

RED BLUFF TO HALF MOON BAY MASTERPLAN

| MASTERPLAN WORKS SUMMARY | PRIORITIES | | | | TOTAL BCC | TOTAL OTHERS |
|---|------------------|------------------|------------------|------------|--------------------|------------------|
| STUDY AREA (BCC) | HIGH | MEDIUM | LOW | Ongoing | | |
| CULTURAL HERITAGE | \$70,000 | \$0 | \$0 | \$0 | \$70,000 | \$0 |
| BEACH ACCESS | \$35,000 | \$1,000 | \$282,000 | \$0 | \$318,000 | \$0 |
| PUBLIC TOILETS | \$0 | \$275,000 | \$0 | \$0 | \$275,000 | \$0 |
| COASTAL WALKING PATH | \$22,500 | \$0 | \$0 | \$0 | \$22,500 | \$0 |
| B14 HALF MOON BAY CAR PARK | \$57,000 | \$230,000 | \$45,000 | \$0 | \$111,000 | \$221,000 |
| B15 CAR PARK CERBERUS WAY | \$57,000 | \$110,000 | \$50,000 | \$0 | \$187,000 | \$30,000 |
| B13 CAR PARK LOVE STREET | \$0 | \$5,000 | \$0 | \$0 | \$5,000 | \$0 |
| RED BLUFF AND WHITE CLIFFS | \$34,000 | \$0 | \$49,500 | \$0 | \$83,500 | \$0 |
| VEGETATION MANAGEMENT | \$32,000 | \$5,000 | \$15,000 | \$0 | \$52,000 | \$0 |
| SUBTOTAL RED BLUFF TO HALF MOON BAY WORKS | \$307,500 | \$626,000 | \$441,500 | \$0 | \$1,124,000 | \$251,000 |
| CONTINGENCIES (20%) | | | | | \$224,800 | \$50,200 |
| TOTAL RED BLUFF TO HALF MOON BAY MASTERPLAN - CAPITAL IMPLEMENTATION WORKS | | | | | \$1,348,800 | \$301,200 |

RED BLUFF TO HALF MOON BAY MASTERPLAN

IMPLEMENTATION SCHEDULE V3 Prepared by TBLD P/L for Bayside City Council 21.05.19 Note preliminary cost estimates are for planning purposes only and subject to survey and detailed design.

| Item No. | Plan Ref | Action Description | Amount | Item | Rate | BCC Cost | Cost Other | Priority | Agency responsible for approval | Agency responsible for funding |
|-----------------------------------|----------|---|--------|--------|---------|------------------|------------|----------|---------------------------------|--------------------------------|
| 1. CULTURAL HERITAGE | | | | | | | | | | |
| 1.1 | C6 | Undertake due diligence Cultural Heritage Assessment | 1 | Item | | \$50,000 | | High | AV | BCC |
| 1.2 | | Liaise with Aboriginal Victoria and traditional owner groups to develop interpretive signage to improve visitor understanding and appreciation of cultural heritage values at Half Moon Bay - Red Bluff. | 1 | Item | | \$20,000 | | High | BCC | BCC |
| SUBTOTAL CULTURAL HERITAGE | | | | | | \$70,000 | \$0 | | | |
| 2. BEACH ACCESS | | | | | | | | | | |
| 2.1 | | B13 car park beach access ramp. | | | | | | | | |
| 2.1.1 | | Install directional signage top and bottom of the B13 ramp. | 2 | No. | \$500 | \$1,000 | | High | BCC | BCC |
| 2.1.2 | B12 | Install handrail to AS1428 on the other side of the B13 Ramp. | 170 | lin. m | \$600 | \$102,000 | | Low | BCC | BCC |
| 2.1.3 | | Monitor and maintain stone work along the ramp and replace stairs with ramp at entry to carpark | 1 | Item | | \$1,000 | | Medium | BCC | BCC |
| 2.2 | | Bayview Crescent beach access ramp. | | | | | | | | |
| 2.2.1 | | Install directional signage at the Bayview Crescent pedestrian crossing on Beach Road. | 1 | No. | \$500 | \$500 | | High | BCC | BCC |
| 2.2.2 | | Replace existing Bayview Crescent ramp retaining wall on approach to the toilet block. Ensure protection of cultural heritage values and native vegetation during works. | 40 | lin. m | \$800 | \$32,000 | | High | BCC | BCC |
| 2.2.3 | | Install handrail to AS1428 on Bayview Crescent beach access ramp on both sides. | 280 | lin. m | \$600 | \$168,000 | | Low | BCC | BCC |
| 2.2.4 | | Reset the concrete edge around the perimeter of the shower enabling all ability use while minimising overflow to the adjoining path. | 1 | Item | | \$500 | | High | BCC | BCC |
| 2.3 | | B14 car park beach access ramp (White Cliffs). | | | | | | | | |
| 2.3.1 | | Repair existing post and cable fencing. | 1 | Item | | \$500 | | High | BCC | BCC |
| 2.3.2 | | Install directional signage at the top of the ramp. | 1 | No. | \$500 | \$500 | | High | BCC | BCC |
| 2.3.3 | | Replace Bayside Arts trail interpretive sign bases when required. | 6 | No. | \$2,000 | \$12,000 | | Low | BCC | BCC |
| SUBTOTAL BEACH ACCESS | | | | | | \$318,000 | \$0 | | | |
| 3. PUBLIC TOILETS | | | | | | | | | | |
| 3.1 | | Upgrade handrails to the HMBSLSC / public toilet access ramp to comply with AS1428. | 1 | Item | | \$20,000 | | Medium | BCC | BCC |
| 3.2 | | Install handrails to both sides of the toilet beach access stairs including nose strips and TGS1 to comply with AS 1428. | 1 | Item | | \$5,000 | | Medium | BCC | BCC |
| 3.3 | | Investigate developing an adult changing facility in one of the existing toilet/change spaces at HMBSLSC to make access available to a broader range of community members. | 1 | Item | | \$200,000 | | Medium | BCC | BCC |
| 3.4 | | Review toilet layout at HMBSLSC in accordance with Crime Prevention Through Environmental Design (CPTED) principles and upgrade the toilet facilities to include an additional cubicle and external hand wash facility within the existing footprint. | 1 | Item | | \$50,000 | | Medium | BCC | BCC |
| SUBTOTAL PUBLIC TOILETS | | | | | | \$275,000 | \$0 | | | |

