PLANS AND DOCUMENTS
referred to in the PDA
DEVELOPMENT APPROVAL

Approval no: DEV2024/1586

Date: 18 June 2025

Queensland Government

APPENDIX H CIVIL ENGINEERING REPORT

Civil Engineering Report

Aura Town Centre

Date 19 December 2024

Prepared by **MPN Consulting Pty Ltd**
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Revision Status

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Report Title:	Civil Engineering Report

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Issue A	19/12/2024	Daniel Lee	Lachlan Stephenson		16903

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1 > Executive Summary

This engineering report has been commissioned by Stockland in support of the Material Change of Use Development Application for the proposed Stage 1 of the Aura Town Centre.

This report addresses the following Engineering aspects of the proposed development:

- Topography
- Water
- Sewer
- Roadworks
- Earthworks
- Stormwater
- Electrical and Telecommunictions

The site will be fully serviced via the existing and proposed infrastructure mains, with access to the site provided by the roads currently in design and under construction surrounding the development site, along with the new internal roads to be delivered as part of the Town Centre Stage 1.

2 > Purpose

This Civil Engineering Report has been prepared in support of the Material Change of Use Development Application for the proposed Aura Town Centre Stage 1. Information has been provided on site design and services connections within the Civil Engineering Report.

3 > Introduction

3.1 Project Description

The current proposed development involves the construction of a Town Centre, including retail outlets, dining facilities, on-grade temporary carparking and basement car parking, loading facilities and landscaping.

The development site will have access from Seamless Connector and Peoples Place to the north, with new internal private roads to be delivered as part of the Stage 1 Town Centre works connecting through to Splendour Street to the east and Celebration Street to the west. The private roads within the development are noted as Main Street, Internal Road A, Internal Road B and Internal Road C.

The proposed Stage 1 layout is depicted on the architectural plans prepared by Buchan Group attached in Appendix A, with excerpt below.

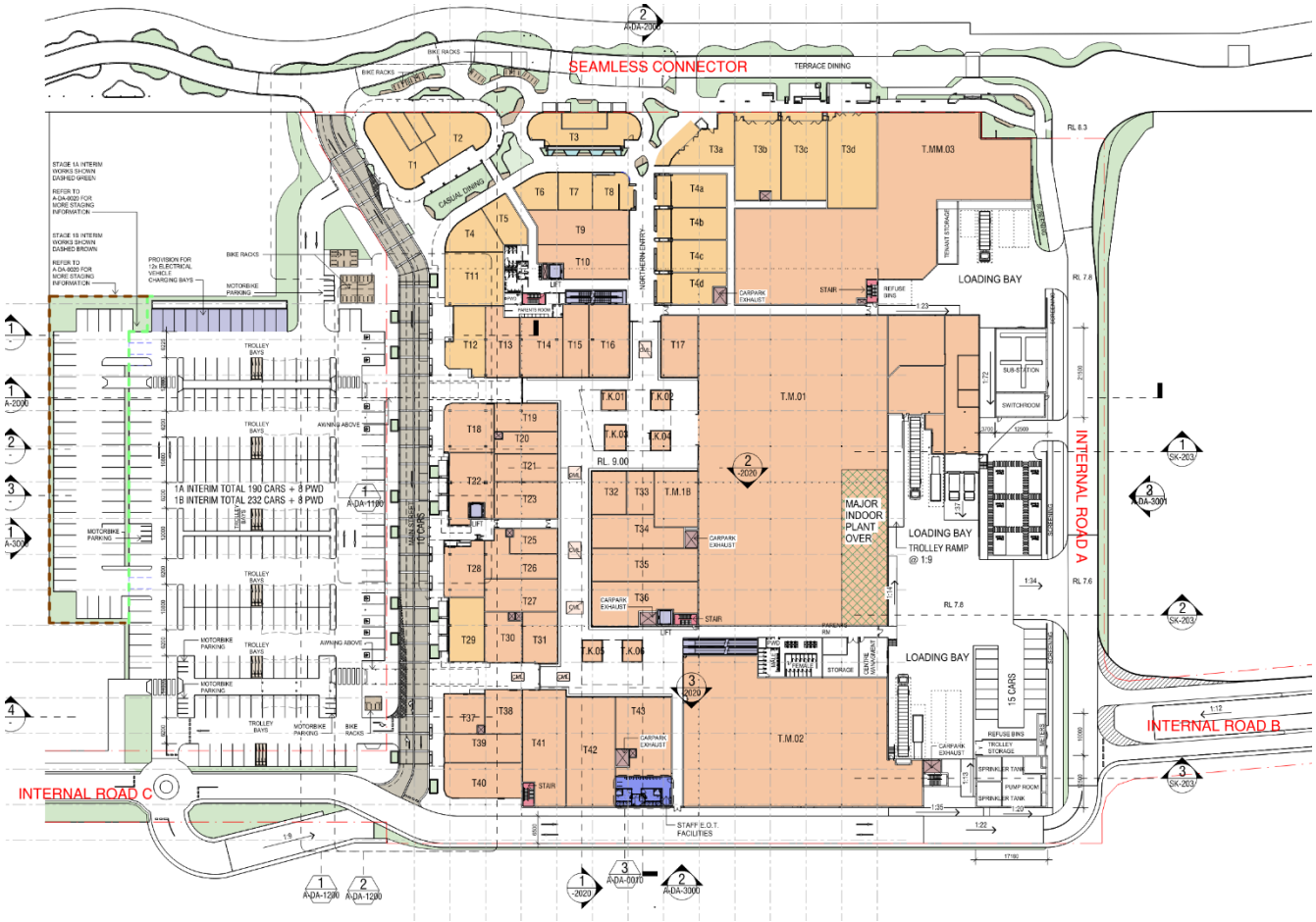


Figure 1 - Proposed Development

4 > Site Characteristics

4.1 Site Location

The site is located in the suburb of Bells Creek within the Aura Masterplanned community to the south west of Caloundra

The site is bounded by Seamless Connector to the North, Internal Road A and B to the East and the South, and Main Street and Internal Road C to the West.

The site location is shown in Figure 2 below with respect to the surrounding masterplan.

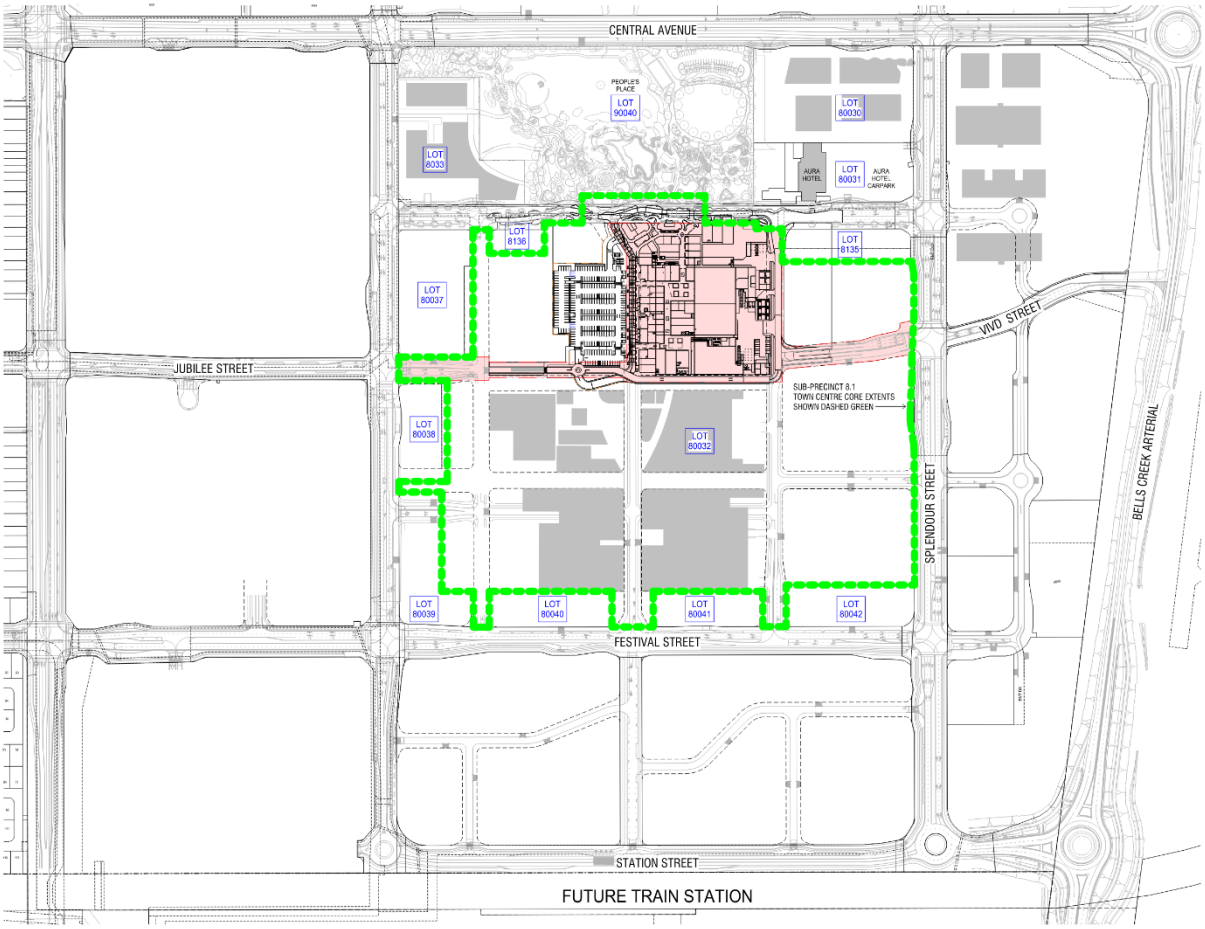


Figure 2 - Site Location

4.2 Topography and Existing Site Drainage

The site is currently vacant with surrounding roads and site earthworks in design and under construction. The existing site generally falls from the west to the east at an average slope of 0.6%.

Currently, stormwater runoff from the existing site sheetflows to the east as overland flow into currently undeveloped land.

5 > Site Data

Site data has been obtained from the following sources of information:

- Sunshine Coast Council (SCC)
- Satellite imagery
- Adjacent Design Plans by Others

6 > Stormwater

6.1 Lawful Point of Discharge

The lawful points of discharge for the proposed development are located per the overall site stormwater drainage strategy (Aura Development Stormwater Management Plan – Design Flow and BMT (2019) and Updated Flood Risk Management Strategy – BMT (2018) – including subsequent updates and technical memorandum) with the east and west catchments split by Main Street. The site will have multiple points of connection to the north east, south east and south west of Stage 1 of the retail development. The discharge points are depicted on MPN Plan 8053–DA.02 attached in Appendix B.

6.2 Flooding

The Town Centre ground floor level of RL 9 will be above all localised and regional flooding (plus freeboard) with the road corridor designed to ensure the ground floor level is immune from overland flow flooding along the roadways.

The Town Centre will also to have flood free access and egress during all storm events.

Flooding has been assessed by BMT in their Updated Flood Risk Management Strategy (2018)and subsequent Technical Memorandum's noting the levels associated with Bells Creek in proximity to the development areas.

6.3 Rainwater Harvesting

In accordance with the requirements of the overall Aura stormwater master planning strategy and the Stormwater Quality Management Plan (by DesignFlow) runoff from a minimum 50% of the total roof area will be collected in a rainwater harvesting tank for reuse in toilet/urinal flushing and landscape watering.

The tanks have been sized in accordance with the requirements of the report with the volumes noted below:

1kL/toilet or urinal = 62kL

or

Total roof area =20,261m² = 2.03ha

Tank = 25kL/ha

Total Volume = 62kL

A tank of 62kL has been provided in accordance with the requirements of the above and will be located under the loading area in the south east corner of the site. This tank will be provided with the necessary pumps and connectivity to supply the harvested runoff internal pedestals in accordance with the requirements of the report.

6.4 Site Based Stormwater Management Plan

The aim of the Stormwater Management Plan outlined below is to:

- Prevent or minimise adverse social or environmental impacts from stormwater runoff originating from the proposed development.
- Achieve acceptable levels of stormwater runoff quality and quantity.

The Stormwater Management Plan aims to identify Stormwater Quantity and Quality Best Management Practice for the site and demonstrate that water quantity and quality impacts will be minimised in receiving waters. All stormwater management systems will be completed in accordance with the masterplan drainage strategy and the Aura Precincts 6-10 & 16 Stormwater Quality Management Plan (version 4) prepared by Design Flow. A copy of the report cover is provided in Appendix C.

The Stormwater Management Plan outlines the site in two sections, the operational phase and the construction phase. The operational phase addresses treatment of contaminated runoff from the developed site before discharging into receiving waters, whilst the construction phase of the Stormwater Management Plan addresses erosion and sediment control to prevent contamination of water sources by stormwater runoff during construction of the site.

6.5 Operational Phase

The site stormwater management for Stage 1 of the Aura Town Centre is discussed in the below sections with the site stormwater infrastructure depicted on MPN Plan 8053-DA.02 attached in Appendix B.

6.5.1 Stormwater Quantity Management

The approved stormwater masterplans for the Aura Masterplanned community confirm that the Aura Town Centre site is not required to provide on-site detention facilities, with all stormwater attenuation being provided off site through major stormwater structures at the extents of the development area.

