

TRAFFIC IMPACT ASSESSMENT

Stage 14, Caerleon Estate

PREPARED FOR:

Caerleon Mudgee Pty Ltd C/- Davis Stack

REFERENCE:

0529r01v08

DATE:

28/09/2023



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1. Introduction

1.1. Overview

PDC Consultants has been commissioned by Caerleon Mudgee Pty Ltd C/- Davis Stack to undertake a Traffic Impact Assessment (TIA) of a Development Application (DA) for a proposed residential subdivision (“the subdivision”), forming Stage 14 of the broader Caerleon Estate development.

The DA (DA 0349/2022) was lodged with Mid-Western Regional Council (Council) in 2022 for a scheme comprising:

- 237 low density residential lots.
- Proposed new internal local road network serving the residential lots.
- Connections to the existing road network at Hill End Road via proposed internal local roads delivered as part of earlier stages and the subject Stage 14 of the Caerleon Estate.

Council since made a request for further information (**Council RFI**) dated 03 November 2022 and a second one dated 05 May 2023 (**Council RFI 2**), in which certain roads and pedestrian access requirements were raised. These included a requirement to undertake traffic assessment of the Hill End Road / Hone Creek Drive intersection to demonstrate it as capable of operating satisfactorily for all stages approved and constructed up to and including the subject Stage 14, plus several further requests for changes to road reserve and pavement widths, pedestrian paths, and lot accesses across the subdivision. Annual average daily traffic data for internal roads was also requested.

In addition to the Council RFI, the proposed development yield has been increased to 370 low density residential lots plus two child care lots, and the proposed internal road network has modified accordingly.

This update to the TIA has therefore been prepared to respond to the Council RFI and to reassess the traffic and parking impacts of the modified Stage 14 subdivision proposal.

Given the DA proposes the subdivision of land with more than 200 allotments, it is required to be referred to Transport for NSW (TfNSW) under the provisions of the State Environmental Planning Policy (Transport and Infrastructure) 2021.

The site is located within the Mid-Western Regional Council local government area and has therefore been assessed in accordance with Mid-Western Regional Local Environmental Plan 2012 and Development Control Plan 2013. In addition, the site falls within the land covered by Appendix C Caerleon DCP 4 of the Mid-Western Regional Development Control Plan and has thus also been assessed against the Caerleon DCP.

1.2. Historic Assessment of the Caerleon Estate

A TIA was undertaken in 2012 by Traffix (Traffix 2012) of the proposed rezoning of the Caerleon Estate. This considered the development in its entirety, assuming an upper limit total of 1,400 residential dwellings and provision of a small ‘activity centre’ to service the residential population.

Traffix 2012 has been used as a foundational study within which context the assessment within this TIA has been developed. The comprehensiveness of assessment of traffic impacts on the local and broader road network in Traffix 2012 has rendered wholesale reassessment of traffic impacts unnecessary in this TIA; further details are provided in Section 7.

1.3. Structure of this Report

This report documents the findings of our investigations in relation to the anticipated traffic and parking impacts of the proposed development and should be read in the context of the Statement of Environmental Effects, prepared separately. The remainder of this report is structured as follows:

- Section 2: Describes the site and existing traffic and parking conditions in the locality.
- Section 3: Assesses the proposed future transport network conditions near the site.
- Section 4: Describes the proposed development.
- Section 5: Assesses the proposed parking requirements of the development.
- Section 6: Assesses the proposed road network conditions of the development.
- Section 7: Assesses the traffic impacts of the development.
- Section 8: Presents the overall study conclusions.

1.4. References

In preparing this report, reference has been made to the following guidelines / standards and reports:

- State Environmental Planning Policy (Transport and Infrastructure) 2021 (SEPP T&I 2021).
- Mid-Western Regional Local Environmental Plan 2012 (MLEP).
- Mid-Western Regional Development Control Plan 2013 (MDCP).
- Caerleon Development Control Plan 2012 (CDCP).
- Traffic Impact Assessment, Caerleon Rezoning, Mudgee, Traffix 2012 (Traffix 2012).
- 16 Regional Cities Services Improvement Program, Transport for NSW website (16 Cities Program).
- Austroads Guide to Road Design Part 4: Intersections and Crossings – General (AGRD04-17).
- Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections (AGRD04A-17).
- RMS Guide to Traffic Generating Development 2002 (RMS Guide).
- RMS Technical Direction TDT 2013/04a - Guide to Traffic Generating Developments (RMS Guide Update).

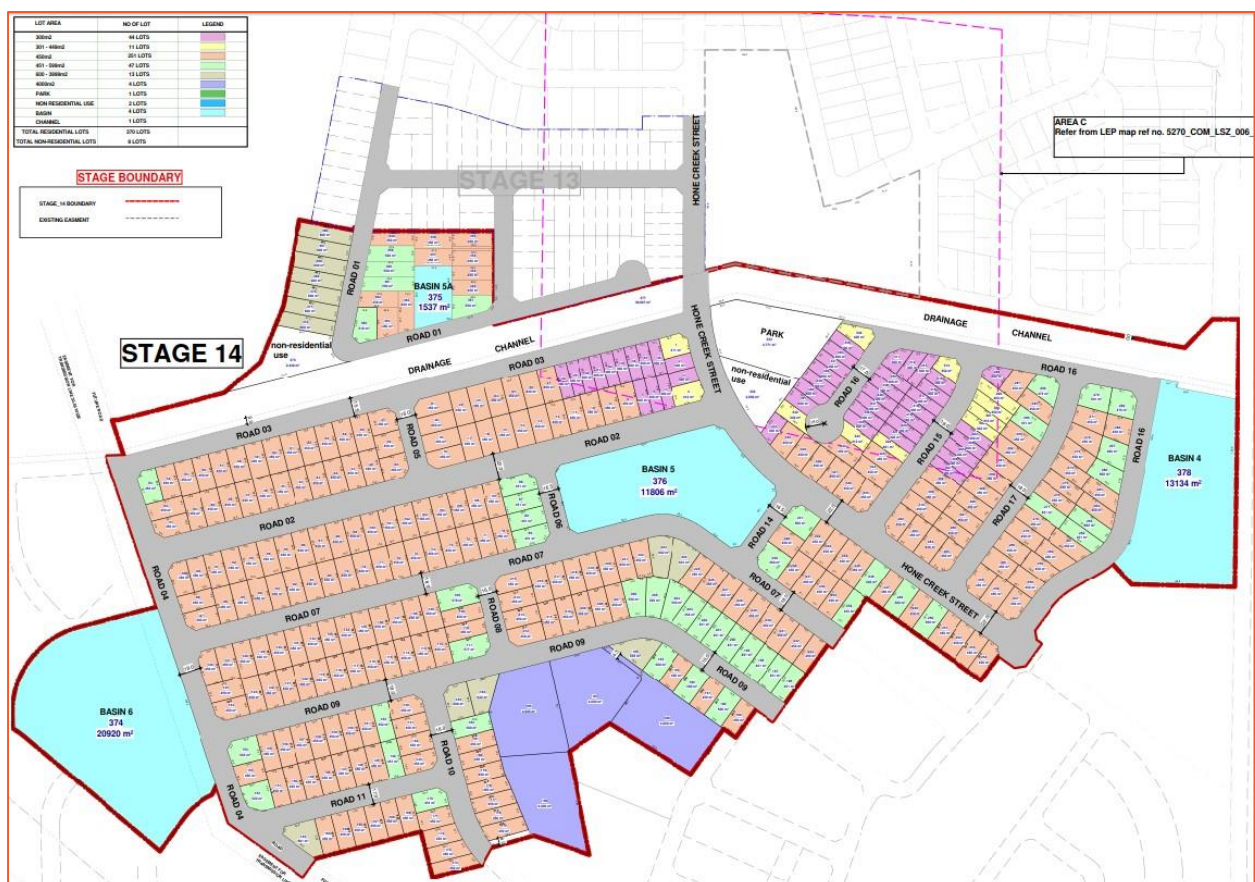
2. Existing Conditions

2.1. Location and Site

The Caerleon Estate covers a total area of some 310 hectares (ha), of which the subject Stage 14 subdivision comprises some 34 ha and is located in the Central West of NSW approximately 3-4 kilometres north-west of Mudgee Railway Station.

The Caerleon Estate is bound by the Gwabegar Railway Line to the east, Hill End Road to the north, residential development to the south-east, and rural environmental management land to the south and west. Stage 14 is sited centrally within the Caerleon Estate and is bound by earlier development stages (12 and 13) to the north, public recreation zoned land around Hone Creek to the east, and future rural residential land uses to the south and west.

Land upon which the subdivision is proposed is primarily rural bushland; however, it is zoned for general residential (R1) use in line with the proposal. The subdivision is illustrated by the proposed masterplan in **Figure 1** (also provided as **Appendix A**).



