



COTTESLOE BEACH ACCESS PATH  
UPGRADES - STAGE 2

PUBLIC CONSULTATION PACKAGE  
LANDSCAPE DESIGN CONCEPTS

**DRAFT**

ISSUE FOR PUBLIC CONSULTATION

SK01	C	BEACH ACCESS UPGRADE LOCATIONS
SK02	C	BEACH ACCESS N04: ERIC STREET
SK03	C	BEACH ACCESS S15: JARRAD STREET
SK04	C	BEACH ACCESS S04: WARTON STREET
SK05	C	TYPICAL STAIR SECTION

# BEACH ACCESS UPGRADE LOCATIONS



BEACH ACCESS S04: WARTON STREET

BEACH ACCESS S15: JARRAD STREET

BEACH ACCESS N04: ERIC STREET

## UPGRADES OVERVIEW


The Town of Cottesloe is continuing the works to upgrade the beach access along the coast between North Street and Curtin Avenue. Stage 1 works included upgrades to path N07 at Grant Street, path N06 at Grant Marine Park, Path S12 at Deane Street and path S10 at Salvado Street.

Stage 2 works propose the upgrade of path N04 next to Barchetta, path S15 providing access to The Cove and S04 just north of Warton Street. All the materials, fixtures and fittings proposed match what was used for the Stage 1 upgrades and align with the draft Cottesloe Beach Access Path Style Guide.

It is intended that all upgrade works to beach access points will be clear and uncluttered with common elements and a consistent palette throughout. Generally, the infrastructure provided will be robust and relatively minimal.

Disturbance to the coastal dune system and planting will be minimal. Where new planting and revegetation opportunities present species will be selected from the local coastal pant community and will be suitable for frontline coastal locations.

## LEDGEND

- |                                              |                                  |                                                                                                                 |
|----------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1 Vlamingh Memorial                          | 7 Cottesloe Surf Lifesaving Club | 13 Cottesloe Tennis Club                                                                                        |
| 2 Warne Hostel for the Aged                  | 8 Cottesloe Main Beach groyne    | 14 Ocean Beach Hotel                                                                                            |
| 3 WA Foundation for Deaf Children            | 9 Indiana Tea House              | 15 Grant Marine Park and Playground                                                                             |
| 4 Australian Red Cross - Lady Lawley Cottage | 10 Cottesloe Beach Hotel         |  Mudurup Rocks Sacred Site |
| 5 South Cottesloe groyne                     | 11 Cottesloe Beach Playground    |                                                                                                                 |
| 6 Sun Dial                                   | 12 Car Park No. 2                |                                                                                                                 |



**Stairs**

Stairs and deck landings will be finished in Fibre Reinforced Plastic that is durable and comfortable under foot. Sub structure and posts will be constructed from ACQ treated pine.

The stairs will be constructed using the Town's standard detail with wide treads. Tactile markers will demark the top of the stairs.



**Bin Enclosure**

Replacement bins will be provided and upgraded to the Town's standard stainless steel bin enclosure.

Wider concrete pads will be installed for each bin location to allow for recycling bins to be installed adjacent in future.



**Drink Fountains**

Drink fountains will be installed with water bowls for dogs and constructed from stainless steel for durability.



**Walls**

Walls with integrated seating will be constructed from poured concrete with a smooth off form finish. The walls reference the use of concrete in the area and provide a neutral coloured material to minimise visual impact.

The concrete seating walls will provide a smooth comfortable seating option.



**Paving**

The beach access nodes will be poured concrete to provide a hardwearing surface and match in with the existing shared path.

### Shower

Stainless steel shower unit with feet rinse tap. New soakwells to be installed under paving, away from dune embankments.



**Balustrades**

Post and plank balustrades will be constructed from class 1 durability hardwood timber for durability and minimal visual impact.

### Handrails

Handrails will be constructed from stainless steel for durability.

# BEACH ACCESS N04: ERIC STREET

## LOCATION PLAN



## UPGRADE DESCRIPTION

Beach access path 04 is located to the north of Barchetta café and consists of three (3) sections. The lower section, from the shared use path to the beach, will be upgraded as part of the stage 2 works. This section currently is a combination of concrete and timber. There is no formal landing as the stairs run immediately off the share path. Barrier railings on the stairs themselves do not comply with current building standards. The upper sections will form part of later upgrades.

Upgrade works to the lower section of access path 04 will include building over the existing concrete stairs in the new timber post and rail detail with Fibre Reinforced Plastic treads. The existing timber stairs will be completely replaced to maintain consistency and a total of 26 steps with a central landing will be installed to address the level difference.

