Kadaltilla
Adelaide Park Lands Authority

Glen Osmond Road, Hutt Road and Park 17 Improvements

Thursday, 25 July 2024
Board Meeting

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Public

Purpose

This report presents the proposal for the rehabilitation of the existing open channel along Glen Osmond Road as part of the Glen Osmond Road, Hutt Road and Carriageway Park / Tuthangga (Park 17) Improvements project. The project will address the existing concerns associated with the eroded open channel by conveying the stormwater flow through an underground culvert whilst conserving the existing mature trees, enhancing Park Lands safety and accessibility, and appropriately managing stormwater.

As part of the project, other improvement works such as renewing the ageing road surface, lighting infrastructure, and construction of new shared-use path to strengthen the connection between the southern Park Lands and the City will also be undertaken.

Recommendation

THAT THE KADALTILLA / ADELAIDE PARK LANDS AUTHORITY ADVISES COUNCIL:

That the Kadaltilla / Adelaide Park Lands Authority:

1. Endorses the recommendation to proceed with the Glen Osmond Road, Hutt Road and Carriageway Park / Tuthangga (Park 17) Improvements concept as contained in **Attachment A** to Item 6.1 on the Agenda for the meeting of Kadaltilla / Adelaide Park Lands Authority held on 25 July 2024.
2. Notes that the Administration will provide further updates to Kadaltilla as design progresses.

Implications

Adelaide Park Lands Management Strategy 2015-2025	Adelaide Park Lands Management Strategy 2015-2025 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.
2023-2028 Strategic Plan	Kadaltilla / Adelaide Park Lands Authority 2023-2028 Strategic Plan Strategic Plan Alignment – Environmental Performance Define, protect, and enhance landscape values and design qualities
Policy	Not as a result of this report.
Consultation	The community will be engaged through a project website following the endorsement of this project in the 2024/25 Business Plan and Budget.
Resource	Not as a result of this report.
Risk / Legal / Legislative	Not as a result of this report.
Opportunities	Not as a result of this report.
City of Adelaide Budget Allocation	Council has allocated $42,000 for detailed design as part of its 2024/25 Business Plan and Budget process.
Life of Project, Service, Initiative or (Expectancy of) Asset	50 to 100 years asset life expectancy, depending on asset type.
Ongoing Costs (eg maintenance cost)	No additional ongoing costs expected for renewal of existing assets. The shared-use path and associated Park Lands lights will be new assets which will require ongoing maintenance costs (i.e. 2% of capital cost).
Other Funding Sources	No other external funded sources identified.

Discussion

Background

1. The project was initiated as a stormwater renewal project with an objective to rehabilitate the existing open channel along Glen Osmond Road. The open channel performs an important role for stormwater management in the area and requires renewal due to the deteriorated condition of the asset.
2. The existing unfenced open channel with steep banks poses an ongoing risk to public safety, which is exacerbated by the progressive erosion affecting the performance of the stormwater asset and undermining the stability of the banks. The bank erosion will also impose irreversible damages to the row of mature sugar gums (Eucalyptus cladocalyx), which forms a towering avenue approach to the City. There are a total of 45 trees, including 19 significant trees and 12 regulated trees lining the south-western bank of the channel between Greenhill Road and South Park Lands Creek.
3. This project was created to address the erosion issue of the open channel to provide long-term tree health preservation of the existing gum trees, while maintaining the stormwater management function. Importantly, the project will improve access and pedestrian safety concerns created by the steep banks of the open channel.
4. A comprehensive feasibility study was completed to consider numerous options to rehabilitate the existing open channel that meets the project objectives to provide an appropriate stormwater management solution, preserve the existing significant trees, and remove the current safety hazard due to the eroding steep banks.
5. The options investigated included but were not limited to, like-for-like renewal of the open channel; backfilling the existing open channel and conveying stormwater via a culvert beneath the road; and diverting some of the stormwater flow through two vegetated ephemeral basins to provide environmental, biodiversity and passive recreational benefits. These options either didn't fully meet the project objectives, required the removal of numerous existing trees, are technically infeasible, or have significant budget implication.
6. The most feasible solution is to convey the stormwater flow via an underground culvert along its current alignment, allowing the existing trees to be restabilised through backfilling the open channel and creating a shallow grassed swale, which will provide improved amenity values and safe access along the edge of the Park Lands.

