

ATTACHMENT 12

Traffic Engineering RFI Response Letter

5 June 2025
Our Ref: 23BRT0507
Council Ref: COM/2024/317

Attention: Hayden Gianarakis

MG Land Pty Ltd
C/- Urban Strategies
Lvl 1, The Ice Cream Factory, West Village
97 Boundary St, West End QLD 4101

Dear Hayden,

Re: 202 Baileys Mountain Road, Upper Coomera – Request for Information Response

1 Background

Colliers International Engineering and Design (TTMC) Pty Ltd (previously TTM Consulting Pty Ltd.) have been engaged by MG Land Pty Ltd. C/- Urban Strategies to provide a response to traffic engineering items raised in City of Gold Coast (CoGC) Council's Information Request (IR) letter dated 24 December 2024. Colliers have reviewed transport-related items in the IR letter pertaining to Items 6a-e, 25a-bii, 26a-b, 34a-e and provide the relevant responses in the following sections.

2 Transport Engineering Council RFI Items

2.1 Council RFI Item 6a

To demonstrate compliance with Performance outcome PO11, Performance outcome PO13 and Performance outcome PO16 of the Transport code, the applicant is requested to address the following:

- (a) *Demonstrate the required form of intersection for the proposed new public road with Baileys Mountain Road. The physical configuration of the intersection shall be suitable, and provide sufficient capacity, to accommodate the 'ultimate' traffic demands intended to use the public road, noting that the Town Planning Report states that 'The new local access road will also provide access for neighbouring properties in the sub-precinct, minimising intersections with Baileys Mountain Road'. The proposed intersection design shall be supported by an Austroads turning warrants assessment (if a priority-controlled intersection is appropriate), and also by SIDRA Intersection assessment based on 'ultimate' traffic volumes. Appropriate growth rates shall also be applied to background traffic volumes on Baileys Mountain Road (as per the table provided, below). Of note, TTM Consulting's Transport Engineering Report does not sufficiently address*

intersection design as it does not quantify 'ultimate' traffic demands or demonstrate the results of a turning warrants assessment (additionally, the proposal for the provision of 'basic' left and right turning treatments, as identified in Section 5.1 of the report, has not been substantiated). To be clear, the 'ultimate' intersection design must be identified at this stage so that appropriate infrastructure can be provided. A revised, fully dimensioned functional layout drawing showing the required intersection design, signed by an RPEQ Traffic Engineer, shall be submitted.

Background traffic growth – Baileys Mountain Road

2-way flow	2021	2026	2031	2036	2041
Baily Mountain Road	3,991	6,209	6,297	8,904	8,905
Absolute Growth (from 2021)	2021	2026	2031	2036	2041
Baily Mountain Road		56%	58%	123%	123%
CAGR (from 2021)	2021	2026	2031	2036	2041
Baily Mountain Road		9.2%	4.7%	5.5%	4.1%

(Source: City of Gold Coast)

Colliers Response to Council RFI Item 6a

As requested in Council's RFI items, a turning warrants assessment has been conducted of the proposed site access off Baileys Mountain Road. Colliers have applied compound annual growth rates (CAGR) to background traffic volumes as per Council's request.

It is to be noted that Colliers have undertaken surveys along Baileys Mountain Road (BMR), specifically at the BMR / Courtney Drive intersection and the BMR / Old Coach Road intersection. The observed peak hour traffic volumes are summarised in Figure 2-1 overleaf, 'southbound' referring to travel from the BMR / Courtney Drive intersection to the BMR / Reserve Road intersection and 'northbound' the reverse.



Figure 2-1: Traffic Volume Counts – Baileys Mountain Road

Considering an annual growth rate of 5.5% for the 2037 design horizon to existing surveyed traffic volumes, results in the following:

- **AM Peak Hour Total:** 245 vph
Northbound: 76 vph
Southbound: 169 vph
- **PM Peak Hour Total:** 186 vph
Northbound: 78 vph
Southbound: 108 vph

Colliers have considered traffic generated from the following developments in the traffic assessment:

- Current Development (COM/2024/317) – 73 townhouse units
- Adjacent Development (ROL/2024/16) – 187 single dwelling units across BMR and Courtney Drive
- Committed Development (COM/2019/82) – 196 single dwelling units
- Future Subdivision Scenario of Lot 182/RP156422 – based on 60 single dwelling units
- Future Subdivision Scenario of Lot 187/RP173728 – based on 28 single dwelling units

Based on the through traffic volumes along Baileys Mountain Road for the 2037 design horizon and the proposed turning movements to/from the site access, the turn treatment assessment results are outlined in Figure 2-2 and Figure 2-3 . Directional splits of the proposed development volumes have been estimated based off observations on the surrounding catchment areas and attractors.