2.2. Road Network

The existing road hierarchy near the site is shown by **Figure 2**, with the following roads considered noteworthy:

- **Castlereagh Highway:** a TfNSW classified highway (HW 18) that runs in a north-west / south-east alignment to the north-east of the subdivision between Craboon to the north-west and Marrangaroo to the south-west. Near the site it comprises a single lane in each direction, with turn treatments provided at the intersection with Hill End Road and is subject to 80 km/h speed zoning restrictions.
- **Hill End Road:** a TfNSW main road (MR 215) that runs in a north / south direction between its intersection with Castlereagh Highway to the north of the subdivision and Sofala to the south. It is subject to 80 km/h speed zoning restrictions and carries a single lane in each direction.
- **Hone Creek Drive:** a new local road that generally runs in a north / south alignment through the subdivision between Hill End Road to the north and its proposed connection upon completion of the Caerleon Estate to Fairydale Lane to the south. It carries a single lane in each direction and is subject to 50 km/h speed zoning restrictions.
- **Fairydale Lane:** a local road that runs in an east / west alignment to the south of the subdivision between Gladstone Street to the east and its termination at 89 Fairydale Lane to the west. Near the site it carries a single lane in each direction and is subject to 50 km/h speed zoning restrictions.

2.3. Public and Active Transport

Existing public and active transport provision near the Caerleon Estate is limited, given its current nature as a primarily rural site on the outskirts of Mudgee.

The Integrated Public Transport Service Planning Guidelines, Rural and Regional NSW, states that the walking catchment for regional bus services includes all areas within an 800-metre radius of a bus stop.

There are currently no bus services operating near the site or within the walking catchment, with the closest being routes 561 and 563 which use the Castlereagh Highway / Bell Street / Putta Bucca Road intersection, some 2.0 kilometres south of the Castlereagh Highway / Hill End Road intersection.

Mudgee Railway Station forms the nearest rail connection, some 3 – 4 kilometres away from the Caerleon Estate.

No dedicated cycle facilities are provided near the site, with the nearest being on- and off-road cycle paths in Mudgee, some 2 – 3 kilometres south-east of the Caerleon Estate. The current road network of Castlereagh Highway and Hill End Road are unsuitable for cycling for most other than experienced cyclists, given their higher speed environments and lack of dedicated facilities.



Figure 2: Location and Road Hierarchy Plan

2.4. Existing Traffic Conditions

2.4.1. Castlereagh Highway / Hill End Road

AM and PM weekday intersection turn counts were undertaken for the Castlereagh Highway / Hill End Road intersection on Wednesday 23rd June (3:00 – 6:30pm) and Thursday 24th June (6:30 – 9:30am) 2021, with observed peak hour AM (8:15 – 9:15am) and PM (3:45 – 4:45pm) counts provided in **Figure 3**.

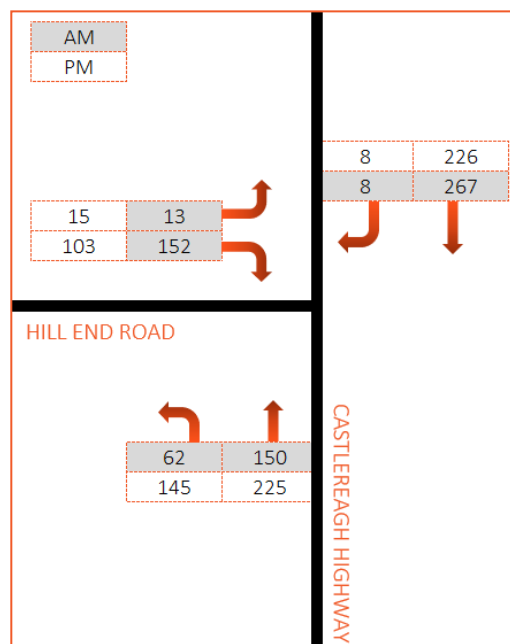


Figure 3: Existing Castlereagh Highway / Hill End Road Intersection Turn Counts

The existing intersection layout has been assessed using SIDRA to identify current operational performance under existing intersection turn counts, with summary outputs for weekday AM and PM peaks provided in **Table 1**.

Table 1: Existing Intersection Performance at Castlereagh Highway / Hill End Road

PEAK	V/C	AVG. DELAY (s) ¹	LOS
AM	0.31	12.9	A
PM	0.24	12.9	A

¹ Average delay value presented is the maximum delay experienced by any one movement at the intersection.

Table 1 demonstrates that the intersection of Castlereagh Highway / Hill End Road currently performs very well, with the highest delay of 12.9 seconds experienced on the Hill End Road right turn movement during weekday AM and PM peak periods. The intersection performs at Level of Service (LOS) A during both peaks, considered the best performance with the lowest levels of congestion.

2.4.2. Hill End Road / Hone Creek Drive

Following receipt of the Council RFI, intersection turn count surveys were undertaken for the intersection of Hill End Road / Hone Creek Drive on Wednesday 19 July (6:30 – 9:30am and 3:00 – 6:30pm) 2023, with observed peak hour AM (8:15 – 9:15am) and PM (3:45 – 4:45pm) counts provided in **Figure 4**.

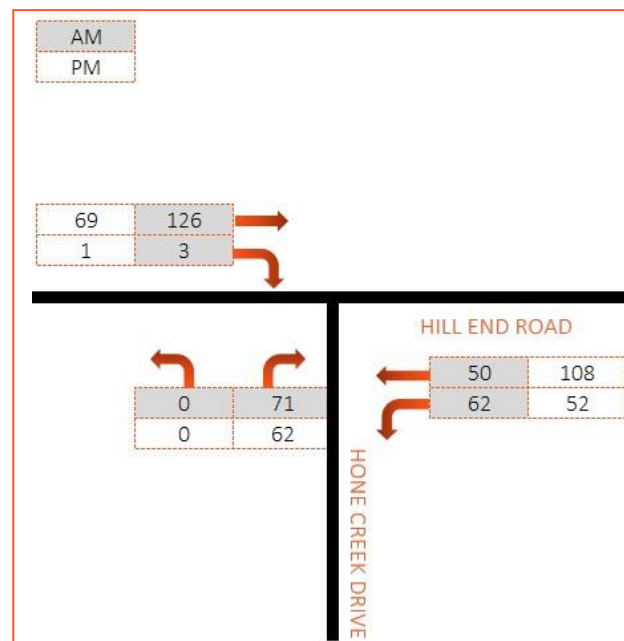


Figure 4: Existing Hill End Road / Hone Creek Drive Intersection Turn Counts

The existing intersection layout has been assessed using SIDRA to identify current operational performance under existing intersection turn counts, with summary outputs for weekday AM and PM peaks provided in **Table 1**.

Table 2: Existing Intersection Performance at Hill End Road / Hone Creek Drive

PEAK	V/C	AVG. DELAY (s) ¹	LOS
AM	0.10	9.1	A
PM	0.08	9.1	A

¹ Results presented are for the single movement experiencing the maximum average delay.

Table 1 demonstrates that the intersection of Hill End Road / Hone Creek Drive currently performs very well, with the highest delay of 9.1 seconds experienced on the Hone Creek Drive right turn movement during weekday AM and PM peak periods. The intersection performs at LOS A during both peaks, considered the best performance with the lowest levels of congestion.

It has been conservatively assumed that the intersection operates under 'STOP' sign conditions, though in reality motorists are expected to behave more akin to 'GIVE WAY' signage.

3. Future Conditions

3.1. External Road Network Connections

3.1.1. Castlereagh Highway / Hill End Road

The intersection of Castlereagh Highway / Hill End Road is to be upgraded at a time commensurate with ongoing issue of subdivision certificates for residential lots for earlier stages of the Caerleon Estate.

Under its ultimate arrangement, the intersection will comprise a full-length channelised right turn bay provided on the Castlereagh Highway (north) approach, a rural auxiliary left turn lane treatment provided on the Castlereagh Highway (south) approach, and Hill End Road widened to accommodate left and right turning vehicles side-by-side at the intersection.

Intersection capacity and safety will therefore be greatly increased, prior to delivery of the Stage 14 subdivision. This ultimate arrangement is expected to be complete prior to release of the subdivision certificate of the 248th lot of the Caerleon Estate, before delivery of Stage 14.

3.1.2. Hill End Road / Hone Creek Drive

This intersection is identified in Traffic 2012 as being the primary location at which traffic generated by the Caerleon Estate will access the existing road network.

This prior assessment identified intersection upgrade works necessary to satisfactorily accommodate the proposed rezoning of the Caerleon Estate as being provision of basic right and left turn treatments on the respective Hill End Road approaches, as defined by AGRD04-17 and AGRD04A-17.

It is anticipated these works will be delivered in advance of delivery of the Stage 14 subdivision, thereby ensuring safe and efficient access to the existing road network.

Following receipt of the **Council RFI**, performance of this intersection upon occupation of the Stage 14 subdivision has been assessed and is discussed in Section 7, which demonstrates that the findings of Traffic 2012 stand up and that basic right and left turn treatments are sufficient to ensure satisfactory intersection performance for all stages approved and constructed up to and including the subject Stage 14.