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| 4. COASTAL WALKING TRAIL | | | | | | | | | | |
| 4.1 | | Reinstate retaining wall between B13 ramp and Bayview Crescent ramp. | 1 | Item | | \$20,000 | | High | BCC | BCC |
| 4.2 | | Install directional and code of conduct signage at key entry points. | 5 | No. | \$500 | \$2,500 | | High | BCC | BCC |
| SUBTOTAL COASTAL WALKING TRAIL | | | | | | \$22,500 | \$0 | | | |
| 5. B14 HALF MOON BAY CAR PARK | | | | | | | | | | |
| 5.1 | A5 | Establish new direct pedestrian crossings throughout B14 car park including relocation of existing light poles. | 1 | Item | | \$50,000 | | High | BCC | BCC |
| 5.2 | A6 | Relocate existing parking meter closer to more frequently used parking areas. | 1 | Item | \$1,000 | \$1,000 | | High | BCC | BCC |
| 5.3 | A7 | Formalise new line marking within the B14 car park as part of future resurfacing works. | 1 | Item | | \$5,000 | | High | BCC | BCC |
| 5.4 | A8 | Liaise with Friends of the Cerberus Inc. to reinstate interpretive signage to the southern end of the pier. | 1 | Item | | | \$1,000 | High | PV | FOC |
| 5.5 | A9 | Liaise with DELWP to extend seawall behind the existing rock revetment to protect car parking and path from wave action during high tide/storm events. | 80 | Lin. m | \$1,500 | | \$120,000 | Medium | DELWP | DELWP |
| 5.6 | A10 | Establish a new Gross Pollutant Trap (GPT) and litter baskets to improve stormwater management and water quality in the bay. | 1 | Item | | | \$100,000 | Medium | BCC | MW |
| 5.7 | A13 | Install new seating area to the western corner of B14 car park with views to the Bay. | 1 | Item | | \$5,000 | | Low | BCC | BCC |
| 5.8 | A12 | Liaise with Parks Victoria to establish a new seating area on the pier while retaining maintenance access. | 1 | Item | | \$5,000 | | Medium | PV | BCC |
| 5.9 | A15 | Establish new pedestrian crossing and drainage to improve pit inlet efficiency. | 1 | Item | | \$5,000 | | Medium | BCC | BCC |
| 5.10 | A11 | Remove steps up to the pier and replace with accessible ramp with handrails to both sides. | 1 | Item | | \$40,000 | | Low | BCC | BCC |
| SUBTOTAL B14 HALF MOON BAY CAR PARK | | | | | | \$111,000 | \$221,000 | | | |
| 6. B15 CAR PARK - CERBERUS WAY | | | | | | | | | | |
| 6.1 | A16 | Establish raised pavement vehicle priority crossing, new signage and improved sightlines for the Coastal Walking Trail crossing on Cerberus Way. | 1 | Item | | \$15,000 | | High | BCC | BCC |
| 6.2 | A17 | Upgrade pedestrian path links down Cerberus Way to improve safety, installing a connecting sealed path from B15 car park. Relocate planted indigenous vegetation where possible and offset impacts on native vegetation with closure of the nearby duplicated unsealed path. | 60 | Lin. m | \$200 | \$12,000 | | High | BCC | BCC |
| 6.3 | A22 | Replace existing Bayview Crescent ramp retaining wall on approach to the toilet block, ensure protection of cultural heritage values and native vegetation during works. | 1 | Item | | \$30,000 | | High | OAAV | BCC |
| 6.4 | A18 | Realign the B15 Cerberus Way entry from Beach Road to establish right and left hand exit lanes to reduce traffic congestion and improve safety on the Bay Trail. | 1 | Item | | \$80,000 | | Medium | BCC | BCC |
| 6.5 | A20 | Replace ageing pine log stairs from Cerberus Way and install handrails to both sides. | 1 | Item | | \$30,000 | | Medium | BCC | BCC |
| 6.6 | A19 & E6 | Establish rain gardens in B15 car park to improve stormwater treatment and water quality. | 1 | Item | | | \$30,000 | Low | BCC | MW |
| 6.7 | A21 | Replace existing handrail and picnic furniture at the Half Moon Bay lookout. | 1 | Item | | \$20,000 | | Low | BCC | BCC |
| SUBTOTAL B15 CAR PARK - CERBERUS WAY | | | | | | \$187,000 | \$30,000 | | | |

