

19-23 Rosalind Street, Cammeray NSW

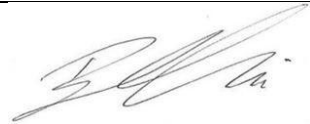
INTEGRATED WATER MANAGEMENT PLAN AND STORMWATER MANAGEMENT PLAN



Doc No:
Revision:
Client:

J1442-CIV-RPT-0002[F]
F Date: 20/02/2026
Perifa Rosalind Development Pty Ltd.

Document Control Record

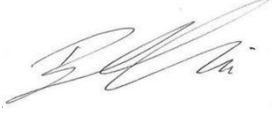
Document Information					
Document Title		19-23 Rosalind Street, Cammeray NSW: INTEGRATED WATER MANAGEMENT PLAN AND STORMWATER MANAGEMENT PLAN			
Document Number		J1442-CIV-RPT-0002[F]			
Revision History					
Current Revision:		F			
Rev.	Date	Details	Author	Verifier	Approver
F	20/02/2026	Re-Issued for Submission	LF	BA	BA
E	30/01/2026	Re-Issued for Submission	LF	BA	BA
D	16/01/2026	Re-Issued for Submission	LF	BA	BA
C	15/01/2026	Issued for Submission	LF	BA	BA
B	17/12/2025	Re-Issued for Information	LF	BA	BA
A	14/12/2025	For Client Review	LF	BA	BA
Filepath					
J:\Active Projects\J1401 To J1500\J1442 - PER - 19-23 Rosalind Street, Cammeray\09-Doc_WRK\02-RPT\Civil\J1442-CIV-RPT-0002[F] Integrated Water Management Plan And Stormwater Management Plan.Docx					
Document Approval					
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Signature			Signature		

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1.0 Consultant Declaration Form

CONSULTANT DECLARATION

PROJECT DETAILS	
PROJECT NAME	
Application number	SSD-96505456
Address of subject land	19-23 Rosalind Street, Cammeray
Lot / DP	SP4657, SP5218 and SP16181
APPLICANT DETAILS	
Applicant name	Perifa Rosalind Development Pty Ltd
Applicant address	Level 7/111 Elizabeth Street, Sydney
REPORT DETAILS	
Name of report this declaration relates	J1442-CIV-RPT-0002[E] Integrated Water Management Report
Report reference no.	J1442-CIV-RPT-0002[E]
Report date	31/01/2026
Company name (inc. ABN / ACN)	78 617 857 235
Author name	Billy Adzioski
Author qualifications	Civil Engineer
Author address	level 5/131 Macquarie St, Sydney NSW 2000
DECLARATION BY CONSULTANT	
Name	Billy Adzioski
Registration no.	3142944
Organisation registered with	Engineers Australia
Declaration	<p>The undersigned declares that J1442-CIV-RPT-0002[E] Integrated Water Management Report:</p> <ul style="list-style-type: none"> has been prepared in accordance with the following policy, guidelines, or legislative requirements: <ul style="list-style-type: none"> North Sydney Development Control Plan (DCP) 2013 State Environmental Planning Policy (biodiversity and conservation) 2021 WaterNSW NorBE Guideline AS/NZS 3500.3:2025 Plumbing and drainage Stormwater contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the Integrated Water Management Report relates; does not contain information that is false or misleading; identifies and addresses the relevant Planning Secretary's environmental assessment requirements (SEARs) for the project; identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments to which the Integrated Water Management Report relates; contains a consolidated summary of the proposed or necessary mitigation measures
Signature	
Date	20/02/2026

2.0 Introduction and Declaration

2.1 Introduction

This Integrated Water Management Report (IWMR) has been prepared by Innovis on behalf of Perifa Rosalind Development Pty Ltd (Perifa) to assess the potential environmental impacts that could arise from the construction of a seniors housing development (the development) at 19-23 Rosalind Street, Cammeray (the site). This report supports the assessment of the proposed development under Part 4 of the *Environmental Planning and Assessment Act 1979*.

Industry specific SEARs were issued on 17 October 2025 for the development. Development for the purposes of seniors housing with an Estimated Development Cost (EDC) of more than \$30 million and includes a residential care facility is state significant development under Schedule 1, Section 28 of the *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP). The proposed development has an EDC exceeding \$30 million and includes a residential care facility component. Accordingly, it is considered State Significant Development.

This report has been prepared to outline the proposed stormwater drainage requirements and design, water quality requirements and design, and outline the existing water (potable and sewer) for the development site. The IWMR consists of works and design undertaken by Innovis (Civil Stormwater and Drainage) as well as inputs from Collective Engineering (Wastewater).

Summary of the Development

The proposed development includes the construction of a new seniors housing development and comprises the following works:

- Site preparation works including demolition of three (3) existing residential flat buildings and associated parking facilities as well as bulk excavation;
- Construction of two (2), five (5) and six (6) storey buildings, Building A and B respectively, comprising the following:
 - Building A:
 - 7 x 2-bedroom ILUs;
 - 11 x 3-bedroom ILUs; and
 - Internal communal space for use by residents.
 - Building B:
 - 11 x 2-bedroom ILUs;
 - 20 x 3-bedroom ILUs;
 - Two (2) residential care facility beds and residential care hub; and
 - Internal communal facilities for use by all residents comprising a cinema, private dining room, gymnasium and pool.
- Communal open space and associated landscaping;
- Construction of two (2) basement levels to facilitate car parking accessible via Rosalind Street;
- Ground Level neighbourhood shop located in Building A;
- Extension and augmentation of utility infrastructure as required.

For a detailed project description refer to the Environmental Impact Statement prepared by Colliers Urban Planning.

3.0 Site Description

The site is located at 19–23 Rosalind Street, Cammeray within the North Sydney Local Government Area (LGA). It comprises three (3) allotments legally described as SP4657, SP5218 and SP16181, and occupies a total area of approximately 4,100m². A site aerial showing each allotment is provided at Figure 1. Each respective lot currently comprises a three (3) storey residential flat building with the two (2) of the rear buildings situated on battleaxe allotments connected to Rosalind Street.



Figure 1 Site aerial (Source: Nearmap/Colliers Urban Planning)

4.0 SEARs Reporting Requirments

<p>11. Water Management</p> <ul style="list-style-type: none"> • Detail the proposed Drainage and services infrastructure to be incorporated as part of the development (stormwater and wastewater) • Demonstrate how the development complies with Council’s drainage requirements and identify proposed stormwater treatment and water quality management measures to minimise environmental impacts. 	<p>Section 7 & HY-ME-001 (attached)</p> <p>Section 7 & 8</p>
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5.0 Background & Subject Site

The total development site currently consists of 3 lots. The three lots are made up of existing low rise residential unit blocks, with onsite parking and paved areas. The total site area of the development site is approximately 4,100m². The site currently falls to the northeast, with the stormwater flows entering the kerb and gutter within Rosalind Street. The overland flows also traverse the site and flow into the kerb and gutter within Rosalind Street. The site currently has not on-site detentions system or water quality measures. The flows off the site flow down Rosalind Street and enter the Council drainage system at the existing kerb inlet pit near 39 Rosalind Street.