3.1.3. Fairydale Lane / Hone Creek Drive

The main proposed collector road, named Hone Creek Drive, through the Caerleon Estate will run in a north / south alignment from Hill End Road to Fairydale Lane. The connection to Fairydale Lane will be in the form of a priority sign-controlled T-intersection, with the collector road giving way to through movements on Fairydale Lane.

This intersection is identified in Traffix 2012 as being secondary and ancillary to the Hill End Road / Hone Creek Drive intersection in providing access to the existing road network, given the proximity of most of the residential and non-residential land uses to the north of the Caerleon Estate.

CDCP identifies that Hone Creek Drive is proposed to be constructed in the early stages of development, or as outlined in a condition of development consent or a voluntary planning agreement.

The Hone Creek Drive connection to Hill End Road exists and, in response to the **Council RFI**, has been demonstrated capable (Section 7) of accommodating all traffic generated by stages approved and constructed up to and including the subject Stage 14 and as such, the connection through to Fairydale Lane is not required or proposed as part of or in advance of Stage 14.

3.2. Future Active Transport Network

CDCP outlines an indicative pedestrian and cycle network plan for the Caerleon Estate, which is provided as **Figure 5** for reference.

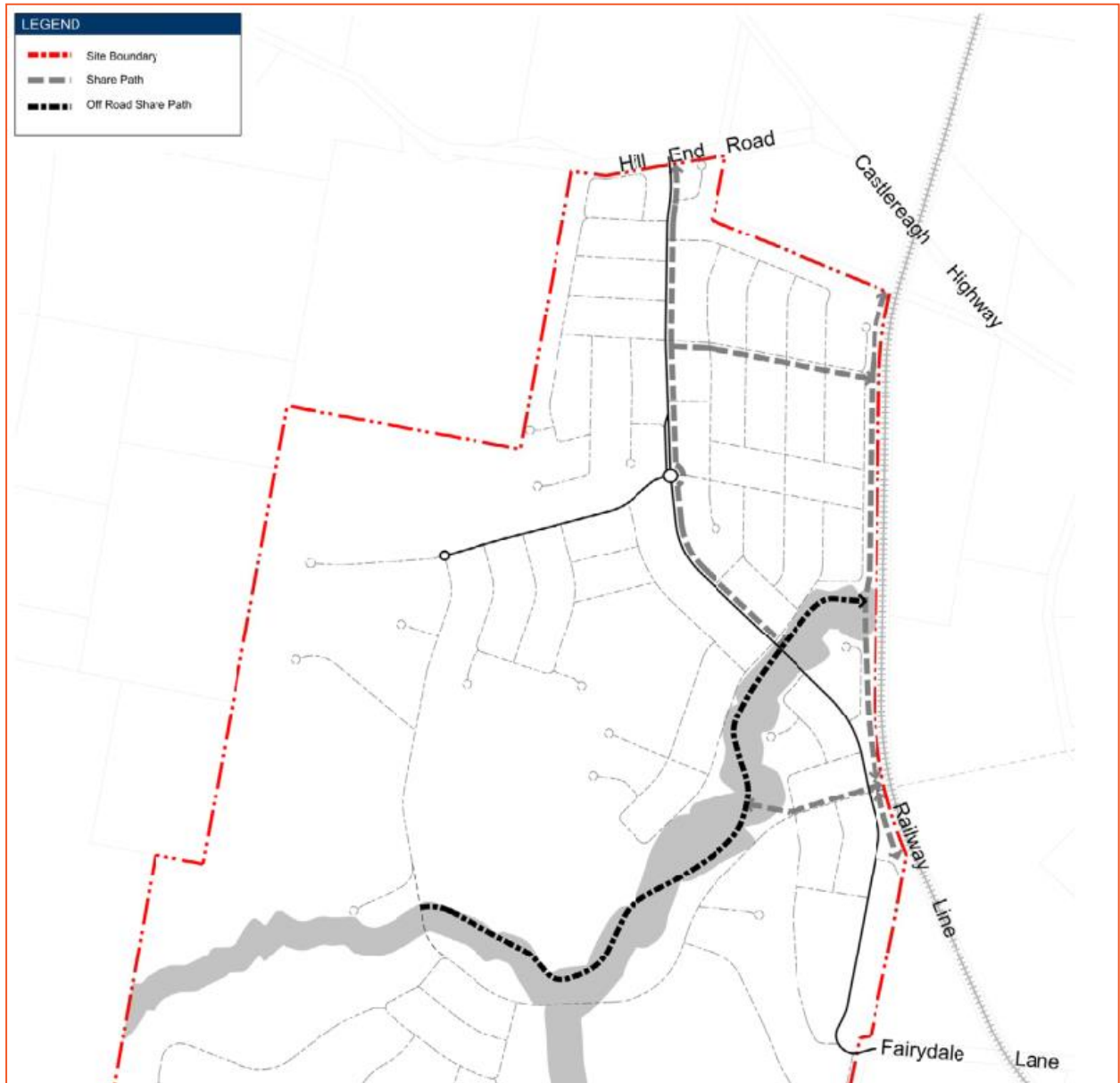


Figure 5: Indicative Pedestrian and Cycle Network

A shared pedestrian and cycle path is proposed for much of the length of the main collector road through the Caerleon Estate, being Hone Creek Drive, which will provide safe and efficient links to and from trip attractors in the development, as well as to the broader centre of Mudgee to the south. This shared path will be supported by an off-road shared path along Hone Creek, to promote recreational and outdoor activities for residents.

In response to the **Council RFI**, certain road reserve widths throughout the proposed subdivision have also been widened in the amended subdivision plans to facilitate shared cycleway/paths, at the request of Council.

3.3. Future Public Transport Network

Neither MDCP nor CDCP provide information regarding future bus service enhancements to support the proposed Caerleon Estate.

The 16 Cities Program is a commitment by the NSW Government to improve public transport services throughout regional NSW. Improvements to regional bus services will aim to provide better connections to where customers need to go for work, school, health, and social and recreational benefits.

To date, no proposals have been outlined to improve public transport provision near the subdivision or the broader Mudgee and Caerleon area, with the closest cities under consideration being Bathurst, Orange, and Parkes. However, it is understood that the NSW Government plan to investigate expansion of the 16 Cities Program in future.

4. Proposed Development

A detailed description of the proposed development for which approval is now sought, is outlined in the Statement of Environmental Effects prepared separately. In summary, the amended DA proposes a residential subdivision comprising:

- 370 low density residential lots.
- Two child care centres of capacity for around 90 children each, serving residents of the Caerleon Estate.
- One public park.
- Proposed new internal local road network serving the residential lots.
- Connection to the existing road network at Hill End Road via proposed Hill End Road and internal local roads delivered as part of earlier stages and the subject Stage 14 of the Caerleon Estate.

The traffic implications arising from the proposed development are discussed in Section 7. A copy of the subdivision plan is provided as **Appendix A**.

5. Parking Requirements

The subject DA proposes subdivision works only; any and all future development on the subdivided lots would be subject to future DA or CDC applications during which the relevant parking requirements would be assessed. No on-site parking within the lots is proposed as part of this DA. Nevertheless, for completeness, consideration is given to the proposed land uses below.

CDCP does not provide car parking rates for residential dwellings, and as such MDCP has been used to determine the required car parking provision.

Clause 5.1 of MDCP requires that residential dwellings provide car parking at:

- *2 spaces per dwelling – 1 space to be a garage, 1 space may be provided in a stacked arrangement in front of the garage provided that the space is contained wholly within the site.*

The proposed residential lots within the subdivision will meet the MDCP car parking requirements, ensuring satisfactory on-site provision is made with no reliance upon on-street car parking. Car parking will be accessed via residential local streets, as defined by Table 1 of CDCP.

In addition to on-site car parking, Table 2 of CDCP notes typical cross sections for almost all roads within the Caerleon Estate, except for laneways, will permit on-street parallel car parking, either on one or both sides. Further modifications have been made to the proposed road reserve widths in response to the **Council RFI** to ensure on-street parking provision meets Council's requirements.

CDCP also requires that 60-degree angles rear-to-kerb parking bays are to be provided within, and on both sides of, the carriageway of Neighbourhood Centre Road, a section of Hone Creek Drive to the north of the subdivision.

MDCP requires that car parking for child care centre developments be required at a rate of one space per four children which, for child care centres of around 90 children would result in a requirement for 23 on-site car parking spaces each.

As such, car parking provision throughout the subdivision is expected to be plentiful and capable of accommodating demands generated by residents.

6. Proposed Road Network

6.1. Future Road Hierarchy

A new road network internal to Caerleon Estate is proposed to serve the entire development, including the Stage 14 subdivision, and provide access to the broader road network. The indicative street hierarchy is illustrated in CDCP, which is provided as **Figure 6** for reference. Road design will be generally in accordance with the descriptions and standards outlined in Tables 1 & 2 of CDCP.

