

Glen Osmond Road, Hutt Road & Park 17 Improvements

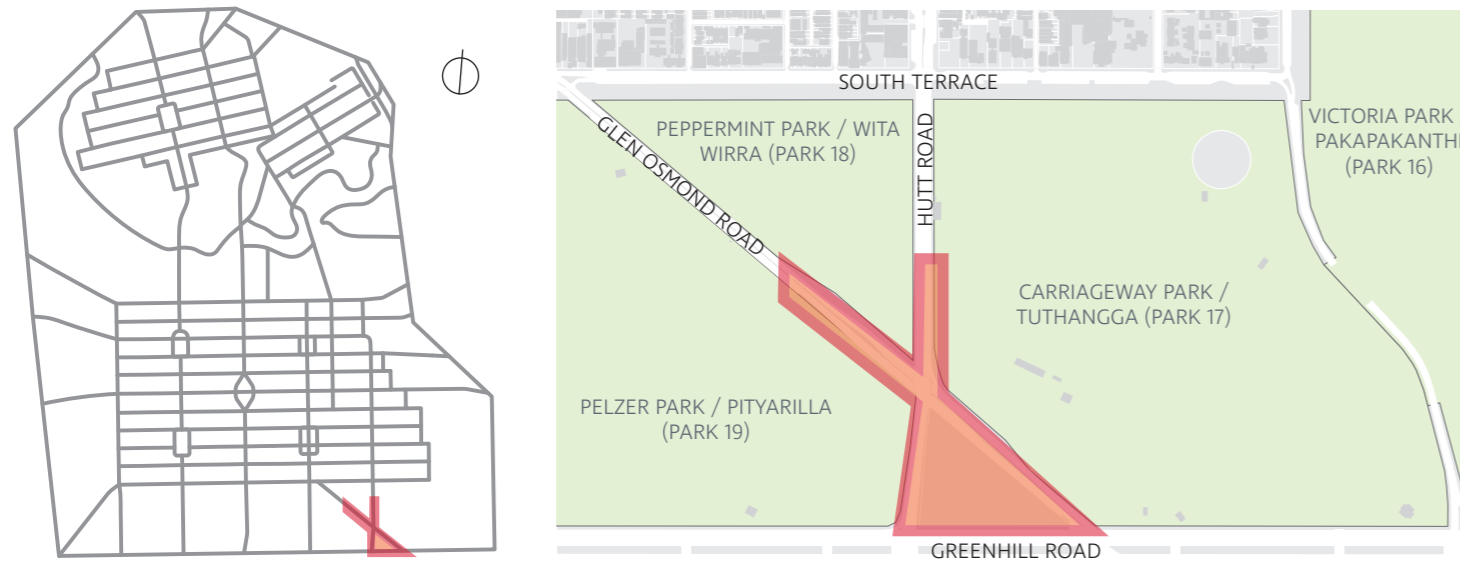
Carriageway Park / Tuthangga (Park 17) & Pelzer Park / Pityarilla (Park 19)

CONCEPT
JULY 2024



Glen Osmond Road, Hutt Road & Park 17 Improvements

Context



Location Plan



'Plan of Park 19' prepared by August Pelzer 1917



Extract of a 1936 aerial photograph of metropolitan Adelaide depicting Tuthangga/Park 17

Background

The project site is predominately located within the south west corner of Carriageway Park / Tuthangga (Park 17) of the Adelaide Park Lands. This 16,300 sqm triangular portion of land bordered by Glen Osmond, Hutt, and Greenhill Roads originally comprised part of the adjoining Park 19 land parcel to the west until the 1960s when it was added to Park 17 for management purposes. As a result the underlying character of the landscape and early plantings it can be seen as more closely reflecting the previous structure and management practices of Park 19.

