

DEPARTMENT OF BIODIVERSITY, CONSERVATION AND ATTRACTIONS REPORT

PROPOSAL	Stairway and revegetation in public foreshore land
LOCATION	Lot 8378 Diagram 35070 (Crown reserve 24959) Jutland Parade, Dalkeith
COST	\$500,000
APPLICANT	George Hajigabriel, Rowe Group on behalf of the landowner 26 Jutland Parade, Dalkeith
LANDOWNER	Crown land under management of City of Nedlands
LOCAL GOVERNMENT	City of Nedlands
MRS CLASSIFICATION	Regional Open Space
DECISION TYPE	Part 5, <i>Swan and Canning Rivers Management Act 2006</i> , Ministerial Determination
ATTACHMENTS	1A Revised application 1B Referral Responses – City of Nedlands and the Department of Planning, Lands and Heritage 1C Supporting documents: Technical Information
RECOMMENDATION	APPROVAL WITH CONDITIONS

1. INTRODUCTION

- 1.1 The Department of Biodiversity, Conservation and Attractions (DBCA) has received an application from the Rowe Group on behalf of the owner of Lot 26 Jutland Parade Dalkeith (refer Figure 1) to undertake works in the adjoining foreshore land within lot 8378 Diagram 35070, Crown reserve 24959.



Figure 1: Site – Lot 8378 Diagram 35070 (outlined in red) - abutting residence at 26 Jutland Parade

- 1.2 The subject land is contained within the Regional Open Space reservation under the Metropolitan Region Scheme. The City of Nedlands (the City) has the care, control and management of the site on behalf of the Crown.
- 1.3 The proposed development is to occur on land entirely within the Swan Canning development control area and therefore requires determination by the Minister for the Environment in accordance with Part 5 of the *Swan and Canning Rivers Management Act 2006* (SCRM Act).
- 1.4 The application (**Attachment 1A**) proposes foreshore works (refer Figure 2) including:
- Removal of an existing dilapidated stairway
 - Installation of a stairway to provide access to the foreshore for lot 24 on diagram 35070 (No. 26) and immediately adjoining residential lots, being lot 28 on Diagram 46250, and lot 32 on diagram 68950
 - Provision of public access to the stairway, including a landing and viewing platform
 - Removal of weeds on the embankment and foreshore
 - Rehabilitation of the embankment and foreshore through revegetation with locally native species
 - Stabilisation of the embankment using foreshore stabilisation techniques
 - Installation of wayfinding signage to direct public to the stairway
- 1.5 DBCA has prepared this report in accordance with section 76 of the SCRM Act.

2. CONSULTATION



Figure 2: Proposed revegetation and stairway down embankment from 26 Jutland Parade to foreshore

- 2.1 In accordance with section 73 of the SCRM Act, the application was initially advertised on DBCA's website. The application was advertised for 42 days commencing on 18 March 2025. No public submissions were received.
- 2.2 The application was referred to the City of Nedlands (the City) and the Department of Planning, Lands and Heritage (DPLH) for comment.

City of Nedlands

- 2.3 The City advises that it supports the proposal subject to conditions and advice notes including the establishment of a Deed of Agreement for the approved infrastructure within a public place, and the applicant establishing appropriate indemnity for the City for any damage or injury arising from the approved infrastructure.

- 2.4 The City's comments are provided in **Attachment 1B**.

Department of Planning, Lands and Heritage

- 2.5 To enable the lodgment of the application, DPLH as landowner of the reserve, provided correspondence supporting the lodgment of the application. This correspondence also contained recommended conditions of approval pertaining to the preparation of a Foreshore Management Plan and compliance with any requirements of DBCA or the City, which has the care, control and management of the land. DPLH's formal referral response reiterated this previous advice.
- 2.6 DPLH's comments are provided in **Attachment 1B**.

3. PUBLIC CONSULTATION – SUBMISSIONS ON DRAFT REPORT

- 3.1 In accordance with the requirements of Section 75 of the SCRM Act, a copy of the draft report and proposed recommendation were provided to the applicant and the relevant stakeholders being the City and DPLH. A copy was also published on the DBCA website between 7 August and 25 August 2025 with an invitation for public submissions.
- 3.2 No public submissions were received and further comment was not provided by the City or DPLH.
- 3.3 The applicant provided a submission seeking amendment to recommended Condition 7 regarding the applicant's obligations in terms of public liability, and the management and maintenance of the infrastructure in the public foreshore land. This matter has been resolved in consultation with the City of Nedlands, and Condition 7 and related Advice Note 5 have been amended accordingly.

4. RELEVANT POLICIES AND PLANS

- State Planning Policy 2.10 – Swan-Canning River System (SPP 2.10)
- Corporate Policy Statement No. 42 – Planning for Land Use, Development and Permitting Affecting the Swan Canning Development Control Area (Policy 42)
- Corporate Policy Statement No. 45 – Planning for Miscellaneous Structures and Facilities in the Swan Canning Development Control Area (Policy 45)
- Draft Melville Water (Dootanboro) Locality Plan – DBCA 2022
- Draft City of Nedlands Foreshore Management Plan (2024) – City of Nedlands 2024

5. ENVIRONMENTAL AND PLANNING CONSIDERATIONS

- Environmental protection
- Landscape character and visual amenity
- Amenity, public access and community benefit
- Heritage

6. BACKGROUND

- 6.1 The proposal is for works within public foreshore land located in front of 26 Jutland Parade, Dalkeith. Figure 3 shows the existing connections to the foreshore and regional public open space. The site is between Point Resolution Reserve and Otto Point Reserve / Sunset Foreshore.



Figure 3: Site Context

- 6.2 The applicant has obtained separate planning approval for construction of a new single dwelling at 26 Jutland Parade, Dalkeith. The approved works are contained wholly within the residential lot and include structural changes to the large retaining wall adjoining the boundary of the foreshore reserve.
- 6.3 The existing stairs across the embankment and down to the foreshore provide access for the residence at 26 Jutland Parade. The stairs are in a state of disrepair and have failed in places along the steep slopes. The area is overgrown with a variety of weeds, including invasive species and woody weeds. The extent and habit of weed growth makes the site impenetrable in places (refer Figure 4).



Figure 43: Weed growth in the foreshore reserve

- 6.4 The application as originally lodged on 19 April 2024 proposed private access from the applicant's land through the Crown reserve to the river. Initial discussions with the applicant considered the potential privatisation of the public foreshore and focused on reducing the bulk and scale of the proposal. The design was subsequently amended to reduce impacts on visual amenity as well as providing a broader public benefit, with the stairway and landing to provide public access and vistas across the Swan River. Proposed wayfinding signage was also incorporated into the proposal.
- 6.5 The revised design of the proposed staircase is described in the application as 'light-touch' foreshore access walkway with landing entry from the residences at the top of the

slope. A series of level changes down the embankment are negotiated by stairs, linked by planes of metal floor grating. The base of the slope sits between 1.0 - 1.7 m AHD and rises to 13.6 m AHD (Refer Figure 2). The steps will terminate on the foreshore with a proposed combination of bioengineering and dense plantings of endemic sedges, rushes and shrubs to improve site stabilisation. It is from this point the public will be able to access the stairs from the foreshore and up to the boundary of the residential properties to enjoy the vistas across the river.

7. DISCUSSION

Environmental protection

- 7.1 Policy 42 states that natural vegetation should be promoted, maintained and restored, and existing native vegetation should be retained as a means of protecting linkages and natural vegetation corridors. Additionally, it considers that land use and development on and adjacent to the river system should maintain and enhance the quality and amenity of the river environment, and that proposed development should be carefully undertaken to prevent detrimental impacts to the foreshore area.
- 7.2 The works associated with the proposed stair construction and site revegetation will require the removal of the non-native and invasive vegetation from the embankment, including brazilian pepper trees (*Schinus terebinthifolius*) and a variety of annual and perennial broad-leaf, grassy and other woody weeds (refer Figure 43).
- 7.3 A geotechnical study was prepared for the site (refer **Attachment 1C – Technical Information**). The study states that the slope is steep and considered metastable, with slope movements likely to occur as very gradual creep of the upper 1-2m of the surficial sands. The study recommends the retention of vegetation and significant root systems to help stabilise the slope. Additionally, the study considers that where possible all piles and anchors should be installed into the limestone beyond the upper surficial sands and down to a depth of 3m, or at least 0.5m into competent limestone. To further guard against erosion, the study recommends that no stormwater be directed from the residential properties towards the river.
- 7.4 Consistent with the findings in the report, in order to minimise the risk of embankment destabilisation and soil erosion, the works are proposed to be staged and employ measures to maintain slope stability including leaving root systems in place.
- 7.5 The Revegetation Management Plan provided with the application outlines a strategy and process for the revegetation of the site (refer **Attachment 1C – Technical Information**). The revegetation will reflect the area's original ecology and include the planting of species from the Karrakatta – Central and South vegetation complex. Lower on the site, at the interface to the river, plantings will include appropriate rushes and sedges which will provide a stabilising function. Existing native vegetation, including some large Tuart trees (*Eucalyptus gomphocephala*), will be retained.
- 7.6 Works will also incorporate erosion control measures on the slope. The nature of these will be determined following initial removal of the weeds, which are currently preventing access and the ability to fully understand the site characteristics. Measures discussed within the Foreshore Design Report and the Revegetation Management Plan include coir netting, coir logs, and brush fencing.
- 7.7 The Foreshore Management Plan, recommended through a condition of approval, will guide the revegetation and ongoing management of the site. The plan will include further detail on the proposed revegetation works, including agreed completion criteria and in-fill planting requirements.

- 7.8 The applicant will be responsible for all costs associated with maintenance of the foreshore vegetation for five years of monitoring, maintenance and weed control post-installation in accordance with the vegetation management plan.
- 7.9 The restoration of the foreshore vegetation will contribute towards the establishment of an ecological corridor along this section of river, consistent with the intent of the City's *Foreshore Management Plan – a 30 year strategy for the river*. This vegetation could provide an important link to the nearby Point Resolution and Sunset Foreshore to provide improved ecological and amenity outcomes along this section of the river system.
- 7.10 No in-water works are part of the proposal, but the proximity of the proposed works to the river and public foreshore reserve necessitate measures to minimise the risk of mobilisation of materials into the waterway. It is therefore recommended that a Construction Environmental Management Plan (CEMP) be required as a condition of approval. The CEMP should address:
- Staged demolition and construction methodology
 - Weed removal
 - Machinery and equipment management (including refuelling protocols)
 - Access to the site, including by machinery along the foreshore / public reserve
 - Public access, fencing, signage and safety
 - Installation of wayfinding signage
 - Minimisation of noise and vibration impacts on nearby residents and the general public
 - Maintenance, monitoring and reporting
- 7.11 It is recommended that the CEMP is prepared to the satisfaction of DBCA, on advice from the City.

Landscape character and visual amenity

- 7.12 SPP 2.10 requires that development proposals do not restrict or negatively impact on public views to or from the river, particularly from vantage points. Proposals should ensure that the essential qualities that give the area its distinctive character are protected and enhanced.
- 7.13 Policy 42 states that the design, materials and colour scheme of developments adjacent to the river and foreshores should complement and protect the character and landscape setting of the river. Structures such as that proposed through this application should demonstrate that they maintain or improve public access; community use and enjoyment of the river system; the visual amenity and landscape character of the river; and views to and from the river.
- 7.14 Figure 5 provides a current view of the foreshore and residence from the river. While the site is currently dominated by invasive vegetation such as broad leaved pepper and arundo grass, The site generally presents as a natural interface to the river.
- 7.15 The structure will be built into the landscape using appropriate materials and an approach which will minimise the visual intrusion. The design and proposed materials, such as aluminum grates with visual permeability, will limit the intrusiveness of the built form on the amenity of the foreshore whilst ensuring durability.
- 7.16 The restoration of the foreshore will improve the landscape character of the foreshore, and the provision of a publicly accessible stairway using appropriate materials with an appropriate design will not negatively impact on the visual amenity.

