# Stormwater Management Report

# Long Reef Golf Course, Collaroy



Prepared by Orion Group

Long Reef Golf Club

May 2025



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### **Document Control**

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## **Executive Summary**

Orion Group has been engaged by Long Reef Golf Club to prepare Civil Engineering Plans and an accompanying Stormwater Management Report to support the Development Application for an upgrade to the Long Reef Golf Club located on Anzac Avenue, Collaroy NSW 2097.

This report outlines the site-specific strategy for managing the stormwater quantity and quality to achieve the requirements and targets set out in the Northern Beaches Council Development Control Plan and Northern Beaches Council Water Management Development Policy.

This report is to be read in conjunction with the complementary Civil Engineering Plans, prepared by Orion Group for the proposed development.

# 1. Introduction

Orion Group has been engaged by Long Reef Golf Club to prepare a Stormwater Management Report in accordance with the Northern Beaches Council requirements to support a planning proposal for the proposed development at Long Reef Golf Club.

### 1.1 Site Description

The proposed upgrades to the existing Long Reef Golf Club is located on Anzac Avenue, Collaroy NSW 2097 on Lot 1, DP 1144187.



Figure 1 Site Locality Plan (Imagery courtesy of MetroMap© October 2024)

The site encompasses approximately 0.37ha and is currently functioning as a golf club. The topography of the site is predominantly gently sloping, descending from the north-western corner near the intersection of the driveway and Anzac Avenue toward Fishermans Beach, with a gradient of 2.6% observed in the existing car park. Along the north-eastern boundary, the slope becomes steeper, reaching a gradient of 15% as it descends toward the sand.

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### 1.2 The Proposed Development

### 1.2.1 Project Description

Alterations and additions to the existing LRGC Club House to improve facilities for members and the wider community. Works will include partial demolition of roof and walls with alterations and additions to the existing one (1) storey building to create a refurbished two-storey clubhouse with provision of two (2) new accessible car spaces. Internal works will create the following areas of use:

#### Ground Floor

- new lobby entry space
- three (3) Members & Community Multi-use Rooms
- two (2) bar areas
- members lounge with external terrace area
- commercial kitchen
- dining area
- amenities
- office spaces
- storage rooms
- keg room
- kiosk
- covered outdoor terrace dining area; and
- garden seating area.

#### First Floor

- lobby and entry area
- back of house space
- Members & Community Multi-use Room
- bar lounge
- amenities
- members lounge and terrace area; and
- two (2) outdoor terrace areas

#### 1.2.2 Site Location

The Site is positioned within the suburb of Collaroy, which forms part of the Northern Beaches Local Government Area (LGA). The Site is located at the eastern end of Anzac Avenue, Collaroy. The Site is located within Griffith Park which includes the Long Reef Golf Course (LRGC), Griffith Park Playing Field and amenities building, Collaroy Tennis Club, Long Reef Surf Lifesaving Club and associated facilities.

The Site is zoned RE1 Public Recreation and is subject to the provisions of Warringah Local Environmental Plan 2011. The Site is situated on the southern side of Anzac Avenue between Seaview Parade to the west and Fisherman's Beach to the east.

In its current state, the Site comprises the existing LRGC Club House which is a single storey rendered brick building with hipped tile roof and part flat metal roof. The Club House has been subject to various additions and extensions over the years and is no longer fit for purpose. There is an existing at grade parking area to the west of the existing building that will remain largely unchanged.

The Site adjoins Fisherman's Beach to the north and east, open reserve and Fisherman's Beach Boat Ramp to the east, an access road to car parking along the foreshore, Pro Shop and golf course to the south and southwest and low-density residential housing to the north-west.



The wider Site context is a combination of recreational and sporting facilities within Griffith Park, beach and intertidal areas, and low-density residential development.

The proposed site layout is shown in Figure 2. The civil plans by Orion Group are enclosed in Annexure A.



#### Figure 2 Proposed Site Plan

### 1.3 Objectives

The purpose of this stormwater management report is to outline and address any potential stormwater impacts from the proposed development submission on the surrounding properties and beachfront.

The key stormwater management objectives for the development include the following:

- To direct stormwater runoff to the golf course drainage system without adversely impacting on the adjoining downstream beachfront.
- To ensure the efficient and effective planning, management and maintenance of the golf course's existing and future stormwater systems and reduce environmental and property damage.
- Minimise the potential impacts of development and other associated activities on the aesthetic, recreational and ecological values of our local beaches.

# 2. Water Quality Design

As part of the water quality design for the site upgrade to the existing stormwater management system (refer to Annexure B for the historical site catchment plan by Patterson Britton & Partners Pty Ltd.), it is proposed that runoff from stormwater and roof areas be directed to an existing pond within the golf course. This pond, integral to the golf course's established stormwater management strategy, will enable the reuse of collected water for irrigation, supporting sustainable water management practices.



# 3. On-site Detention

For the water quantity design, it is proposed that no on-site detention (OSD) be implemented, as the site is an upgrade of the existing development and may be influenced by tidal events due to its beachfront location. The existing stormwater management strategy will be retained to ensure consistency with the site's current drainage approach, which has been designed to accommodate the unique conditions of the area.



# 4. Existing Stormwater System



### 5. Summary

This report has outlined the proposed stormwater management strategy for the development aligns with the existing strategy. Stormwater and roof runoff will be directed to an existing pond within the golf course, supporting sustainable water reuse for irrigation. Due to the site's beachfront location and potential tidal impacts, no on-site detention is proposed. The existing stormwater management approach will be maintained to ensure consistency with the established drainage strategy.

Yours sincerely,

Main

Stephen Brain
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### 6. References

Australian Rainfall and Runoff: A Guide to Flood Estimation, Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), Commonwealth of Australia (Geoscience Australia) 2019

Northen Beaches Council Engineering Design Code

Northern Beaches Council Water Management for Development Policy, February 2021

Annexure A

Civil Engineering Plans