DM COMPOSITES

DMWALK™

SHARPES BEACH FRP VIEWING PLATFORM

PROJECT BACKGROUND

Sharpes Beach is a highly exposed coastal environment subject to salt spray, humidity, and harsh marine conditions. These conditions often cause premature corrosion in traditional materials such as steel or aluminium.

To ensure long-term durability and reduce maintenance costs, the viewing platform structure was designed using Fiber Reinforced Polymer (FRP) structural components, offering exceptional resistance to corrosion and environmental degradation.

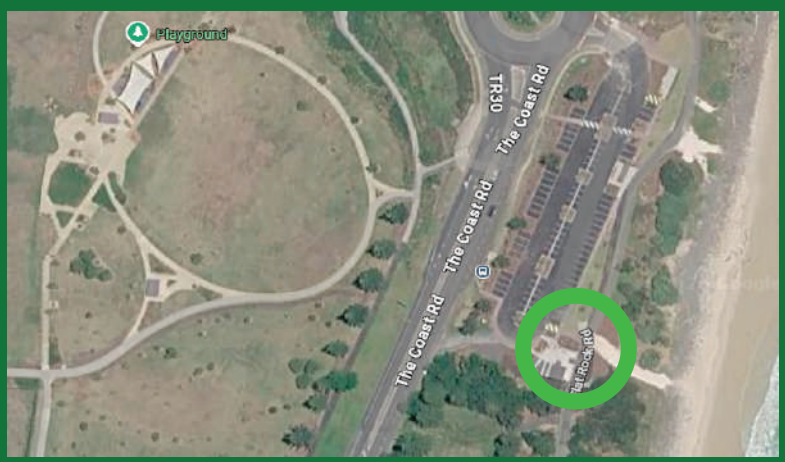
The platform provides a safe and accessible vantage point for visitors, allowing views across the beach and surrounding coastline while seamlessly integrating with the surrounding pathways and public spaces developed as part of the precinct upgrade.

LOCATION:

Sharpes Beach, Skennars Head (NSW)

CONSTRUCTION COMPLETION:

