



PART B

SUBDIVISION

DRAFT

2025

UPPER LACHLAN
DEVELOPMENT CONTROL PLAN



TABLE OF CONTENTS

B.1.	RESIDENTIAL SUBDIVISION	3
B.1.1.	Earthworks and Retaining Walls	4
B.1.2.	Subdivision Lot Design	5
B.1.3.	Subdivision Road Design	8
B.1.4.	Stormwater Design and Management	12
B.1.5.	Public Open Space Provision	13
B.1.6.	Landscape Design and Management	14
B.1.7.	Utility and Service Provisions	15
B.2.	VILLAGE SUBDIVISIONS	16
B.2.1.	Earthworks and Retaining Walls	17
B.2.2.	Subdivision Lot Design	18
B.2.3.	Subdivision Road Design	21
B.2.4.	Stormwater Design and Management	25
B.2.5.	Public Open Space Provision	26
B.2.6.	Landscape Design and Management	27
B.2.7.	Utility and Service Provision	28
B.3.	LARGE LOT SUBDIVISION	29
B.3.1.	Earthworks and Retaining Walls	30
B.3.2.	Subdivision Lot Design	31
B.3.3.	Subdivision Road Design	32
B.3.4.	Stormwater Design and Management	36
B.3.5.	Landscape Design and Management	37
B.3.6.	Utility and Service Provision	38
B.4.	RURAL SUBDIVISION	39
B.4.1.	Earthworks and Retaining Walls	40
B.4.2.	Subdivision Lot Design	41
B.4.3.	Subdivision Road Design	42
B.4.4.	Stormwater Design and Management	43
B.4.5.	Utility and Service Provision	44
B.5.	INDUSTRIAL SUBDIVISIONS	45
B.5.1.	Earthworks and Retaining Walls	46
B.5.2.	Subdivision Lot Design	47
B.5.3.	Subdivision Road Design	48
B.5.4.	Stormwater Design and Management	49
B.5.5.	Landscape Design and Management	50
B.5.6.	Utility and Service Provisions	51
B.6.	STRATA AND COMMUNITY TITLE	52
B.6.1.	Strata and Community Title Controls	53

B.1. | RESIDENTIAL SUBDIVISION

APPLICATION OF THIS PART

Part B.1 applies to greenfield, infill and laneway subdivisions on land zoned R2 Low Density Residential under the Upper Lachlan Local Environmental Plan 2010.

TERMS AND DEFINITIONS

Part B.1 uses a number of specific terms that are explained below:

Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian Height Datum (AHD) is the common national surface level datum approximately corresponding to mean sea level.

Building Code of Australia (BCA) is a set of technical provisions for the design and construction of buildings and other structures in Australia, and is now part of the National Construction Code.

Flood Hazard is the potential loss of life, injury and economic loss caused by a future flood event.

Flood Prone Land is land that is susceptible to flooding as per the Upper Lachlan Floodplain Risk Management Plan and Study.

Flood Planning Area is the area of land at or below the Flood Planning Level and thus subject to flood related development controls.

Flood Planning Level (FPL) is the level of the 1% AEP plus a safety freeboard, which is 500mm as adopted by Upper Lachlan Shire Council.

Freeboard is the factor of safety typically used in relation to the setting of floor levels, levees and the like, and is usually expressed as a height above a flood planning level.

Hill is a minimum change in elevation of 20m over a 100m distance.

Landholding means an area of land constituted or worked as a single property, and if comprising more than 1 lot—the lots are contiguous, or separated only by a road or watercourse.

Legal Point of Discharge is the designated location where stormwater from a property is legally permitted to drain into a public stormwater system.

National Construction Code (NCC)

is a set of technical provisions for the design, construction, and performance of buildings and plumbing systems in Australia.

On Site Detention (OSD) is a stormwater management system that is designed to temporarily store excess stormwater runoff on a property for controlled release in a manner that ensures it doesn't overwhelm the local drainage system, and may employ design features such as detention basins, water tanks, sumps and the like.

Primary Road is the primary road used to access a property.

Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location.

Ridgeline refers to the highest line (crest) along a hill or mountain ridge.

Site Coverage is the proportion of a site that is covered by buildings / structures.

B.1.1. Earthworks and Retaining Walls

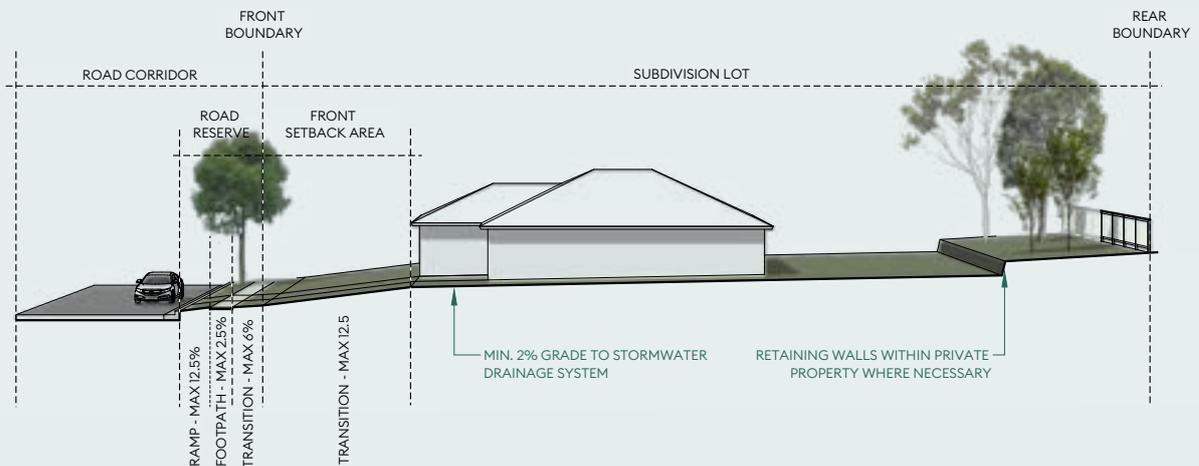
OBJECTIVE

To ensure earthworks associated with residential subdivisions does not negatively impact on soil and water quality, adjoining properties and the wider public realm.

STANDARDS

- a. Development is designed to respond to the natural topography and landform, to minimise cut and fill and maintain drainage flows.
- b. Development involving earthworks and where the land slopes at a grade of 6% or greater, the predominant road alignment should be perpendicular to the contours of the site, wherever practicable.
- c. Development of new roads are constructed at the natural ground level of the site wherever practical, taking into account the constraints of the site and road design requirements.
- d. Development is designed to the natural landform and if the land is sloping prior to subdivision works, lots are to be designed to reflect inherited slopes.
- e. Development is designed to have a minimum 2% fall towards the proposed stormwater drainage system (roadside drainage infrastructure or drainage reserve / easement), in order to allow for suitable stormwater run-off from the site.
- f. Development involving earthworks is to be suitably protected from soil erosion, soil movement and sedimentation as per Landcom Managing Urban Stormwater Soils and Construction (Blue Book).
- g. Development involving the imported fill must be certified Virgin Excavated Natural Material (VENM).
- h. Development involving retaining walls or other structural supports, including footings and drainage, must be located wholly within private property boundaries and not within proposed public road reservations.
- i. Development is designed to drain stormwater from excavation areas are to be properly drained to a legal point of discharge (e.g. inter-allotment drainage pipes, street gutter system or drainage reserve).