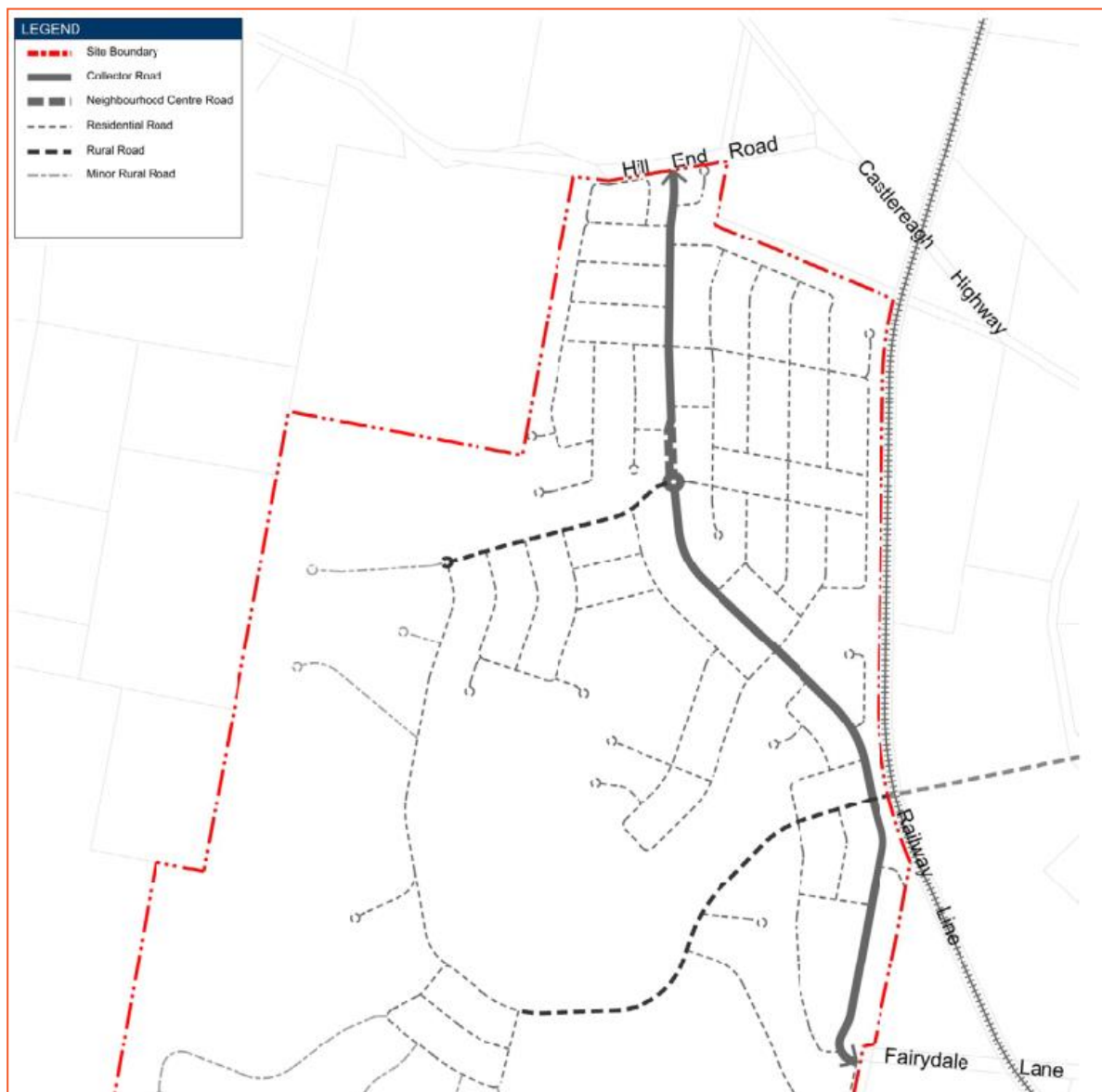


Figure 6: Caerleon Estate Indicative Street Hierarchy

The Stage 14 subdivision has the residential collector street of Hone Creek Drive passing in a north / south alignment through the subdivision, to its east. All other roads within the subdivision, illustrated by **Figure 6**, are proposed as a variety of classifications befitting their intended purpose, being residential collector streets, residential local streets, minor access streets with cul-de-sacs, or rural roads.

6.2. Typical Cross Sections

The typical cross-sectional information of the roads proposed within the subdivision are identified by Table 2 of CDCP, with typical cross sections illustrated by **Appendix B**. In addition, certain key roads through the subdivision are provided with a 22.0 metre road reserve width in response to requests made by the **Council RFI**.

The proposed local roads will connect to the new internal road network being developed for earlier stages of the Caerleon Estate to the north, via Hone Creek Drive. Upon completion of the Caerleon Estate and after Stage 14, residents of the subdivision will be able to access the existing road network either to the north at Hill End Road, or to the south at Fairydale Lane, each via Hone Creek Drive.

All intersections within the subdivision are expected to comprise priority sign-controlled intersections, given the relatively low traffic volumes each will accommodate. All residential and minor access streets within the subdivision would be expected to be subject to 50 km/h posted speed restrictions. Turning head cul-de-sacs will be designed in accordance with Council's requirements.

6.3. Annual Average Daily Traffic Generation

In the **Council RFI 2**, Council requested the forecast annual average daily traffic (AADT) volumes for each road servicing residential dwellings within Stage 14. RMS Guide Update recommends application of a daily traffic generation rate for low density dwellings in regional NSW of 7.4 trips / dwelling / day. Estimates are summarised by **Table 3**.

Table 3: AADT Estimates

ROAD	LOTS	AADT
Hone Creek Drive	26 ⁽¹⁾	496 ⁽¹⁾
2	47	348
3	31	229
4	9	67
5	3	22
6	2	15
7	58	429
8	4	30
9	52	385
10	16	118
11	16	118
14	1	7

ROAD	LOTS	AADT
15	24	178
16	8 to 17	59 to 126
17	23	170
18	2 to 14 ⁽¹⁾	15 to 407 ⁽¹⁾
TOTAL	370	3307

¹ Includes a child care centre lot, for which a daily traffic generation rate of 3.45 trips / child / day has been adopted.

Planning for the 'future roads' and 'future subdivisions' is underway but has not yet been finalised and as such, a development yield is not available from which AADT can be estimated.

Further, there will be a point in future at which additional connections to the existing road network, notably at Fairydale Lane, will be constructed, which would change the dynamic of trip distribution of these future lots. Until assessment of these future stages has been undertaken during the respective future DAs, the nexus between development stages and road infrastructure cannot be accurately estimated.

7. Traffic Impacts

7.1. Overview

As discussed in Section 1.2, the traffic impacts of the entire Caerleon Estate were assessed in Traffix 2012, which considered trips generated by all proposed land uses and their impacts on the surrounding road network.

The assumptions adopted in this assessment remain generally valid, with no significant modification to the proposed upper limit number of residential lots or non-residential area. As such, comprehensive traffic modelling assessment of the surrounding road network was not considered necessary as part of this TIA.

It is noted that such assessment would require consideration of all other stages of the Caerleon Estate development, which are not the subject of this DA, to identify cumulative impacts on the surrounding road network at the time the Stage 14 subdivision is operational. As such, this would essentially replicate assessment undertaken in Traffix 2012 and is considered unnecessary.

However, the **Council RFI** requested assessment of the Hill End Road / Hone Creek Drive intersection for a scenario in which all stages up to and including Stage 14 are approved and occupied, as a means of demonstrating this intersection could satisfactorily accommodate the traffic generation without a need to build the Hone Creek Drive connection to Fairydale Lane as part of the Stage 14 works.

As such, trip generation of the subdivision for all stages up to and including Stage 14 has been identified in the following sections, with the impacts to the surrounding road network presented therein.

7.2. Trip Generation and Distribution

In determining anticipated traffic generation of the subdivision, the RMS Guide Update recommends application of a peak period traffic generation rate for low density dwellings in regional NSW of 0.71 trips / dwelling / hour during the AM peak and 0.78 trips / dwelling / hour during the PM peak. Application of these rates to the respective stages of the subdivision results in the peak period traffic generation identified by **Table 4**.

Table 4: Trip Generation of All Subdivision Stages to Stage 14

TRIP GENERATION BY STAGE (veh)														
STAGE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
LOTS	56	19	36	50		16	24	50		8	7	54	45	370
AM	40	13	26	36		11	17	36		6	5	38	32	263
PM	44	15	28	39		12	19	39		6	5	42	35	289

DAs and the respective trip generation for Stages 1—13 have been approved by Council.

Not all trips identified by **Table 4** are external to the Caerleon Estate development. The RMS Guide recommends up to 25% of trips may be considered ‘internal’ trips, representing trips to local retail centres, or social visits. For consistency with Traffix 2012, a 12.5% discount for internal trips is considered suitable. For this same reason, trips generated by the two proposed child care centres in Stage 14 were not included in **Table 4**, to avoid double-counting as these centres would only serve residents of the surrounding Caerleon Estate and not generate external trips.

The findings of **Table 4** and application of the 12.5% discount have been used to identify resultant weekday AM and PM peak traffic volumes expected to use the Hill End Road / Hone Creek Drive intersection to address the Council RFI.

