nature Reserve precinct.

The Green Line's plan for connectivity to the pedestrian overpass across Nepean Highway reduces the chance that pedestrian will attempt to cross the highway between the overpass and Rusden St. This section of the highway, which is over 1km in length, is dangerous for pedestrians. Future plans may include an additional safe pedestrian crossing over the Nepean highway to efficiently link to the Elsternwick Park Nature reserve.

Finally, the existing elevated pedestrian bridge over the rail line does not meet modern expectations for universal accessibility.

- Renovate/rebuild the existing rail crossing to improve accessibility.
- Rework Riddell Parade footpath to integrate with the rail reserve.





#### **INCREASING PUBLIC OPEN SPACE**

The Riddell St section of the Green Line is well-serviced with public open space; with the Elsternwick Station Reserve and the new pocket park between Riddell St, Gibson St, and Archibald St.

Actions Required:

• Pedestrian crossing from west side of Riddell St to pocket park.





#### **BUILDING TREE CANOPY**

The Green Line increases tree canopy by replanting the derelict embankments on either side of the rail line. This section of the Green Line is home to sections of remnant vegetation, which should be propagated from here along sections with similar ecological characteristics.

Actions Required:

- Identify and propagate indigenous trees and grasses along this section of the rail reserve.
- Replace invasive species with indigenous trees, shrubs, and grasses.



#### SUPPORTING BIO-DIVERSITY

The Green Line supports bio-diversity by linking habitat along the rail line.

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.

### ELM LANE

The Elm Lane section is a short section that connects Elm Avenue to Oak Avenue. These avenues are connected via Elm Lane, a narrow walking path between the houses and the rail reserve.

Elm Lane is in significant disrepair with an eroded bitumen path, uneven road access, and no night lighting. The narrow rail corridor through this section is poorly maintained and devoid of significant indigenous vegetation.

Significant opportunities exist in this section to improve amenity for local residents, to improve tree canopy on the east side of the reserve, and to revegetate the west side of the rail reserve with indigenous plantings.





#### IMPROVING PUBLIC ACCESSIBILITY

Elm Lane offers significant opportunity to improve public accessibility.

For residents of this area, the Green Line project route represents the most direct access Elsternwick and Gardenvale Stations.

Actions Required:

- Revitalise existing walking path alongside rail reserve.
- Consider safety issues



#### **INCREASING PUBLIC OPEN SPACE**

This area affords opportunities to connect new open space within Elsternwick south west to other communities via the Green Line.

Actions Required:

- Create new areas of public open space in the Nepean Hwy area.
- Connect new open space to other communities via the Green Line.

#### **BUILDING TREE CANOPY**

The west side of the rail reserve is largely devoid of planting, while the east side includes some established tree canopy.

Actions Required:

- Revegetate the west side of the rail reserve with grasses and shrubs.
- Improve tree canopy on east side of rail reserve with tree plantings.



#### SUPPORTING BIO-DIVERSITY

The Green Line supports bio-diversity by linking habitat along the rail line.

- Plant species that support indigenous wildlife.
- Landscape west/east sides of rail reserve to support wildlife.

### **ELSTERNWICK SOUTH-WEST**

The final section of the Green Line continues from Elm Lane, along Oak Avenue for a short distance, down Marmara Drive, skirts around the existing housing, and then rejoins the rail embankment along a new linear park for approximately 300m to reach Nepean Highway. From here, pedestrians can use the existing pedestrian overpass to continue to Gardenvale Station, or to join the Elster Creek walking track to travel to Elsternwick Nature Reserve (via Elsternwick Primary School).



Under the Green Line Proposal, the rail corridor would become an integral recreation space as part of any future redevelopment, instead of a narrow and overshadowed afterthought.



In the absence of a redevelopment of this site, the Green Line could travel down Elm Avenue to Nepean Highway to then connect with the pedestrian overpass to Gardenvale station and other bike and pedestrian accessible routes.





#### IMPROVING PUBLIC ACCESSIBILITY

This final section of the Green Line, when properly integrated with the possible future redevelopment of the Toyota site, promises to greatly improve public accessibility through this entire precinct.

The Green Line will offer walking and cycling access to local shopping centres, transport hubs, schools and parks.

Actions Required:

• Fully integrate Green Line linear park and walking path into future redevelopment.





