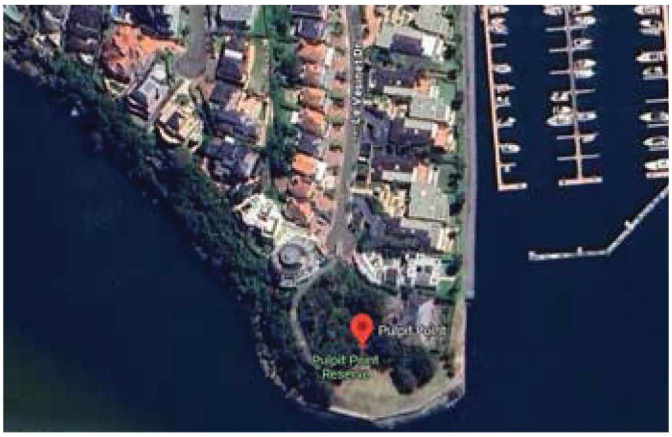
DMGRATE™

PPHOA - HUNTERS HILL MARINA DECKING REPLACEMENT

LOCATION

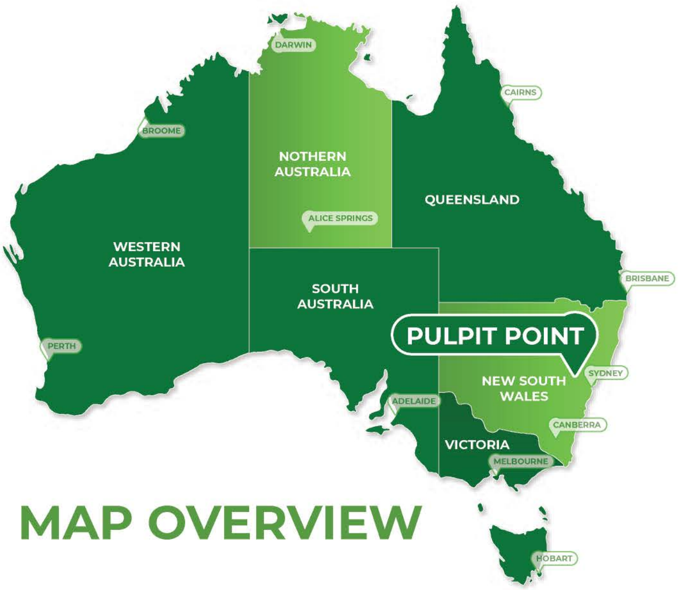
The area known as Fern Bay is owned by the NSW Government and managed by the NSW Roads & Maritime Services, which in turn has leased part of the bay to the Pulpit Point Home Owners Association (PPHOA) for the purpose of building a private Marina and a publicly accessed boardwalk. Both were completed in 1994.

The Pulpit Point Marina has 112 berths and they are assigned to property owners at Pulpit Point. It comprises 24 x 15 metre berths, 56 x 12 metre berths, 32 x 10 metre berths, 2 x Pump Out berths and 2 Visitor berths.



PROJECT TIMELINE

January 2024 - Construction Start
February 2024 - Construction Complete



MAP OVERVIEW

HISTORY

Hunters Hill, named after Captain John Hunter, is Sydney's oldest suburb, preserving the early colonial ideal of a private residential retreat. Initially inhabited by the Wallumategal people, the area saw European settlement in the 1830s, with notable figures like Mary Reibey and John Tawell. It became a popular site for wealthy landowners and entrepreneurs, with many immigrants, including Italians and French, contributing to its development. The suburb grew through the 19th century with stone buildings, villas, and a strong sense of community, highlighted by the establishment of a municipality and significant infrastructure like ferries and bridges.

PROJECT

DM Composites was selected as the preferred provider for the supply and installation of FRP gratings for a significant boardwalk re-decking and the ongoing maintenance of the floating marina at Hunters Hill, located at Pulpit Point. This project encompasses the full scope of the re-decking process, including the removal of existing materials, preparation of the underlying structure, and installation of high-performance FRP gratings that offer enhanced durability, strength, and resistance to harsh environmental conditions typical of marine environments.