The assessment assumes a 20% inbound and 80% outbound split during the AM peak period and a 60% inbound and 40% outbound split during the PM peak, in line with Traffix 2012. Of trips passing through the Hill End Road / Hone Creek Drive intersection, a total of 90% of all traffic is assumed as travelling to and from the Castlereagh Highway intersection to the east, with the remainder using Hill End Road to and from the west.

Resultant traffic volumes expected to use the Hill End Road / Hone Creek Drive intersection are as illustrated by **Figure 7**, for all stages up to and including Stage 13, and all stages up to including Stage 14, respectively.

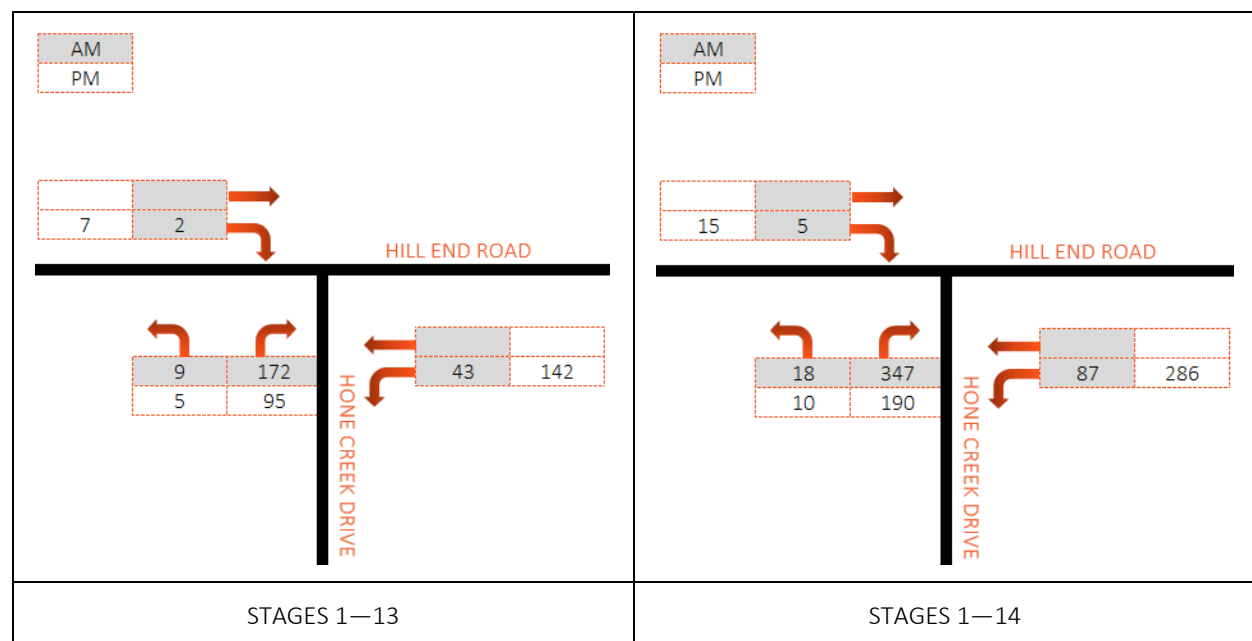


Figure 7: Hill End Road / Hone Creek Drive Traffic Volumes With and Without Stage 14

7.3. Traffic Impacts

The findings of the trip generation and distribution estimations were used to assess two development scenarios: one with Stages 1—13 included and the other with Stages 1—14 included. SIDRA Intersection outputs are presented in **Table 5**.

Table 5: With Development Intersection Performance at Hill End Road / Hone Creek Drive

PEAK	SCENARIO	V/C	AVG. DELAY (s) ¹	LOS
AM	BASE	0.10	9.1	A
	BASE + STAGES 1—13	0.33	10.1	A
	BASE + STAGES 1—14	0.78	22.7	B
PM	BASE	0.08	9.1	A
	BASE + STAGES 1—13	0.23	10.3	A
	BASE + STAGES 1—14	0.58	19.9	B

¹ Results presented are for the single movement experiencing the maximum average delay.

Table 5 demonstrates that the intersection of Hill End Road / Hone Creek Drive will continue to perform satisfactorily with spare capacity once all development stages up until and including Stage 14 are occupied. The 'with Stage 14' scenarios perform excellently during weekday AM and PM peak periods at LOS B, defined by the RMS Guide as having "acceptable delays & spare capacity".

As such, findings demonstrate that the ultimate connection of Hone Creek Drive through to Fairydale Lane is not required to facilitate development up and until the Stage 14 development, and that the intersection would likely have spare capacity to cater for additional development stages too before reaching a capacity threshold.

The anticipated traffic performance is therefore considered satisfactory.

8. Conclusion

In summary:

- PDC Consultants has been commissioned by Caerleon Mudgee Pty Ltd C/- Davis Stack to undertake a traffic impact assessment for a proposed residential subdivision of some 370 residential lots being delivered during Stage 14 of the broader Caerleon Estate.
- The subject subdivision gains access to the existing local road network via a proposed internal road network to the north at Hill End Road, being delivered as part of earlier subdivision stages. The subdivision will be served by a network of local residential and collector streets, providing access between residential lots, local centres, and the broader road network.
- Given the existing performance of the Castlereagh Highway / Hill End Road intersection is excellent and comprehensive traffic assessment has been undertaken during stages of the Caerleon Estate development, no further detailed traffic analysis of the subject subdivision has been undertaken within this TIA.
- Nevertheless, traffic impacts arising from the Stage 14 subdivision have been assessed and are expected to be minimal, in the context of the route choices available and external road network upgrades being delivered to facilitate the broader Caerleon Estate.

It is therefore concluded that the proposed subdivision is supportable on traffic planning grounds.



Appendix A

STAGE 14

LOT AREA	NO OF LOT	LEGEND
300m2	44 LOTS	
301 - 449m2	11 LOTS	
450m2	251 LOTS	
451 - 599m2	47 LOTS	
600 - 3999m2	13 LOTS	
4000m2	4 LOTS	
PARK	1 LOTS	
NON RESIDENTIAL USE	2 LOTS	
BASIN	4 LOTS	
CHANNEL	1 LOTS	
TOTAL RESIDENTIAL LOTS	370 LOTS	
TOTAL NON-RESIDENTIAL LOTS	8 LOTS	

STAGE BOUNDARY

STAGE_14 BOUNDARY

EXISTING EASMENT

STAGE 14

AREA C

Refer from LEP map ref no. 5270_COM_LSZ_006_160_20220412.

ISSUE	DATE	DESCRIPTION	BY
1	27/09/2023	DA Submission	

Bathla

137 Gunga Road, Gungahlin, ACT 2912
P: 02 9398 4762 F: 02 9398 4762
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GENERAL NOTES:

1. THE DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT DESCRIPTION AND THE PROJECT DESCRIPTION IS TO BE READ IN CONJUNCTION WITH THE PROJECT DESCRIPTION.

2. THE DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT DESCRIPTION AND THE PROJECT DESCRIPTION IS TO BE READ IN CONJUNCTION WITH THE PROJECT DESCRIPTION.

3. THE DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT DESCRIPTION AND THE PROJECT DESCRIPTION IS TO BE READ IN CONJUNCTION WITH THE PROJECT DESCRIPTION.

DO NOT SCALE

PROJECT:
CAERLEON.MUDGEES_STAGE 14PROJECT ADDRESS:
Hone Creek Drive, Caerleon
LOT 930 DP 1274170DRAWING TITLE:
SUBDIVISION LAYOUT PLAN

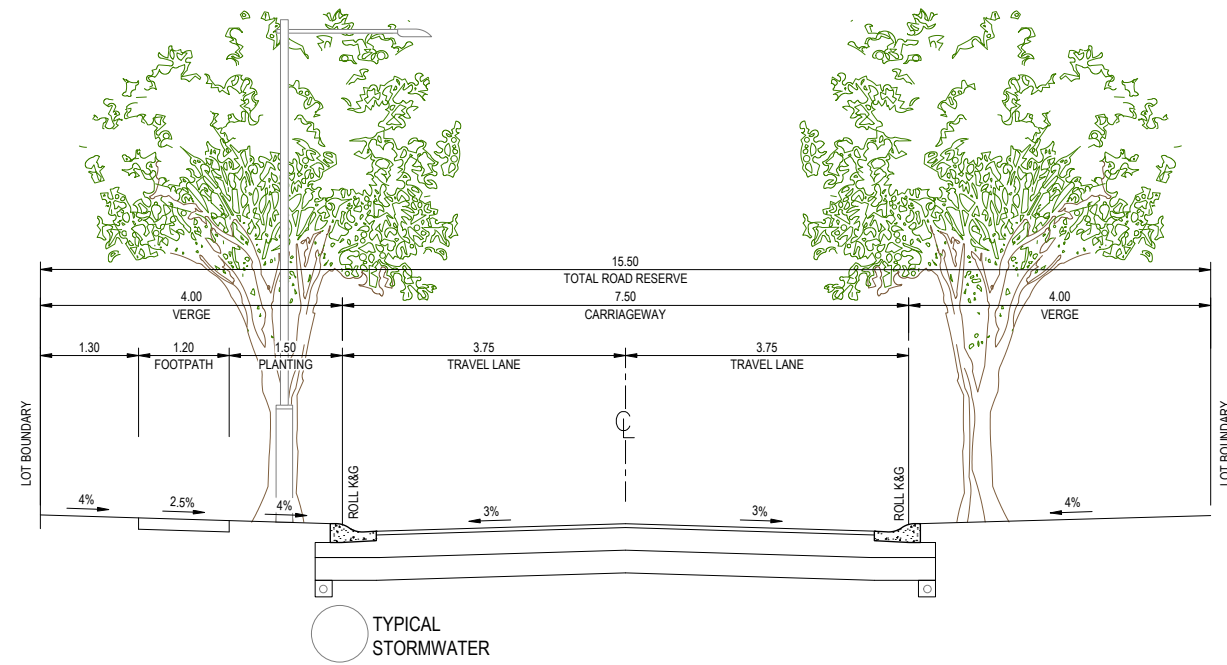
DATE	SCALE	REVISION
09/27/23	As Indicated	SK-2
Author	Checker	1