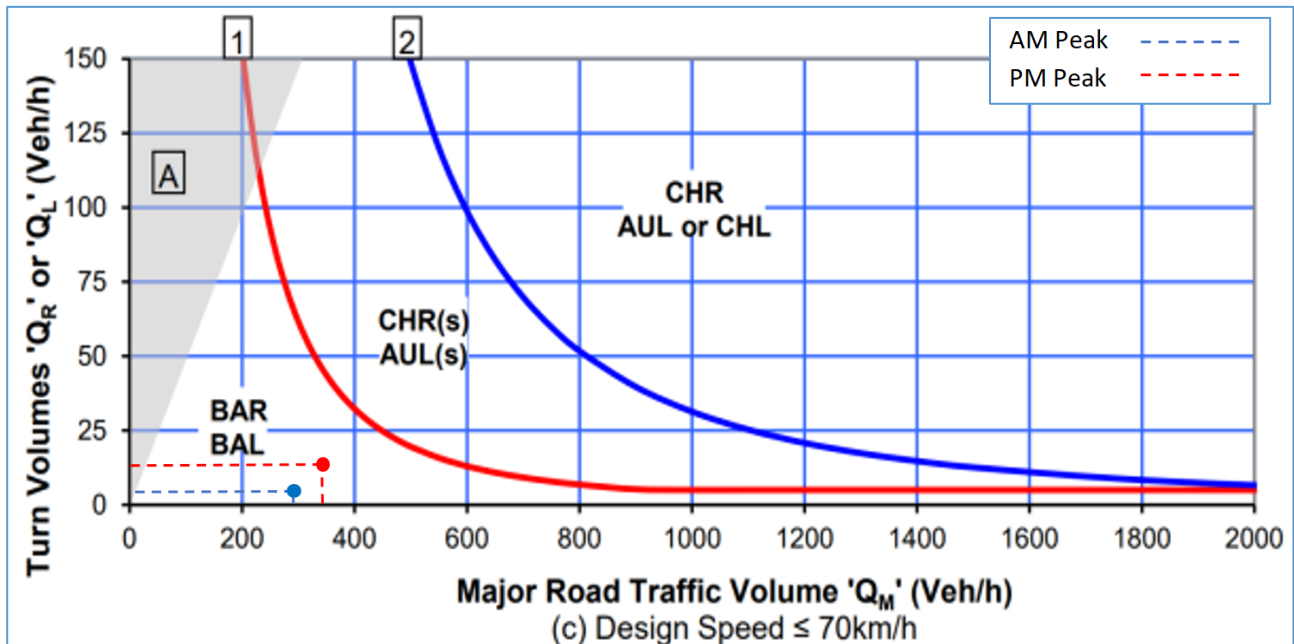


Figure 2-2: Turn Treatment Warrant Assessment – Right-turn into Subject Site

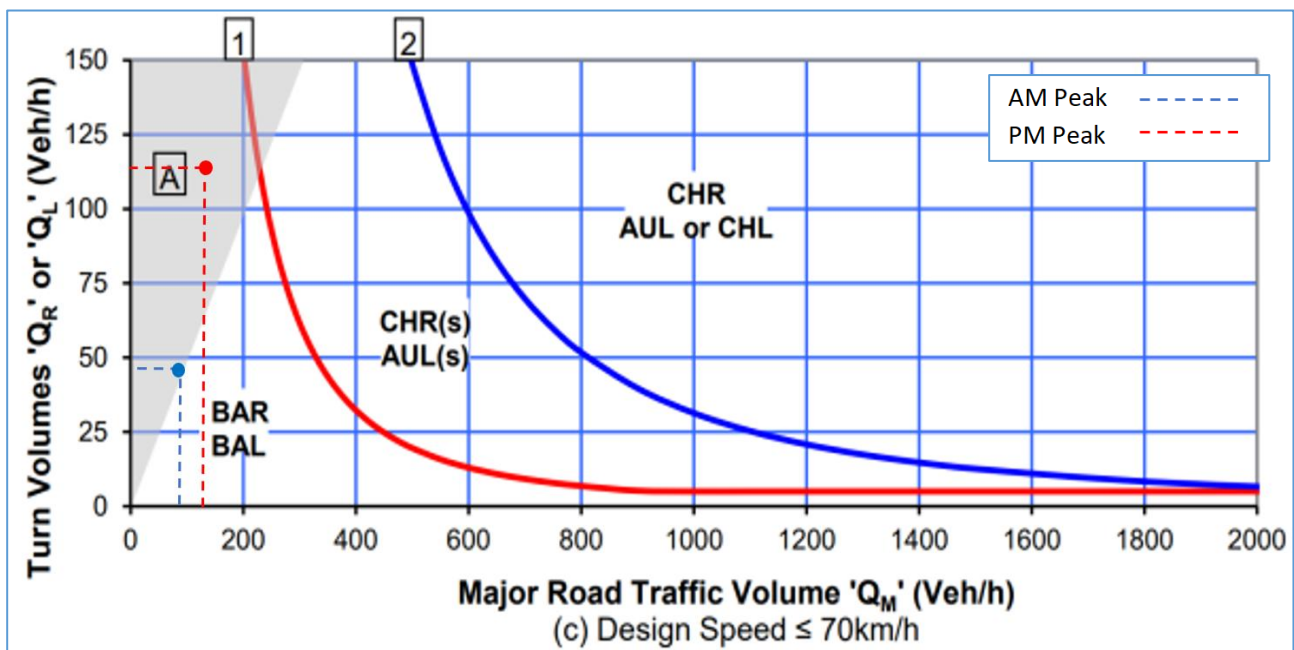


Figure 2-3: Turn Treatment Warrant Assessment – Left-turn into Subject Site

As shown above, the turn warrants assessment indicate that the following:

- A BAR treatment identified for right-turn from the Baileys Mountain Road north approach.
- A BAL treatment identified for the left-turn from the Baileys Mountain Road south approach.

It is to be noted that as part of the previous concept intersection layout / arrangement, an auxiliary left-turn lane (AUL) and basic right-turn (BAR) treatment was proposed for the Baileys Mountain Road site access. Both turn treatments had been designed based on Austroads Guide to Road Design Part 4A "Unsignalised and Signalised Intersections," with the appropriate distances, tapers and widths being used.

Colliers propose to retain the arrangement of the adjacent site, BAR and AUL, for the current development proposal. The access will be used by both the current development and the adjoining development (ROL/2024/116). This is considered sufficient to meet 'ultimate' traffic demands. Comparing the 'ultimate' intersection design against the proposed road upgrade works to Baileys Mountain Road indicates generally appropriate tie-in into the future works, refer to Figure 2-4.



Figure 2-4: Tie in with turn treatment (functional layout) at Baileys Mountain Road with Council proposed road upgrade

Based on the concept design provided, it is expected that no land dedication will be required for the proposed access intersection concept design proposed.

Colliers have also conducted an intersection capacity analysis of the Baileys Mountain Road site access, with input through SiDRA intersection assessment software (Version 9.1). The following future year scenarios have been derived for the purposes of the TIA:

- **2025 Survey Scenario:** To establish base operations of surrounding road network, based on the existing road configuration, to compare future operations against.
- **2027/2037 Base Case Scenario:** To establish base operations at opening year and the design horizon, considering base traffic growth, committed traffic demands and any changes to the road network. This will be used to compare the net impact of the proposed development traffic demands against.

For these purposes, no changes are proposed to the existing road network configuration.

- **2027/2037 Base + Development Case Scenario:** This will be used to determine road network operations with inclusion of the proposed development at opening year and the design horizon. Future subdivision scenarios have been taken into account. Comparison against the Base Case scenarios will determine the overall impact of the proposed development and any necessary mitigation works required.

Contrary to the CAGR (5.5%) used in to calculate the required turn treatment warrants, the application of background growth rates to obtained traffic volumes have been applied to all Council intersections in line with Council's LGIP population estimation & growth table for consistency's sake, outlined in Table 2-1 below.

Table 2-1: City of Gold Coast Population Growth Estimations

Description	2020	2021	2026	2031	2036	2041	Ultimate development
Willow Vale – Upper Coomera	35,817	36,714	40,761	43,258	44,962	45,077	50,781

The results of the SiDRA intersection have been summarised in Table 2-2.

Table 2-2: SiDRA Intersection Assessment – Baileys Mountain Road / Courtney Drive intersection

Scenario	DOS	Average Delay		LOS	95 th Percentile Critical Queue (m)		
		Overall	Worst Movement		South (BMR)	North (BMR)	East (Site access)
AM Peak Hour							
2027 Base + Development	15%	3 sec	6 sec (Right turn from site access)	A	>1m	>1m	4m
2037 Base + Development	15%	3 sec	6 sec (Right turn from site access)	A	>1m	>1m	4m
PM Peak Hour							
2027 Base + Development	11%	3 sec	6 sec (Right turn from site access)	A	>1m	>1m	2m
2037 Base + Development	11%	3 sec	6 sec (Right turn from site access)	A	>1m	>1m	3m

The analysis indicates that the intersection is expected to operate at suitable levels up to the 2037 design horizon, with development/committed/post-subdivision traffic included, with a worst cast DOS 15% and LOS A, occurring at the 2037 AM peak. The average delay for the intersection is approximately 3 seconds, with the exit movements from the access road being approximately 6 seconds. 95th percentile queuing on any approach in any peak / assessment period is less than 1 vehicle length (6m). This is considered satisfactory to accompany the required turn treatment for the site.

Overall, Colliers determines that the intersection design is in line with Austroads guidelines and Council requirements.