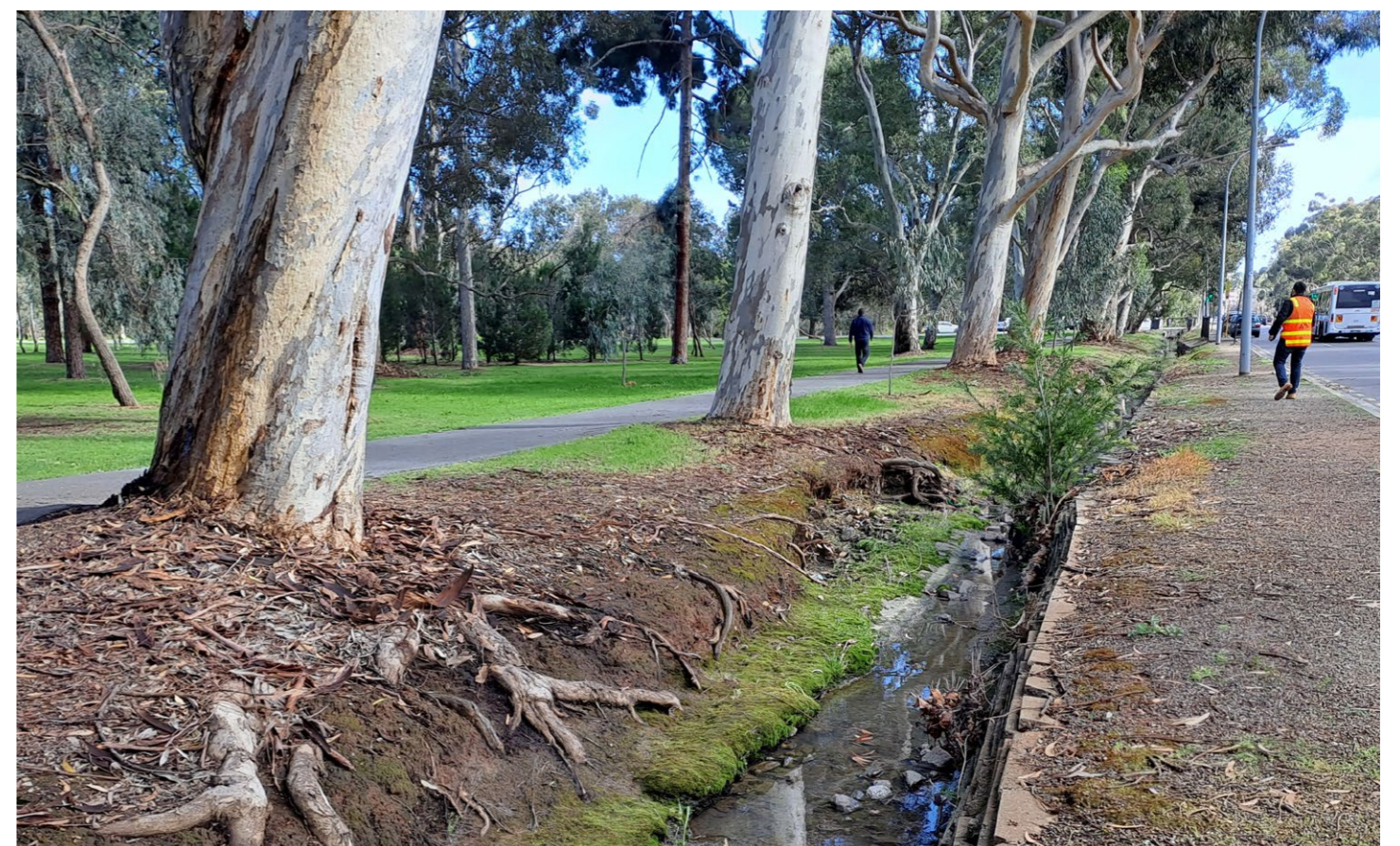
Cited in historic references to pre and post contact times, Kaurna and Aboriginal sites or activities are not linked specifically to this site but are generalised for the whole of the South Park Lands as 'a landscape regularly occupied for encampments, food harvesting, burials, and hunting activities.' References from the 1860s allude to Aboriginal people having been 'driven out' of the South Park Lands.

From this period it is thought the first City Gardener, William O'Brien, established the first shelterbelt tree plantations along the 'Glen Osmond – Mount Barker' Road in the Park Lands and at the project site, while the majority of Park 19 remained largely cleared of vegetation. Some of the shelterbelt river red gums (*Eucalyptus camaldulensis*) trees survive in the project site.

In 1915, the proposal to run a tram line through Park 19 linking Hutt Street with George Street in Parkside led to the construction of the extension of Hutt Road, including 7-foot-wide footpaths on either side; and created the new small triangular parcel of Park 19 subsequently known as Park 19A which comprises part of the project site. A new 'Plan of Garden' was conceived by City Gardener, August Pelzer, for this area as a passive recreational 'pocket park' including perimeter plantings, a meandering pedestrian pathway system around clumps of trees and shrub plantings, and the continuation of the 'Ponder Avenue' cycle track with sugar gums along its interface with Glen Osmond Road to Greenhill Road.

