BLACK ROCK FORESHORE MASTERPLAN

Thompson Berrill Landscape Design P/L
17 May 2016
INTRODUCTION

The Black Rock Foreshore Masterplan guides design, priorities and staging of on ground works on the foreshore between Arkaringa Crescent and Fourth Street including public open space associated with Black Rock House. The plan implements the recommendations of Council endorsed strategic plans including the Bayside Open Space Strategy (2012) and the Bayside Coastal Management Plan (BCMP) (2014).

The Bayside Open Space Strategy (2012) classifies the Black Rock Foreshore as municipal open space highlighting its importance for both local Bayside residents and regional visitors from outside the municipality. Consistent with the recommendations of the strategy, the provision of facilities at Black Rock Foreshore will aim to cater for visits in excess of two hours in duration by providing adequate shade, car parking, public toilets, picnic facilities and drinking fountains serviced by a network of accessible sealed and unsealed walking and cycling paths.

The Bayside Coastal Management Plan (2014), adopted by Council in 2014, included extensive consultation with the Bayside community and various clubs/affiliations that has informed the development of this draft masterplan. The BCMP in partnership with Department of Environment, Land, Water and Planning (DELWP) provides the strategic direction for actions and works proposed within the draft masterplan. The key objectives for the masterplan include:

- Ensure protection of the foreshore environment particularly areas of remnant coastal vegetation and habitats for native wildlife.
- Identify and protect areas of cultural heritage significance.
- Identify and improve access and safety on the designated Coast Walking Path, maintain existing character while sustainably managing for increasing future use.
- Identify opportunities to rationalise and revegetate informal tracks to reduce impacts on environmental and cultural heritage values.
- Liaise with DELWP to identify and improve the effectiveness of the sea wall along the foreshore promenade.
- Incorporate appropriate historical interpretation of Old Melbourne Gaol inscriptions in consultation with Heritage Victoria as part of the Bayside Coastal Arts Trail.
- Review and prioritise replacement of existing toilet facilities in accordance with Council policy.
- Redeveloping the Black Rock Life Saving Club building to improve its function, amenity, appearance and consider integration of public change room and toilet facilities.
- Improve vehicle and pedestrian access and safety to and around the Black Rock Life Saving Club precinct.
- Improve all ability access to the beach, paths, toilets, parking, picnic area, lookout points and club based facilities.
- Support improved public access and multiose of club based facilities.

The masterplan is being prepared to guide future on ground works priorities and staging on Council managed land over the next ten years.
**LAND MANAGEMENT**

The Black Rock Foreshore Precinct is Crown Land with Bayside City Council having committee of management responsibility in accordance with the requirements of the Crown Land Reserves Act (1978), Coastal Management Act (1995) and Bayside Coastal Management Plan (2014). The Masterplan is being prepared to guide future on ground works priorities and staging on Council managed land. As part of this study area, Black Rock House has been included.

**EXISTING BUILDINGS AND LEASE AREAS**

The Victorian Coastal Strategy (2014) Building Policy promotes coastal dependant uses, sustainability, equity and community need in relation to the development and management of buildings on the coast. There are two leased buildings within the study area.

The Black Rock Life Saving Club was built in the early 1920s and requires a major upgrade to meet the safe and efficient operation of the Club.

The Black Rock House Friends Group (formed in 1979) assists Bayside City Council to manage Black Rock House located on 34 Ebden Avenue, inland from the foreshore.

Management and any future redevelopment of the existing building and lease area on the foreshore precinct is guided by the requirements of the Victorian Coastal Strategy (2014), Council Policy and the recommendations of the Bayside Coastal Management Plan (2014). These include:

- Encourage consideration of joint partnerships and increased public access in any redevelopment proposals for aging infrastructure.
- Ensure no net increase in building footprint and seek rationalisation of existing buildings where possible in any redevelopment works.

**BLACK ROCK LIFE SAVING CLUB**

Black Rock Life Saving Club was formed in early 1928 to provide life saving services on Black Rock beach from Quiet Corner to Arkaringa Point. The Black Rock Life Saving Club facilitates patrol, training and social events for its club members and the public. The main purpose of the life saving club is to keep the beaches safe.

The building is situated in the most suitable location in this section of foreshore to ensure panoramic views from the north to the south end of the beach.

The building has been renovated and expanded since initial construction in 1932. The current structure and facilities are in need of major upgrade/replacement. This includes improving all ability access and providing adequate space and facilities for the safe and efficient running of the club patrol activities and operations.

The State government, through Life Saving Victoria, is responsible for life saving clubs and associated facilities.

**BLACK ROCK HOUSE**

Black Rock House was built in 1856 by Charles Ebden, former Governor of Victoria. The house was originally built as a holiday house and was also used as a vice-regal retreat (from 1858-1861), with the original 122 acres extending to directly adjoin the foreshore. Today, the house no longer has beach frontage, retaining only a narrow access way between the garden and Beach Road.