DA ISSUE

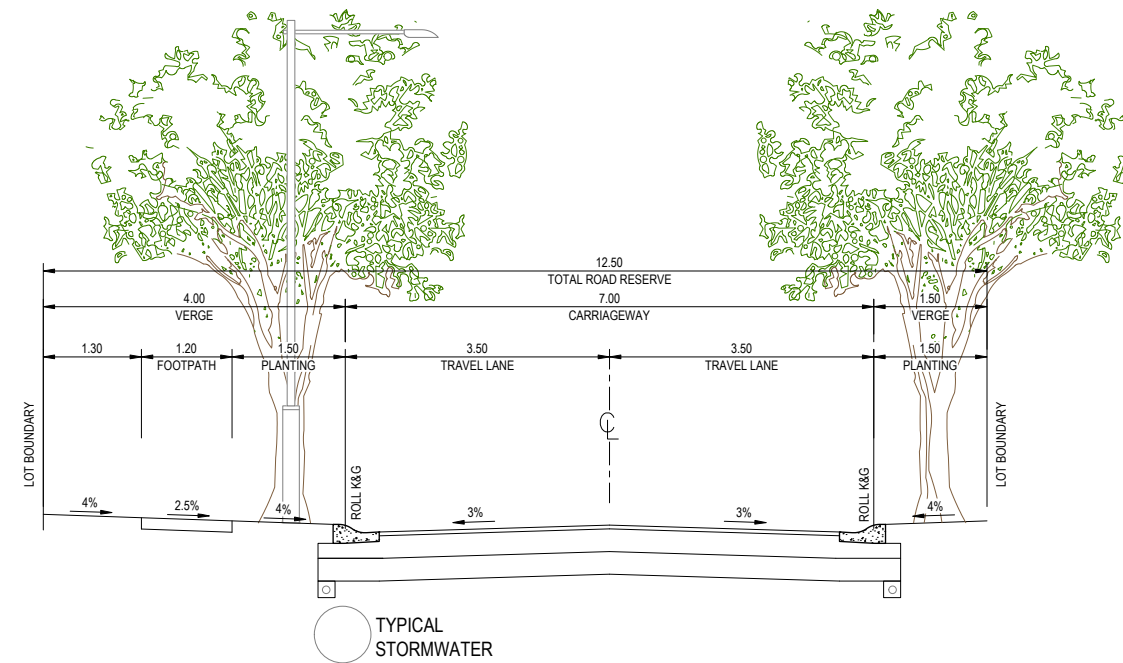
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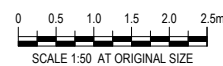
Appendix B



MINOR ACCESS ROAD (15.5m WIDE)
1:50



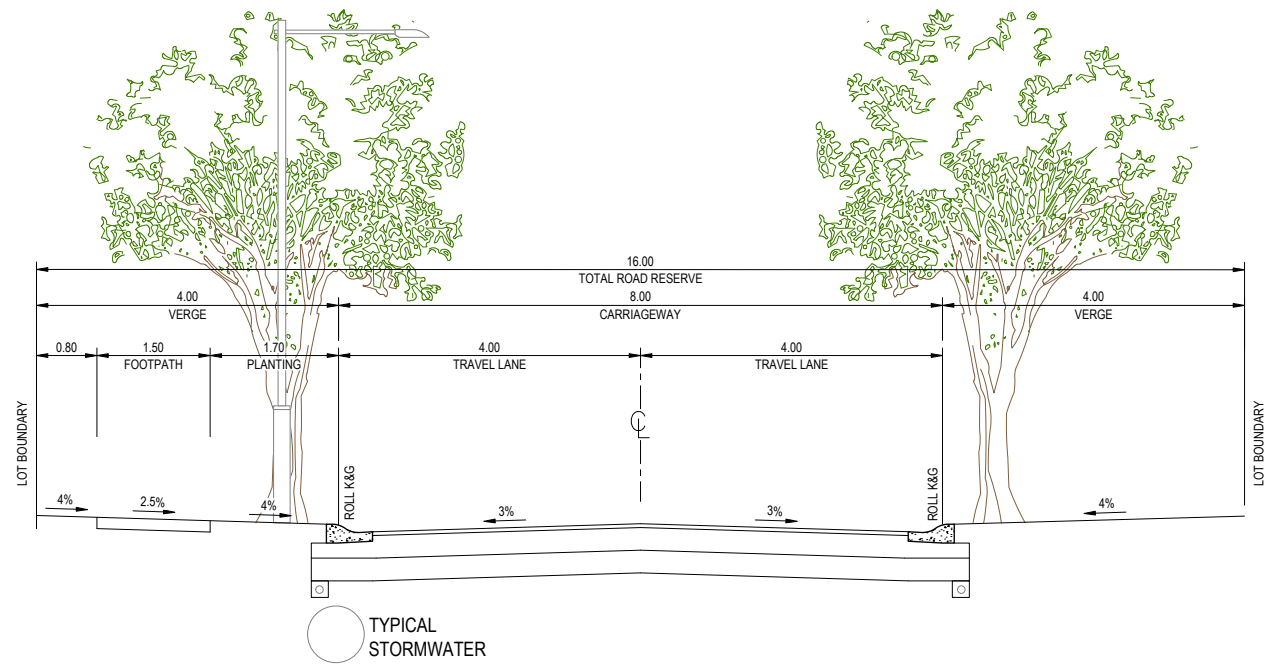
MINOR ACCESS ROAD (12.5m WIDE)
1:50



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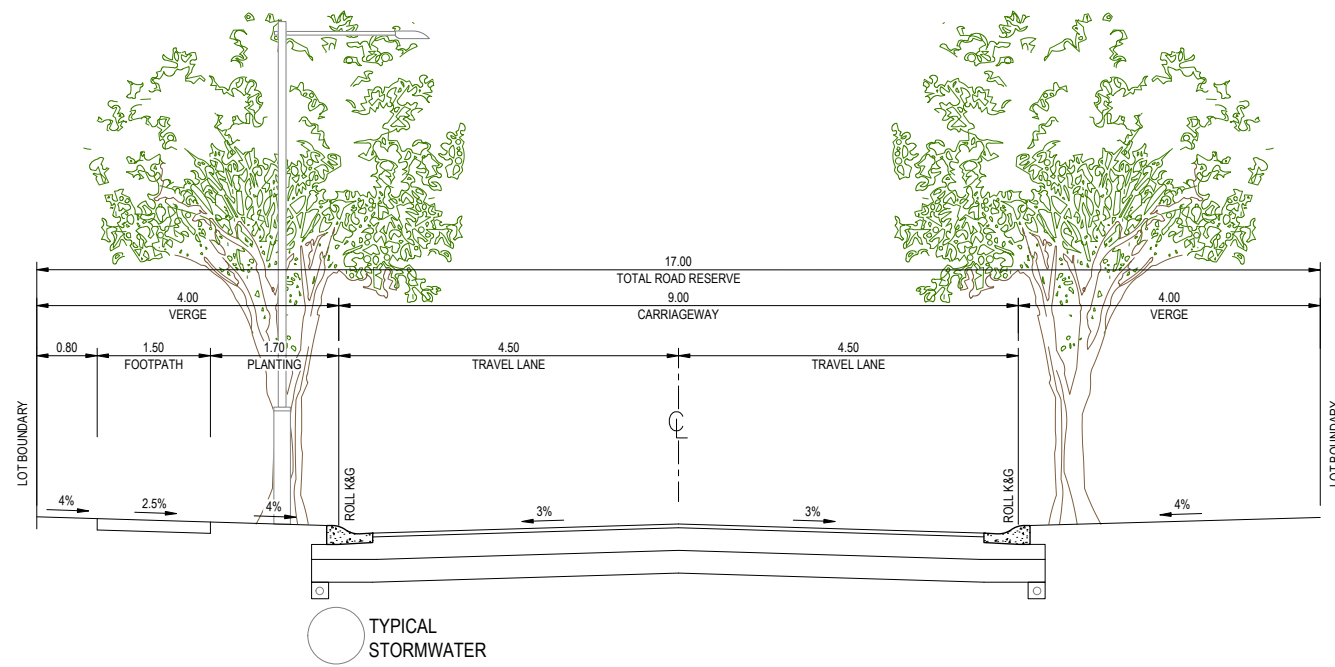