While the park's amenity is reduced and currently underutilised for recreational use due to the surrounding road environment, it still supports many large mature trees and more recent native tree plantings without understorey planting. The overall space is predominantly flat, draining slowly to a low point adjacent Hutt Road, which becomes inundated following moderate rainfall. The park area still contains a single sealed path beside the drainage channel along Glen Osmond Road as the present-day version of 'Ponder Avenue'.

The project site also includes the continuation of the Glen Osmond Road drainage channel extending beneath Hutt Road and terminating at the South Park Lands Creek. A visual representation of the project context is provided on page 4. (Source of historical references: Jones, D. (2007) *Adelaide Park Lands & Squares Cultural Landscape Assessment Study prepared for the Corporation of the City of Adelaide.*)



Existing drainage channel condition and majestic *Eucalyptus cladocalyx* (Sugar Gum) trees historically known as 'Ponder Avenue' which provide a dramatic entry statement to the City of Adelaide

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Project Drivers

The ageing open drainage channel is the key driver for this project scope as it requires substantial rehabilitation in response to the advanced state of disrepair of its retaining materials; increasing erosion of its steep banks; and the inadequate capacity of the existing Hutt Road culvert to convey current and future estimated flow rates. As a result, a prominent row of large sugar gum (*Eucalyptus cladocalyx*) trees lining the south side of the channel are under threat from the increasing extent of soil erosion around their roots. The degraded state of the channel is also adversely impacting the presentation of this major entrance to the city.

These trees are identified as a key landscape feature in the Carriageway Park / Tuthangga (Park 17) Community Land Management Plan (CLMP) as one side of the Glen Osmond Road avenue, creating a striking impression along this major route into the City. Together with the poor presentation of the crumbling channel, the further degradation and loss of these trees through neglect would affect visual amenity, become a hazard for park and road users, and fail to align with the City's clear environmental commitment to protect the Park Lands' natural heritage and increase city-wide greening and biodiversity.

The project also presents an opportunity to renew other ageing assets such as roads, kerbing, street lighting and improve access and safety through providing a shared use path connection to Hutt Street Entry Statement and the inner southern suburbs.

Project Objectives

- Rehabilitation of degraded stormwater infrastructure and other ageing assets such as road, kerbs and lighting
- Conservation of mature, regulated and significant trees
- Creation of new pedestrian and cycling link between Hutt Street Entry Statement and the inner southern suburbs
- Improvements to safety and accessibility of crossing points at Glen Osmond Road intersection
- Improvements to access to bus stops and on-street car parks on Glen Osmond Road

Scope

The overall scope of the project consolidates the design and coordinated delivery of the following renewal components:

- Rehabilitation of open drainage channels and culverts along the southern side of Glen Osmond Road
- Rehabilitation of road pavement and renewal of kerb and gutter on Hutt Road
- New public lighting renewal along Glen Osmond Road
- New shared use path to link the Park Lands Trail and Greenhill Road

The project incorporates a number of planned renewal and upgrade components due to their interconnectivity within the project area. This includes new lighting along Glen Osmond Road, road asset renewal to Hutt Road, and a shared use path beside Hutt Road connecting adjacent suburbs to Hutt Street and the City.

Throughout the development of the concept design, numerous options were explored to manage stormwater, including; diversion of stormwater into sedimentation/detention basins, renewal of existing stormwater channels and relocation of the channel beneath Glen Osmond Road away from existing trees. However, following detailed analysis the most feasible option is to convert the channel into a culvert.

A visual representation of the project scope is provided on **page 5**. Construction materials from the drainage channel which hold minor cultural heritage interest will be salvaged. Their reuse in the project will be determined during the detailed design phase.

Strategic Context

The Adelaide Park Lands Management Strategy (APLMS) 2015-2025 identifies opportunities for this section of Glen Osmond Road to become a feature Park Lands city gateway with public art, and an improved urban interface along Greenhill Road to increase its appeal for users along this route into the City. The Strategy also details a number of general strategies, with the following of relevance to the project:

Strategy 2.2 Establish shared walking and cycling paths with safe connections and crossing points linking the City and inner suburbs

Strategy 3.1 Develop an identifiable landscape character for each Park Lands edge.