Project scope and concept options

7. Through an integrated design and planning approach several programmed asset renewal and upgrade works have been added to the open channel rehabilitation project scope, to provide an overall improvement to Glen Osmond Road, Hutt Road and Carriageway Park / Tuthangga (Park 17).
8. The concept design as detailed in **Attachment A** features:
    - 8.1. Conservation of the row of sugar gum trees along Glen Osmond Road, contributing to an improved visual presentation of these Park Lands as one of the major entrances into the city through enablement of a more formal edge treatment.
    - 8.2. Rehabilitation of the existing open channel through an installation of 1800mm wide culvert along Glen Osmond Road.
    - 8.3. Renewal of road pavement, kerb and water table along Hutt Road.
    - 8.4. Renewal of road lighting along Glen Osmond Road.
    - 8.5. Renewal of degraded stormwater infrastructure along Glen Osmond Road.
    - 8.6. Construction of a new shared-use path and associated lighting within the Adelaide Park Lands along Hutt Road to strengthen the connection between the city and the southern suburbs for people walking, cycling and running. The path will extend the proposed shared-use path to be constructed under the Entry Statement project to Greenhill Road and adjacent suburbs, with a safer and more accommodating crossing at Glen Osmond Road intersection.

Impacts to existing trees

9. The alignment of the proposed culvert and shared-use path has been designed to minimise impacts to existing trees. The culvert is to be installed at the bed of the existing channel and located as far away from existing trees as possible to reduce any adverse impacts to the root systems. The alignment of the proposed shared-use path is designed to prioritise larger, healthy trees over smaller specimens and those with lower environmental and amenity values.
10. An independent arborist was engaged to provide advice on potential impacts to the existing trees from the project during construction. The advice received is most of the tree population are in good to fair overall condition and are therefore expected to tolerate the proposed level of encroachment. Refer to Link 1 for the arborist report.

11. A total of eight trees are identified to be removed to allow a fit-for-purpose shared-use path and culvert to be built as part of the project. None of these trees are significant or regulated and are all less than 5m in height. Six are noted to be only in fair condition and of those six, two are noted to have surpassed useful life expectancy (refer to page 8 in **Attachment A** for further information).
12. The arborist indicated that the loss of these trees will be offset by the benefits of long-term preservation and the proposed tree replacement planting within the wider locality of the project site, with the appropriate space to thrive.
13. It was also noted that there are a few trees with substantial development impact based on the current design. It is expected that during detailed design, mitigation and protection measures will be implemented to minimise impact to these trees.
14. The Administration will explore opportunities for planting of new trees within the vicinity to offset the loss of the eight trees proposed to be removed as part of this work.

Next Steps

15. [It is recommended to] replace the existing open channel with a culvert to continue to provide reliable stormwater management services to the catchment and the surrounding locality, while addressing ongoing erosion risk to the historic avenue of trees.
16. [The project will also include] renewal of the deteriorated asset and construction of the proposed shared-use path to strengthen the connection between the city, the south-eastern Park Lands and the surrounding suburbs.
17. Council has allocated $42,000 for detailed design as part of the 2024/25 Business Plan and Budget process. Construction is proposed to occur over two stages, commencing in the 2025/26 financial year subject to budget allocation, prioritising the replacement of the existing open channel with a culvert and renewal of the ageing assets, while the delivery of the new shared-use path will be at a subsequent stage.

Data and supporting information

Link 1 – Arborist Report

Attachments

Attachment A – Concept Report

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