Diagram 1. Acceptable Landform Example - Residential Subdivision



B.1.2. Subdivision Lot Design

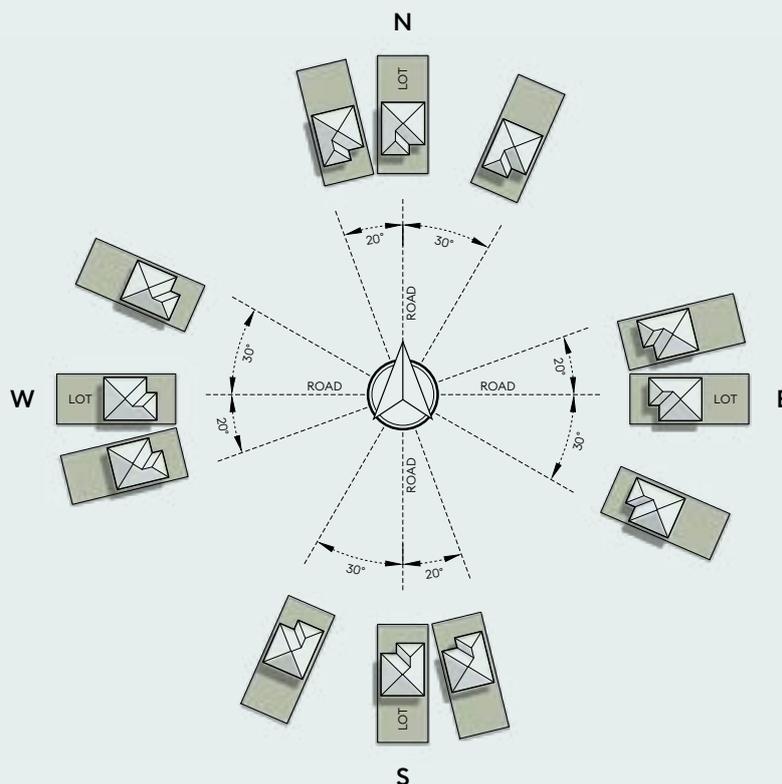
OBJECTIVE

To ensure residential subdivision design provides housing choice and is practical, efficient and consistent with the dominant street patterns in the surrounding neighbourhood.

STANDARDS

- a. Development is designed to respond to the Upper Lachlan Local Environmental Plan 2010 in relation to watercourses, riparian areas, flooding, vulnerable groundwater, riparian areas, wetlands, heritage and biodiversity.
- b. Development is designed to be consistent with the dominant lot size configuration along adjoining streets.
- c. Development is designed to incorporate a mix of sizes to provide for a range of housing choice and diversity.
- d. Development is designed to enable the construction of a future dwelling and likely outbuildings, private open space, vehicle access and parking areas.
- e. Development is designed to maximise opportunities for solar access.
- f. Development is designed to provide 18m lot widths measured at the building line on land mapped in the 800m² Minimum Lot Size under the Upper Lachlan Local Environmental Plan 2010.
- g. Development of corner blocks incorporates 3m splays parallel to front and side boundaries of the corner allotment and enables the construction of a future dwelling that can comply with the setback standards in Part C for both street frontages.
- h. In addition to f) and g), lot design is to involve:
 - i. Adequate width for the construction of a 6m wide access driveway, and
 - ii. Adequate width for roadside parking of at least 1 x standard length vehicle.
- i. Development design for battle-axe shaped lots are avoided where possible and are only permitted where there is no other means of gaining access to a public road, and compliance with the following is achieved:
 - i. The lot meets the minimum lot size for the zone in Upper Lachlan Local Environmental Plan 2010, exclusive of the access handle. The minimum area is increased to not less than 900m² for lots without any street or park frontage.

Diagram 2. Optimal Lot Orientation for Dwellings



- ii. Single access handles are not less than 6m in width, not more than 30m long, and are constructed with a sealed, paved or concreted driveway that is not less than 3m in width.
 - iii. Dual access handles created with a reciprocal right of way are not less than 10m in width, not more than 30m long, and are constructed with a sealed, paved or concreted driveway that is not less than 5.5m in width.
 - iv. Adequate provision is made for the collection of kerbside garbage.
 - v. Adequate provision is made for the maneuvering of vehicles.
- j. Development design for street network is to involve:
 - i. Is uncomplicated and fosters walking, cycling and use of public transport for access to daily activities.
 - ii. Enables new housing to front streets, urban parks and natural areas.
 - iii. Makes provision for connections to be made to adjacent future urban areas.
 - iv. Enable travel from any address to the most convenient collector street or higher order road in less than three turning movements.
 - v. Promotes active transport movement between local and higher order streets and roads.
- k. Development involving the creation of a new lot that only has access via a laneway is to be accompanied by full development plans showing how the new lot can accommodate a future dwelling design that complies with Part C of the Upper Lachlan Development Control Plan 2025.
 - i. Development involving creation of a new lot that only has access via a laneway is to incorporate a minimum 1.5m wide frontage linking to the primary road for pedestrian access, bin collection, mailbox delivery and provision of all utility services (if necessary).

Diagram 3. Lot Frontage Standards

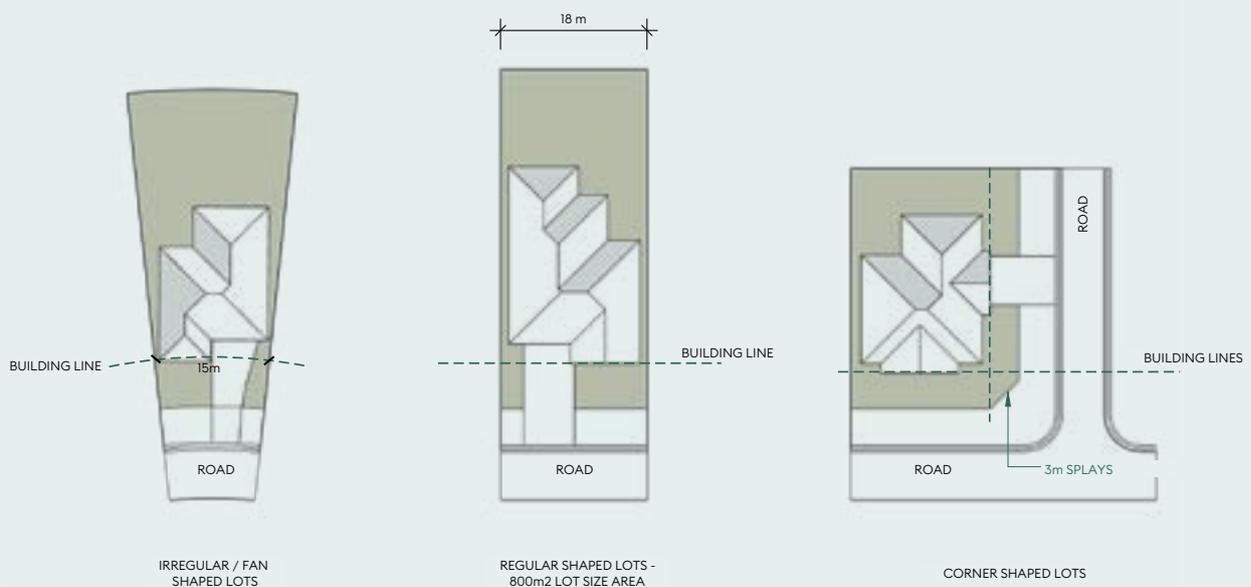




Diagram 4. Battle-axe Lot Design

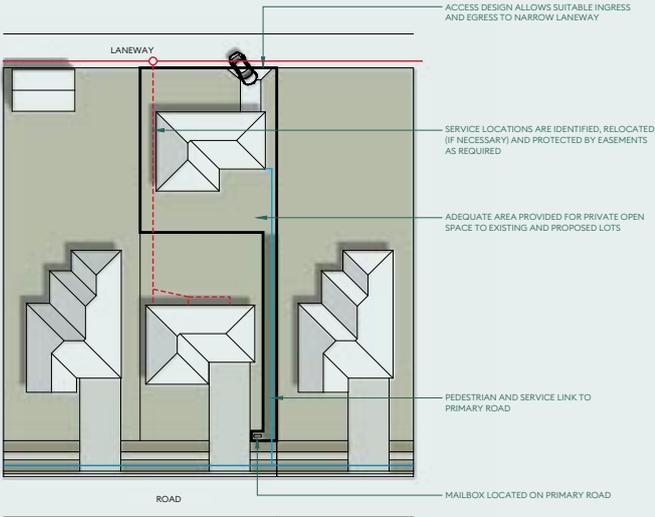


Diagram 5. Design Principles Laneway Subdivision

B.1.3. Subdivision Road Design

OBJECTIVE

To ensure residential subdivision design provides housing choice and is practical, efficient and consistent with the dominant street patterns in the surrounding neighbourhood.