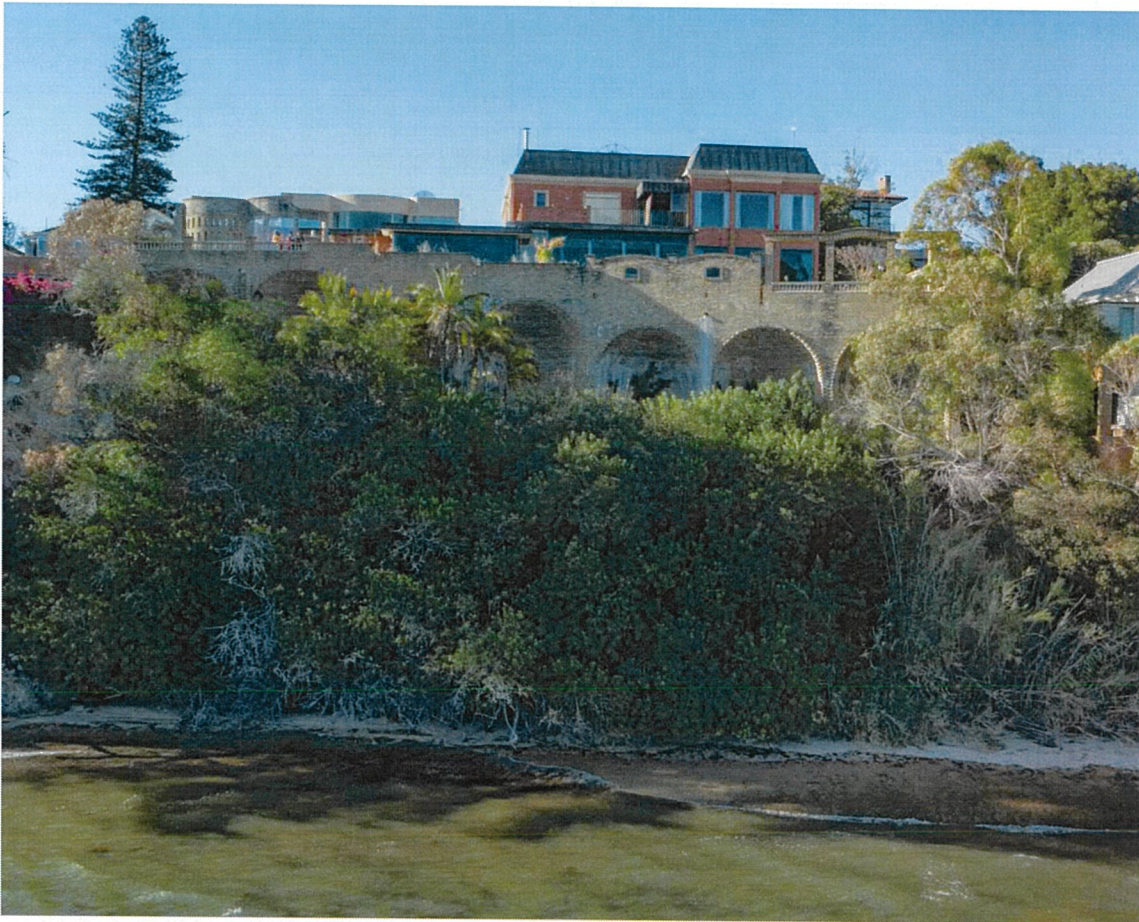


Figure 54: Current view of the foreshore and residence from the river

Amenity, public access and community benefit

- 7.17 Policy 45 and SPP2.10 require the proposed development to enhance the public's access to, and enjoyment of, the river. Applicants must demonstrate that adequate provisions have been made for public access to foreshore areas. Policy 43 states that applications for development are required to demonstrate benefit to the community. DBCA's Draft Locality Plan Dootanboro (Melville water) promotes a safe and accessible public open space network including public access between Point Resolution and Otto Point Reserve/Sunset foreshore.
- 7.18 The proposal provides increased public access to a section of the foreshore and provides access to the stairs and viewing platform with vistas across the river that previously were not attainable for members of the public.
- 7.19 The stairs will be publicly accessible from the foreshore and will provide a vantage point for the public to experience views out to and across the river, enhancing the public's access and enjoyment of the river. The proposed stairs and viewing areas are set back from the river and beach area and will not impede public access along the foreshore.
- 7.20 Access is however restricted around an adjacent rocky outcrop (refer Figure 6) under some conditions i.e. when tides are high. The applicant is supportive of improved public access in the area and is prepared to contribute towards the design of improved access along the foreshore to the site. Improved access would enable the public to have continued access along the foreshore and to the proposed structure at all tide conditions.



Figure 65: Current view of the foreshore and residence from the river

- 7.21 The applicant has committed to contributing towards improving public access to the stairway and viewing platform, which will provide vantage points for the public that were previously largely inaccessible.
- 7.22 Condition 10 is recommended to allow for delivery of a signage and access plan to identify opportunities for improved wayfinding including provision of signage and improved access points within and around the foreshore.
- 7.23 The locality plan also promotes improving wayfinding signage and investigating dual naming for key areas of the foreshore. The applicant has expressed a willingness to incorporate these measures.
- 7.24 Preparation of a signage and access plan is therefore recommended as a condition of approval to provide public awareness of the stairway and viewing platform and to clarify that access is available for all members of the public.

Heritage

- 7.25 Policy 42 states that places of cultural and heritage significance, both Aboriginal and non-Aboriginal, and of natural heritage are to be conserved.
- 7.26 The proposed works are located adjacent to an area identified on the Register of Aboriginal Sites (ID 3536 – Swan River). DBCA supports the recognition and protection of heritage areas, including the Swan Canning river system, which is of important spiritual and cultural significance to Whadjuk Noongar people.
- 7.27 Pursuant to the requirements of the *Aboriginal Heritage Act 1972*, these values should be identified and protected prior to the commencement of works and will form part of the advice to the applicant.

- 7.28 The applicant should engage with the Aboriginal community to ensure cultural heritage is considered in the signage and access plan for the infrastructure and where possible the use of dual naming should be considered. This should be addressed within the recommended signage and access plan.

8. SWAN RIVER TRUST

- 8.1 In accordance with section 75(3A) of the SCRM Act, the Swan River Trust considered DBCA's draft report at its meeting of 29 July 2025. The Trust resolved to advise the Director General of DBCA that it recommends the application be approved subject to the conditions outlined in DBCA's draft report.

9. CONCLUSION

- 9.1 The proposal seeks to demolish an existing dilapidated stairway and install an improved stairway with a viewing platform for public use while providing a direct opportunity for residents abutting the reserve to obtain practical access to the foreshore and river. The proposal also includes the removal of significant weeds in the public foreshore followed by planting of endemic species and implementation of foreshore stabilisation measures. The proposal provides an opportunity for broader public enjoyment of the river reserve by provision of a community lookout. The proposal is not likely to have any adverse impact on the foreshore but will improve amenity and biodiversity values in the area and provide a benefit to the community.
- 9.2 For these reasons, the proposal is recommended for approval, subject to conditions and advice.

10. RECOMMENDATION – APPROVAL WITH CONDITIONS

That the Director General of DBCA advises the Minister for the Environment that the proposal at Crown reserve 24959, Lot 8378 Jutland Parade, Dalkeith, as described in the application lodged on 3 March 2025, and amended plans and information received on 11 March 2025 and 19 March 2025 (**Attachment 1A**), be approved, subject to the following:

CONDITIONS

1. Approval to implement this decision is valid for three (3) years from the date of this approval. If on-site works have not substantially commenced within this period, a new approval will be required before commencing or completing the development.
2. The applicant shall notify the Department of Biodiversity, Conservation and Attractions in writing not less than seven (7) days prior to the commencement of works (**Advice Note 1**).
3. The final design plans/drawings and technical specifications, including details of the external colours, finishes and materials shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions on advice of the City of Nedlands prior to the commencement of works (**Advice Note 1**).
4. All works are to be undertaken in accordance with a Construction Environmental Management Plan which is to be submitted to and approved by the Department of Biodiversity, Conservation and Attractions on advice of City of Nedlands prior to commencement of works (**Advice Notes 2 and 3**).
5. All works are to be undertaken in accordance with a Foreshore Management Plan which is to be submitted to and approved by the Department of Biodiversity, Conservation and Attractions on advice of the City of Nedlands prior to the commencement of construction (**Advice Note 4**).
6. Prior to the commencement of works, all significant vegetation to be retained in and adjacent to the authorised work site shall be identified and protected by installation of Tree Protection Zones in accordance with Australian Standard AS 4970-2009 - *Protection of trees on development sites*.

7. Prior to the commencement of works, the applicant shall enter into an Asset Management Agreement, or similar Deed of Agreement, with the City of Nedlands to the satisfaction of the Department of Biodiversity, Conservation and Attractions indemnifying the City from any damage or injury arising from the approved infrastructure constructed in the public place during the period where any works are being carried out (either in the construction phase or at the time when maintenance works are being undertaken). The deed should also detail the applicant's obligations for the construction management and maintenance for the approved works. The agreement shall be prepared by the City's solicitors to the satisfaction of the City, and at the cost of the applicant (**Advice Note 5**).
8. The cost of all works within the foreshore associated with the development, including the removal and disposal of existing infrastructure, are to be borne by the Applicant.
9. The authorised works shall not prevent public access along the foreshore reserve unless temporary closure is necessary for safety purposes. In the event public access is limited by the works, a clearly signed, safe alternative route shall be provided.
10. Prior to commencement of works, a signage and access plan shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions on the advice of the City of Nedlands (**Advice Note 6**).
11. All stormwater discharge from the development shall be contained and disposed of on-site unless otherwise approved by the Department of Biodiversity, Conservation and Attractions on the advice of the City of Nedlands.
12. Prior to issue of a Building Permit, an external lighting plan shall be submitted to and approved by the City of Nedlands. External lighting shall comply with the requirements of Australian Standard 4282 – Control of Obtrusive Effects of Outdoor Lighting to the satisfaction of the City of Nedlands.
13. The development is to comply with Australian Standard AS2156.2 Walking Tracks – Infrastructure Design and Australian Standard AS1428 Design for Access and Mobility.

ADVICE NOTES

1. Notifications can be emailed to rivers.planning@dbca.wa.gov.au.
2. Regarding **Condition 4**, the Construction Environmental Management Plan (CEMP) should describe how the authorised works will be managed to minimise potential environmental impacts. Guidance for preparation of a CEMP is provided in [DBCA Guidance Note – Construction Environmental Management Plans](#) (the PDF will download automatically) and [Policies, plans and guidelines | Department of Biodiversity, Conservation and Attractions](#).
3. Regarding **Condition 4**, the CEMP should also include details regarding but not limited to:
 - Staged demolition and construction methodology
 - Staging of weed removal
 - Machinery and equipment management (including refuelling protocols)
 - Access to the site, including by machinery along the foreshore / public reserve
 - Public access, fencing, signage and safety
 - Installation of wayfinding signage
 - Minimisation of noise and vibration impacts on nearby residents and the general public
 - Maintenance, monitoring and reporting
4. Regarding **Condition 5**, the Foreshore Management Plan should include details regarding but not limited to:
 - The location and details of the planting densities and species composition proposed (noting that appropriate local native species should be planted in riparian zones at a ratio of 500:50:5 herbs/sedges:shrubs:trees for each 100m²)
 - A schedule of works

- Weed control, including target species and any chemicals to be used, and its management within a water sensitive environment
 - Stabilisation measures (eg matting type and extent of bioengineering solutions)
 - A reticulation plan, indicating type and location of sprinkler, bubbler, drippers and if bore or scheme water will be used
 - Completion criteria and in-fill planting
 - Ongoing monitoring and maintenance requirements, including timeframes
5. Regarding **Condition 7**, the City would expect the applicant to satisfy this obligation by ensuring their builders have appropriate construction and public liability insurance (which would be expected of any reputable builder); and to highlight that LGIS has indicated that it would expect the City to be named as a beneficiary of that policy with the insurance company in relation to those works. It is acknowledged that the City will be responsible for maintaining suitable public liability insurance outside the periods referenced in the above-mentioned condition. It is also acknowledged that public access to the staircase will be prevented during the construction period and at the times when maintenance works are being undertaken.
6. Regarding **Condition 10**, the Signage and Access Plan should include details regarding but not be limited to:
- Identification of an appropriate name for the infrastructure, which is to be arrived at by engagement with the Aboriginal community
 - Proposed wayfinding signage
 - Incorporation of cultural heritage into signage including dual naming where appropriate, and following consultation with the Aboriginal community
 - Consistency with the City of Nedlands policy for Community Signage
 - Identification of points of access to the foreshore and estimation of the extent and cost of works required to provide for improved access
7. Note that it is an offence under the Swan and Canning Rivers Management Regulations 2007 to destroy, pull up, cut back or injure any tree, shrub or perennial plant that is on land within the Swan Canning Development Control Area, except with the prior approval of the Department of Biodiversity, Conservation and Attractions.
8. In the case of damage or pollution events, contact the Department of Biodiversity, Conservation and Attractions on 9278 0981 (Riverpark Duty Officer) or the Department of Transport on 9480 9924 (Marine Pollution Response).
9. This is approval only and does not remove the responsibility of the applicant/owner to comply with all relevant statutory requirements of other relevant legislation (for example building, health and engineering requirements of the City). In that regard it is noted that a Demolition Permit and a certified Building Permit will be required for the development, prior to any approved works occurring.

FINAL REPORT ENDORSEDSigned: 

Date: 23/12/25

Stuart Smith

Director General, Chief Executive Officer



Department of Biodiversity,
Conservation and Attractions



SWAN CANNING
RIVERPARK

Form 1 – Application for Approval of Development

Swan and Canning Rivers Management Act 2006 – Part 5 – section 72(1)

1. Applicant details

The applicant is the person with whom the department, on behalf of the Chief Executive Officer, will correspond, unless an authorised agent has been appointed to act on behalf of the applicant, in which case correspondence will be sent direct to the agent.

Name	George Hajigabriel		
Position (if applicable)	Director		
Organisation (if applicable)	Rowe Group		
Contact person	George Hajigabriel		
Postal address	Level 3, 369 Newcastle Street		
Town/Suburb	Northbridge	State	WA Postcode 6003
Telephone	Work (08) 9221 1991	Mobile	0412 498 503
Email	george.hajigabriel@rowegroup.com.au		

I give authority for an agent (as identified at item No. 3) to act on my behalf during the assessment of the application ☐ YES ☒ NO

If 'YES', please provide Agent's details at item No. 3

Applicant signature

Date

2. Landowner details

All owner(s) of the land must sign this application. Where land is owned by the Crown or has a management order granted to a local government or other agency, this application must be signed by the relevant landowner or management body as required under section 72(5)(a) of the Act. If there are more than two landowners, please provide the additional information and signature(s) on a separate page.

