

Technical Memorandum

Memo No.	30031870-1194-001	Date of Issue	20/09/2024
Subject	Aura Precinct 4 Stage 22A Development	Discipline	Civil
Project Name	Aura Business Park	Project No.	30031870
Document No.	30031870-1194-001	Revision	0
Author	Andriena Ortega		
Reviewed by	Tim Wood	Approved by	Tim Wood
Prepared for	Stockland Development Pty Ltd	Attention to	Liam Hiscock
Attachments	Appendix A – Stage 22A ROL Plans; Appendix B – Existing Bulk Earthworks/Combined Services Plans; Appendix C – Lot 1194 Preliminary Civil Design Plans		

1 Project Background

SMEC Australia Pty Ltd (SMEC) was commissioned by Stockland Development Pty Ltd to complete an assessment of civil engineering aspects associated with the development of Aura Business Park (ABP) Precinct 4 Stage 22A as referred to in the approved DEV2013/439 Plan of Development (PoD) dated 25/01/2024. The location of Precinct 4 within the Caloundra South PDA is shown in Figure 1 below.

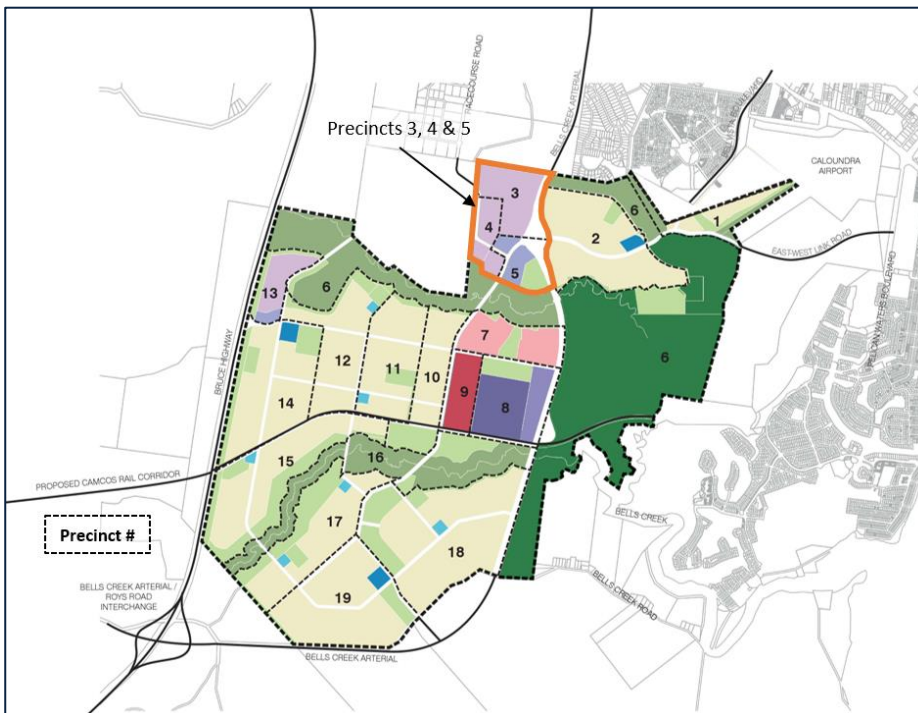


Figure 1: Aura Development Precincts (Extract from Unitywater Infrastructure Agreement: map produced by URBIS)

Precinct 4 Stage 22A (as shown in Figure 2 below) includes a single super lot 1194 which is bordered by Aura Boulevard and Graf Drive.

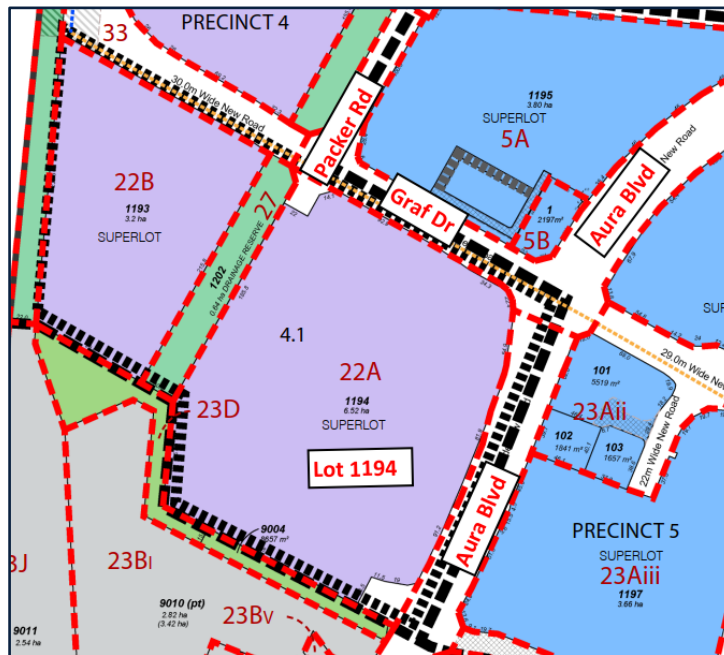


Figure 2: DEV2013/439 Aura Precinct 3, 4 and 5 Plan of Development 25/01/2024 (URBIS 2024)

2 Purpose of Technical Memorandum

This technical memorandum has been prepared for Stockland Development Pty Ltd to confirm that the proposed development does not compromise civil design matters already considered in the existing ABP approval (EDQ DEV2013/439 last amended 25/01/2024) or preclude future compliance with relevant guidelines.

3 Proposed Development Civil Assessment

3.1 Proposed ROL Layout

The Lot 1194 super lot is proposed to be reconfigured into 14 lots, intended for commercial and industrial uses including several multi-story and large GFA buildings. The site will have three external access points and an internal circulating road network. The proposed ROL plans are attached in Appendix A.

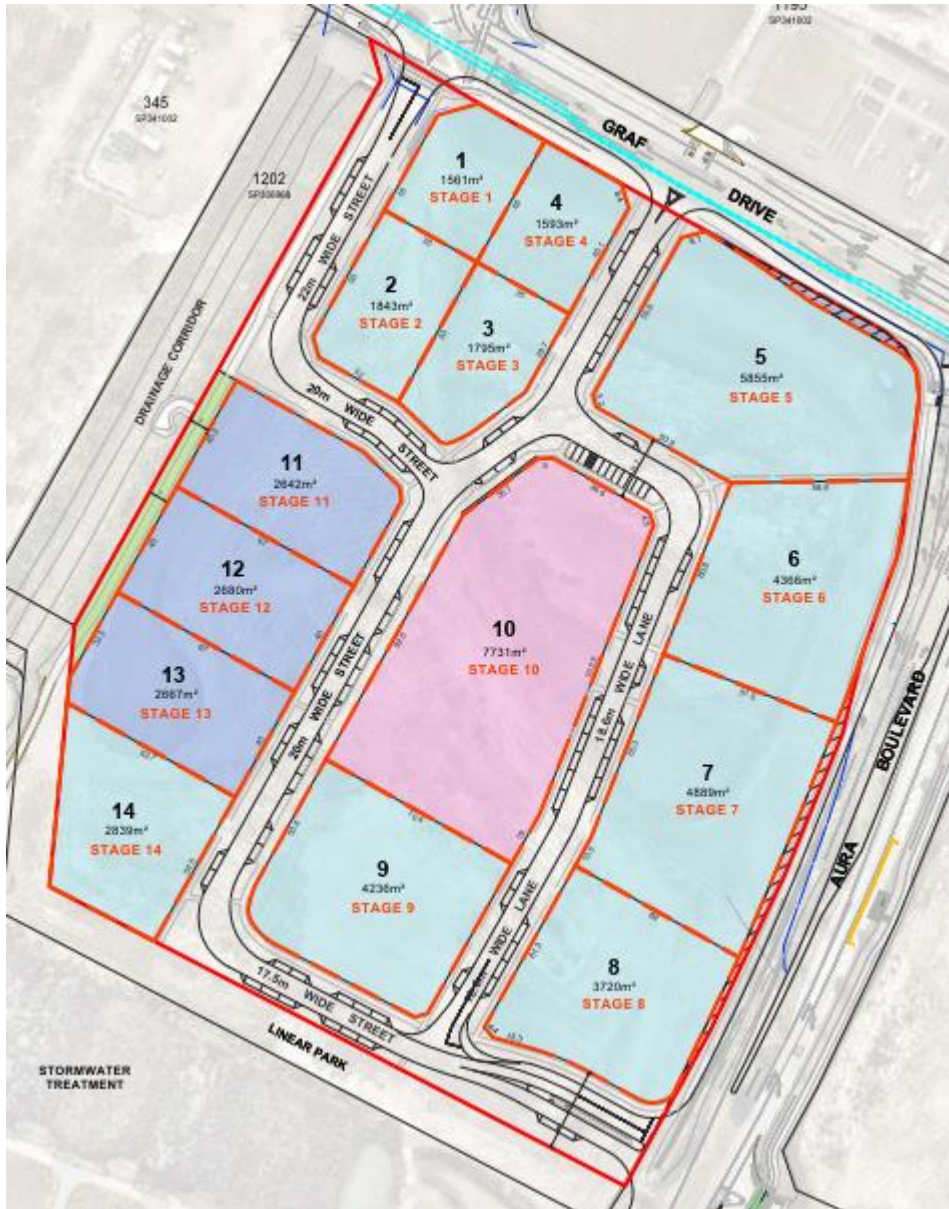


Figure 3: Stage 22A Plan of Development: Appendix C – Staging Plan (RPS 20/09/2024)

3.2 Bulk Earthworks

3.2.1 Existing Surface

Bulk earthworks have previously been completed on the site in 2022/2023 as part of DEV2013/439 P3-5 Bulk Earthworks and are supported by a Level 1 report in accordance with AS3798 by Douglas Partners (Report 207929.00.R.001.Rev 0). As shown in Figure 4 Lot 1194 is entirely Level 1 fill of an average 2m depth and is generally flat, graded at approximately 1% from north-west to the south-east corner.

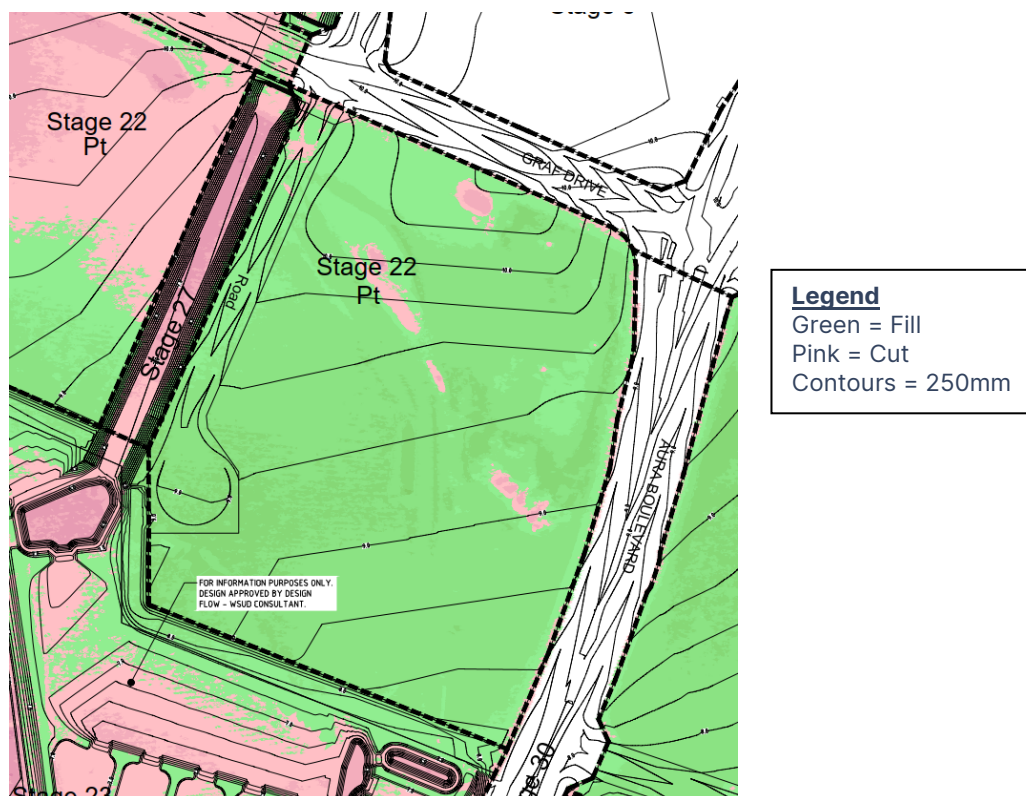


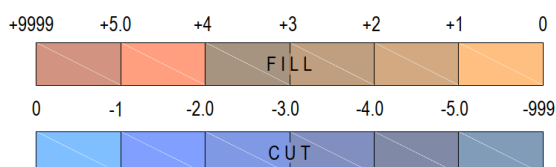
Figure 4: Bulk Earthworks Design Plan 30031846-BE-103 (SMEC 30/10/2019)

The existing bulk earthworks design for Lot 1194 is attached in Appendix B.