DRAWN: M.I.LJJEVSKI	DESIGNED: M.I.LJJEVSKI	RESIDENTIAL SUBDIVISION - CAERLEON MUDGE DEVELOPMENT APPLICATION - STAGE 14 TYPICAL SECTIONS SECTIONS PLAN			
DRAFT CHECK: J.AGUSTIN	DESIGN CHECK: J.AGUSTIN				
APPROVED: J.AGUSTIN					
NOT FOR CONSTRUCTION		DRAWING NUMBER MKRV0036-114-C0310	SHEET No. 1 OF 5	ORIG. SIZE A1	REVISION 1



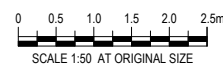
MINOR ACCESS ROAD (16.0m WIDE)

1:50



MINOR ACCESS ROAD (17.0m WIDE)

1:50

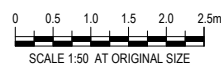
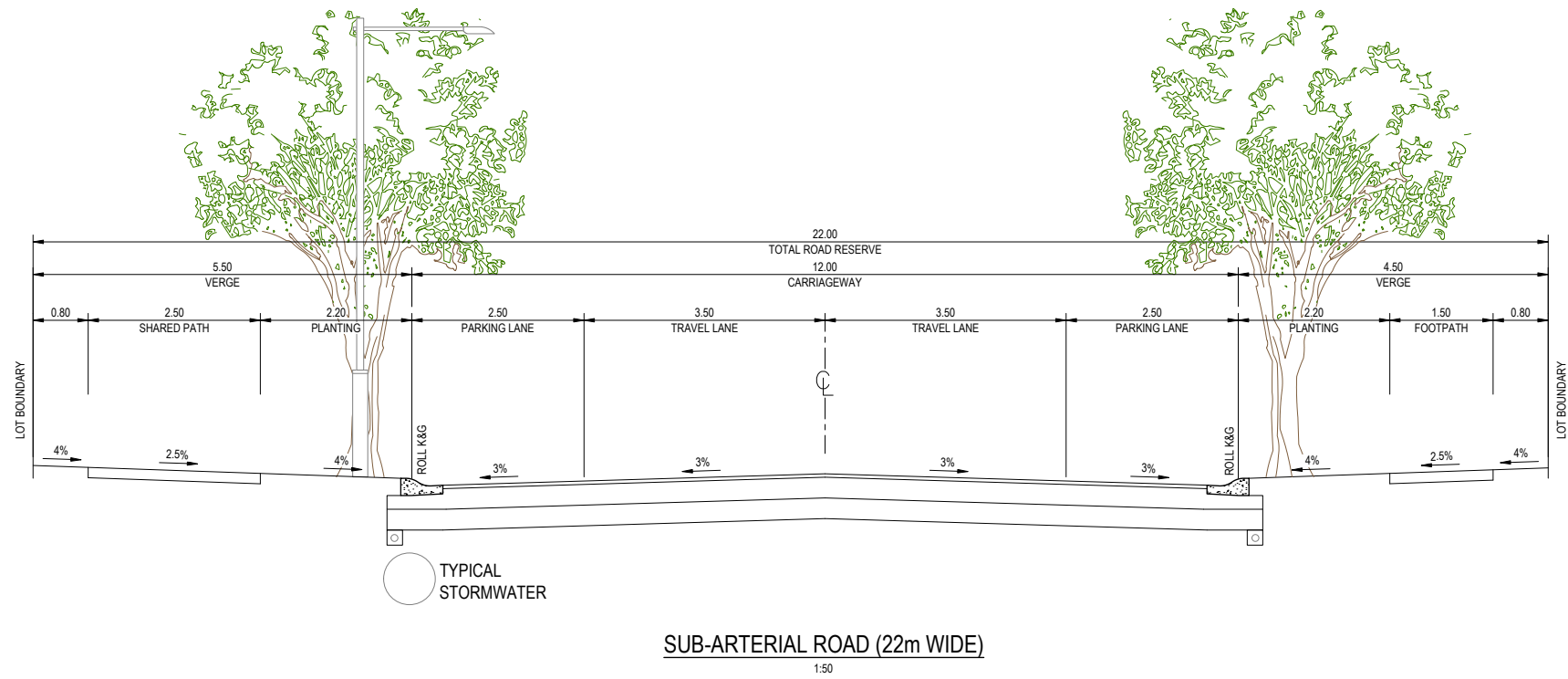
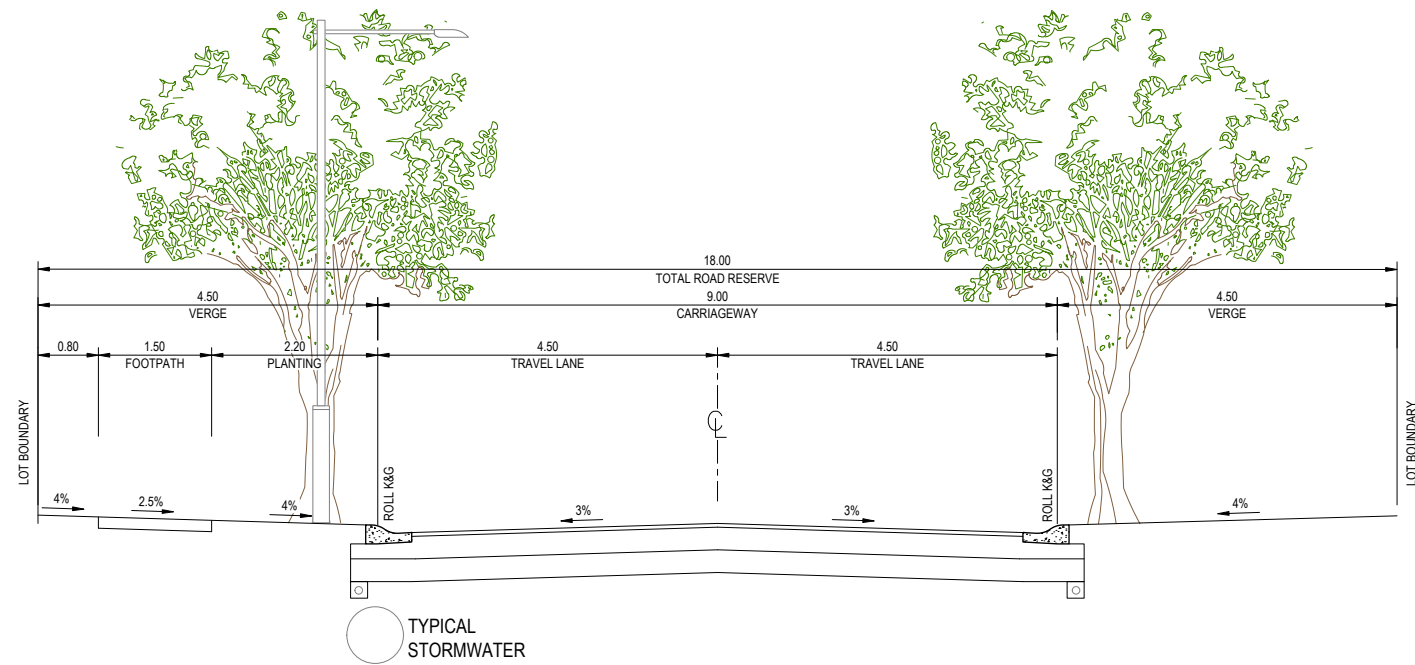


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DRAFT CHECK: J.AGUSTIN	DESIGN CHECK: J.AGUSTIN				
APPROVED:	J.AGUSTIN				
NOT FOR CONSTRUCTION		DRAWING NUMBER MKRV0036-114-C0311	SHEET No. 2 OF 5	ORIG. SIZE A1	REVISION 1

REV	DATE	DESCRIPTION	AMD BY	APP BY
1	15.09.23	FOR APPROVAL	M.I	J.M.A
P1	25.08.23	DRAFT ISSUE	M.I	J.M.A



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DESIGNED: M.I.LJEVSKI
DRAFT CHECK: J.AGUSTIN
DESIGN CHECK: J.AGUSTIN
APPROVED: J.AGUSTIN