STANDARDS

- a. Development is designed with a practical, legal and safe access to each lot.
- b. Development of the road system is designed to respond to geotechnical, topographical and specific site features in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- c. Development of the road system is designed to the appropriate speed zone limit(s), including any local area traffic management devices, in accordance with AS 1742.13: 2009 Manual of uniform traffic control devices Part 13: Local area traffic management.
- d. Development of roads / vehicle access to each lot is gained onto the local road network in accordance with the Austroads Guide to Road Design Part 4 - Intersections and crossings and Part 4a - Unsignalised and signalised intersections, and not directly onto a classified road, unless there are no other practical means of access available to the lot(s) and access / intersections comply with TfNSW requirements.
- e. Development of existing public road infrastructure abutting the subdivision, including roads, intersections, kerb and gutter and pedestrian and cycling facilities are upgraded / replaced where they do not meet the requirements of Upper Lachlan Shire Council.
- f. Development of the road system is designed to respond to the appropriate road hierarchy (e.g. arterial, collector, local road or minor access road) in accordance with Table 1 and Upper Lachlan Shire Council Engineering Guidelines (latest version).
- g. Development of pedestrian and cycling facilities that are shown in an Active Transport Plan adopted by Council and that apply to the site are undertaken as part of the subdivision works.
- h. Development of kerb and gutter is provided to all classes of roads having speed limits of 50km/hr or less in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- i. Development of street furniture (e.g. lights, trees, signs) is provided in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version), unless otherwise specified in this Part.
- j. Development of public roads, pedestrian and cycling facilities, streetlights, street trees, street signs and road furniture are accommodated within existing / proposed road reserves in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- k. Development involving dedication of a public road is accompanied by a statement from the applicant suggesting names for the new road that are consistent with the NSW Geographical Names Board Guidelines for the Naming of Roads.

Table 1. Road Design Requirements - Residential Subdivisions

Design Requirement	Local Distributor	Collector	Local Access	Local Access (Minor)	Cul-de-sac & Minor Access
Maximum traffic volume (vehicles/day)	5,000-7,000	3,000	1,000	500	100
Number of dwellings	500-750	300	100	50	10
Carriageway width (m)	13	11	8	7	6
Footway width (m)	2 x 5.5	2 x 5.5	2 x 5.5	2 x 4.0	2 x 3.5
Road Reserve - total width (m)	24	22	19	15	13
Lane provision	2 moving / parking	2 moving / intermittent parking	2 moving / intermittent parking	2 moving / intermittent parking	2 moving / intermittent parking
Maximum desirable speed (km/h)	40-60	30-50	20-30	20-30	15-25
Maximum design speed (km/h) for sight distance calculations	60	50	40	40	30
Footpath	Both sides / shared with cycleway	Both sides	One Side	One side	Not required, unless identified in Active Transport Plan
Cycle Way	2.5m wide shared cycleway	Marked on road	On road shared	On road shared	On road shared
Kerb and gutter	Barrier	Barrier	Barrier	Rollover	Rollover
Street lighting	P2	P3	P4	P4	P5
Reference Diagram	Diagram 9	Diagram 10	Diagram 11	Diagram 12	Diagram 13