Exposed tree roots within drainage channel

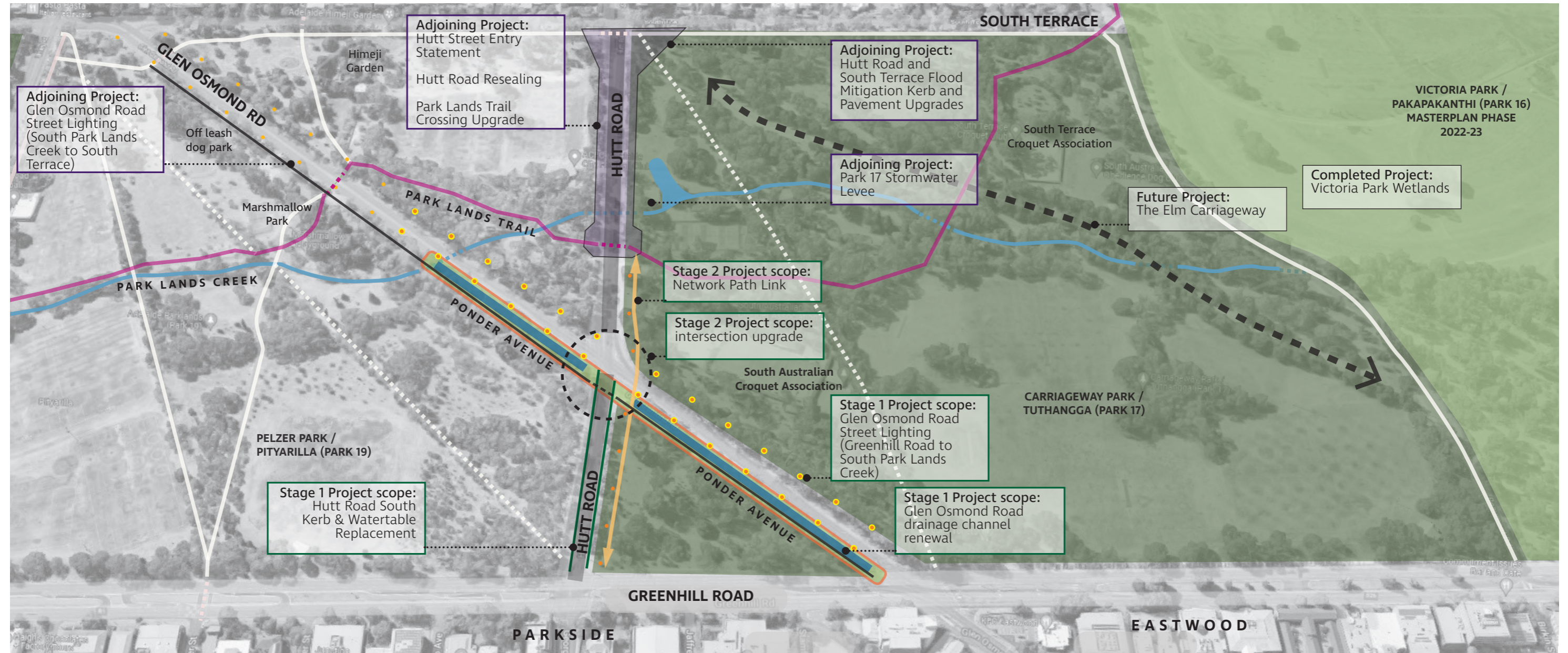


Stacked stone and concrete slab retaining wall with unsafe sheer drop into channel

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Overview

Scope and Surrounding Projects



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Existing shared use path and Ponder Avenue lined with Sugar Gums along Glen Osmond Road



Existing crossing and slip lane on the eastern side of Glen Osmond Road at the intersection with Hutt Road with poor waiting areas and high speed vehicle turning movements