A new landing will be formed at the top of the stairs to allow users to safely look for cyclists before crossing the shared use path. New barrier railings will be installed on this landing along with tactile indicators to current building code standards. All tread will comply with the Town's new standard depth (320mm) and risers will be consistently 150mm +/- 10mm.

The dune area either side of the works will be stabilised using jute matting where needed and planted during the winter months following construction of the access. The existing conservation fence will be realigned to account for the new stairs and restrict access to protected dune areas.

## LEDGEND

- 1 Existing concrete stairs next to Barchetta to remain. Works to patch cracks and chips to form part of the Town's maintenance.
- 2 Opportunity to upgrade the planting beds next to the viewing platform.
- 3 Relocate bins to the opposite side of the stairs next to the public toilets. Upgrade bins to the Town's stainless steel detail.
- 4 Existing shower to remain in place.
- 5 Existing concrete to be removed and re-poured and new pedestrian crossing and stop lines to be marked out.
- 6 New landing to be formed next to the shared use path to allow for safe pedestrian crossing.
- 7 New barrier railings to be located on the new landing.
- 8 Tactile paving indicators to be placed at the top of the stairs in accordance with building standards.
- 9 Fibre Reinforced Plastic steps. All tread to match new 320mm depth.
- 10 New mid-way Fibre Reinforced Plastic landing.
- 11 New hardwood timber post and rail siding to the stairs.
- 12 New stainless steel tubular hand rail fixing to the timber siding to meet current building code standards.
- 13 Realign 1.0m conservation fence and tie into existing.
- 14 Opportunity to extend stairs into beach sand to account for erosion/storm events.
- 15 Embankment rehabilitated and stabilised with coastal plant species.



Image 1

Existing stairs to be upgraded are uneven and do not comply with current building code standards.



Image 2

Existing barrier railings on stairs to be replaced and stairs abutting the shared path to be upgraded for safer pedestrian crossing.



Image 3

Opportunity to relocate bin stores and renew planting beds next to the viewing platform.



# BEACH ACCESS S15: JARRAD STREET

## LOCATION PLAN



## UPGRADE DESCRIPTION

Beach access S15 otherwise known as 'The Cove' is culturally significant as it is located on the Mudurup Rocks Sacred Site. Beach access currently is sub-standard and as one of the main surf breaks in the metropolitan area it needs upgrading. Balancing the cultural sensitives and the need for safer access will be paramount to the works in this location.

The access currently is made up of a combination of large uneven concrete stairs with a timber ramp atop. There are a number of community and memorial plaques that will be relocated and/or integrated into the new layout to preserve the local identity.

The upgraded access node will include an informal seating area, shower and information signage. Impacts to the rocks will be minimized by focusing works over the existing structures and on the existing access footprint. A great opportunity presents to remove the timber plank ramp connecting to the sun dial to reinstate the natural landform and vegetation.

The new access stairs will comprise Fibre Reinforced Plastic treads for the upper section with plastic micro-mesh grating for the lower section with anti-slip treatment for greater safety. A new launch platform is proposed at the base of the stairs to provide safe surf access.

The dune area either side of the works will be stabilised using jute matting where needed and planted during the winter months following construction of the access.

## LEDGEND

- 1 Existing information signage panel to be relocated to better integrate with the new access.
- 2 New stainless steel drink fountain with dog water bowl to match the Town's standard street furniture pallet.
- 3 New stainless steel single shower unit to match the Town's standard street furniture pallet.
- 4 Expanded concrete hardstanding to create seating/look out area and allow space around the shower unit.h
- 5 Smooth off form finish concrete wall, to 0.5m height with seating edge.
- 6 New stainless steel bin enclosure to match the Town's standard street furniture pallet.
- 7 Community directional signage and 'The Cove' to be relocated to better integrate with the new access.
- 8 Memorial bench seat to be relocated to better integrate with the new access.
- 9 Tactile paving indicators to be placed at the top of the stairs in accordance with building standards.
- 10 New widened Fibre Reinforced Plastic steps and landings. All step treads to match new 320mm depth.
- 11 Opportunity for new Fibre Reinforced Plastic lookout platform allowing space for surfers to pass.
- 12 New hardwood timber post and rail siding to the stairs.
- 13 New stainless steel tubular hand rail fixing to the timer siding to meet current building code stanards.
- 14 Remove timber plank ramp and reinstate dune vegetation.
- 15 New plastic micro-mesh grating with anti-slip treatment to lower stairs built over existing concrete stairs.
- 16 New wide plastic micro-mesh grating launch platform carefully installed around the rocks for safe surf access.