3.2.2 Preliminary Design

The proposed earthworks strategy is aligned with creating stormwater catchments that generally match those approved within the *Aura Precincts 3-5 Stormwater Quality Management Plan V1.7* by Design Flow 15/09/2022 and facilitate balanced distribution of stormwater flows to the end of line WSUD wetland and bioretention devices (refer Figure 12).

It is anticipated all required earthworks fill material will be sourced from on-site material and road box/trench spoil. A small volume of material could be imported from local area sources should on-site material not be able to be sourced.



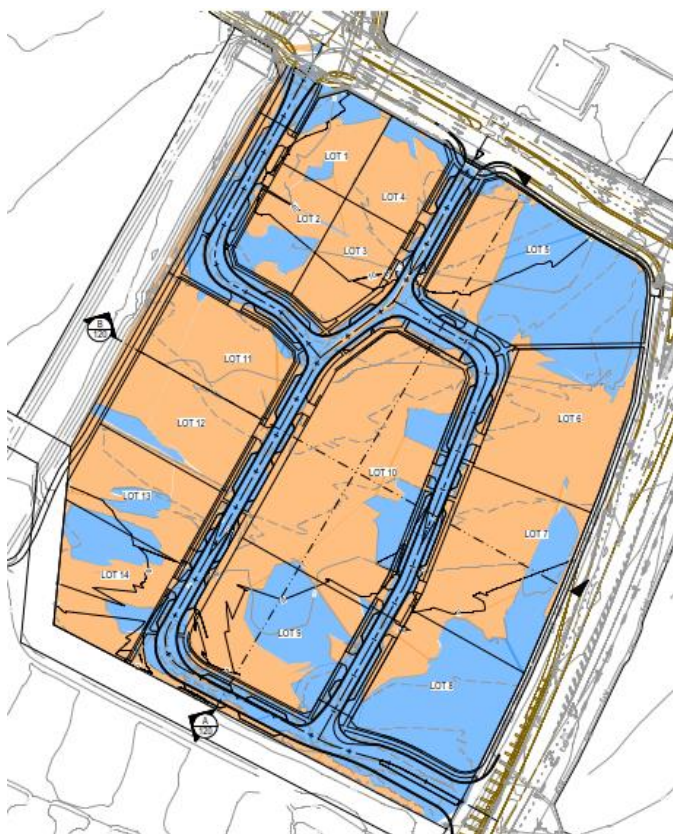


Figure 5: Bulk Earthworks Design Plan 30031846-1194-120 (SMEC 19/09/2024)

The preliminary bulk earthworks design (to be further refined as part of detailed design) for Lot 1194 is attached in Appendix C.

3.3 Roadworks

3.3.1 Traffic Model

The *Aura Precincts 3-5 Traffic Modelling Refresh* by PwC August 2023 (endorsed by EDQ under the DEV2013/439 PoD) documents the ultimate road network, forecast trip generation and Gross Floor Area (GFA) assumptions for the business park. Stage 22A is considered within the traffic model as Node 1019. Note 1019 connections include two signalised intersections and a left-in/left-out as shown in Figure 11.

Note 1019 currently facilitates trip generation for 30,000m2 commercial land use GFA, a Fast Food Outlet (with drive-thru) and a Service Station. Should a Fast Food Outlet and Service Station not be proposed or industrial land use be proposed, it is intended to reallocate the trip generation towards increasing the allowable commercial GFA. This is discussed further in the proposed Stage 22A Plan of Development design criteria DS1.2.

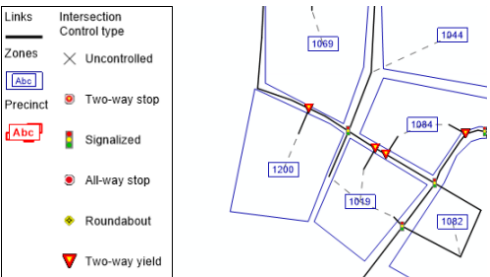


Figure 6: Aura Precincts 3-5 Traffic Modelling Refresh: Figure 2 Road Network Summary (PwC August 2023)

3.3.2 Development Access Locations

In line with the traffic model, the proposed development will be accessed from three separate locations as shown in the following figures.

Graf Dr & Packer Rd Signalised Intersection

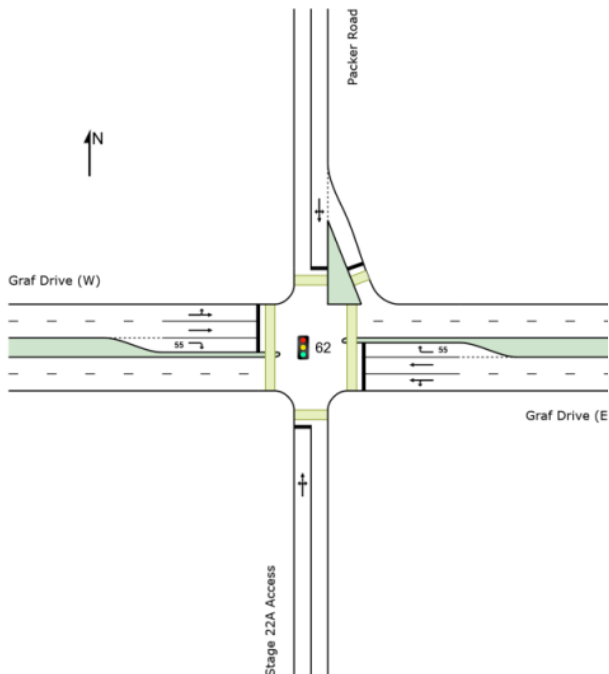


Figure 7: Graf Dr & Packer Road Intersection SIDRA Layout (SMEC 16/04/2024)

Aura Blvd & Stage 22A Signalised Intersection

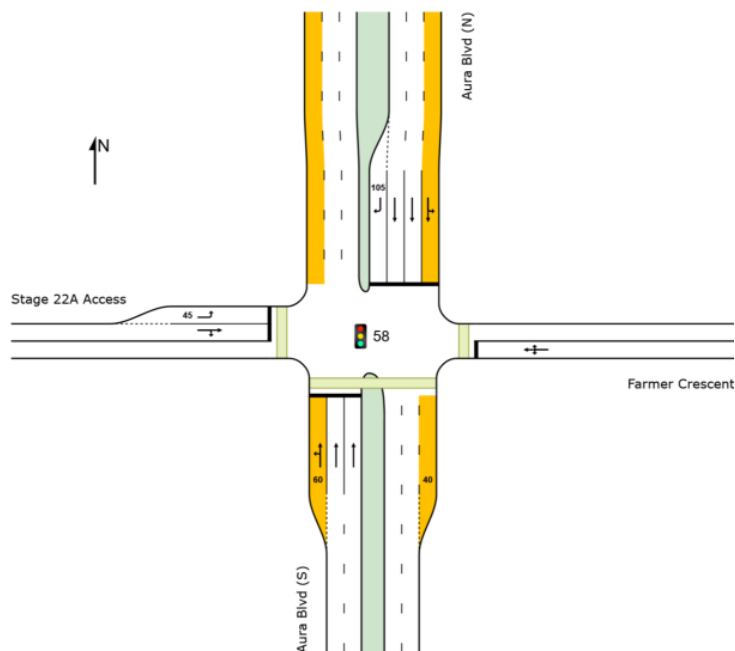


Figure 8: Aura Blvd & Stage 22A Access Intersection SIDRA Layout (SMEC 16/04/2024)

Graf Dr & Stage 22A Left In/Left Out Intersection

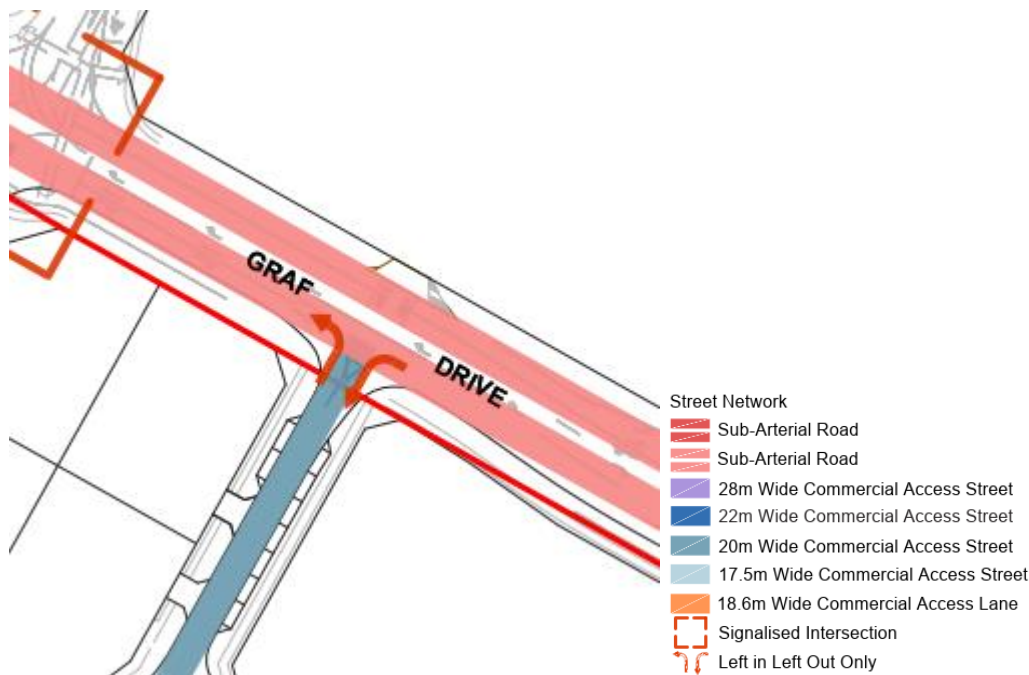


Figure 9: Stage 22A Plan of Development: Appendix G - Road Hierarchy (RPS 20/09/24)

The two signalised intersections are documented in the *Aura Business Park Signalised Intersection Technical Memorandum* by SMEC 16/04/2024. Compliance assessment approval of the Graf Dr & Packer Rd intersection was received from EDQ on 08/07/2024. Construction of the intersection has commenced in September 24 and is anticipated to be completed and operating in 2025.