6.5.2 Retail Centre and Main Street

Stormwater runoff from the roof of the new retail centre will be collected and conveyed to a new rainwater harvesting tank which will be located under the loading area to the south east of the site. The rainwater harvesting tanks will capture 50% of the roof area as noted in section 6.3. Overflow from the tanks will discharge to the stormwater drainage system within the new private roads to convey it external to the retail site into the masterplan infrastructure systems.

Main Street will be captured in a drainage system which will be suspended from the soffit of the structural slabs within the basement area. The Main Street drainage will gravity to the North and South and connect to the internal private road drainage systems to be conveyed to the external drainage systems.

6.5.3 Basement Drainage System

Localised drainage pits will be installed within the basement to capture any indirect rainfall that is tracked in with pedestrians or vehicles. These localised pits will be connected to a basement pump out sump where the stormwater will be pumped to a pit internal to the site before gravity draining to the drainage system external to the retail area. No pumped flows will directly discharge to the external system.

All basement drainage will pass through a hydrodynamic separator for capture of oil/grease and some sediments prior to pump out.

6.5.4 Basement Access Ramps

All ramps to the basement will ramp up slightly towards the centre before ramping down into the basement. This will mitigate road flows from entering the basement via the ramps. Any direct rainfall on the ramps will be picked up in a grated drain at the base of the ramp. The grated drain will discharge to the basement drainage system for pump out to the drainage system external to the retail area.

6.5.5 On Grade Temporary Car Park

The on-grade temporary car park will be designed with falls to a new underground pit and pipe network which will capture car park stormwater runoff. The new pit and pipe network will drain through the car

park area and connect to the stormwater drainage network in internal private road C. The drainage will then be directed west to celebration street as per the stormwater drainage masterplan.

All car park drainage will pass through a hydrodynamic separator for capture of oil/grease and some sediments and gross pollutants prior to discharge to the external network in accordance with the masterplan drainage strategy. The external drainage network will then convey the water to the masterplan stormwater quality and quantity systems.

6.6 Construction Phase (Sediment and Erosion Control)

6.6.1 Intent of Erosion and Sediment Control Management Plan

To prevent stormwater contamination (of watercourses) and the release of contaminated stormwater and wastewater by ensuring compliance with the Environmental Protection Act 1994 and Environmental Protection (Water) Policy 2009.

6.6.2 Implementation Strategy

Establish control measures and best practice approaches to prevent stormwater contamination and minimise the risk and adverse effects of erosion and sedimentation. All Erosion and Sediment Control measures must be designed, constructed and maintained in a manner that is commensurate with the site's erosion risk.

6.6.3 Erosion and Sediment Control Measures

- Obtain a license or approval to operate activities that are classed as environmental relevant activities (i.e. they have the potential to cause environmental harm).
- Implement and maintain appropriate control measures to prevent sediment laden wastewater and other potential pollutants such as oil, paint and wet concrete from entering the stormwater system via stormwater drains and gullies. The control measures which must be considered to be adopted are:
    - Limitation of site access during construction to minimise disruption to traffic. Install a temporary construction entry/ exit sediment trap at all site accesses to minimise mud and sediment from the site being tracked onto public road, particularly during wet weather or when the site is muddy.
    - Install and maintain appropriate sediment fences around construction areas.
    - Divert clean stormwater runoff, using catch drains, around construction areas to existing or new stormwater drainage system.
    - Install sandbags and other pollution containment devices around stormwater drains and any other locations where required to prevent sediment entering the trunk stormwater system.
    - Cover open earth/ soil areas progressively (with concrete slabs and pavements or mulch) to minimise areas of bare earth/ soil.

- Any stockpiles of excavated soil and demolition/ construction waste must be located where risk of erosion and sedimentation is minimal, and must be protected from wind and water erosion.
- Implement and maintain appropriate control measures such as catch drains and sediment fences to prevent ponding of stormwater or discharge of stormwater from the site to adjacent properties.
- Provision of spill/ pollution control equipment that is readily accessible to clean up spills and leaks.
- Ensure spill/ pollution control measures are available and maintained in working condition.
- Sediment contained by the sediment control devices such as sandbags, sediment fences and containment bunds must be frequently removed and placed in a controlled area.
- Implement an inspection schedule for any spill or leaks of any potential polluting areas or activities.

6.6.4 Erosion and Sediment Control Management Goals

- Licenses, approvals, permits and inspection reports are in order.
- Sediment or pollution control devices such as sandbags, sediment fences and containment bunds are in place, maintained and effective.
- Spill/ pollution control equipment is readily accessible at designated locations.
- No accumulated sediment is contained by the sediment control devices such as hay bales, sediment fences and containment bunds.
- No sediment exceeding a depth of 300mm in the pollution control devices (e.g. silt trap).

6.6.5 Erosion and Sediment Control Implementation Program

- Licenses, permits or approvals for each environmentally relevant activity must be obtained prior to the commencement of the particular activity.
- Appropriate control measures such as sediment fences, temporary construction entry/ exit sediment traps, pollution containment devices (e.g. sandbags), stormwater diversion and administrative controls must be installed and established prior to commencement of the earthworks and construction activities.
- Pollution control devices such as spill control equipment must be inspected on a regular basis (at least weekly).
- Other sediment and pollution control equipment such as containment bunds, hay bales and sediment fences must be inspected on a regular basis (at least daily).

- Inspection for any leaks, spills or potential contaminating activity must be performed on a regular basis (at least daily).
- Remove accumulated sediment or other contaminants from sediment/ pollution control devices on a regular basis.
- All erosion and sediment control measures must be inspected within 24 hours of expected rain and within 18 hours of a rainfall event.

6.6.6 Responsible Person or Organisation

The contractor shall be responsible for the implementation and maintenance of the Erosion and Sediment Control Measures.

6.6.7 Reporting/Review

Records such as licenses, approvals, permits and inspection reports must be reviewed on a regular basis (e.g. at least monthly) to ensure that legal compliance is met, complaints are reviewed and systems are working to prevent contamination.

6.6.8 Corrective Actions

- Perform clean-up of any spills immediately.
- Any mud or sediment which is tracked onto public roads is to be immediately removed using dry clean-up methods (i.e. shovel and broom).
- Remove or relocate any stockpiles of waste where there is a reasonable risk of erosion and sedimentation.
- Replace or repair sediment or pollution control devices if they are not maintained in good working condition.

7 > Development Population

The following table shows the Equivalent Population (EP) derived for the proposed development for water and sewerage services. The EP is calculated in accordance with the Caloundra South Infrastructure Agreement (Water and Wastewater Infrastructure), Ref 40769743v9.

Estimated Development EP Demand – Stage 1			
Land Use	**Development Rate (EP/100m² GFA)**	**GFA (Gross Floor Area)**	**Total Equivalent Persons (EP)**
Retail	1.1	15,470m²	170EP
Commercial/Business	1.1	1,780m²	20EP
TOTAL			**190EP**

The site is nominated as being within Catchment 5 of the Final Precinct Network Plan. As this is the first development within the catchment, the available network is assessed to have ample capacity to service the development demands.

8 > Water Supply

Inspection of the water network from the adjacent Stantec design plans and overall water servicing strategy shows the following services in the vicinity of the site:

- A proposed 250mm dia DICL water main located on the southern verge of Peoples Place and Seamless Connector;
- A proposed 250mm dia DICL water main connection located on the western verge of Internal Road A;
- A proposed 150mm dia PVC-O water main connection located on the northern verge of Internal Road B.

It is proposed to extend the 250mm DICL water main south from the connection point in the western verge of Internal Road A to the proposed 150mm PVC-O water main in the northern verge of Internal Road B. Connection to the Town Centre will be via the extended 250mm DICL water main in the western verge of Internal Road A.

As the watermains running along Internal Road A and Internal Road B will be public infrastructure within a private road, the watermains will be covered by easements. The easements will be in accordance with the requirements of Unity Water.

The size of the water meters to service Stage 1 of the Town Centre and the connection arrangement will be confirmed in consultation with the hydraulic consultants and Unity Water during the detailed design phase.

Proposed fire tanks and pump room will be located at the southeastern corner of the site to service Stage 1 and future stages of the retail development.

The existing and proposed water infrastructure in the vicinity of the site is shown on MPN Plan 8053–DA.04 attached in Appendix B.

9 > Sewer

Inspection of the sewer network from adjacent Stantec design plans and overall sewer servicing strategy show the following services:

- Proposed 250mm PE reticulation sewer main located along the northern verge of Seamless Connector and Peoples Place. A manhole is located in the northeastern corner of the intersection of Peoples Place and Internal Road A;
- Proposed 160mm PE sewer property connection located along the eastern verge of Internal Road A;
- Proposed 160mm PE sewer property connection located along the eastern verge of Main Street from the main in Peoples Place.

The north eastern site connection is currently under construction per Stantec design. It is proposed to utilise the connection for the proposed Town Centre development. The mains to the east and west of the proposed development site will each accept a portion of the proposed development in accordance with the masterplan catchments and servicing strategy.

The proposed sewer infrastructure in the vicinity of the site is shown on MPN Plan 8053–DA.03 attached in Appendix B.

10 > Roadworks

Access to the Stage 1 development will be provided off the public roads Peoples Place and the Seamless Connector to the north, and Splendour Street to the east and Celebration Street to the west. Connection to the public roads will be via a series of new internal private roads which will provide circulation through Stage 1 of the Town Centre Development as depicted on the architectural plans.

Peoples Place is currently under construction based on the approved design by Stantec. Seamless Connector is currently in design to facilitate access into the Town Centre site and be delivered prior to the opening of Stage 1 of the Town Centre.

Internal Road A, B & C and Main Street are all private roads that will be delivered as part of Stage 1 of the Town Centre to provide connection to the external public road network. Car parking (temporary on grade and basement) will be constructed for the development site. The pavement design parameters will be assessed from the traffic analysis and the site geotechnical conditions.

All roadworks will be designed and constructed in accordance with the relevant Council, State and Australian Standards.

The internal and external traffic and carparking arrangements will be addressed in a Traffic Report by SLR Consulting lodged under separate cover.

11 >Earthworks

The proposed development will involve earthworks to construct the Town Centre, a basement for carparking, above-ground temporary carparking, roadworks and landscaping along with trenching for underground utilities and services.

Basement construction will be a combination of retaining walls and batters to the upper ground level and dock levels. All batters and walls will be designed in accordance with the requirements of the geotechnical report and structural engineering advice.

The design and construction of the earthworks will be in accordance with AS3798 “Guidelines on Earthworks for Commercial and Residential Developments”.

Any excavated material not suitable for fill will be removed from the site and disposed of appropriately in an approved landfill.

All filling operations will be completed under Level 1 geotechnical supervision.

A preliminary bulk earthworks basement layout and sections are shown on MPN Plan 8053-DA.01 attached in Appendix B.

12 > Electricity and Communications

The proposed development will be serviced for electrical and telecommunications services from the existing and proposed underground infrastructure in Peoples Place, Seamless Connector and Internal Roads. All works will be undertaken in accordance with the relevant authority specifications to provide the required level of service.

13 > Conclusion

This Civil Engineering Report demonstrates that under the proposed plans Stage 1 of the Town Centre will be adequately serviced for water and sewer by the proposed connections to the infrastructure mains, and electricity and telecommunications will be provided to the site with connections undertaken in accordance with the requirements of the relevant authorities.

Stormwater runoff from the site will be discharged to the kerb and channel and stormwater infrastructure in the surrounding internal private and external public road network. Rainwater harvesting and stormwater quality treatment will be provided in accordance with the requirements of the stormwater quality management plan. No detention systems are required on site with stormwater attenuation provided in offsite structures.

Water servicing for the proposed development will be provided via a new water connection to the proposed 250mm dia water main on the western verge of Internal Road A, in accordance with Unity Water and SEQ Code requirements. The new 250mm main will connect to the existing main in Peoples Place and will be covered by an easement where it traverses the internal private road network. The size of the new connection will be confirmed in consultation with the hydraulic consultant and Unitywater during the detailed design stage of the development.

It is proposed to provide new sewer connections to the proposed main along the northern verge of Seamless Connector at the northwestern and northeastern corners of the site to service the Town Centre. The size and arrangement of the new connections will be confirmed in consultation with the hydraulic consultant and Unitywater during the detailed design stage of the development.

The proposed development will involve earthworks to construct the Town Centre, a basement for carparking, above-ground temporary carparking, roadworks and landscaping along with trenching for underground utilities and services. The proposed development will involve major earthworks. All earthworks undertaken on site will be compliant with all relevant Australian Standards to minimise environmental impacts.