Black Rock House is currently managed by Bayside City Council with assistance from the Friends Group and is used for community events. A volunteer program assists with group guided tours and maintaining and preserving the historical property.

**BLACK ROCK SEA WALL**

The existing sea wall is managed directly by the Department of Environment, Land, Water and Planning (DELWP).
LAND MANAGEMENT

The foreshore between Arkaringa Crescent and Fourth Street is Crown land and is zoned Public Park and Recreation Zone (PPRZ) in the Bayside Planning Scheme.

HERITAGE OVERLAYS (HO)
- Black Rock House is Council owned land. The site is also listed on the Victorian Heritage Register Ref No. H216.
- HO703: Sandringham Beach Park – Beach Road, Sandringham.

Sandringham Beach Park (including the northern section of Black Rock foreshore) is of Regional significance as a predominantly intact belt of native coastal vegetation, and associated gardens. The site contributes significantly to the surrounding landscape, and to the heritage and amenity value of the region.

Remnant belts of native vegetation exists along the length of Sandringham Park, listed on the Register of the National Estate. These belts are dominated mainly by Coast Banksia (*Banksia integrifolia*) and Coast Tea Tree (*Leptospermum laevigatum*).

Requirements include: no reduction of native vegetation to accommodate further car parking; no removal of existing vegetation or garden specimens or replacement with inappropriate species.

DESIGN DEVELOPMENT OVERLAYS (DDO)
The Design Development Overlay (DDO1) relating to building height controls on the coast applies to the whole of the foreshore reserve. Buildings must not exceed two storeys and must comply with requirements as outlined in the Victorian Coastal Strategy (2014) and the Bayside Coastal Management Plan (2014).

These include:
- Investigate opportunities for multi-use of existing buildings and in any redevelopment proposals.
- No net increase in building footprint and seek rationalisation of existing buildings where possible in any redevelopment works.
- Prioritise coastal dependent uses.

EROSION MANAGEMENT OVERLAY (EMO)
Erosion Management Overlay (EMO) covers areas prone to erosion, landslip and other land disturbance processes. The EMO applies to the entire Black Rock Foreshore Precinct.

VEGETATION PROTECTION OVERLAY (VPO)
Native vegetation at Black Rock Foreshore is included in the Vegetation Protection Overlay (VPO1) in the Bayside Planning Scheme. The VPO applies to the entire Black Rock Foreshore Precinct.
VEHICLE ACCESS

B16 CAR PARK – EXISTING CONDITIONS
The recently upgraded sealed B16 car park services both the playground and beach users with overflow parking out onto Beach Road. There are currently 33 spaces and one disabled space and integrated Water Sensitive Urban Design system. This car park adequately caters to the existing use and there are no plans for upgrade.

BEACH ROAD AT BLACK ROCK LIFE SAVING CLUB
Emergency and maintenance vehicle access is currently provided via the Black Rock Life Saving Club ramp from Beach Road. Parking on Beach Road is time limited (No stopping between 6-10am everyday) and the nearest alternative car park is Black Rock shopping centre or B16 car park at Half Moon Bay.

Currently, there is no provision of disabled parking near the Black Rock Life Saving Club. The need for this may increase if the proposed upgrade to the beach access ramp occurs and also for emergency/maintenance vehicle access for Beach Road.
PEDESTRIAN AND CYCLE ACCESS

BAY TRAIL - SHARED PATH
The 2.5m wide Bay Trail provides continuous off road access for both pedestrians and cyclists travelling along Beach Road.

COAST WALKING PATH
The unsealed Coast Walking Path runs parallel with Beach Road, winding its way through the coastal bushland offering elevated views out to the Bay. It varies in width and is increasingly popular with walkers and joggers of all ages and abilities. Cyclists are discouraged from using the trail to avoid congestion and to minimise impacts on sensitive coastal vegetation and habitat values.

BEACH ACCESS RAMPS AND STAIRS
There are six beach access ramps and four sets of beach access stairs, none of which are compliant with the current universal access standard as defined in AS1428.

The concrete ramp at Black Rock Life Saving Club is 3.0m wide and provides pedestrian and maintenance/emergency vehicle access to the beach. Three ramps connect to the sea wall path with approximately 1 in 6 grades with no handrails. Modification of these ramps to achieve a 1 in 14 grade with landings every 9.0m will necessitate lengthening them by more than 80m. This is not practical given the highly erosive nature of the site and requirements of the Vegetation Protection Overlay.

SEA WALL (FORESHORE PROMENADE) AND HISTORICAL HEADSTONES
The bluestone sea wall extends from the Black Rock Gardens ramp and ends at the junction of Central Avenue and Beach Road. The sea wall was developed to protect Beach Road and the concrete path provides access around Quiet Corner.