5.1 Proposed Development

The proposed development involves demolition of all existing buildings within the allotment & construction of two buildings intended as long-term accommodation for senior's occupants. This will comprise of a five-storey building and a six-storey building both with two basement levels for carparking purposes. The proposed development also includes several open space communal areas and landscaped areas. The proposed ground floor layout plan can be seen in Figure 2 below.

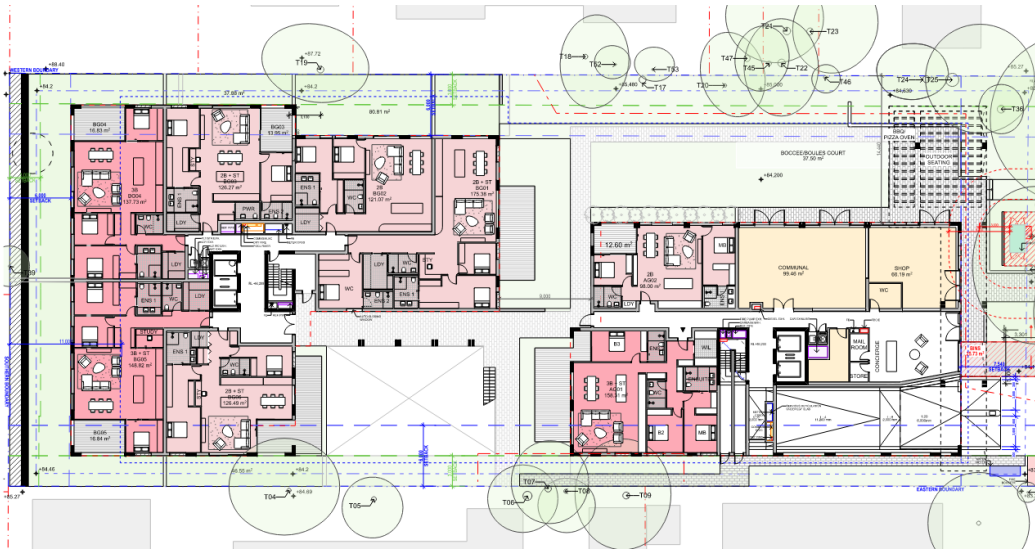


Figure 2: Proposed Architectural Ground Floor Plan – Chrofi Architects

6.0 Existing Site Characteristics

6.1 Topography

The local topography around the site shows the site falls from the South-West to North-East, towards Rosalind Street. The high point of the site is located at the South-West corner of the site at an RL of ~RL 88.16m AHD, and the low point located at the North-East corner of the site at ~RL 83.56m AHD. This is an approximate fall of 4.4%.



Figure 3: Site Topography (Source: Mecone Mosaic)

6.2 External Stormwater Catchments

The surrounding area has been investigated to determine the likely impact of existing external stormwater catchments on the proposed site. The site is currently surrounded by developments and a roadway, so it is believed that no external catchments impact the development site. These neighbouring properties are fully developed, and it is reasonable to presume their stormwater infrastructure is sufficient as to not affect the proposed development.

6.3 Existing Stormwater Infrastructure

Following review of the survey information, it has been determined that the site does not currently have significant stormwater infrastructure, with most of the flow traversing the site via overland flows. There is currently a grated trench drain which captures these overland flows and diverts them into a pit and out to an outlet pipe within Rosalind Street. From site inspections and North Sydney Council's online portal, it has been determined that there is no stormwater infrastructure directly in front of the development site, but there is a Council pit and pipe system at the eastern end of Rosalind Street. This is shown in **Error! Reference source not found.** Figure 4 below.

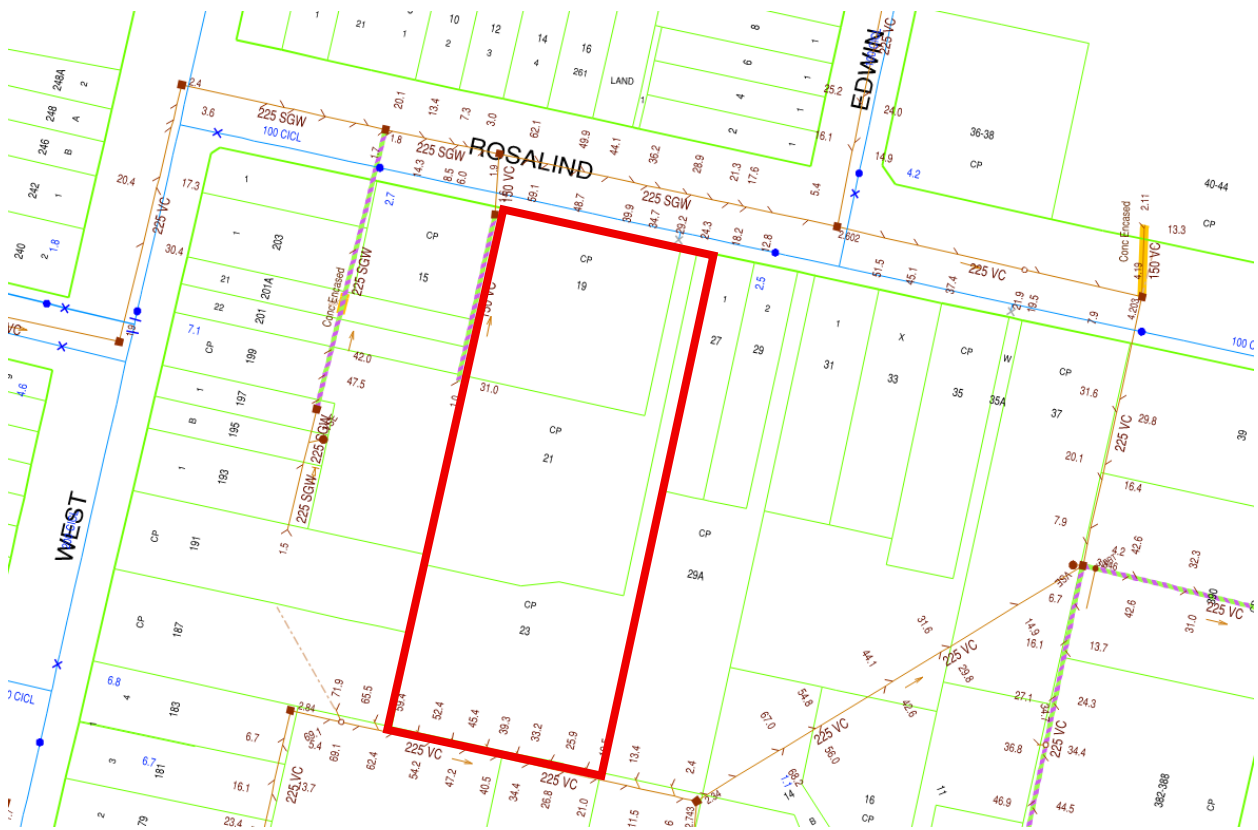


Figure 5: Existing Sewer and Potable Water Infrastructure (Source: Sydney Water BYD – Referral 264525299)