The left in/left out is proposed to utilise a raised central median island to negate the apparent 4-way intersection and a raised threshold treatment for pedestrians and cyclists along Graf Dr. This intent is shown indicatively on the preliminary design plans and will be refined during detailed design.

3.3.3 Road Hierarchy

The road network proposed within Lot 1194 is documented in the proposed *Stage 22A Plan of Development Appendix G -Road Hierarchy* and *Appendix H - Road Cross Sections* by RPS 20/09/24 and is summarised below.

28m Wide Commercial Access Street:

- 28m Road Reserve
- 5m RHS Verge – 2m Footpath
- 7m RHS Carriageway – 3.5m Left Turn Lane & 3.5m Through/Right Turn Lane
- 3.5m Landscaped Median Island with SM3 Kerb Type
- 5m LHS Carriageway – Through Lane
- 7.5 m LHS Verge – No Footpath (located with adjacent linear park)
- Typical B1 Kerb Type

22m Wide Commercial Access Street:

- 22m Road Reserve
- 6.5m RHS Verge – 1.5m Footpath and 2.3m Indented Parking
- 7m Carriageway – 2 x 3.5m Lanes
- 8.5 m LHS Verge – 3m Footpath and 2.3m Indented
- Typical B1 Kerb Type
- 900mm Invert Kerb Type through Indented Parking Bays

20m Wide Commercial Access Street:

- 20m Road Reserve

- 6.7m RHS Verge – 2m Footpath and 2.3m Indented Parking
- 7m Carriageway – 2 x 3.5m Lanes
- 6.3 m LHS Verge – 1.5m Footpath and 2.3m Indented Parking
- Typical B1 Kerb Type
- 900mm Invert Kerb Type through Indented Parking Bays

17.5m Wide Commercial Access Street:

- 17.5m Road Reserve
- 6.7m RHS Verge – 2m Footpath and 2.3m Indented Parking
- 7m Carriageway – 2 x 3.5m Lanes
- 3.8m LHS Verge – No Footpath and 2.3m Indented Parking
- Typical B1 Kerb Type
- 900mm Invert Kerb Type through Indented Parking Bays

18.6m Wide Commercial Access Lane:

- 18.6m Road Reserve
- 6.05m RHS Verge – 2m Footpath and 2.3m Indented Parking
- 7m Carriageway – 2 x 3.5m Lanes
- 5.55m LHS Verge – 1.5m Footpath and 2.3m Indented
- Typical B1 Kerb Type
- 900mm Invert Kerb Type through Indented Parking Bays

The proposed road hierarchy and cross sections are considered appropriate for the intended low speed environment and the *IPWEAQ Street Design Manual* guidelines (replacement to *Queensland Streets*) is proposed to be adopted in detailed design.

The preliminary roadworks design (to be further refined as part of detailed design) for Lot 1194 is attached in Appendix C.

3.3.4 Design Vehicles

The adopted design vehicle for the proposed roadworks is a 12.5m Rigid Truck/Bus in accordance with Austroads. A 19m AV Semi-Trailer in accordance with Austroads was used as the design check vehicle. The combination of design/check vehicles align with the intended use of the precinct being narrower streets with a low-speed environment that facilitate the proposed commercial uses and heavy pedestrian activity.

A 19m AV Semi-trailer as the design vehicle would result in overly wide intersections and could lead to traffic passenger cars travelling faster than desirable/safe around corners. It's use as a check vehicle ensures that any accidental entry can be facilitated through the road network without conflict.

All roads have been reviewed with swept path analysis to identify localised widening and line marking adjustments. Trafficable 50mm height concrete median build outs are proposed through some intersections to ensure passenger cars maintain low speeds and larger vehicles can be accommodated.

A plan demonstrating turn path compliance can be provided on request.

3.3.5 On-Street Parking

All on-street parking shall be in accordance with *AS2890.5:2020 On-street parking facilities*. To maximise verge widths parallel parking has predominately been adopted throughout the road network with one section of 90° bays adjacent to the "Village Heart". There are a total of 80 parallel bays and 10 x 90° bays. It is anticipated that at least 1 of the 90° will be marked for disability parking.

3.3.6 Lot Access/Driveways

Where an Austroads 12.5m Rigid Truck/Bus (HRV) access is required, the driveway will be required to comply with Sunshine Coast Council Standard Drawing *RS-051 Heavy Duty Vehicle Crossing General Wide Flared*. It has been assumed for the purposes of space proofing that this will be required for all lots. The actual driveway size and configuration may be reduced during detailed design depending on the design vehicle adopted.

3.3.7 Open Drainage Channel Maintenance Access

The existing central open drainage channel within the adjacent Stage 27 requires a maintenance vehicle access for Council to existing sediment forebays and linkage to the end-of-line WSUD systems. This has been facilitated by joint use of the 3m Shared Path within a 7m pedestrian link corridor bordering the drainage channel, which provides broader connectivity via the path within the future western Linear Park (Stage 23D).

3.3.8 Waste Collection Access

As the proposed development includes only streets and no roads, all lots can utilise a Type B Access where the design vehicle access must:

- i. enable standing wholly within the site without occupying any designated queue areas, or blocking access to more than 50% of car parking spaces; and
- ii. limit any on-street manoeuvring to reversing on or off the site in one movement only. The swept path of the vehicle may cover the overall width of a two-way undivided driveway.

Based on a Type B access it is anticipated that all lots can be serviced by an Austroads 12.5m Rigid Truck/Bus (HRV) design vehicle. Alternatively, future development can arrange privately managed waste collection agreements if required.

3.4 Stormwater Quantity

The surrounding stormwater network on Graf Dr, Packer Road and Aura Blvd has not been designed to convey flows generated by Lot 1194 with the exception of the Packer Road/Graf Dr intersection which facilitates a small area. The western half of Lot 1194 will discharge to the central open drainage channel (Stage 27) and western WSUD inlet, while the eastern half will discharge into the eastern WSUD inlet.

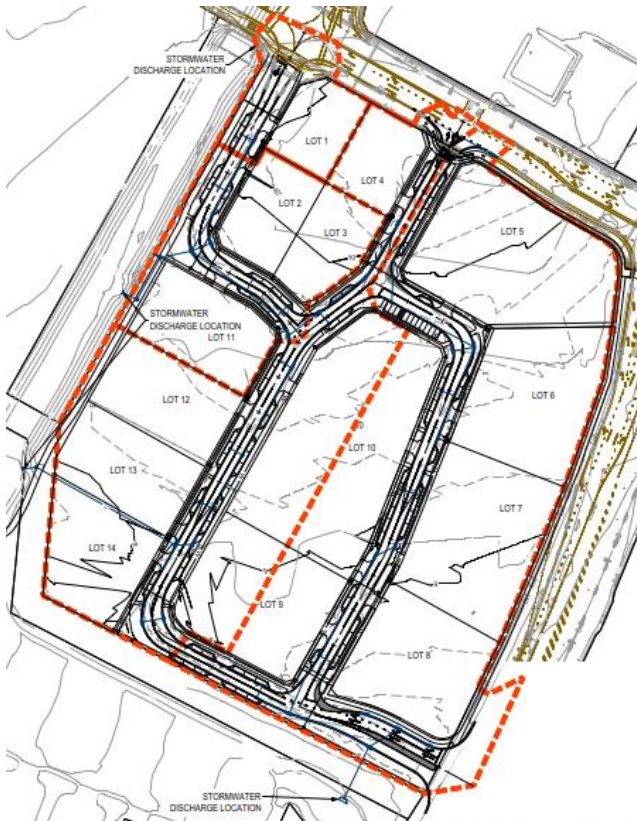


Figure 10: Preliminary Design Stormwater Catchments (SMC 19/09/24)

QUDM suggests that commercial precincts adopt a 10% AEP minor event, however due to the road hierarchy generally being access streets/lanes with no collector roads it is proposed to adopt a 2% AEP in line with the balance of industrial access streets within the business park. A 1% AEP major event will be adopted.

Imperviousness in line with commercial development will be adopted in accordance with QUDM and allowance made for climate change in accordance with Sunshine Coast Council Planning Scheme.

The preliminary stormwater design (to be further refined as part of detailed design) for Lot 1194 is attached in Appendix C.

3.5 Stormwater Quality

Full construction build-out of the end-of-line wetland and bioretention stormwater quality WSUD devices have been completed in accordance with the *Aura Precincts 3-5 Stormwater Quality Management Plan V1.7* by Design Flow 15/09/2022. Lot 1194's southern boundary is bordered by a linear park (Stage 23D) that interfaces with the WSUD system. The WSUD system has two inlet sediment ponds, one at each end as shown in Figure 11.

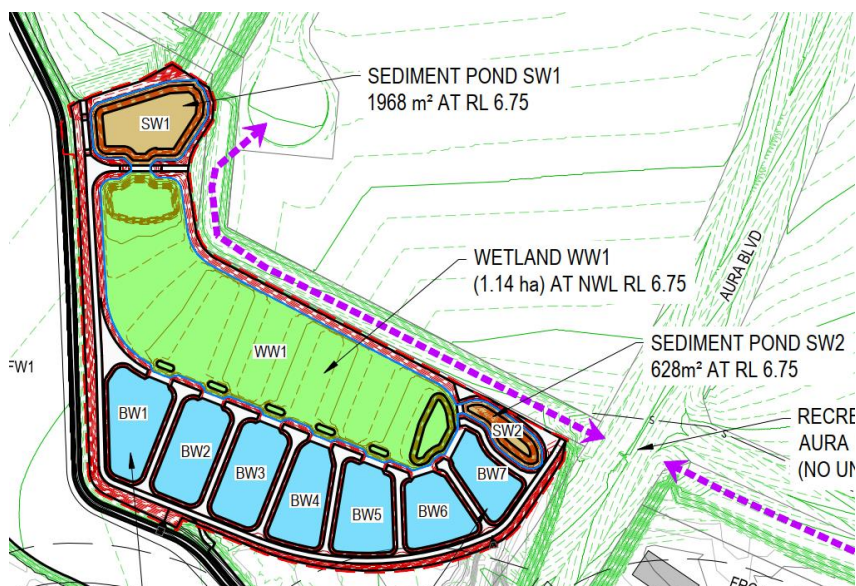


Figure 11: Aura P3-5 WSUD General Arrangement 4334-002 (DesignFlow 17/12/2019)

The stormwater catchments shown in Figure 12 show the approximate catchment area that can discharge into each inlet which will generally be maintained within the proposed design.



Figure 12: Stormwater Quality Treatment Catchments (DesignFlow 15/09/2022)

The on lot development requirements of the SQMP as described in section 4.2 and 4.3 and proposed for the Stage 22A Plan of Development Design Criteria are as follows:

- DS 6.3 For all non-residential buildings, rainwater tanks are to be installed to ensure minimum 50% roof capture and reuse. Tanks are to be sized as 1KL per toilet or urinal (with a minimum size of 5KL). Tanks must be installed in accordance with all Council, State Government, Federal Government and industry plumbing standards for rainwater tanks. Tanks must be connected to and supply water to all of the following:
 - Toilets (all toilets)
 - Urinals (all urinals)
 - Laundry (all cold taps in laundry)
 - Outdoor taps (all outdoor taps) and irrigation
 - All non-potable taps (i.e. wash down taps)
- DS 6.4 Stormwater management is to be provided via Gross Pollutant Management for all ground level runoff to remove litter and other gross pollutants prior to discharge from the allotment (noting bioretention pods are not required). No specific oil management is required because the risk of oil is very low and suitable treatment is provided in the end-of-line wetland and bioretention systems.