Existing drainage channel in degraded condition



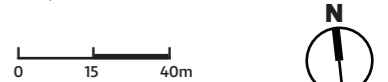
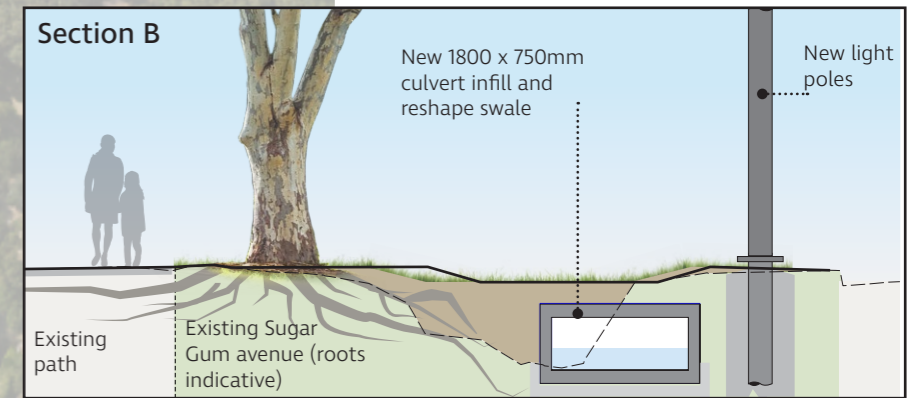
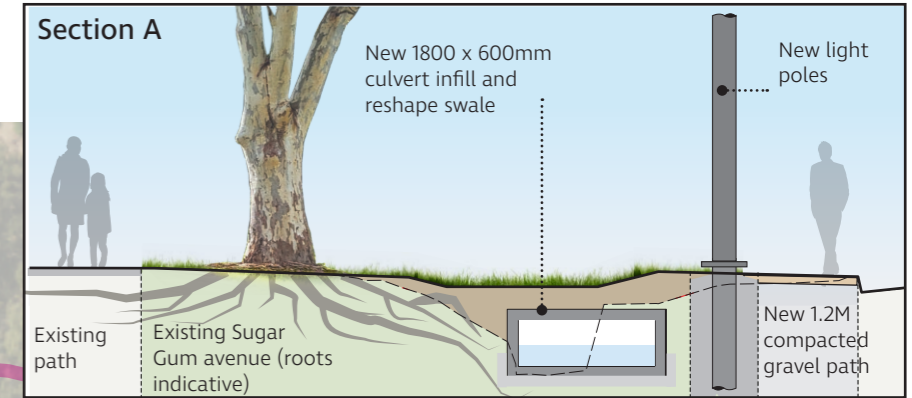
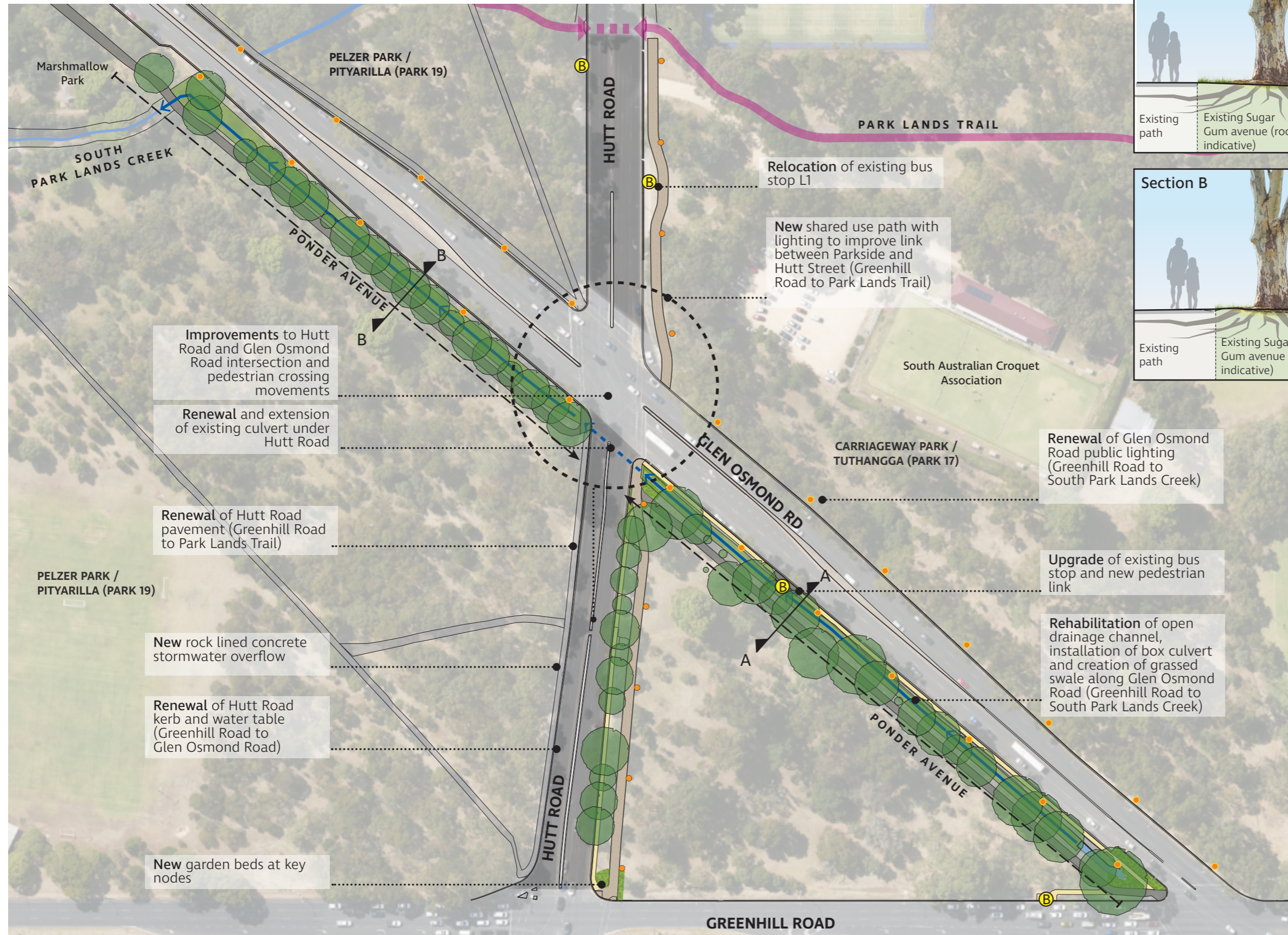
Existing degraded drainage channel during rainfall event which presents a public safety hazard



