



TO: Development Engineer

PROPERTY DETAILS 2 Abelia Avenue TRALEE NSW 2620 & 223 Alderson Place TRALEE NSW 2620
Lot 2 DP 1001136 & Lot 1 DP 1207483 & Lot 100 DP 1316639

FILE NO'S: DA.2025.0303

SUBJECT: Referral to Development Engineer for Comments

DESCRIPTION: Subdivision to create 191 Torrens title lots, two open spaces, landscaping, associated roads and infrastructure

REFERRAL FOR:

- Development Application Comment
- Bushfire Assessment
- Local Government Approval
- Construction Certificate

RESPONSIBLE OFFICER Ranganathan Ravi

DATE: 28 July 2025

Additional Info Required: **Nil.**

All information requested as part of the assessment were addressed by the applicant.

DEVELOPMENT ENGINEERING REFERRAL

Location: 2 Abelia Avenue TRALEE NSW 2620

Lot 2 DP 1001136 & Lot 217 DP 1315891

DA.2025.0303 – Subdivision to create 191 Torrens Title lots, open space, associated roads and infrastructure.

Date: 1/09/2025

Sewer Available: Yes _____ Driveway Access: N/A _____

Water Available: Yes _____ Kerb and Gutter: N/A _____

Flood Category: N/A _____ Footway Width: N/A _____

Natural Water Course: N/A _____ Footway Grade: N/A _____

Drainage Easements: existing easement over property or adjoining land

easement required over property or adjoining land

Hydraulics: attached unavailable at time of assessment irrelevant

Subdivision Works Construction Certificate required: Yes No

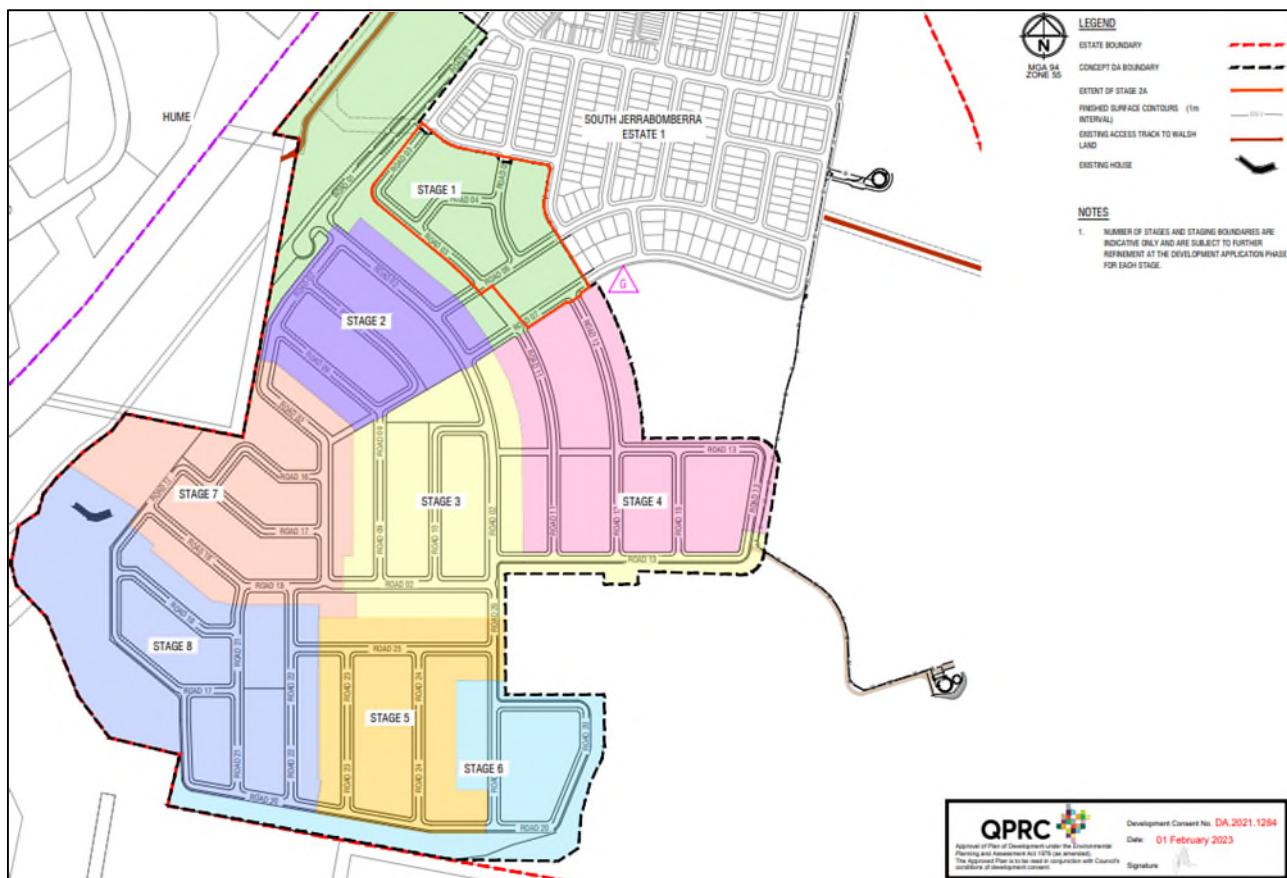


Figure 1: Concept Development Plan – Approved under DA.2021.1284

Proposal

Referring to the Statement of Environmental Effects prepared by Village Building Co. (VBC) dated 22 August 2025, and supporting documents submitted as part of this application, the proposed development seeks approval for stages 2D and 2F-I of the South Jerrabomberra Estate 2 Subdivision. The proposed development includes:

- 191 Residential lots
- 2 Open space lots
- Associated roads and infrastructure.

The development site is over part of Lot 2 DP 1001136 and part of Lot 217 DP 1315891 and is part of the South Jerrabomberra urban release area, approximately 8km from Queanbeyan city centre. The site is bound by the Goulburn-Bombala railway corridor, along the ACT/NSW border to the west. The subject site is particularly steep, ranging from 5-25% grade falling to the North-West.

A concept DA for the entire Estate 2 was approved under DA.2021.1284 on 23 December 2022. Subsequent modifications, being DA.2021.1284.A and DA.2021.1284.B, were approved on 27 June 2024 and 11 June 2025, respectively. This application proposes changes to the layout of stages 2D and 2F-I that were assessed as part of the recently approved concept DA modification.