2.2 Council RFI Item 6b

(b) Further to point (a), the functional layout drawing must demonstrate that the proposed intersection design achieves full compliance with all relevant design standards (including Council's standards and Austroads guidelines) - this includes (but is not limited to) the alignment of the new public road with respect to Baileys Mountain Road (the two roads shall meet at 90 degrees), lane widths, verge widths, horizontal alignment, etc. In addition, it must be demonstrated that the proposed intersection design ties into Council's road planning for Baileys Mountain Road (Council will provide drawings showing the relevant road planning, in this regard). The drawing shall also show the required corner truncations at the new intersection, and kerb and channel for the extent of works (between the tangent point and taper of any turn lanes). In addition, any errors shown on the functional layout drawing shall be corrected (including, but not limited to – consistent identification of turning treatments, including within the title block, removal of reference to the new public road as a 'driveway', etc).

Colliers Response to Council IR Item 6b

Please refer to the functional layout (see **Attachment B – 23BRT0507-04**), which has been designed to Austroads 'Guide to Road Design Part 4A: Unsignalised and Signalised Intersection' requirements for the urban auxiliary left (short lane) and urban basic right turn treatments.

2.3 Council RFI Item 6c

(c) Submit an updated swept path (using the 'design service vehicle') based on the amended intersection design.

Colliers Response to Council RFI Item 6c

Swept paths have been conducted with the updated intersection layout (see **Attachment B – 23BRT0507-05**), indicating that the design service vehicle of a GCCC 9.8m side loader RCV is able to ingress / egress the proposed site access road to / from at Baileys Mountain Road adequately.

2.4 Council RFI Item 6d

(d) *Demonstrate compliant sight distances for the proposed intersection of the new public road / Baileys Mountain Road.*

Colliers Response - Council IR Item 6d

To assess the safe intersection sight distance (SISD), Colliers have undertaken a site visit at the proposed site access. The site visit identified the following conditions present:

- Baileys Mountain Road is a two-way, two-lane road with a carriageway width of approximately 6.5m.
- Posted speed limit of 60 km/h.
- Proposed site access is located at the boundary between Lot 183/RP156422 and Lot 58/SP191940, directly opposite of the power pole at the boundary intersection on the opposing side of the road.

As per Austroads 'Guide to Road Design – Part 4A: Signalised and Unsignalised Intersections,' a design speed of 70 km/h was taken into consideration. Figure 2-5 below and Figure 2-6 overleaf show the available sight distances to the east and west of the proposed intersection location respectively.



Figure 2-5: View to the east of the proposed intersection



Figure 2-6: View to the west from the proposed intersection

A summary of the sight distance requirements, observations, location and compliance is provided in Table 2-3. This assumes a 1.5 second reaction time, in line with Austroads guidelines for an unsignalized T-intersection.

Table 2-3: Access Location, Separation Requirements and Provisions Summary

Direction	Location	Min. SISD Requirement (m)	Proposed Provision (m)	Compliance
Entering sight distance	Measured along the existing centreline of the road	151m	105m (existing eastbound lane) 114m (proposed eastbound lane)	See below
Exiting sight distance	Measured approximately 5m and 7m from the edge of the traffic lane	151m	126m (existing eastbound lane) >200m (existing westbound lane)	See below

The results of the sight distance assessment indicate non-compliant sight distances to the east and west of the proposed intersection of the new public road / Baileys Mountain Road. However, Colliers have undertaken a further review exploring the sight distance factors.

Sight distance to the west (exiting vehicle)

Assessment of sight distance indicates there is greater than 200m sight distance to the west of the intersection, greater than the requirement of 151m. At both 5m and 7m offsets from the proposed intersection and carriageway realignment, sight distance is somewhat obstructed by existing vegetation (e.g., grasses) - see Figure 2-7 overleaf.



Figure 2-7: Grasses Limiting Sight Lines

It is expected that as part of delivery of the access road connection to Baileys Mountain Road, the vegetation will be appropriately managed to ensure sufficient sight distance to the west of the intersection is able to be achieved.

Sight distance to the east (exiting & entering vehicle)

It is noted that vegetation needs to be removed along the eastbound lane site frontage to achieve the listed sight distance. The results of the sight distance for an exiting vehicle indicate there is greater than 126m sight distance to the east of the intersection, less than the requirement of 151m. For an entering vehicle, there is 106m sight distance along the existing eastbound lane and 114m sight distance if measured at the future proposed eastbound lane (into current verge). Although not strictly compliant with the Austroads guidelines, the following considerations / comments are provided:

- Stopping Sight Distance (SSD) of 92 metres is achieved in both directions on Baileys Mountain Road
- Minimum Gap Sight Distance (MGSD) of 97 metres is achieved in both directions on Baileys Mountain Road.
- Adequate Safe Intersection Sight Distance (SISD) of ~151m is provided to the north / west of the road intersection location.
- While it is noted that sight lines are constrained to the south / east of the road intersection location, the following mitigation factors are considered relevant:

- The current constrained pavement width (as well as uphill gradient) of this section of Baileys Mountain Road will naturally lower travel speeds on the south / east approach;
- Advanced warning signage – such as W2-4(L) to provide indication of the new road on the south / east approach to the new road intersection to advise drivers; and
- Clearing of roadside vegetation (as part of verge maintenance) north of Baileys Mountain Road to maintain maximum sight lines within the corridor.

Overall, sight distances are considered to generally comply with Austroads guidelines, with mitigation measures outlined. Ultimately, the future upgrade of Baileys Mountain Road will provide an improved overall road design within the corridor.

2.5 Council RFI Item 6e

(e) Demonstrate compliant sight distances for the proposed site access location with the new public road.

Colliers Response to Council RFI Item 6e

Colliers have undertaken a desktop review to assess sight distance compliance at the proposed site access location with the new public road. Colliers refers to 'AS2890.2:2018' for directions on sight distance compliance of service vehicles (trucks). The new public road is intended to be a 50 km/h road. Given this, Australian Standards identifies a minimum requirement of 69m sight distance.

A review of the site location identifies approximately 63m sight distance to the west of the site access and 76m to the east of the site access. The eastbound sight distance is compliant. Whilst the westbound sight distance is not strictly compliant with AS2890.2:2018, the marginal shortfall is considered acceptable given the local nature of the road network, the relative speed of vehicles approaching from Baileys Mountain Road as well as the general infrequency of truck movements. It is to be noted that compliance is achieved when referring to AS2890.1:2004, which states a minimum SSD of 45m.

On this basis, sight distances for the proposed site access with the new public road is considered sufficient.

2.6 Council RFI Item 8a

The proposed car parking layout does not comply with Performance outcome PO20 or AS2890.1 for the following reasons:

- (a) Pedestrian sight triangles are not shown where the proposed site access meets the new public road. Sight triangles shall be fully dimensioned and development drawings shall include the following notation 'Pedestrian sight triangles to be kept clear of obstructions to visibility. Low level landscaping permitted to a maximum mature height of 500mm above driveway level'.*

Colliers Response to Council RFI Item 8a

The development plans have been updated to include notes regarding pedestrian sight triangles.

2.7 Council RFI Item 8b

(b) Provision has not been made for visitors to turn-around at the end of dead-end aisles (NW and NE aisles).

Colliers Response to Council RFI Item 8b

The development plans include a blind aisle extension of 1.5m at the north-west (NW) end of visitor spaces. This is greater than the minimum 1.0m requirement as stated in AS2890.1:2004. A turnaround area for vehicles has been included in the amended plan for the north-east (NE) visitor car parks.

In this regard, the site is considered to have sufficient turn-around for visitors.

2.8 Council RFI Item 8c

(c) Development drawings shall be amended to demonstrate that the proposed car parking facilities achieve compliance with AS2890.1 requirements.