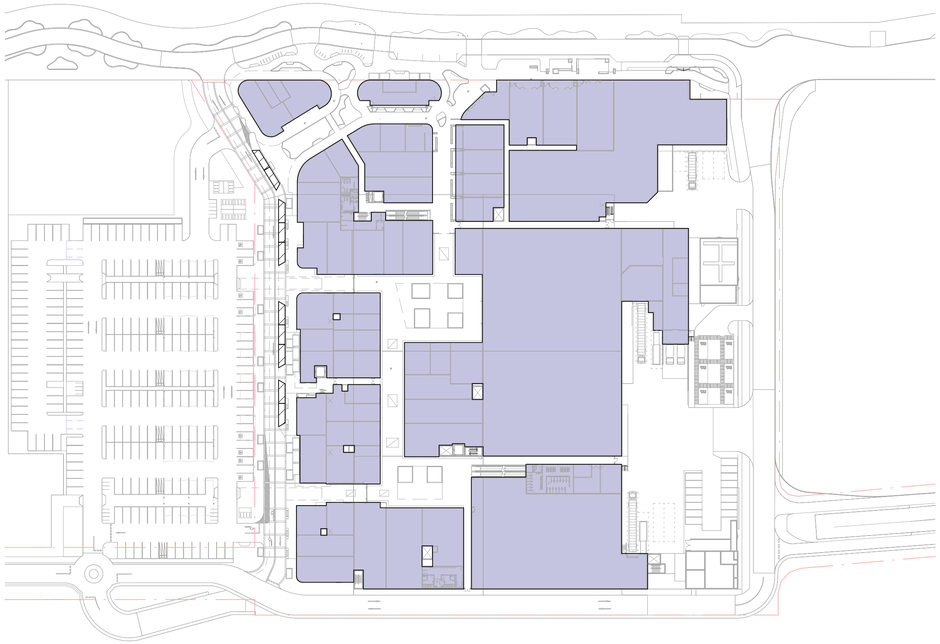
The Town Centre area will be accessed via the public roads of Peoples Place, Splendour Street and Celebration Street with Stage 1 of the Town Centre then access via internal private roads known as Main Street, Internal Road A, B & C. Roadworks completed on site will be undertaken in accordance with the relevant Council, State and Australian Standards.

The development will be serviced for electricity and telecommunications via new connections to the proposed underground infrastructure in the public and private roads.

14 > Limitations of Report

MPN have prepared this report to support the Development Application for the proposed Stage 1 Aura Town Centre. This report is provided for the exclusive use of Stockland for this specific project and its requirements. It should not be used or relied upon by a third party and MPN accept no responsibility for the use of this report by any party other than Stockland.

Appendix A. Site Layout Plan



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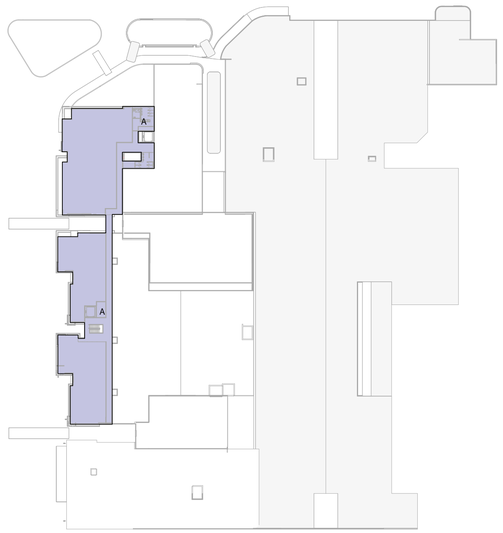

2 LEVEL 1 GFA PLAN
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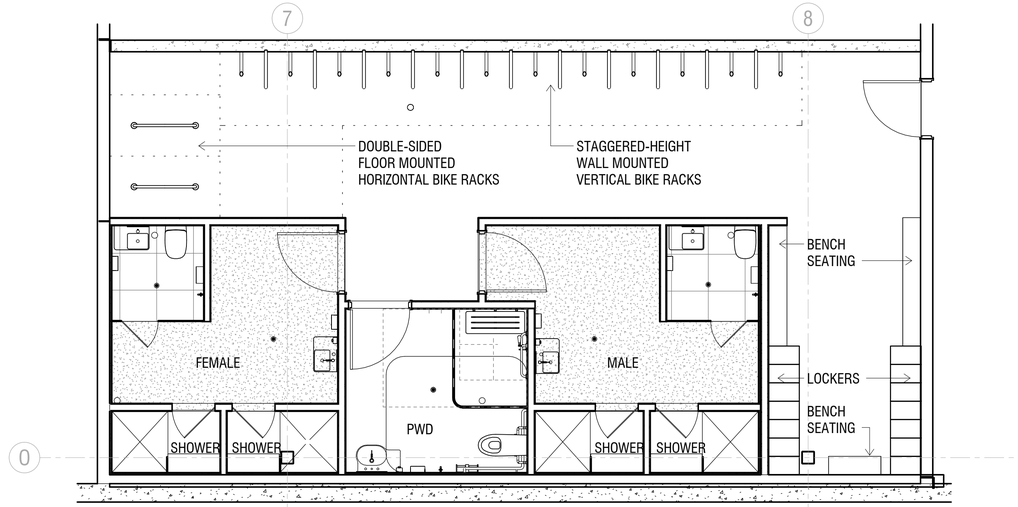

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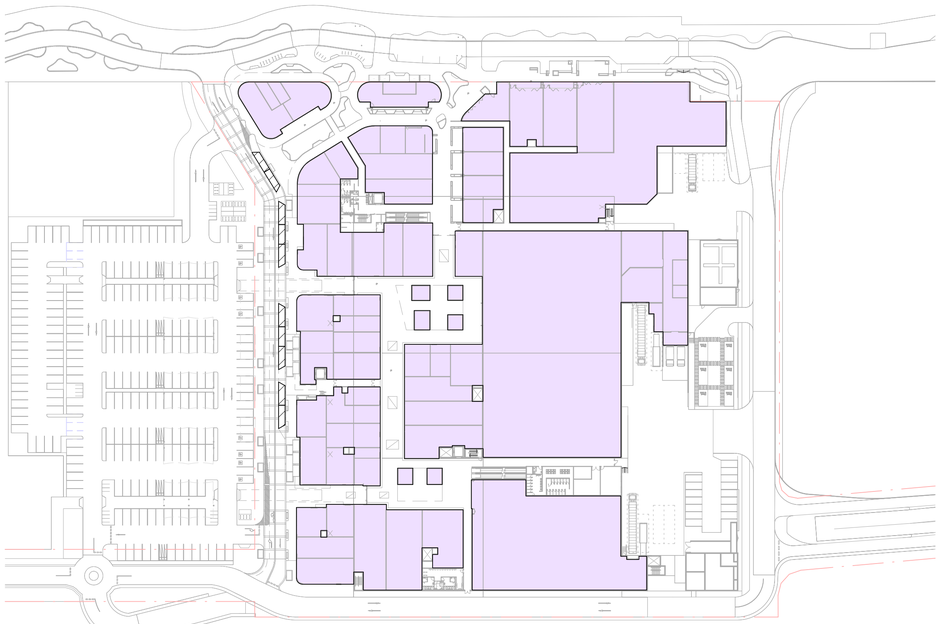

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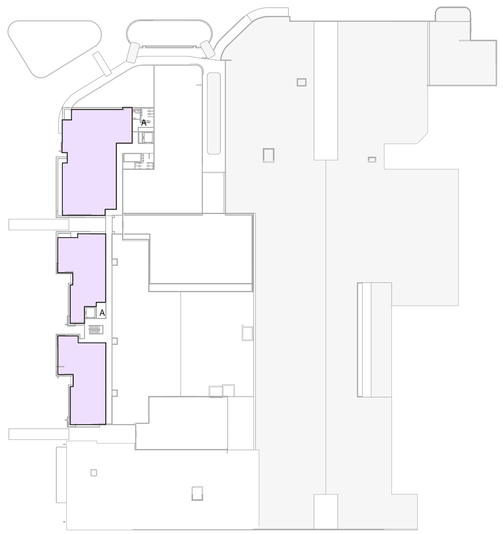

5 LEVEL 1 NLA PLAN
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GFA SUMMARY	STAGE 1A + 1B
GROUND FLOOR	15,470 m²
LEVEL 1	1,780 m²
TOTAL	**17,250 m²**

GLAR / NLA SUMMARY		STAGE 1A + 1B
GROUND FLOOR	(GLAR)	14,800 m²
LEVEL 1	(NLA)	1,345 m²
TOTAL	(HYBRID)	**16,145 m²**

PARKING SUMMARY	CARS PROVIDED STAGE 1A	CARS PROVIDED STAGE 1B	CARS PROVIDED STAGE 1A + 1B
STAGE 1 - BASEMENT	403		403
STAGE 1 - GROUND	223	+ 42	265
TOTAL	**626**	**+ 42**	**668**

END OF TRIP FACALITIES SUMMARY	
TOTAL NUMBER OF BICYCLE PARKING (SECURED) GROUND FLOOR	26
TOTAL NUMBER OF LOCKERS GROUND FLOOR	26
TOTAL NUMBER OF FEMALE SHOWER GROUND FLOOR	2
TOTAL NUMBER OF MALE SHOWER GROUND FLOOR	2

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	22-11-24	WIP	GC	GC
B	29-11-24	WIP	GC	GC
C	04-12-24	AREA MEASUREMENT UPDATE	MM	GC
D	06-12-24	WIP	MM	GC
E	13-12-24	WIP	MM	GC
F	17-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

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Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

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AREA + PARKING + EOT SUMMARIES

Drawing Number
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Revision
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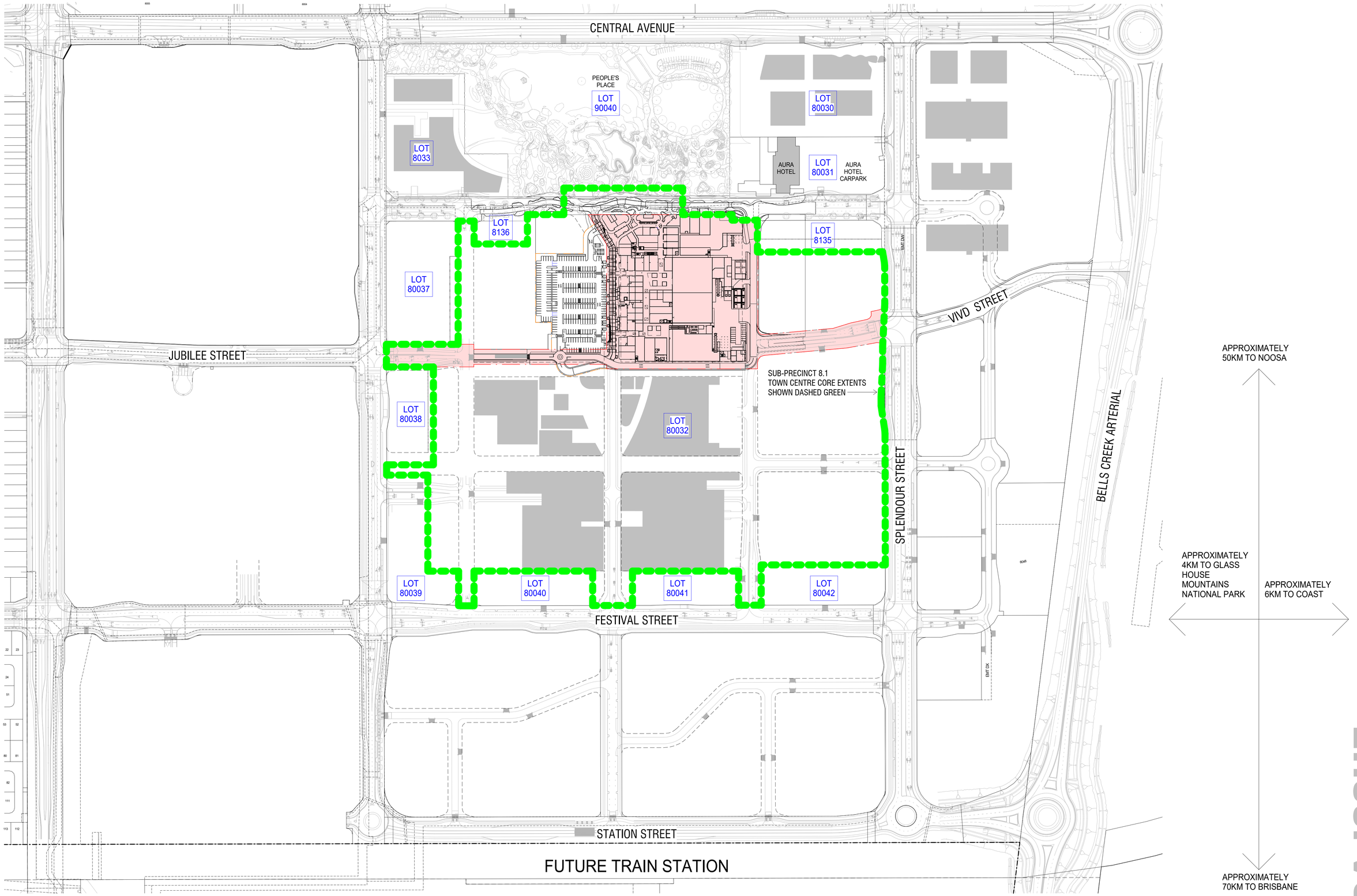

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E	17-12-24	WIP	MM	GC
F	18-12-24	DA ISSUE	MM	GC

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Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