3.6 Water & Sewerage

3.6.1 Demand Assessment

The approved EP allocation for Lot 1194 is 725.1 EP in *Appendix C EP Plan* of the Unitywater approved *Aura Precincts 3, 4, 5 & 6 (Part) Final Precinct Network Plan (FPNP)* by SMEC 20/11/2017. This is made up of an allowed 37,500m² of GFA at a Business use rate of 1.1 EP/100m² GFA to 412.5EP and several specific uses (refer Figure 13) for an additional 312.6 EP.

Lot 1194			312.6 EP	
Fast Food	3	1800	4.7	84.6
Indoor Sport and Rec	2	4000	1.3	52
Indoor Entertainment	2	4000	2.5	100
Shop	4	1000	2	20
Service Station	1	400	1.5	6
Various				50

Figure 13: Aura Precincts 3, 4, 5 & 6 (Part) FPNP: Table of Additional Uses - Lot 1194 (SMEC 20/11/2017)

The new EP allocation based on the proposed land uses and forecast GFA is as follows:

Lot No.	Land Use	Lot Area	GFA (m2)	EP/100 m2	EP
1	Commercial	1561	1000	1.1	11
2	Commercial	1843	1300	1.1	14.3
3	Commercial	1795	1100	1.1	12.1
4	Commercial	1593	1000	1.1	11
5	Commercial	5855	4250	1.1	46.75
6	Commercial	4366	3000	1.1	33
7	Commercial	4889	3250	1.1	35.75
8	Commercial	3720	2500	1.1	27.5
9	Commercial	4236	2900	1.1	31.9
10	Co-work/Offices	7331	1600	1.1	17.6
	Retail/Food		1650	4.7	77.55
	Childcare		1000	1.4	14
11	Industrial	2642	1310	0.2	2.62
12	Industrial	2680	1180	0.2	2.36
13	Industrial	2667	1180	0.2	2.36
14	Commercial	2839	1780	1.1	19.58
			Total 30,000 GFA		
				Total Proposed EP Allocation	360 EP
				Existing Approved EP Allocation	725 EP
				Remaining Approved EP Allocation	365 EP

Based on the above table, the existing water and sewerage infrastructure has sufficient capacity for the proposed development.

3.6.2 Servicing Points

Lot 1194 will have two external water connection points to the existing water main within Graf Dr, one via the proposed left in-left out intersection and one via the intersection with Packer Road. The watermain within Lot 1194 will be installed to both sides of the road and looped around the internal road network. There will be no watermain connection to the Aura Blvd road reserve at the south-eastern intersection as there is no main to connect to.

The sewerage connection point is existing and is located at the south-east corner of Lot 1194 and already has live downstream infrastructure connecting to Aura Precinct 2 to the east.

The preliminary water & sewerage design (to be further refined as part of detailed design) for Lot 1194 is attached in Appendix C.

3.7 EDQ Guidelines

The proposed development is in accordance with, and does not compromise future compliance with:

- EDQ Guideline 6 (Street and Movement network)
- EDQ Guideline 13 (Engineering standards)

4 CONCLUSION

SMEC Australia Pty Ltd (SMEC) has been commissioned by Stockland Development Pty Ltd to complete an assessment of civil engineering aspects associated with the development of Aura Business Park (ABP) Precinct 4, Stage 22A.

Detailed earthworks will be designed to align with the existing EDQ approval DEV2013/439 and is not expected to compromise future compliance.

Traffic modelling, site access and roadworks aspects has been considered and aligns with the existing EDQ approval DEV2013/439 and is not expected to compromise future compliance.

Stormwater drainage (quantity & quality) has been considered and aligns with the existing EDQ approval DEV2013/439 and is not expected to compromise future compliance.

Sewerage and water servicing has been considered and aligns with the existing approval DEV2013/439 and Unitywater approved Final Precinct Network Plan and is not expected to compromise future compliance.

The proposed development is in accordance with and does not compromise future compliance with relevant civil EDQ Guidelines.

Appendix A **Stage 22A ROL Plans**



Legend

General

— Site Boundary

--- Future Road Dedication

Lot Types

■ Village Heart

■ Commercial Office

■ Boutique Manufacture & Technology

■ Pedestrian Link

Road Services

— Electricity

— Water

— Stormwater

Note:

All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:

Site boundaries: SMEC

Adjoining information: SMEC

Aerial photography: Nearmap

Land Budget		
Land Use	Area	Percentage
Area of Subject Site	6.758 ha	100.0%
Future Road Dedication	0.055 ha	0.8%
Saleable Area		
Village Heart	0.773 ha	11.4%
Commercial Office	3.270 ha	48.4%
Boutique Manufacture & Technology	0.799 ha	11.8%
Total Area of Allotments	4.842 ha	71.6%
Road		
Public Road	1.788 ha	26.5%
Pedestrian Link	0.073 ha	1.1%
Total Area of New Road	1.861 ha	27.5%
Yield Breakdown		
Village Heart	1	7.1%
Commercial Office	10	71.4%
Boutique Manufacture & Technology	3	21.4%
Total Number of Allotments	14	100.0%



Legend

General

Site Boundary

Path Facilities:

3m Cycle Path

3m Shared Pedestrian / Cycle Path

3m Pedestrian / Cycle Path
& Maintenance Track

Full Width Path Where Shop Fronts Adjoining

2.0m Pedestrian Path

1.8m Pedestrian Path

1.5m Pedestrian Path

2m Pedestrian Path

Signalised Intersection

Left in Left Out Only

Raised Cycle and
Pedestrian Crossing

Note:

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Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

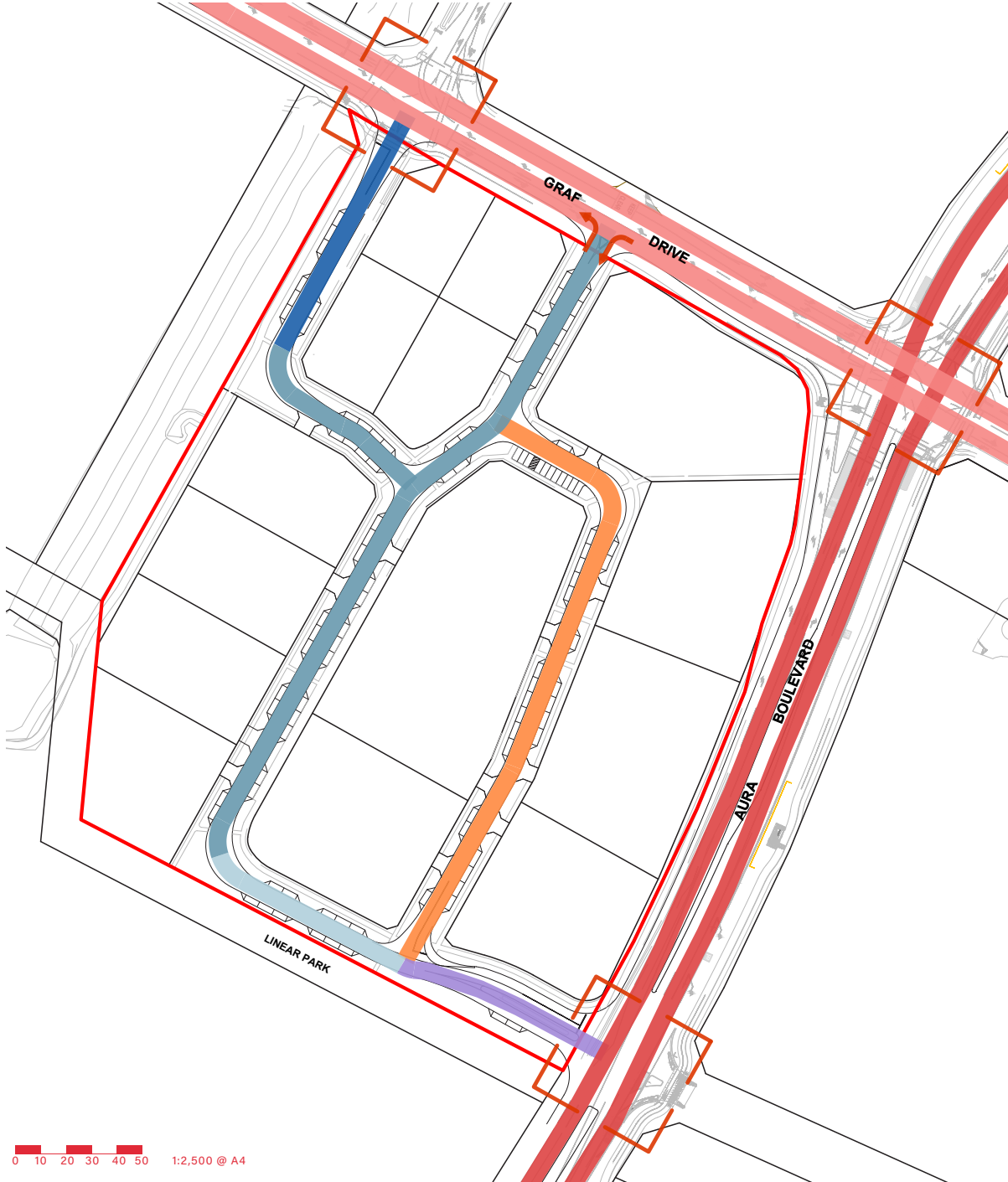
The boundaries shown on this plan should not be used for final detailed engineers design.

Source Information:

Site boundaries: SMEC

Adjoining information: SMEC

Aerial photography: Nearmap



Legend

General

Site Boundary

Street Network

Sub-Arterial Road

Sub-Arterial Road

28m Wide Commercial Access Street

22m Wide Commercial Access Street

20m Wide Commercial Access Street

17.5m Wide Commercial Access Street

18.6m Wide Commercial Access Lane

Signalised Intersection

Left in Left Out Only

Note:

All Lot Numbers, Dimensions and Areas are approximate only, and are subject to survey and Council approval.

Dimensions have been rounded to the nearest 0.1 metres.

Areas have been rounded down to the nearest 5m².

The boundaries shown on this plan should not be used for final detailed engineers design.