Details of first landowner

Name	State of WA (refer to attached letter of consent)		
Position (if applicable)			
Organisation (if applicable)	Department of Planning Lands and Heritage		
Contact person	Conor Noone (A/Project Officer Land Management Metropolitan & Peel)		
Postal address			
Town/Suburb		State	Postcode

I consent to this application being made.

First landowner signature

refer to attached letter of consent

Date

Details of second landowner (if applicable)

Name			
Position (if applicable)			
Organisation (if applicable)			
Contact person			
Postal address			
Town/Suburb		State	Postcode

I consent to this application being made.

Second landowner signature

Date



3. Authorised agent details (if applicable)

The applicant must sign the form and tick the authorisation under item No. 1 to provide authority for an appointed authorised agent to act on their behalf.

Details of authorised agent

Name	N/A		
Position (if applicable)			
Company/agency (if applicable)			
ACN/ABN (if applicable)			
Postal address			
Town/Suburb		State	Postcode
Telephone	Work	Mobile	
Email			
Authorised Agent signature		Date	

4. Location of proposed development

Certificate of title information	Volume	LR3000	Folio	431
	Diagram/plan/deposit plan no.	35070		
Lot No.(s)	8378			
Location				
Reserve No.(s) (if applicable)	24959			
Street No.(s) and name	Jutland Parade			
Town/Suburb	Dalkeith			
Nearest road intersection	Adlema Place			

5. Details of proposed development

Please provide a written description of the proposed development (refer to the Development Application Guidelines for further details on what information to include in this section).

Estimated cost of development	Stairway - less than \$50,000 -- \$500,000
Current use of land	Stairway
Proposed development	Foreshore works, including stairway access (refer to attached letter and Design Report prepared by Josh Byrne and Associates).

Checklist

Information to include in your Part 5 development application

<input checked="" type="checkbox"/> Completed application form, including written consent of the landowner(s). (DBCA will organise landowner consent for the River reserve)
<input checked="" type="checkbox"/> Additional information including details of the proposed development (including the existing and proposed use of the site and proposed hours of operation) and addressing any relevant issues identified in the policies.
<input checked="" type="checkbox"/> Plans and specifications of the proposed development showing: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> current and proposed levels (contours at no greater than 1 metre intervals), including retaining structures and fill requirements <input checked="" type="checkbox"/> the location, metric dimensions, materials, finishes and type of all existing and proposed structures, including services <input checked="" type="checkbox"/> sections through the site <input checked="" type="checkbox"/> the nature and extent of any open space and landscaping proposed <input checked="" type="checkbox"/> proposed external lighting and signage <input checked="" type="checkbox"/> any watercourse flowing through the site <input checked="" type="checkbox"/> position of any large trees or on-site vegetation, clearly marking vegetation to be retained and removed <input checked="" type="checkbox"/> the existing and proposed means of access and movement for pedestrians and vehicles
<input checked="" type="checkbox"/> Plans, elevations and sections of any building or structure proposed to be erected or altered and/or any building or structure to be retained.
<input checked="" type="checkbox"/> Site plan of the lot showing the development location in relation to: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> adjacent roads <input checked="" type="checkbox"/> rivers, creeks, springs and wetlands <input checked="" type="checkbox"/> nearby conservation areas and/or Bush Forever sites <input checked="" type="checkbox"/> floodway and floodplain boundaries <input checked="" type="checkbox"/> land reserved for Parks and Recreation under the Metropolitan Region Scheme
<input checked="" type="checkbox"/> Information on the availability of drainage and sewer.

<input checked="" type="checkbox"/> NA	Information on any impacts to heritage sites or protected areas and subsequent approvals (if required).
<input checked="" type="checkbox"/> NA	Information regarding potential acid sulfate soils and/or contamination.
<input checked="" type="checkbox"/> NA	If the proposed development is likely to disturb potential and/or actual acid sulfate soils or a contaminated site, a preliminary investigation is required, and the results included with this application.
<input checked="" type="checkbox"/>	Details of the proposed construction methodologies.
<input checked="" type="checkbox"/>	Geotechnical information.
<input checked="" type="checkbox"/> NA	Operational details (where relevant) e.g. for a proposed café.
Larger developments should also include:	
<input checked="" type="checkbox"/>	photo montages showing the development in relation to the river and foreshore landscape
<input checked="" type="checkbox"/> NA	information on the impacts of parking, noise and traffic generated by the proposal
<input checked="" type="checkbox"/>	details of stormwater management incorporating water sensitive urban design principles
<input checked="" type="checkbox"/> NA	details of any dewatering proposed during construction including the expected volumes, water quality, method of disposal and sampling regimes in accordance with DBCA's Policy 50 – Planning for dewatering affecting the Swan and Canning Development Control Area
<input checked="" type="checkbox"/>	any specialist studies and/or management plans required to support the application such as traffic, heritage, environmental, engineering, landscaping or urban design studies.

If insufficient information is provided with the initial application, further information will be sought from the applicant. If the required information is not provided, the application will be returned. DBCA cannot process the application without the completed (and correct) application form.



Department of **Planning,
Lands and Heritage**

Our ref: Case: N/A; File: 03013-1957.
Enquiries: Conor Noone
Email: Conor.Noone@dplh.wa.gov.au
Phone: (08) 6552 4445

Rowe Group
Level 3 369 Newcastle Street
Northbridge WA 6003

Sent via email to: Ashleigh.Maple@rowegroup.com.au
Cc: George.Hajigabriel@rowegroup.com.au

Dear Ashleigh,

**REQUEST FOR LANDOWNER CONSENT TO LODGE DEVELOPMENT
APPLICATION IMPACTING STATE LAND – LOT 8378 ON DIAGRAM 35070
BEING RESERVE 24959 – CITY OF NEDLANDS**

I refer to your email dated the 29th of February 2024 where you requested landowner consent to lodge an application for development approval which impacts land owned by the State of Western Australia. The impacted land is Lot 8378 on Diagram 35070, being part of Crown Reserve 24959 (the Land), which is managed by the City of Nedlands (City) for the purpose of "Recreation". The land is detailed in Attachment 1.

Given the reserve is under the full care, control and management of the City this is a matter for the City to consider. We write to grant consent, as landowner, to the lodgement and progression of the enclosed Application for Development Approval for foreshore works.

This letter of consent has been provided to facilitate only the processing of this application. No endorsement, undertaking or assessment is made or intended, and this should not be taken as approval to carrying out the proposed development or to any modification of the tenure of the State land.

This Department will not incur any of the application fees or associated costs with the preparation of plans or development in association with the foreshore works. The applicant will be responsible for all costs associated with the proposal.

The applicant is advised that this Letter of Consent has been signed subject to the following conditions:

1. The applicant preparing a foreshore management plan and obtaining any approvals or permits, as required from the Department of Biodiversity, Conservation and Attractions for any proposed development over the Land in accordance with the *Swan and Canning Rivers Management Act 2006*.
2. The applicant adhering to any requirements, conditions and/or maintenance agreement imposed by the City of Nedlands.

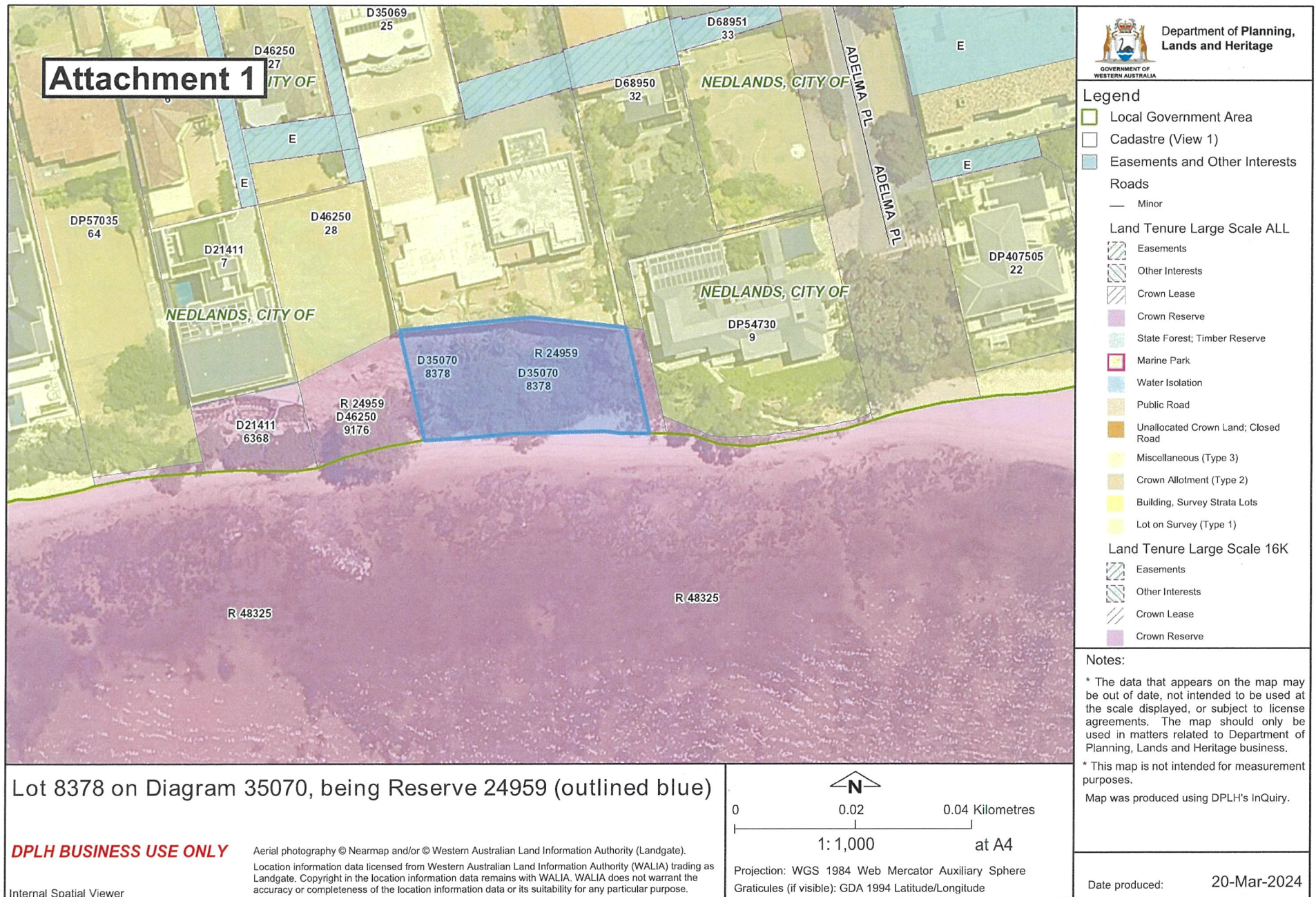
Please do not hesitate to contact Conor Noone, Acting Project Officer – Land Management Metropolitan & Peel at the Department of Planning, Lands and Heritage on (08) 6552 4445 or at Conor.Noone@dplh.wa.gov.au should you require further information.

Yours sincerely



Zoe James
A/Assistant Manager
Land Use Management – Metropolitan and Peel
Department of Planning, Lands and Heritage

21 March 2024



Job Ref: 9824
26 March 2024

Chief Executive Officer
City of Nedlands

PO Box 9
NEDLANDS WA 6909

Attention: Ms Aviva Micevski – Coordinator Statutory Planning

Dear Aviva,

**APPLICATION FOR DEVELOPMENT APPROVAL – LOT 8378 JUTLAND PARADE
DALKEITH – FORESHORE WORKS**

Rowe Group acts on behalf of Mr and Mrs Fry being the landowners of No.26 (Lot 24) Jutland Parade Dalkeith. We have been instructed by our Client to prepare an lodge an application for Development Approval for works in the foreshore reserve which is directly adjacent to their land. The works are proposed to be located on Lot 8378 Jutland Parade Dalkeith, being Reserve 24959 (the 'subject site'), on land owned by the State of Western Australia and located within the Development Control Area identified by the *Swan and Canning Rivers Management Act 2006 ('SCRM Act')*.

To enable this Application to be processed, the following documentation is enclosed:

- ▲ Completed and signed Metropolitan Region Scheme ('MRS') Form 1;
- ▲ Copy of the Landowner Consent provided by an authorised officer of the Department of Planning Lands and Heritage (DPLH);
- ▲ Copy of the current Certificate of Title; and
- ▲ Design Report prepared by Josh Byrne and Associates (includes Development Plans and several Appendices).

The subject site is contained within the 'Parks and Recreation' reservation of the Metropolitan Region Scheme (MRS). As such, the development application is to be determined by the Western Australian Planning Commission (WAPC), on advice from the City of Nedlands and the Department of Biodiversity, Conservation and Attractions. Under the provisions of Clause 29 of the MRS, the Local Authority is to forward a copy of the application to the WAPC within seven (7) days of receipt of the application. The Local Authority may then



Level 3
369 Newcastle Street
Northbridge 6003
Western Australia

p: 08 9221 1991
f: 08 9221 1919
info@rowegroup.com.au
rowegroup.com.au



provide recommendations to the WAPC in respect of the application within forty-two (42) days of receipt of the application. Please note that a development application fee is not required for this application given the subject land is reserved under the Metropolitan Region Scheme (MRS).

LOCATION AND SITE DESCRIPTION

The subject site is located within the City of Nedlands in the suburb of Dalkeith. The subject site has an area of 893m² and is located abutting the Swan River adjacent to No.26 (Lot 24) Jutland Parade Dalkeith. The site currently contains a brick staircase providing access to the Swan River however the staircase is currently unsafe and in a state of disrepair. The foreshore area is currently overgrown with Pepper Trees, weeds and grasses. The site comprises Reserve 24959, more fully described as Lot 8378 on Diagram 35070.