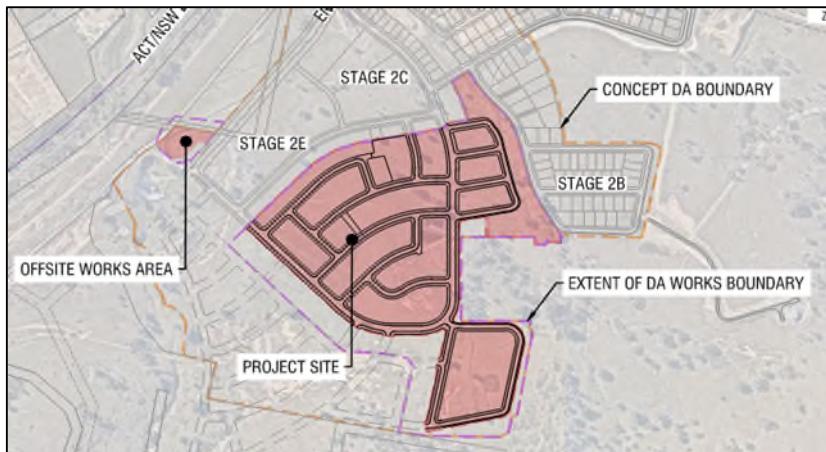


Figure 2: Extent of Works Under This Application

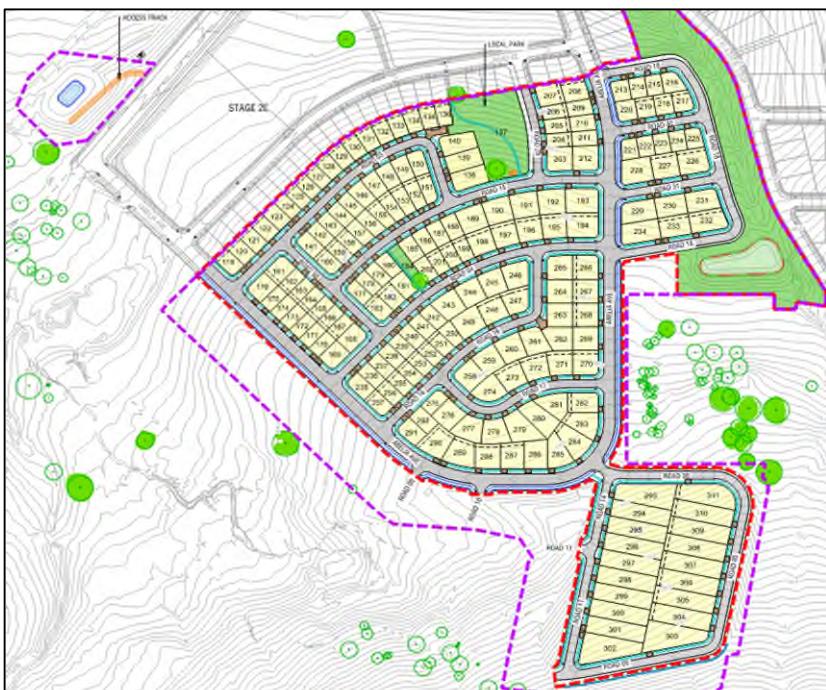


Figure 3: General Arrangement Plan

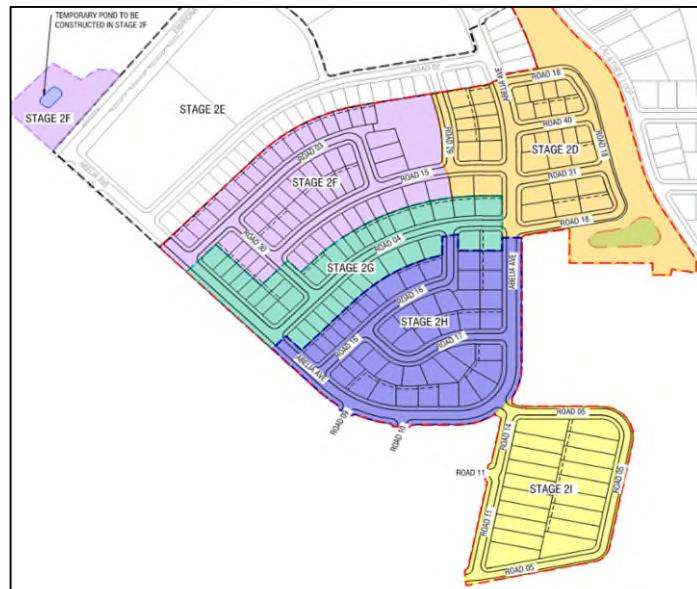


Figure 4: Staging Plan

Water

An infrastructure report was prepared by Calibre Consulting as part of the REF application for the entire development area. This site falls within the area covered by this report. The report considered water supply for 1,500 dwellings across the South Jerrabomberra Development, with the combined total of dwellings across Estate 1, the already approved stages of Estate 2 (stages A-C and E), and this DA being 1298. Therefore, under the demand provisioned for in the infrastructure study.

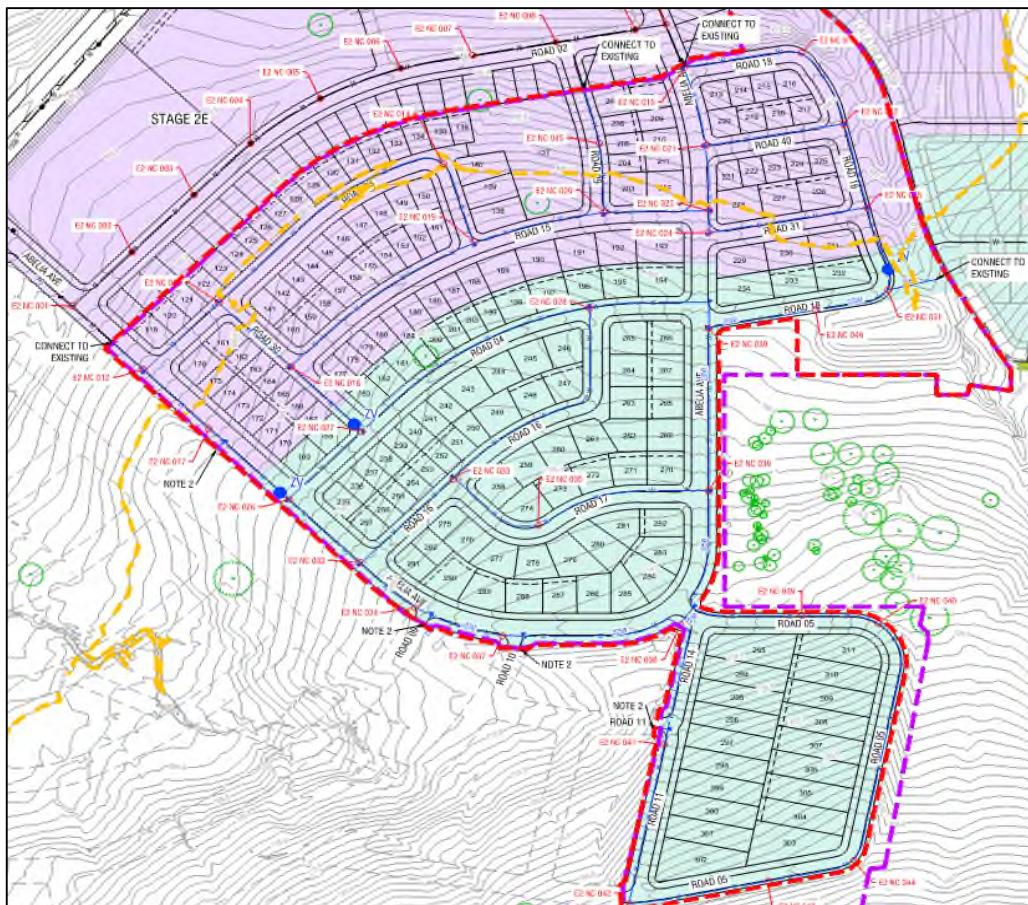


Figure 5: Water pressure zones

South Jerrabomberra Estate 2 comprises two pressure zones, a High Zone and an Intermediate Zone, see figure 5. Both zones are proposed to be utilised for the stages proposed as part of this application. The southern half of the development will be within the high-pressure zone, to be serviced from the high-level reservoir. A 225mm Ø stub was provided to the stage boundary, off Calathea Loop, as part of the Stage 2B works. Mains will extend from this to service the high-pressure zones within the area covered by this application.

The Northern half of the development will be within the intermediate zone and will be serviced from the existing water reticulation from Estate 2, Stage 2C and 2E. Three zone valves are proposed throughout the development as part of this application, see figure 5.

The pressure at various nodes within the proposed subdivision is provided as part of the supporting documents submitted. The pressure ranges from 35.76m head (350.45kPa) to 83.57m head (818.99kPa) throughout the subdivision. It is noted that the maximum pressure exceeds the allowable maximum of 800kPa as outlined in QPRC's D11 Water Reticulation specification. This occurs once throughout the development, at node E2 NC 031, with all other nodes satisfying the maximum pressure requirements of Council's D11 specification. AS3500, Part 3.3.4 specifies that the maximum pressure at any outlet, other than a fire service outlet, within a building should not exceed 500kPa. As such, a pressure reducing valve at the reticulation or at the service connection will be required to limit pressure to 500kPa.

A detailed hydraulic plan will need to be submitted as part of the subdivision works certificate application to confirm compliance with all relevant criteria of QPRC D11 specifications, and where specified, relevant WSAA and Australian Standards.

Sewer

An infrastructure report was prepared by Calibre Consulting as part of the REF application for the entire development area. This site falls within the area covered by this report. The report considered sewer demand for 1,500 dwellings across the South Jerrabomberra Development, with the combined total of dwellings across Estate 1, the already approved stages of Estate 2 (stages A-C and E) and this DA being 1298. Therefore, under the demand provisioned for in the infrastructure study.

The development is proposed to be serviced by a gravity network that will flow to the existing sewer main at several locations. These include:

- 150mm Ø stub on the North of open space lot 137,
- 150mm Ø stub on the Western verge of Abelia Avenue, adjacent to lot 208,
- 150mm Ø stub on the Northern verge of Road 18, and
- 225mm Ø stub in the Northern Verge of Abelia Avenue.

The mains proposed within the development are 150mm and are predominantly under the footpath. Mains required at the back of blocks are to be located within a shared 3.5m wide sewer and stormwater easement.

A series of nodes within the estate has been used to calculate and confirm the size and grade of the proposed sewer mains. The engineering report and calculations provided have confirmed that the sewer networks have been designed in accordance with QPRC's D12 specifications and WSA02 2014-3.1.

Detailed design confirming the alignment and grade of the sewer mains and individual property connections are to be assessed at the Subdivision Works Certificate stage.