Image 1

Existing concrete stairs to be built over so as not to disturb natural rock formation.



Image 2

Existing timber plank ramp side access to the sun dial and look out point to be removed and the dunes revegetated.



Image 3

Existing community signage and memorials to be integrated into the upgrade.



# BEACH ACCESS S04: WARTON STREET

## LOCATION PLAN



## UPGRADE DESCRIPTION

The location of the stair is opposite the soon to be upgraded Warne Hostel for the Aged. Community elements like the book exchange will be integrated into the new layout so they can continue to be enjoyed by locals.

The upgraded access node will include a widened hardstanding to clearly mark the beach access and prevent clashes with the shared use path. Upgrade proposals include informal seating area and information signage. The new stairs will be made from Fibre Reinforced Plastic. All tread will comply with the Town's new standard depth (320mm) and risers will be consistently 150mm +/- 10mm.

By realigning the stairs, a new access will be created directly onto the sand. The previous access along the rocks will be closed and reinstated to natural vegetation.

The dune area either side of the works will be stabilised using jute matting where needed and planted during the winter months following construction of the access. The existing conservation fence will be realigned to account for the new stairs and restrict access to protected dune areas.

## LEDGEND

- 1 Smooth off form finish concrete wall, to 0.5m height with seating edge.
- 2 Existing signage to be relocated to better integrate with the new access.
- 3 Expanded concrete hardstanding to create seating/look out area.
- 4 New book exchange unit to be integrated into the seating wall.
- 5 Existing bus shelter.
- 6 Upgraded Fibre Reinforced Plastic ramp and stairs to be built on existing structural sub-frame.
- 7 Tactile paving indicators to be placed at the top of the stairs in accordance with building standards.
- 8 New widened Fibre Reinforced Plastic steps and landings. All step treads to match new 320mm depth.
- 9 New hardwood timber post and rail siding to the stairs.
- 10 New stainless steel tubular hand rail fixing to the timber siding to meet current building code standards.
- 11 Opportunity for new Fibre Reinforced Plastic lookout platform allowing space for beach goers to pass.
- 12 Embankment rehabilitated and stabilised with coastal plant species.
- 13 Realign / install new 1.0m conservation fence and tie into existing.
- 14 Opportunity to extend stairs into beach sand to account for erosion/storm events.



Image 1

Book exchange to be upgraded and integrated into the new seating wall.



Image 2

Access across the rocks to be closed and dune vegetation to be reinstated. New safer and direct beach access to be provided.



Image 3

Existing sub-frame appears in good repair. Investigations to understand the suitability of re-using the sub-frame proposed.



# TYPICAL STAIR SECTION

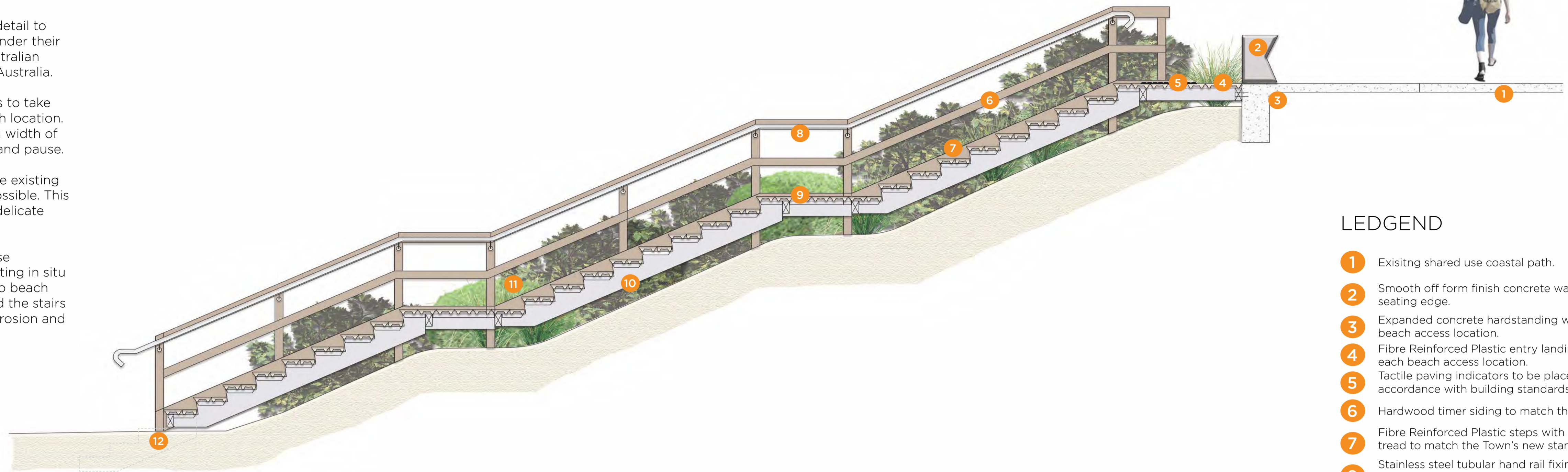
## DETAIL OVERVIEW

The Town have adopted a new beach access stair detail to provide safe, comfortable access to the coastline under their control. The new detail aligns with the relevant Australian Standards and the National Construction Code of Australia.