Sections of the sea wall have been built using original bluestone from the Old Melbourne Gaol. The inscriptions on stones are visible in the vicinity of B16 ramp. The sea wall has been subject to major repairs in 2009 and requires design review in the context of climate change to protect sections of foreshore currently subject to erosion. This is currently being considered by DELWP.
RECREATIONAL FACILITIES

PUBLIC TOILETS
There are two existing public toilets on site, located between the Black Rock Life Saving Club and playground. Upgrade/replacement is identified as one of the top priorities for these toilets in the Bayside Public Toilet Strategy (2012) and Bayside Coastal Management Plan (2014) due to lack of lighting and narrow entry restricting disabled access to the toilets.
Currently the public toilets are used by both playground visitors and beach users while located away from both activity areas.
The Bayside Public Toilet Strategy (2012) proposes removal of the two toilet blocks to be replaced with one building containing one or more unisex toilets to accommodate all ability access.
The recommendation in this plan is to move the new public toilet facility closer to the playground area providing sealed all ability access from B16 Carpark, and clear visual links for visitors on the Bay Trail.
To overcome the gap in provision of public toilets on the foreshore between Ricketts Point and Black Rock, the Bayside Public Toilet Strategy (2012) suggested installing a new public toilet facility on the foreshore opposite 330-331 Beach Road, Black Rock. The opportunity to establish a toilet facility in this location was reviewed and is not supported by DELWP or community consultation.

The aim for BRLSC is to provide a safe, friendly and welcoming environment where all members can interact and enjoy the benefits of healthy outdoor activities to learn about water safety, first aid, and resuscitation, develop an awareness of the beach and the aquatic environment, in a manner that is educational and embraces tolerance and inclusion.
The building is situated in an ideal location along the foreshore as it has panoramic views from the north to south end of the beach.
As the original Clubhouse was first constructed in 1932, the structure and facilities now are extremely run down and in need of upgrade/replacement.
The building also requires redesign as there is not enough room for equipment/fuel storage. The building does not meet current building codes which limits the clubs ability to attract new members.
The Clubhouse cannot be relocated further north without significant removal of intact coastal vegetation and relocation south moves the facility away from the main swimming beach. The site is also in a highly erosive, exposed windy and weather prone location, however relocation closer to Beach Road potentially impacts on key functions including beach surveillance.
The Victorian Coastal Strategy (2014) Building Policy promotes coastal dependant uses, sustainability, equity and community need in relation to the development and management of buildings on the coast. Black Rock Life Saving Club is a coastal dependant use.
Management and any future redevelopment of the existing building and lease area on the foreshore precinct is guided by the requirements of the Victorian Coastal Strategy (2014), Council Policy and the recommendations of the Bayside Coastal Management Plan (2014). These include:
• Encourage consideration of joint partnerships and increased public access in any redevelopment proposals for aging infrastructure.
• Ensure no net increase in building footprint and seek rationalisation of existing buildings where possible in any redevelopment works.
• These aims are achievable on the existing site and replacement of the building will improve access to facilities, safety and landscape amenity for all foreshore users.

BLACK ROCK PLAYGROUND
The Black Rock Playground has undergone redevelopment in 2014. The playground is well used by visitors and local residents.
The playground is located between B16 Carpark and Black Rock Garden and is accessible by the Coast Walking Path and also from Beach Road.
There are two BBQs, one drinking fountain and ample seating and a shared pathway which joins to the coastal walking path towards the Black Rock Gardens.

BLACK ROCK GARDENS
The playground is also located right next to the Black Rock Gardens which allows groups to extend social activities in the open space area.
A sculpture by Faustas Sadauskas called ‘Beacon’ was commissioned by Council for the gardens in 2003 and forms part of the Bayside Coastal Arts Trail.
CULTURAL HERITAGE

BLACK ROCK HOUSE

Black Rock House was built in 1856 by Charles Ebden, former Governor of Victoria. The house was originally built as a holiday house and remained in the Ebden family until 1911 during which it was rented out and used as a guest house and private dwelling.

The original 122 acres was gradually sold off and the house lost its beach frontage retaining only the track out from the garden to what is now Beach Road.

There have been two major periods of renovation, in 1931 under the ownership of Professor Peter MacCallum and in 1974 when it was purchased by the City of Sandringham. The gardens feature magnificent 150 year old Moreton Bay Fig trees planted when the home was built.

Later restorations have focussed on restoring the house as it was in the 1860s and the home and garden are protected by a Heritage Overlay in the Bayside Planning Scheme and included on the Victorian Heritage Register, the Register of the National Estate and classified by the National Trust.

Black Rock House is currently managed by the Bayside City Council with assistance from a dedicated Friends group formed in 1979. It is used for community events and a volunteer program assists with group guided tours and maintaining and preserving the historical property.

Recommendations include:
• Support existing community use of the house and continue ongoing protection of heritage values.
• Increase public use of the adjoining gardens as open space, providing two new seats (one sun and one shade) overlooking the lawn.
• Retain public access through from Ebden Avenue and the garden to Beach Road and the foreshore. Liaise with VicRoads to establish a kerb ramp on the foreshore side at Beach Road to improve universal access at the informal crossing point.
• Review existing signage.

SEA WALL AND PROMENADE

The sea wall is owned and managed by DELWP and the beach access ramps and stairs are managed by Council.