Diagram 6. Road Standards - Local Distributor Road

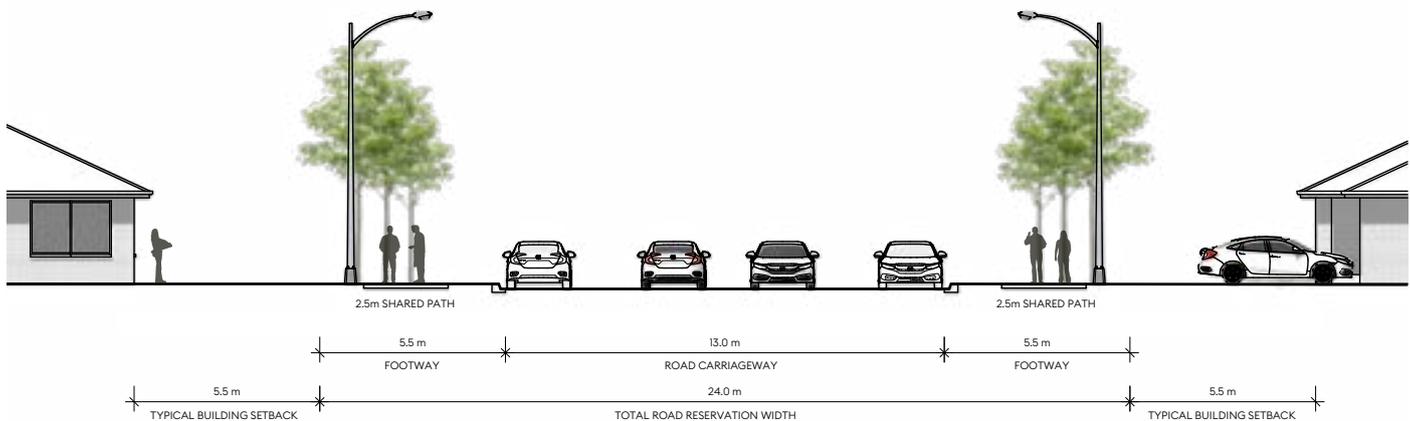


Diagram 7. Road Standards - Collector Road

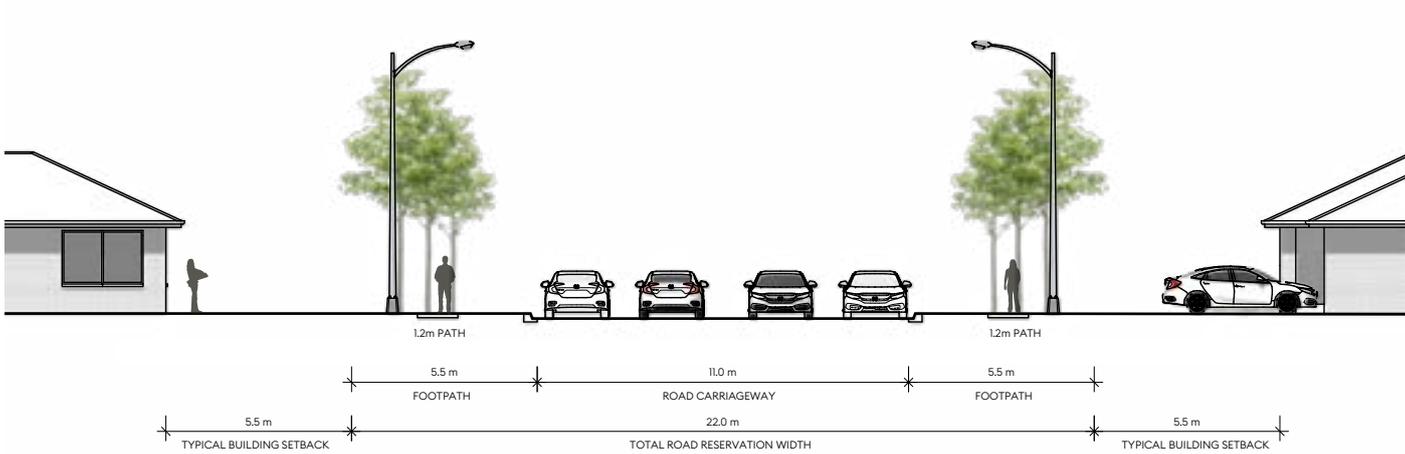


Diagram 8. Road Standards - Local Access Road

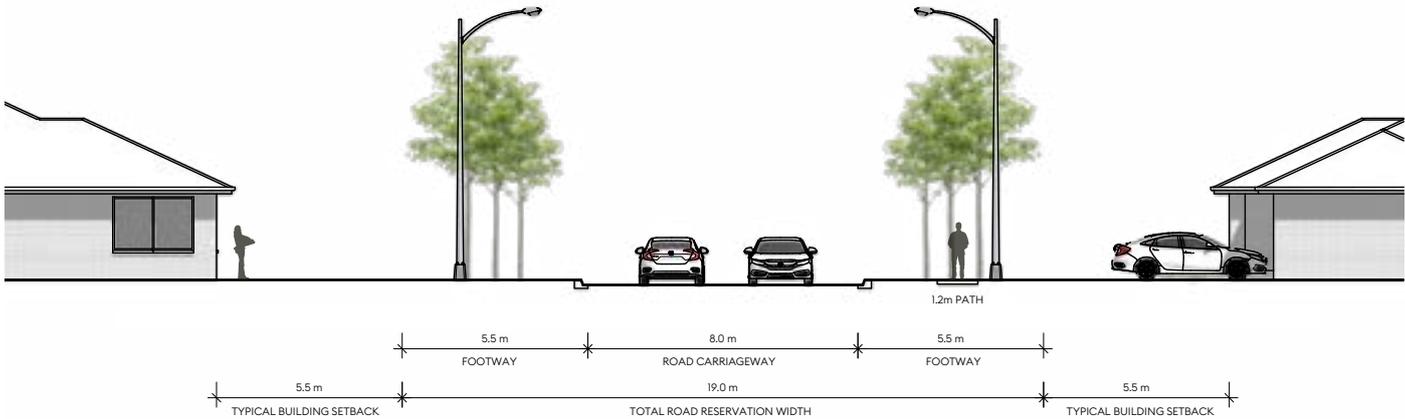


Diagram 9. Road Standards - Local Access (Minor) Road

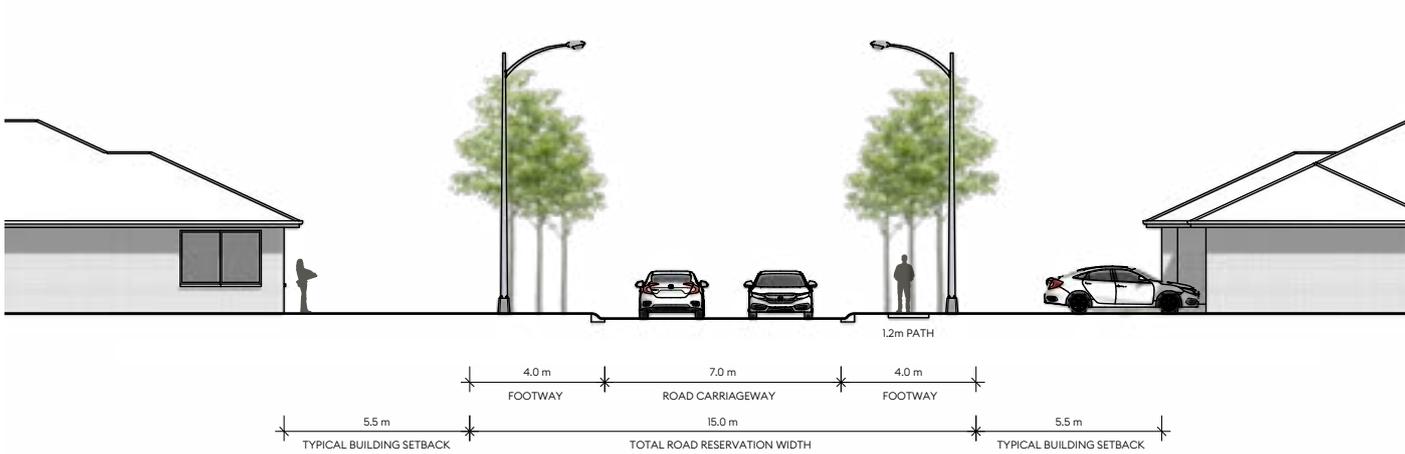
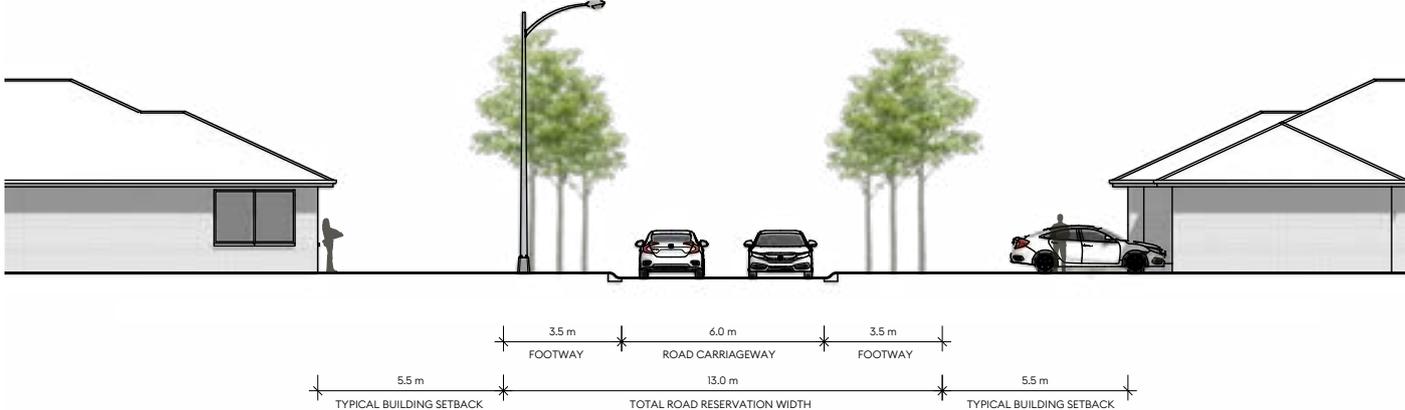


Diagram 10. Road Standards - Cul-de-sac and Minor Access Road



B.1.4. Stormwater Design and Management

OBJECTIVE

To ensure stormwater from residential subdivisions is properly drained to a legal point of discharge without causing adverse impacts on public drainage infrastructure, downslope properties or the quality of receiving waters.

STANDARDS

- a. Development is designed so as not to significantly alter pre-development stormwater patterns and flows.
- b. Development is designed to direct stormwater to a legal point of discharge.
- c. Development is designed by a suitably qualified professional in accordance with the Australian Rainfall and Runoff 2019 major and minor event philosophy, as follows:
 - i. Design to accommodate all stormwater in the 10% AEP via underground drainage infrastructure.
 - ii. Design to accommodate all stormwater above the 10% AEP up to the 1% AEP via roads and / or drainage reserves.
 - iii. Design so that post-development runoff rates are equal to or less than pre-development runoff rates for the 1% AEP.
- d. Development of existing stormwater management infrastructure abutting the subdivision development, including road drainage and drainage reserves is upgraded / replaced where it does not meet Upper Lachlan Shire Council Engineering Guidelines (latest version).
- e. Development takes into account any riverine flooding conditions and the stormwater management requirements of the whole site / stormwater drainage system, including stormwater from upslope areas in the catchment, based on a fully developed scenario.
- f. Development in a flood planning area is designed to allow future dwellings to achieve compliance with the flood planning requirements of Upper Lachlan LEP 2010 and the Upper Lachlan Shire Floodplain Risk Management Plan 2017.
- g. Development is designed with easements to drain stormwater over all pipelines, sumps, overland flow paths and channels (other than natural water courses).
- h. Development that cannot drain stormwater to a legal point of discharge via gravity must be supported by a site-specific Stormwater Management Plan prepared by a suitably qualified professional.
- i. Development involving discharge of stormwater to an existing rear lane way is only permitted where kerb and gutter or underground stormwater infrastructure exists, or provided as part of the development where is demonstrated capacity for this infrastructure to handle estimated stormwater runoff.

B.1.5. Public Open Space Provision

OBJECTIVE

To ensure subdivisions (where required) provide accessible, safe, functional and attractive open space that meets the needs of existing and future residents.

STANDARDS

- a. Development of the physical provision of dedicated public open space is required for greenfield subdivisions (i.e. where the lot design is not constrained by existing urban form). Public open space is calculated as part of the subdivision design, based on the following calculation:
 - i. A minimum of 2.83 hectares per 1,000 head of estimated population, calculated at a rate of 4 persons per residential allotment (the calculation formula is $2.83/1,000 \times (4 \times \text{No. of lots}) \times 10,000\text{m}^2$), or
 - ii. 10% of the net developable land area.
- b. Development of public open space must be provided in a manner that:
 - i. Is highly accessible to surrounding residential neighbourhoods.
 - ii. Has a minimum of two frontages to a public street.
 - iii. Has been designed to incorporate any natural or cultural features of the land.
 - iv. Integrates with pedestrian and cycle links, community facilities and other recreational precincts.
 - v. Integrates with major drainage networks and water quality facilities, where these are compatible and do not pose a public safety risk.
 - vi. Complies with CPTED principles contained in Crime Prevention and the Assessment of Development Applications.
 - vii. Can be enjoyed and used for activities by people in a range of different age groups.
 - viii. Can be maintained efficiently.
- c. Development involving infill subdivision or laneway subdivision generally does not require dedication of public open space.
- d. Development involving infill subdivision or laneway subdivision may require a monetary contribution in lieu of public open space in accordance with a Contributions Plan adopted by Upper Lachlan Shire Council.

