

Integrated Water Cycle Management Report

Mirvac Residential – COBBITTY – T3 DA03b

Lot 319 in DP 1289777, Lot 3102 in DP 1223680 and
Lot 3 in DP 1276275



03/05/2024

Mirvac

Revision A

24-0148-01

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Document Control

Revision	Prepared	Reviewed	Approved	Date	Description
Rev A	David Healy	Mariano Polisciuk	Mariano Polisciuk	03/05/2024	First Issue
Rev 00	David Healy			23/04/2024	Uncontrolled - Issued for Information

1 Introduction

This Report has been prepared to demonstrate that the IWCM controls proposed under this Development Application (T3 DA03b) are in accordance with the submitted and peer reviewed IWCM Masterplan previously prepared for the overall subject site.

1.1 Site Description

The subject site is located within the Camden Council LGA and sits centrally within the Masterplan prepared for the site previously known as Lot 2005 (DP 1162239) No. 531 Cobbitty Road. Since the masterplan has been prepared the site has been subdivided to create a number of residue lots under DP 1276275.

This Development Approval aims to provide some of the permanent water quantity and water quality management infrastructure proposed in the Masterplan IWCM Report (Orion Group Reference 21-0258-04) and IWCM and FEM Report (Orion Group Reference 21-0258-08).

The site extents for this Development approval are shown in the figure below:

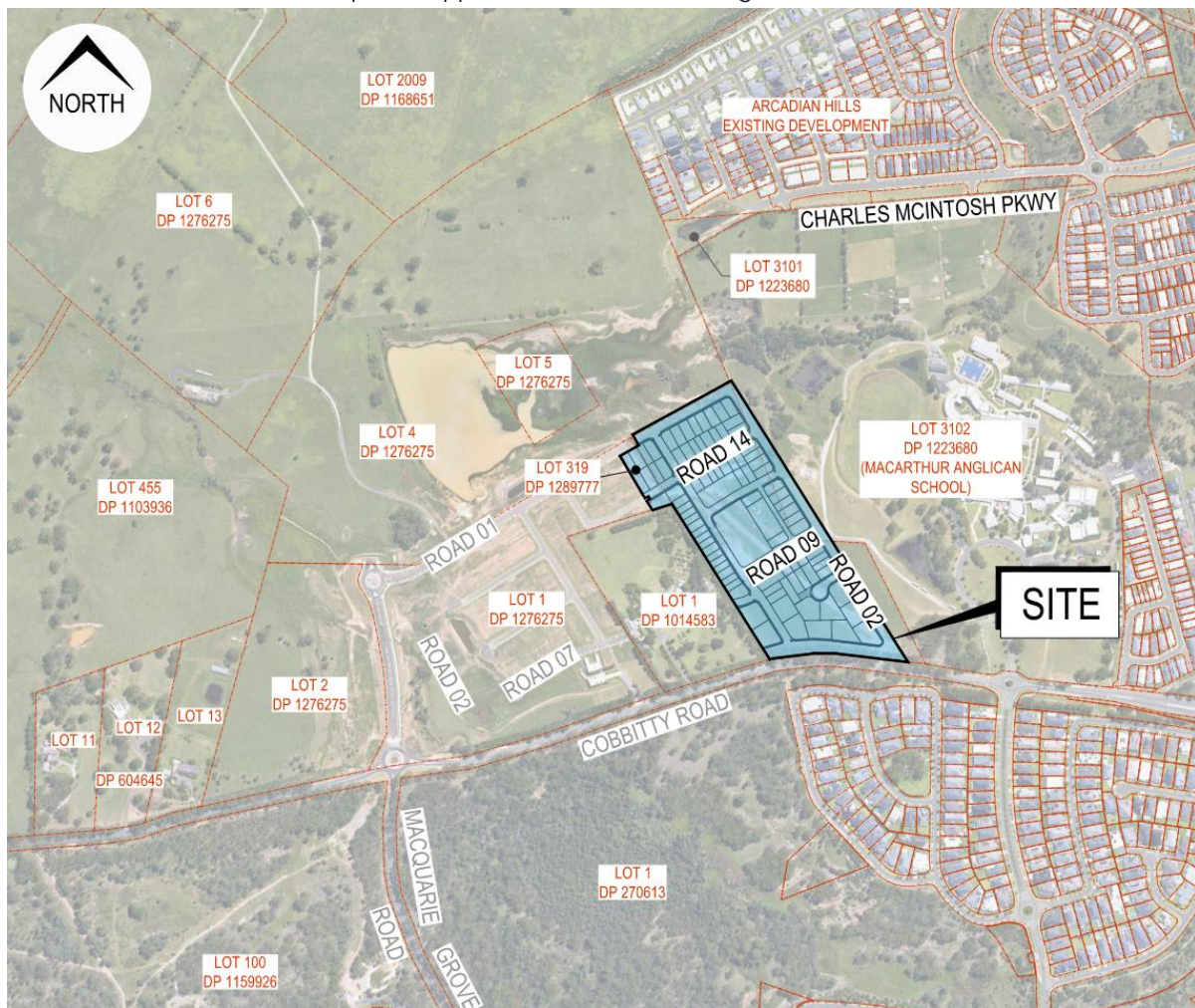


Figure 1 – Site Extents (Imagery courtesy of Metromap ©)

1.2 Proposed IWCM Infrastructure

The proposed Development will utilise the water quantity and quality infrastructure constructed under DA2023/461/1 (Stage 2).

2 Water Quantity Infrastructure

2.1 Required Water Quantity Infrastructure (Masterplan)

As documented under the Mirvac Masterplan IWCM and FEM Report (Orion Group Reference 21-0258-08) prepared for DA2023/461/1, the following infrastructure is required to meet the pre-versus-post no net negative design objectives.

Table 1 - Masterplan IWCM Water Quantity Controls

Storage Structure	1% AEP WSL (m AHD)	1% AEP Volume to WSL (m ³)	Outlet Structure Configuration
Lake	74.311	103,356	First Stage - 2 x 825 Ø RCP Second Stage - 8 x 1.2 x 1.2 Surface Inlet Pits @ RL 73.35 Third Stage - Weir – 25m @ RL 74.05
Playing Fields	72.339	14,800	525 Ø RCP Weir 1 – 3.6m @ RL72.1

2.2 Provided Water Quantity Infrastructure (Proposed DA)

No water quantity device is proposed for this specific Development Application, the low flows will be directed via existing stormwater pipe constructed as part of the Tranche 3 Stage 1 development (Orion Group Reference 21-0258-09).

The high flows will be split and discharged into the Riparian Corridor (to be constructed under DA2023/461/1) with the use of a splitter pit located at the northern end of the site on Road 1. These flows will be controlled by the infrastructure that will be constructed as part of DA2023/461/1 DA.

Refer to Road and Drainage Civil Engineering drawing set for indicative drainage layout and location of splitter pit and existing pipe infrastructure.

3 Water Quality Infrastructure

3.1 Required Water Quality Infrastructure (Masterplan)

As documented under the Mirvac Masterplan IWCM and FEM Report (Orion Group Reference 21-0258-08) prepared for DA2023/461/1, the following infrastructure is required to meet the urban development water quality management objectives for the site.

Table 2 - Masterplan IWCM Water Quality Controls

Catchment	Controls
PD03	1 x GPT & 850 m ² Biofiltration System

3.2 Provided Water Quality Infrastructure (Proposed DA)

No water quality device is proposed for this specific Development Application, the low flows will be directed via existing stormwater pipe to the existing GPT constructed as part of the Tranche 3 Stage 1 development (Orion Group Reference 21-0258-09).

The water will be treated by the biofiltration system as listed in Table 2.

4 Conclusion

This report demonstrates that the IWCM controls proposed under this Development Application (T3 DA03b) are consistent with the IWCM Masterplan previously prepared and approved for the overall subject site. This development is also consistent with the IWCM and FEM Report prepared for DA2023/461/1 and hence satisfy the DCP requirements.