The existing sea wall path extends over 900 metres from Black Rock Gardens, south around Quiet Point to Ricketts Point Beach. The path is well used and it provides excellent access and views to the bay for persons with limited mobility. It is also popular for fishing on the north side of the designated Ricketts Point Marine Sanctuary.

The bluestone sea wall has a concrete base and cap. There have been repairs/extensions completed at the northern Black Rock Gardens end using roughly laid bluestone pitchers which detract from the historic sections of the wall formed using larger blocks from the Old Melbourne Gaol. The path is 2.0m wide and various forms of natural rock retaining wall, some more than 2.0m wide, have been used to stabilise the eroding cliff line which comes under frequent wave attack in high tide storm events. Continued sea level rise under current climate change modelling will likely require significant extension of foreshore protection works to protect the Black Rock Life Saving Club and Beach Road.

HERITAGE OVERLAY

Aboriginal people’s occupation of what is now known as the Black Rock Foreshore dates back many thousands of years and the area contains registered cultural heritage sites (middens). These sites and all other cultural heritage places are protected under the provisions of the Victorian Aboriginal Heritage Act (2006). The Act recognises Aboriginal people as the primary guardians of their cultural heritage and has established a process for Aboriginal groups to apply to be registered as Registered Aboriginal Parties (RAPs).

Other historical features of the foreshore include the bluestone sea walls and the harbour breakwater. The Black Rock Foreshore has other cultural values such as a long history of beach and holiday use and these features and uses need to be considered in any works.

Indigenous and European cultural heritage must be protected during masterplan implementation, and on sites where major ground breaking work are involved a due diligence Cultural Heritage Assessment will be required.

Old and new bluestone sea wall at Black Rock Gardens ramp

Historical headstones located at the base of B16 ramp

HERITAGE OVERLAY (HO)

To conserve and enhance heritage places of natural or cultural significance and to ensure development does not adversely affect their significance.
• HO703 Beach Road Sandringham including tree controls.
• HO148 Black Rock House.
GEOLOGY AND COASTAL PROCESSES

The foreshore cliffs at Black Rock between Half Moon Bay and Quiet Corner are highly erosive and covered by an Erosion Management Overlay in the Bayside Planning Scheme.

The cliffs have been extensively modified and filled as part of works on Beach Road, however in several areas the soft Red Bluff sands are visible and have been cut back to expose the harder Black Rock sandstone, mostly visible at Quiet Corner.

The beach at Black Rock is subject to summer accretion with dominant drift north from November to April and winter depletion when sand moves back south towards Quiet Corner (refer Figure 4).

There are no artificial groynes however this section of foreshore has been subject to severe and rapid erosion following major storms. The most notable of these in 1935 cut the cliff back 6 metres, leading to the establishment of the current sea wall (refer Figure 5).

The sea wall is constructed from bluestone recovered from the demolished Old Melbourne Gaol. The construction of the sea wall has increased scour and the beach frequently disappears after storm events. The sea wall itself has been severely damaged and repaired several times. The most recent major repairs were by the DSE, now the Department of Environment, Land Water and Planning (DELWP), in 2010.

DELWP are currently investigating options to improve the effectiveness of the existing sea wall to reduce overtopping and erosion of the Beach Road embankment and stone retaining walls at Black Rock - Quiet Corner.

The Black Rock Masterplan recommends the following is also considered as part of these investigations:

- Options to improve long term foreshore stability in front of the Black Rock Life Saving Club including provision of improved all ability path access onto the existing sea wall.
- Removal and replacement of the existing more recently constructed section of ad hoc sea wall repairs at the Black Rock Gardens ramp.
- Protection of the historic Old Melbourne Gaol stone inscriptions.
- Options to improve integration of existing stormwater outfalls as part of any new works.
FLORA AND FAUNA

The majority of the Black Rock Foreshore contains remnant coastal vegetation in Bayside. This comprises Coastal Dune Grassland (EVC 879) and Coastal Headland Scrub (EVC 181) providing important habitat and refuge for a range of indigenous native birds, bats, mammals, reptiles and insects in the otherwise built urban environment.

Native vegetation at Black Rock Foreshore is included in the Vegetation Protection Overlay (VPO1) in the Bayside Planning Scheme. The aim of the overlay is to protect and preserve trees and areas of significant vegetation, implementing key requirements of the State Planning Policy Framework and ensuring any new development minimises loss of native vegetation. The overlay and ongoing Council management of the foreshore aim to maintain and enhance habitat and habitat corridors and to encourage the regeneration of native vegetation. A Permit is required to remove vegetation other than as part of weed control, fire prevention, public safety and road safety management actions.

The Bayside Native Vegetation Works Program Stage 2 has identified the existing vegetation and management issues with a three year monitored list of actions for a limited section of indigenous vegetation in Black Rock South. This program covers the indigenous vegetation within a small part of this Precinct. Other areas of indigenous vegetation should also be incorporated into the management of vegetation.