RESIDENTIAL SUBDIVISION - CAERLEON MUDGE
DEVELOPMENT APPLICATION - STAGE 14
TYPICAL SECTIONS
SECTIONS PLAN

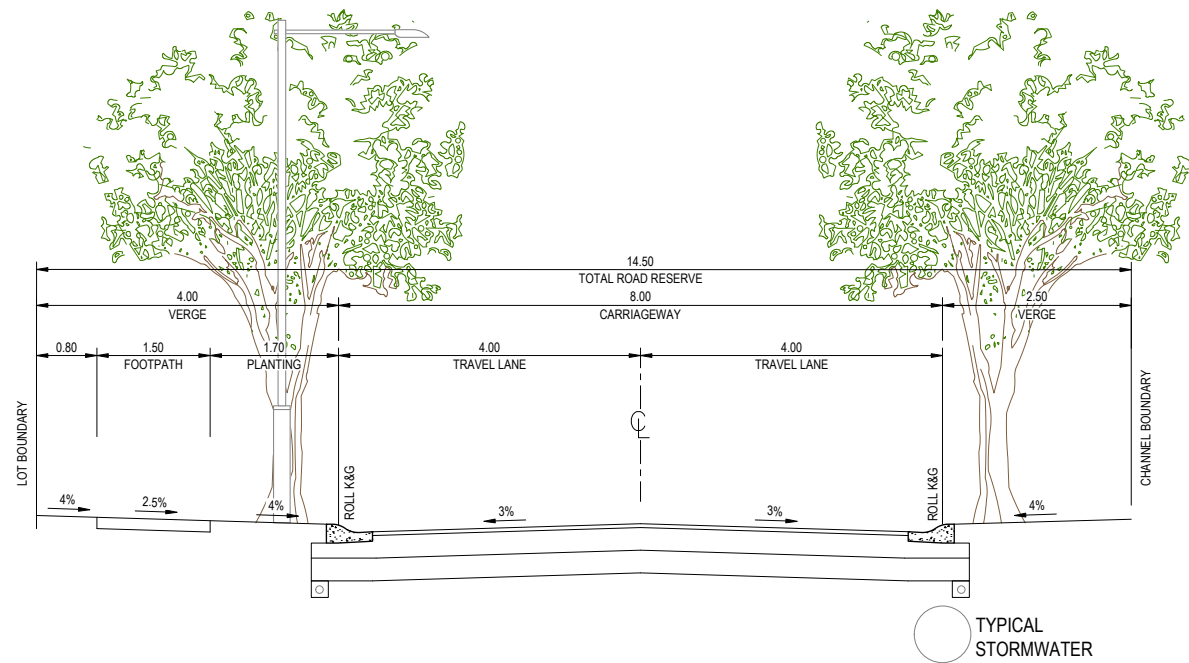
NOT FOR CONSTRUCTION

DRAWING NUMBER
MKRV0036-114-C0312

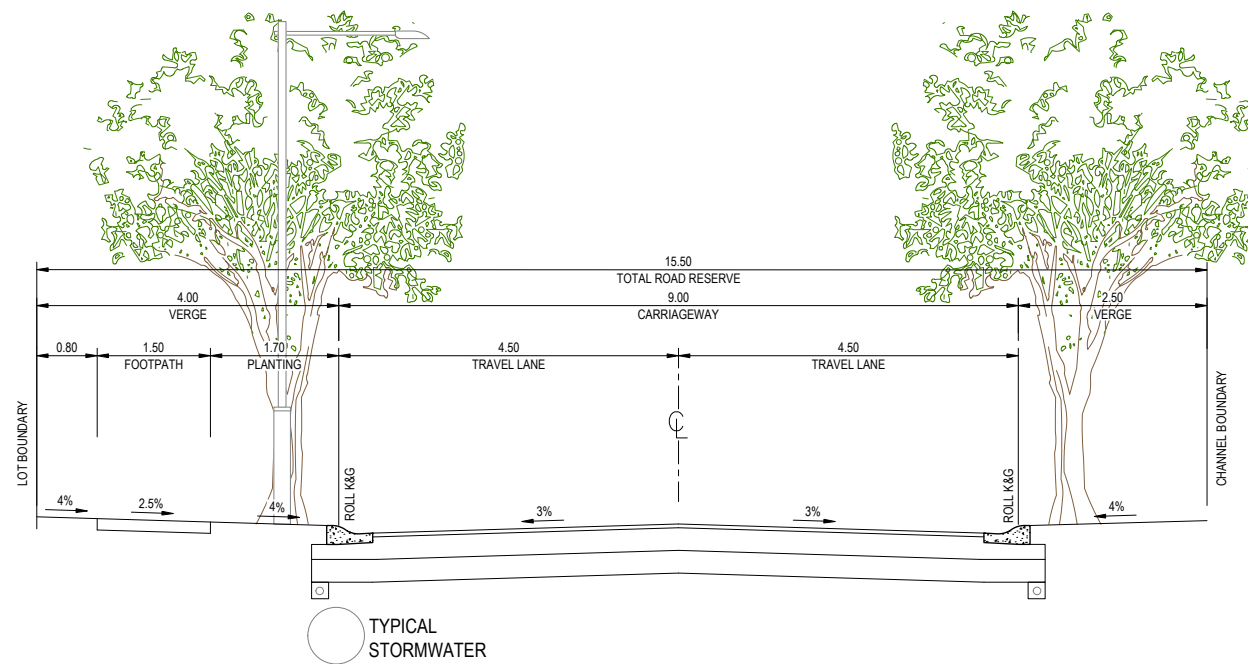
SHEET No.
3 OF 5

ORIG. SIZE
A1

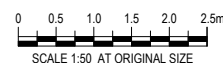
REVISION
1



MINOR ACCESS ROAD (16.0m WITH
REDUCED VERGE, 14.5m WIDE)



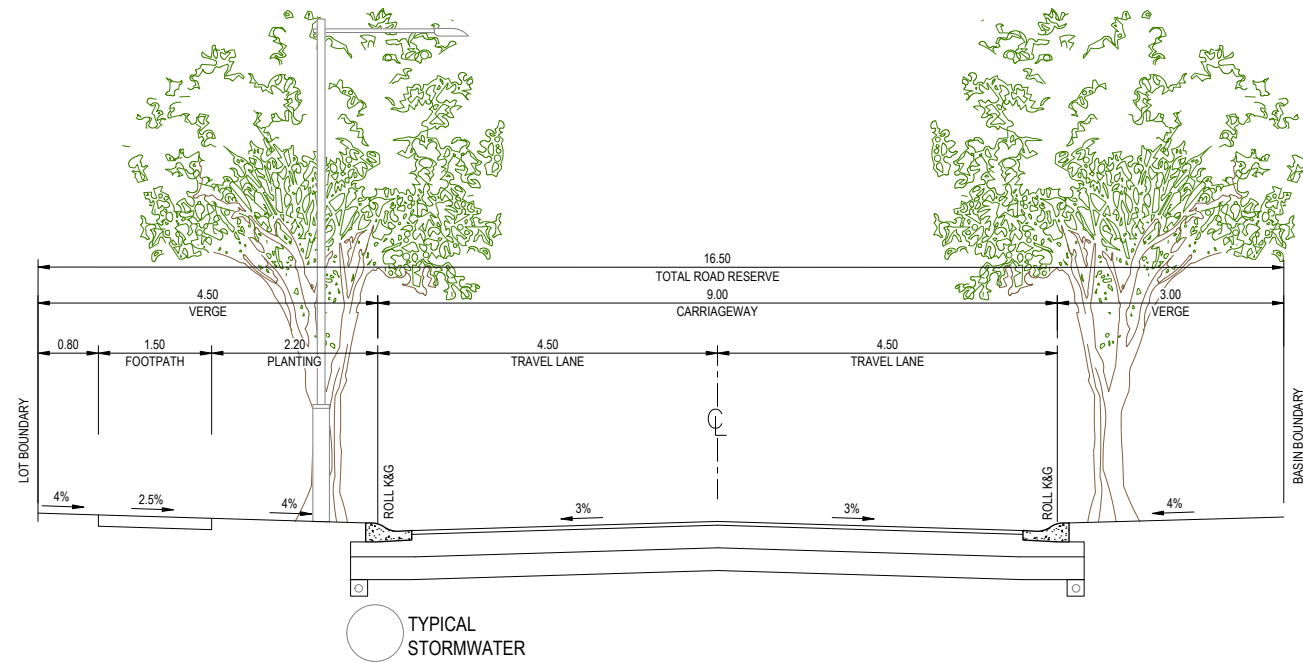
MINOR ACCESS ROAD (17.0m WITH
REDUCED VERGE, 15.5m WIDE)



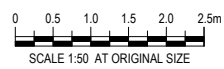
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MAKER ENG

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DRAFT CHECK: J.AGUSTIN	DESIGN CHECK: J.AGUSTIN				
APPROVED:	J.AGUSTIN				
NOT FOR CONSTRUCTION		DRAWING NUMBER MKRV0036-114-C0313	SHEET No. 4 OF 5	ORIG. SIZE A1	REVISION 1



RESIDENTIAL ROAD (18.0m WITH
REDUCED VERGE 16.5m WIDE)
1:50



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DRAFT CHECK: J.AGUSTIN	DESIGN CHECK: J.AGUSTIN				
APPROVED: J.AGUSTIN					
NOT FOR CONSTRUCTION		DRAWING NUMBER MKRV0036-114-C0314	SHEET No. 5 OF 5	ORIG. SIZE A1	REVISION 1

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