Flights of stairs will be grouped in comfortable sets to take up the level differences specific to each access path location. Each flight will be separated by a minimum landing width of 1.0m to provide users a place to comfortably pass and pause.

The new stair alignment will be placed on top of the existing and reuse viable sub-frame infrastructure where possible. This approach will help to minimise disturbance to the delicate dune system and surrounding vegetation.

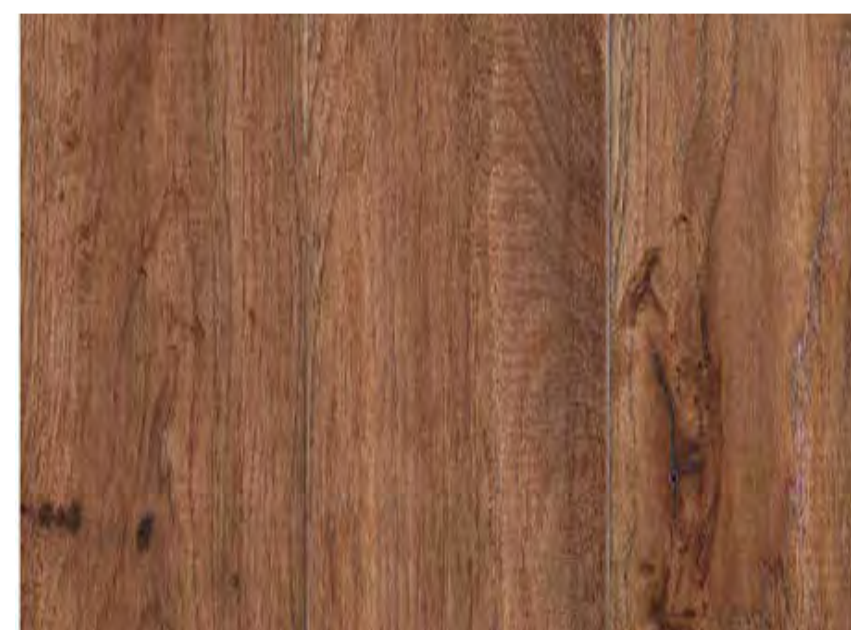
To further minimise disturbance, and better optimise construction costs, it is proposed to build over existing in situ concrete where possible. A comfortable arrival onto beach sand will be achieved through better alignment and the stairs extending into the sand to manage the effects of erosion and storm damage.



## LEDGEND

- 1 Existing shared use coastal path.
- 2 Smooth off form finish concrete wall, to 0.5m height with seating edge.
- 3 Expanded concrete hardstanding where viable to suit each beach access location.
- 4 Fibre Reinforced Plastic entry landing of various widths to suit each beach access location.
- 5 Tactile paving indicators to be placed at the top of the stairs in accordance with building standards.
- 6 Hardwood timber siding to match the Town's new standard detail.
- 7 Fibre Reinforced Plastic steps with 150mm risers and 320mm tread to match the Town's new standard detail.
- 8 Stainless steel tubular hand rail fixing to the hardwood timber siding to meet current building code standards.
- 9 Fibre Reinforced Plastic landings of various widths to suit each beach access location.
- 10 Marine grade ACQ treated pine subframe.
- 11 Embankment rehabilitated and stabilised with coastal plant species.
- 12 Opportunity to extend stairs into beach sand to account for erosion/storm events.

## MATERIALS PALLET



**Hardwood Timber**

Post and plank balustrades will be constructed from class 1 durability hardwood timber. Class 1 is the highest durability rating for timber. Sub-frame and in ground support posts will be constructed from ACQ treated pine.