Colliers Response – Council Item 8c

Colliers have conducted a design review of car parking facilities for the development plans, outlined in Table 2-4.

Table 2-4: Internal Site Layout Review

Design Aspect	GCCC/AS Standards	Proposed Provision	Compliance
Parking space length: • Visitor space (User Class 2)	5.4m (min)	5.4m	Compliant
Parking space width: • Visitor space (User Class 2)	2.5m (min)	2.5m	Compliant
Aisle Width: • Parking aisle	5.8m (min)	6.2m	Compliant
Parking module gradient	1:16 (6.25%) (max)	Designed to 1:20 (5%)	Compliant
Blind Aisle Extension	1.0m beyond final space	1.5m	Compliant

As outlined in the originally submitted TTM' (now Colliers) Transport Engineering Report (TER), residents will park their vehicles within their allocated garages. It is expected that the Development Approval will provide appropriate conditioning to ensure that the garages meet relevant standards (i.e. AS2890.1:2004).

Overall, the on-site carparking layout is considered to be compliant with all relevant aspects of AS2890.1:2004.

2.9 Council IR Item 25a-bii

The proposed new public road is shown to be approximately 100m long, however it does not include sufficient area for a vehicle turning facility. This will result in unsafe reversing and/or inefficient vehicle turning manoeuvres and does not comply with Overall Outcome 9.4.8.2 (2) (d) of the Reconfiguring a lot code or Specific outcomes 3.6.1 (7) or 3.6.4.1 (4) of the Strategic framework.

Section 2.4.15 of the City's Land Development Guidelines states that a facility for vehicles to turn around is provided at the end of all cul-de-sac streets (ie. streets that are closed at one end). Officers do not consider the provision of a vehicle crossover to be an appropriate facility for vehicles of the general public to complete a turnaround manoeuvre. The Applicant is requested to provide:

- (a) An engineering concept road design drawing (fully dimensioned) showing a vehicle turning facility at the Western end of the proposed public road. An 18m diameter (kerb to kerb) cul-de-sac head is an acceptable option, or alternatively a "T" shaped turning facility can be considered, subject to provision of RPEQ signed swept path drawings to demonstrate the largest intended design vehicle can safely and efficiently achieve a turnaround manoeuvre.*
- (b) An amended ROL plan showing amended land dedication for the new public road to:*
 - (i) Accommodate the proposed vehicle turning facility, including minimum 4.5m wide verge around the full perimeter; and*
 - (ii) Provide corner truncations at the proposed intersection location with Bailey's Mountain Road, made by 3 equal chords of a 6m radius (or as required by Council's TAPM section's comments for the proposed intersection).*

Note: The vehicle turning facility is expected to be constructed similar to the City's minimum requirements for public road as per the Land Development Guidelines (ie. kerb and channel, asphalt surfacing, minimum 4.5m wide verges).

Colliers Response to Council RFI Item 25a-bii

Colliers determines that any vehicles that access the new public road from Baileys Mountain Road unintentionally would utilise the proposed subject site / development vehicle crossover to undertake a 3-point turn to travel back to Baileys Mountain Road. With the construction of the remaining portion of road for the adjacent development. Once construction of the remaining local road network is complete (adjacent development to the north), vehicles would circulate through this local network to the Baileys Mountain Road intersection and back to the wider road network.

This is considered a reasonable interim arrangement, given that there are no other developments using the new public road while not fully constructed and traffic generation within the new public road will be minimal.

2.10 Council RFI Item 26a

The provided "Transport Engineering Report" (dated 17/10/2024, prepared by TTM), indicates that the proposed new public road is to be classified as a "Residential Collector Street", which has an upper threshold limit of 3,000 vehicles per day as per the LDG's. However, without an indicative road network layout plan

for the adjoining lots or indicative ultimate traffic volumes (in vehicles per day) for the section of proposed new public road, it is difficult for Officers to determine the appropriate street classification for compliance with Acceptable outcome AO15/Performance outcome PO15 of the Reconfiguring a Lot code or Specific outcomes 3.6.1(1), (7) & (8) and 3.6.4.1(2) & (4) of the Strategic framework.

The provided concept bulk earthworks drawings (prepared by Cozens Regan) do not indicate the proposed earthworks levels where the new public road meets the adjoining lots. Without this information, it is difficult for Officers to determine if the proposed public road can be extended in the future (i.e., Applicant has not demonstrated that significant level differences are avoided at this boundary of the proposed public road that would restrict future extension of this road). The applicant is requested to:

- (a) Provide an indicative road network layout plan which includes indicative future development for the subject site and surrounding lots 184RP173727, 185RP173727 and 56RP162858.

Colliers Response to Council RFI Item 26a

Colliers refers to the development plans, provided by Saunders Havill in Figure 2-8.

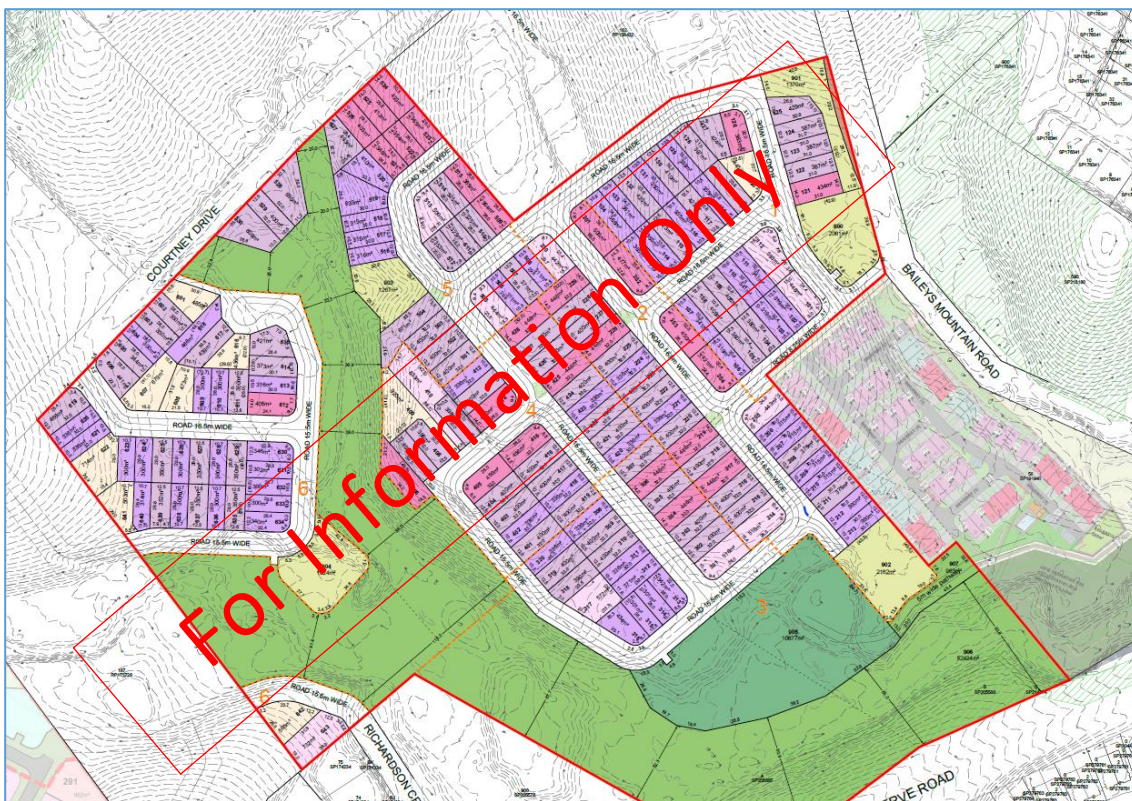


Figure 2-8: Indicative Road Network Layout Plan (Rev K – 06 May 2025)

Source: Saunders Havill (2025)

The plan indicates connection of the current proposal to the lots referenced by Council.

