



SOUTH NEW BRIGHTON, SOUTH OF BRIDGE STREET

Area	South New Brighton - south of Bridge Street
Issue	Risk of flooding and erosion south of Bridge St, including South New Brighton Park
Option	New set-back bunds with repair, replacement or infill of existing erosion management structures.
Plain English explanation	<p>A new bund(s) that is set back from the estuary edge in necessary locations from south of Bridge Street to the boardwalk, with erosion management that is repaired, replaced or infilled. It provides the same or a greater level of flood management as other areas in Ihutai/Estuary and reduce the risk of further erosion of the estuary edge. It would reduce the risk of flooding in most of South New Brighton Park, and for houses and community facilities (campground, tennis club etc) that are in or near the park. However, it would not reduce flooding of the existing track in the park. This structure could be raised in the future with some modifications if required.</p> <p>This option could integrate more easily into the landscape, and would not impact on access to estuary edge to the same extent as a bund on the edge. There would be an opportunity to put a path along the top of it. It would also be less expensive, but would still require a number of consents (which could impact on how long it takes to implement).</p> <p>We would still need to do further investigations to determine what method of erosion management would be best suited for where. It is likely the whole area would have a range of different forms of erosion management rather than having only one form. The estimated total cost is approximately \$1.6-\$2.2 million.</p>
Description	Bunds would be constructed 25-100 metres from the estuary edge in necessary locations from south of Bridge St to the boardwalk. The bunds would generally follow the line shown as 'Possible New Stopbank' in the South New Brighton Reserves Development Plan .



	<p>The bunds would reduce the risk of flooding from Ihutai/Estuary to houses and to community facilities in South New Brighton Park, but not the existing track in South New Brighton Park.</p> <p>The bunds' height would be no less than RL 11.4m which is the height of the Beachville Road sea wall and the Kibblewhite Street stopbank and is higher than the McCormacks Bay causeway (RL 11.2m).</p> <p>The bunds may not be continuous as they would be merged into existing high ground. They could be planted with small shrubs and have a shared path on top.</p> <p>Where there has been damage to existing erosion management structures (reno mattresses, gabion baskets) they would be replaced, repaired, or filled in with other material (such as soil or rock) to reduce the current risk based on the updated 2018 high tide statistics. They may be bigger and higher than what was there before, or a different method as appropriate. There may also be sections of beach re-nourishment included where this is more appropriate, and areas where no additional erosion management is required.</p>
Estimated Cost	Total cost approximately \$1.6-\$2.2 million (approximately \$1-1.5 Million for the bund, and \$600,000 -700,000 for erosion repair).
Delivery Timing	1-2 years to allow for further investigations, design, impact assessments and consenting before construction can begin. Construction could be staged, depending on consent conditions, over a 12 month period.
Implementation Requirements	<p>Some assessment has been undertaken for a bund in this location, but detailed design and costings would be required. There is also some question as to the need for the bund in all locations shown which would be confirmed following further investigation into the risk of flooding based on 2018 high tide statistics.</p> <p>Erosion management concept plans have been prepared, but detailed investigations, design and costings would be required. This would include deciding which structures would need fixing or replacing and the method appropriate in each location.</p> <p>Construction times may be restricted due to wildlife breeding seasons.</p>



Considerations	<p>The setback location of the bund uses existing internal land forms and contours and would have minimum visual impact. It would maintain access to the water and estuary edge and would have less environmental impact than a bund located on the estuary edge. Some large trees would need to be removed to construct the bund.</p> <p>Although reno mattress can encourage beach development and reduce the risk of erosion, they can also have a negative effect on natural character, amenity value, species diversity, bird roosting and feeding areas, and intertidal habitat zones. Some options, such as applying loose cobbles may have less impact, and more opportunity for maintaining habitat than raised reno mattresses, gabion baskets and vertical walls.</p>