The City of Nedlands issued approval on the 30 January 2024 for a single house on No.26 (Lot 24) Jutland Parade, Dalkeith (DA23/88242). Although the works in the foreshore area which form part of this application did not form part of the application for No.26 (Lot 24) Jutland Parade, Dalkeith, the works and the intent to submit a separate formal application for them, was foreshadowed to the City during the course of assessment of the single house application.

Refer to **Attachment 1 – Certificate of Title**.

PROPOSED DEVELOPMENT

This Application seeks approval to undertake works within the foreshore area to provide access from No.26 (Lot 24) Jutland Parade, Dalkeith to the water level of the Swan River. The proposed development incorporates the following:

- ▲ A new replacement staircase providing direct access from No.26 (Lot 24) Jutland Parade, Dalkeith to the river foreshore, including:
 - Installation of a Bondek landing built to the northern boundary of the reserve to connect to a pedestrian access point from No.26 (Lot 24) Jutland Parade;
 - Installation of a 'Light Touch' aluminium walkway structure, including a Surefoot piling system, aluminium floor grate platforms, stairs to negotiate level changes and balustrading;
 - Installation of a Terraforce retaining wall part way down the slope to accommodate the level change of the stairs and structural integrity of the structure;
 - Installation of limestone rock revetment to the back of the shoreline, to protect against erosion in high tides and storm surge events;
- ▲ Site clearing and weed management, surface preparation and erosion control measures;
- ▲ Revegetation planting including planting of endemic species, monitoring and maintenance of the foreshore area by the owners of No.26 (Lot 24) Jutland Parade, Dalkeith.

Development Plans are contained within the Design Report prepared in support of the proposal, by Josh Byrne and Associates. Refer to **Attachment 2 – Foreshore Design Report**.

TOWN PLANNING CONSIDERATIONS

The subject site is reserved under the Metropolitan Region Scheme ('MRS') for the purposes of 'Parks and Recreation'. Refer to **Figure 1 - Metropolitan Region Scheme**.

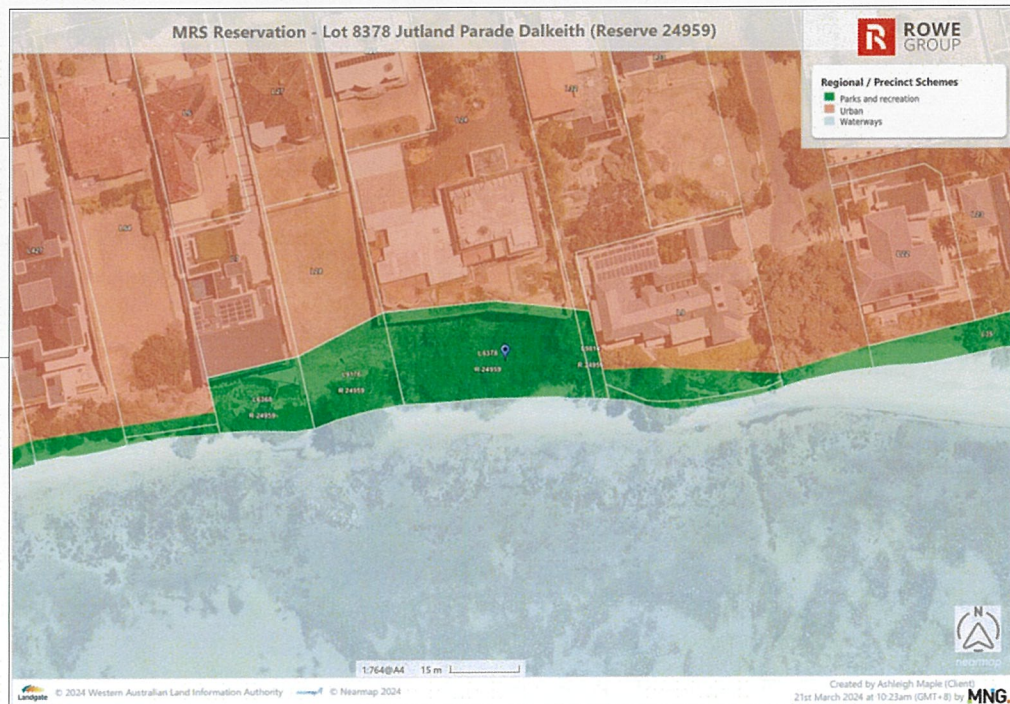


Figure 1 – Metropolitan Region Scheme

In accordance with Clause 28 and 29(1)(a)(i) and (ii) of the MRS, the Application is required to be referred to the Western Australian Planning Commission ('WAPC') for determination, following a recommendation being provided by the City of Nedlands.

The subject site is also located within the Swan River Trust Development Control Area identified by the *SCRM Act* and therefore referral to the Department of Biodiversity, Conservation and Attractions is required as part of the application process.

OTHER CONSIDERATIONS

In preparing the design for the foreshore access, consideration has been given to slope stabilisation, erosion control, revegetation, monitoring and maintenance of the site, structural integrity, coastal risk, tide and water

levels. The Foreshore Design Report prepared by Josh Byrne & Associates includes the following relevant technical reports prepared to inform the design process:

- ▲ Survey – prepared by MNG
- ▲ Geotechnical Report – prepared by Galt Geotechnics
- ▲ Revegetation Management Plan – prepared by Tranen Revegetation Systems
- ▲ Technical Note on Dynamics and Design Considerations – Prepared by Seashore Engineering

Refer **Attachment 2 - Foreshore Design Report**.

State Planning Policy 3.7 – Planning in Bushfire Prone Areas

The subject site is not identified as being bushfire prone by the Department of Fire and Emergency Services Map of Bushfire Prone Areas and as such, no further action is required in this regard.

Draft State Planning Policy 2.9 – Planning for Water

Draft State Planning Policy 2.9 – Planning for Water ('Draft SPP 2.9') seeks to ensure that planning and development considers water resource management and includes appropriate water management measures to achieve optimal water resource outcomes. The proposed development responds to section 7.1 and 7.7 of Draft SPP 2.9 which includes various general policy measures and specific policy measures for the Swan Canning River system, as follows:

- ▲ The proposed development includes the removal of existing weed species present on the reserve and the planting of endemic species to increase vegetation coverage and stabilise the slope;
- ▲ Provides sufficient separation between the structure and the 1:10 year flood level;
- ▲ Replaces a dilapidated, unsafe structure with an improved outcome for the site, maintaining and improving access to the River that would otherwise be inaccessible;
- ▲ The proposed development is compatible with its riverine environment and provides access to the foreshore for the adjacent land;
- ▲ The proposal enhances the natural landscape character through the design of the stairway and revegetation works which will remove an invasive weed and replace it with natural vegetation.

CONCLUSION

The Application seeks approval for a new access to the river foreshore to replace the existing stairway access. The proposed development is considered consistent with the State and Local planning framework for the following reasons:

- ▲ The proposed development improves the existing, dilapidated walkway and stairway access, removes existing weed species and unmanaged landscaping;
- ▲ The proposed development would improve activation and amenity of the immediate area and provide a useable space for the occupiers of No.26 (Lot 24) Jutland Parade, Dalkeith; and



- ▲ The proposed development provides an opportunity to improve the reserve through removal of non-native plant and invasive weed species, planting of endemic species to regenerate and enhance the ecological environment while improving stability for the metastable slope.

On the basis of the above and attached, we respectfully request the WAPC support the proposed development and that the Development Approval is granted.

Should you require any further information or clarification in relation to this matter, please contact George Hajigabriel on 9221 1991.

Yours faithfully,

George Hajigabriel

Rowe Group

Encl. Certificate of Title
Foreshore Design Report

Cc. Client
Josh Byrne and Associates

WESTERN



AUSTRALIA

TITLE NUMBER

Volume Folio

LR3000 431

RECORD OF QUALIFIED CERTIFICATE
OF
CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893
AND THE LAND ADMINISTRATION ACT 1997

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts

REGISTRAR OF TITLES



LAND DESCRIPTION:

LOT 8378 ON DIAGRAM 35070

STATUS ORDER AND PRIMARY INTEREST HOLDER:
(FIRST SCHEDULE)

STATUS ORDER/INTEREST: RESERVE UNDER MANAGEMENT ORDER

PRIMARY INTEREST HOLDER: CITY OF NEDLANDS

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. RESERVE 24959 FOR THE PURPOSE OF RECREATION
MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
Lot as described in the land description may be a lot or location.
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
(3) The interests etc. shown hereon may have a different priority than shown.

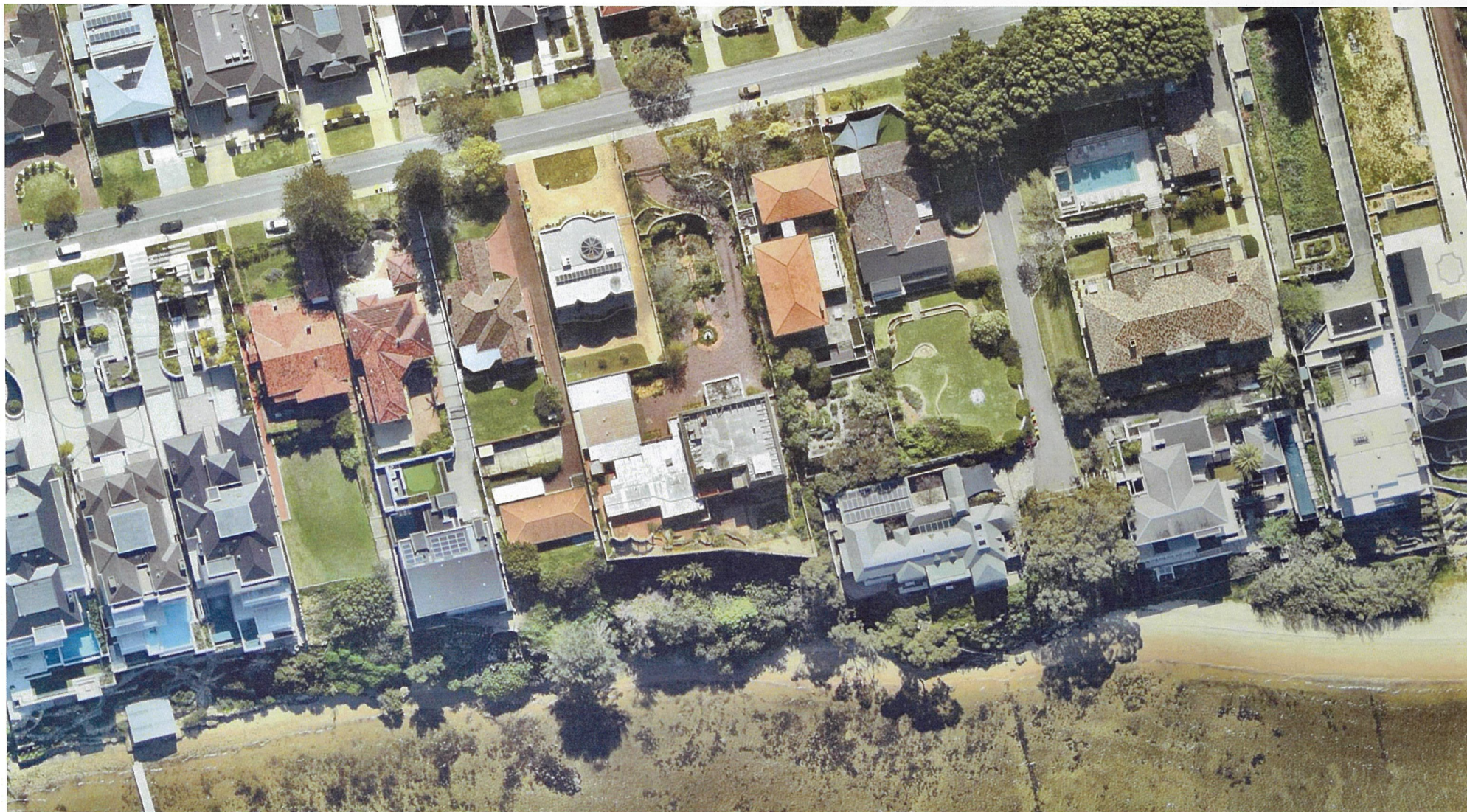
-----END OF CERTIFICATE OF CROWN LAND TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: D35070
PREVIOUS TITLE: LR3000-431
PROPERTY STREET ADDRESS: LOT 8378 JUTLAND PDE, DALKEITH.
LOCAL GOVERNMENT AUTHORITY: CITY OF NEDLANDS
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

NOTE 1: K630802 CORRESPONDENCE FILE 03013-1957-01RO



26 JUTLAND PARADE, DALKEITH
FORESHORE DESIGN

01 CONTENTS

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02 INTRODUCTION

The owners of 26 Jutland Parade Dalkeith have appointed Josh Byrne & Associates (JBA) to develop a design for the setback area designated in the Development Control Area (DCA).

This response will accompany the Development Application for the lot.

Document Status

Date of issue	Rev No.	Reason for Issue	Author	Reviewed By	Approved by
29/02/2024	A	Issue to Client	PV/NK/MC	PV/MC	PV
08/03/2024	B	Issue to Client	PV/NK/MC	NK	PV
08/03/2024	C	Issue to Client	PV/WN	PV	PV
20/12/2024	D	Issue to Client	PV/WN	PV	PV
27/02/2025	E	Issue for DBCA approval	PV/WN	PV	PV
19/03/2025	F	Issue to DBCA	PV/WN	PV	PV

This document may only be used for the purpose for which it was commissioned in accordance with the Terms of Engagement.