B.1.6. Landscape Design and Management

OBJECTIVE

To ensure public reserves in residential subdivisions are properly landscaped and maintained for a reasonable period of establishment time so as to improve the function and appearance of these spaces.

STANDARDS

- a. Development involving more than 4 lots is to be supported by a Landscape Plan prepared by a suitably qualified professional that adequately demonstrates the objectives of this Part are being met.
- b. Development of landscaping in public open spaces required under Part B1.5 is designed in accordance with a Landscape Plan prepared by a suitably qualified professional.
- c. Development of ground surfaces of public open space must be suitably graded, irrigated, turfed and drained to a legal point of discharge.
- d. Development of ground surfaces of the footpath within the public road reserve must be suitably graded towards the top of concrete kerb at a minimum grade of 2%.
- e. Development of ground surfaces of public drainage reserves must be suitably graded away from buildings and fence lines and drained to a legal point of discharge.
- f. Development is to be provided with street trees in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- g. Development of public reserves / open space must be maintained by the subdivider under a Deed of Agreement with Council for a minimum period of 12 months (commencing after completion to the satisfaction of Council).

B.1.7. Utility and Service Provisions

OBJECTIVE

To ensure residential lots are provided with essential services and infrastructure that are engineered to minimum design standards.

STANDARDS

- | | |
|---|--|
| <p>a. Development of all lots is to be connected to the centralised electricity supply network in accordance with the Essential Energy Connecting to the Network Information Pack 2018.</p> <p>b. Development is provided with street lighting in accordance with AS/NZS 1158: 2010 Lighting for roads and public spaces.</p> <p>c. Development of all lots is to be connected to telecommunications in accordance with the Australian Government's Telecommunications Infrastructure in New Developments policy.</p> <p>d. Development of all lots is to be connected to a reticulated water main via a minimum 20mm service and meter in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | <p>e. Development of all lots is to be connected to a reticulated sewerage main in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> <p>f. Development is designed with common trenching and is used for compatible services and infrastructure, generally in accordance with the NSW Streets Opening Coordination Council Model Agreement for Local Councils and utility/service providers 2018 and the Streets Opening Coordination Council Guide to Codes and Practices for Streets Opening.</p> |
|---|--|

B.2. | VILLAGE SUBDIVISIONS

APPLICATION OF THIS PART

Part B.2 applies to subdivisions on land zoned RU5 Village under Upper Lachlan Local Environmental Plan 2010, which generally includes the following villages:

- a. Bigga.
- b. Binda.
- c. Breadalbane.
- d. Collector.
- e. Dalton.
- f. Grabben Gullen.
- g. Gunning.
- h. Jerrawa.
- i. Laggan.
- j. Taralga.
- k. Tuena.

TERMS AND DEFINITIONS

Part B.1 uses a number of specific terms that are explained below:

Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian Height Datum (AHD) is the common national surface level datum approximately corresponding to mean sea level.

Building Code of Australia (BCA) is a set of technical provisions for the design and construction of buildings and other structures in Australia, and is now part of the National Construction Code.

Flood Hazard is the potential loss of life, injury and economic loss caused by a future flood event.

Flood Prone Land is land that is susceptible to flooding as per the Upper Lachlan Floodplain Risk Management Plan and Study.

Flood Planning Area is the area of land at or below the Flood Planning Level and thus subject to flood related development controls.

Flood Planning Level (FPL) is the level of the 1% AEP plus a safety freeboard, which is 500mm as adopted by Upper Lachlan Shire Council.

Freeboard is the factor of safety typically used in relation to the setting of floor levels, levees and the like, and is usually expressed as a height above a flood planning level.

Hill is a minimum change in elevation of 20m over a 100m distance.

Landholding means an area of land constituted or worked as a single property, and if comprising more than 1 lot—the lots are contiguous, or separated only by a road or watercourse.

Legal Point of Discharge is the designated location where stormwater from a property is legally permitted to drain into a public stormwater system.

National Construction Code (NCC)

is a set of technical provisions for the design, construction, and performance of buildings and plumbing systems in Australia.

On Site Detention (OSD) is a stormwater management system that is designed to temporarily store excess stormwater runoff on a property for controlled release in a manner that ensures it doesn't overwhelm the local drainage system, and may employ design features such as detention basins, water tanks, sumps and the like.

Primary Road is the primary road used to access a property.

Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location.

Ridgeline refers to the highest line (crest) along a hill or mountain ridge.

Site Coverage is the proportion of a site that is covered by buildings / structures.

B.2.1. Earthworks and Retaining Walls

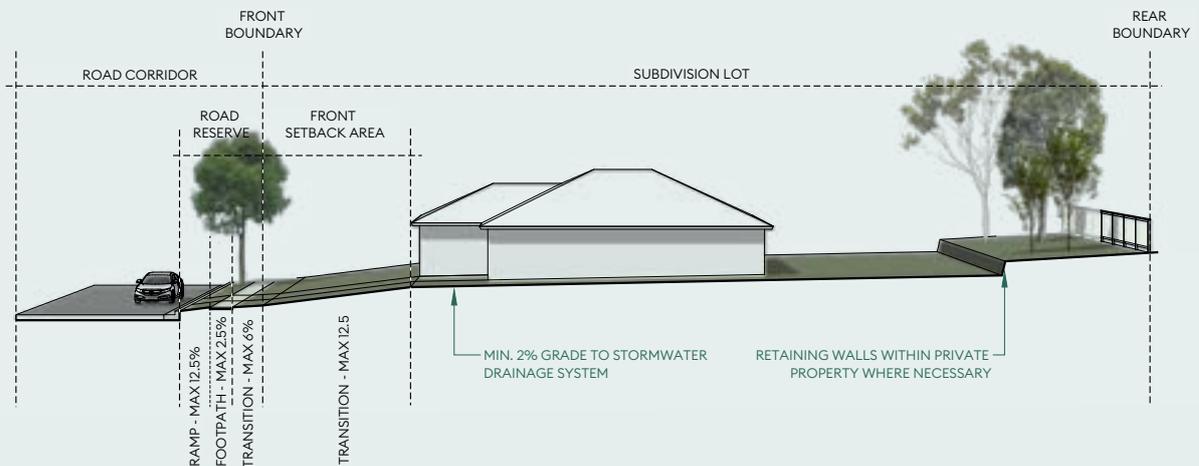
OBJECTIVE

To ensure earthworks associated with village subdivisions does not negatively impact on soil and water quality, adjoining properties and the wider public realm.

STANDARDS

- a. Development is designed to respond to the natural topography and landform, to minimise cut and fill and maintain drainage flows.
- b. Development involving earthworks and where the land slopes at a grade of 6% of greater, the predominant road alignment should be perpendicular to the contours of the site, wherever practicable.
- c. Development of new roads are constructed at the natural ground level of the site wherever practical, taking into account the constraints of the site and road design requirements.
- d. Development is designed to the natural landform and if the land is sloping prior to subdivisions works, lots are to be designed to reflect inherited slopes.
- e. Development is designed to have a minimum 2% fall towards the proposed stormwater drainage system (roadside drainage infrastructure or drainage reserve / easement), in order to allow for suitable stormwater run-off from the site.
- f. Development involving earthworks is to be suitably protected from soil erosion, soil movement and sedimentation as per Landcom Managing Urban Stormwater Soils and Construction (Blue Book).
- g. Development involving the imported fill must be certified Virgin Excavated Natural Material (VENM).
- h. Development involving retaining walls or other structural supports, including footings and drainage, must be located wholly within private property boundaries and not within proposed public road reservations.
- i. Development is designed to drain stormwater from excavation areas are to be properly drained to a legal point of discharge (e.g. inter-allotment drainage pipes, street gutter system or drainage reserve).