2.11 Council RFI Item 26b

(b) *Provide an indicative ultimate traffic volume (in vehicles per day) by a suitably qualified RPEQ traffic engineer for the proposed new public road within the subject site. This figure must include indicative ultimate traffic volumes generated by future development on surrounding lots as listed in the item above.*

Colliers Response to Council RFI Item 26b

Colliers have consulted with the neighbouring development and have obtained information on site layout and lot arrangement. Currently, there are 135 proposed lots for the adjacent residential subdivision accessible through Baileys Mountain Road. The current development proposal includes 73 proposed lots. For consistency's sake, daily traffic generation rates of 7.53 vehicles per day (vpd) for low density residential dwelling houses and 6.5 vpd for medium density residential dwellings have been applied.

As all lots have shared access through Baileys Mountain Road, the total vehicle per day volume for the new public road is therefore approximately 1,500 vpd, which is at the threshold of "Residential Access Street" and well within the 3,000 vpd threshold of a "Residential Collector Street" classification. Therefore, the adopted classification of the road as a "Residential Collector Street" is considered appropriate.

2.12 Council RFI Item 34a

The applicant is proposing a number of dead-ends without providing cul-de-sac heads (minimum 18m diameter) to facilitate manoeuvring of a CoGC side-loading refuse collection vehicle. In accordance with Performance outcome PO3 of the Transport code, the applicant is requested to provide WCV swept paths. Officers acknowledge the CoGC RCV swept paths provided in the Traffic Engineering Report by TTM, however, the following amendments are required.

Provide amended RCV swept paths, ensuring that they include the following information:

(a) *Swept path analysis is to be generated by AutoTurn, AutoTrack or similar.*

Colliers Response to Council RFI Item 34a

Colliers acknowledges Council's request for swept paths, which have been completed using AutoTURN. The updated swept paths indicate there is sufficient space for a CoGC side-loading refuse collection vehicle (RCV) to manoeuvre the site and pickup bins kerbside (see **Attachment B – 23BRT0507-06**).

2.13 Council RFI Item 34b

Provide amended RCV swept paths, ensuring that they include the following information:

- (b)** *Plans must demonstrate vehicle specifications in accordance with the 'City Plan Policy – Solid Waste Management' including the kerb-to-kerb turning radius as nominated in Appendix C of SC6.16 City plan policy – solid waste management code.*

Colliers Response to Council RFI Item 34b

In accordance with Council's 'City Plan Policy – Solid Waste Management,' vehicle specifications have been updated - including the kerb-to-kerb turning radius of 10.5m for the refuse vehicle (see **Attachment B – 23BRT0507-06**).

2.14 Council RFI Item 34c

Provide amended RCV swept paths, ensuring that they include the following information:

- (c)** *Manoeuvring clearances in accordance with AS2890.2 must be clearly depicted on drawings and demonstrate no obstructions exist for all waste servicing manoeuvres.*

Colliers Response to Council RFI Item 34c

Colliers have ensured all swept paths have manoeuvring clearances of 500mm (either side) for service vehicles (including WCV), and 300mm (either side) for B99 vehicles. Colliers notes that "Appendix C – Waste Collection Vehicle Clearances" of Council's City Plan specifies a 300mm clearance either side to ensure safe access and unimpeded operation of service vehicles. The swept paths indicate that no obstructions exist for all waste servicing manoeuvres (see **Attachment B – 23BRT0507-06**).

2.15 Council RFI Item 34d

Provide amended RCV swept paths, ensuring that they include the following information:

- (d)** *Reversing movements on-site are to be kept to a minimum and access to the development from the road is to comply with AS2890.2.*

Colliers Response to Council RFI Item 34d

There are two locations in the internal site layout where a reverse manoeuvre will be utilised to fulfil refuse collection duties of the WCV. At the majority of these locations, the WCV will not reverse more than 2 lengths; this is considered safe and the most efficient method of kerbside refuse collection. For the south-east location, a slightly longer reverse manoeuvre (3 vehicle lengths) is illustrated, which is considered acceptable in this

instance given the overall development layout and that there are no residential crossovers on the nearside of internal circulation road where the reverse manoeuvre occurs (see **Attachment B – 23BRT0507-06**).

2.16 Council RFI Item 34e

Provide amended RCV swept paths, ensuring that they include the following information:

(e) *Swept paths are to be certified by an appropriately qualified RPEQ.*

Colliers Response – Council Item 34e

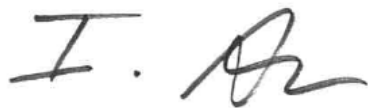
The sign-off of the previously submitted Transport Engineering Report and subsequently, contents of this traffic engineering letter by a traffic-qualified RPEQ extend to the sign-off of all attached Colliers drawings.

3 Summary

We trust the information contained herein will be sufficient to progress the application with Council.

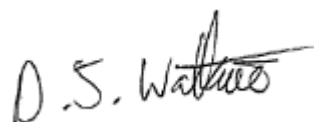
If there are any queries in relation to the information provided, please contact the undersigned.

Yours sincerely,



Isaac Ahn
Consultant – Transport
Colliers International Engineering & Design Pty Ltd

Yours sincerely,



Darryl Watkins | RPEQ # 23854
Technical Director – Transport
Colliers International Engineering & Design Pty Ltd

Attachments

Attachment A – Development Plan

Attachment B – Colliers Drawings

202 BAILEYS MOUNTAIN ROAD, UPPER COOMERA

SITE & PROPERTY SETBACKS

DRIVEWAY LENGTH: 5.5m (typical)
SIDE SETBACKS: 1.35m (typical)
REAR SETBACKS: 4.0m (typical)
dimensions are typical unless noted otherwise

INTERNAL ROADWAYS: 6.2m
PATHWAYS: 1.2m

DEVELOPMENT SUMMARY

REAL PROPERTY DESCRIPTION		
202 BAILEYS MOUNTAIN RD, UPPER COOMERA, 4209 ON RP LOT 58 ON SP191940		
TOTAL SITE AREA	30,872m²	
DEVELOPMENT AREA	18,187m²	
SITE COVER	5,520m²	(30.4%) OF DEVELOP. AREA
TOTAL PRIVATE OPEN SPACE	3,114m²	(17.1%) OF DEVELOP. AREA
COMMON SPACE / PUBLIC OPEN SPACE	1,082m²	(5.9%) OF DEVELOP. AREA

BUILDING CLUSTER TYPES

BUILDING TYPE	CLUSTER	UNITS	BUILDING DESCRIPTION
DUPLEX	17	34	2 STOREY - 3 BEDROOM + MPR - 1 CAR
TRIPLEX	5	15	2 STOREY - 3 BEDROOM + MPR - 1 CAR
QUADPLEX	6	24	2 STOREY - 3 BEDROOM + MPR - 1 CAR
TOTAL	28	73	