There has been extensive historical and ongoing community involvement in protection and enhancement of native vegetation and habitat along Black Rock Foreshore. Black Rock and Sandringham Conservation Association (BRASCA), Friends of Native Wildlife (FONW) and the local community all actively assist Council in rubbish removal, weed control and monitoring of flora and fauna.

The vegetation mapping included in this masterplan has been completed with assistance from BRASCA. Key issues identified by BRASCA and FONW include the narrow width of the foreshore reserve and the close proximity of the Coast Walking Path to the Bay Trail, which increases the impacts of cycling on fragile coastal vegetation.
FLORA AND FAUNA MANAGEMENT

1. Focus specialist weed control and management resources into areas with good quality remnant indigenous vegetation implementing recommendations as identified in the Bayside Native Vegetation Native Works Program.

2. Close and revegetate informal access tracks, eroded escarpments and untreated pocket spaces to offset the impacts of ongoing requirement for vegetation pruning and removal to maintain sightlines for safety along the Coast Walking Path and beach access ramps.

3. Ensure new cliff and escarpment fencing includes anchor points to improve safety in future weed control and revegetation efforts in these difficult to access areas.

4. Continue staged revegetation in consultation with local community groups e.g. BRASCA. Ensure use of indigenous species grown from locally sourced seed consistent with the prevailing Ecological Vegetation Class (EVC). Carefully plan revegetation, modifying the species mix within the EVC if required to maintain and enhance biodiversity values. Ensure establishment of long term sustainable and manageable planting in areas with existing views or where required for ongoing public access or other use.

5. Undertake ongoing monitoring of fox, rabbits and feral cat numbers initiating targeted control programs where required.

6. Develop interpretative signage regarding indigenous flora and fauna found on the Black Rock Foreshore.
BLACK ROCK LIFE SAVING CLUB
6. Redvelop Black Rock Life Saving Club building in accordance with Victorian Coastal Design Guidelines to be slightly lower in height and incorporate accessible public toilet and change facilities without increasing the building overall footprint, subject to Life Saving Victoria/External Funding. (H)
7. Upgrade the existing beach access ramp to provide improved emergency/maintenance vehicle and all-ability access to the Black Rock Life Saving Club. (H)
8. Remove ageing beach stairs after completion of new ramp and investigate relocation of the beach shower closer to Black Rock Life Saving Club. (H)
9. Establish two disabled and four standard parallel parking bays on Beach Road opposite Black Rock Life Saving Club. (H)

SEA WALL
10. Liaise with DELWP to investigate options to repair failing rock retaining walls and to address impacts of future sea level rise on the existing sea wall and shoreline at Black Rock Life Saving Club. Install risk/warning signage to alert path users to wave action at high tide. (H)
11. Liaise with Heritage Victoria to appropriately protect and interpret the stonework inscriptions in the sea wall from the Old Melbourne Gaol. (M)

BLACK ROCK GARDENS
12. Formalise unsealed path edging and width at 2.5m through Black Rock Gardens. (L)
13. Upgrade of picnic tables and seats through Black Rock Gardens. (H)

PUBLIC TOILETS
14. New all ability access toilet facility to replace existing ageing and poorly positioned toilets. Design to be consistent with Victorian Coastal Design Guidelines with no net increase in building footprint. Existing toilet facilities do not provide for disabled access and will be removed. (M)
15. Provide additional shaded picnic table near Seaview Crescent. (M)

BLACK ROCK HOUSE
16. Install two bench seats in the gardens overlooking the grass area providing a mix of sun and shaded seating. (M)
17. Install directional signage to and from Black Rock House to maintain historic links to the foreshore and beach. Liaise with VicRoads to investigate kerb ramps at the crossing point. (M)

COAST WALKING PATH
Maintain a compacted granitic gravel/sand walking path up to 2.5m in width (site specific), inclusive of pruning to either side. Retain fencing only to the coastal side of the path and use logs to define the trail alignment on the unfenced side.
1. Install new fencing at existing informal lookout points along with revegetation to assist cliff stability. Provide a bench seat and one picnic table. (H)
2. Establish additional timber chicanes and signage to restrict cyclist access to the Coast Walking Path. (H)

BEACH ACCESS RAMPS AND STAIRS
Coordinate and prioritise ramp upgrades with provision of new disabled parking and improved directional signage to ramps with better access for persons with limited mobility. Establish stainless steel handrails to AS1428 on both sides. Where possible, add flat resting points along steep ramps. Implementation priorities are as follows:
- B16 Car park beach access ramp (H)
- Black Rock House beach access ramp (M)
- Black Rock Gardens beach access ramp (M)
- Seaview Crescent beach access ramp (L)
- Second Street beach access ramp (L)
3. Retain and maintain the beach access stairs at Gordon Crescent. Commence design and planning for longer term replacement of the stairs in their current location, including vegetation and cultural heritage impact assessment as needed to gain the required works permit. Continue to maintain the existing timber stairs and update local residents on the replacement planning process. (H)
4. Retain the Quiet Corner stairs. Install handrail to both sides. (L)

NOTE: Refer to Implementation Schedule on Page 14-16 for numbering reference
NOTE: Refer to Implementation Schedule on Page 14-16 for numbering reference
The following section provides an overview of the indicative capital costs to implement key improvements and actions identified in the Draft Masterplan. Draft priorities have been allocated to enable consideration of staging of works subject to confirmation of funding availability.