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Drawing Title
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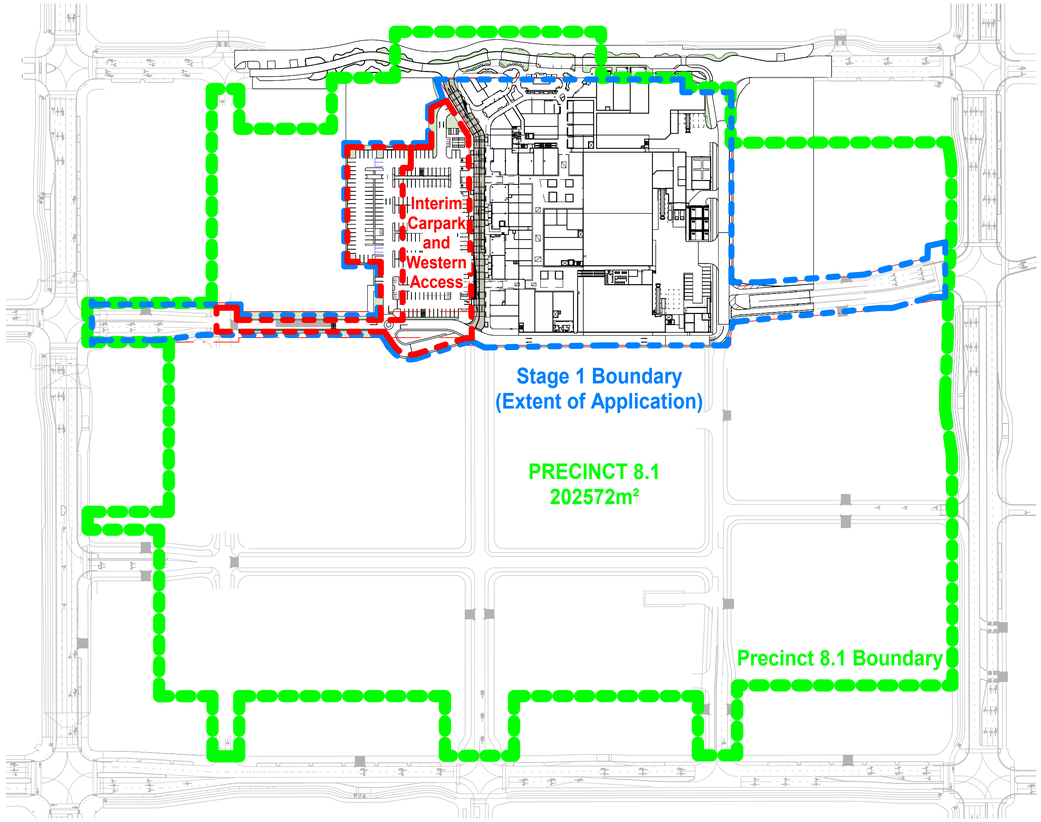

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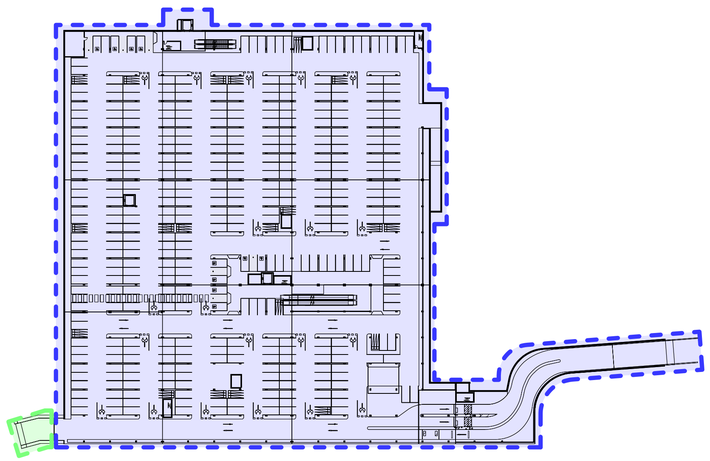

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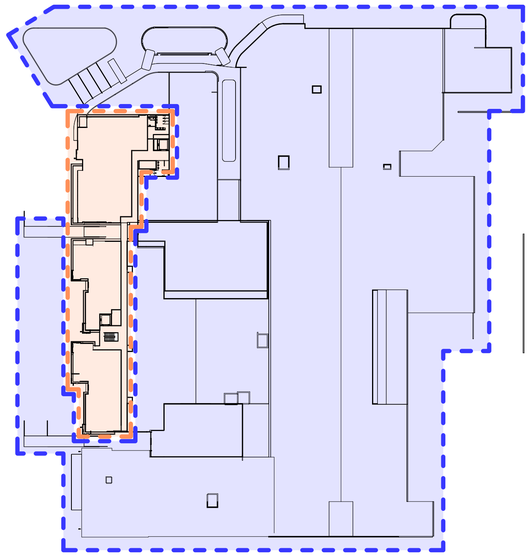
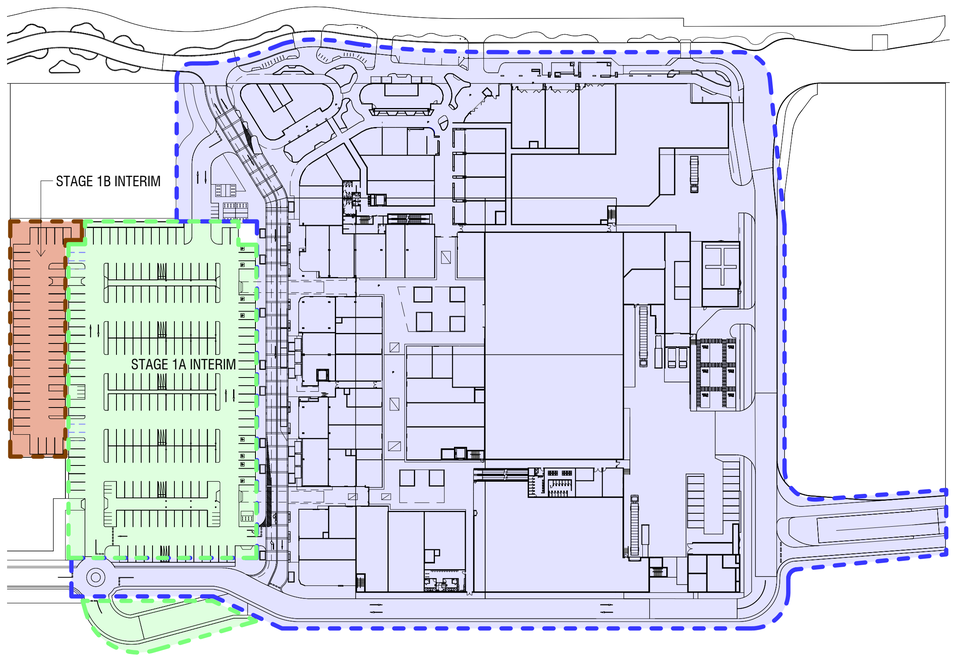


4 LEVEL 1 PLAN_STAGING
1 : 1000

Staging Legend

- INTERIM CARPARK AND WESTERN ACCESS
- Stage 1 Boundary (Extent of Application)
- Precicnct 8.1 Boundary
- Stage 1A
  - Main St
  - Basement
  - Ground Level Retail
- Stage 1B
  - Level 1
- Stage 1A Interim Works
  - 198 car parking bays at ground level
- Stage 1B Interim Works
  - 42 car parking bays at ground level



3 GROUND LEVEL PLAN_STAGING
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Project
AURA TOWN CENTRE
STAGE 1

Project Number
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Revision
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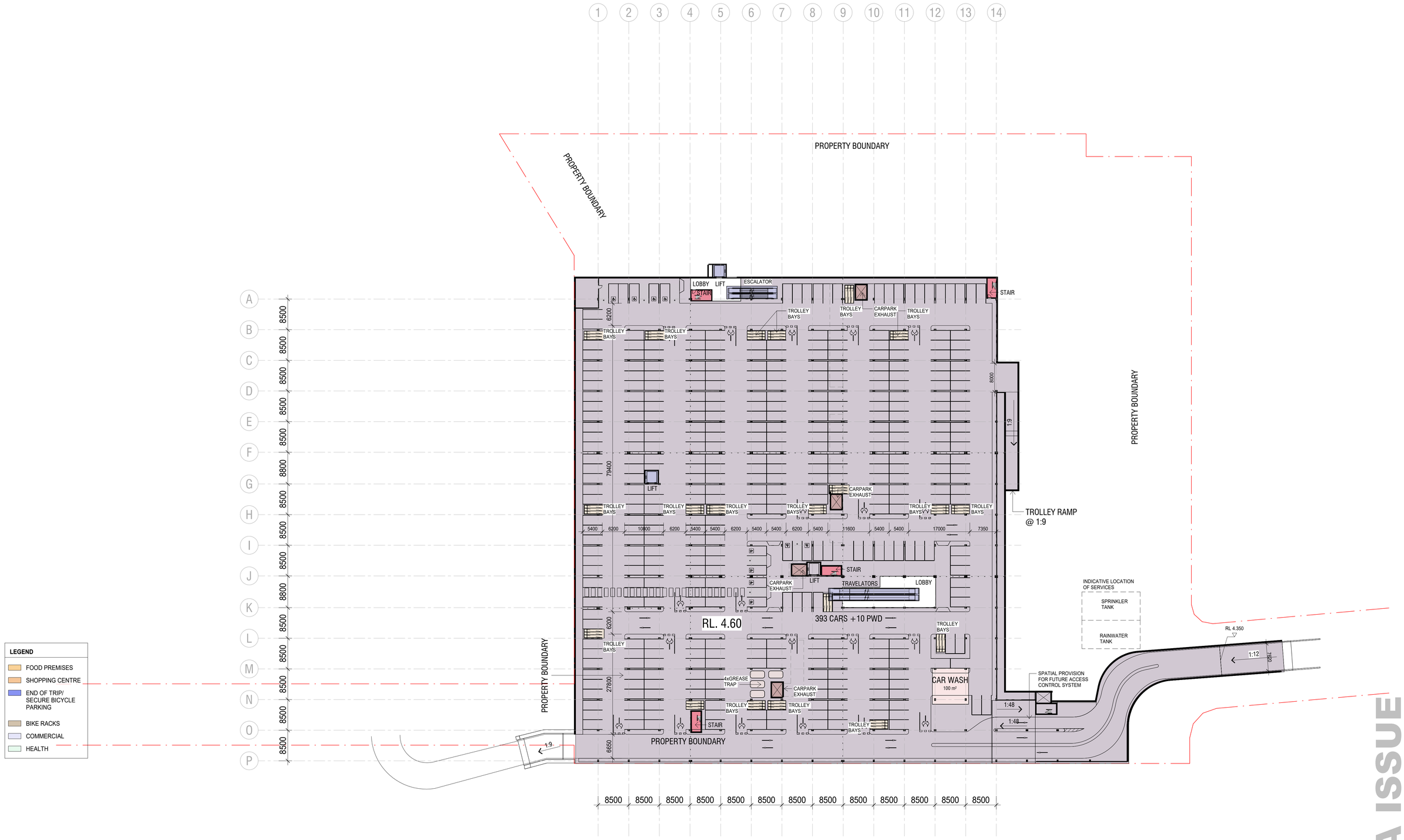

LEGEND

- FOOD PREMISES
- SHOPPING CENTRE
- END OF TRIP/ SECURE BICYCLE PARKING
- BIKE RACKS
- COMMERCIAL
- HEALTH

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	13-12-24	WIP	MM	GC
F	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:35:47 PM
Date Issued 18-12-24
Scale As indicated @A1
0 10 20 40 60M