KEY FEATURES

Our involvement in this project underscores DM Composites' expertise in providing innovative solutions for public infrastructure, specifically in the replacement of traditional materials with advanced FRP (Fiber Reinforced Polymer) alternatives. The FRP gratings chosen for this project are engineered to withstand the demands of a floating marina, offering corrosion resistance, minimal maintenance requirements, and long-term performance in the face of exposure to moisture, saltwater, and high foot traffic.

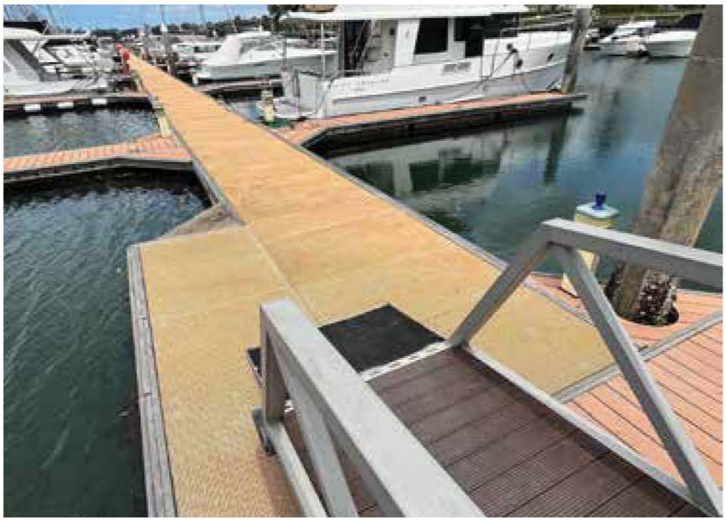
As part of the project, DM Composites will also contribute to the ongoing maintenance of the floating marina by ensuring that the FRP gratings are properly integrated into the existing structure, further enhancing the longevity and functionality of the marina. This will involve regular inspections, maintenance protocols, and timely replacements as needed, ensuring that the infrastructure remains safe, functional, and visually appealing for all users.

DM Composites' commitment to sustainability and environmental protection is central to the execution of this project, as we adhere to all local regulations and incorporate environmentally responsible practices throughout the re-decking and maintenance phases. Our comprehensive approach ensures the preservation of the surrounding marine environment while delivering a high-quality solution that meets the specific needs of the Pulpit Point marina.

CHALLENGES AND SOLUTIONS

The project presented several challenges, primarily related to the unique conditions of the the surrounding environment. One of the main obstacles was ensuring the durability and stability of the FRP gratings in a marine environment subject to saltwater exposure, and high humidity. Traditional materials like timber or steel are prone to corrosion and deterioration in such conditions, making FRP an ideal alternative.

To overcome these challenges, DM Composites conducted extensive site assessments and collaborated closely with structural engineers to ensure the correct anchoring and support systems were in place. We selected high-grade FRP materials that offer superior corrosion resistance, coupled with a robust installation methodology that ensured secure attachment and alignment with the existing marina structure. Our team also implemented advanced anti-slip surface treatments on the gratings to prevent accidents in wet conditions.



Another challenge involved coordinating the installation process without disrupting marina operations, which required a precise project schedule and efficient execution. By carefully managing resources and employing a phased installation approach, we were able to minimize disruptions to marina users and complete the re-decking work within the project timeline.

OUTCOME

The project has been a resounding success, with the installation of FRP gratings enhancing the safety, functionality, and aesthetic appeal of the floating marina at Pulpit Point. The FRP materials have proven to be highly durable, offering significant resistance to the corrosive effects of saltwater, and providing a long-lasting solution with minimal ongoing maintenance needs. The boardwalk is now better equipped to withstand harsh environmental conditions while providing a safe and accessible pathway for marina users.

The marina's overall resilience and longevity have been significantly improved, with the ongoing maintenance aspect ensuring that the structure remains in optimal condition for years to come. The successful execution of this project has not only reinforced DM Composites' reputation for delivering innovative and sustainable infrastructure solutions but also provided the Hunters Hill community with a modern, durable, and environmentally friendly marina facility.

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