

Newcastle Ocean Baths – Key considerations for pool promenade and sand floor

The information below provides the rationale for the design of the pool promenade and the sand floor of the pool which are part of the Stage 1 upgrade of Newcastle Ocean Baths. The design addresses the significant project drivers of making the site safe, presenting value for City of Newcastle and the community, while providing a solution that meets the range of needs of baths users.

Community use of the site

- We heard that pool users value the sandy floor of the pool.
- We heard that there are safety concerns regarding water quality, due to high turbidity/low visibility and algae/slime growth in the water, in the sand, and on the pool walls. Additionally, there are significant trip hazards and access challenges due to the dilapidated nature of the site.
- City of Newcastle has a duty of care to keep the site open as much as possible and we heard that reducing closure time due to maintenance and inundation is a priority for users.

New, raised pool promenade/deck level

- The existing pool promenade will be covered by a new concrete cap, adding 150mm-250mm of height to the existing levels.
- The existing concrete is dilapidated beyond repair, and 'demolish and rebuild' is not considered feasible due to costs, impact on landfill, stability concerns for surrounding site features, negative heritage impacts, and constructability concerns.
- Additional height is required to address the impacts of climate change. Approximately 700mm of additional height is required in accordance with the Newcastle Coastal Zone Hazard Study (2014) for the design life of the project; however, this significant increase does not meet with the expectations of site users. As such, 250mm (maximum increase) is considered a fair compromise in response to community and heritage values of the site.
- The new concrete cap to the promenade enables the surrounding site features to also be upgraded including access ramps, pump station pipework, and retaining walls.
- The additional height of the pool promenade is considered a negligible change when considered against swell and tidal events that bring sand into the pool.

Concrete slab overlain existing rock base of the pool

- The existing base of the pool needs to be raised to match the new height of the pool promenade level to continue to maintain current use of the pool for walking exercise.
- The concrete cap level allows for a minimum 200mm of sand to be maintained on top of the concrete to meet community expectations of the site.
- The new concrete cap on the floor will make it quicker and easier to maintain the sandy bottom, reducing pool closure time while also delivering improved water quality.