Drawing Title
BASEMENT PLAN

Drawing Number
A-DA-1000

Revision
F

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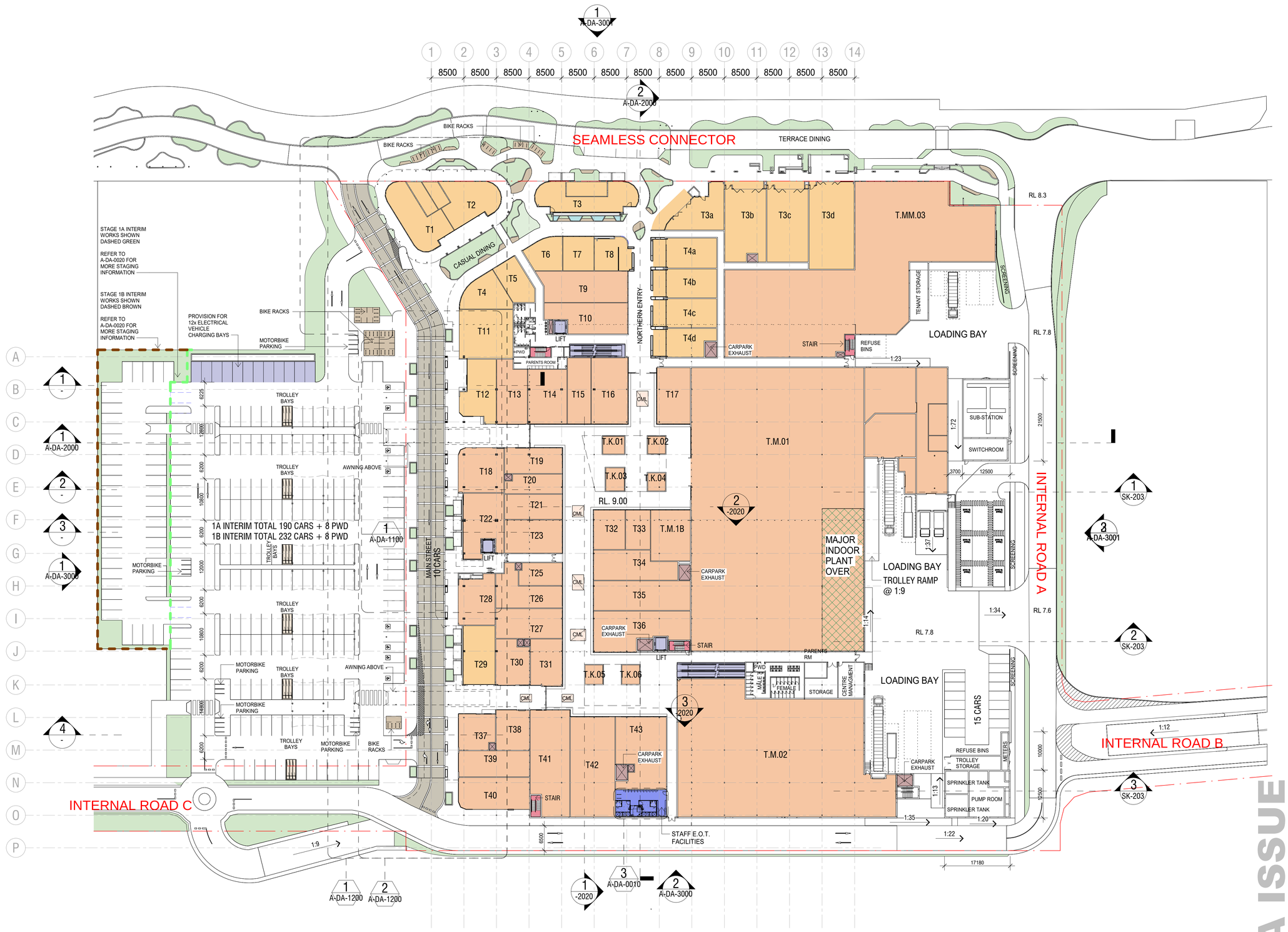

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	13-12-24	WIP	MM	GC
F	17-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
VACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:19:02 PM
Date Issued 18-12-24
Scale As indicated @A1

Drawing Title
GROUND FLOOR PLAN

Drawing Number
A-DA-1001

Revision
G

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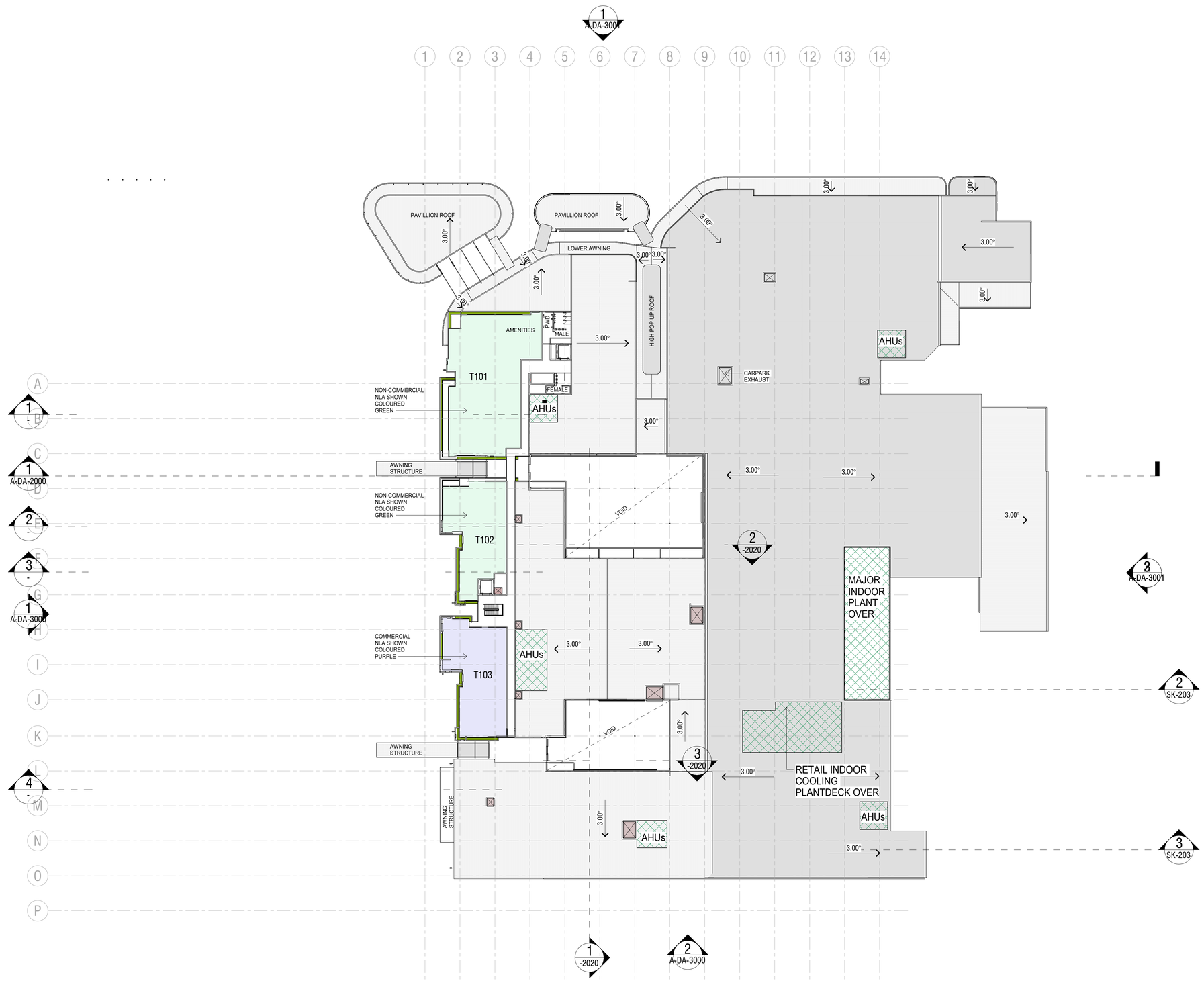

LEGEND

- FOOD PREMISES
- SHOPPING CENTRE
- END OF TRIP/ SECURE BICYCLE PARKING
- BIKE RACKS
- COMMERCIAL
- HEALTH

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:19:19 PM

Date Issued 18-12-24

Scale As indicated @A1
0 10 20 40 60M

Drawing Title
LEVEL 1 PLAN

Drawing Number
A-DA-1002

Revision
G

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DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:19:13 PM
Date Issued 18-12-24
Scale 1 : 500 @A1
0 10 20 40 60M

Drawing Title
ROOF PLAN

Drawing Number
A-DA-1003

Revision
G

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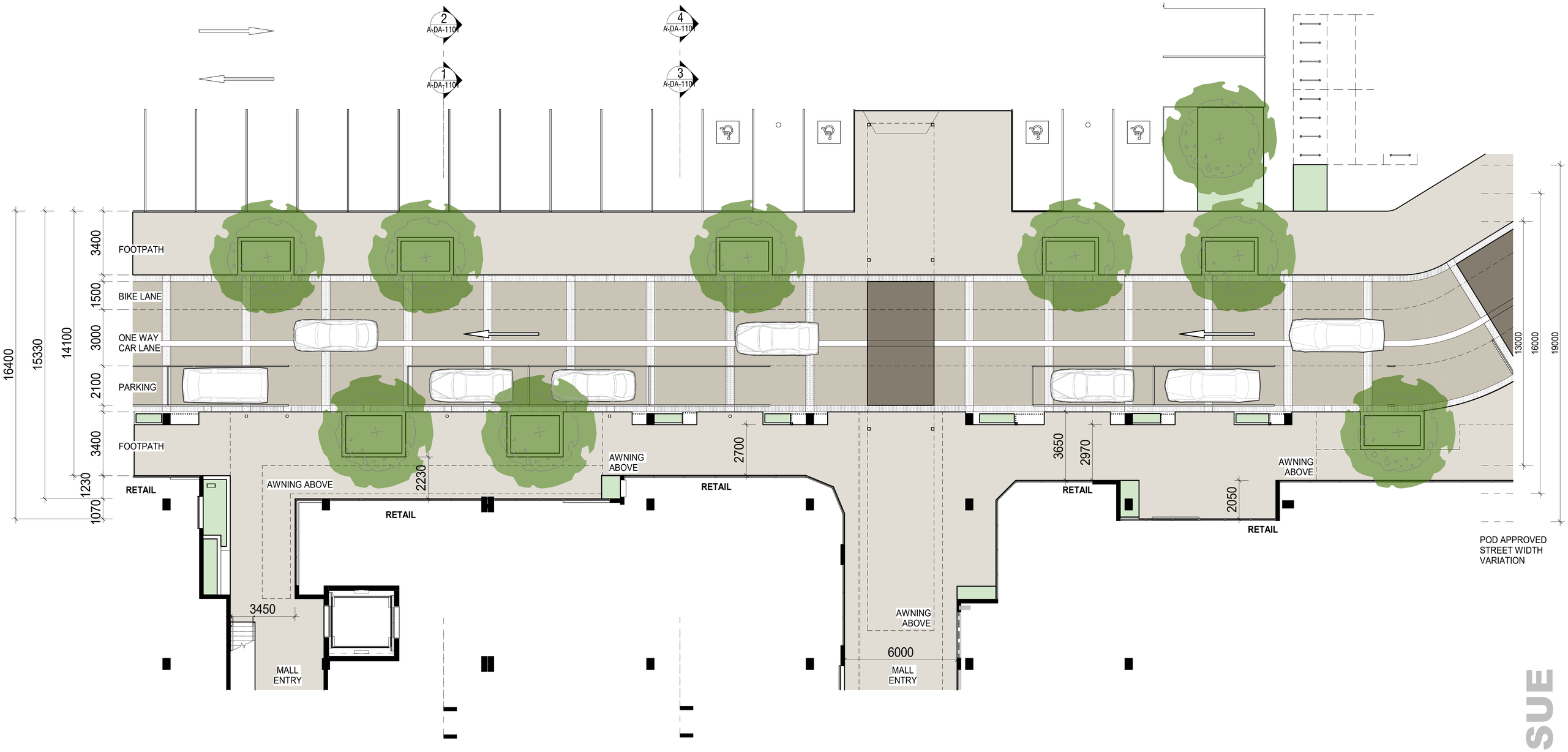
+ 61 7 3859 9222 / **buchangroup.com.au**



DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
VACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:20:00 PM
Date Issued 18-12-24
Scale 1 : 100 @A1