The large number of facilities and complexity of replacing older asset at Black Rock Foreshore mean that staging of works will be required. The staging and timing for delivery of the works is subject to external agency funding and implementation of some works may need to be delayed or bought forward, i.e. due to the need for urgent maintenance or as part of cost-effective delivery of other projects. In all cases priorities should be viewed as a guide only.

(H) High (1-3 years)
(M) Medium (4-6 years)
(L) Low (7-10 years)
(O) Ongoing (part of current programs/works)

Please note all works estimates are for preliminary planning purposes, prepared without access to survey and detailed design and are a guide only.

NOTE: The Adoption of the Black Rock Foreshore Masterplan by Council does not constitute a decision to proceed with any identified opportunities. It provides a long-term concept to guide decision making and will be subject to future decisions and funding considerations by Council.

### DRAFT MASTERPLAN WORKS SUMMARY

<table>
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<th>STUDY AREA (BCC)</th>
<th>HIGH</th>
<th>MEDIUM</th>
<th>LOW</th>
<th>TOTAL BCC</th>
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| SUBTOTAL BLACK ROCK FORESHORE WORKS | $3,504,300 | $598,250 | $86,850 | $1,139,400 | $3,050,000 |

| CONTINGENCIES (20%) | | | | $227,880 | $610,000 |

| TOTAL BLACK ROCK FORESHORE MASTERPLAN - CAPITAL IMPLEMENTATION WORKS | $1,367,280 | $3,660,000 |

NOTE: No costs are included for DELWP works associated with Foreshore stabilisation and modification to the existing sea wall.
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<tr>
<th>Item No.</th>
<th>Plan Ref</th>
<th>Action Description</th>
<th>Amount</th>
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<th>Rate</th>
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<td>Demolish the existing Black Rock Life Saving Club building and undertake bulk earthworks to extend the ground floor space without increasing the overall building footprint.</td>
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<td>New Black Rock Life Saving Club. Two storey building slightly lower in height than the existing building with accessible public toilet/change facilities incorporated without increasing the building footprint.</td>
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<td>Reconstruct the BRLSC Ramp access to the beach. Provide 1 in 14 grade all ability access, stainless steel handrails to both sides and improved maintenance/emergency vehicle access to the beach and ground floor of the new BRLSC building from Beach Road.</td>
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<td>DELWP</td>
<td>BCC</td>
<td>1.1, 1.2 and 2.1</td>
</tr>
<tr>
<td>1.4</td>
<td>19</td>
<td>Undertake weed control and revegetation of the steep foreshore embankment below the BRLSC and beach access ramp. Works are to be undertaken as part of site restoration after completion of the new building and beach access ramp.</td>
<td>830</td>
<td>m2</td>
<td>$60</td>
<td>$49,800</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
<td>1.2, 1.3 and 2.1</td>
</tr>
<tr>
<td>1.5</td>
<td>8</td>
<td>Maintain the existing beach shower. In the longer term relocate the beach access shower closer to the new Black Rock Life Saving Club. Close and revegetate the existing stair connection to beach following upgrade of the new ramp.</td>
<td>1</td>
<td>Item</td>
<td>$20,000</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>1.3</td>
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<td><strong>Subtotal Black Rock Life Saving Club</strong></td>
<td></td>
<td></td>
<td></td>
<td>$3,379,800</td>
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<td></td>
<td><strong>FORESHORE SEA WALL AND BEACH ACCESS (by DELWP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>10</td>
<td>DELWP to investigate options to stabilise the foreshore in front of the Black Rock Life Saving Club and improve all ability access to the existing sea wall.</td>
<td>155</td>
<td>lin.m</td>
<td>N/C</td>
<td>High</td>
<td>DELWP</td>
<td>DELWP</td>
<td>1.3 and 1.4</td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>10</td>
<td>DELWP to investigate options to increase protection for the existing sea wall. Reduce wave action via mitigation works north of Quiet Corner to reduce overtopping and erosion of the Beach Road embankment and retaining walls. Works to include repair of existing rock retaining walls and improved integration drainage outfalls.</td>
<td>1,000</td>
<td>lin.m</td>
<td>N/C</td>
<td>High</td>
<td>DELWP</td>
<td>DELWP</td>
<td>2.1, 2.3 and 2.4</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>20</td>
<td>Remove and replace the existing section of adhoc sea wall repairs at the Black Rock Gardens ramp. Works to be completed in a style consistent with upgrades for the new works.</td>
<td>25</td>
<td>lin.m</td>
<td>N/C</td>
<td>High</td>
<td>DELWP</td>
<td>DELWP</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>11</td>
<td>Liaise with Heritage Victoria to record and protect the historic Old Melbourne Gaol stone inscriptions in works to reduce erosion along the existing sea wall and develop interpretive signage.</td>
<td>1</td>
<td>Item</td>
<td>N/C</td>
<td>High</td>
<td>DELWP</td>
<td>HV</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>3</td>
<td>Install signage at each beach access point indicating ramp grade/condition with directions to better access points as staged upgrades are completed.</td>
<td>20</td>
<td>No.</td>
<td>$500</td>
<td>$10,000</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td>4</td>
<td>Retain and maintain the existing timber stairs opposite Gordon Crescent. Commence design and planning permit approvals as required to enable replacement when the existing stairs eventually become structurally unsound.</td>
<td>1</td>
<td>Item</td>
<td>$15,000</td>
<td>High</td>
<td>BCC</td>
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## IMPLEMENTATION SCHEDULE