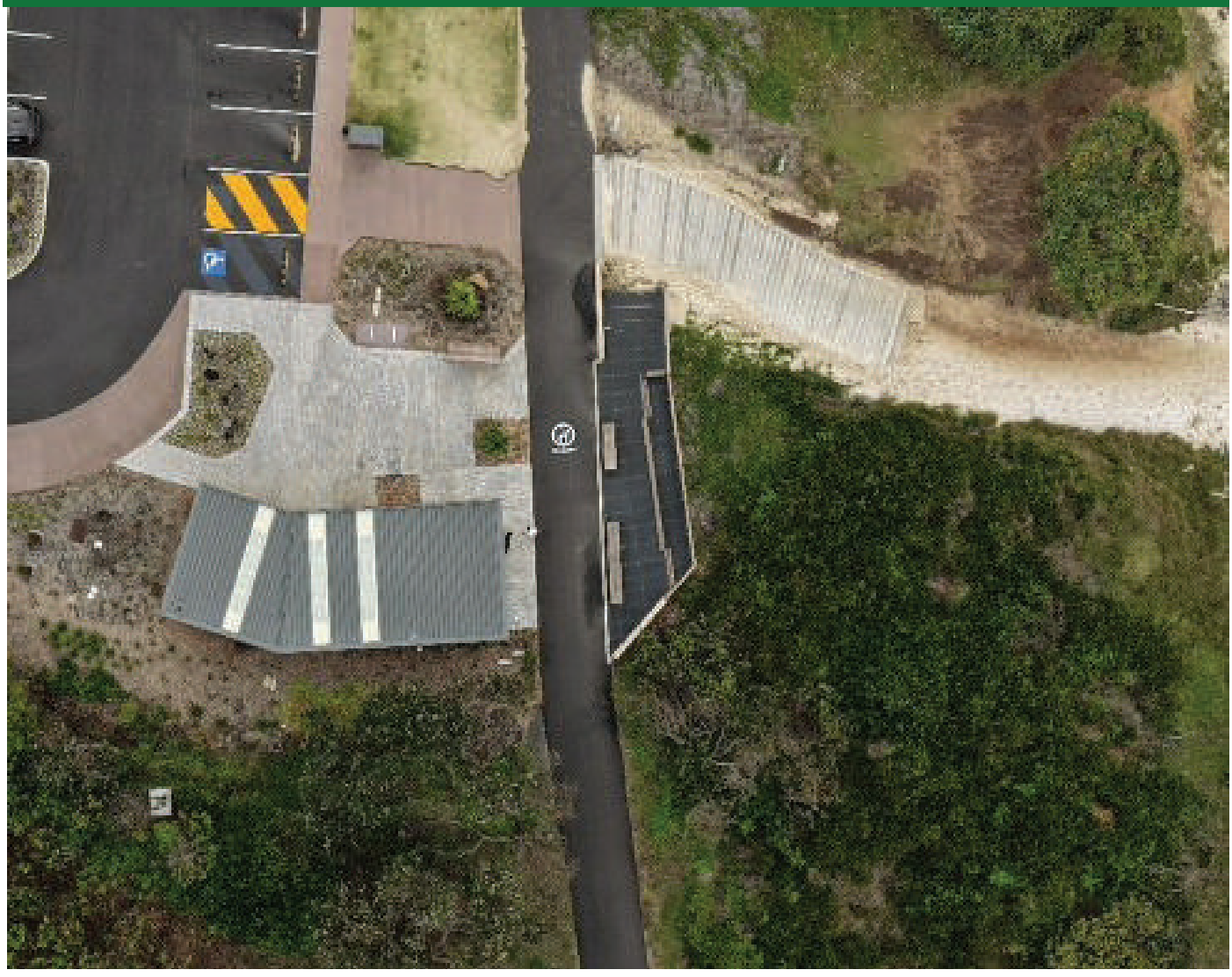
February, 2026



DM COMPOSITES' ROLE

DM Composites delivered a design and supply package for the viewing platform structure including:

- **Structural design of the FRP platform framing system and footings**
- **Engineering calculations in accordance with Australian Standards**
- **Supply of FRP structural beams and deck support members**
- **Supply of FRP grating deck panels**
- **Stainless steel structural connection hardware**
- **Detailed fabrication drawings and manufacturing documentation**



STRUCTURAL DESIGN

The platform structure was engineered using DM Composites' pultruded FRP structural beam system DMBEAM, providing high strength while maintaining a lightweight modular design.

Structural Configuration:

- **FRP primary beams**
- **Secondary FRP beams**
- **FRP grating deck support system**
- **Stainless steel connection brackets and structural angles**

The platform framing was designed to accommodate architectural deck finishes installed by others while maintaining structural integrity and load capacity for public use.

This modular system allows the platform to be fabricated off-site and assembled efficiently on-site with minimal disruption to the surrounding environment.

ENGINEERING AND COMPLIANCE

The structure was engineered to comply with relevant Australian Standards including:

- AS/NZS 1170 – Structural Design Actions
- AS 1657 – Fixed Platforms, Walkways and Stairways
- AS 2156 – Walking Tracks
- National Construction Code (NCC) safety requirements for public infrastructure

Wind loading calculations were based on Region A5 conditions with a design wind speed of 45 m/s, ensuring the structure performs reliably in coastal environments.

All fabrication tolerances and structural connections were documented in the DM Composites fabrication drawings to ensure precise manufacturing and installation.

MATERIAL ADVANTAGES

FRP was selected as the primary structural material due to its suitability for coastal infrastructure projects.

Key benefits include:

- Corrosion resistance in marine environments
- Lightweight structural components
- High strength-to-weight ratio
- Low maintenance and long design life
- Fast installation with modular construction

Unlike traditional materials, DM Composites FRP solutions do not require protective coatings or ongoing repainting, significantly reducing lifecycle costs for councils and asset owners.

PROJECT OUTCOMES

The completed viewing platform now forms a key feature of the upgraded Sharpes Beach precinct, offering visitors a safe and elevated location to enjoy panoramic views of the coastline.

The use of FRP structural components ensures the platform will maintain its structural integrity and appearance despite the challenging coastal conditions.

This project demonstrates DM Composites' capability to deliver durable, corrosion-resistant structural solutions for public infrastructure in coastal environments, supporting councils and government agencies in delivering long-lasting community assets.

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