0 10 20 40 60M

Drawing Title
MAIN STREET TYPOLOGY PLAN

Drawing Number
A-DA-1100

Revision
G

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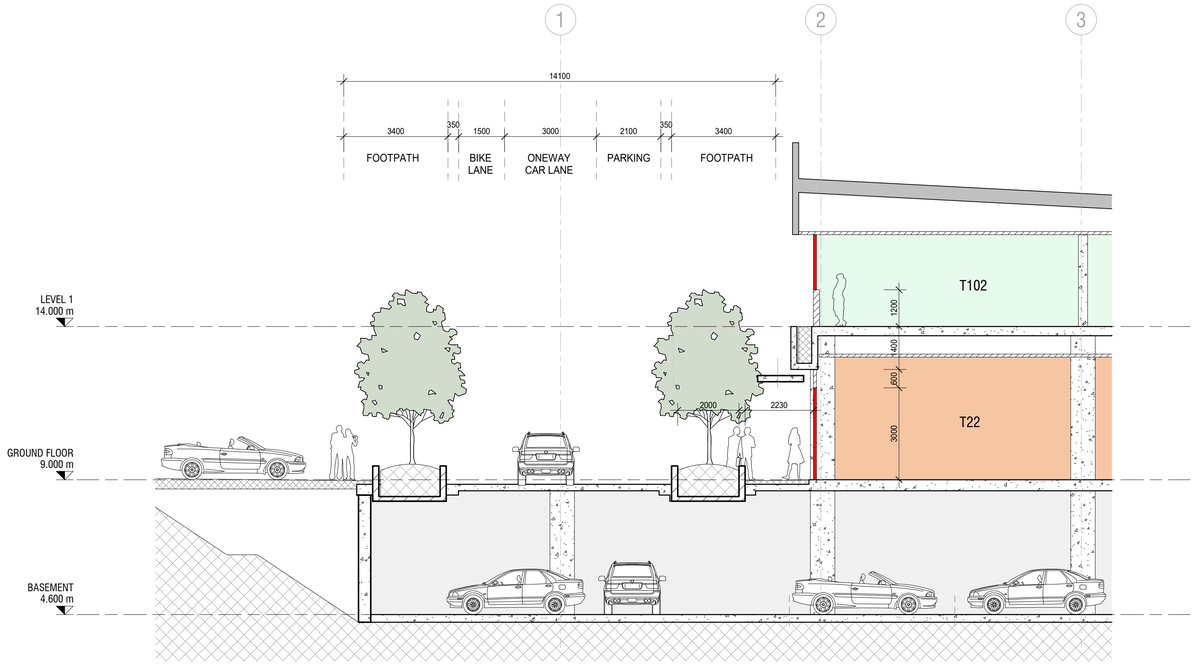
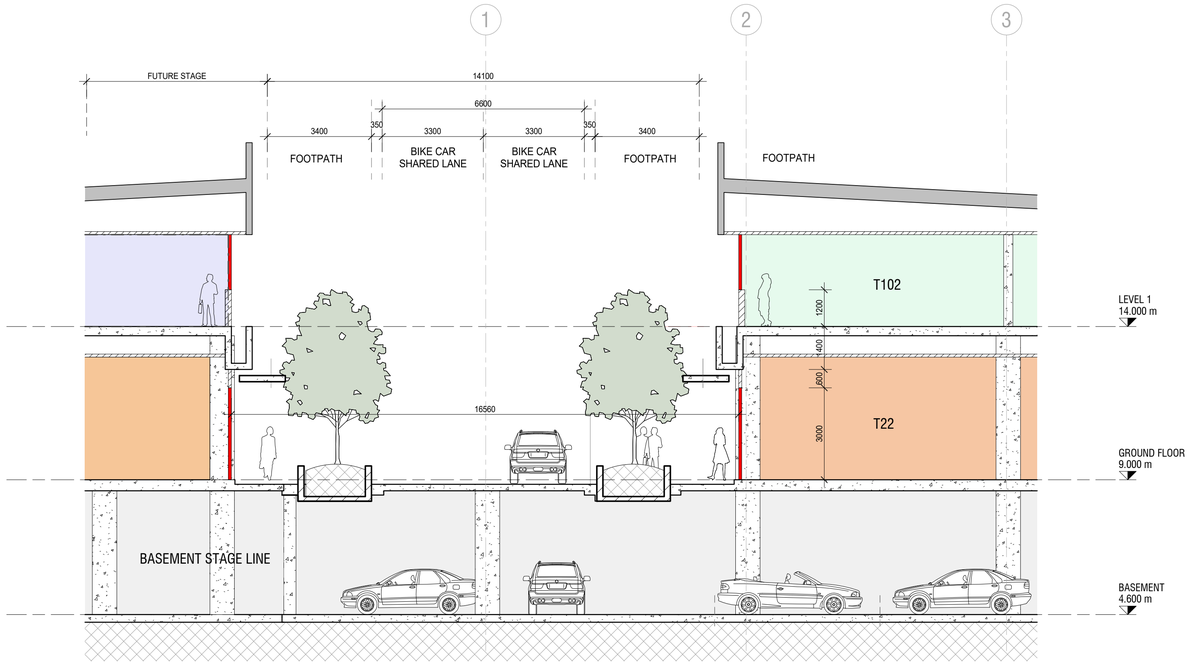


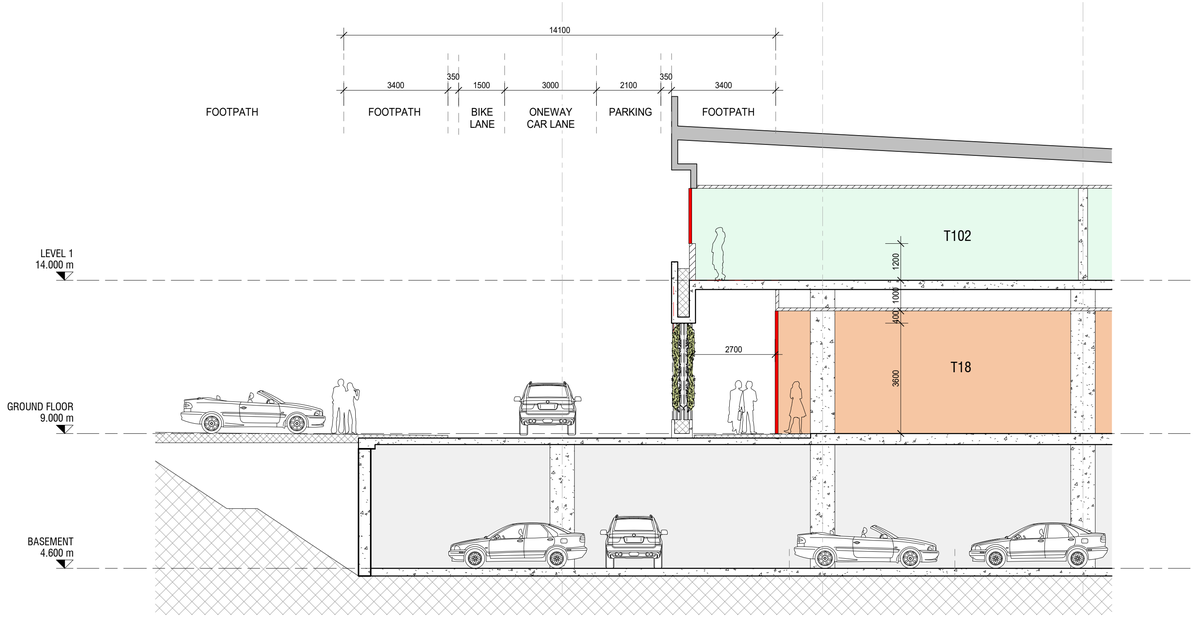
1 MAIN STREET STAGE 1 DETAIL SECTION 1

A-DA-1100 1 : 100



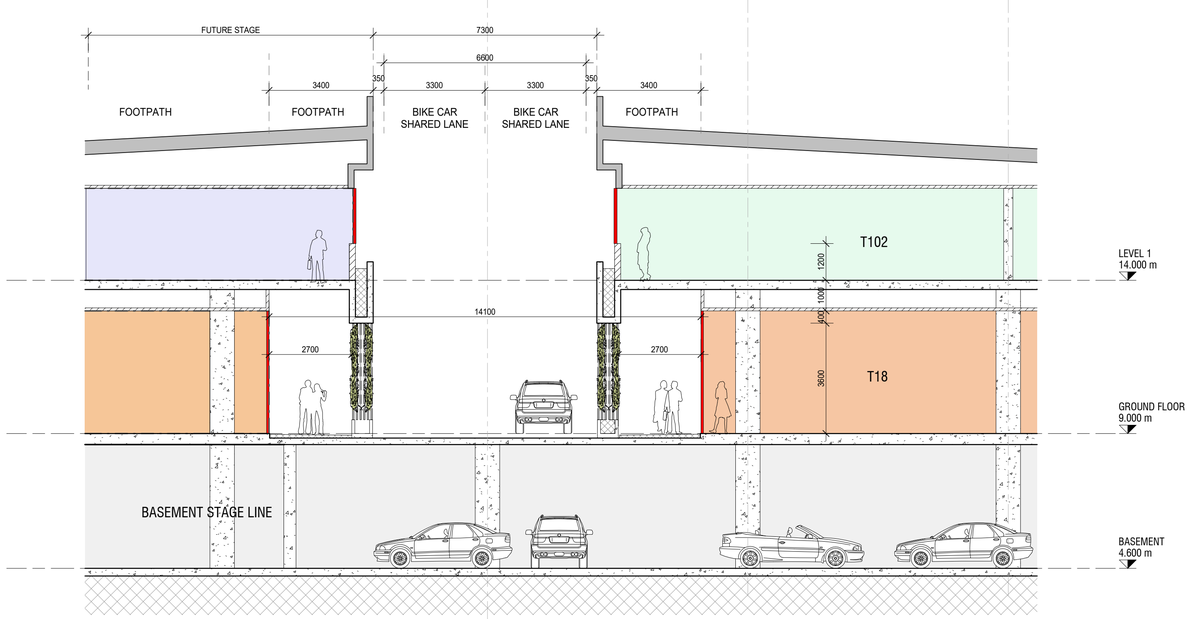
2 MAIN STREET FUTURE DETAIL SECTION 1

A-DA-1100 1 : 100



3 MAIN STREET STAGE 1 DETAIL SECTION 2

A-DA-1100 1 : 100



4 MAIN STREET FUTURE DETAIL SECTION 2

A-DA-1100 1 : 100

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	16-09-24	FOR INFORMATION	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:18:42 PM
Date Issued 18-12-24
Scale 1 : 100 @A1

0 10 20 40 60M

Drawing Title
MAIN STREET DETAIL SECTION

Drawing Number
A-DA-1101

Revision
G

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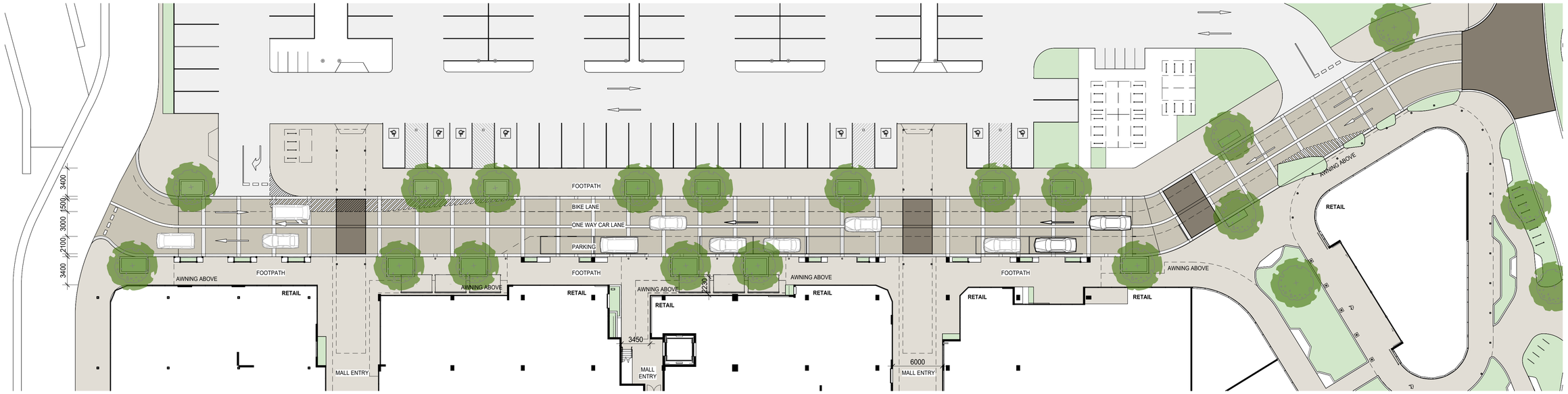
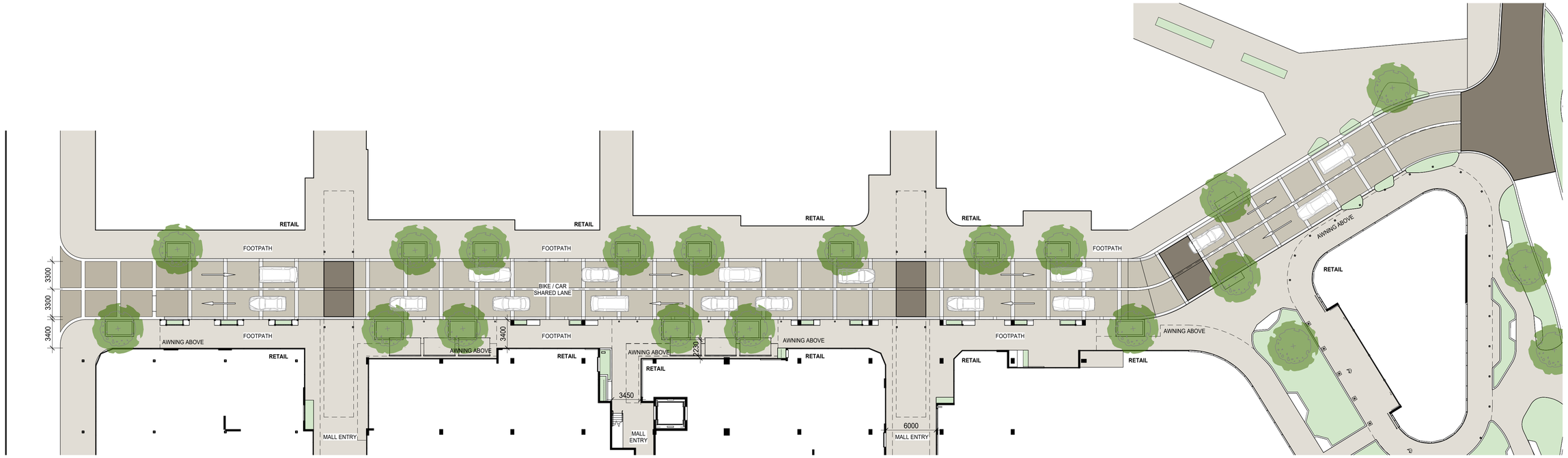


1 MAIN STREET TYPOLOGY PLAN CURRENT STAGE
A-DA-1001 1 : 250



2 MAIN STREET ULTIMATE PLAN
A-DA-1001 1 : 250

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	16-09-24	FOR INFORMATION	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 19/12/2024 9:49:18 AM
Date Issued 18-12-24
Scale 1 : 250 @A1