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<tr>
<th>Item No.</th>
<th>Plan Ref</th>
<th>Action Description</th>
<th>Amount</th>
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<th>Agency Responsible for funding</th>
<th>Related Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7</td>
<td>4</td>
<td>Replace the existing Gordon Cres stairs retaining existing character including integrated seating/rest points. Ensure the new stairs minimise removal of vegetation and potential impacts on cultural heritage values.</td>
<td>1</td>
<td>Item works</td>
<td>$150,000</td>
<td>Medium</td>
<td>BCC</td>
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<td>2.8</td>
<td>3</td>
<td>B16 Car park beach access ramp. Establish stainless steel handrails to AS1428 on both sides.</td>
<td>120</td>
<td>lin.m</td>
<td>$250</td>
<td>$30,000</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
<td>2.2 and 2.5</td>
</tr>
<tr>
<td>2.9</td>
<td>3</td>
<td>Black Rock Gardens beach access ramp. Establish stainless steel handrails to AS1428 on both sides.</td>
<td>95</td>
<td>lin.m</td>
<td>$250</td>
<td>$23,750</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>2.2 and 2.5</td>
</tr>
<tr>
<td>2.10</td>
<td>3</td>
<td>Black Rock House beach access ramp. Establish stainless steel handrails to AS1428 on both sides.</td>
<td>70</td>
<td>lin.m</td>
<td>$250</td>
<td>$17,500</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>2.2 and 2.5</td>
</tr>
<tr>
<td>2.11</td>
<td>3</td>
<td>Seaview Crescent beach access ramp. Establish stainless steel handrails to AS1428 on both sides.</td>
<td>105</td>
<td>lin.m</td>
<td>$250</td>
<td>$26,250</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
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<td>2.12</td>
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<td>Second Street beach access ramp. Establish stainless steel handrails to AS1428 on both sides.</td>
<td>65</td>
<td>lin.m</td>
<td>$250</td>
<td>$16,250</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
<td>2.2, 2.5 and 3.4</td>
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<tr>
<td>2.13</td>
<td>5</td>
<td>Retain Quiet corner stairs. Establish stainless steel handrails to AS1428 on both sides.</td>
<td>65</td>
<td>lin.m</td>
<td>$250</td>
<td>$16,250</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
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<td><strong>Subtotal Foreshore Sea Wall and Beach Access</strong></td>
<td></td>
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<td></td>
<td><strong>$305,000</strong></td>
<td></td>
<td></td>
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<tr>
<td>3.1</td>
<td>14 &amp; 21</td>
<td>Remove and replace the two existing toilet blocks with a new single structure all ability access toilet facility. Design to be consistent with Victorian Coastal Design Guidelines with no nett increase in building footprint.</td>
<td>1</td>
<td>Item</td>
<td>$200,000</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>3.2</td>
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</tr>
<tr>
<td>3.2</td>
<td>23</td>
<td>Replace the handrail on the coast path between the B16 car park, playground and new toilet facility. Establish handrail and anchor points for weed control and revegetation access on the steep embankment.</td>
<td>60</td>
<td>lin.m</td>
<td>$500</td>
<td>$30,000</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>3.1 and 3.3</td>
</tr>
<tr>
<td>3.3</td>
<td>24</td>
<td>Undertake weed control and revegetation with low indigenous coastal vegetation to maintain views from the coast walk over on the steep embankment near the playground. Works to be completed following upgrade of the path and handrail to ensure safety for works and ongoing maintenance.</td>
<td>1</td>
<td>Item</td>
<td>$50,000</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>3.2</td>
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<tr>
<td>3.4</td>
<td>13</td>
<td>Undertake staged upgrade of picnic tables and seats through Black Rock Gardens to improve all ability access</td>
<td>6</td>
<td>No.</td>
<td>$3,000</td>
<td>$18,000</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
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<tr>
<td>3.5</td>
<td>25</td>
<td>Install fencing to prevent public access to the concrete roof of the former gardeners shed at the top of the Black Rock Gardens beach access ramp. Longer term remove and revegetate.</td>
<td>1</td>
<td>Item</td>
<td>$1,500</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
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<td></td>
<td>1</td>
<td>Item</td>
<td>$10,000</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>12</td>
<td>Formalise unsealed path edging and width at max 2.5m through Black Rock Gardens and reinstate grass where possible.</td>
<td>210</td>
<td>lin.m</td>
<td>$60</td>
<td>$12,600</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
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<td></td>
<td></td>
<td><strong>Subtotal Black Rock Gardens</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$322,100</strong></td>
<td></td>
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## IMPLEMENTATION SCHEDULE

