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HYDRAULIC SERVICES
INTEGRATED WATER MANAGEMENT PLAN
Campbelltown Arts Centre

03rd March 2026

Rev #	Date	Description
01	14th January 2026	Integrated Water Management Plan
02	27th January 2026	Integrated Water Management Plan
03	03rd March 2026	Integrated Water Management Plan

APPROVALS

Rev #	Author	Status	Reviewer	Approver
01	L. Stalker	Superseded	J. Skubevski	J. Skubevski
02	L. Stalker	Superseded	J. Skubevski	J. Skubevski
03	L. Stalker	Current	J. Skubevski	J. Skubevski

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Contents

1 INTRODUCTION

This Water Management Plan has been prepared by WSce on behalf of Campbelltown City Council (CCC or "Council") and is submitted to the Department of Planning, Housing and Infrastructure (DPHI) in support of a State Significant Development Application (SSDA) for the expansion of the existing Campbelltown Arts Centre (CAC) on land at 1 Art Gallery Road, Campbelltown (the site).

This SSDA seeks approval for:

- Demolition of parts of the existing buildings and structures on site.
- Expansion and redesign of the existing CAC, including the following elements:
  - Reorientation of the building towards Queen Street in the north to create a more substantial, welcoming and visible connection to the City Centre.
  - Addition of a new 350 seat theatre with back of house facilities.
  - Providing rehearsal spaces, creative and educational workshop areas, and community facilities.
  - Provision of ancillary artists' residences.
  - Provision of commercial spaces including a café/restaurant, retail, and conference facilities.
  - Provision of expanded gallery spaces for the exhibition of artists' collections and dedicated storage for loaned artworks and collections.
  - Landscaping works including provision of feature planting and paving.
  - Expansion and reconfiguration of at grade car parking.
  - Extension and augmentation of services and infrastructure as required.

For a further detailed project description, please refer to the Environmental Impact Statement prepared by Colliers Urban Planning, the Architectural Drawings prepared by FJC studio, and the other accompanying technical documents that form part of the State Significant Development Application.

2 PROJECT DESCRIPTION

The site is located at 1 Art Gallery Road, Campbelltown and is legally identified as Lot 500 DP777387, Lot B DP157318, Lot 1 DP1038779, Lot 2 DP259807 and Lot 3 DP259807, as illustrated in the Site Aerial at Figure 1. It is situated within the Campbelltown local government area (LGA) immediately southwest of the Campbelltown City Centre and railway station. The existing development on site consists of the current Campbelltown Arts Centre, characterised by a double storey built form with open space and an at-grade carpark.

The site is bounded by Art Gallery Road to the west, Narellan Road to the south, Oxley Street to the east and Camden Road to the north. The northern part of the site is separated from the southern portion by Art Gallery Road as shown in Figure 1. The site comprises a total site area of approximately 18,877m2.