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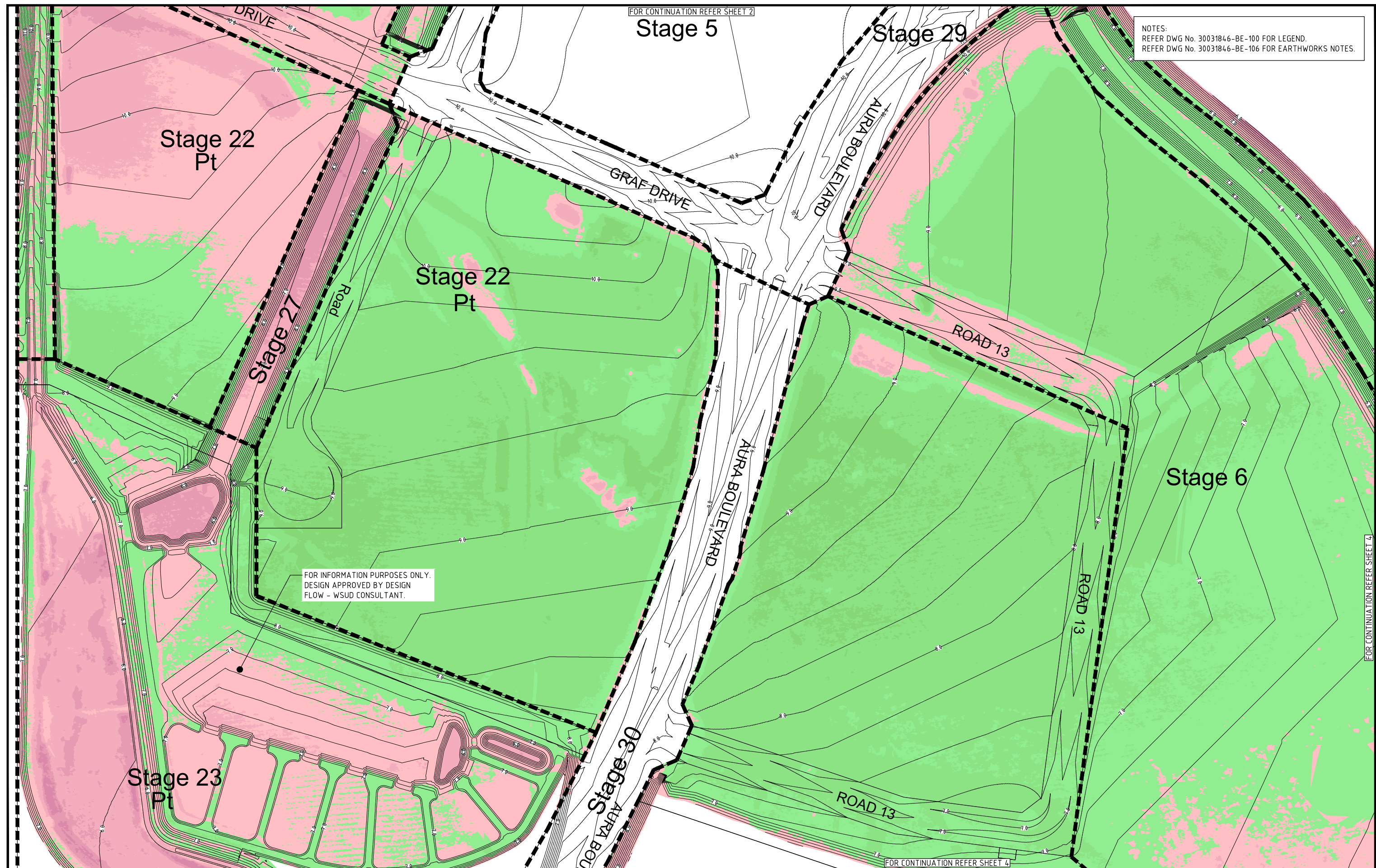
Site boundaries: SMEC

Adjoining information: SMEC

Aerial photography: Nearmap

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Appendix B **Existing Bulk Earthworks and Combined Services Plans**



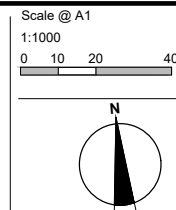
1	Issue for Information	30.10.19	JC/SM	MF
REVISION		DATE	DES/DFT	WVR
				APPD

Matthew Figg
RPEQ 19245

Principal
Stockland Development Pty Ltd

All setting out should be carried out in accordance with GAA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

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M.Figg
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J. Callahan
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Date
Sept. 2019



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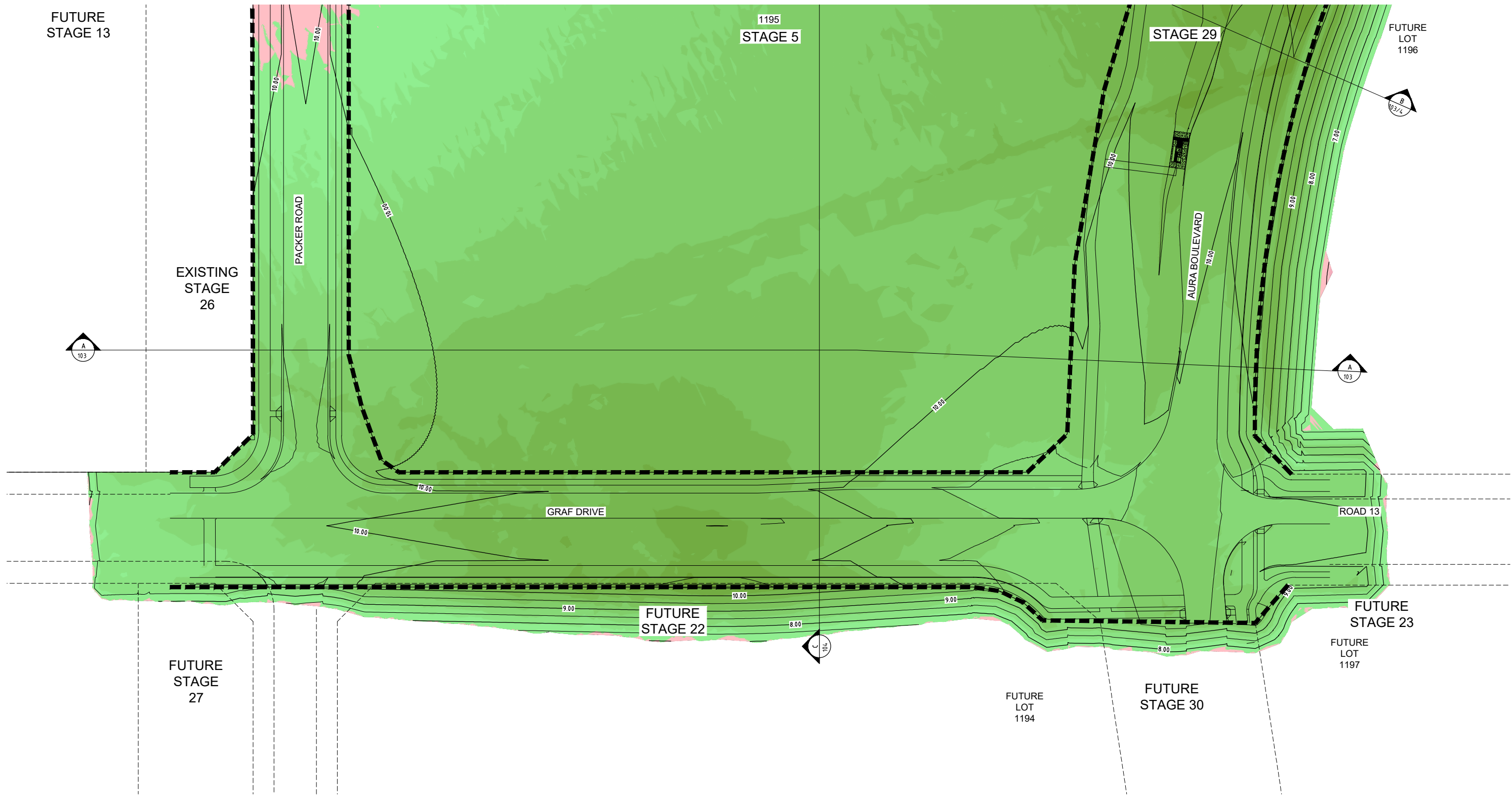
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Canberra	+61 2 6126 1900	Perth	+61 8 9323 5900

Aura Precinct P3, P4 & P5
Bulk Earthworks Strategy Drawings
Economic Development Queensland

Earthworks Layout Plan - Sheet 3 of 5
Drawing No. 30031846-BE-103
Dev. App. No. DEV2013/439
 Sheet No. 3 of 5

Rev0.1

Issue for Information



NOTES
1. FOR EARTHWORKS, LEGEND AND GENERAL NOTES REFER PROJECT DRAWING 101.

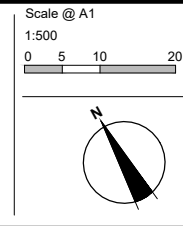
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B	18/05/18	JC/CH		MF
A	20/03/18	JC/SM		MF

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Principal
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All setting out should be carried out in accordance with GAA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

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Canberra	+61 2 6126 1900	Perth	+61 8 9323 5900

Aura Precinct P3, P4 & P5
Stages 5 and 29 Detailed Design
Economic Development Queensland
Bulk Earthworks
Bulk Earthworks Layout Plan
Drawing No. 30031846-05-102
Dev. App. No. DEV2013/439
Sheet No. 2 of 2

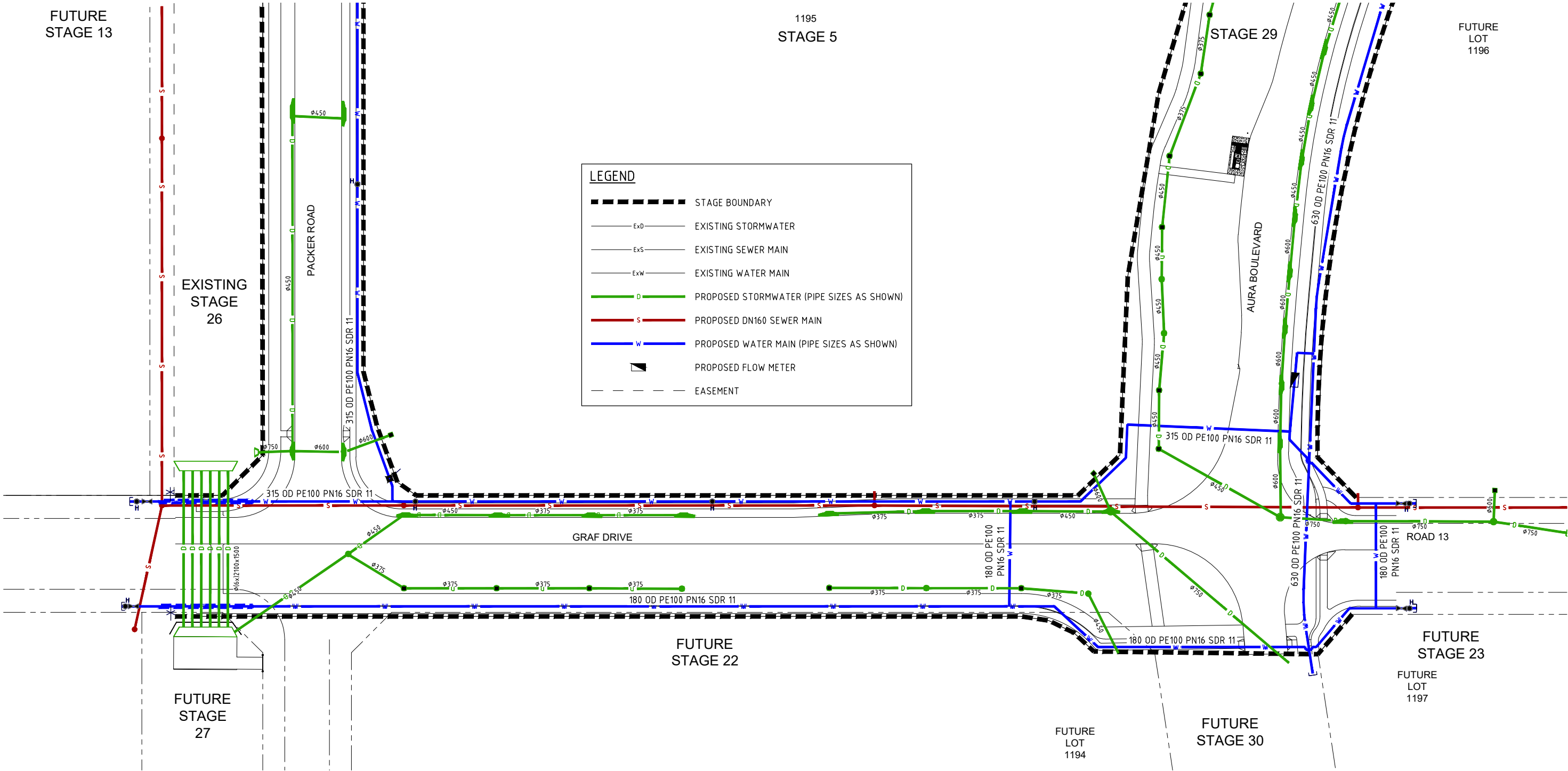
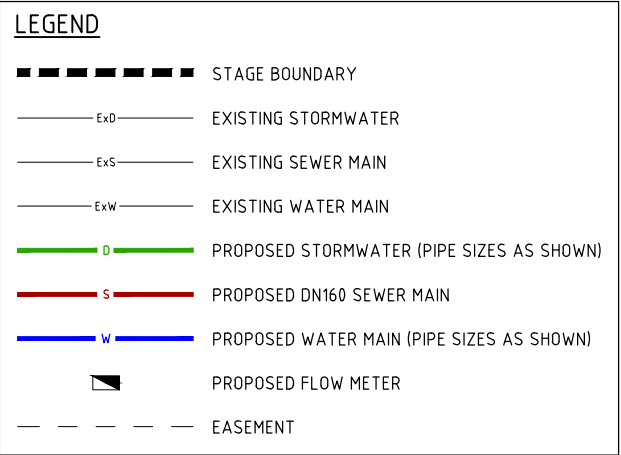
Rev C
Issue for Construction