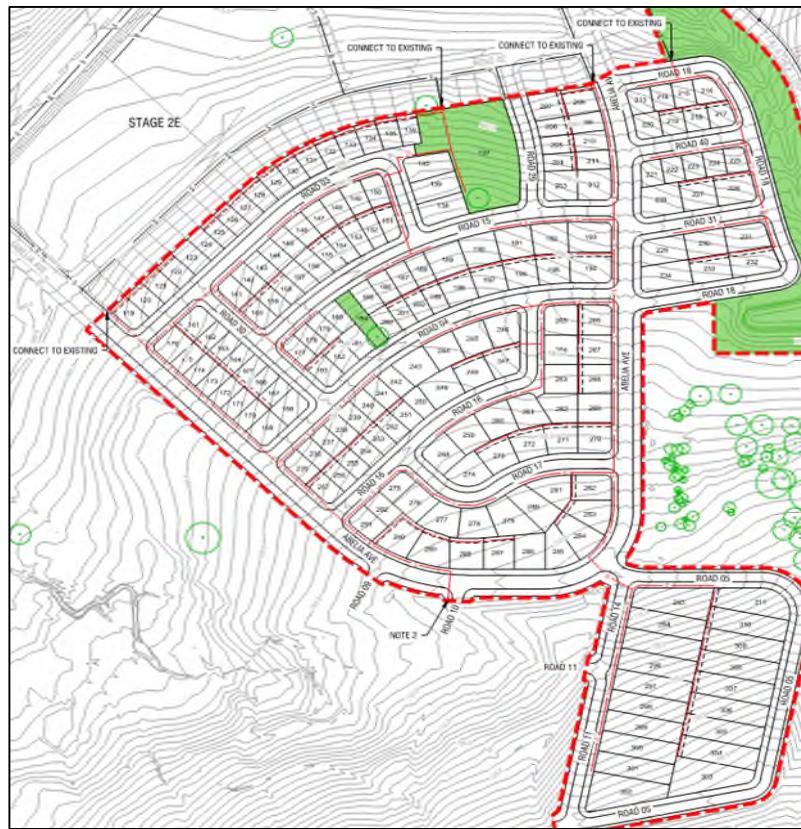


Figure 6: Sewer – General Arrangement

Storm Water

The catchment for the development site falls naturally to the Goulburn-Bombala railway line. The railway line has four culverts within the vicinity of the estate, see figure 7. This development falls within the central culvert sub-catchment and part within the Dog Trap catchment.

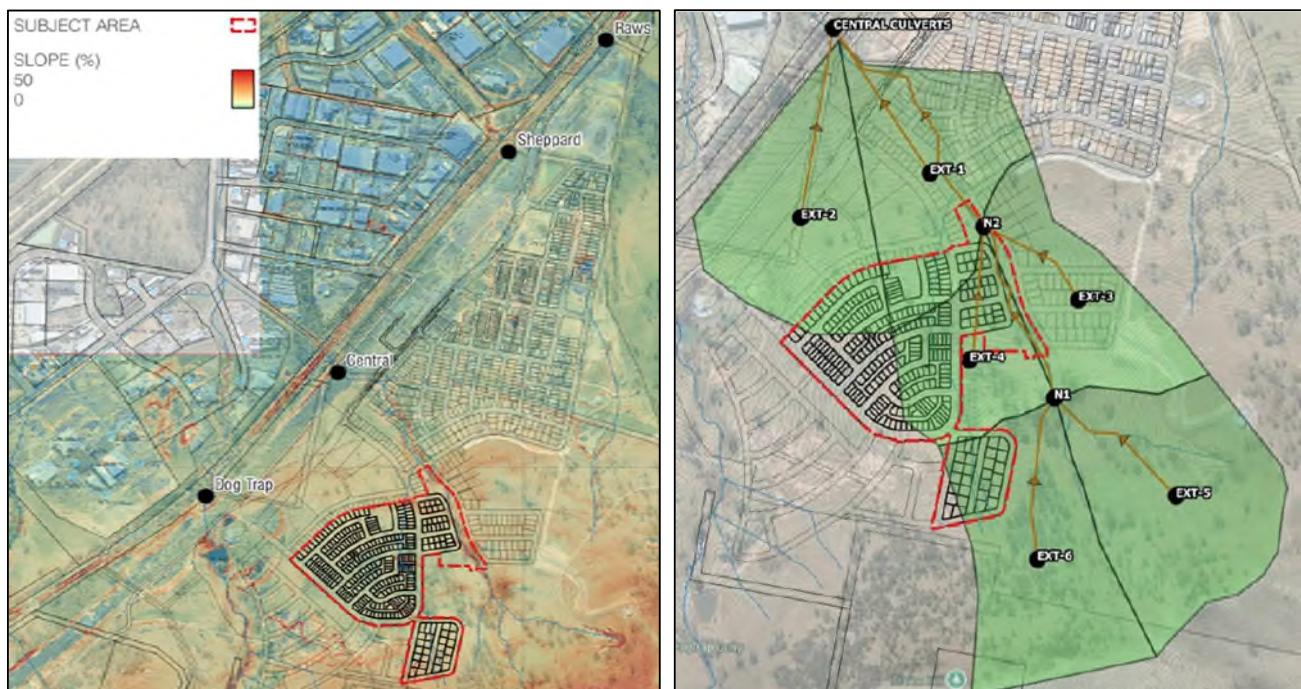


Figure 7 (Left): Railway Line Culverts
Figure 8 (Right): Existing Catchment Plan

The Civil Engineering Report prepared by SPIIRE, dated 9 July 2025, states that drainage networks have been designed to comply with the discharge rates required by QPRC's design specifications. This requires:

- Predevelopment peak discharge rates for 20% and 1% AEP events will not be exceeded,
- 1%AEP water levels in any detention asset will have a minimum 0.5m freeboard to floor levels.

The minor drainage network, i.e. pipe drainage network, is to convey the 20%AEP event flows. The major drainage network, i.e. stormwater flow overland through road reserves, is designed to convey the gap between 1% and 20% AEP events.

The mains are predominantly within the verge. Inter-allotment drainage is proposed where the primary network is unable to service the lot due to topography. Inter-allotment drainage must be located within a stormwater easement, minimum 2.5m wide, or a shared sewer and stormwater easement, minimum 3.5m wide.

The development proposes the construction of an open channel with rock chutes to the East of Road 18, to convey flows from the upstream external catchment, instead of the piped flows as approved under the Estate 2 concept plan, DA.2021.1284. The submitted Civil Engineering report confirms that the flow velocity and depth within the channel meet QPRC's design requirements. A detailed design must be submitted for assessment at the Subdivision Works Certificate stage.

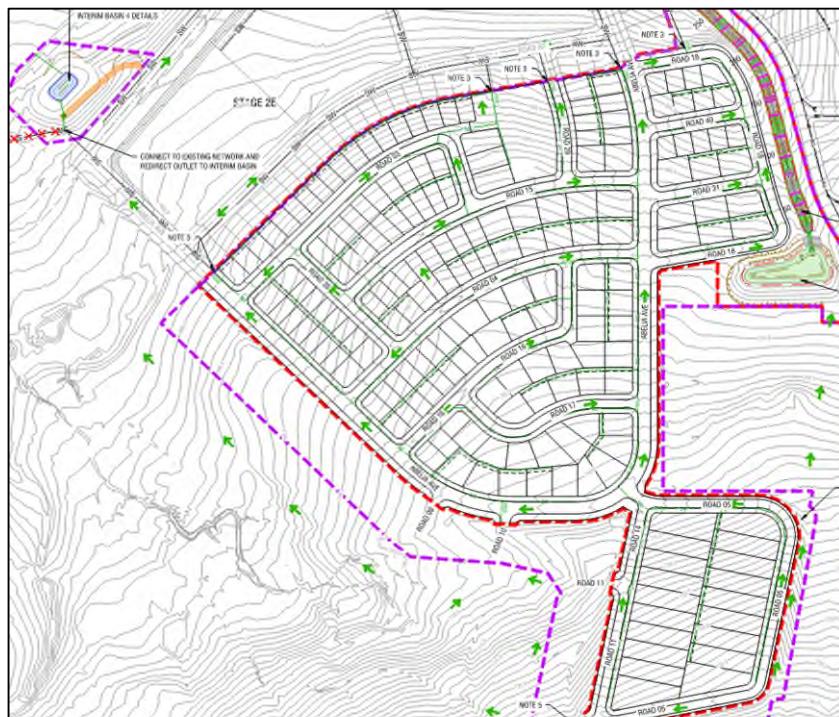


Figure 9: Stormwater General Arrangement

Stormwater Quantity

QPRC D5 – Stormwater Drainage Design Specification sets out the requirements for stormwater quantity targets. All development must limit the site stormwater discharge to an amount equal to or less than the predevelopment discharge rates for the 1% and 20% Annual Exceedance Probability (AEP) storm events.