Diagram 11. Acceptable Landform Example - Residential Subdivision



B.2.2. Subdivision Lot Design

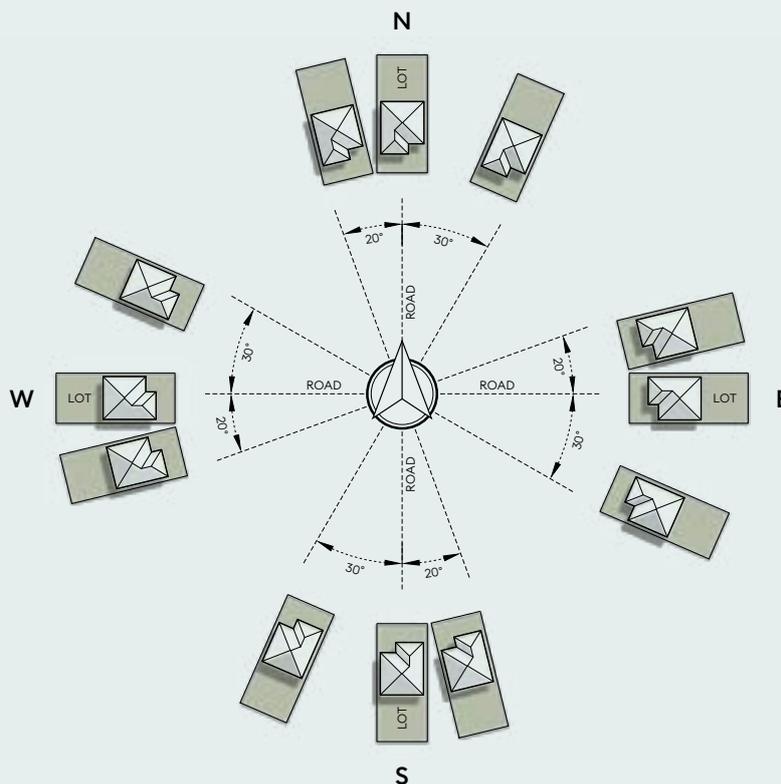
OBJECTIVE

To ensure village subdivision design provides housing choice and is practical, efficient and consistent with the dominant street patterns in the surrounding neighbourhood.

STANDARDS

- a. Development is designed to respond to the Upper Lachlan Local Environmental Plan 2010 in relation to watercourses, riparian areas, flooding, vulnerable groundwater, riparian areas, wetlands, heritage and biodiversity.
- b. Development is designed to be consistent with the dominant lot size configuration along the street servicing the development site, or within the immediate vicinity of the development site.
- c. Development is designed to enable the construction of a future dwelling and likely outbuildings, private open space, vehicle access and parking areas.
- d. Development is designed to maximise opportunities for solar access.
- e. Development is designed to have a minimum lot frontage that is consistent with the existing dominant subdivision pattern within 100m of the subject land.
- f. Development of corner allotments is designed to enable the construction of a dwelling that can comply with the prevailing setback requirements along both frontages.
- g. Development of corner lots are designed to incorporate a 3m splay parallel to front and side boundaries of the corner allotment.
- h. Development design for battle-axe shaped lots are avoided where possible and are only permitted where there is no other means of gaining access to a public road, and compliance with the following is achieved:
 - i. The lot meets the minimum lot size for the zone in Upper Lachlan LEP 2010, exclusive of the access handle. The minimum area is increased to not less than 900m² for lots without any street or park frontage.
 - ii. Single access handles are not less than 6m in width, not more than 30m long, and are constructed with a sealed, paved or concreted driveway that is not less than 3m in width.
 - iii. Dual access handles created with a reciprocal right of way) are not less than 10m in width, not more than 30m long, and are constructed with a sealed, paved or concreted driveway that is not less than 5.5m in width.

Diagram 12. Optimal lot orientation for solar access to future dwellings



- iv. Adequate provision is made for the collection of kerbside garbage.
- v. Adequate provision is made for the maneuvering of vehicles.
- i. Development design for street network is to involve:
 - i. Is uncomplicated and fosters walking, cycling and use of public transport for access to daily activities.
 - ii. Enables new housing to front streets, urban parks and natural areas.
 - iii. Makes provision for connections to be made to adjacent future urban areas.
- iv. Enable travel from any address to the most convenient collector street or higher order road in less than three turning movements.
- v. Promotes active transport movement between local and higher order streets and roads.
- j. Development involving the creation of a new lot that only has access via a laneway is to be accompanied by full development plans showing how the new lot can accommodate a future dwelling design that complies with Part C of the Upper Lachlan Development Control Plan 2025.
- k. Development involving creation of a new lot that only has access via a laneway is to incorporate a minimum 1.5m wide frontage linking to the primary road for pedestrian access, bin collection, mailbox delivery and provision of all utility services (if necessary).

Diagram 13. Lot Frontage Standards

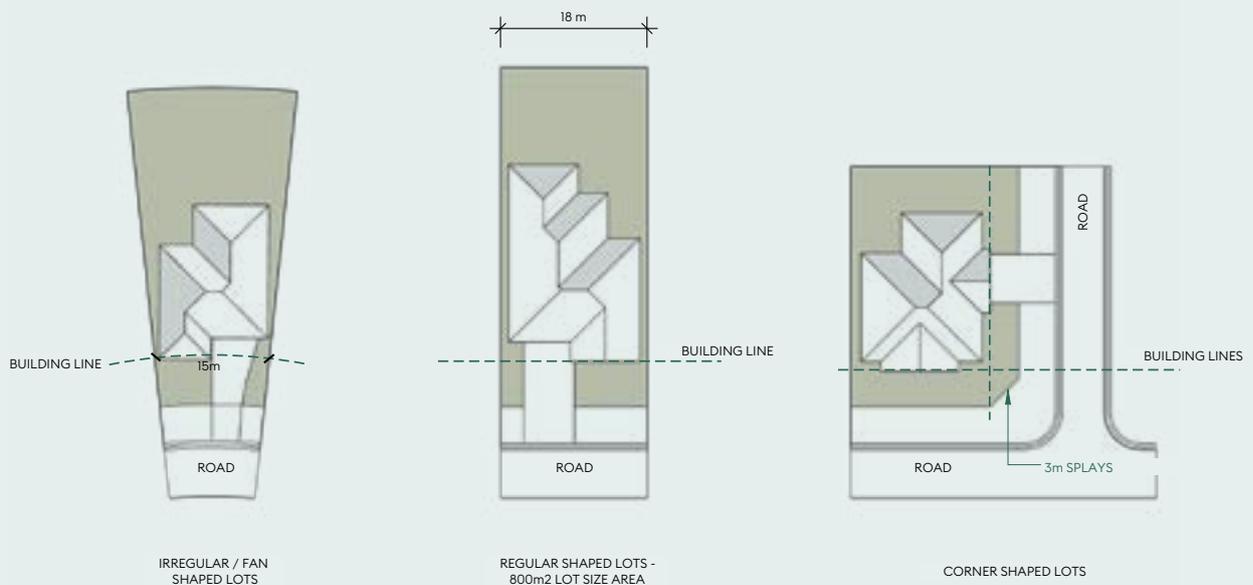




Diagram 14. Battle-axe Lot Design

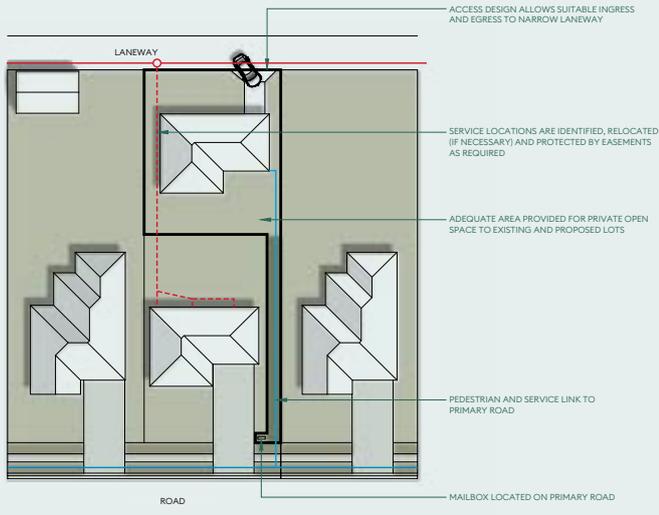


Diagram 15. Design Principles - Laneway Subdivision Lots

B.2.3. Subdivision Road Design

OBJECTIVE

To ensure village subdivision design provides housing choice and is practical, efficient and consistent with the dominant street patterns in the surrounding neighbourhood.