7.0 Stormwater Drainage

7.1 Stormwater Runoff Quantity Requirements

As previously outlined, the site is located within North Sydney Council area. As per the North Sydney Development Control Plan (DCP) and the nature of the development (residential development), the key controls are as follows:

- 🕒 As a minimum, post-development stormwater discharge rates should be less than pre-development stormwater discharge rates
- 🕒 Rainwater tanks should be installed for all residential developments
- 🕒 Ensure paved areas are at least 50% pervious
- 🕒 On-site stormwater detention, including the use of grass swales and detention basins, should be pursued where practicable to minimise and filter stormwater runoff

7.2 Stormwater Quantity Assessment

In determining the requirements for the site, a pre-development and post-development site assessment was undertaken. The assessments undertook a breakdown of the Pervious Vs Impervious fraction for both the pre-development and post-development site to enable the determination of the flows from the site in both states. The assessment outcomes are provided in Table 1 below.

Table 1: Pre-Development Vs Post-Development Pervious Vs Impervious Comparison

	Pre Development (SP16181, SP5218, SP4657)	Post Development (Amalgamated)
Roof Area	1,203 m ²	2,085 m ²
Pavement	1,716 m ²	417 m ²
Landscape	1,187 m ²	1,604 m ²
Total	4,106 m ²	4,106 m ²

INTEGRATED WATER MANAGEMENT PLAN AND
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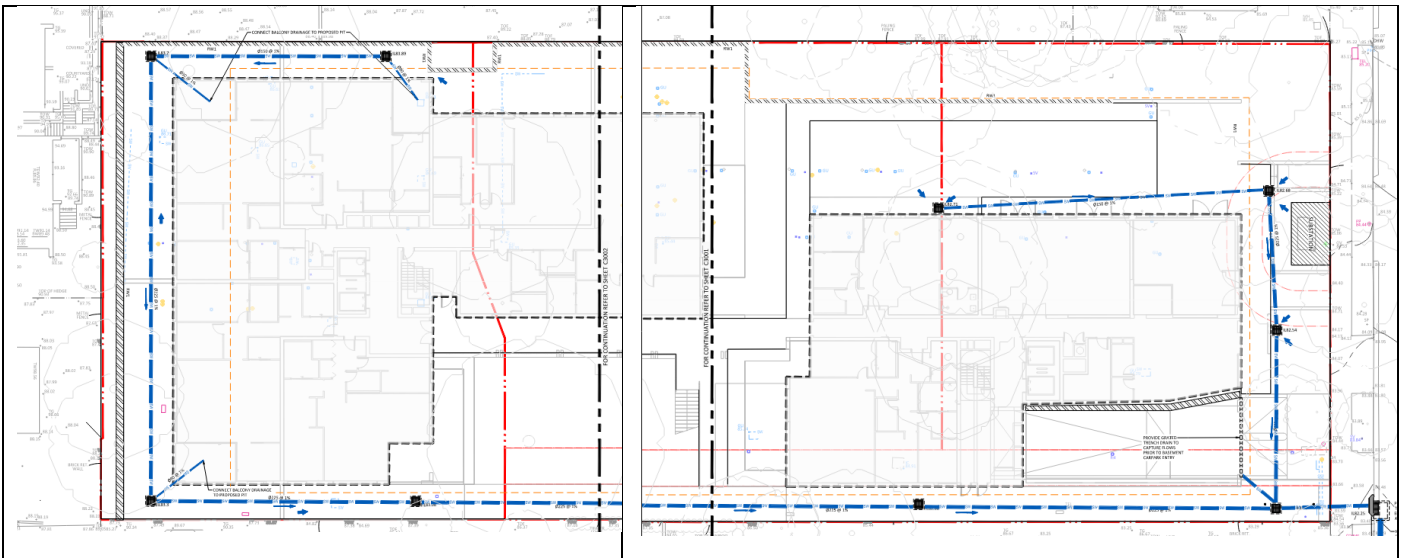


Figure 7: Proposed Internal Stormwater Plan

The internal stormwater drainage will utilise a pit and pipe system which will capture all ground flows. The roof drainage will be captured and funnelled into a rainwater tank. The water from this tank will be used on-site, with the excess water diverted into the stormwater drainage line and into a new proposed stormwater drainage line with Rosalind Street. The new stormwater system will run from our development site and connect into the existing drainage system near 39 Rosalind Street. The new stormwater drainage line is proposed to be a 375mm diameter Reinforced Concrete Pipe (RCP) laid at 1% grade. This is compliant with North Sydney Council design regulations. This new stormwater line is shown in Figure 8