The Central Catchment, see figure 8, is proposed to consist of multiple different land uses. This will increase the overall fraction of impervious area and therefore runoff during rain events.

The Civil Engineering report prepared by SPIIRE, dated 9 July 2025, reflects the revised layout and confirms that the proposed stormwater strategy can meet site discharge requirements through the provision of three basins, Central Basin (1A and 1B), Basin 3 and Interim Basin 4, see figure 10.

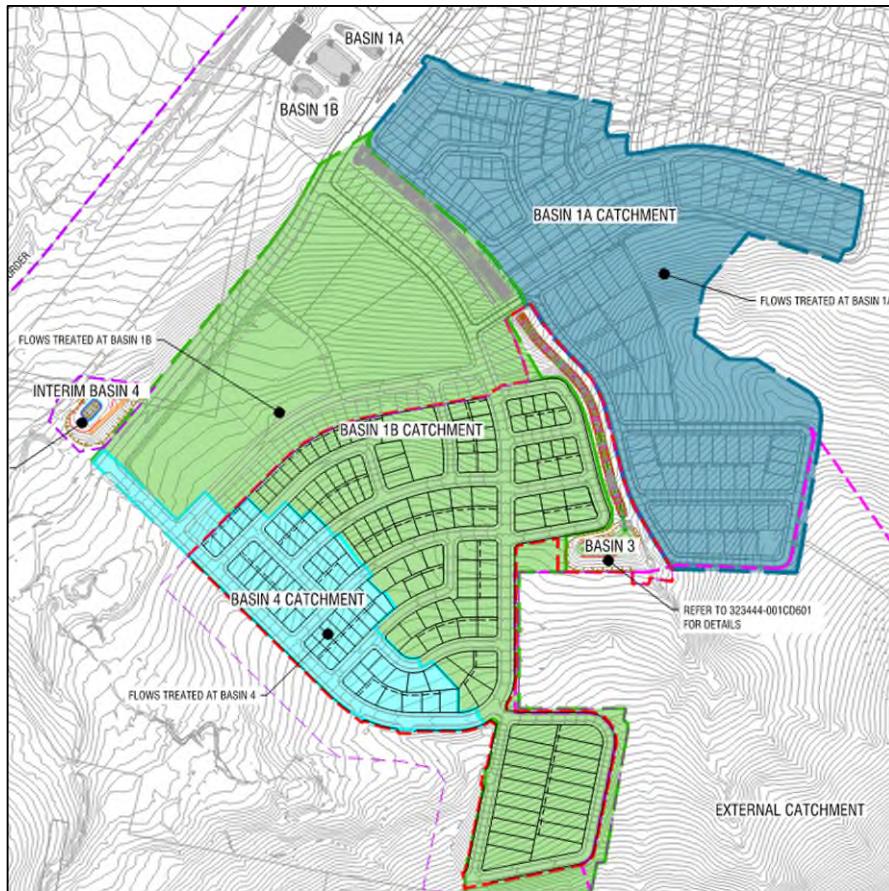


Figure 10: Basin Catchments

1% AEP	Central Basin (1A/1B)	Basin 3	Interim Basin 4
Flood Depth (m)	2m (from EDD)	2.0m (from base)	1.34m (from EDD)
Flood storage (m ³)	7,500	2,500	1,400

Figure 11: Required Basin Volume

Central Basin (1A and 1B)

Central Basin (1A and 1B) was designed and approved as part of DA.2021.1284.B. An updated hydraulic model, prepared as part of this application, incorporates the revised lot layout and demonstrates that the basin can achieve the required attenuation and outflow targets, see figure 12.

	Predeveloped Flow (m ³ /s)	Developed Flow (m ³ /s)
20% AEP Event	5.5 (1hr TP5)	5.28 (30min TP8)
1% AEP Event	14.7 (30min TP26)	13.48 (30min TP26)

Figure 12: Central Basin – Developed Outflows

Basin 3

Basin 3 is a dry detention basin that will capture and temporarily detain runoff from the upstream external catchment. Basin 3, therefore, reduces downstream flow impacts and integrates into the overall stormwater management strategy.

Interim Basin 4

Interim basin 4 is to service the area of the development not contributing to the Central Basin catchment. This basin provides detention and treatment capacity until future, permanent basins are constructed.

WSUD Asset	AEP Event	Inflow (m ³ /s)	Outflow (m ³ /s)
BASIN 3	20% AEP Event	3.3 (45min TP6)	3.0 (45min TP6)
	1% AEP Event	8.4 (30min TP28)	7.0 (30min TP28)
INTERIM BASIN 4	20% AEP Event	0.85 (20min TP4)	0.21 (1hr TP1)
	1% AEP Event	1.9 (15min TP21)	0.57 (1hr TP26)

Figure 13: Basin 3 & Interim Basin – Developed Outflows

The report confirms that the sizes of the proposed basins will ensure the predevelopment discharge rates for 20% and 1% AEP events will not be exceeded. Detailed design of the stormwater network, including pipe details and basin designs, must be submitted for assessment at the Subdivision Works Certificate stage.

Water Quality

QPRC's D7 – *Erosion Control and Stormwater Management Design Specification* sets out the requirements for stormwater quality targets. The Civil Engineering Report prepared by SPIIRE addresses the water quality requirements regarding suspended solids, total phosphorus and total nitrogen. Three basins are proposed for the treatment of stormwater within the development site.

A majority of the proposed development has been accounted for within the 1B Basin catchment, which was designed and approved under DA.2021.1284.B. No additional stormwater quality controls are proposed to be constructed for this catchment as part of this application.

The area of the development not draining to the Central Basin is proposed to be treated by Interim Basin 4. To achieve quality objectives, it is proposed to provide a GPT and a 320m² sediment pond to treat runoff.

The Civil engineering report prepared by SPIIRE confirms stormwater quality objectives can be achieved using the treatment devices already approved and proposed as part of this development, see figure 14.

	Total Suspended Solids	Total Phosphorus	Total Nitrogen
Undeveloped (kg/yr)	9,074	18.1	171.1
Developed Untreated (kg/yr)	40,140	58.7	694.8
Developed Treated (kg/yr)	6,696	31	356.7
Reduction	108%	68%	65%

Figure 14: MUSIC Treatment Results

Erosion and Sediment Control

An Erosion and Sediment Control Plan (ESCP) will be required for any works causing surface cover disturbance. An ESCP must be submitted with any subdivision works certificate. A Stormwater Management Plan (SWMP) must be implemented by the primary contractor for any works causing surface cover disturbance. This requirement applies to each stage of the development.

Flooding

The site is not flood affected.

Bushfire

The site is located within bushfire prone land. The lot is within the mapped fire zone for Vegetation Category 3. The submitted bushfire report, prepared by Ember Bushfire Consulting, identifies a 100m temporary APZ to be established and maintained wrapping around the Southwest, South and Southeast of the subdivision site until future development is underway.

Traffic and Parking

A traffic study was prepared as part of South Jerrabomberra Estate 1, considering the expected traffic generation of Estate 2. The traffic generation was determined by the number of residential lots in the entire SJE and was ultimately capped at 1,500 dwellings. The combined total dwellings across both Estate 1, Stage 2A, Stage 2B, Stage 2C, Stage 2E, and this application is 1,298. This does not exceed the traffic generation permitted as part of the overall South Jerrabomberra development. Therefore, a traffic impact statement was not provided as part of this application.

Parking within the site is generally in accordance with QPRC's D1 specifications and is provided through on-street informal parking. This is consistent with the existing parking arrangements throughout South Jerrabomberra estate.

It is proposed to prohibit carriageway parking in some areas along Abelia Avenue to ensure safe intersection sight distances are met. This arrangement is to be confirmed in the detailed design submitted as part of the Subdivision Works Certificate application and approved by the Local Traffic Committee.

Roads

It is proposed to have collector bus routes and local/edge streets within the site. Access to the proposed subdivision is proposed by Abelia Avenue, to the North and South (Stage 2E) and Road 3 (Stage 2E).

Collector Roads

The continuation of Abelia Avenue through the development is designed as a collector road, with a design speed of 50km/h. This will be the main traffic route for vehicle access and reticulation for this development, in addition to being the bus route. Council's D1 Geometric Road Design specification requires collector roads to have a minimum pavement width of 11.2m, to cater for buses, a minimum 5m verge and a minimum 1.5m footpath. The submitted plans indicate the verge on one side of Abelia Avenue is 6m verge with a 2.5m shared path, while the other is 5m with a 1.5m footpath.