0 10 20 40 60M

Drawing Title
MAIN STREET ULTIMATE LAYOUT

Drawing Number
A-DA-1200

Revision
G

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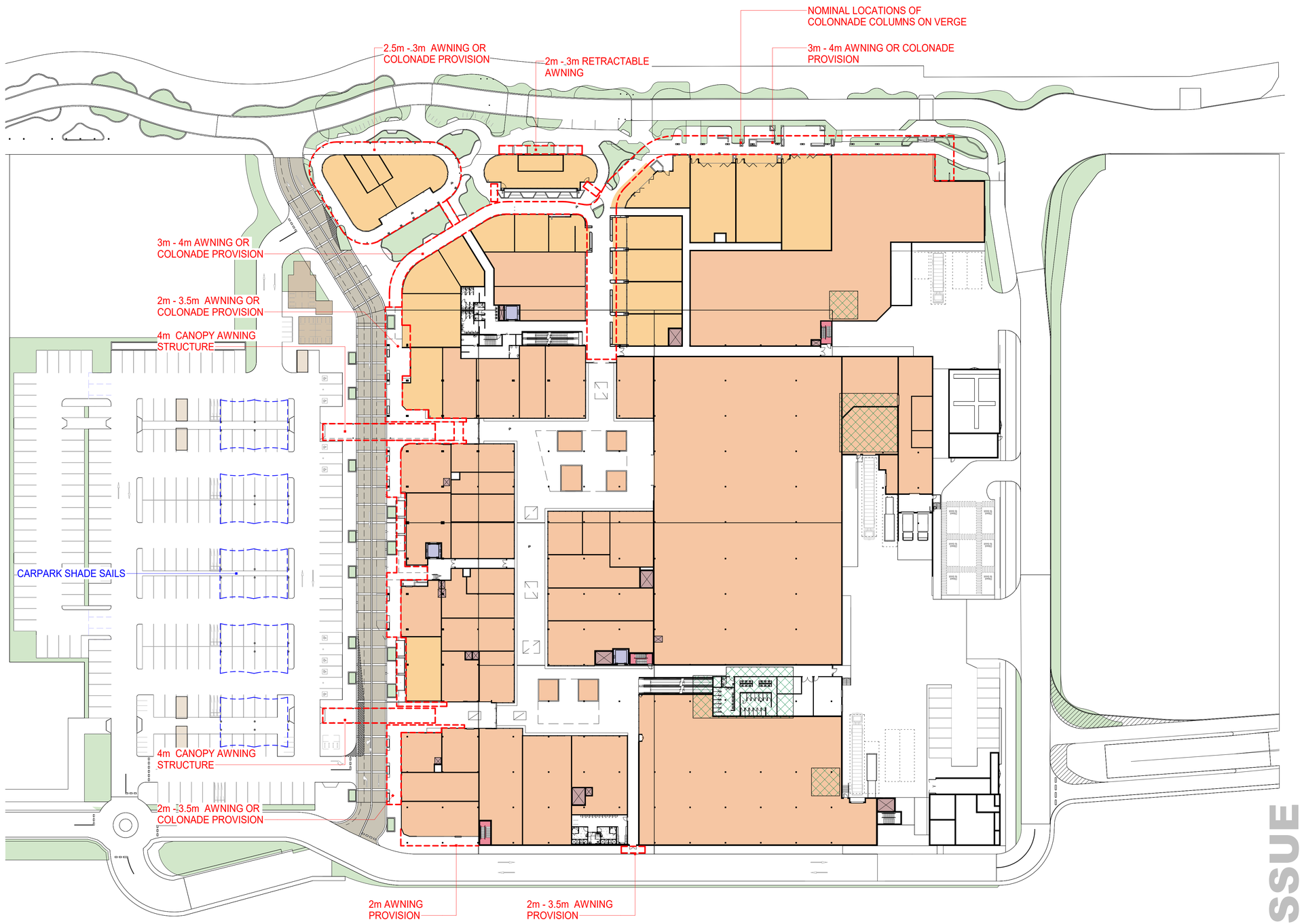

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	15-11-24	WIP	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:20:32 PM
Date Issued 18-12-24
Scale 1 : 500 @A1

0 10 20 40 60M

Drawing Title
AWNING COVERAGE PLAN

Drawing Number
A-DA-1201

Revision
G

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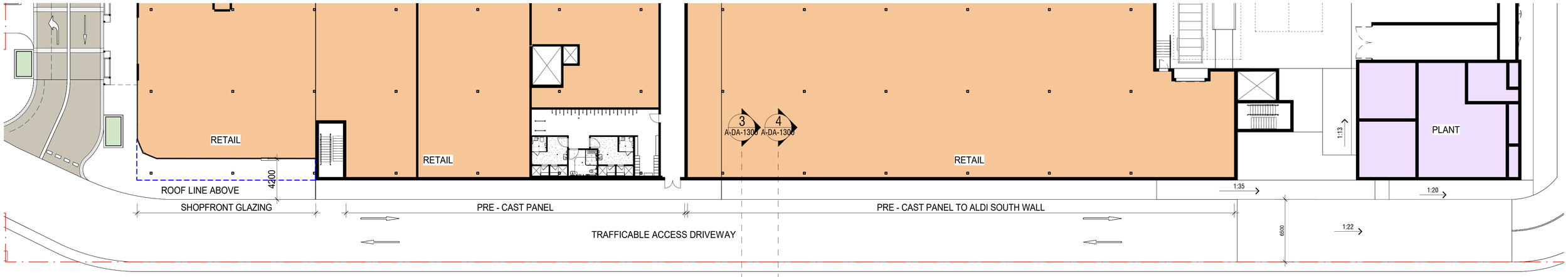
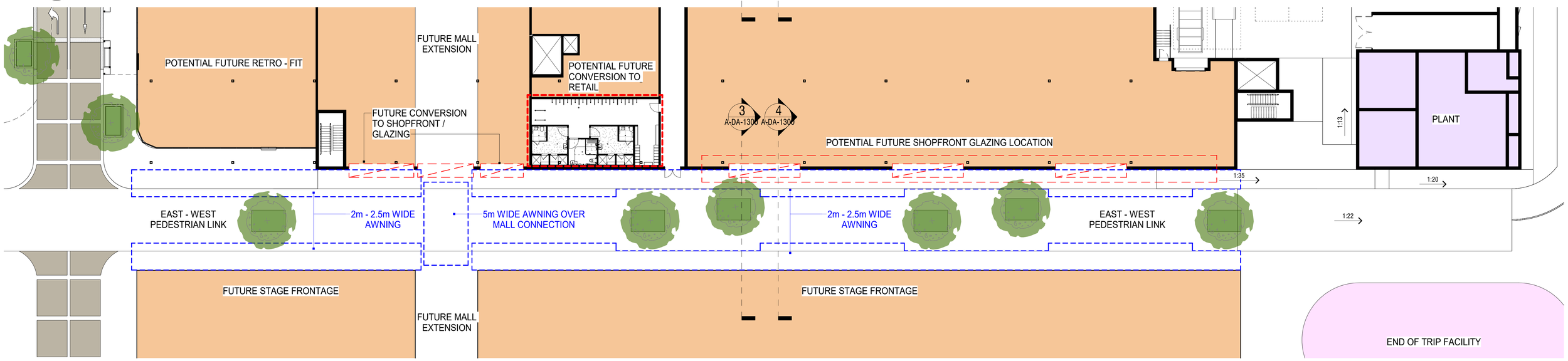


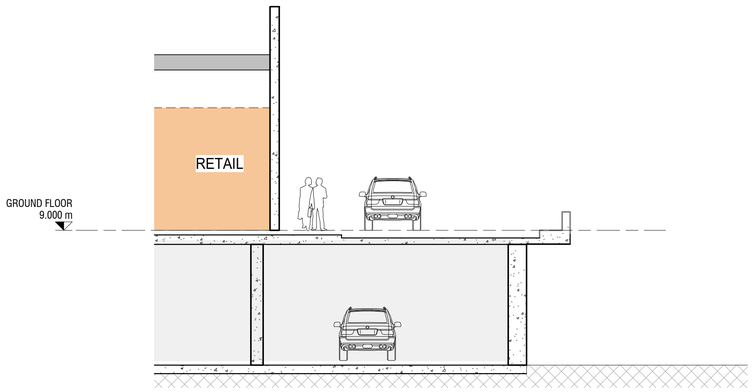
1 - RETAIL SOUTH EAST WALL - STAGE 1

1 : 200



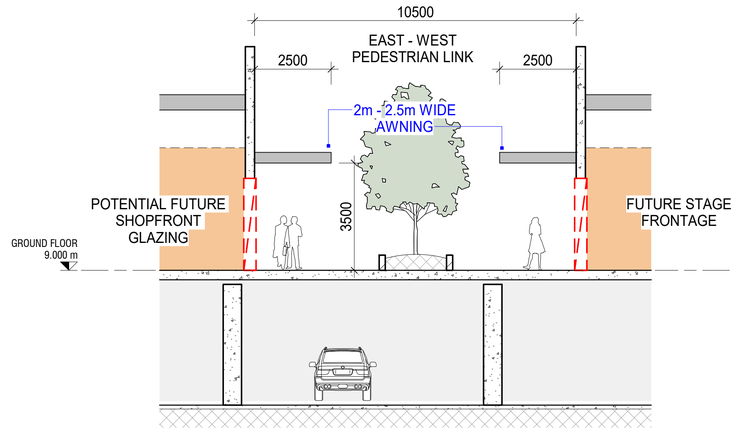
2 - RETAIL SOUTH EAST WALL - STAGE 2

1 : 200



3 A-DA-1300 SOUTH EAST WALL DETAIL SECTION - STAGE 1

1 : 100



4 A-DA-1300 SOUTH EAST WALL DETAIL SECTION - STAGE 2

1 : 100

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	16-09-24	FOR INFORMATION	JR	GC
B	22-11-24	WIP	GC	GC
C	29-11-24	WIP	GC	GC
D	06-12-24	WIP	MM	GC
E	10-12-24	WIP	KQ	GC
F	13-12-24	WIP	MM	GC
G	18-12-24	DA ISSUE	MM	GC

File
VACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:20:18 PM

Date Issued 18-12-24

Scale As indicated @A1

0 10 20 40 60M

Drawing Title
SOUTH EAST WALL

Drawing Number
A-DA-1300

Revision
G

BUCHAN
Brisbane Studio
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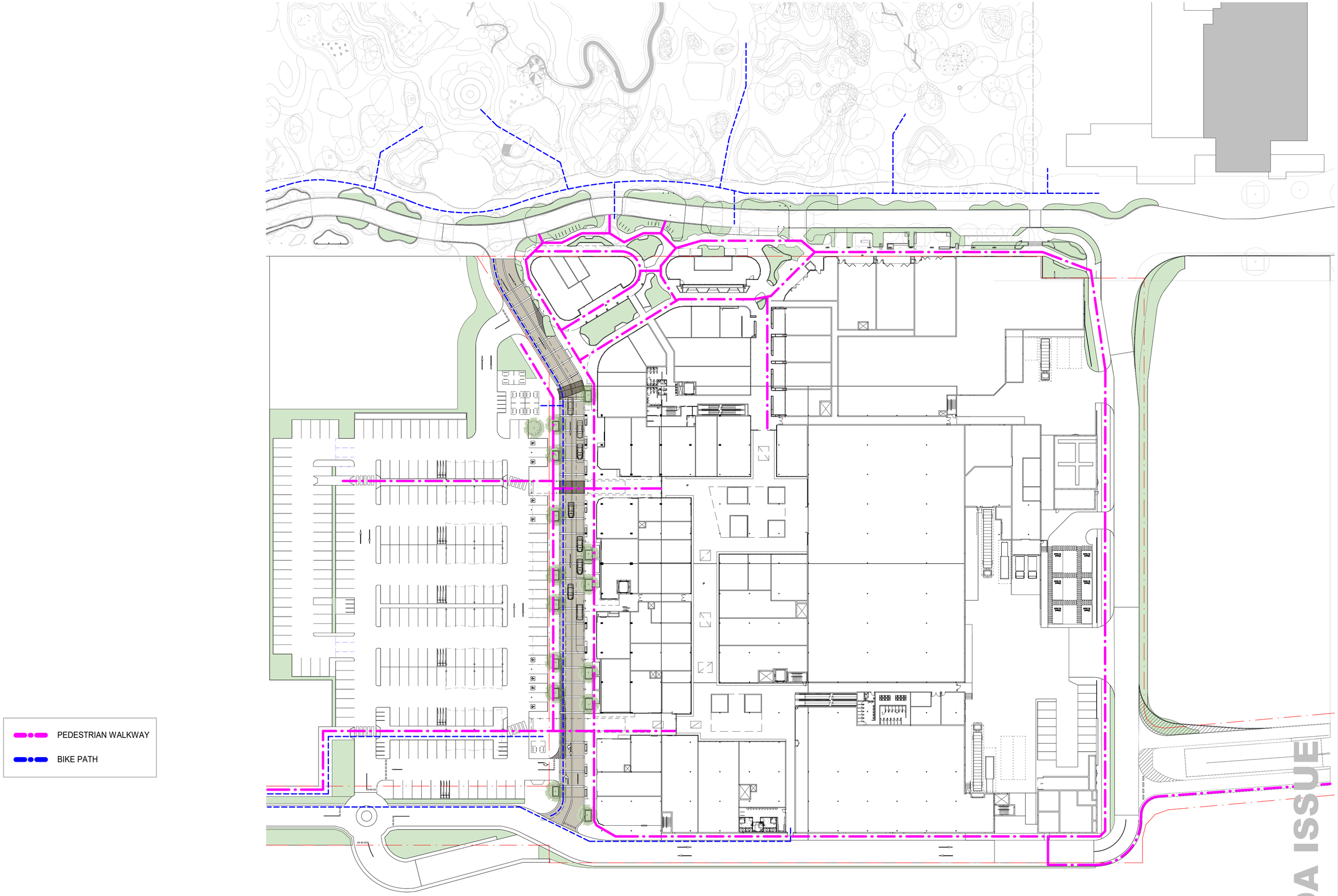