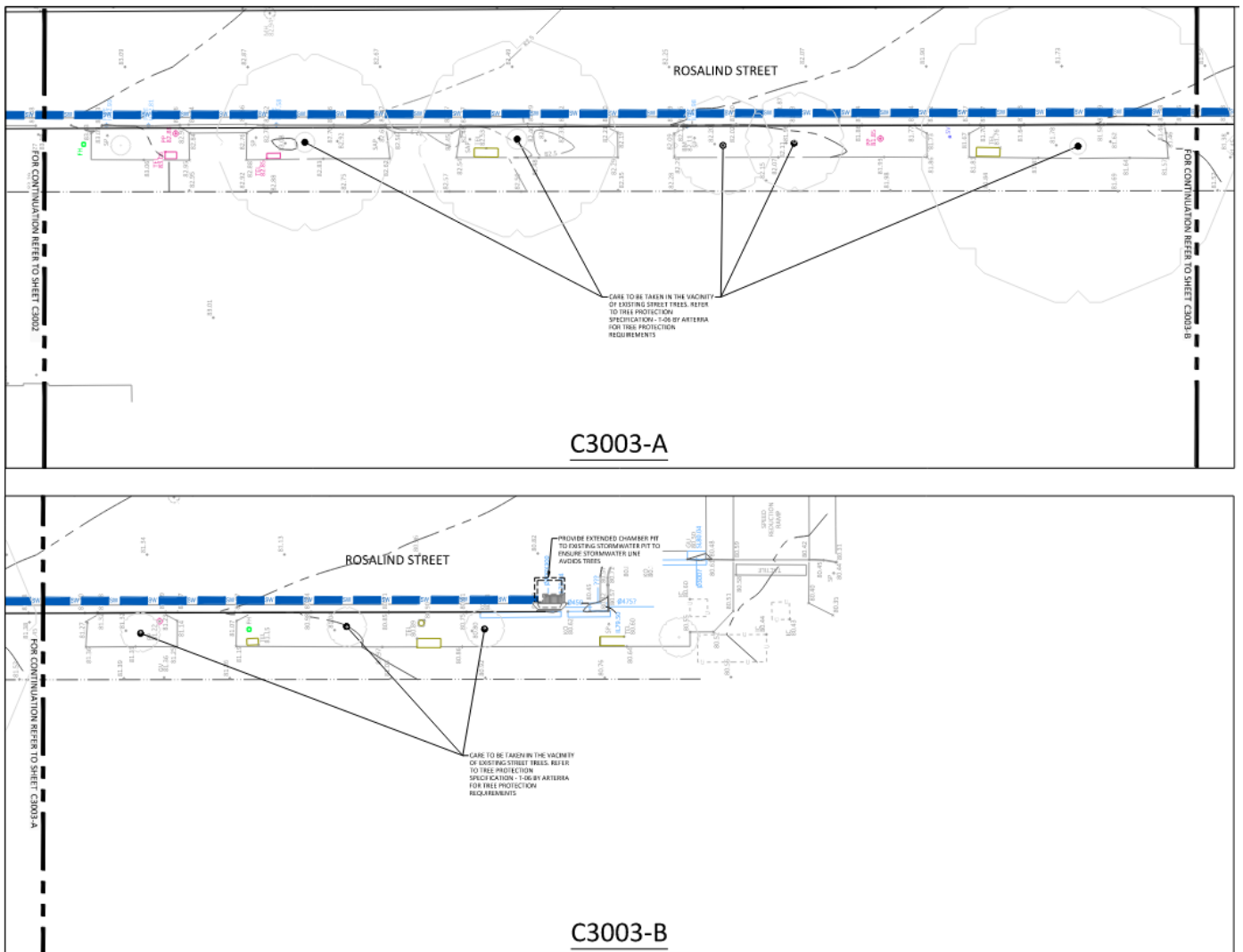


Figure 8: Proposed External Stormwater Plan

8.0 Stormwater Quality (WSUD) Assessment

8.1 Stormwater Runoff Quality Objectives

Objective 4V-1 - Potable water use is minimised	
Water efficient fittings, appliances and wastewater reuse should be incorporated	<p>Refer BASIX & NatHERS assessment report by IGS.</p> <p>BASIX provides the following comments:</p> <p>Common areas:</p> <p>4-star (water-rated) toilet facility.</p> <ul style="list-style-type: none"> • 3-star (water-rated) taps. <p>Central system:</p> <p>Rainwater tank (No. 1) with capacity of minimum 3,000L (minimum), collecting run-off from minimum 304.8 m2 of roof area, used for irrigation of common area landscape with minimum area of 456 m2.</p> <ul style="list-style-type: none"> • Rainwater tank (No. 2) with capacity of minimum 3,000L (minimum), collecting run-off from minimum 532.8 m2 of roof area, used for irrigation of common area landscape with minimum area of 260 m2. • Indoor swimming pool (No. 1): Volume: 56 kLs (Building B). <p>Private dwellings:</p> <ul style="list-style-type: none"> • 3-star (Water Rating) showerheads with a flow rate > 7.5 but <= 9 L/min. • 4-star (Water Rating) toilets.

	<ul style="list-style-type: none"> • 6-star (Water Rating) kitchen taps. • 3-star (Water Rating) bathroom taps. • 4-star (Water Rating) clothes washers. • 6-star (Water Rating) dishwashers. • On demand hot water recirculation. 																												
Apartments should be individually metered	We will endeavour to individually meter hot water and cold water, as per typical embedded network.																												
Rainwater should be collected, stored, and reused on site	<p>Rainwater will be stored and utilised for landscape irrigation. Refer BASIX & NatHERS assessment report by IGS.</p> <table border="1" data-bbox="568 608 1951 866"> <thead> <tr> <th>Central systems</th> <th>Size</th> <th>Configuration</th> <th>Connection (to allow for...)</th> </tr> </thead> <tbody> <tr> <td>Swimming pool (No. 1)</td> <td>Volume: 56 kLs</td> <td>Location: Indoor swimming pool and/or spa area (No. 1)</td> <td>-</td> </tr> <tr> <td>Central water tank - rainwater or stormwater (No. 2)</td> <td>3000</td> <td>To collect run-off from at least: - 532.8 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).</td> <td>- irrigation of 260 square metres of common landscaped area on the site</td> </tr> <tr> <td>Fire sprinkler system (No. 2)</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <table border="1" data-bbox="568 906 1951 1137"> <thead> <tr> <th>Central systems</th> <th>Size</th> <th>Configuration</th> <th>Connection (to allow for...)</th> </tr> </thead> <tbody> <tr> <td>Central water tank - rainwater or stormwater (No. 1)</td> <td>3000</td> <td>To collect run-off from at least: - 304.8 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).</td> <td>- irrigation of 456 square metres of common landscaped area on the site</td> </tr> <tr> <td>Fire sprinkler system (No. 1)</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Central systems	Size	Configuration	Connection (to allow for...)	Swimming pool (No. 1)	Volume: 56 kLs	Location: Indoor swimming pool and/or spa area (No. 1)	-	Central water tank - rainwater or stormwater (No. 2)	3000	To collect run-off from at least: - 532.8 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 260 square metres of common landscaped area on the site	Fire sprinkler system (No. 2)	-	-	-	Central systems	Size	Configuration	Connection (to allow for...)	Central water tank - rainwater or stormwater (No. 1)	3000	To collect run-off from at least: - 304.8 square metres of roof area of buildings in the development - 0 square metres of impervious area in the development - 0 square metres of garden/lawn area in the development - 0 square metres of planter box area in the development (excluding, in each case, any area which drains to, or supplies, any other alternative water supply system).	- irrigation of 456 square metres of common landscaped area on the site	Fire sprinkler system (No. 1)	-	-	-
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Drought tolerant, low water use plants should be used within landscaped areas	Refer to McGregor Coxall Landscape Drawings for selection of native plants including drought tolerant, low water use plants.																												
Objective 4V-2 - Urban stormwater is treated on site before being discharged to receiving waters																													
A number of the following design solutions are used:	Roof areas will be captured and stored in rainwater tank. This will be used for irrigation of landscaped areas as per BASIX & NatHERS assessment report by IGS and Ecologically Sustainable Development Report by IGS.																												

<ul style="list-style-type: none"> runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry, and irrigation porous and open paving materials is maximised onsite stormwater and infiltration, including bioretention systems such as rain gardens or street tree pits 	<p>Landscaped areas are maximised, and pervious pavers are proposed for footpath areas. Refer to McGregor Coxall Landscape Drawings</p> <p>On-Site detention is not required for the site as per Section 4 of J1442-CIV-RPT-0002[C] Integrated Water Management Report</p>
<p>Objective 4V-3 - Flood management systems are integrated into site design</p>	
<p>Detention tanks should be located under paved areas, driveways or in basement car parks</p>	<p>The site is no deemed a flood control site or flood effected. This is outlined within J1442-CIV-RPT-0001[B] Flood Report.</p>
<p>On large sites parks or open spaces are designed to provide temporary on-site detention basins</p>	

8.2 Stormwater Quality Assessment

The stormwater quality runoff has been assessed against the State Environmental Planning Policy (biodiversity and conservation) 2021, which references the WaterNSW NorBE Guideline. NorBE, short for Neutral or Beneficial Effect, calls for the stormwater runoff from the development to achieve, as a minimum, a neutral effect due to water quality. The aim of the proposed system will be to have a beneficial effect, and this will be outlined below.