FUTURE
STAGE 13

1195
STAGE 5

STAGE 29

FUTURE
LOT
1196



FOR CONTINUATION REFER TO DWG 30031846-05-603

WARNING
BEWARE OF UNDERGROUND SERVICES
The locations of underground services are approximate only and their exact position should be proven on site.
No guarantee is given that all existing services are shown.
Locate all underground services before commencement of works
DIAL 1100 BEFORE YOU DIG
www.1100.com.au

REVISION	DATE	DES/OFT	WVR	APPD
C	9/05/18	JC/SM		MF
B	18/05/18	JC/CH		MF
A	20/03/18	JC/SM		MF

Matthew Figg
RPEQ 19245

Principal
Stockland Development Pty Ltd

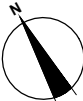
All setting out should be carried out in accordance with GAA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

Project Leader
M.Figg
Designed
J. Callahan
Drawn
S.Mango
Checked
C.Green
Authorised
M.Figg
Date
March 2018

Scale @ A1

1:500

0 5 10 20



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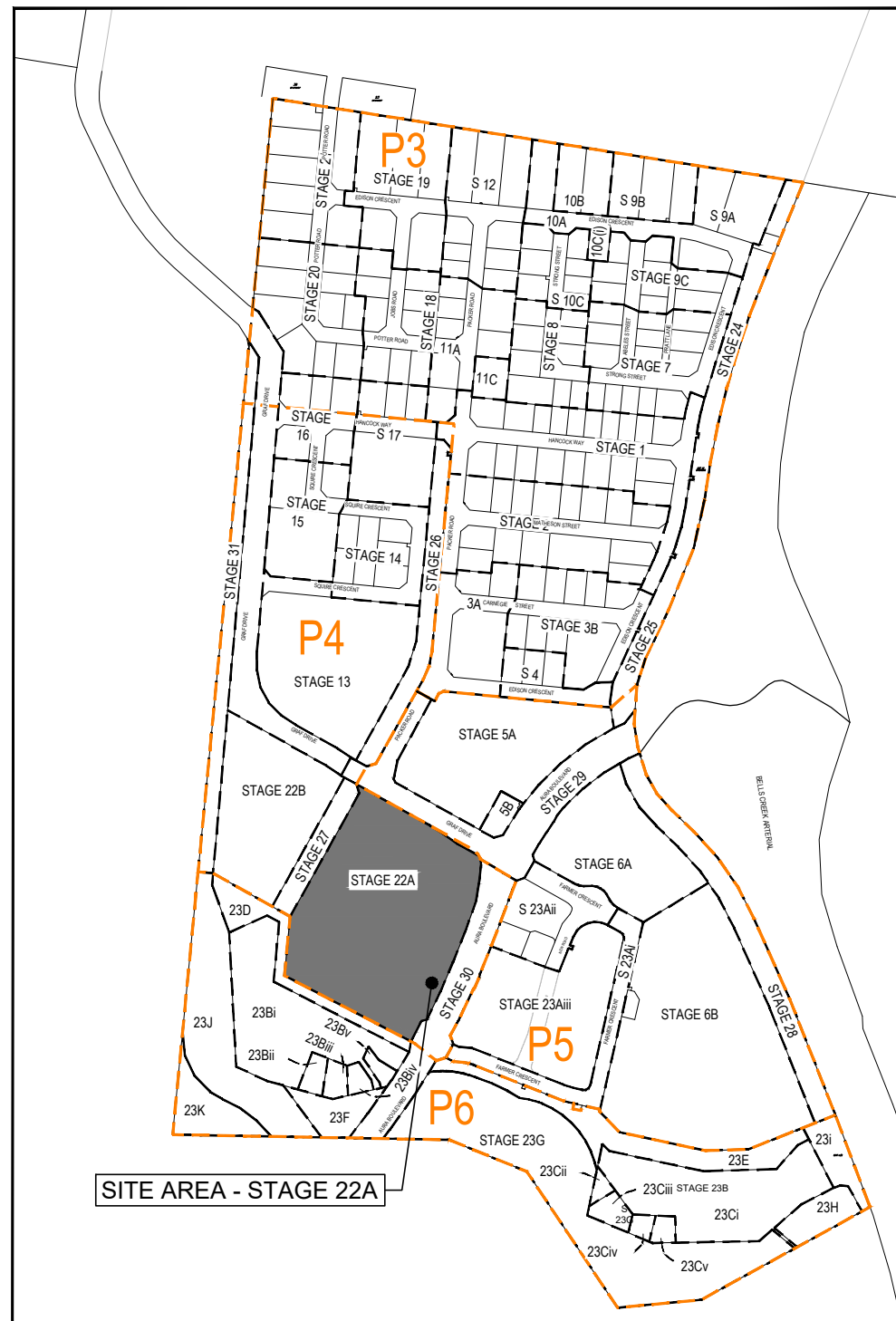
Aura Precinct P3, P4 & P5
Stages 5 and 29 Detailed Design
Unitywater
Services
Combined Services Layout Plan
Drawing No. 30031846-05-602
Dev. App. No. DEV2013/439
Sheet No. 2 of 3

Rev C

Issue for Construction

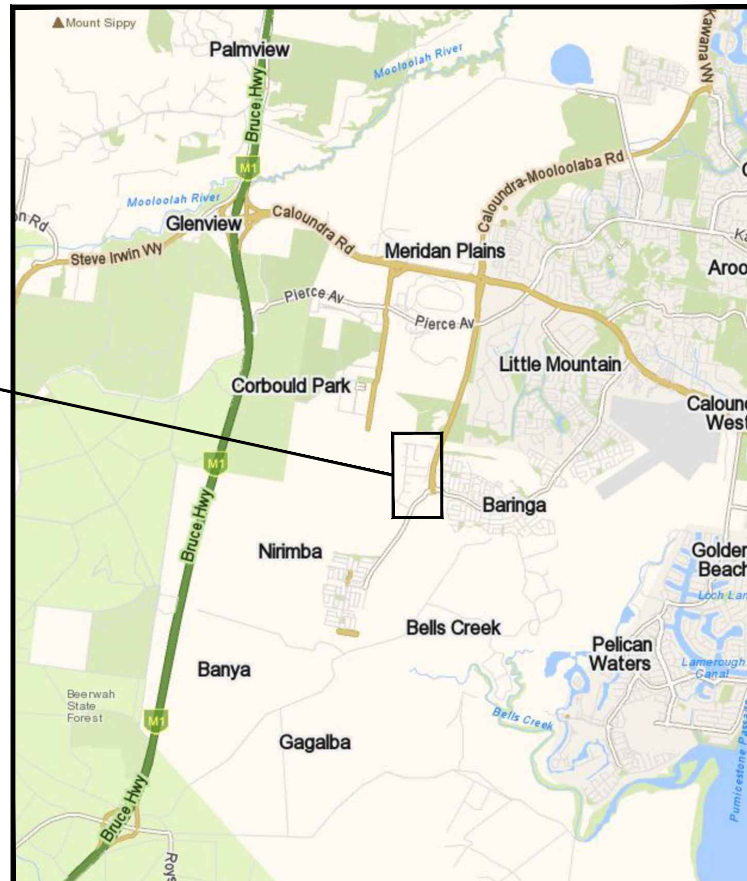
Appendix C **Preliminary Civil Design Plans**

AURA PRECINCTS 3-6
STAGE 1194 PRELIMINARY DESIGN
ECONOMIC DEVELOPMENT QUEENSLAND



REAL PROPERTY DESCRIPTION
PROPOSED SUBDIVISION FOR STOCKLAND
DEVELOPMENT PTY LTD.
Lot 345 ON SP341002
PARISH OF BRIBIE, COUNTY OF CANNING.

LOCALITY PLAN
SCALE 1:5000



LOCALITY MAP

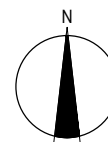
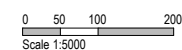
DRAWING INDEX

30031846-1194-100	GENERAL COVER SHEET
30031846-1194-120	BULK EARTHWORKS LAYOUT PLAN
30031846-1194-200	ROADWORKS LAYOUT PLAN
30031846-1194-220	ROADWORKS LONGITUDINAL SECTIONS
30031846-1194-240	ROADWORKS TYPICAL CROSS SECTIONS
30031846-1194-310	STORMWATER LAYOUT PLAN
30031846-1194-410	SEWER LAYOUT PLAN
30031846-1194-510	WATER LAYOUT PLAN
30031846-1194-600	COMBINED SERVICES LAYOUT PLAN

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						APPROVED RPEQ: 29318
						T. WOOD DATE: 19.09.2024



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LEVEL 1, THE EDGE EAST, 10 LAKE KAWANA BLVD
BIRTINYA QLD 4575
SMEC PROJECT No 30080127



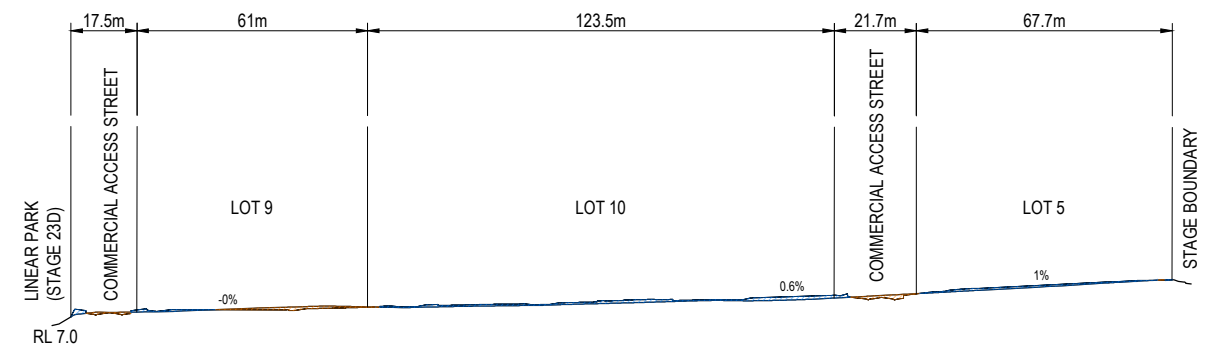
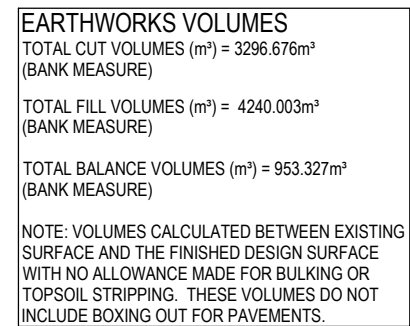
	CLIENT
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PROJECT NAME
AURA PRECINCTS 3-6
(DEV2013/439)
AURA BUSINESS PARK
STAGE 22A - DETAILED DESIGN