1 GROUND FLOOR_MOVEMENT PLAN (BICYCLE AND FOOTPATH)

1 : 500

DA ISSUE

Rev.	Date	Description	Iss.	Appr.
A	29-11-24	WIP	GC	GC
B	06-12-24	WIP	MM	GC
C	13-12-24	WIP	MM	GC
D	18-12-24	DA ISSUE	MM	GC

File
\ACCDocs\Buchan\240206-R24-Aura_Town_Centre\

Project
AURA TOWN CENTRE
STAGE 1

Project Number
240206

Status

Date Plotted 18/12/2024 5:21:41 PM
Date Issued 18-12-24
Scale As indicated @A1
0 10 20 40 60M

Drawing Title
GROUND FLOOR - MOVEMENT PLAN

Drawing Number
A-DA-1400

Revision
D

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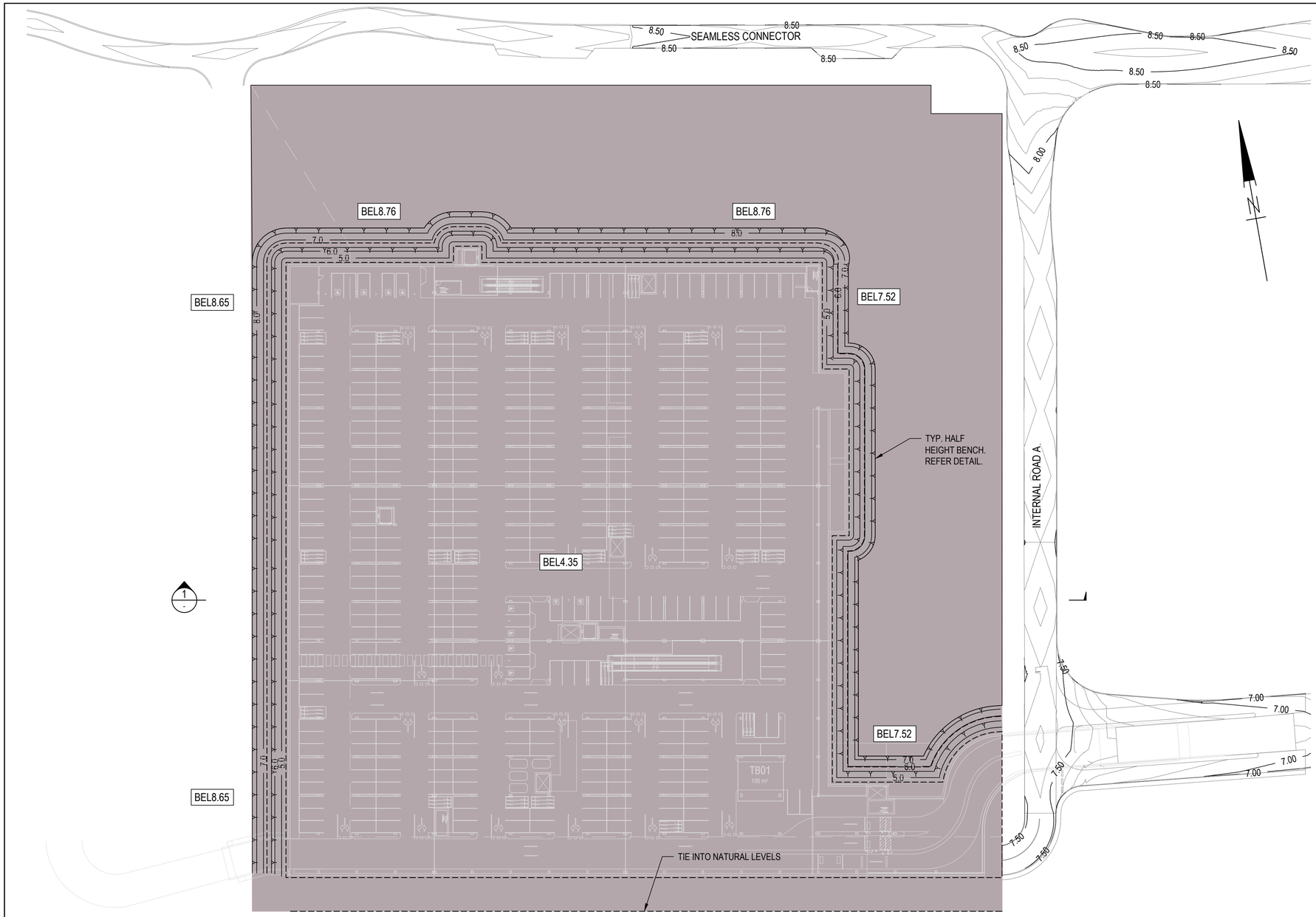
Appendix B. MPN Plans



SECTION 1

SCALE 1:250

LEGEND

EXISTING		PROPOSED
	PROPERTY BOUNDARY	
	EASEMENT BOUNDARY	
5.00	CONTOUR	5.00
	BUILDING	
	CONCRETE	
	EDGE OF BITUMEN	
	KERB	
	KERB AND CHANNEL	
	FLUSH KERB	
	KERB RAMP	
SW	STORM WATER MAIN	
RW	ROOFWATER	
W W	WATER MAIN	
S S	SEWER MAIN	
RM	RISING MAIN	
G G	GAS MAIN	
T T	TELECOMMUNICATIONS	
OF	OPTIC FIBRE	
E E	U/G ELECTRICITY	
	O/H ELECTRICITY	
	FENCE	
	RETAINING WALL	
	LANDSCAPE WALL	
	TOP OF BATTER	
	FACE OF BATTER	
	TOE OF BATTER	
	SWALE DRAIN	
	BULK EARTHWORKS LEVEL	BE 22.22
	TREE	
	BOREHOLE	BH1
	TEST PIT	TP1
	CUT AREA	
	FILL AREA	

FOR APPROVAL

NOT FOR CONSTRUCTION

! ! ! CAUTION ! ! !
CONTRACTOR TO CONFIRM THE DEPTH AND LOCATION OF ALL SERVICES PRIOR TO COMMENCING ANY CONSTRUCTION WORKS OR ORDERING ANY MATERIALS.

0 5 10 12.5
SCALE 1:250 (A1) 1:500 (A3)

0 5 10 20 25
SCALE 1:500 (A1) 1:1000 (A3)

ISSUE	DATE	AMENDMENT	BY	APP
B	08.12.24	FOR APPROVAL	DL	
A	04.12.24	FOR APPROVAL	DL	

AURA TOWN CENTRE - STAGE 1

SCALES: AS SHOWN
DESIGN: DL
DRAWN: DL
CHKD:
APPRD:
DATE:

CLIENT:
STOCKLAND

BASEMENT BULK EARTHWORKS PLAN

MPN CONSULTING
ABN: 39 062 191 799
P: 61 7 3335 4555
E: solutions@mpnc.au
Level 4, Building 3,
Kings Row Office Park,
42 McDougall Street, Milton, QLD, 4064

mpn JOB 8053

DRAWING No. DA.01

REV B

DRAINAGE DELIVERY TO BE COMPLETED AS PART OF SEAMLESS CONNECTOR CONSTRUCTION

SEAMLESS CONNECTOR

CONNECT TO DRAINAGE IN SEAMLESS CONNECTOR DELIVERED BY OTHERS

STAGE 1B INTERIM WORKS SHOWN DASHED

SUSPENDED DRAINAGE SHOWN INDICATIVE ONLY. TO BE CONFIRMED BY HYDRAULIC ENGINEER AT DETAILED DESIGN STAGE.

SITE DRAINAGE CONNECTION POINT

DRAINAGE LAYOUT PER STANTEC DESIGN PLANS

PEOPLES PLACE

MAIN STREET

INTERNAL ROAD A

INTERNAL ROAD B

INTERNAL ROAD C

FFL9.00

62kL RAINWATER HARVESTING TANK

ROOFWATER CONNECTION POINT

GPT & HYDRODYNAMIC SEPARATOR

SUSPENDED DRAINAGE SHOWN INDICATIVE ONLY. TO BE CONFIRMED BY HYDRAULIC ENGINEER AT DETAILED DESIGN STAGE.

REFER INSET A FOR CONNECTION TO EXISTING

CONNECT TO EXISTING STORMWATER DRAINAGE

CONNECT TO EXISTING STORMWATER DRAINAGE

LEGEND

STAGE 1 RETAIL DRAINAGE

EXTERNAL DRAINAGE BY OTHERS

N

CELEBRATION ST

INTERNAL ROAD C

CONNECT TO EXISTING STORMWATER DRAINAGE

INSET A

SCALE 1:500

0 5 10 20 25

SCALE 1:500 (A1) 1:1000 (A3)

ISSUE	DATE	AMENDMENT	BY	APP
B	08.12.24	FOR APPROVAL	DL	
A	04.12.24	FOR APPROVAL	DL	

AURA TOWN CENTRE - STAGE 1

SCALES: AS SHOWN
DESIGN: DL
DRAWN: DL
CHKD:
APPRD:
DATE:

CLIENT: STOCKLAND

STORMWATER NETWORK

MPN CONSULTING
ABN: 39 062 191 799
P: 61 7 3335 4555
E: solutions@mpnc.au
Level 4, Building 3,
Kings Row Office Park,
42 McDougall Street, Milton, QLD, 4064

mpn JOB 8053

DRAWING No. DA.02

REV B

FOR APPROVAL

NOT FOR CONSTRUCTION

LEGEND

EXISTING SEWER LOCATION AND SIZE DELIVERED BY OTHERS	S250

0 5 10 20 25

SCALE 1:500 (A1) 1:1000 (A3)

FOR APPROVAL

NOT FOR CONSTRUCTION

ISSUE	DATE	AMENDMENT	BY	APP
B	08.12.24	FOR APPROVAL	DL	
A	04.12.24	FOR APPROVAL	DL	

AURA TOWN CENTRE - STAGE 1

SCALES: AS SHOWN
DESIGN: DL
DRAWN: DL
CHKD:
APPRD:
DATE:

CLIENT:
STOCKLAND

SEWER NETWORK

MPN CONSULTING
ABN: 39 062 191 799
P: 61 7 3335 4555
E: solutions@mpnc.au
Level 4, Building 3,
Kings Row Office Park,
42 McDougall Street, Milton, QLD, 4064

mpn JOB
8053

DRAWING No.
DA.03

REV
B

LEGEND

STAGE 1 WATER LOCATION AND SIZE — W250

EXISTING WATER LOCATION AND SIZE DELIVERED BY OTHERS — W250

SEAMLESS CONNECTOR

PEOPLES PLACE

CONNECT TO EXISTING DN250 END OF LINE ARRANGEMENT

WATER PER STANTEC DESIGN PLANS

STAGE 1B INTERIM WORKS SHOWN DASHED

FFL9.00

MAIN STREET

INTERNAL ROAD A

INTERNAL ROAD B

INTERNAL ROAD C

EASEMENTS REQUIRED FOR PUBLIC MAINS IN PRIVATE ROADS

CONNECT TO EXISTING DN150 END OF LINE ARRANGEMENT

CONSTRUCT NEW METERED CONNECTION

SPRINKLER TANKS & PUMP ROOM

EXTENSION OF MAIN IN FUTURE STAGES

1:23 1:72 1:37 1:34 1:14 1:13 1:35 1:20 1:22 1:12 1:9

0 5 10 20 25

SCALE 1:500 (A1) 1:1000 (A3)

FOR APPROVAL

NOT FOR CONSTRUCTION

ISSUE	DATE	AMENDMENT	BY	APP
B	08.12.24	FOR APPROVAL	DL	
A	04.12.24	FOR APPROVAL	DL	

AURA TOWN CENTRE - STAGE 1

SCALES: AS SHOWN
DESIGN: DL
DRAWN: DL
CHKD:
APPRD:
DATE:

CLIENT: STOCKLAND

WATER NETWORK

MPN CONSULTING
ABN: 39 062 191 799
P: 61 7 3335 4555
E: solutions@mpnc.au
Level 4, Building 3, Kings Row Office Park, 42 McDougall Street, Milton, QLD, 4064

mpn JOB 8053

DRAWING No. DA.04

REV B

Appendix C. Aura SWQMP

AURA PRECINCTS 6 - 10 & 16

STORMWATER QUALITY MANAGEMENT PLAN

VERSION 4

DesignFlow

Prepared for Stockland

November 2022