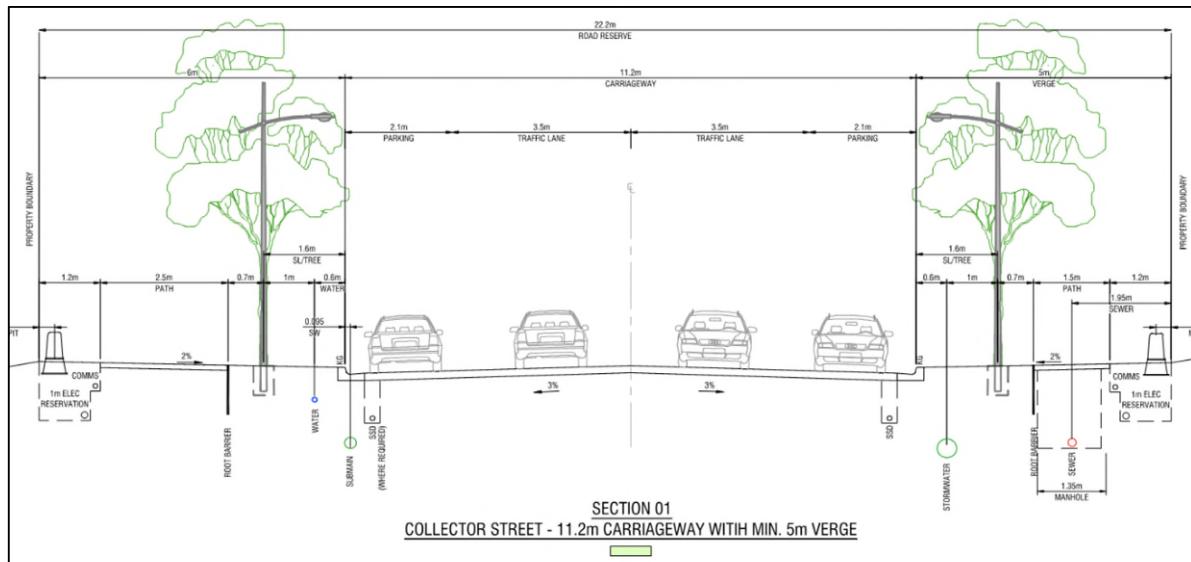


Figure 15: Collector Road Cross Section

Local Roads

Streets within the development, other than Abelia Avenue, have been designed as local with a design speed of 40km/h and in accordance with QPRC's D1 design specification. These are provided with a pavement width of 8m, verge width of 5m and a 1.5m footpath on both sides of the road.

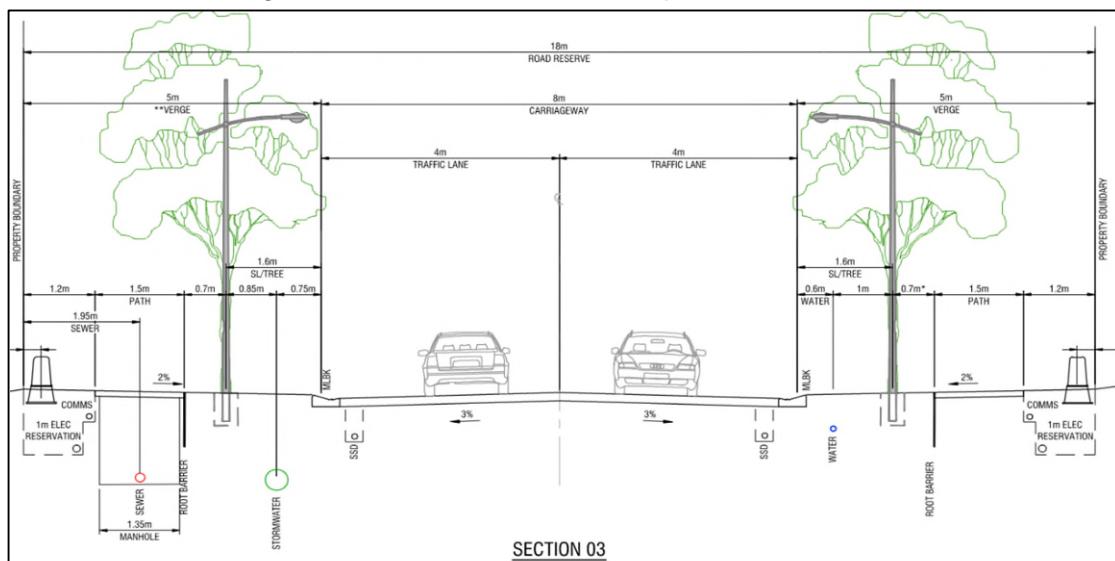


Figure 16: Local Road Cross Section

Edge Street

Road 05 and Road 18 are classified as edge streets. These roads have been provided with an 8m pavement width, a 5m verge adjacent to the residential lots and a 2.5m wide verge adjacent to the drainage swale and open spaces. The proposed reduced verge width is not compliant with QPRC's specifications. SPIIRE's engineering report acknowledges this departure from QPRC's design requirements and confirms that the reduced verge will not contain any services except for the water main and will include a vehicle barrier to prevent vehicle access to the drainage swale and other open space areas. A similar approach was used as part of Estate 1 Stage 1D, and Estate 2 Stage 2B. Development Engineering does not generally support reduced verge width as it limits the maintainability of swales and restricts the construction of the footpath in future. The pedestrian path network plan for estate 2 shows a 1.5m wide footpath constructed within the drainage reserve between Speargrass Road and Pandorea Way, to the Northeast of the drainage swale, and a

pedestrian bridge to create a link to the footpath located on Road 18. An email from Village dated 24 September 2025 confirmed that this path and link will be constructed as part of this development. The final alignment of the path is to be confirmed and assessed as part of the Subdivision Works Certificate application.

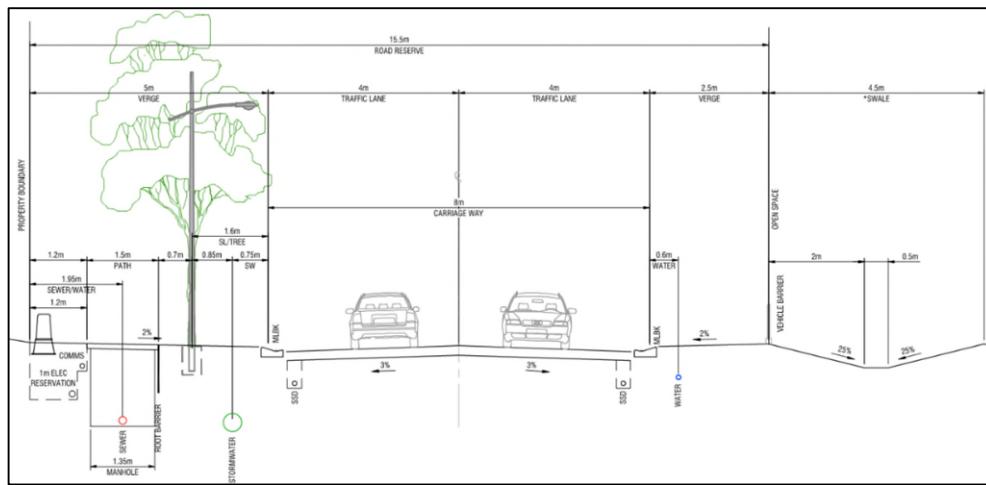


Figure 17: Edge Street Cross Section

Swept Path and Sight Distance

Swept path plans were included in the civil plans submitted with this application. Submitted swept path drawings confirm an 8.8m service vehicle can safely pass a B99 vehicle on all roads at 5km/h, in accordance with Austroads Design Vehicles and Turning Path Templates Guide.

Development Engineering raised concerns over potential conflict points at the Abelia Avenue, Road 05 and Road 14 intersections. The applicant has proposed additional line marking and signage to mitigate the risk of conflicting movements. A detailed line marking and signage plan is to be submitted for assessment by Local Traffic Committee.

Sight distance calculations were submitted as part of this application. The civil engineering report prepared by SPIIRE confirms all sight distances have been completed in accordance with QPRC's D1 specification. The report notes that achieving sight distances in certain locations will require signage to restrict on-street parking. A detailed line marking and signage plan is to be submitted for assessment by the Local Traffic Committee.