Existing Ash tree avenue on Hutt Road (east side) with restricted pedestrian access

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Project Scope



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Artist's Impression

Rehabilitated drainage channel looking north-west along Glen Osmond Road and Ponder Avenue



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Tree Retention

The project will retain and protect the avenue of Regulated and Significant sugar gums on Glen Osmond Road lining the shared use path historically known as 'Ponder Avenue'. The alignment of the proposed culvert and shared use path connecting the Park Lands Trail Crossing to Greenhill Road has been designed to minimise impacts to these trees whilst also addressing ongoing impacts of erosion within the drainage channel which endangers the ongoing sustainability of the trees.

159 trees were assessed within the project area. Under the Planning, Development and Infrastructure Act 2016, of those 159 trees, 70 trees are 'Unregulated Trees', 40 trees were classed as 'Regulated Trees', 45 trees were identified as 'Significant Trees' and 4 were classed as exempt due to species.

Trees identified below provides a snapshot of high value trees being retained in the project. Please refer to the Treesolve Arborist Report for further information on trees.



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Tree Impact

An external arborist was engaged to produce an Arboricultural Impact Assessment Report based on the Concept Design and provided recommendations regarding tree management. The report recommends that removal of eleven (11) trees would be required based on development impact or due to poor health and/or structure.