STANDARDS

- a. Development is designed with a practical, legal and safe access to each lot.
- b. Development of the road system is designed to respond to geotechnical, topographical and specific site features in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- c. Development of the road system is designed to the appropriate speed zone limit(s), including any local area traffic management devices, in accordance with AS 1742.13: 2009 Manual of uniform traffic control devices Part 13: Local area traffic management.
- d. Development of roads / vehicle access to each lot is gained onto the local road network in accordance with the Austroads Guide to Road Design Part 4 - Intersections and crossings and Part 4a - Unsignalised and signalised intersections, and not directly onto a classified road, unless there are no other practical means of access available to the lot(s) and access / intersections comply with TfNSW requirements.
- e. Development of existing public road infrastructure abutting the subdivision, including roads, intersections, kerb and gutter and pedestrian and cycling facilities are upgraded / replaced where they do not meet the requirements of Upper Lachlan Shire Council.
- f. Development of the road system is designed to respond to the appropriate road hierarchy (e.g. arterial, collector, local road or minor access road) in accordance with Table 2 and Upper Lachlan Shire Council Engineering Guidelines (latest version).
- g. Development of pedestrian and cycling facilities that are shown in an Active Transport Plan adopted by Council and that apply to the site are undertaken as part of the subdivision works.
- h. Development of kerb and gutter is provided to all classes of roads having speed limits of 50km/hr or less in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- i. Development of street furniture (e.g. lights, trees, signs) is provided in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version), unless otherwise specified in this Part.
- j. Development of public roads, pedestrian and cycling facilities, streetlights, street trees, street signs and road furniture are accommodated within existing / proposed road reserves in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).

Table 2. Road Design Requirements - Village Subdivisions

Design Requirement	Local Distributor	Collector	Local Access	Local Access (Minor)	Cul-de-sac & Minor Access
Maximum traffic volume (vehicles/day)	5000-7000	3000	1000	500	100
Number of dwellings	500-750	300	100	50	10
Carriageway width (m)	13	11	8	7	6
Footway width (m)	2 x 5.5	2 x 5.5	2 x 5.5	2 x 4.0	2 x 3.5
Road Reserve - total width (m)	24	22	19	15	13
Lane provision	2 moving / parking	2 moving / intermittent parking	2 moving / intermittent parking	2 moving / intermittent parking	2 moving / intermittent parking
Maximum desirable speed (km /h)	40-60	30-50	20-30	20-30	15-25
Maximum design speed (km/h) for sight distance calculations	60	50	40	40	30
Footpath	Both sides / shared with cycleway	Both sides	One Side	One side	Not required, unless identified in Active Transport Plan
Cycle Way	2.5m wide shared cycleway	Marked on road	On road shared	On road shared	On road shared
Kerb and gutter	Barrier	Barrier	Barrier	Rollover	Rollover
Street lighting	P2	P3	P4	P4	P5
Reference Diagram	Diagram 9	Diagram 10	Diagram 11	Diagram 12	Diagram 13