In determining the requirements for the site, a pre-development and post-development site assessment was undertaken. The assessments undertook a breakdown of the Pervious Vs Impervious fraction for both the pre-development and post-development site to enable the determination of the flows from the site in both states. The assessment outcomes are provided in Table 3 below.

Table 3: Pre-Development Vs Post-Development Pervious Vs Impervious Comparison

	Pre Development (SP16181, SP5218, SP4657)	Post Development (Amalgamated)
Roof Area	1,203 m ²	2,085 m ²
Pavement	1,716 m ²	417 m ²
Landscape	1,187 m ²	1,604 m ²
Total	4,106 m²	4,106 m²

As can be seen, there is a significant reduction of paved areas in the post development state. The current paved areas on the site are predominately at grade parking areas with asphalt finishes. The removal of these areas will have a significant improvement to the water quality of the flows generated by the site. Additionally, the installation of a 20kL rainwater tank which will capture all flows from the roofs within the proposed development, and re-use the water for the landscape areas, of which there is a significant increase compared to the current site. The information was gathered, and a MUSIC model was developed.

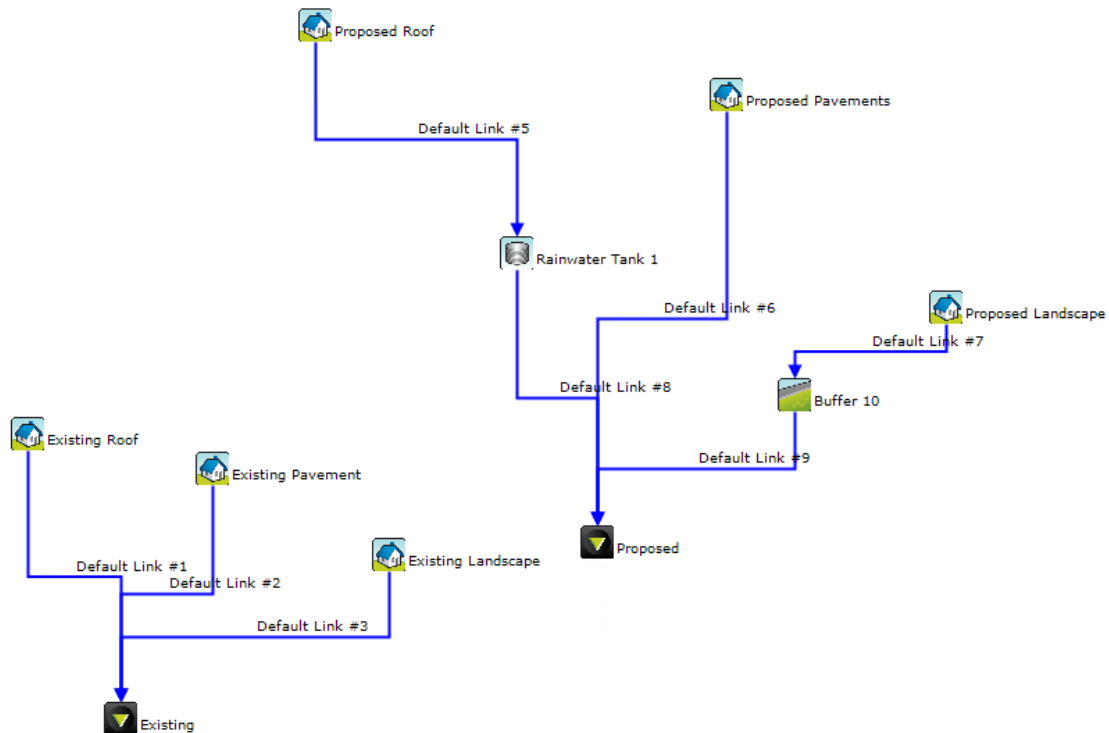


Figure 9: MUSIC Model Layout

As the target assessment utilised the NorBE requirements, both pre and post development scenarios were modelled within the MUSIC model. The catchment areas were based off the information outlined in Table 3. Roofs and pavements were modelled as 100% impervious, while landscaped areas were modelled as 50% impervious. The results of the assessment are outlined in Table 4 below.

Table 4: MUSIC Modelling Results

	Pre Development (SP16181, SP5218, SP4657)	Post Development (Amalgamated)	% Change
Flow (ML/yr)	5.015	4.627	8% Reduction
Total Suspended Solids (kg/yr)	1055	196.4	82% Reduction
Total Phosphorus (kg/yr)	2.05	0.7767	62% Reduction
Total Nitrogen (kg/yr)	12.15	9.188	24% Reduction
Gross Pollutants (kg/yr)	121.4	44.59	63% Reduction

As can be seen from the results in Table 4, the proposed development and the associated treatment measures have a beneficial effect on the stormwater runoff quality.

9.0 Stormwater Network Maintenance Schedule

To ensure the ongoing effective operation of the stormwater network and water quality treatment devices, the devices must be maintained in accordance with manufacturer recommendations/requirements and general best practice. It is noted that all pits are to be inspected in a safe manner that assesses localised risk and in accordance with maintenance contractor safe work method statements (SWMS).

The below summaries the various stormwater network components that will need to be maintained, whilst Section 10.0, below, details required maintenance of specific items within the network requiring maintenance.

9.1 Pit and Pipe Network

A general inspection of the stormwater pit network is to be undertaken every six (6) months and after major storm events. The general inspection involves visual inspection inside pits, removal and disposal of larger gross pollutants within pits in accordance with waste disposal regulations to prevent blockages, and minimal rectification works as required.

9.2 OSD Tanks

There is no proposed OSD tank for the site. As such, no maintenance is required.

9.3 Water Quality Treatment Devices

The water quality for the site is predominately swales and overland flow routes. These should be visually inspected half yearly to ensure no sediment or debris deposits.

10.0 Proposed Maintenance Schedule

	Frequency	Responsibility	Procedure
Stormwater Drainage and Pit and Pipe Network			
Blockage of inlet and outlet pipes within pits	Half Yearly	Maintenance Contractor	Lift or remove grate. Check for debris, if debris exists, remove and clean out pit
Grated Inlets	Half Yearly	Maintenance Contractor	Visual inspection of all grated inlets. Check for debris, if debris exists, remove and clean
Condition of pit structures and inlet/outlet connection with pit	Every Two Years	Maintenance Contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from walls if necessary. If damage or cracking is encountered, notify structural engineer for advice and direction for repair
Overland flow paths and drainage swales	Half Yearly	Maintenance Contractor	Visually inspect via walk along the flow path and swale. Check batters and condition of path extent. Remove any debris/litter/sludge
Pipe Condition	Every Five Years	Maintenance Contractor	Undertake CCTV inspection. Any debris and/or damage should be reported and rectified with advice from civil and/or structural advice
Civil Structures			

Subsoil lines	Annually	Maintenance Contractor	Clean by blasting with water into inspection openings and pits to ensure conveyance through lines. Review outlets to ensure flow through line
Retaining Walls	Annually	Maintenance Contractor	Walk along and inspect all visible faces of wall structure. Observe for cracking, crack width, any lean on wall and moisture within structure. Notify structural engineer if any of the above is observed
Embankments and batters	Annually	Maintenance Contractor	Walk along bottom of embankments where possible. Check batter stability and vegetation. Notify civil engineer if scour or damage is observed

11.0 Erosion & Sediment Control

Landcom have published a design guide entitled “Managing Urban Stormwater - Soils and Construction” which is regarded as the standard to which erosion and sedimentation control should be designed to within New South Wales (NSW). Council specifies compliance with the Landcom design guide in their Stormwater and Floodplain Management Technical Manual.