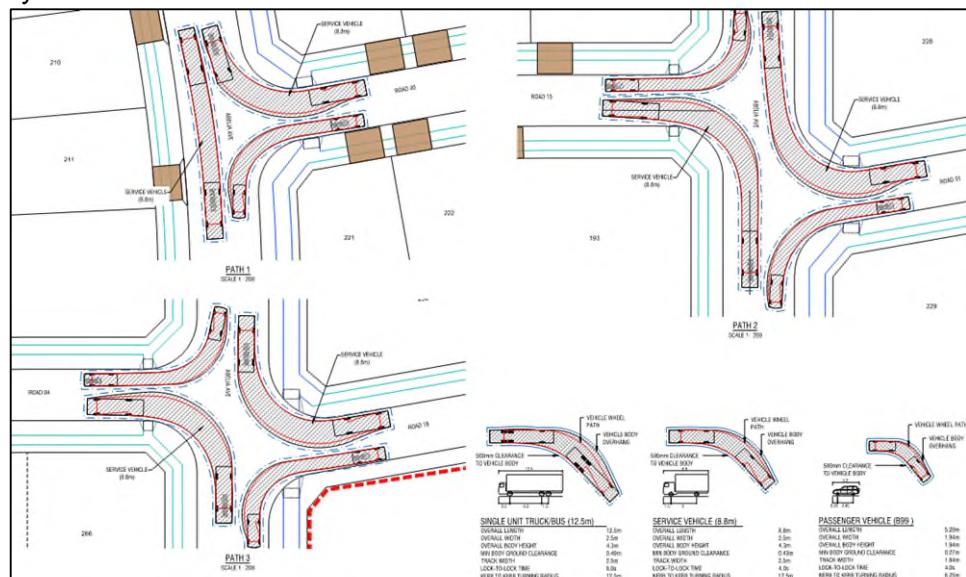


Figure 18: Intersection Turning Movement Plan

Section 64 Contributions

No Section 64 contributions are payable for this proposed concept master plan as the infrastructure will be provided under the South Tralee Essential Infrastructure Planning Agreement (SJ EIPA).

Development Contributions Sec 7.11

A State Planning Agreement was executed on 14 August 2018 for the delivery of 750 dwellings at South Jerrabomberra. The agreement requires a monetary contribution per urban lot. The Developer must provide evidence that obligations under SVPA2022-28 have been fulfilled prior to the issue of Subdivision Certificate for relevant stages.

ENGINEERING CONDITIONS REFERENCE

DA.05.13 ~ Imported Fill

All imported fill delivered to site shall be certified Virgin Excavated Natural Material (VENM).

Reason: Only clean and non-contaminated fill is used on site.

DA.05.24 ~ Unauthorised Use of Public Land

No building materials are to be stored, or construction activities undertaken on public or adjoining land without prior written approval from Council.

Reason: To prevent unnecessary disturbance to public land.

DA.05.25 ~ Work on Adjoining Land is Limited

The verge and other adjoining lands must not be used for storage of materials, trade/construction vehicle parking or disturbed by construction activities with the exception of;

- a) Installation of a temporary, stabilised construction access across the verge,
- b) Installation of services,
- c) Construction of an approved permanent verge crossing.

Reason: To minimise interference with the verge and its accessibility by pedestrians.

DA.06.03 ~ Water and Sewer Certificate of Compliance - Design

Prior to the release of a Subdivision Works Certificate, a Certificate of Compliance in accordance with the *Water Management Act 2000* must be obtained from Council.

Reason: To ensure that supply is available, and/or the hydraulic design is in accordance with the relevant specifications.

DA.06.12 ~ Subdivision Works Certificate

The Subdivision Works Certificate Application and accompanying engineering design plans and Certification Report must be submitted to, and endorsed by, Council prior to the commencement of any works for a subdivision stage.

The engineering plans must comply with the requirements of Council's Design and Construction Specifications and include the following where applicable to a subdivision stage;

- a) A Certification Report in accordance with Council's DQS Quality Assurance Design Specification, Clause DQS.04,
- b) This general note - All work must be constructed in accordance with the requirements of Council's QPRC Design and Construction Specifications,
- c) Detailed Pavement design conforming to the procedures set out in Council's Design and Construction Specifications and/or relevant RMS specifications,
- d) ADAC XML data file which shall align with the corresponding Subdivision Works Certificate construction drawings.

Reason: To provide design certification of the subdivision works.

DA.06.13 ~ Submit a Construction and Environment Management Plan

Prior to release of any Subdivision Works Certificate, a Construction and Environment Management Plan (CEMP) for the management of soil, water, vegetation, waste, noise, vibration, dust, hazards and risk for the construction works must be submitted to, and endorsed by, Council. The document must;

- a) describe the proposed construction works and construction program for all stages, and
- b) set standards and performance criteria to be met by all stages of the construction works, and
- c) describe the procedures to be implemented to ensure that all stages of the works comply with the standards and performance criteria, and
- d) identify procedures to receive, register, report and respond to any complaints, and
- e) nominate and provide contact details for the persons responsible for implementing and monitoring compliance with the CEMP.

Erosion and Sediment Control Plans (ESCP) shall be provided for each stage of the construction works. The ESCP is a dynamic document that requires Council endorsement prior to the next stage of construction works or changes to staging of the construction works they relate to.

Reason: To ensure that satisfactory measures are in place to provide for environmental management of all stages of the construction works.

DA.06.21 ~ Engineering plans for Subdivision Construction

All Subdivision Works Certificate applications for each stage shall have accompanying detailed Engineering Design Plans marked "ISSUED FOR CONSTRUCTION" (PDF, DWG and XML formats), a Certification Report and a Detailed Cost Estimate submitted to Council for assessment and prior to the commencement of any works for a subdivision, or stage of subdivision.

The engineering plans must comply with the requirements of Council's Design and Construction Specifications and include the following where applicable to a subdivision stage.

- a. All urban Collector and Local Streets shall be designed and constructed to the standard of a dense graded AC14 asphalt mix and in accordance with the Design Specification for PAVEMENT DESIGN and Construction Specification for ASPHALTIC CONCRETE. As a minimum, a 7mm prime seal shall be indicated on the Drawings below the asphalt surfacing.
- b. Stormwater drainage shall be designed and constructed to be located generally behind the kerb line, and in accordance with Council's Stormwater Drainage Design and Construction Specifications. Stormwater lines shall not be located parallel under or traversing along the centre of road pavements.
- c. All local roads are to implement Modified Layback Kerbing (MLBK). Any other forms of kerbing will not be accepted.
- d. Water reticulation shall be designed and constructed in accordance with the requirements specified in Council's Water Reticulation Design and Construction Specifications, and the relevant sections of the Water Reticulation Code of Australia WSA 03-2011.
- e. Sewerage System Design shall be designed and constructed in accordance with the requirements specified in Council Sewerage System Design and Construction Specification, and the relevant sections of the Sewerage Code of Australia WSA 02-2014-3.1 and WSA 04-2022.
- f. Final alignment of pedestrian path and crossing within the drainage channel, noted on the concept plan.
- g. A compliant ADAC XML file is required to be submitted as an accompaniment to the DWG

Engineering Design Plans marked "ISSUED FOR CONSTRUCTION" and supporting information including a Detailed Cost Estimate. The ADAC XML data shall align with the corresponding Subdivision Works Certificate construction DWG (and PDF) drawings submitted.

Reason: To ensure design and construction is in accordance with Council's standards and requirements for asset information data collection.

DA.08.04 ~ Traffic Management and Section 138 Consent

Prior to undertaking any works within a public road reserve or affecting the road reserve, a traffic management plan is to be submitted to and approved by Queanbeyan-Palerang Regional Council under Section 138 of the *Roads Act 1993*.

Reason: To ensure that works carried out comply with the Roads Act.

DA.08.08 ~ Sediment and Erosion Control

A Sediment and Erosion Control Plan (S&ECP) for all site works, including road works and access, is to be approved by the principal certifying authority prior to work commencing. The plan is to cover all measures to control erosion and sediment transport in accordance with the NSW Landcom publication *Managing Urban Stormwater - Soils and Construction (4th Edition 2004 - "Blue Book")*.

Erosion and sediment controls are to be in place before the disturbance of any soils on the site, and are to be maintained during the works and for as long as necessary after the completion to prevent sediment and dirty water leaving the site and/or entering the surface water system outside of the site as follows:

- a) divert uncontaminated run-off around cleared or disturbed areas,
- b) erect a silt fence to prevent debris escaping into drainage systems or waterways,
- c) prevent tracking of sediment by vehicles on roads, and
- d) stockpile topsoil, excavated material, construction and landscaping supplies and debris within the site.

Reason: To minimise environmental impact associated with any works & to prevent soil erosion/water pollution.

DA.08.12 ~ Submit Notice of Commencement of Subdivision Work

A notice to Commence Subdivision Works must be submitted to Council at least two (2) days prior to commencing any subdivision works and nominating Council as the Principal Certifying Authority for the subdivision works.

Reason: To provide for supervision of the subdivision works.

DA.08.13 ~ Inspection and Test Plans

The Project Quality Plan shall include inspection and test plans detailing witness points covering at least the following aspects of the works. Witness points shall be signed off by the site foreman or other nominated to do so in the Project Quality Plan:

- Installation of sediment and erosion control devices,
- Site clearing,
- Site regrading,
- Preservation measures installed for trees and vegetation,

- Culvert location and installation including preparation of base, bedding and backfill,
- Earthworks including longitudinal drainage and subgrade preparation,
- Pavement materials and construction,
- Bitumen sealing where applicable,
- Fencing, signs, guideposts and line markings installation.