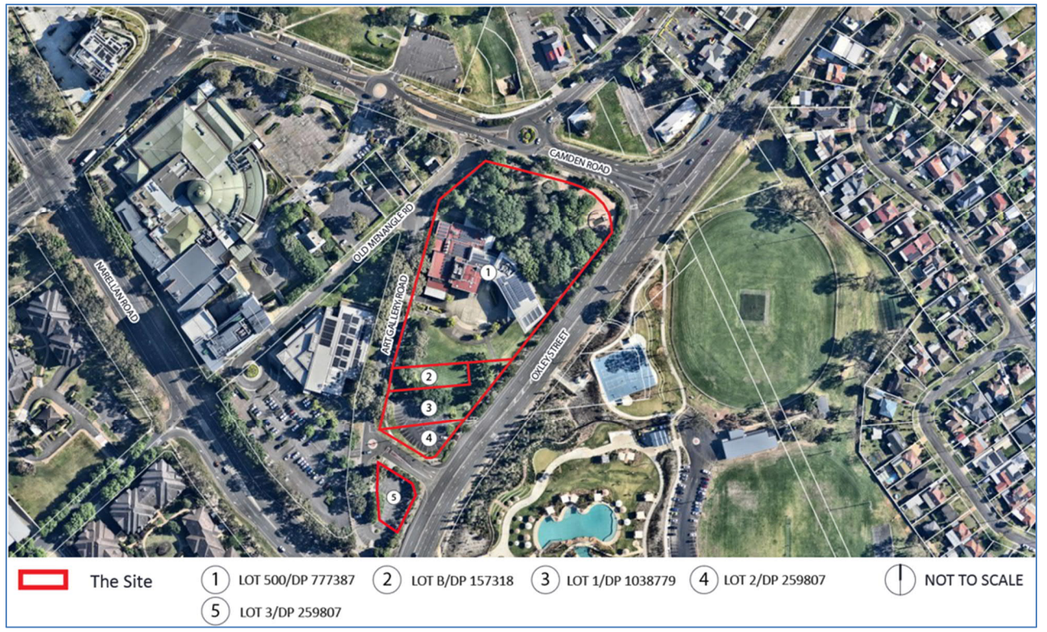

Figure 1: Aerial image of site (Colliers Urban Planning)

3 SEARS DECLARATION

This integrated Water Management Plan has been prepared in response to the Secretary's Environmental Assessment Requirements (SEARs) for the proposed development dated 7 August 2024 for SSD-74509208. Specifically, this report has been prepared to respond to those SEARs outlined in Table 1 below.

Secretary's Environmental Assessment Requirements relevant to this Report

Table 1: Sears Declaration

SEAR	SEAR Description	Section this is addressed and summary of response
14 – Water Management	Outlines the water related servicing infrastructure required by the development (informed by the anticipated annual and ultimate increase in servicing demand) and evaluates opportunities to reduce water demand (such as recycled water provision)	Section 4 and Section 5.
14 – Water Management	Details the proposed drainage design (wastewater) for the site including any on-site treatment, and nominated discharge points	Section 4.3.2.

4 HYDRAULIC SERVCES DEMAND CALCULATIONS

WSce assume Sydney Water to have existing demand information of their utility mains readily available for which they can utilise to determine if there are any required amplifications as a result of the proposed development.

This section of the report which calculates the demands for the various hydraulic utility services references the following documents and utilises the methods described within:

- Sydney Water Non Residential water usage guideline

4.1 DRINKING WATER SUPPLY DEMAND CALCULATIONS

The average daily demand for the proposed Campbelltown Arts Centre has been estimated in Table 2 and Table 3 below.

Table 2: Average Daily Water Demand

Development Type	Metric Unit	Average Demand (L / metric unit / day)
Community centre, library	Square Meter	0.8

Table 3: Average Daily Water Demand

Total Units	Average Demand (L/ metric unit / day	Total Average Daily Water Demand (kL)
7,937m^2	0.8	6.76

The following flows for the entire site have also been calculated:

- Probable simultaneous demand – 1.67 L/sec (subject to architectural development)
- Fire flow for hydrants – 20 L/sec
- Fire flow for hose reels – 0.66 L/sec
- Fire flow for sprinklers and drenchers – TBC – BCA Certifier and Fire Safety Engineer required to determine requirement.

4.2 SEWER DISCHARGE CALCULATIONS

To determine the average daily sewer discharge for the proposed development, an estimate has been made by adopting an 80% water to sewer discharge factor as advised by Sydney Water on previous projects. This exceeds the standard 60% factor as referenced in the NSW Water Directorate

The calculations for the average daily sewer discharge have been included in Table 4 and Table 5.

Table 4: Average Daily Sewer Discharge

Development Type	Metric Unit	Average Demand (60% of Water Average Demand) (L / metric unit / day)
Community centre, library	Square Meter	0.64

Table 5: Average Daily Sewer Discharge

Total Units	Average Demand (L/ metric unit / day	Total Average Daily Water Demand (kL)
7,937m^2	0.64	5.08

4.3 UTILITY SERVICE CONNECTIONS

4.3.1 WATER

The existing Performing Arts Centre site has access to two Sydney water mains as identified below and in Figure 2.