#### **INCREASING PUBLIC OPEN SPACE**

As noted in Section 4.2.3 of the Glen Eira Open Space Strategy Refresh 2020, Elsternwick lacks Municipal open space with just 3sqm of open space per person. There are no major areas of open space within 400 metres of Elsternwick or Gardenvale without crossing major roads.

This plan's proposed public open space can be re-imagined to better serve the needs of the community.

Actions Required:

• Fully integrate Green Line linear park and walking path into future redevelopment.



Green Line Alliance

#### **BUILDING TREE CANOPY**

This section of the rail corridor is currently 'boxed in' behind large walls, but the rail embankment behind the walls includes a line of historic river red gums. The future redevelopment of this site offers a once-only opportunity to create a linear park alongside the rail embankment.

Actions Required:

• Integrate existing mature historic trees into Green Line







#### SUPPORTING BIO-DIVERSITY

The Green Line supports bio-diversity by linking habitat along the rail line.

- Plant species that support indigenous wildlife.
- Landscape west/east sides of embankment to support wildlife.

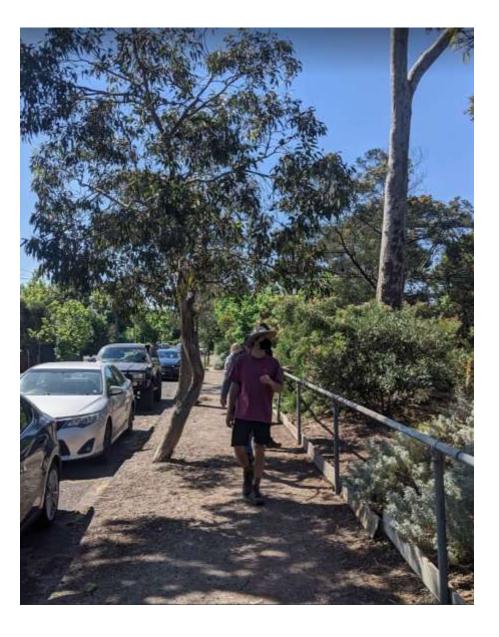












### **GREEN LINE PLANTING REFERENCE**

The planting activities along the Green Line should adhere to these goals:

- Primary goal to provide habitat for wildlife
- All indigenous planting
- Plant species selection and structure to minimise invasive species incursion
- Focus on understory and middle story planting



#### **PLANTING GUIDE**

The following planting guides were contributed by Rob Scott from Naturelinks.

#### TREE LAYER

- Banksia integrifolia subsp. integrifolia
- Eucalyptus camaldulensis
- Eucalyptus melliodora
- Eucalyptus ovata
- Eucalyptus viminalis subsp. pryoriana

#### UNDERSTOREY LAYER

- Acacia implexa
- Acacia mearnsii
- Acacia melanoxylon
- Acacia paradoxa
- Acacia stricta
- Allocasuarina littoralis
- Allocasuarina verticillata
- Banksia marginata
- Bursaria spinosa subsp. spinosa
- Leptospermum lanigerum
- Leptospermum myrsinoides
- Myoporum insulare
- Myoporum petiolatum
- Ozothamnus ferrugineus
- Solanum laciniatum

Blackwood Hedge Wattle Hop Wattle Black Sheoak Drooping Sheoak Silver Banksia Sweet Bursaria Woolly Tea-tree Heath Tea-tree Common Boobialla Sticky Boobialla Tree Everlasting Large Kangaroo Apple

**Coast Banksia** 

**River Red-gum** 

Yellow Box

Lightwood Black Wattle

Swamp Gum

Coast Manna-gum

#### **GROUND COVER**

- Acacia brownii
- Acacia suaveolens
- Acacia verticillata
- Acaena novae-zelandiae
- Allocasuarina paludosa
- Arthropodium strictum s.l.
- Atriplex semibaccata
- Austrostipa nodosa
- Billardiera scandens s.s.
- Bossiaea cinerea
- Bossiaea prostrata
- Bulbine bulbosa
- Chrysocephalum apiculatum s.l. Common Everlasting
- Chrysocephalum semipapposum Clustered Everlasting
- Clematis microphylla var. microphylla spp. agg. Small-leaved Clematis