DRAWING TITLE	GENERAL COVER SHEET
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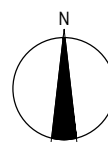
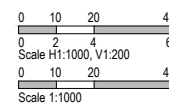
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	CLIENT
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PROJECT NAME
AURA PRECINCTS 3-6
(DEV2013/439)
AURA BUSINESS PARK
STAGE 22A - DETAILED DESIGN

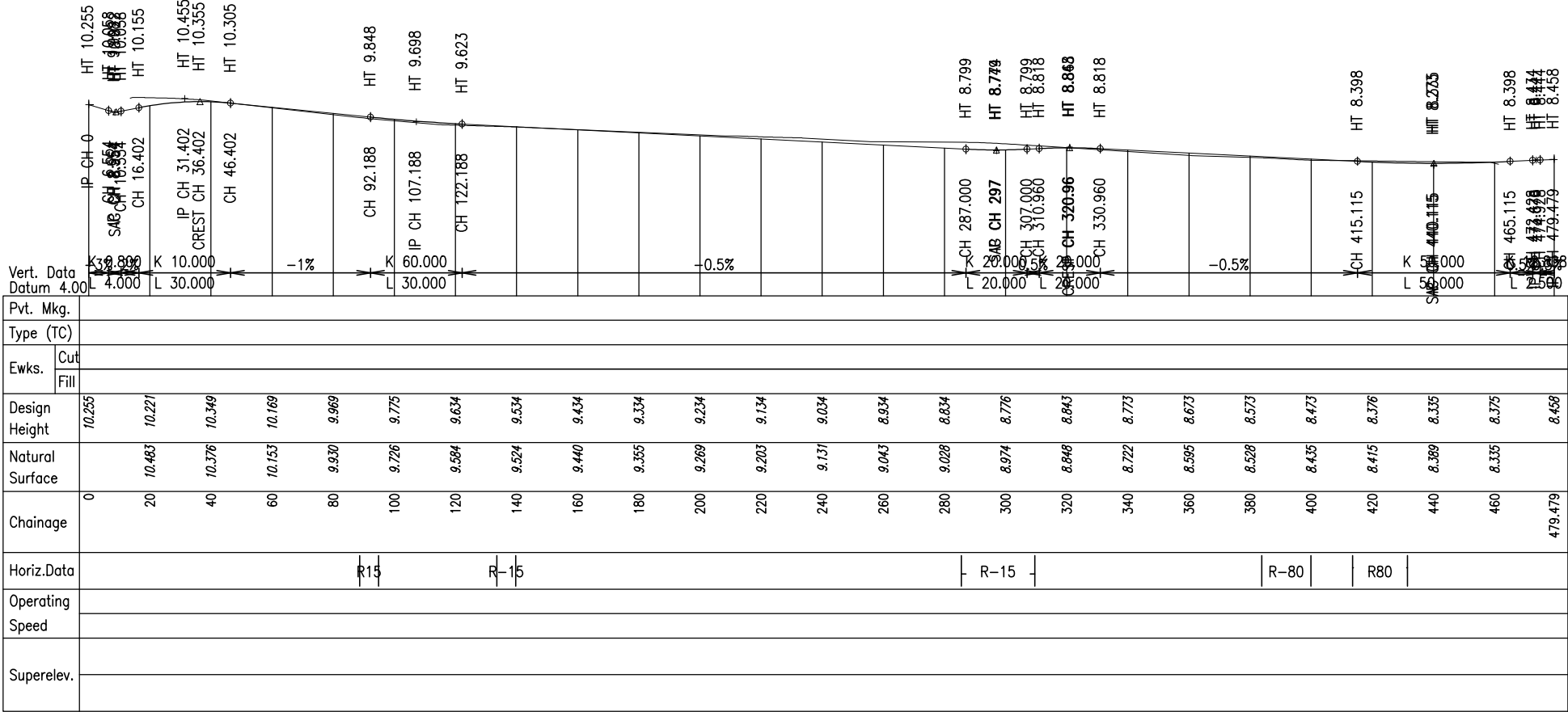
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DRAWING TITLE

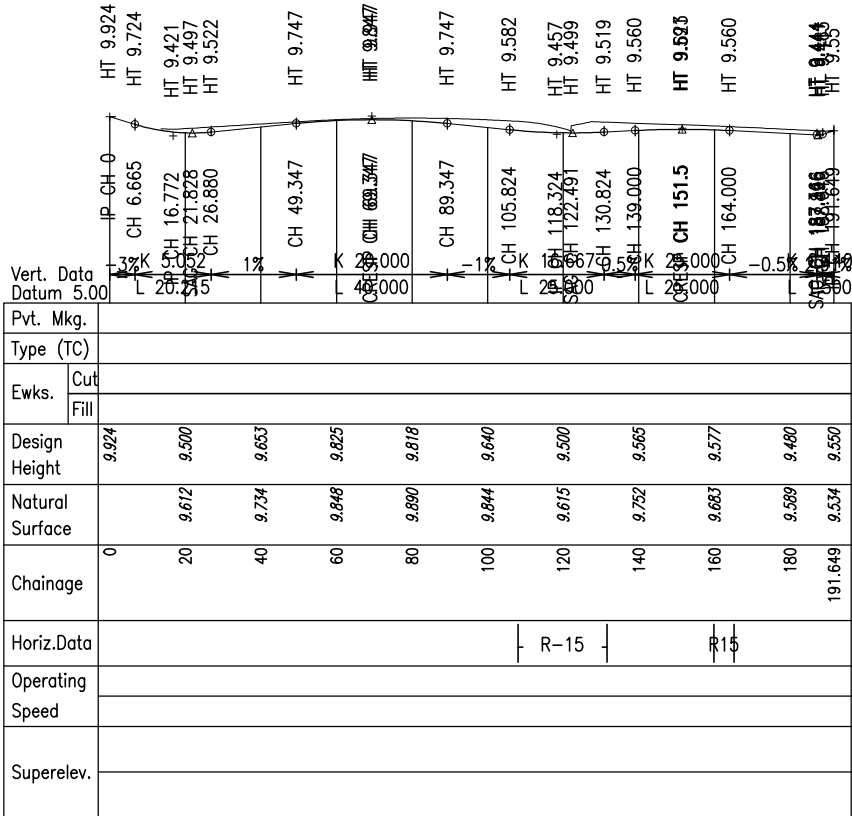
BULK EARTHWORKS
LAYOUT PLAN

PROJECT/DRAWING No	30031846-1194-120
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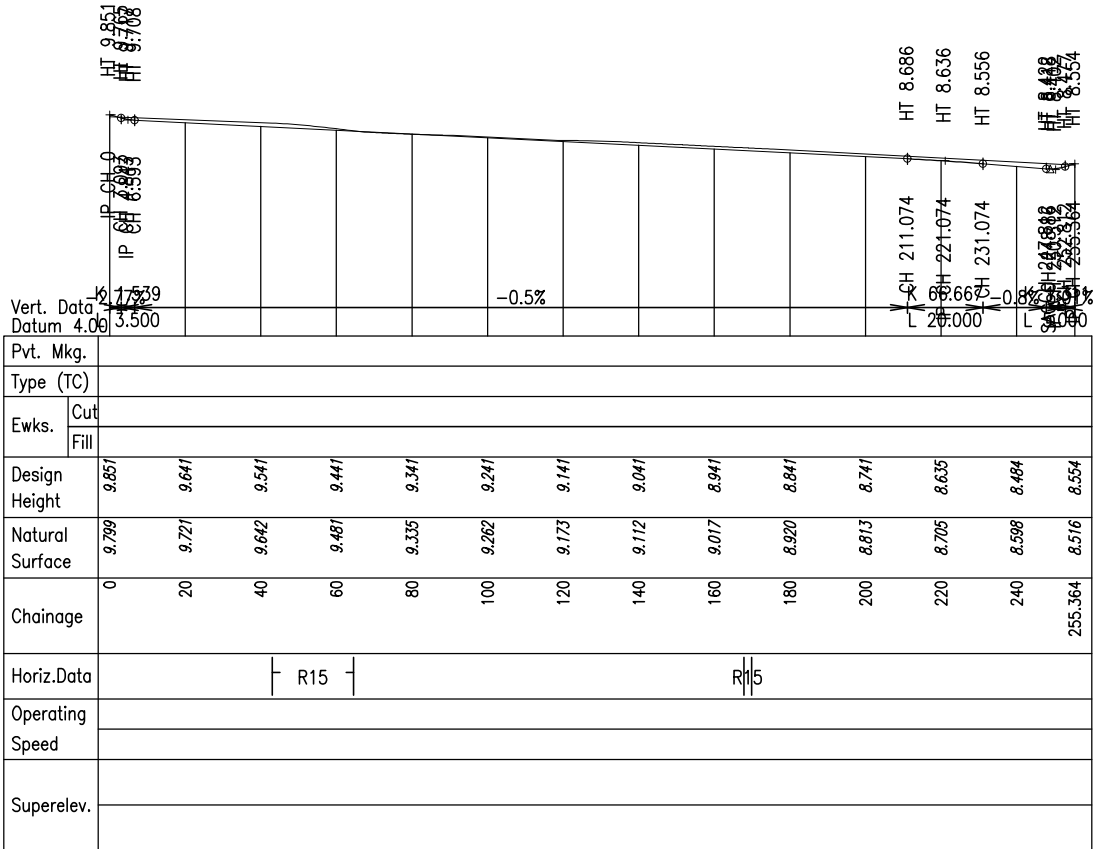
VISION
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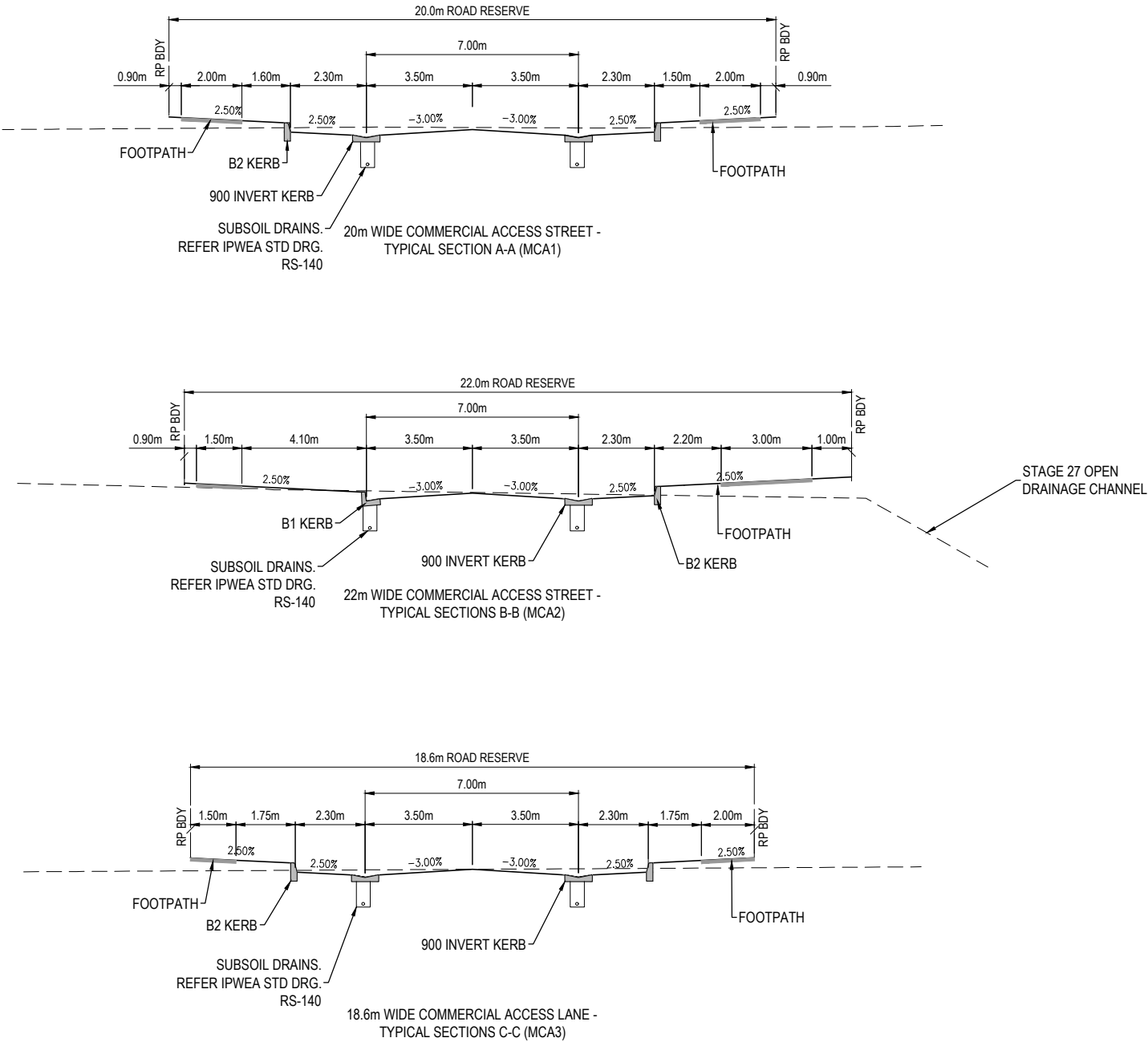