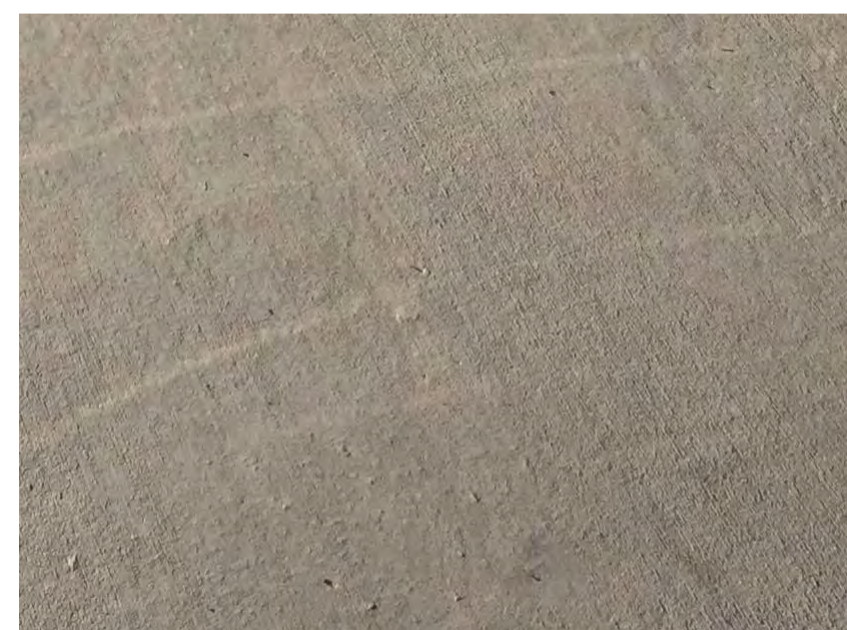
All timberwork to be in accordance with the relevant Australian Standards and the National Construction Code of Australia.



**Stainless Steel**

Fixtures and fittings such as handrails, drink fountains, bin enclosures and shower units will be constructed from 316 grade stainless steel unless noted otherwise.

Grade 316 has excellent corrosion resistance in a wide range of uses. Its main advantage is its increased ability to resist pitting and crevice corrosion.



**Poured Concrete**

Extensions to the shared use path and new hardstand areas will be constructed from N40 grade concrete.

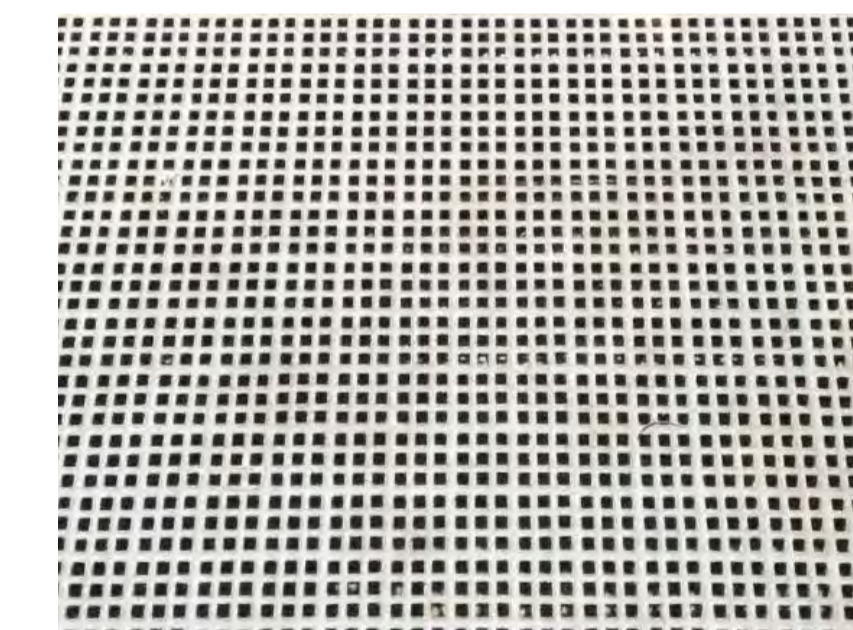
All concrete work to be in accordance with the relevant Australian Standards and the National Construction Code of Australia.



**Fibre Reinforced Plastic**

Stair tread and landings will be constructed from Fibre Reinforced Plastic. Fibre Reinforced Plastic has properties of being high-strength, durable and light-weight.

It is a common material used by the marine and leisure boat industry due to its favourable characteristics.



**Fibre Reinforced Plastic Micro-mesh**

Micro-mesh has maximum UV resistance and is a durable anti-slip surface that is comfortable for bare feet.

Micro-mesh is proposed for the lower section of **beach access path S15** to provide surfers safe and direct access to the water.



**Tactile Indicators**

Tactile indicator studs will be located at the top of each new beach access. These are designed to give warning of hazards in the continuous accessible path of travel and directional information to pedestrians who are visually impaired.