Advice: If Queanbeyan-Palerang Regional Council is nominated Principal Certifying Authority for the work include as a minimum the following hold points for inspection and release by the Principal Certifying Authority;

- Culvert/drainage line location and bedding,
- Sewer main location and bedding,
- Water main location and bedding,
- Stormwater main location and bedding,
- Subgrade preparation prior to placement of pavement materials,
- Pavement prior to sealing,
- Final inspection of completed works.

Release of the above hold points prior to commencement of the next stage of the works will require that the work be acceptable on the basis of visual inspection by the Principal Certifying Authority and satisfactory test results supplied by the applicant's Project Superintendent.

Reason: To ensure that the works are carried in accordance with quality assurance principles.

DA.08.23 ~ Submission of Traffic Control Devices Plan

A Traffic Control Devices Plan (TCD) must be submitted to Council for approval by the Local Traffic Committee prior to the installation of any traffic control devices. It must include line-marking and sign-posting.

Reason: To authorise traffic control devices.

DA.09.01 ~ Hours of Operation for Works

All works associated with the construction and/or demolition of this development must be carried out between the following hours unless Queanbeyan-Palerang Regional Council agrees in writing. A written application shall be made to Queanbeyan-Palerang Regional Council if a variation of hours is required.

Weekdays:	7.00am to 6.00pm
Saturdays:	8.00am to 4.00pm
Sundays and Public Holidays:	NIL

Reason: To reduce the chance of offensive noise being created and to minimise the impacts of the development in its locality.

DA.09.02 ~ Approval Documents

Keep a copy of all stamped approved plans, specifications and documents on site while work is being undertaken.

Reason: Relevant documentation is available for perusal on site by a council officer, for compliance check.

DA.09.08 ~ All Works to be Confined to the Site

All demolition, excavation, backfilling, construction and other activities associated with the development must:-

- a) Be carried out entirely within the allotment boundaries unless otherwise approved by Council.
- b) Comply with the requirements of AS 2601-2001 - The demolition of structures.
- c) If within one metre of the verge, the site must be protected by a hoarding which must be erected prior to the commencement of the demolition works.
- d) Be kept clear of stormwater, sewer manholes and service easements on the site.
- e) Any gates must be installed so they do not open onto any footpath or adjoining land.

Reason: To ensure that all development activity associated with the development does not pose a hazard to life or property and that the effectiveness of public services is not impaired.

DA.09.17 ~ Site Filling/Regrading

Provide a site regrading plan, showing existing and finished contours and prepared by an accredited engineering designer, for approval by the principal certifying authority, before site work commences. Selected fill is to be placed, under the supervision of an accredited geotechnical engineer, as controlled fill in accordance with AS 2870-1996 Residential Slabs and Footings, as amended. Fill is to be certified, and the site classified. The certifications are to be provided to Queanbeyan-Palerang Regional Council before release of the subdivision certificate.

Reason: To ensure that land is suitable for construction of residential dwellings.

DA.09.19 ~ Works Sites to be Fenced

A fence must be erected between the development site and public places before commencement of any other work.

Reason: To ensure that an effective barrier is provided to preserve the safety of people and property in public places.

DA.09.20 ~ Temporary Vehicle Access

Temporary vehicle access to the site must be stabilised to prevent the tracking of sediment onto the roads and footpath. Soil, earth, mud or similar materials must be removed from the roadway by sweeping, shovelling, or a means other than washing, on a daily basis or as required. Soil washings from wheels must be collected and disposed of in a manner that does not pollute waters.

Reason: To minimise transfer of soil from the site onto the road pavement.

DA.09.33 ~ Protection of Works on Public Roads

Lighting, fencing, traffic control advanced warning signs must be provided for the protection of works and for the safety and convenience of the public, in accordance with Council's Design and Construction Specifications.

Traffic movement in both directions on public roads and vehicular access to private properties must be maintained at all times, during the currency of the works.

Reason: To ensure an adequate level of public safety and convenience during construction.

DA.09.43 ~ Haulage Trucks Hours of Operation

Haulage truck operations on all public roads shall cease during the period when school buses may be encountered on public roads, between the hours of 7.00am to 9.00 am, and 3.00pm to 5.00pm on school days.

Reason: To avoid potential conflict with existing local traffic.

DA.09.45 ~ Dust Management

Immediately undertake all measures as appropriate, and/or respond to any Council direction to provide dust suppression on roads leading to, adjacent to and within the subdivision construction site in the event that weather conditions, construction activities and construction traffic are giving rise to abnormal generation of dust.

Reason: To ensure that local residents and activities are not disadvantaged by dust during construction.

DA.10.17 ~ Repair Damaged Public and Private Property

All damage caused to public and private property during the construction operations and associated activities must be repaired or reinstated prior to the issue of Subdivision Certificate.

Reason: To ensure that all public and neighbouring private property in the vicinity of the development is maintained in its pre-development condition.

DA.10.63 ~ Landscaping Works Completed in Accordance with Approved Plans

All landscaping must be completed by a suitably qualified landscape contractor in accordance with approved landscape plan bearing the Council approval stamp.

Reason: To help ensure a high standard of landscape works.

DA.10.64 ~ Statement of Completed Landscape Works

A “Statement of Completed Landscaped Works” form signed by the landscape plan designer and the landscape contractor must be submitted to Council prior to the issue of the Subdivision Certificate.

Reason: To help ensure a high standard of landscape works.

DA.10.102 ~ Lighting in Car Parks and Public Spaces

Street Lighting throughout the subdivision and in public spaces must comply with AS/NZS 1158 - Lighting for Roads and Public Spaces.

Reason: To ensure the provision of adequate lighting within the development.

DA.10.124 ~ Stormwater Disposal and Water Quality Requirements

All stormwater from the site must be trapped and piped to the existing stormwater system via an on-site detention system to limit the discharge from the site to the pre-development rate in accordance with Council's D5 Development Design Specification.

In-ground Gross Pollutant Traps (GPT) targeting litter are to be installed in accordance with Council's D7 Erosion Control and Stormwater Management Specification.

Reason: To provide satisfactory stormwater disposal and water quality.

DA.10.130 ~ Works as Executed – On-Site Detention System and WSUD Assets

Prior to Subdivision Certificate, Work as Executed drawings of the constructed on-site detention systems and WSUD assets certified by the designer are to be submitted to Council accompanied by evidence of restriction of land use of the land and positive covenant over the lot in favour of Council.

Reason: To ensure on site detention is constructed in accordance with the designed system and that its ongoing maintenance is enforceable by law.

DA.11.01 ~ Subdivision Certificate Application and Final Survey

An application to obtain a Subdivision Certificate must be made to Council. This must be accompanied by the following documentation:

- a) A final survey plan of subdivision,
- b) Any s88B instruments required by these conditions of consent,
- c) A letter outlining how compliance with each condition of this development consent has been achieved, and
- d) Engineering Construction Certificate Report in accordance with specifications.

Reason: To enable registration of the subdivision and to ensure compliance with conditions of consent. To provide sufficient signed copies of the subdivision plan for Council, the applicant and the NSW Land and Property Information.

DA.11.02 ~ Statement from Surveyor

Upon the completion of subdivision works and prior to the issue of any Subdivision Certificate a statement prepared by a registered surveyor, must be submitted to the Principal Certifying Authority stating that all water, sewer, stormwater pipelines are completely located within their easements.

Reason: To ensure works are completed in accordance with Council's requirements.

DA.11.03 ~ Water and Sewer Compliance Certificate – Service

Prior to the release of a Subdivision Certificate, a Certificate of Compliance in accordance with the Water Management Act 2000 must be obtained from Council.

Note: This certificate is required regardless of any other water and sewer compliance certificate previously obtained, and regardless of whether the development involved alterations to Council's infrastructure.

Reason: To ensure compliance with Section 6.14 of the Environmental Planning and Assessment Act 1979.

DA.11.04 ~ Electricity Supply

Prior to Council issuing a Subdivision Certificate, a Notice of Arrangement (NOA) shall be requested from the electricity authority which states that satisfactory supply arrangements have been made for the provision of electricity to the proposed development.

Reason: Ensures that satisfactory supply arrangements have been made and that all of the lots in the subdivision are suitably serviced.

DA.11.05 ~ Subdivision Works Defects Liability Period – Bond

The completed subdivision works are subject to a six (6) month defects liability from the date of the

issue of the relevant Subdivision Certificate.