This document is intended to be printed at A3.

03 BACKGROUND RESEARCH

JBA has conducted site analysis and reviewed relevant reports and policy guidance documents.

Key documents reviewed include:-

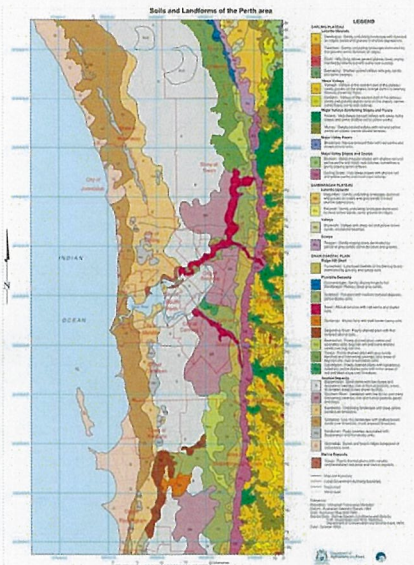
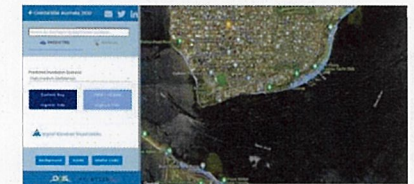
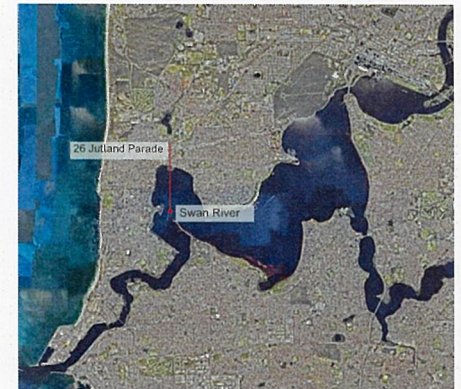
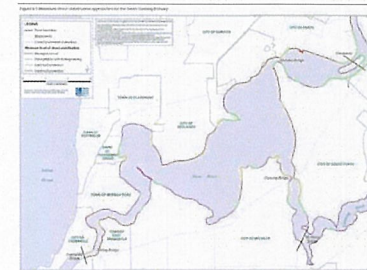
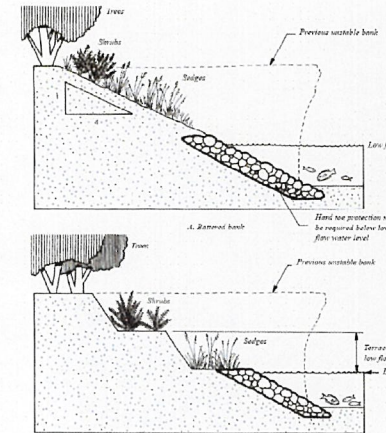
- Swan and Canning Rivers Foreshore Assessment and Management Strategy (Swan River Trust, March 2008)
- Swan Canning River Protection Strategy (Department of Parks and Wildlife, September 2015)
- Swan Canning River System Development Control Procedures (Swan River Trust, 2020)
- Swan River System Landscape Description (Swan River Trust, 1997)
- Corporate Policy Statement 48 - Planning for Development Setback Requirements (Department of Parks and Wildlife, June 2016)
- Point-Resolution-Management-Plan (City of Nedlands, March 2014)
- Potential Impacts of Climate Change on the Swan and Canning Rivers: Summary Paper (Swan River Trust)
- Best Management Practices for Foreshore Stabilisation - Approaches and Decision Support Framework (Swan River Trust, December 2009)
- Best Management Practices for Foreshore Stabilisation - Direct Shore Stabilisation Approaches (Swan River Trust, December 2009)

- Best Management Practices for Foreshore Stabilisation - Erosion Control Matting (Swan River Trust, December 2009)
- Swan River System Landscape Description Precinct 4 (Department of Parks and Wildlife)
- Soils and Landforms of the Perth Area (Department of Agriculture & Food)

Seashore has assessed the water levels on through analysis of Barrack Street tide gauge data set (1988-2021). Use of tidal planes is limited in the Swan River region. High water levels in the river occur almost exclusively within May-July and low water levels occurring from December-February. 1.65mCD (0.9m AHD) is typically reached about once per year.

Coastal Risk Australia indicate potential high tides increasing by another 0.84m by 2100. These factors need to be considered when designing the foreshore interface in this location.

The Foreshore Stabilisation, Approaches and Decision-Support Framework Report (Department Parks and Wildlife, December 2009) identifies a minimum direct hard treatment stabilisation approach for this foreshore area.



TIDAL PLANE	ABBREVIATION	LEVEL (MAHD)	LEVEL (MCD)
Est. 100-yr Recurrence Level	100yARI	1.2 mAHD	1.95 mCD
Est. 10-yr ARI	10yARI	1.1 mAHD	1.79 mCD
Est. 1-yr ARI	1yARI	0.9 mAHD	1.65 mCD
Highest Astronomical Tide	HAT	0.5 mAHD	1.29 mCD
Mean Higher High Water	MHHW	0.3 mAHD	1.03 mCD
Mean Sea Level	MSL	0.0 mAHD	0.75 mCD
Mean Lower Low Water	MLLW	-0.3 mAHD	0.46mCD
Lowest Astronomic Tide	LAT	-0.5 mAHD	0.30 mCD

Table: Barrack Street tide gauge data set (1988-2021)

04 SITE CONTEXT AND CHARACTER

The site is located between Otto Point reserve and Point Resolution Reserve on the Swan River foreshore at Dalkeith.

Geology series mapping contained in Fremantle Part Sheets 2033 I & 2033 IV, Perth Metropolitan Region, Environmental (Gozzard, 1983) indicates that the natural geology of the site comprises limestone. Visual observation also confirms indications of limestone outcropping in the setback area. The river interface of the adjacent lots also displays limestone outcroppings.

The site has very steep grades from the river edge at 0 AHD up to approximately 14.5 AHD. The northern edge of the setback is bordered by the client's house retaining wall, an impressive series of seven brick vaults approximately 8m high. The current path to the river is in a poor state. The brick path and stairs on the steep, sandy slope has been undermined and is unstable. Towards the river and to the western side of the existing brick stair are several limestone outcrops.



Img: Drone view looking north across the existing site

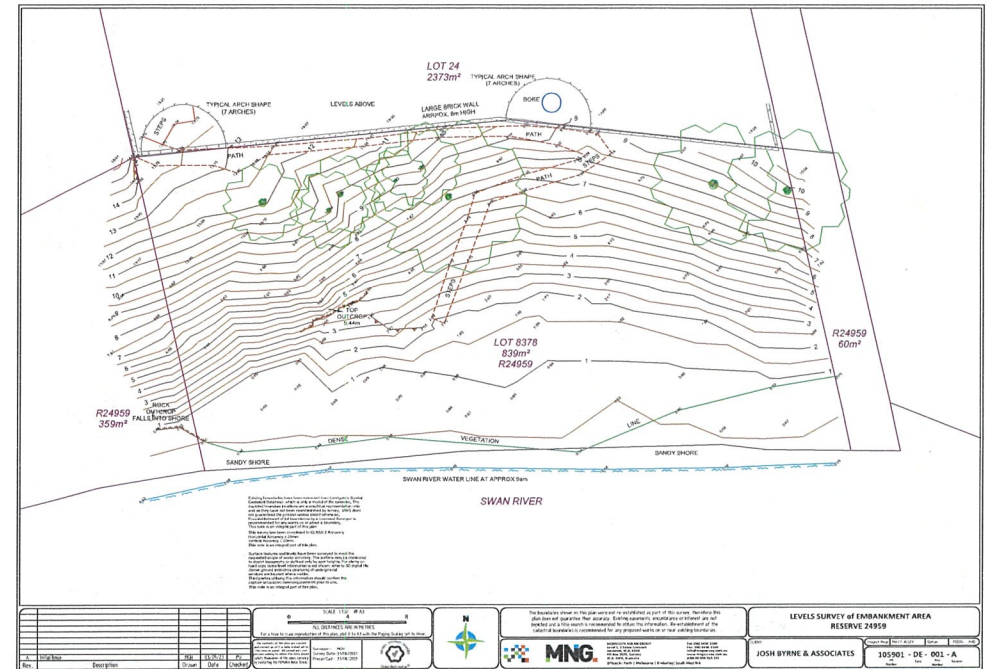


Fig Below: Pre Demolition Survey of setback. Provided by MNG.

05 SITE CONDITIONS



img: Nearmaps



Fig: Site from foreshore, overgrown with weeds



Fig: Limestone rock outcrop and invasive weeds



Fig: Bore and degraded walkway

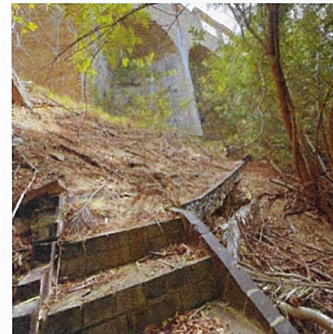


Fig: Brick stair and walkway undermined



Fig: Undermined walkway and yellow sandy fill



Fig: Staircase entrance to site, graffitied



Fig: Remnants of irrigation, weeds and grasses



Fig: Rubbish, weeds and limestone outcrop

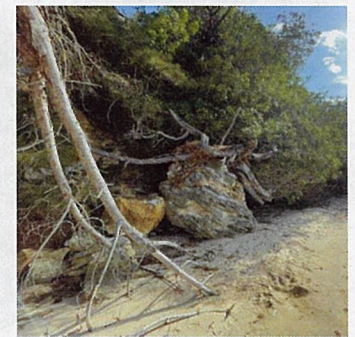


Fig: Limestone outcrop, site from foreshore

06 DESIGN RESPONSE

The design response to the site's challenging topography involves supporting and maintaining the integrity of the "metastable" slope and fulfilling the requirement to create a compliant pathway to the foreshore, whilst also removing non-native plant and invasive weed species and regenerating and enhancing the ecological health of the site.

The design approach focuses on the integration of landscape and structural elements with a "light touch". Incorporating recommendations from structural engineer Terpkos Engineering (Terpkos), coastal engineer Seashore Engineering (Seashore) and environmental consultant Tranen Revegetation Systems (Tranen), our proposal addresses both functional and aesthetic considerations to deliver a resilient, sympathetic and visually appealing foreshore inter-face.

Collaboration and Consultation:

Collaboration with Terpkos, Seashore, and Tranen will continue throughout detailed design and implementation to ensure structural integrity, strong ecological outcomes, and regulatory compliance.

Clearing and Revegetation:

The site contains a recognised environmental weed species, the Brazilian Pepper, along with a number of other non-native plant species. The aim is to remove all Brazilian Pepper by means of cutting down and treating with a chemical herbicide, and to strategically remove all other non-native species. The root systems of the Brazilian Peppers will remain insitu to stabilise the embankment until the revegetation of local species can establish.

The site will be reassessed after clearing in order to tailor the revegetation strategy to the resulting site conditions.

The revegetation strategy will reflect the original ecology of the site, and include the replanting of trees and plants from the Karrakatta vegetation complex, along with appropriate rushes and sedges to the foreshore interface. The re-introduction of local native species will enhance local biodiversity and provide habitat for local wildlife, promoting a positive ecological outcome and assisting with the long-term health and resilience of the surrounding foreshore and broader river system.

Foreshore Access Design:

The proposal is for a foreshore access walkway from a supported Bondek landing entry at the top of the slope through a series of level changes negotiated by stairs and linked by planes of metal floor grating. The base of the slope sits between 1.0 - 1.7 mAHd and rises to 13.6 mAHd. This design will mitigate large-level changes whilst providing a visually appealing amenity landscape. The slope will be protected from coastal erosion through revegetation with appropriate endemic plant species.

Existing exposed limestone will be utilised to stabilise and bench the interface between the shoreline and proposed house pad levels, creating a natural appearance in harmony with the surroundings.

Construction and Materiality:

The construction approach adheres to relevant standards and guidelines, prioritising low-impact methods and materials where feasible. Light-touch materials such as aluminium grates and structural members will minimise visual intrusion whilst ensuring durability and compliance with regulatory requirements.

A combination of structural support methods will be used including a surefoot piling system supporting a bon dek structural decking landing at the top entry, Terraforce retaining blockwork at the mid node, and where necessary, concrete footings as slab on piling.