The control of erosion and sedimentation describes the measures incorporated during and following construction of a new development to prevent the pollution and degradation of the downstream watercourse. During early works, a combination of standard erosion and sediment control measures will be implemented in accordance with Landcom’s Blue Book (Managing Urban Stormwater: Soils and Construction), Australian Rainfall and Runoff 2019 (ARR2019), and best practice engineering design. The key measures proposed include:

- Perimeter silt fences around the site boundary to intercept overland flow and capture sediment-laden water.
- Sandbag or silt fence protection to existing kerb along Rosalind Street, to reduce risk of sediment from entering the local drainage network.
- A vehicle shakedown device at site entry points to reduce sediment tracking onto the public road network.
- Proposed temporary diversion swales to direct surface flows in a controlled manner towards sediment capture areas.

11.1 Stormwater Drainage Inlet

Risk:

- Sediment from the construction site washing into the existing council stormwater drainage inlet infrastructure.

Consequence:

- The sediment will then be conveyed into the downstream waterbody by stormwater runoff, contaminating the waterbody.
- The sediment will build up blocking the stormwater infrastructure and preventing stormwater conveyance to the downstream waterbody and impacting drainage upstream.

Mitigation:

- During demolition works, sediment traps protection will be installed surrounding all existing stormwater drainage infrastructure inlets to prevent sediment entering the system.
- Temporary Stormwater Systems are to be installed where required to capture all site runoff within the zone of excavation. Runoff will be allowed to settle out suspended particles and debris, and an acceptable water of 50mg per litre of Non-Filterable Residues (NFR) is required to be achieved prior to discharge.
- Installation of a fence around the perimeter of the basin is required as well as a rip rap to allow for bobcat access for periodic removal of sediment. Also, a perforated riser outlet pipe needs to be placed for the connection and discharge to an existing pit.
- As the development site will be predominately cut, there is little probability for sedimentation to leave the site during the excavation and construction phase.

Maintenance:

- Frequent inspection of the sandbags to ensure they are arranged in a manner that prevents sediment from accessing the drainage system. If sediment is building up on the sandbags they should be cleared of sediment and re-established.
- All soil erosion and sediment control structures including temporary sediment basins and sediment traps shall be inspected following each storm event and any necessary maintenance work shall be undertaken to ensure their continued proper operation.

11.2 Proposed Sediment Basin

Risk:

- Sediment from the construction site leaving the site and washing into the existing stormwater drainage inlet infrastructure or downstream properties

Consequence:

- The sediment will build up blocking the stormwater infrastructure and preventing stormwater conveyance to the downstream waterbody and impacting drainage upstream and downstream.

Mitigation:

- Sediment basins will be installed, and overland flow directed towards them. The basins will attenuate stormwater flows allowing for the settlement of sediment preventing discharge into the downstream infrastructure.
- The proposed basement excavation will serve as a temporary sediment basin, leveraging the significant depth of the excavation to detain stormwater runoff and promote the settlement of suspended sediments prior to controlled discharge, flows for which are subject to the requirements of a dedicated Dewatering Management Plan prepared by an external consultant.

Maintenance:

- Frequent inspection of the basins to ensure there is sufficient volume for the storage of settlement. If there is insufficient storage the basins should be cleared of sediment and re-established.

11.3 Construction Exit Protection

Risk:

- Mud Tracking

Consequence:

- Spoil being tracked onto the public road corridors, where it is then washed into the existing stormwater drainage infrastructure and is then washed downstream, polluting the downstream waterbody.
- Spoil being tracked onto the public road creating dangerous driving conditions for other road users. Mitigation:
- A shaker grid and/or truck wash down zone to be implemented to the construction site. All vehicles leaving the site will have their wheels washed down and pass over the shaker grid to remove any spoil.

Maintenance:

- Frequent inspection of the shaker grid to ensure it is clean and still functioning.

11.4 Downstream Site Boundaries

Risk:

- Rainfall runoff falling on the site collecting sediment from the construction site and conveying it overland onto downstream properties and waterbodies.

Consequence:

- Sediment discharge polluting downstream properties and waterbodies.

Mitigation:

- Installation of sediment fences on all downstream boundaries of the site to collect sediment and prevent it discharging onto downstream properties or waterbodies.

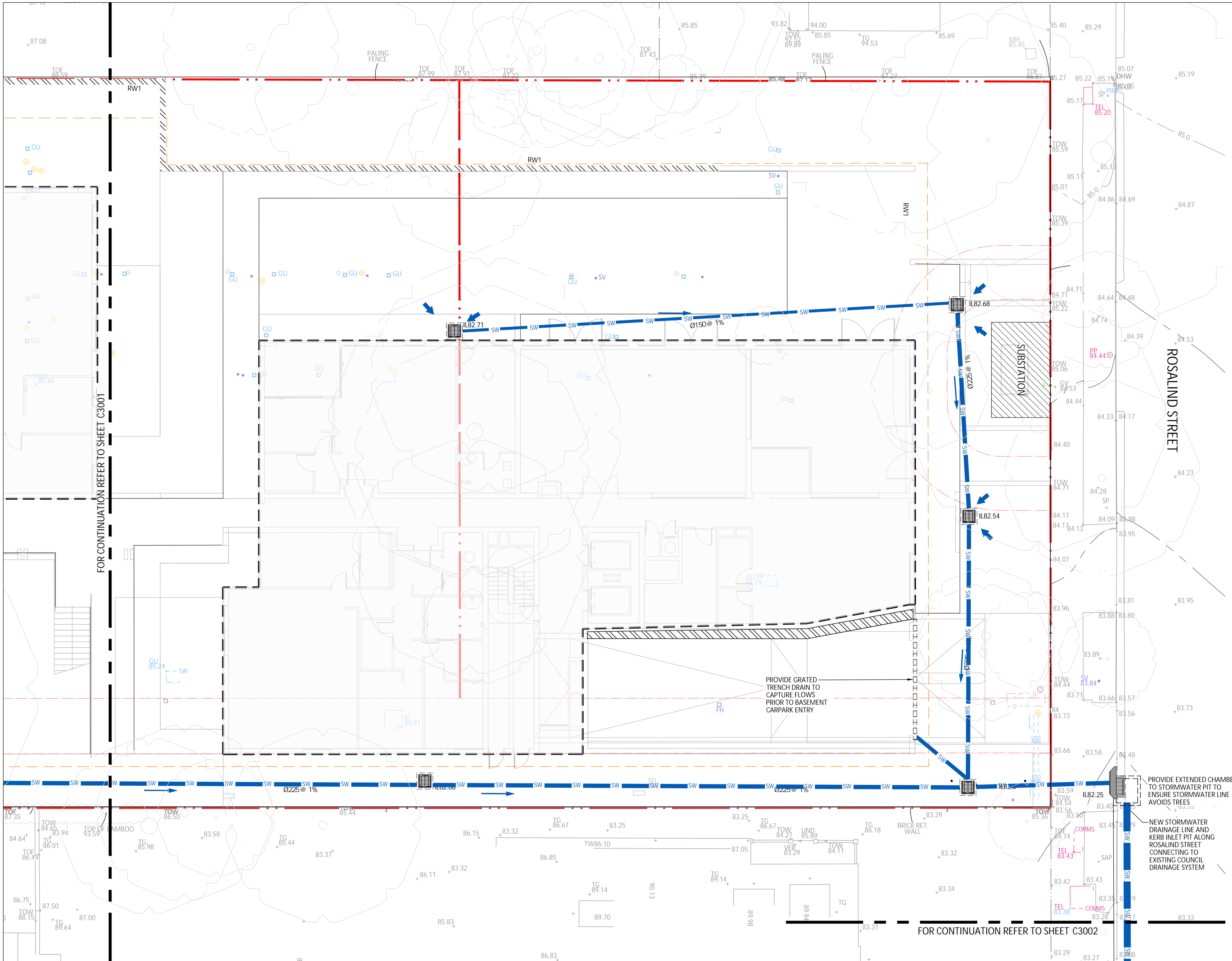
Maintenance:

