CASE STUDY

LANDSCAPE UPGRADE

LOCATION
Randwick City Council, New South Wales

JOB DESCRIPTION
La Perouse Coastal Walkway and Loop road

DATE:
2009 → 2012

REFURBISHING A HERITAGE SITE

The redevelopment of the La Perouse Headland in Randwick City Council, Sydney required special consideration of the landmark's historic and natural values.

BY NOEL CORKERY

LA PEROUSE HEADLAND IS AN AREA of cultural and natural values, thanks to its picturesque landscape and historical heritage. Located 14 kilometres south east of the Sydney CBD on the north shore of Botany Bay, the area is a favourite for tourists, scuba divers and history buffs.

However, years of heavy use and inadequate infrastructure had left it in poor condition. There was no parking control along 'The Loop' road that provides vehicle access around the headland.

While most of the headland is designated a national park to protect the heritage-listed sites, The Loop corridor is excluded and managed by Randwick City Council.

The Council decided to upgrade the road and parking, while constructing a new section of the Coastal Walkway to provide safe and comfortable access for pedestrians around the Headland. The Coastal Walk will ultimately allow pedestrian access along the whole length of coast between Bondi Beach and Botany Bay.

The design of the bollards aimed to capture the distinctive colours of the freshly exposed sandstone along the adjoining cliffs.

Council engaged landscape architecture firm Corkery Consulting to prepare a feasibility study and initial concept to upgrade the road and create a new section of Coastal Walk.

A more detailed design and documentation phase was then carried out by a Corkery-led consortium that included civil and structural engineers TTW, geotechnical engineers Douglas Partners and heritage consultants AHMS.

Together, the team developed the key design components, which included a 700-metre-long section of three-metre-wide coloured concrete path around the Headland – which would provide spectacular water views – and an upgrade to 800 metres of The Loop.

The Loop upgrade included the creation of a one-way section with reduced road width so as to lower speeds and improve traffic flows and the installation of two roundabouts to allow two-way traffic along a section adjoining a row of cafés.

These changes would also result in a more efficient parking layout for 220 vehicles. Furthermore, parking would

not be allowed at the entrance of The Loop to allow unobstructed ocean views.

A key part of the project was maintaining the spectacular views from the Headland. The steel crash barrier had to be replaced with an attractive element that was strong enough to stop vehicles, while allowing visitors to gain access from their parked cars to the new section of the Coastal Walkway.

The solution was the inclusion of 245 pre-cast concrete bollards that would not only form an attractive design element, but also provide seating along the Coastal Walkway.

The use of pre-cast concrete meant the dimensions, colour and texture could be precisely controlled. The design aimed to capture the distinctive colours of the freshly exposed sandstone along the adjoining cliffs, as well as the sandstone blocks used to construct the historic Watch Tower that sits atop the headland.

The high level of durability and minimal maintenance required made concrete the most suitable material for use in the very corrosive coastal environment.

Working in collaboration with the pre-cast concrete fabricators Danliz, samples were prepared that combined variations in aggregate type, cement colour pigments and surface texture. As the bollards were designed to withstand the impact of vehicles, the engineers specified N16 vertical bars and N12 ties combined with a 40 megapascal concrete mix.

All the precast elements were packed with foam inlays and delivered by crane truck, which allowed them to be placed at each area of installation. The delivery schedule was coordinated with the construction contractor to minimise on-site storage time and potential for theft.

Randwick City Council's $2.5m investment has created a public open space asset that will allow many thousands of visitors each year to safely enjoy the unique experience of La Perouse Headland. •••

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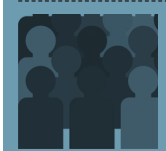
SNAPSHOT OF *Randwick*

Randwick was proclaimed a local government area on 22 February 1859. It was one of the first to be established in NSW after the City of Sydney. It became a city in 1990.

Located southeast of the Sydney CBD, the council's boundaries are substantially the same as they were in 1859. The area encompasses the well-known coastal suburbs Clovelly, Coogee and Maroubra.



Randwick Council has an estimated population of 134,000, which has grown by an average of 0.69 per cent every year since 2001.

The council area is about 37 square kilometres and includes landmarks such as Royal Randwick Racecourse, Centennial Park and Maroubra Beach.

The administration building is located in Randwick, while the council's depot is in Maroubra.

Randwick City employs around 750 full-time staff.

Approximately $1 million has been allocated to the Parks and Recreation Capital Works Program in 2012-2013.

THE HISTORY OF LA PEROUSE

The suburb and headland of La Perouse are named after the French maritime explorer Jean François de Galaup, the comte (count) de Lapérouse. He embarked on a global voyage of discovery in 1785 with two ships, the *Astrolabe* and the *Boussole*.

After travelling along the coasts of Chile, Russia, California and Alaska, the fleet entered Botany Bay on 24 January 1788, much to the surprise of the First Fleet, which had arrived only six days earlier and was soon to found Sydney in nearby Port Jackson.

The French fleet spent six weeks in the Bay to resupply, but was wrecked on a reef near the Solomon Islands shortly after. Accordingly, this area was named in honour of the famed explorer.

The 10.4-hectare headland is a significant cultural site for both Indigenous and European Australians. Most of the area has been deemed a national park to protect the heritage-listed cultural values.

Some of the artifacts include the La Perouse Memorial, Macquarie Watch Tower (built in 1822), the late 19th century Bare Island Fort and the former Telegraph Station (1882), which is now used as a museum.