The design will allow for the construction of the primary structure to be placed on site while environmental remediation and clearing works commence in parallel. The walkway flooring metal grating, will be easily installed into the primary structure.



img: Remiseparken / BOGL Landscape Architects



img: Jeffrey Longhenry

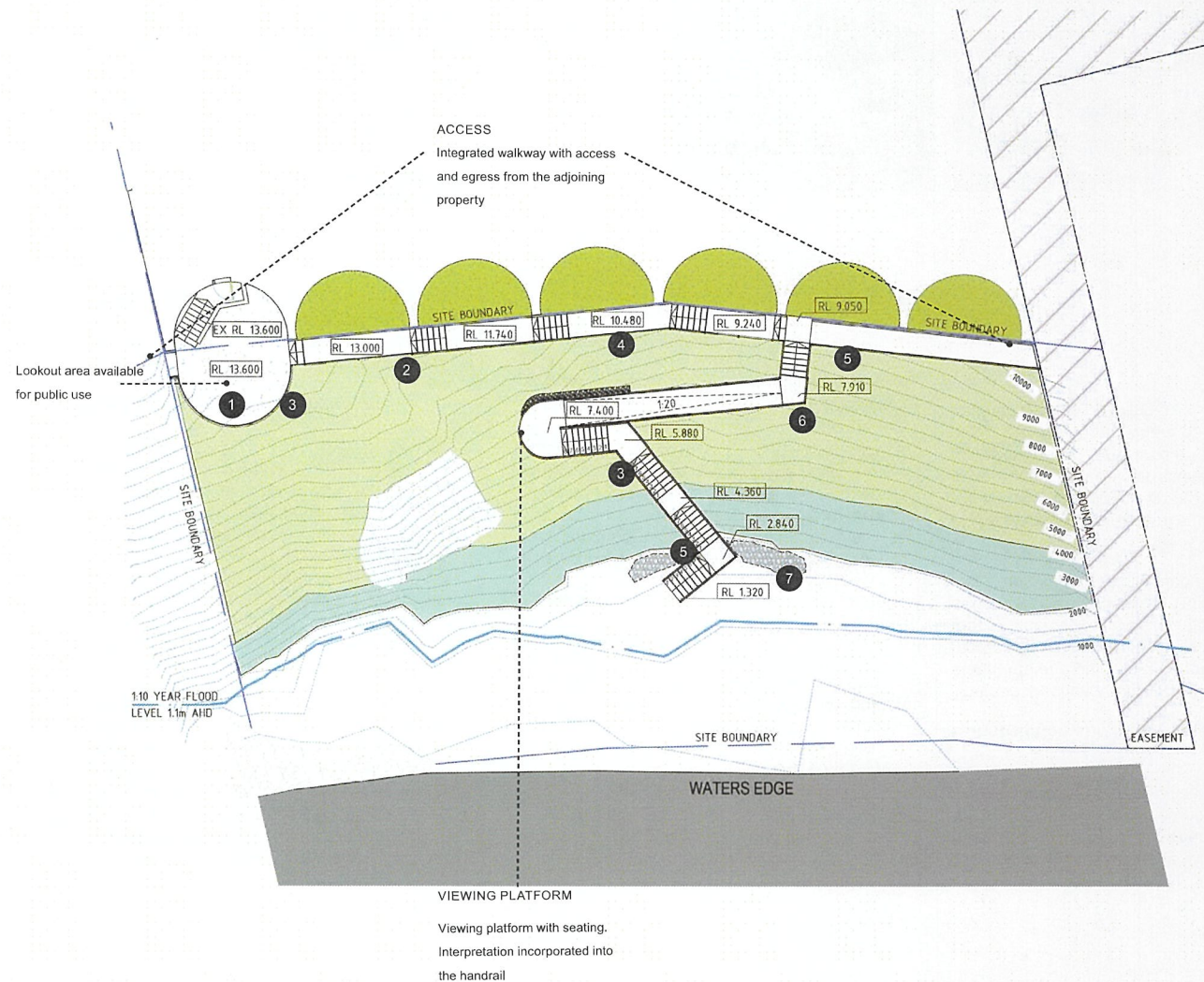


img: Terraforce

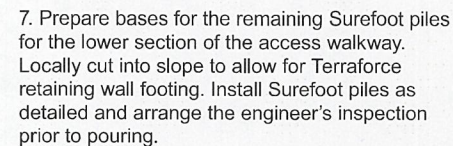


img: JBA

GENERAL ARRANGEMENT

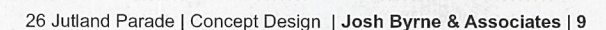






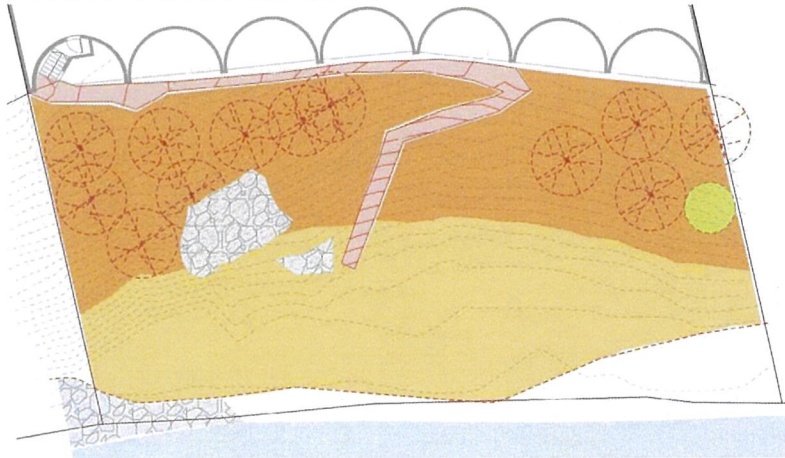
13. Revegetation consultant team to advise on future planting to maintain the stability of the upper surface of the slope.

Construction Methodology, provided by Terpkos. This should be read and followed in conjunction with environmental/revegetation specialist methodology and coastal engineer's documentation.








CLEARING, SLOPE STABILISATION & EROSION CONTROL STRATEGY

PHASE 1 SITE CLEARING & WEED MANAGEMENT PROPOSED TO TAKE PLACE APRIL 2024



LEGEND

-  Demolish existing brick path and stair
-  Retain native species
-  Cut & herbicide Brazilian Pepper
Strategic removal of non-natives
Retain roots for slope support
-  Steep slope
Harnessing requirements
Backpack spraying
Hand removal
-  Hand removal and riverine appropriate herbicides.
Dashed red line indicates surveyed extent of vegetation

The environmental consultant, Tranen has provided the clearing and revegetation methodology. This should be read and followed in conjunction with all consultant documentation.

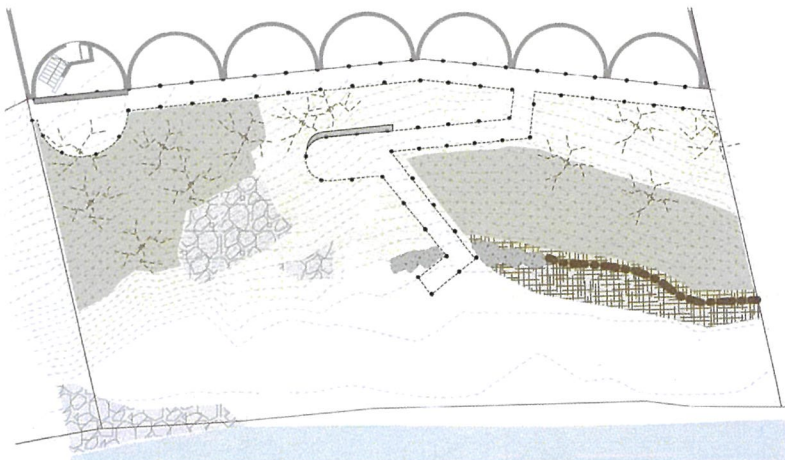
The base of the slope sits between 1.0 - 1.7 mAHd and rises to 13.6 mAHd. It is classed as "metastable" by Galt Engineering. Rope access and harnessing will be necessary during site clearing.

Strategic removal of non-native species to occur prior to planting. Root systems of some trees left in place. Erosion control measures will be implemented, assisting with soil stabilisation.









Weed control events are typically completed in winter, spring, and summer each year. The initial clearing will target main weed species in their growth period, including the systematic removal of the on-site Brazilian Pepper and other non-native vegetation. Some large Tuart trees were observed and will be retained.

Selective herbicides that are appropriate to the target species will be used. In close proximity to the river, only herbicides safe for use in these environments will be used.

PHASE 2 SURFACE PREPARATION & EROSION CONTROL



LEGEND

-  Roots retained for slope support
-  Retaining
-  Limestone at top landing
Terraforce at mid node
-  Structure in place (diagramatic)
Lower stairs to cantilever from pads
-  Tie into existing exposed limestone
- Where appropriate:**
-  Brush matting / mulch
-  Coir logs
-  Coir netting / geotextiles

The steep slope is identified as "metastable" by Galt Engineering, necessitating intervention to maintain its integrity. Non-native species will be strategically removed before revegetation planting, with some tree root systems left in place, reducing damage and erosion to the slope if removed, while providing structure for slope support.

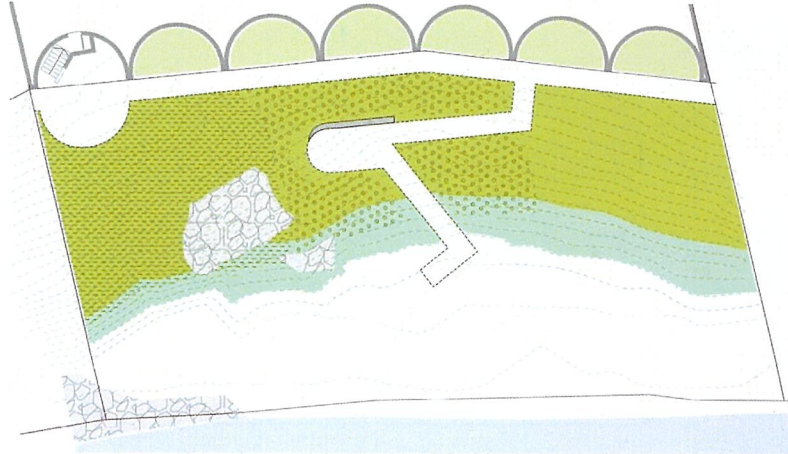
Erosion control measures such as coir netting, coir logs, and brush fencing will be considered after clearing. Revegetation and stabilisation planting using native species will occur during winter, with surface preparation to mitigate runoff and improve plant survival.

Stabilisation measures providing flexibility, such as brush matting and mulch may be required. The requirements for site surface preparation will be reviewed following vegetation removal and the re-assessment of site stability, with additional stabilisation options proposed if required.

Seashore Engineering will design the foreshore stabilisation, with particular consideration to the area surrounding the lower landing portion of access stairs. The design will include rock pitching with a geotextile layer for erosion reduction.

REVEGETATION, MONITORING & MAINTENANCE STRATEGY

PHASE 3 REVEGETATION & PLANTING



LEGEND

- Karakatta Complex Planting Priority Areas:**
- Fast growing, high density forestry and deep cell tubestock with fertiliser tablets
- Bare / exposed slope stabilisation
- Steep slope revegetation
- Riverbank Zone
- Designed Garden Zones

A nominal plant species list focusing on the Karakatta Complex – Central and South has been developed by JBA and Tranen, prioritising fast-growing species for soil stability and cover.

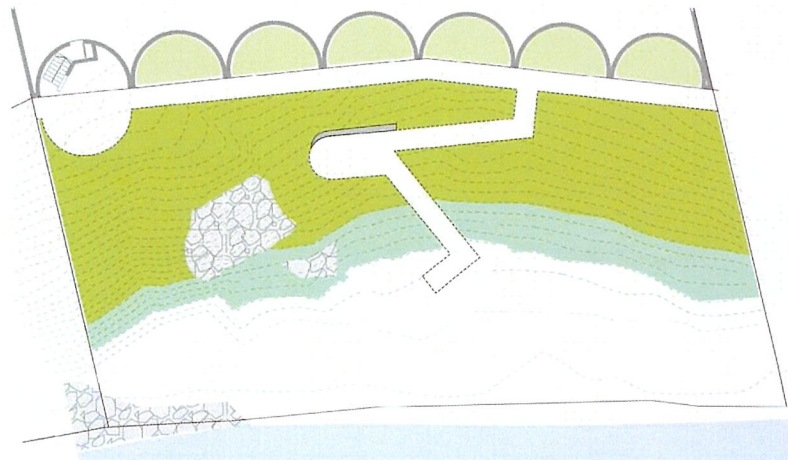
Tubestock, supplied in forestry tubes or deep cells, will be used for planting, ensuring hardy seedlings with developed root systems. Plant orders from native nurseries must be placed in advance, typically before September of the preceding year.

Due to steep slopes, planting may require abseiling with a kidney bucket and hand trowel, necessitating sturdy anchor points across the slope. Coordination with the contractor building the walkway can facilitate this process.

Planting on the slope is expected to occur during naturally wet months, with irrigation set up to enhance survival rates. Fertiliser tablets are recommended to compensate for nutrient deficiencies on slopes, as organic matter may be lacking, and tablets provide nutrients directly to seedlings while minimising weed interference. The Riverbank Zone will be planted prior to the winter storms and will include a selection of salt tolerant species.

The Designed Garden Zones will be addressed at a later stage.

PHASE 4 MONITORING & MAINTENANCE



LEGEND

- Karakatta Complex
- Riverbank Zone
- Designed Garden Zones

Two informal monitoring events per year are recommended during spring and autumn to assess growth. Results will determine if remedial actions like weed control and infill planting are needed.

Maintenance will continue for five years post-installation to establish a self-sustaining vegetation community.

Weed control and infill planting will follow the installation plan unless issues arise, such as poor species establishment or inadequate erosion control.

Completion criteria, including species richness and erosion control, will be developed after existing vegetation removal.

Ongoing weed control will be necessary throughout the maintenance period, with surface preparation and erosion control strategies devised after vegetation removal.