Heath Wattle

Sweet Wattle

Prickly Moses

**Bidgee-widgee** 

Scrub Sheoak

Chocolate Lily

**Berry Saltbush** 

**Knotty Spear-grass** 

Velvet Apple-berry

**Creeping Bossiaea** 

Showy Bossiaea

Bulbine Lily

- Convolvulus erubescens s.l.
  Correa reflexa
  Common Correa
- Dianella brevicaulis
   Small-flower Flax-lily
- Dianella longifolia s.l. Pale Flax-lily
- Dichelachne crinita
   Long-hair Plume-grass
- Dichondra repens
   Kidney-weed
- Einadia nutans
   Nodding Saltbush
- Enchylaena tomentosa var. tomentosa Ruby Saltbush
- Eryngium ovinum Blue Devil
- Ficinia nodosa Knobby Club-sedge
- Geranium solanderi s.l. Austral Crane's-bill
- Goodenia ovata Hop Goodenia
- Hardenbergia violacea Purple Coral-pea
- Indigofera australis subsp. australis Austral Indigo
- Kennedia prostrata
   Running Postman
- Lasiopetalum baueri
   Slender Velvet-bush
- Lepidosperma concavum
   Sandhill Sword-sedge

- Leptospermum continentale Prickly Tea-tree ٠ Lomandra filiformis Wattle Mat-rush • Lomandra longifolia Spiny-headed Mat-rush • Microlaena stipoides var. stipoides Weeping Grass • Austral Stork's-bill Pelargonium australe • Poa labillardierei Common Tussock-grass . Coast Tussock-grass Poa poiformis • Rytidosperma racemosum var. racemosum Clustered Wallaby grass .
- Themeda triandra Kangaroo Grass
- Viola hederacea sensu Willis (1972) Ivy-leaf Violet
- Wahlenbergia communis s.l. Tufted Bluebell
- Wahlenbergia stricta subsp. stricta Tall Bluebell
- Xerochrysum bracteatum Golden Everlasting

#### in has been amended to show existing nunity planting, retaining and enhancing garden as opposed to removing.

### after

Design response

1

- > Enhance look and feel of garden beds at the foot of the railway bridge through additional planting and seating areas
- > Incorporate gateway elements to communicate the entry to Balaclava Walk East and West
- > Install signage and wayfinding devices into the space to direct people to the station and promote local destinations
- > Provide masking for the electrical substation

**Bicycle hoops** 

High tree retention value Very high tree retention value

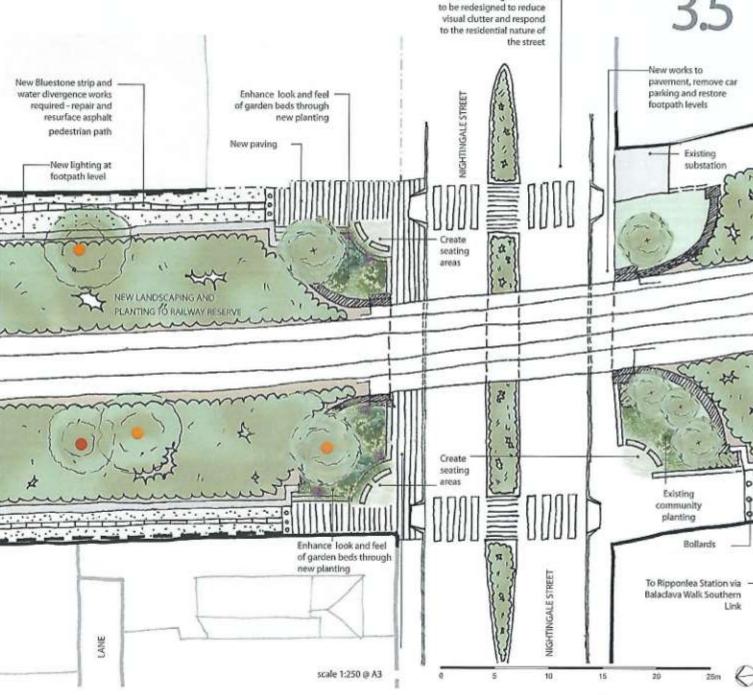
Bollards

(Cork Oak)

...

- > Provide a common street treatment to the area, to help unify the space and announce the gateway to Balaclava Walk East and West
- > Incorporate traffic calming measures to Nightingale Street and provide a generous and clear pedestrian crossing
- Widen footpaths on Nightingale Street so that they meet the plers > of the railway bridge

Precinct design materials legend New planting Large-scale planting 100 Bluestone paving Asphalt with Bluestone paving strip Graphic design element applied to wall/fenceline



Traffic calming measures -

precinct design