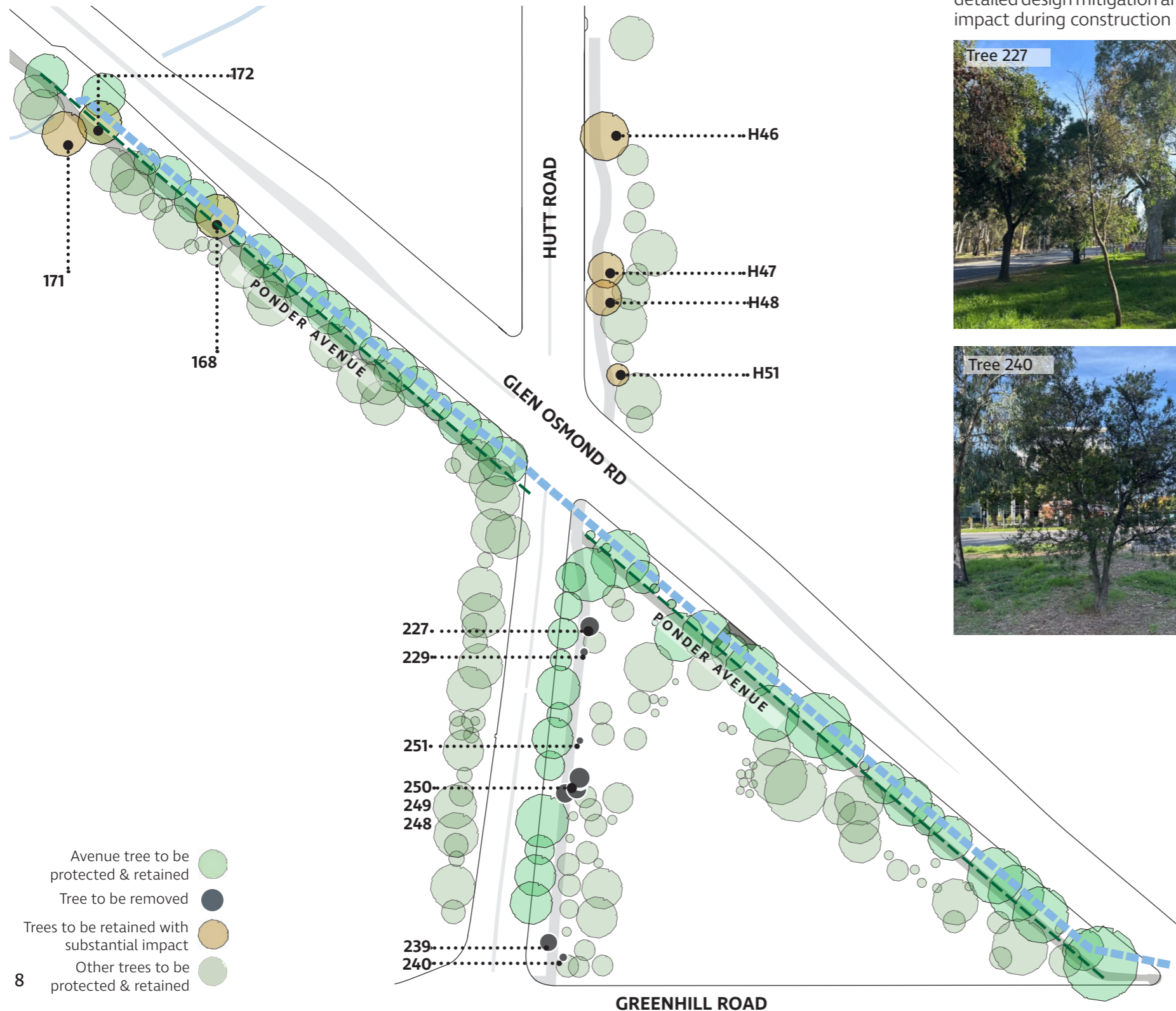
Notwithstanding this recommendation, only eight (8) trees are proposed to be removed in order to construct the shared use path along Hutt Road. These removals are balanced against the long term benefits of addressing the of renewal of the drainage channel for the Ponder Avenue trees.

The alignment of the path aims to minimise impact to high value trees whilst providing a safe and direct shared use path as an alternative to using Hutt Road. Of the eight (8) tree removals proposed; all are less than 5m in height, six

(6) are noted to be only in fair condition and of those six (6), two (2) are noted to have surpassed useful life expectancy. Tree 240, while not recommended for removal based on development impact has been proposed for removal as the tree has surpassed its useful life expectancy. Replacement trees will be included where space allows within the project site or wider locality.

As identified in the arborist's recommendation there are additional trees not in direct conflict with the project, but have been recommended for removal (163, 172, H100 and H50). These trees are recommended for removal due to poor health (1 tree is dead) and/or poor structure and will be further assessed by Council arboricultural staff.

The report also notes other trees with 'substantial development impact based on the current design. During detailed design mitigation and protection measures will be investigated and implemented to minimise development impact during construction and ensure tree sustainability.



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Recommendation

Following extensive design investigations and arboricultural assessment, the following is recommended to achieve the project objectives:

- Replacement the existing open channel with a box culvert to provide reliable stormwater management to the catchment and surrounding locality, whilst addressing ongoing erosion risk to the existing historic avenue of *Eucalyptus cladocalyx* trees and existing street lighting;
- Renewal of road, bus stop and lighting assets which are interconnected with the open channel and path works;
- Construction of a shared use path to strengthen the cycling and pedestrian connection between the City, south-eastern Park Lands and inner southern suburbs
- Upgrade the Glen Osmond Road and Hutt Road Intersection to improve safety and accessibility.