GFA SUMMARY

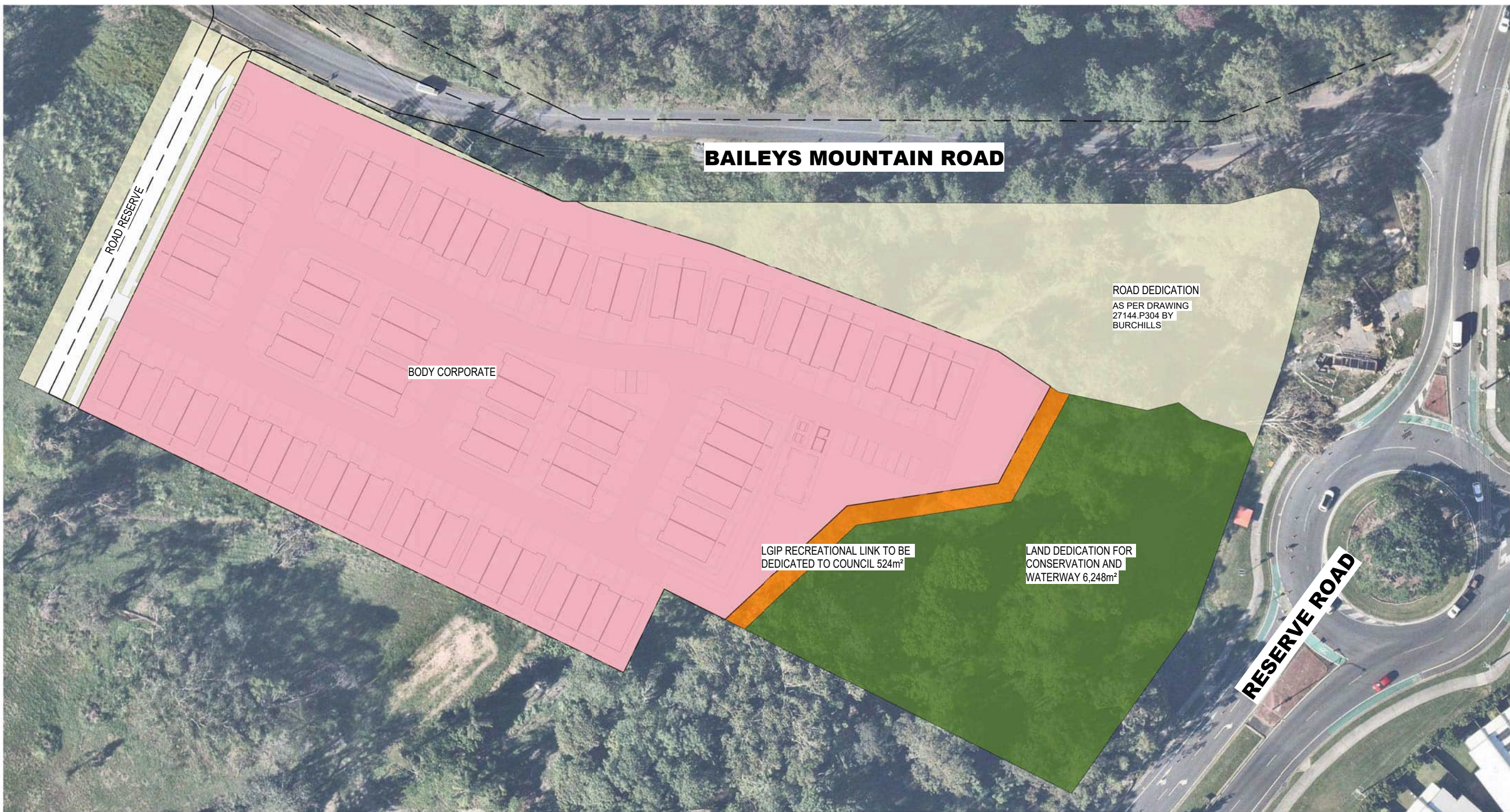
BUILDING TYPE	TOTAL GFA	CLUSTERS	OVERALL GFA
DUPLEX	251m²	17	4,267m²
TRIPLEX	378m²	5	1,890m²
QUADPLEX	504m²	6	3,024m²
TOTAL		28	9,181m²

SITE COVER

BUILDING TYPE	SITE COVER (m²)	CLUSTERS	OVERALL SITE COVER (m²)
DUPLEX	151m²	17	2,567m²
TRIPLEX	277m²	5	1,135m²
QUADPLEX	303m²	6	8,484m²
TOTAL		28	5,520m²