The Subdivider must;

- a. Lodge a cash bond with Council with regard to the defects liability period in an amount as calculated from fees set by Council's Management Plan and current at the time of issue of the Subdivision Certificate; and
- b. Submit written authorisation that in the event of any defect not being rectified to the standards specified in Council's Design and Construction Specifications, Council may enter the subject land and undertake rectification work and deduct the cost thereof from such Bond monies held by Council and to refund the balance, if any, to the Subdivider.

During the defects liability period the Subdivider will be liable for any part of the subdivision works which fail to perform in the manner outlined in Council's Design and Construction Specifications (or as would reasonably be expected under the design conditions).

Reason: To ensure works are completed in accordance with Council's requirements.

DA.11.06 ~ Separate Connections and Services

A separate sewer connection, stormwater drainage connection, water service, electricity supply and communication service must be provided to each allotment within the subdivision at the Subdivider's expense.

Note: The Subdivider may, at their own expense, provide a gas connection to such allotment within the subdivision subject to its availability.

Note: The Subdivider is responsible for all public utilities and services in the area of work and as such must notify all relevant Authorities and bear all costs associated with any repairs and/or adjustments as those Authorities deem necessary.

Reason: To provide access to services for each allotment.

DA.11.08 ~ Inspections - Water and Sewer Authority

Inspections must be performed by the Water and Sewer Authority (Council) when works reach the following stages;

- a) Immediately prior to connection of new sewer pipes to the existing sewerage system,
- b) Immediately prior to connection of new water pipes to the existing water reticulation,
- c) Immediately prior to the backfilling of sewer drainage trenches, and
- d) Immediately after installation of any on-site stormwater management system.

Council's Development Engineering section must be given at least 24 hours notice of the need for these inspections.

Note: Any inspections carried out by Council do not imply Council approval or acceptance of the works, and do not relieve the Developer from the requirements to provide an Engineering Construction Certificate Report in accordance with Council's Design and Construction Specifications.

Reason: To ensure that hydraulic services are constructed in accordance with Council requirements.

DA.11.12 ~ Submission from Service Authority

Prior to the issue of any Subdivision Certificate written evidence from the relevant service authority or a suitably accredited person that satisfactory arrangements have been made for the supply of reticulated electricity and telecommunication services to each lot must be submitted to Council.

Reason: To satisfy relevant utility authority requirements.

DA.11.15 ~ Works as Executed Plans of Dedicated Infrastructure

Prior to the issue of a Subdivision Certificate, a Work-as-Executed package must be provided to Council. This information and engineering data is used to confirm the quality of works, indicate relative asset locations and survey alignments while also noting any other approved changes in asset types or construction details that may have occurred during the construction phase when compared to the originally approved design.

The final Work-as-Executed drawings, reports and digital data shall accurately reflect material types, specifications and other asset-specific information. The Work-as-Executed package must include:

- a. Marked up and red-lined Council stamped approved engineering plans depicting all new civil infrastructure and assets dedicated to Council,
- b. An accompanying compliant ADAC XML digital file
- c. Other reports and information provided in accordance with the relevant approval(s).

Work as Executed (WAE) Drawing DWG and PDF Files

The presentation and content of Work-as-Executed drawing submissions shall be completed in accordance with Queanbeyan-Palerang Regional Council's Engineering Design and Construction Quality Specifications.

The Work-as-Executed drawings are to be provided to Council in both DWG and PDF file formats being printable to A3 size. The Work-as-Executed plans are to be clearly marked up (red-lined) showing all variations from design including changes to levels, alignments and material types. Drawings are to be clearly stamped "WORKS AS EXECUTED" and noted as the "WAE Version" in the revision title block.

Signed Certifications are to be completed on each and all pages of the submitted drawings by the Registered Surveyor certifying the locational accuracy with regard to physical features and assets, cadastral information, contours, levels and the applicable survey datum information.

Asset Design as Constructed (ADAC) XML Files

A compliant ADAC XML file is required to be submitted as an accompaniment to the Work-as-Executed drawings and package of supporting information. The ADAC XML data shall align with the corresponding Work-as-Executed drawings.

On acceptance of the Work-as-Executed information package, Council will undertake data format and conformance checks of the ADAC XML file to confirm validity and completeness with the accompanying Work-as-Executed drawings. Should significant anomalies, errors or missing information be identified during these checks, the files will be returned to the provider for correction and resubmission, potentially delaying the issue of the Subdivision Certificate and acceptance of assets.

Queanbeyan-Palerang Regional Council require ADAC XML file to be formatted to the current software version at the date of submission of the Work-as-Executed drawings.

Reason: To provide a record of completed works as accurate asset information.

DA.11.17 ~ Submission of Street/Road Names

Prior to the issue of a Subdivision Certificate the proposed street names for the new/unnamed road/s must be submitted to and approved by Council and gazetted.

The approved street/road names are to be indicated on the Survey Plan of Subdivision and provided on road name plates to be installed at the road intersections.

Note: Council has a list of approved names for subdivision roads which can be obtained by contacting Council's Environment, Planning and Development section. Any other names will require a written submission to be lodged with Council detailing the origin of the name and the reasons for selection. Proposed names must also comply with the Guidelines for Road Naming prepared by the Geographical Names Board.

Reason: To ensure compliance with the Roads Act 1993 and the Conveyancing Act 1919.

DA.11.20 ~ Covenant on the Land

Apply covenants under section 88B of the *Conveyancing Act 1919* to the new lots incorporating the restrictions listed below. Queanbeyan-Palerang Regional Council shall be nominated as the sole party with the power to vary or remove the required covenants.

- a) All requisite sewerage easements.
- b) Drainage easements shall be created over all existing and proposed drainage lines including inter-allotment drainage.
- c) All easements specified below and contained in the subdivision must benefit Council as well as particular lots;
 - i. easements to drain stormwater,
 - ii. easements to drain sewer,
 - iii. easements for water supply,
 - iv. easements which Council may require to provide or maintain other services, and
- d) Nominating Council as the name of the person/authority empowered to release, vary or modify restriction or positive covenant numbered in the plan.
- e) Plantings on the entire site, including within the building envelopes, are to exclude species listed on the regional weed lists.

Reason: To ensure public utility services, access and restrictions are legalised over the land.

DA.11.22 ~ Dedication to Council

All drainage reserves, WSUD assets, roads, reservoir sites, reserves must be dedicated to Council and shown as such on the Subdivision Survey Plan.

Reason: To permit Council to adequately manage reserves, drainage and utility services, and to provide legal access to lots.

DA.11.28 ~ Dedicate Public Roads

The proposed roads are to be dedicated to Queanbeyan-Palerang Regional Council as public roads.

Reason: To ensure compliance with the Roads Act 1993 and the Conveyancing Act 1919.

DA.11.33 ~ Subdivision Principal Certifying Authority (PCA) Inspections

The applicant shall engage the services of a suitably qualified Superintendent to supervise the construction of the Subdivision in accordance with Councils CQS - Contract Quality System Requirements Specification.

The inspections and/or Hold Points (in accordance with the QPRC Construction Specification) shall

be undertaken and released by Council (as the Principal Certifying Authority) during the construction of the Subdivision. Works shall not proceed beyond the inspection indicated until Council is satisfied that the requirements of the relevant specification have been met.

Reason: To ensure that all subdivision infrastructure is constructed in accordance with Council's Construction Specifications.

DA.11.35 ~ Certification of Completed Works

At the completion of works the superintendent of works shall present to Queanbeyan-Palerang Regional Council a Certification Report for civil works and is to include copies of any approvals outlined in this development consent and report on the current status of environmental restoration and revegetation. All project plans, inspection test plans, and results are to be included in the report. The superintendent of works shall be a Civil Engineer or suitably experienced and accredited Registered Surveyor as set out in Council's Specification.

Reason: To ensure compliance of the works with the terms of the development consent and quality control requirements defects.

DA.11.54 ~ Work in Accordance with Engineering Specifications

All construction and restoration work must be carried out strictly in accordance with the approved drawings and Queanbeyan-Palerang Regional Council's current Design and Construction Specifications.

Reason: To ensure design, construction and restoration work is in accordance with Council's standards and requirements.

DA.12.09 ~ Surface Water Runoff

Do not re-direct surface water onto adjoining private land. Alterations to the surface contours must not impede or divert natural surface water run-off, so as to cause a nuisance to adjoining property owners or create an erosion or sediment problem.

Reason: Stormwater disposal does not impact on the neighbouring properties.

DA.12.29 ~ Plant and Equipment Noise Control

The noise level emanating from plant and equipment on the premises must not exceed a level of 5dB(A) above background level when measured for a LAeq 15-minute period at any residence on privately owned land during the hours of operation.

Reason: To reduce the noise nuisance to residents and adjacent neighbours, also to comply with the Protection of the Environment Operations Act 1997 and Regulations.