- 250mm water mains in Art Gallery Road (Northern side)
- 100mm water mains in Art Gallery Road (Southern side)

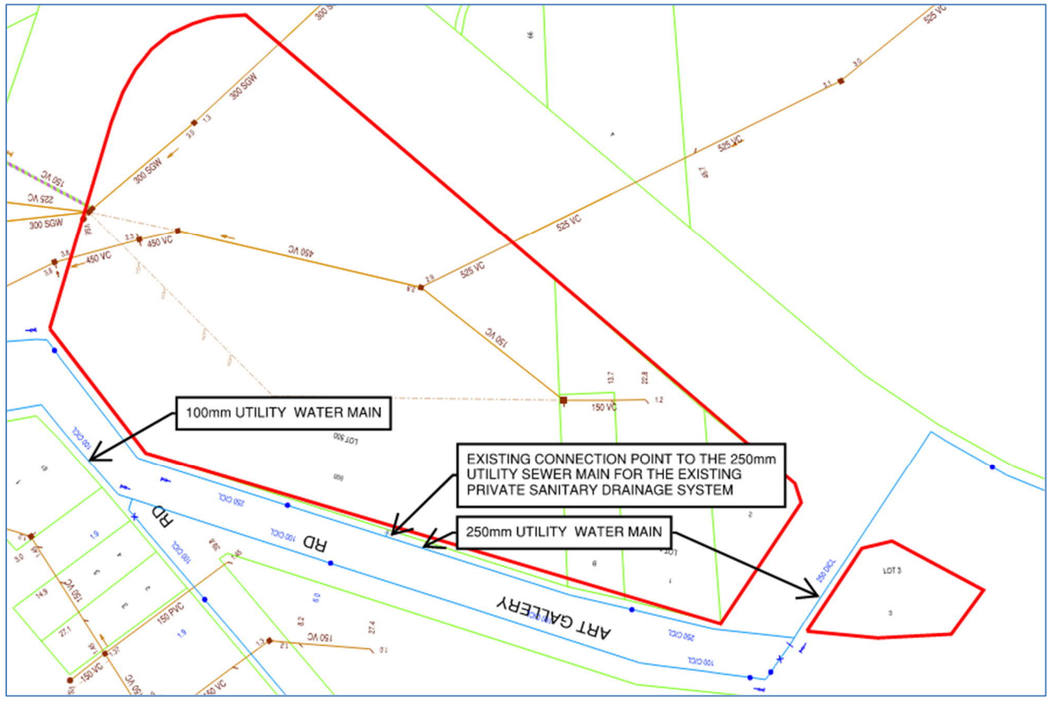

Figure 2: Utility water mains (Source: BYDA)

The site currently has one existing connection to the 250mm utility water main described above and it is the intent of the project to retain and utilise this existing connection. The existing potable water service connection is proposed to be retained and utilised for the development. The available connection capacity will be confirmed by a Water Services Coordinator as part of the Sydney Water Section 73 approval process.

Preliminary investigations, including a pressure and flow test application, indicate that sufficient pressure and flow are available to meet the proposed development demand. No servicing constraints have been identified at the time of writing this report.

4.3.2 SEWER

The existing site has access to two Sydney Water sewer main that reticulate through the site to Oxley Street as identified below and in Figure 3:

- 450mm diameter utility sewer main that reticulates within middle of the site from the Southern boundary to the Northern boundary.
- 300mm diameter utility sewer main within the site near Camden road (Northern side).

The site currently gravity drains towards the 450mm utility sewer main near Camden Road (shown by the Figure 3). The existing sewer service connection is proposed to be retained and utilised for the development. Final confirmation of the connection capacity will be completed by a Water Services Coordinator and will be subject to Sydney Water's Section 73 application process.