- Regular inspection of the sediment fences to ensure they are functioning correctly and are intact.
- If sediment build up is present it should be removed to ensure correct functionality of the fences.

A.1 – Stormwater Drainage Plans

SITEWORKS

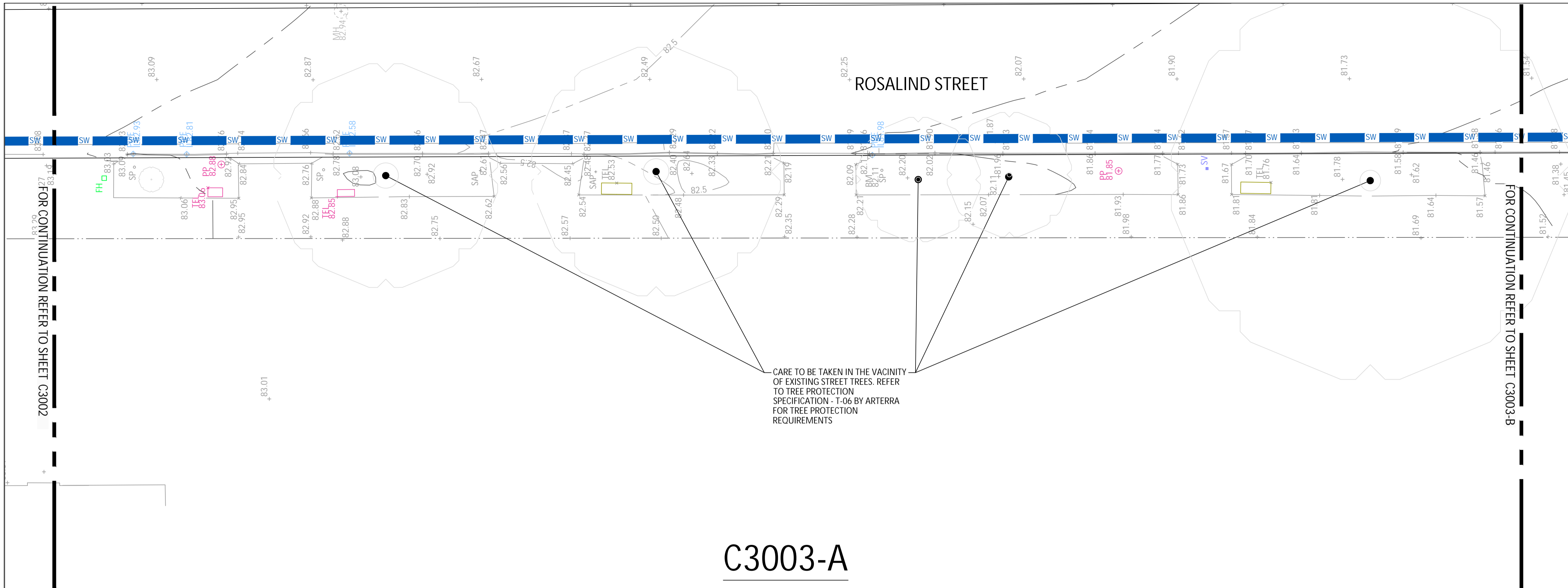
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- EXISTING BOUNDARY EASEMENT LINE
- LIMIT OF WORKS
- LIMIT OF WORKS
- EXISTING CONTOURS
- PROPOSED CONTOURS
- BASEMENT OUTLINE
- MTE MATCH TO EXISTING
- RW1 RETAINING WALL
- PROPOSED STORMWATER PIT
- KERB INLET PIT WITH EXTENDED CHAMBER (PROPOSED/EXISTING)
- GTD GRATED TRENCH DRAIN
- PROPOSED STORMWATER PIPE
- OVERLAND FLOW
- FOOTPATH