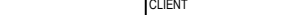


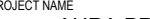
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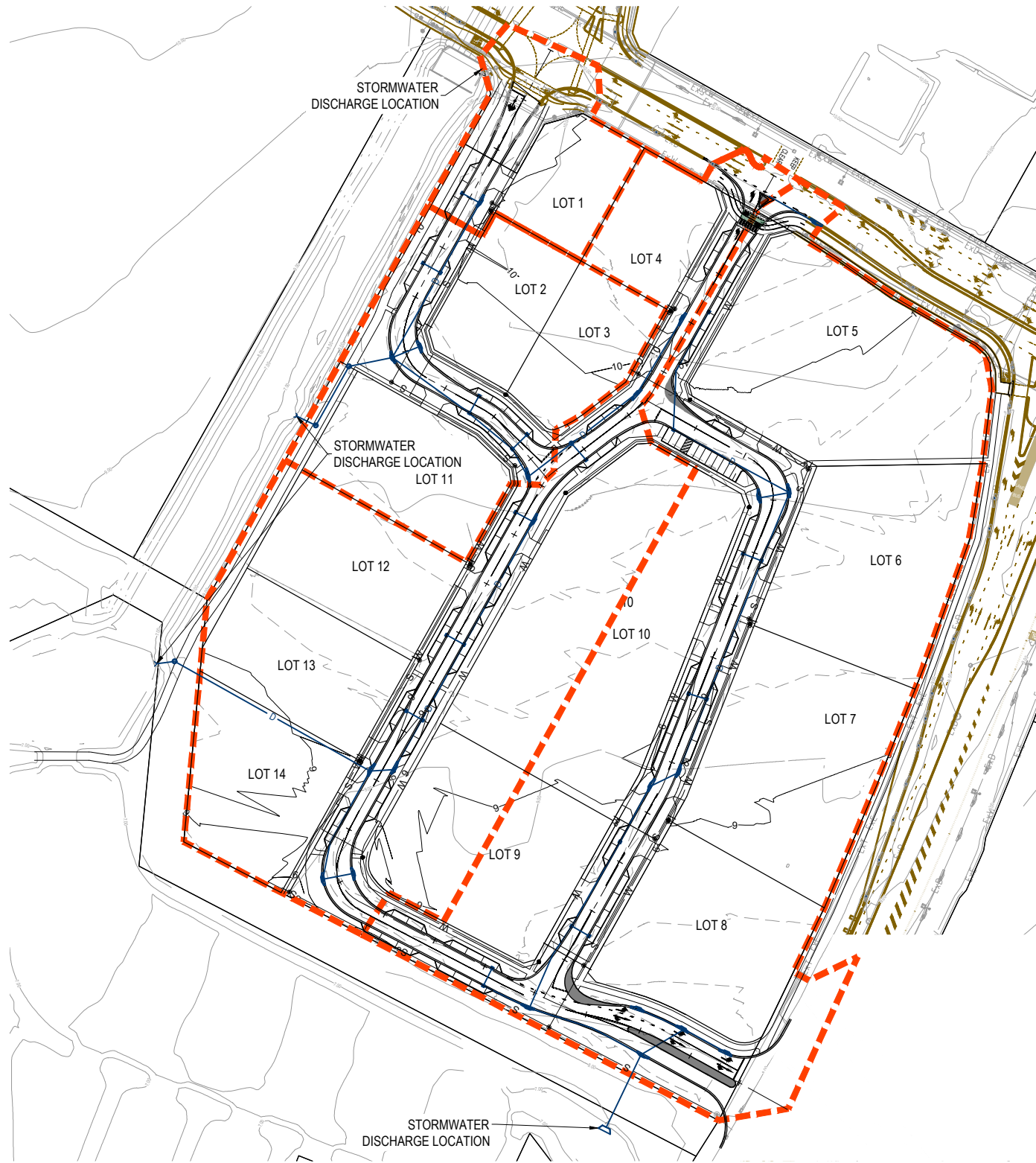


MCA3

LEGEND	
	DESIGN SURFACE
	EXISTING SURFACE



REV	DATE	AMENDMENT \ REVISION DESCRIPTION	DRAFT	DESIGN	WVR No.	STATUS		CLIENT		PROJECT NAME		DRAWING TITLE	
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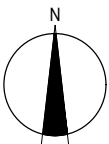
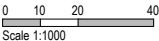


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	PROPOSED CATCHMENT BOUNDARY
	FINISHED SURFACE CONTOURS MAJOUR (0.25m INTERVAL)
	FINISHED SURFACE CONTOURS MINOR (0.25m INTERVAL)
	EXISTING SURFACE CONTOURS(0.25m INTERVAL)
	PROPOSED STORMWATER DRAINAGE PIPE
	EXISTING STORMWATER DRAINAGE PIPE
	EXISTING SEWER MAIN
	PROPOSED SEWER MAIN
	PROPOSED WATER MAIN

REV	DATE	AMENDMENT \ REVISION DESCRIPTION	DRAFT	DESIGN	WVR No.	STATUS		PROJECT NAME		DRAWING TITLE	
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						T. WOOD		DATE 19.09.2024		30031846-1194-310	
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										1	



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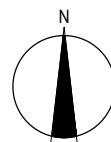
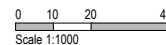


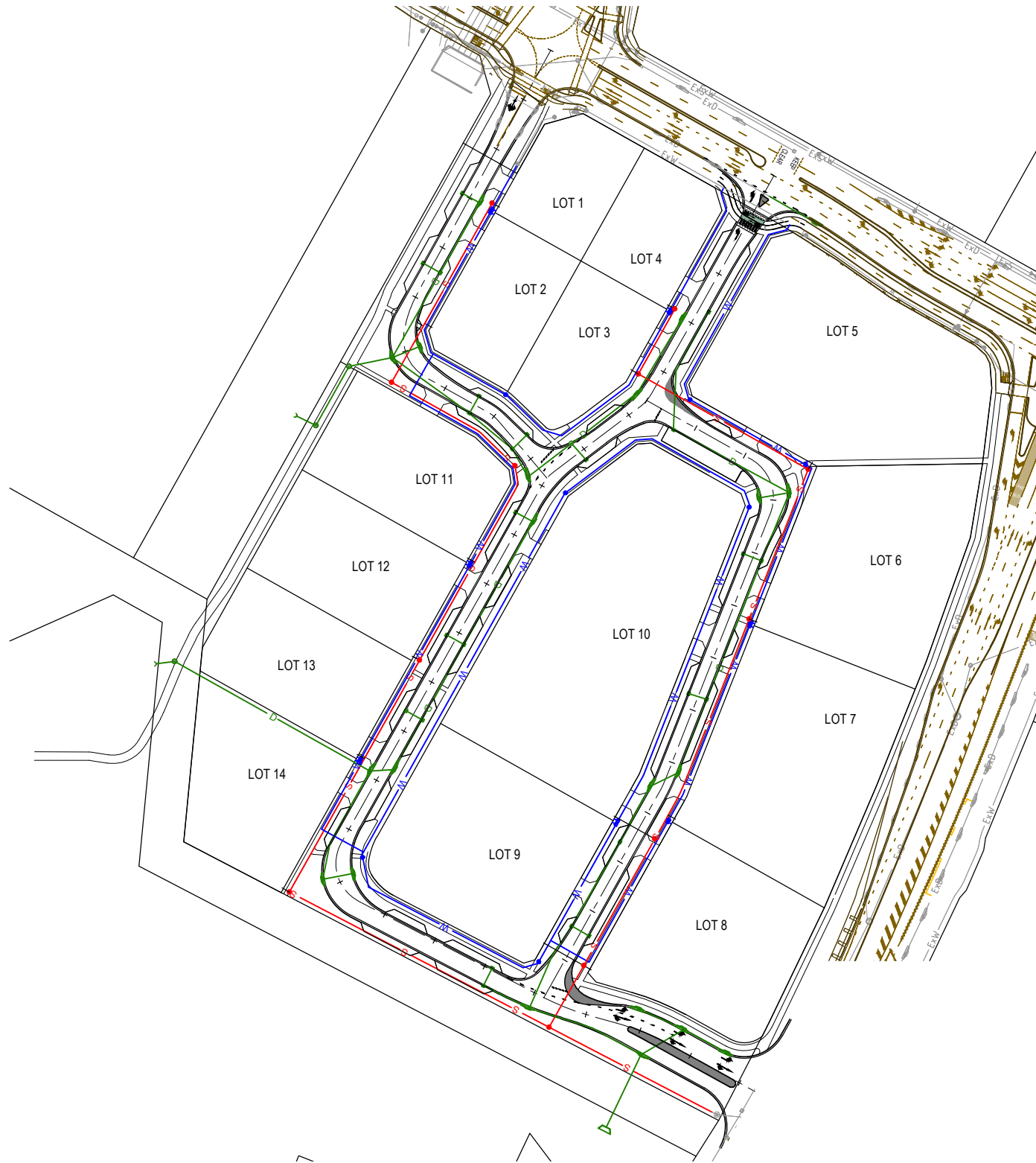
LEGEND	
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	FINISHED SURFACE CONTOURS MINOR (0.25m INTERVAL)
	PROPOSED SEWER MAIN, STRUCTURES, CONNECTION
	PROPOSED STORMWATER DRAINAGE PIPE
	PROPOSED WATER MAIN
	EXISTING STORMWATER DRAINAGE PIPE
	EXISTING SEWER MAIN
	EXISTING WATER MAIN

REV	DATE	AMENDMENT \ REVISION DESCRIPTION	DRAFT	DESIGN	WVR No.	STATUS		PROJECT NAME		DRAWING TITLE	
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						DATE 19.09.2024		REVISION 1			



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LEGEND

ExD

ExS

ExW

D

W

S

EXISTING STORMWATER DRAINAGE PIPE




EXISTING SEWER MAIN

EXISTING WATER MAIN

PROPOSED STORMWATER DRAINAGE PIPE

PROPOSED WATER MAIN

PROPOSED SEWER MAIN, STRUCTURES, CONNECTION

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