PLANTING PALETTE

SHRUBS AND STRAPPY PLANTS

Acacia cochlearis



Image: R Clark

Acacia cyclops



Image: honkeynuts.com.au

Acacia pulchella



Image: gardentags.com

Acacia rostellifera

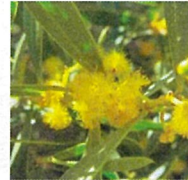


Image: R Clark

Allocasuarina humilis



Image: friendsofqueensparkbushland.org.au

Calothamnus quadrifidus



Image: katanninglandcare.org.au

Dianella revoluta



Image: gardeningwithangus.com.au

Grevillea crithmifolia



Image: Plantrite

Hakea prostrata



Image: friendsofqueensparkbushland.org.au

Hardenbergia comptoniana



Image: greatoceanroadnursery.com.au

Hemiandra pungens



Image: olcantaseeds.com.au

Melaleuca huegelii



Image: honkeynuts.com.au

Melaleuca seriata



Image: honkeynuts.com.au

Olearia axillaris



Image: cottesslocoastcare.org

Patersonia occidentalis



Image: australianseed.com

Scaevola crassifolia



Image: Geographe Plants/R. Clark

Scaevola nitida



Image: Geographe Plants/R. Clark

Templetonia retusa



Image: australianseed.com

TREES

Melaleuca cuticularis



Image: Apace

Corymbia calophylla



Image: instanttreenursery.com.au

Eucalyptus gomphocephala



Image: Lucid Central

RUSHES AND SEDGES

Juncus kraussii



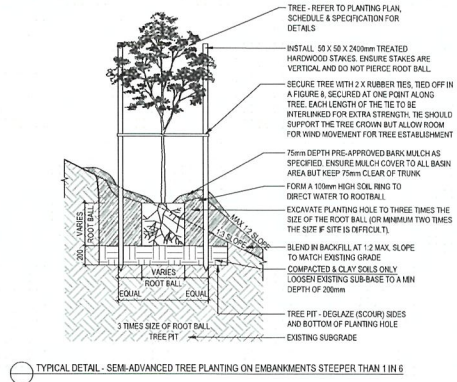
Image: Apace WA

Lepidosperma gladiatum

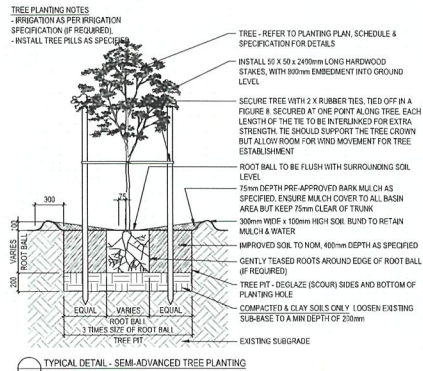


Image: rewildperth.com.au

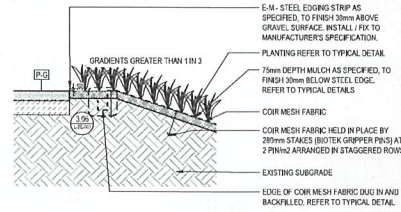
TYPICAL PLANTING DETAILS



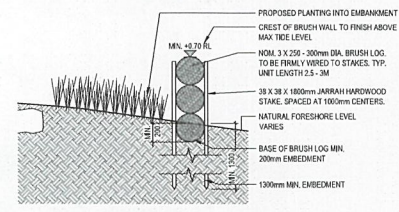
TYPICAL DETAIL - SEMI-ADVANCED TREE PLANTING ON EMBANKMENTS STEEPER THAN 1 IN 6



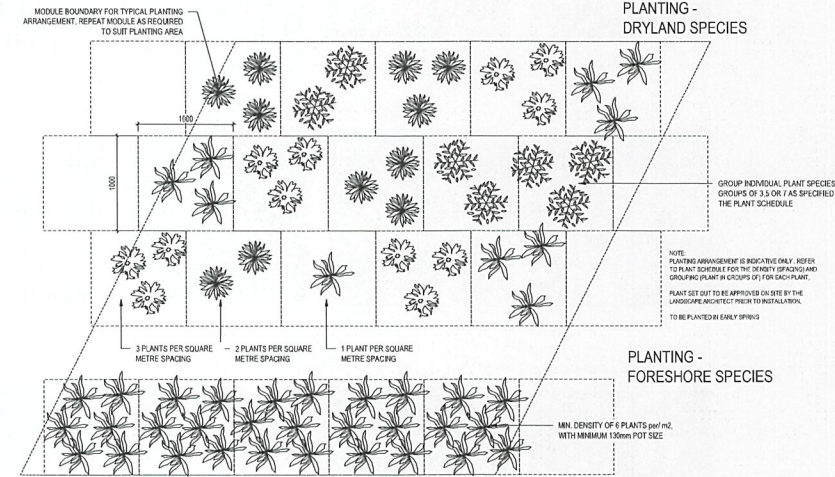
TYPICAL DETAIL - SEMI-ADVANCED TREE PLANTING



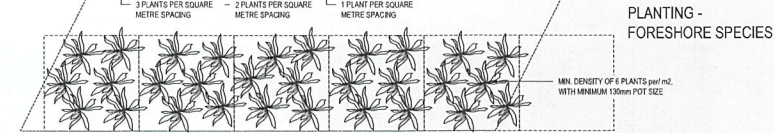
TYPICAL DETAIL - PLANTING ON SLOPE



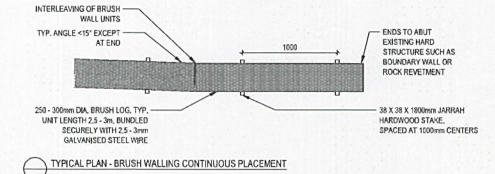
TYPICAL DETAIL - BRUSH WALLING



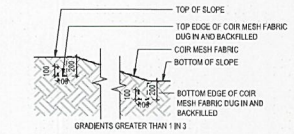
TYPICAL LAYOUT PLAN - PLANTING MIXES



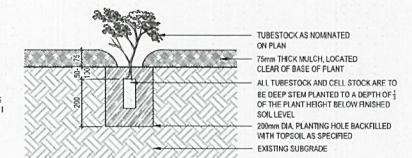
TYPICAL LAYOUT PLAN - PLANTING MIXES



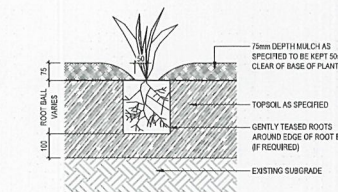
TYPICAL PLAN - BRUSH WALLING CONTINUOUS PLACEMENT