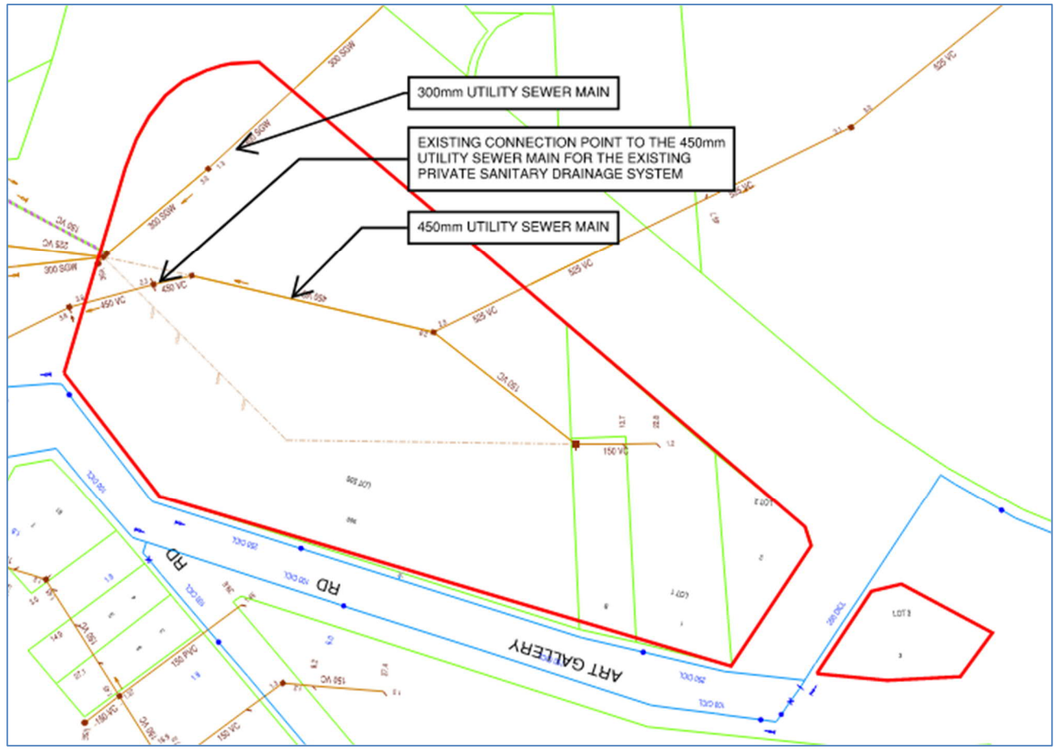

Figure 3: Existing utility mains surround the site (Source: BYDA)

There are no proposed diversions associated with the existing sewer, rather the project planning is incorporating the required clearances and Sydney Water requirements with retaining the current location of the sewer.

The sanitary drainage systems infrastructure will collect and drain wastewater from fixtures within the proposed theatre and supporting facilities, as well as from any trade-waste pre-treatment devices. Following discussion with Campbelltown Council, the workshop areas and artist residency spaces will be provided with pre-treatment devices to manage plaster and oil pant waste streams.

5 WATER USAGE REDUCTION

5.1 LOW-FLOW TAPS

Where possible, drinking water usage will be reduced through the use of low flow taps and sanitary

Fixtures as specified by the architect, typically using the following flow rates:

- Shower 9.0L/min,
- Basin 4.5L/min,
- Sink 4.5L/min.

5.2 WATER METERING

The development will be metered with utility owned water meters at the boundary and privately owned (and read) sub meters shall be provided at water supplies to the kitchen and rainwater tank as required. These water meters will have the capability for connection to BMCS via pulse read-out and therefore can be water demand and leak monitored.

5.3 RAINWATER REUSE

The rainwater harvesting system will supply the site wide irrigation system as required, provided with a drinking cold water top up as required for periods of low rainfall.

5.4 HYDRANT PUMP TESTING

The proposed hydrant test water will reticulate to the rainwater storage tank, although is subject to the design finalisation.