<table>
<thead>
<tr>
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<tr>
<td></td>
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<td><strong>COAST WALKING PATHS</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>4.1</td>
<td>2</td>
<td>Establish timber chicanes and signage to restrict cyclist access to the unsealed coast walking path where located near the Bay Trail.</td>
<td>8</td>
<td>No.</td>
<td>$2,500</td>
<td>$20,000</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
<td>2.5 and 4.3</td>
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<td>4.2</td>
<td></td>
<td>Maintain a compacted granitic gravel/sand walking path up to 2.5m in width (site specific), inclusive of pruning to either side. In areas where the concrete sea wall promenade can be accessed maintain the existing path width using natural logs to define the edge of path where it is unfenced.</td>
<td>1</td>
<td>Item</td>
<td>$10,000</td>
<td>High</td>
<td>BCC</td>
<td>BCC</td>
<td>4.1 and 4.4</td>
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</tr>
<tr>
<td>4.3</td>
<td>1</td>
<td>Establish new timber post and cable fencing at popular cliff top lookout points. Undertake fencing in conjunction with coastal revegetation to assist cliff stability.</td>
<td>2</td>
<td>No.</td>
<td>$20,000</td>
<td>$40,000</td>
<td>High</td>
<td>BCC</td>
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<tr>
<td>4.4</td>
<td>1 &amp; 15</td>
<td>Provide additional seats and picnic tables at lookout points.</td>
<td>2</td>
<td>No.</td>
<td>$6,000</td>
<td>$12,000</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
<td>4.3</td>
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<tr>
<td>4.5</td>
<td></td>
<td>Continue ongoing weed control and indigenous coastal revegetation in collaboration with local community groups.</td>
<td>1</td>
<td>Item</td>
<td>N/C</td>
<td>Ongoing</td>
<td>BCC</td>
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<td></td>
<td><strong>Subtotal Coast Walking Paths</strong></td>
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<td>$82,000</td>
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<td><strong>BEACH ROAD AND BAY TRAIL</strong></td>
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</tr>
<tr>
<td>5.1</td>
<td>17</td>
<td>Liaise with VicRoads to establish kerb ramps on Beach Road at popular informal crossing points.</td>
<td>4</td>
<td>No.</td>
<td>$2,500</td>
<td>$10,000</td>
<td>Medium</td>
<td>VICROADS</td>
<td>BCC</td>
<td>6.3</td>
</tr>
<tr>
<td>5.2</td>
<td>9</td>
<td>Establish two disabled and four standard parallel parking bays on Beach Road opposite the Black Rock Life Saving Club. Slightly realign the Bay Trail and indent the parking bays to enable them to be used all day without increasing risk to cyclists on Beach Road.</td>
<td>1</td>
<td>Item</td>
<td>$80,000</td>
<td>Medium</td>
<td>VICROADS</td>
<td>BCC</td>
<td>1.2 and 1.3</td>
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<td></td>
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<td><strong>Subtotal Beach Road and Bay Trail</strong></td>
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<td></td>
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<td>$90,000</td>
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<td><strong>BLACK ROCK HOUSE</strong></td>
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<td>6.1</td>
<td></td>
<td>Renew and upgrade existing signage at Black Rock House</td>
<td>1</td>
<td>item</td>
<td>$5,000</td>
<td>Medium</td>
<td>BCC</td>
<td>BCC</td>
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<tr>
<td>6.2</td>
<td>16</td>
<td>Establish two bench seats in the gardens over looking the grass area providing a mix of shaded and sunny positions.</td>
<td>2</td>
<td>No.</td>
<td>$2,000</td>
<td>$4,000</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
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</tr>
<tr>
<td>6.3</td>
<td>17</td>
<td>Establish directional signage to and from Black Rock House to maintain historic links to the foreshore and beach.</td>
<td>3</td>
<td>No.</td>
<td>$500</td>
<td>$1,500</td>
<td>Low</td>
<td>BCC</td>
<td>BCC</td>
<td>5.1</td>
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<td><strong>Subtotal Black Rock House</strong></td>
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<td>$10,500</td>
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</table>

**BLACK ROCK FORESHORE MASTERPLAN WORKS - BAYSIDE**

- **$1,139,400**

**BLACK ROCK FORESHORE MASTERPLAN WORKS - OTHER AGENCIES**

- **$3,050,000**

**Contingencies (20%)**

- **$837,880**

**$5,027,280**
REFERENCES