TYPICAL DETAIL - BIODEGRADABLE GEOTEXTILE FABRIC

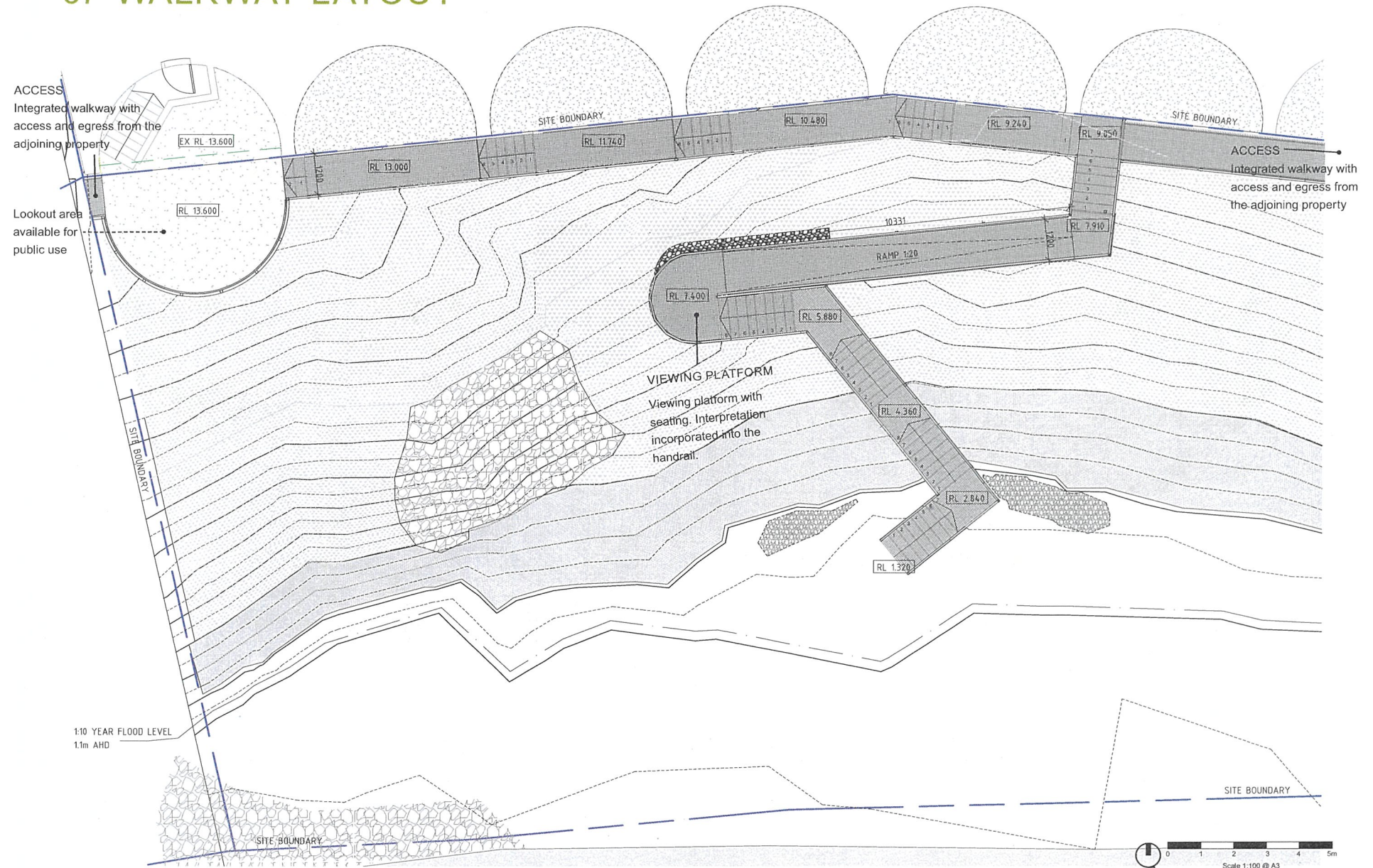


TYPICAL DETAIL - TUBESTOCK PLANTING METHOD

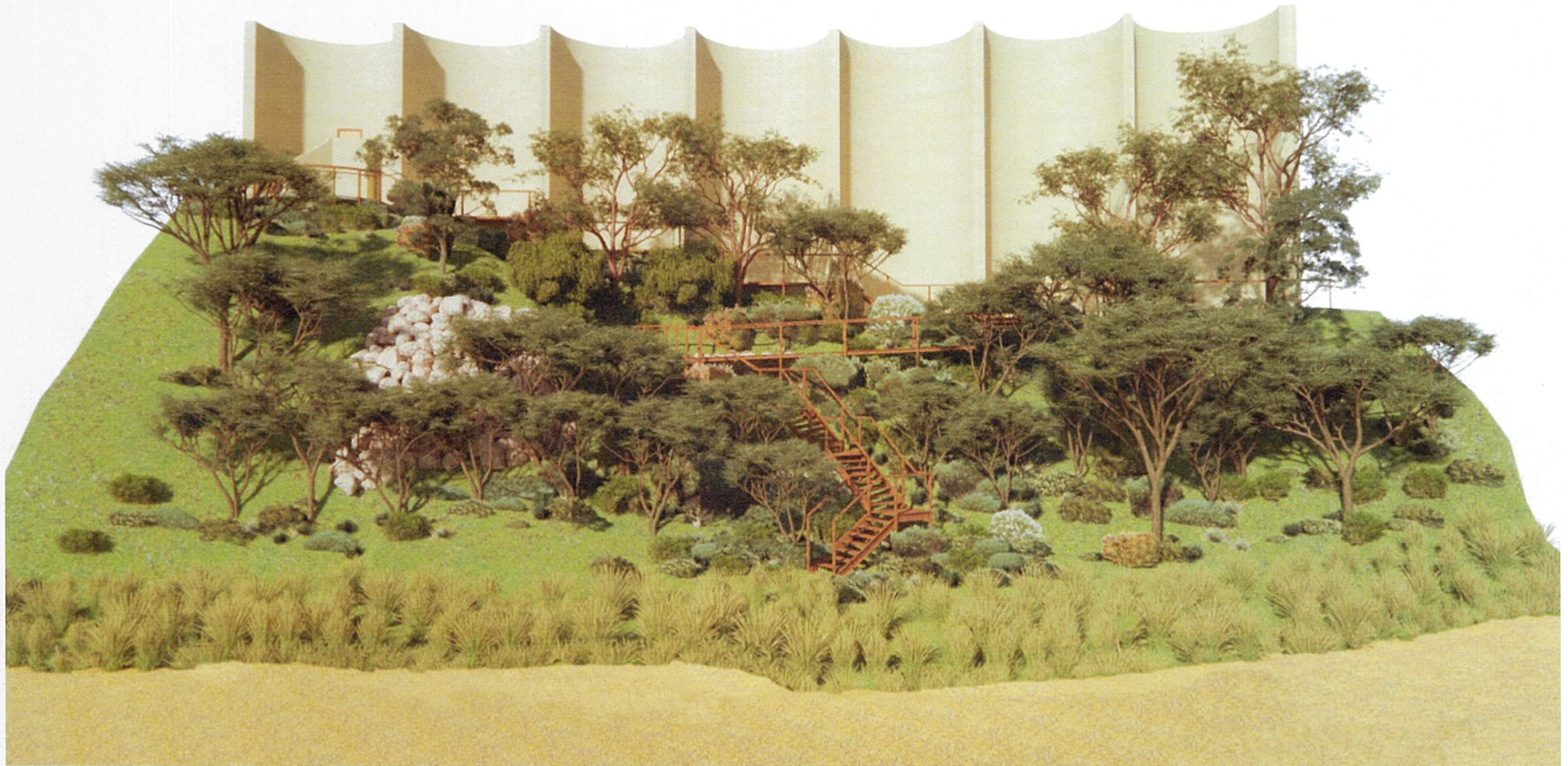


TYPICAL DETAIL - SHRUB PLANTING

07 WALKWAY LAYOUT



08 RENDERS

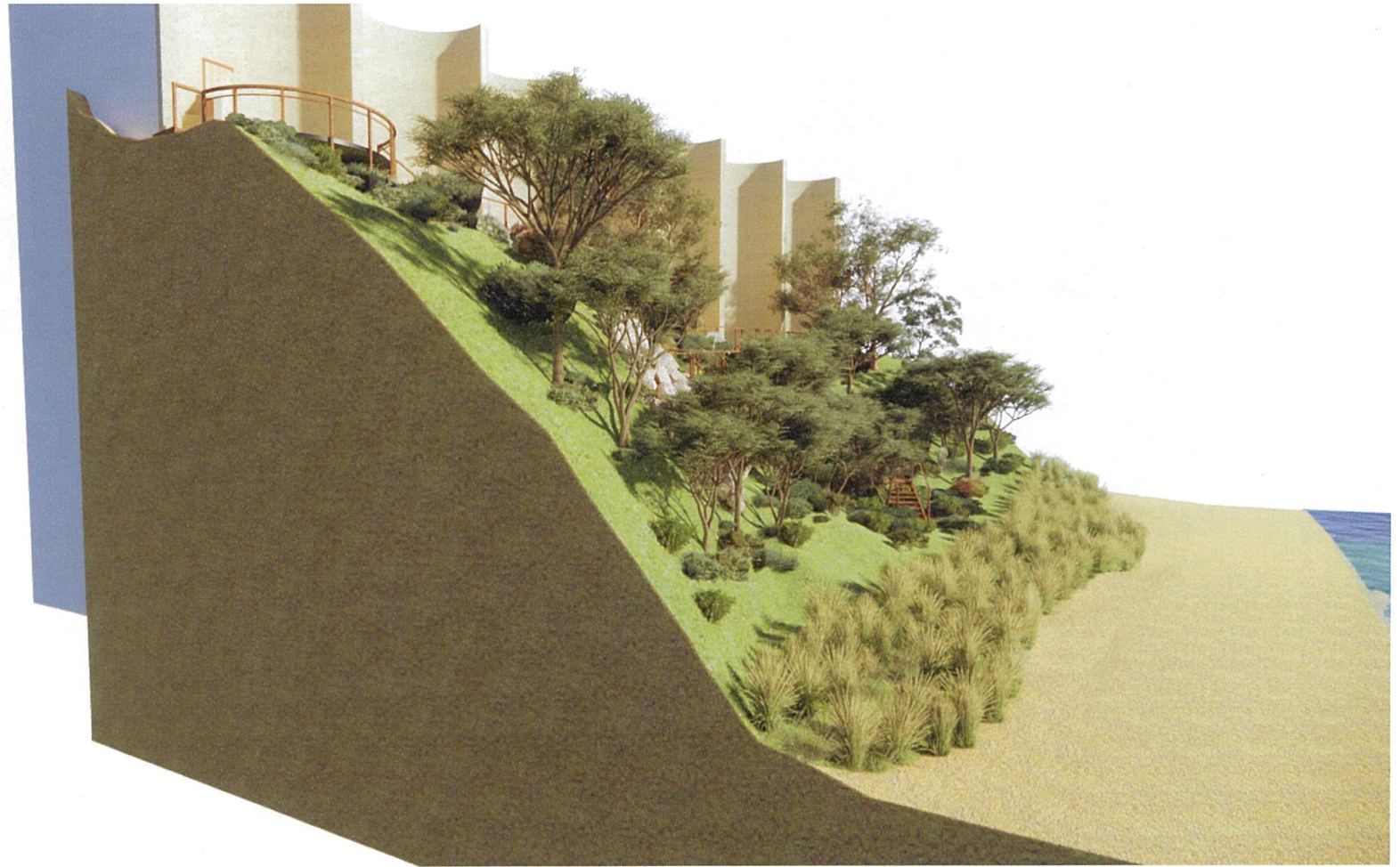


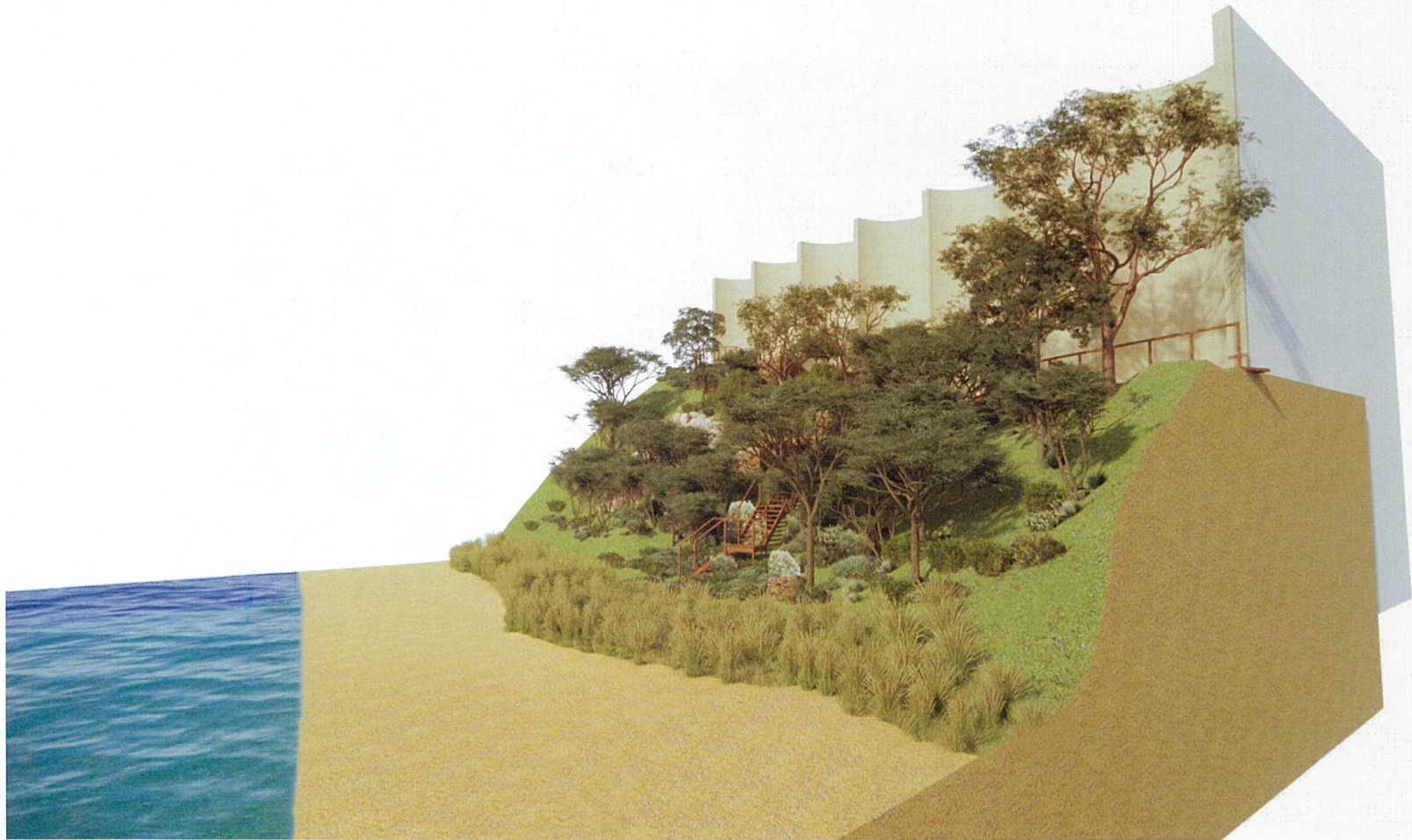














JOSH BYRNE & ASSOCIATES

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A Suite 109 Atwell Buildings 3 Cantonment Street Fremantle WA 6160



Enquiries: Chantel Weerasekera on 9273 3500
Our Reference: DA24-93872
DBCA Reference: 2024-0927

11 July 2025

Attn: Karen Sanders
Karen.sanders@dbca.wa.gov.au

Department of Biodiversity, Conservation and Attractions
Locked Bag 104
BENTLEY DELIVERY CENTRE WA 6983

Dear Ms Sanders

Property Address: Lot 8378, Reserve 24959, Jutland Parade, Dalkeith
Proposal: Foreshore Works including Stair Access and Revegetation

I refer to the Part 5 application referred to the City for comment on 18 March 2025 for foreshore works at the above address.

The site is located on land which is **wholly within** the Swan River Trust Development Control Area. Accordingly, the application was forwarded to the Trust **for determination** in accordance with Part 5 of the *Swan and Canning River Management Area Act 2006*.

The City has assessed the application and recommends approval subject to the following conditions and advice notes.

Conditions

1. Prior to issue of a Building Permit, the applicant shall enter into an Asset Management Agreement, or similar Deed of Agreement, with the City of Nedlands indemnifying the City from any damage or injury arising from the approved infrastructure constructed in the public place. The deed should also detail the applicant's obligations for management and maintenance for the approved works. The agreement shall be prepared by the City's solicitors to the satisfaction of the City, and at the cost of the applicant.
2. Prior to the issue of a demolition permit and building permit, a Demolition or Construction Management Plan (as appropriate) shall be submitted and approved to the satisfaction of the City. The approved Demolition and Construction Management Plans shall be observed at all times throughout the construction and demolition processes to the satisfaction of the City.

3. All works are to be undertaken in accordance with a Landscape Plan which is to be submitted to and approved by the Department of Biodiversity, Conservation and Attractions on advice of the City of Nedlands prior to the commencement of works.
4. Prior to commencement of use, landscaping is to be installed and maintained in accordance with approved landscape plan, or any modifications approved thereto, for the lifetime of the development thereafter, to the satisfaction of the Department of Biodiversity, Conservation and Attractions on the advice of the City of Nedlands.
5. Prior to issue of a Building Permit, all significant vegetation to be retained in and adjacent to the authorised work site shall be identified and protected by installation of Tree Protection Zones in accordance with Australian Standard AS 4970-2009 - Protection of trees on development sites.
6. Prior to issue of a Building Permit, a signage plan shall be submitted to and approved by the City of Nedlands. Signage should be in place for the duration of the works, in a location easily visible to the public.
7. Prior to issue of a Building Permit, an external lighting plan shall be submitted to and approved by the City of Nedlands. External lighting shall comply with the requirements of Australian Standard 4282 – Control of Obtrusive Effects of Outdoor Lighting to the satisfaction of the City of Nedlands.
8. The development is to comply with Australian Standard AS2156.2 Walking Tracks – Infrastructure Design and Australian Standard AS1428 Design for Access and Mobility.
9. All stormwater discharge from the development shall be contained and disposed of on-site unless otherwise approved by the City of Nedlands.

Advice Notes

- a. This is a Planning Approval only and does not remove the responsibility of the applicant/owner to comply with all relevant building, health and engineering requirements of the City, any obligations under the Strata Titles Act, or the requirements of any other external agency.
- b. A Demolition Permit and a certified Building Permit will be required for the development, prior to any approved works occurring.
- c. The Construction Management Plan and Demolition Management Plans are to be prepared in the manner and form provided by the City of Nedlands.

Should you have any queries regarding the above, please do not hesitate to contact Chantel Weerasekera via cweerasekera@nedlands.wa.gov.au or on 9273 3500.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Serigo Famiano', enclosed within a thin black rectangular border.

Serigo Famiano
Manager Urban Planning and Development

Greg Comiskey

From: Zoe James <Zoe.James@dplh.wa.gov.au>
Sent: Thursday, 15 May 2025 10:37 AM
To: Karen Sanders
Cc: Jennifer But
Subject: RE: LOT 8378 ON DIAGRAM 35070 - FORESHORE LAND WITHIN THE CITY OF NEDLANDS

OFFICIAL

[External Email] This email was sent from outside the department – be cautious, particularly with links and attachments.

OFFICIAL

[File 03013-1957]

Hi Karen

Thank you for your email. I confirm the previous conditions remain valid and the Department has no additional comments.

1. The applicant preparing a foreshore management plan and obtaining any approvals or permits, as required from the Department of Biodiversity, Conservation and Attractions for any proposed development over the Land in accordance with the *Swan and Canning Rivers Management Act 2006*.
2. The applicant adhering to any requirements, conditions and/or maintenance agreement imposed by the City of Nedlands.

Kind regards
Zoe

Zoe James

Assistant Manager | Land Management Metropolitan & Peel

Department of Planning, Lands and Heritage

140 William Street, Perth WA 6000

W: wa.gov.au/dplh | P: 6552 4569



The Department of Planning, Lands and Heritage acknowledges Aboriginal people as the traditional custodians of Western Australia. We pay our respects to the Ancestors and Elders, both past and present, and the ongoing connection between people, land, waters and community. We acknowledge those who continue to share knowledge, their traditions and culture to support our journey for reconciliation. In particular, we recognise land and cultural heritage as places that hold great significance for Aboriginal people. Learn more about our [Reconciliation Action Plan](#).