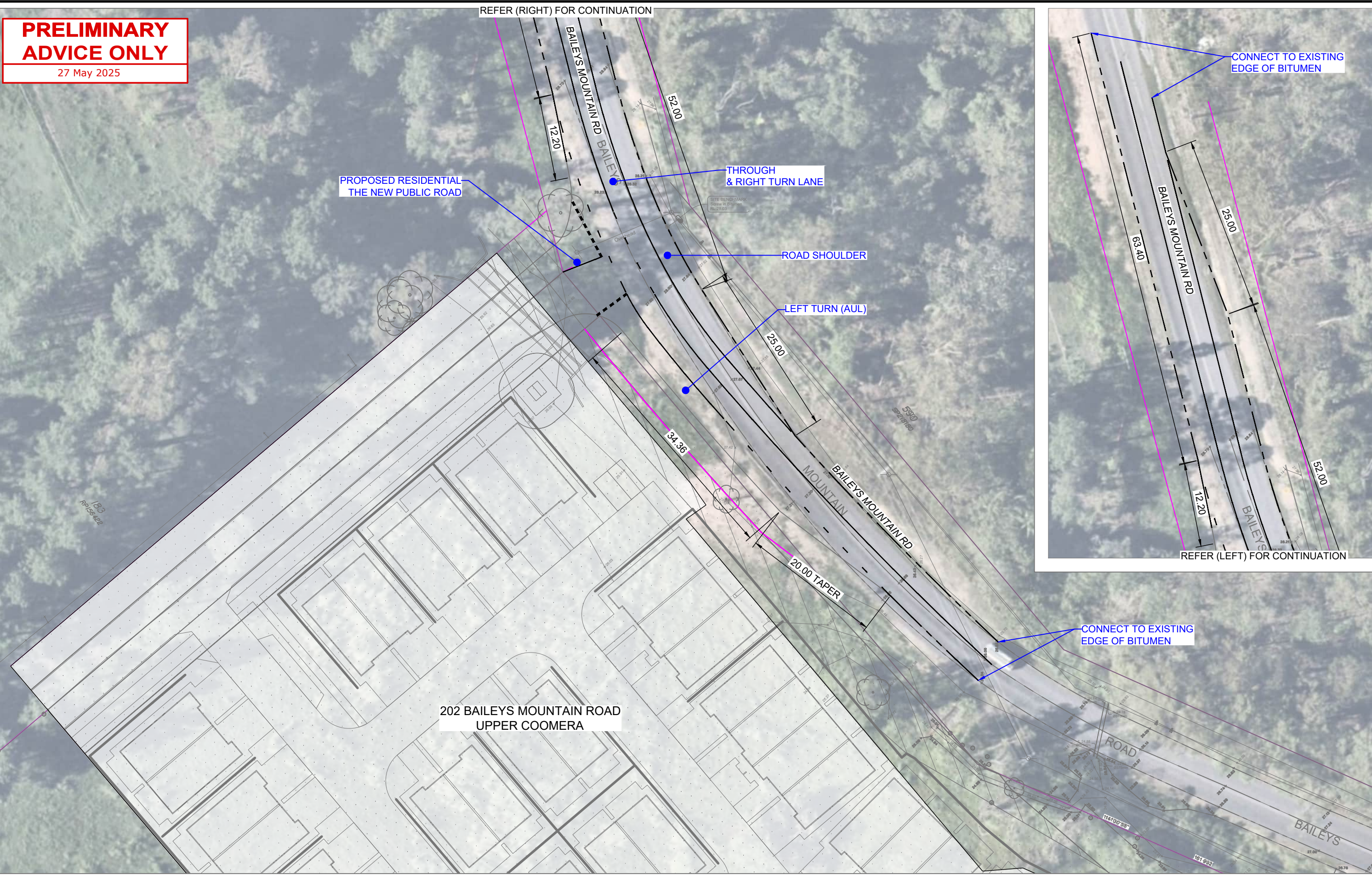
DA DRAWING CONTENT

Sheet Number	Sheet Name
DA-0-000	TITLE SHEET
DA-0-005	LAND OWNERSHIP PLAN
DA-0-010	SITE PLAN OF LAYOUT
DA-0-020	CARPARKING PLAN
DA-0-030	STAGING PLAN
DA-0-035	PRIVATE OPEN SPACE AREA PLAN
DA-0-036	COMMUNAL OPEN SPACE
DA-0-037	BUILDING FACADE TYPES
DA-0-040	FENCING PLAN
DA-0-041	FENCE TYPE DETAILS
DA-0-042	FENCE TYPE DETAILS
DA-0-050	SITE SECTIONS
DA-0-051	SITE SECTIONS
DA-0-052	SITE SECTIONS
DA-0-053	SITE SECTIONS
DA-0-060	STREETSCAPES
DA-0-061	STREETSCAPES
DA-0-062	STREETSCAPES
DA-0-065	9m NGL OFFSET 3D
DA-0-066	HEIGHT EXCEEDANCE SECTIONS
DA-0-067	HEIGHT EXCEEDANCE SECTIONS 1
DA-0-068	HEIGHT EXCEEDANCE SECTIONS 2



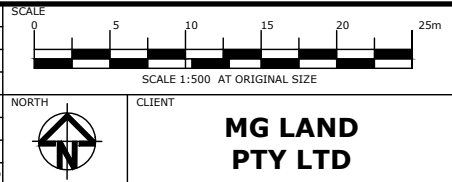


REDDOOR
ARCHITECTURE



**PRELIMINARY
ADVICE ONLY**
27 May 2025

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED
C	27-05-25	BASE PLAN UPDATED	AA	JK	JK
B	02-05-25	RFI AMENDMENTS	AA	JK	JK
A	13-05-24	ORIGINAL ISSUE	AA	JK	JK

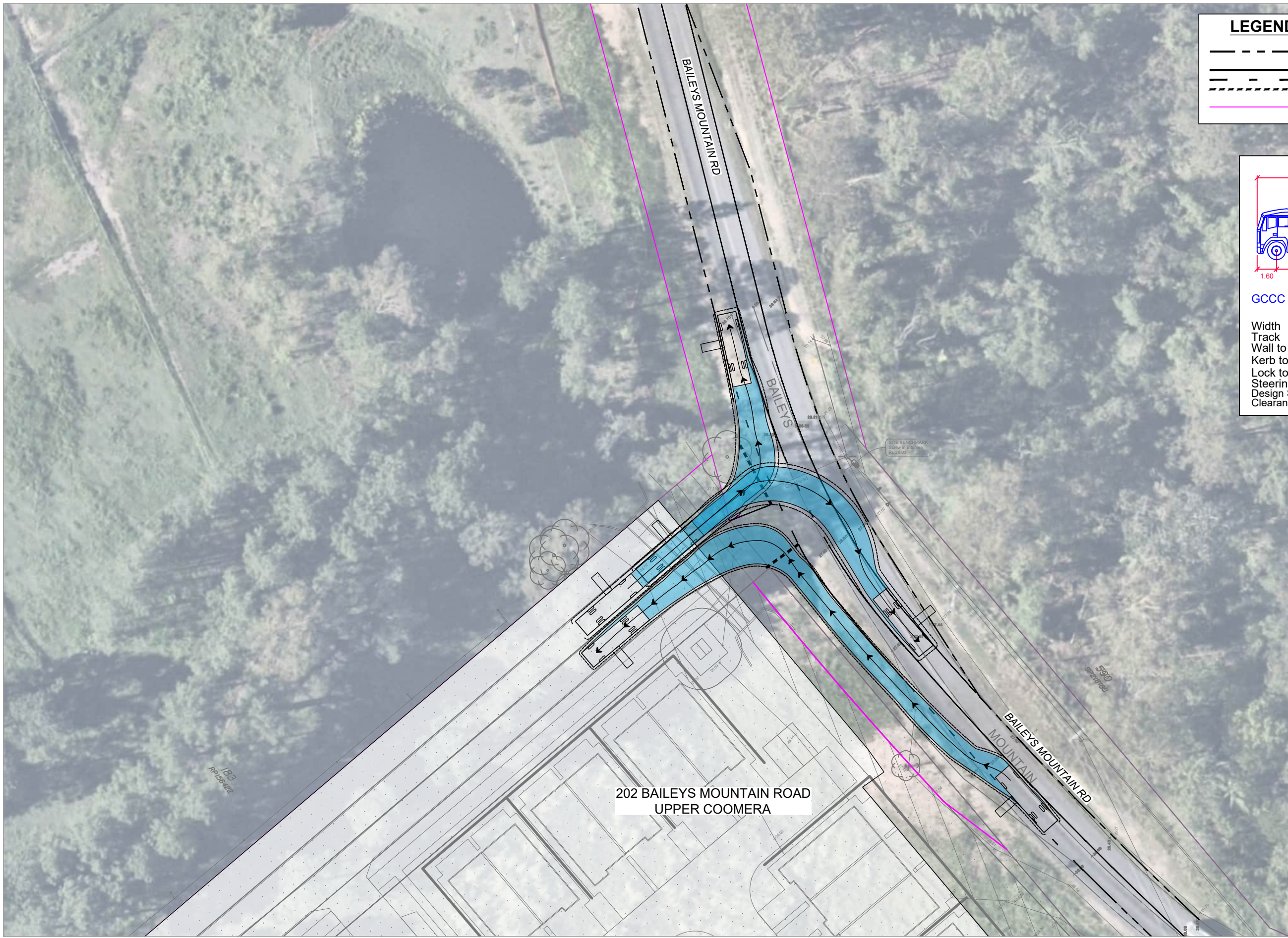




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PROJECT 202 BAILEYS MOUNTAIN ROAD - UPPER COOMERA
DRAWING TITLE FUNCTIONAL LAYOUT PROPOSED INTERSECTION DESIGN - OVERALL PLAN