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| 7. B13 CAR PARK - LOVE STREET | | | | | | | | | | |
| 7.10 | B13 | Replace drinking fountain and install bench seat to provide a rest stop along the Coastal Walking Trail. | 1 | Item | | \$5,000 | | Medium | BCC | BCC |
| SUBTOTAL B13 CAR PARK - LOVE STREET | | | | | | \$5,000 | \$0 | | | |
| 8. RED BLUFF AND WHITE CLIFFS | | | | | | | | | | |
| 8.1 | B2 | Install new risk warning signage and extend brush matting and low Indigenous planting on the coast side of the fence at Red Bluff to discourage access and reduce erosion from stormwater runoff, while retaining views. | 1 | Item | | \$10,000 | | High | BCC | BCC |
| 8.2 | | Install new risk warning signage at B13 ramp and Potter Street to direct beach walkers to the safe route around Red Bluff via the Coastal Walking Trail and on the cliff top. | 8 | No. | \$500 | \$4,000 | | High | BCC | BCC |
| 8.3 | B26 | Replace the existing handrail when needed, increase setback from the cliff edge to enable additional low planting while retaining views. | 150 | Lin. m | \$200 | \$30,000 | | Low | BCC | BCC |
| 8.4 | B27 & E9 | Following improvements to the Coastal Walking Trail through the B13 car park, investigate closure and revegetation of the cliff top at the end of Potter Street. | 300 | m2 | \$65 | \$19,500 | | Low | BCC | BCC |
| 8.5 | A23 | Replace fencing and install risk warning signage at White Cliffs. | 1 | Item | | \$20,000 | | High | BCC | BCC |
| SUBTOTAL RED BLUFF AND WHITE CLIFFS | | | | | | \$83,500 | \$0 | | | |
| 9. VEGETATION MANAGEMENT | | | | | | | | | | |
| 9.1 | E1 | Revegetate the Red Bluff cliff top with brush matting, cut Boxthorn and low Indigenous vegetation to the coastal side of the fence, to reduce public access and stormwater runoff over the eroding cliffs. | 1 | Item | | \$10,000 | | High | BCC | BCC |
| 9.2 | E2 | Continue ongoing pruning to maintain safe sightlines at all road/car park path crossing points. | 1 | Item | | \$2,000 | | High | BCC | BCC |
| 9.3 | E3 | Continue foreshore weed eradication works in partnership with local community groups and revegetate with local indigenous species in accordance with nominated EVC. | 1 | Item | | \$20,000 | | High | BCC | BCC |
| 9.4 | E4 | Subject to recommendations and requirements of the <i>Cultural Heritage Management Plan</i> , carefully remove weeds and continue revegetation with local indigenous species behind the HMBSLSC and at beach level to protect existing midden sites. | 1 | Item | | \$5,000 | | Medium | BCC | BCC |
| 9.5 | E5 | Undertake targeted removal of introduced Palm trees where accessible on the foreshore embankment. | 1 | Item | | \$5,000 | | Low | BCC | BCC |
| 9.6 | E7 | Commence active revegetation of the embankment below the Half Moon Bay lookout while maintaining sightlines. | 1 | Item | | \$10,000 | | Low | BCC | BCC |
| 9.7 | E10 | Retain and protect areas of Mallee Drumstick fungus found on the Red Bluff cliffs. Avoid ground disturbance and ensure establishment of 'no go zones' during path and car park upgrade works. | 1 | Item | | N/A | | Ongoing | BCC | BCC |
| SUBTOTAL VEGETATION MANAGEMENT | | | | | | \$52,000 | \$0 | | | |
| SUBTOTAL RED BLUFF TO HALF MOON BAY MASTERPLAN WORKS | | | | | | \$1,124,000 | \$251,000 | | | |
| Contingencies (20%) | | | | | | \$224,800 | \$50,200 | | | |
| TOTAL RED BLUFF TO HALF MOON BAY MASTERPLAN - CAPITAL IMPLEMENTATION WORK | | | | | | \$1,348,800 | \$301,200 | | | |