NOT FOR CONSTRUCTION

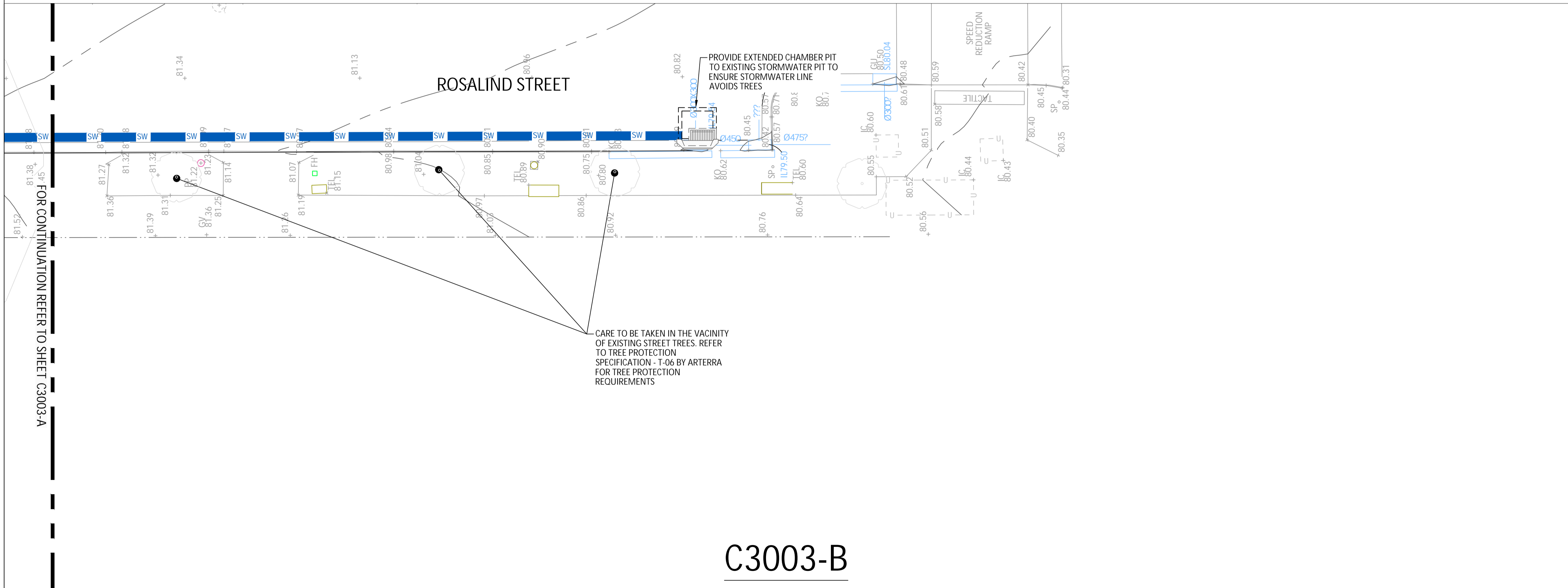
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CLIENT	ARCHITECT	PROJECT	DRAWING TITLE						
		19-23 ROSALIND STREET CAMMERAY, NSW 2062	SITEWORKS AND DRAINAGE PLAN - GROUND FLOOR - SHEET 02			REV	DESCRIPTION	ISSUED	CHECKED
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SITEWORKS

- SITE BOUNDARY LINE
- EXISTING BOUNDARY EASEMENT LINE
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CLIENT		ARCHITECT		PROJECT	DRAWING TITLE			REV	DESCRIPTION	ISSUED	CHECKED	APP'D	DATE	JOB NUMBER	SHEET NUMBER	REVISION
				19-23 ROSALIND STREET CAMMERAY, NSW 2062	SITEWORKS AND DRAINAGE PLAN - GROUND FLOOR - SHEET 03			A	ISSUED FOR INFORMATION	EE	BA	A	12/12/2025	J1442	C3003	A
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														© 2025, INNOVIS PTY LTD reserves all rights to these drawings, designs and/or any other data contained herein. No part of the said drawings, designs and/or other data may be reproduced, modified, transmitted or used in any form or by any means for any purpose without the prior written consent of INNOVIS PTY LTD other than the sole purpose for which such drawings, designs and/or other data are provided to licensed users on such terms as INNOVIS PTY LTD may prescribe.		
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DRAWN: JJ DESIGNED: JJ

A.2 – Collective Engineering Wastewater Memo

Memo

Memo Number	HY-ME-001	Discipline	Hydraulic
Project Name	19-23 Rosalind St, Cammeray	Project Number	23281
Date	14/01/2026		
Topic	Wastewater Connection		

1 Proposed Wastewater Connection

- The proposed design facilitates a connection to the authority sewer infrastructure located in Rosalind Street. Approval for this connection will be subject to Sydney Water's assessment and confirmation through the Notice of Requirements (NOR) application process.
- Wastewater generated from both on-site buildings will be conveyed via a common discharge pipe and connected to a new 150 mm authority branch, which will interface with the existing 225 mm authority sewer main. A Water Servicing Coordinator (WSC) will be appointed to prepare and certify the design for the new site wastewater connection to the sewer main in Rosalind Street.
- Fixtures located at basement level are unable to achieve gravity drainage; consequently, a sewer pumping station will be installed in a duty/standby configuration. The pumped discharge will be directed into the property's gravity drainage system prior to connection with the street sewer infrastructure.
- Refer to Figure 1 for the wastewater concept layout.

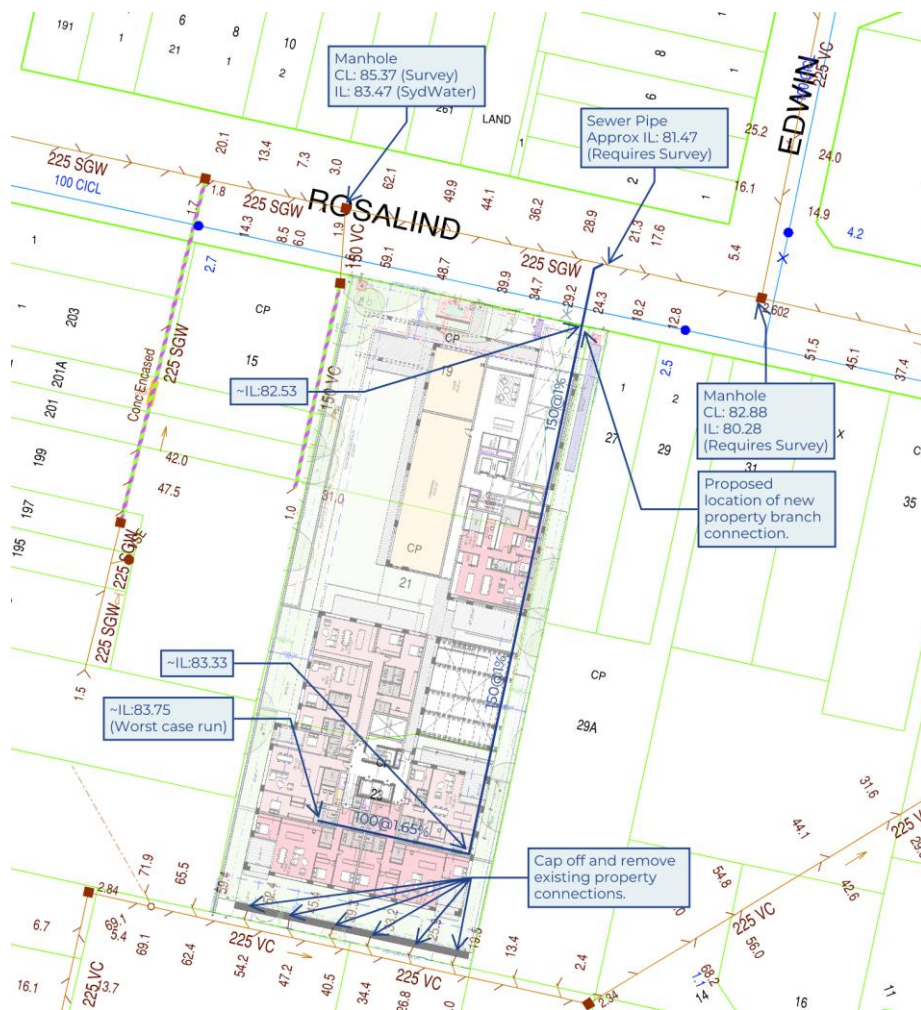


Figure 1 - Proposed Wastewater Connection