PROJECT NUMBER 23BRT0507	ORIGINAL SIZE A3
DRAWING NUMBER 23BRT0507-04	REVISION C
DATE 27 May 2025	SHEET 1 OF 1



LEGEND

PROPOSED KERB

PROPOSED LINEMARKING

EXISTING BOUNDARY

GCCC Side RCV

meters

Width

: 2.50

Track

: 2.50

Wall to Wall Turning Radius

: 11.500m

Kerb to Kerb Turning Radius

: 10.500m

Lock to Lock Time

: 6.0

Steering Angle

: 36.3

Design Speed Forward

: 10.0km/h

Clearance Envelope

: 0.500m

202 BAILEYS MOUNTAIN ROAD
UPPER COOMERA

**PRELIMINARY
ADVICE ONLY**
27 May 2025

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED
C	27-05-25	BASE PLAN UPDATED	AA	JK	JK
B	02-05-25	RFI AMENDMENTS	AA	JK	JK
A	13-05-24	ORIGINAL ISSUE	AA	JK	JK

SCALE
0 5 10 15 20 25m
SCALE 1:500 AT ORIGINAL SIZE

NORTH

CLIENT

**MG LAND
PTY LTD**

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& Design (TTMC) Pty Ltd

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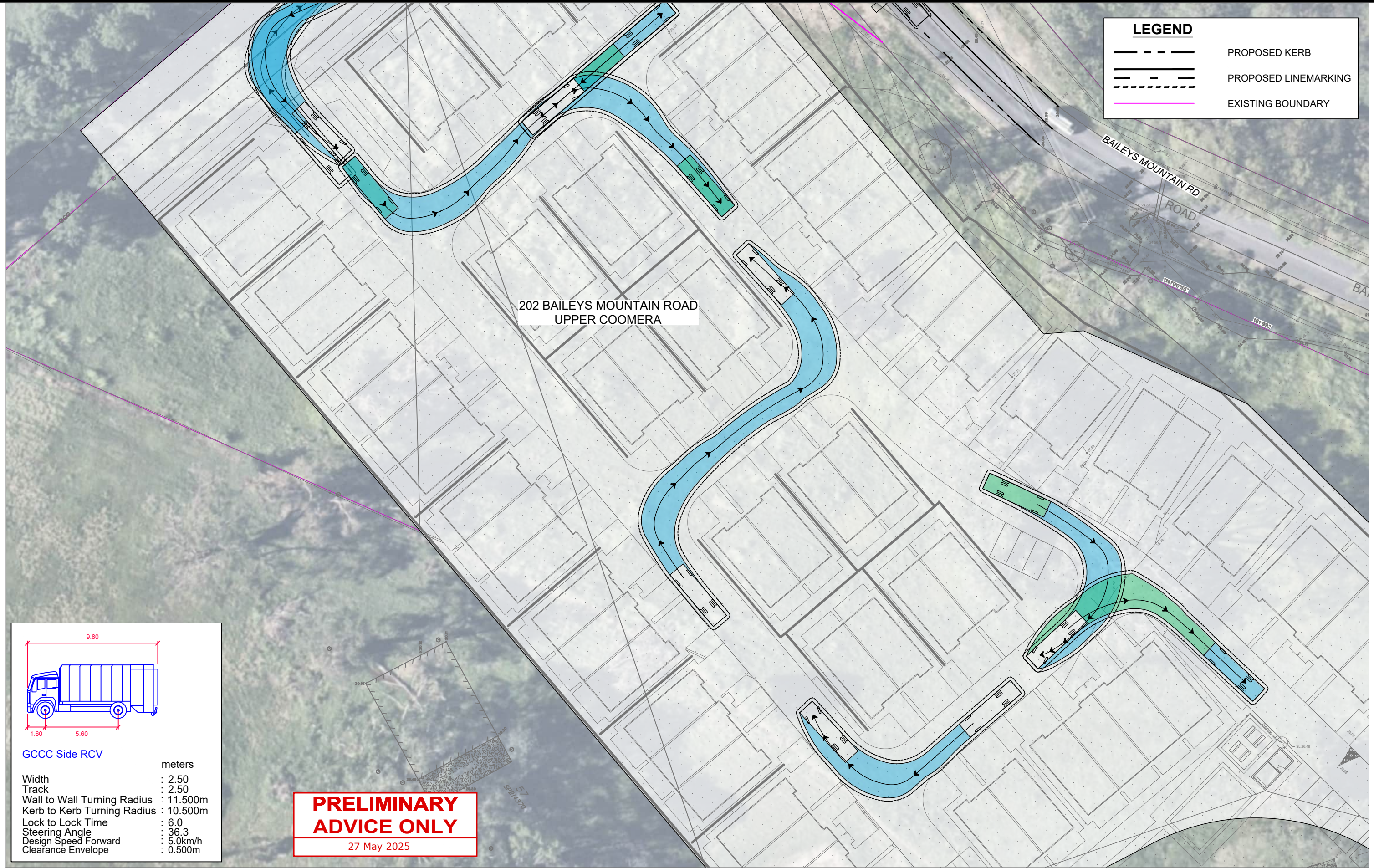
PROJECT

202 BAILEYS MOUNTAIN ROAD - UPPER COOMERA

DRAWING TITLE

FUNCTIONAL LAYOUT
9.80m - RCV GCCC Side COLLECTOR - INTERSECTION

PROJECT NUMBER	23BRT0507	ORIGINAL SIZE	A3
DRAWING NUMBER	23BRT0507-05	REVISION	C
DATE	27 May 2025	SHEET	1 OF 1



REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED
C	27-05-25	BASE PLAN UPDATED	AA	JK	JK
B	02-05-25	RFI AMENDMENTS	AA	JK	JK
A	13-05-24	ORIGINAL ISSUE	AA	JK	JK

SCALE
0 5 10 15 20 25m
SCALE 1:500 AT ORIGINAL SIZE

NORTH

CLIENT
**MG LAND
PTY LTD**

**Colliers International Engineering
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PROJECT
202 BAILEYS MOUNTAIN ROAD - UPPER COOMERA

DRAWING TITLE
FUNCTIONAL LAYOUT
9.80m - GCCC Side RCV COLLECTOR - INTERNAL

PROJECT NUMBER 23BRT0507	ORIGINAL SIZE A3
DRAWING NUMBER 23BRT0507-06	REVISION C
DATE 27 May 2025	SHEET 1 OF 1

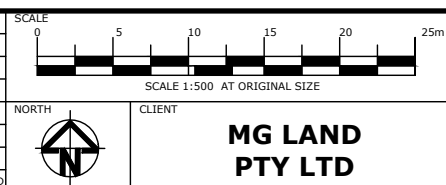
27 May 2025

**(RED COLOUR)
"COUNCIL" PROPOSED
ROAD DESIGN**

**(RED COLOUR)
"COUNCIL" PROPOSED
ROAD DESIGN**

202 BAILEYS MOUNTAIN ROAD
UPPER COOMERA

C	27-05-25	BASE PLAN UPDATED	AA	JK	JK
B	02-05-25	RFI AMENDMENTS	AA	JK	JK
A	13-05-24	ORIGINAL ISSUE	AA	JK	JK
REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED	APPROVED



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PROJECT
202 BAILEYS MOUNTAIN ROAD - UPPER COOMERA

DRAWING TITLE

FUNCTIONAL LAYOUT
COLLIERS PROPOSED ROAD DESIGN
& COUNCIL PROPOSED ROAD DESIGN

PROJECT NUMBER	23BRT0507	ORIGINAL SIZE	A3
DRAWING NUMBER	23BRT0507-08	REVISION	C
DATE	27 May 2025	SHEET	1 OF 1