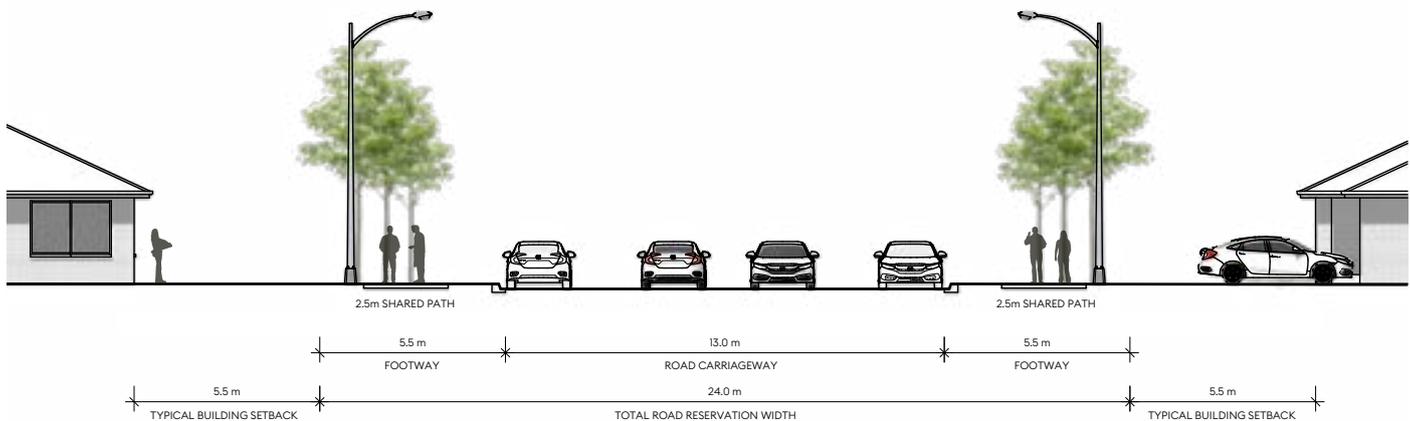


Diagram 16. Road Standards - Local Distributor Road

Diagram 17. Road Standards - Collector Road

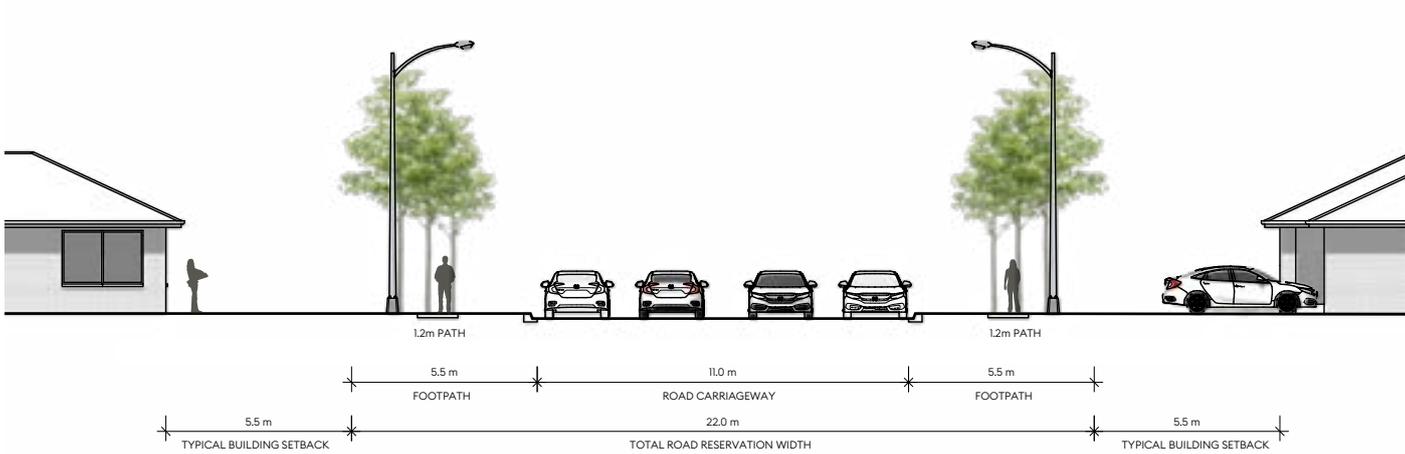


Diagram 18. Road Standards - Local Access Road

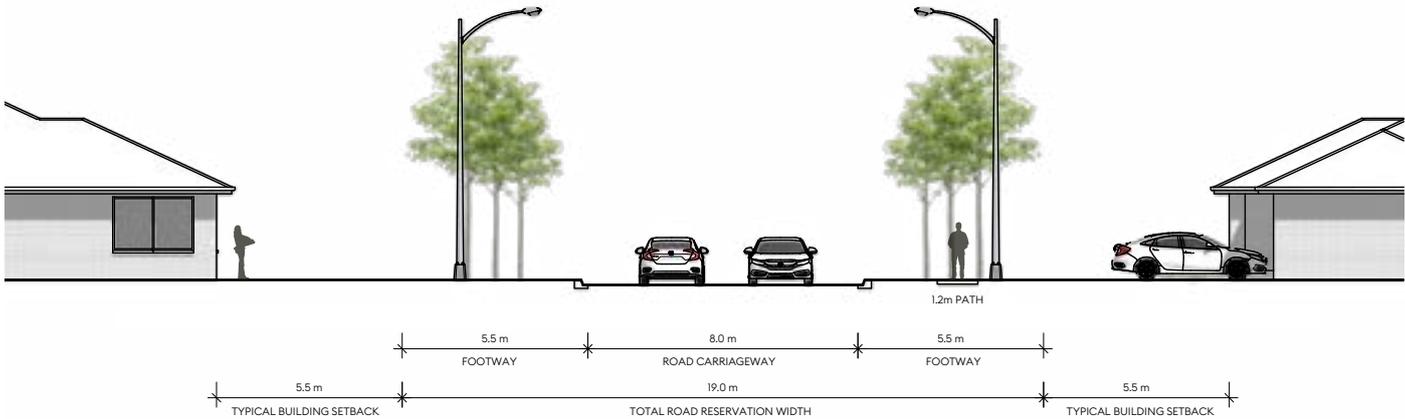


Diagram 19. Road Standards - Local Access (Minor) Road

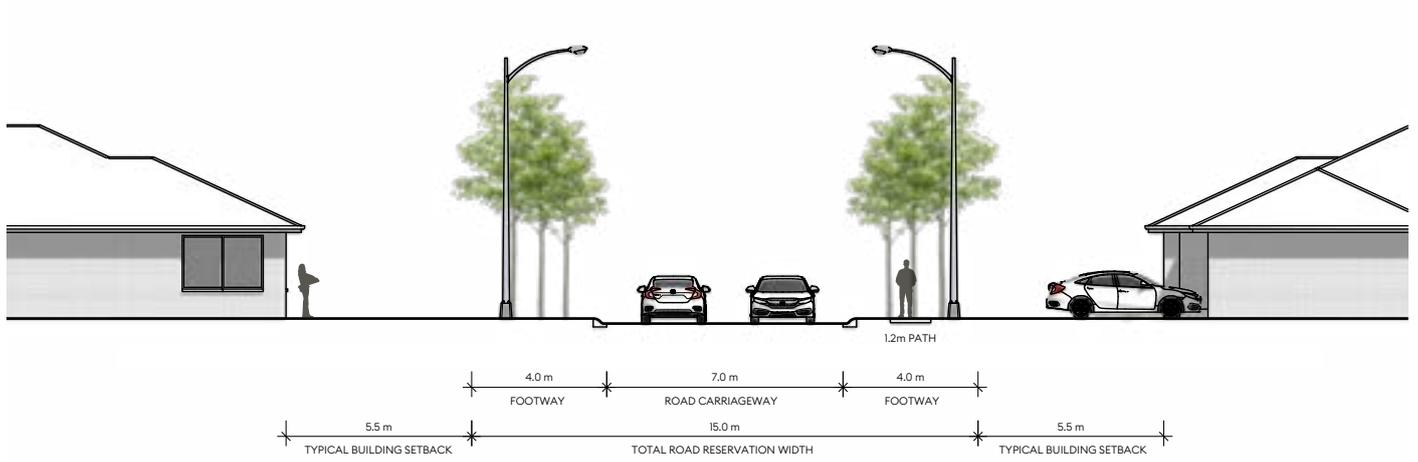
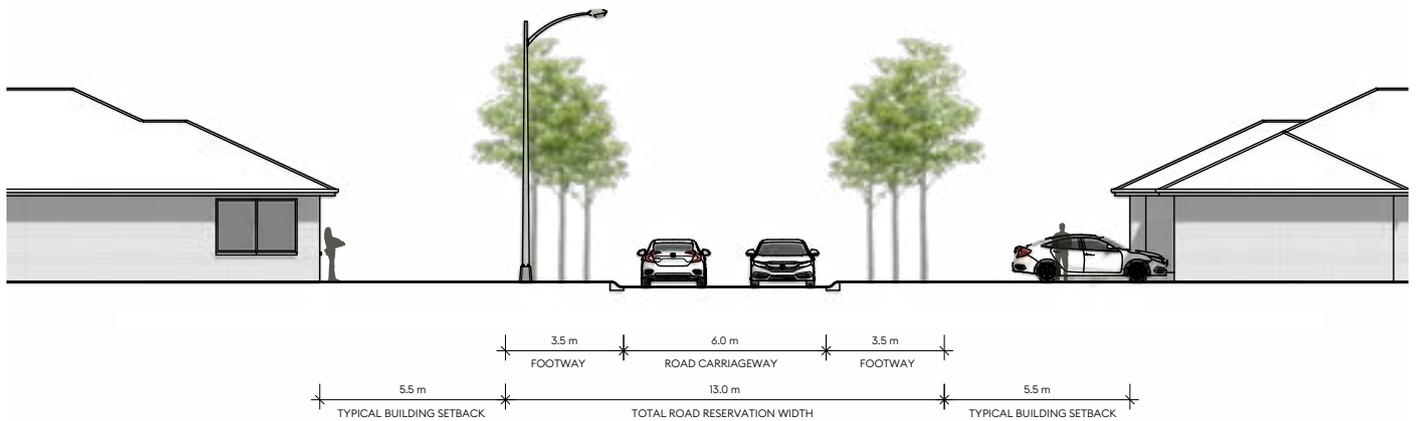


Diagram 20. Road Standards - Cul-de-sac and Minor Access Road



B.2.4. Stormwater Design and Management

OBJECTIVE

To ensure stormwater from village subdivisions is properly drained to a legal point of discharge without causing adverse impacts on public drainage infrastructure, downslope properties or the quality of receiving waters.

STANDARDS

- a. Development is designed so as not to significantly alter pre-development stormwater patterns and flows.
- b. Development is designed to direct stormwater to a legal point of discharge.
- c. Development is designed by a suitably qualified professional in accordance with the Australian Rainfall and Runoff 2019 major and minor event philosophy, as follows:
 - i. Design to accommodate all stormwater in the 10% AEP via underground drainage infrastructure.
 - ii. Design to accommodate all stormwater above the 10% AEP up to the 1% AEP via roads and / or drainage reserves.
 - iii. Design so that post-development runoff rates are equal to or less than pre-development runoff rates for the 1% AEP.
- d. Development of existing stormwater management infrastructure abutting the subdivision development, including road drainage and drainage reserves is upgraded / replaced where it does not meet Upper Lachlan Shire Council Engineering Guidelines (latest version).
- e. Development takes into account any riverine flooding conditions and the stormwater management requirements of the whole site / stormwater drainage system, including stormwater from upslope areas in the catchment, based on a fully developed scenario.
- f. Development in a flood planning area is designed to allow future dwellings to achieve compliance with the flood planning requirements of Upper Lachlan LEP 2010 and the Upper Lachlan Shire Floodplain Risk Management Plan 2017.
- g. Development is designed with easements to drain stormwater over all pipelines, sumps, overland flow paths and channels (other than natural water courses).
- h. Development that cannot drain stormwater to a legal point of discharge via gravity must be supported by a site-specific Stormwater Management Plan prepared by a suitably qualified professional.
- i. Development involving discharge of stormwater to an existing rear lane way is only permitted where kerb and gutter or underground stormwater infrastructure exists, or provided as part of the development where is demonstrated capacity for this infrastructure to handle estimated stormwater runoff.

B.2.5. Public Open Space Provision

OBJECTIVE

To ensure subdivisions (where required) provide accessible, safe, functional and attractive open space that meets the needs of existing and future residents.

STANDARDS

- a. Development of the physical provision of dedicated public open space is required for greenfield subdivisions (i.e. where the lot design is not constrained by existing urban form). Public open space is calculated as part of the subdivision design, based on the following calculation:
 - i. A minimum of 2.83 hectares per 1,000 head of estimated population, calculated at a rate of 4 persons per residential allotment (the calculation formula is $2.83/1,000 \times (4 \times \text{No. of lots}) \times 10,000\text{m}^2$), or
 - ii. 10% of the net developable land area.
- b. Development of public open space must be provided in a manner that:
 - i. Is highly accessible to surrounding residential neighbourhoods.
 - ii. Has a minimum of two frontages to a public street.
 - iii. Has been designed to incorporate any natural or cultural features of the land.
 - iv. Integrates with pedestrian and cycle links, community facilities and other recreational precincts.
 - v. Integrates with major drainage networks and water quality facilities, where these are compatible and do not pose a public safety risk.
 - vi. Complies with CPTED principles contained in Crime Prevention and the Assessment of Development Applications.
 - vii. Can be enjoyed and used for activities by people in a range of different age groups.
 - viii. Can be maintained efficiently.
- c. Development involving infill subdivision or laneway subdivision generally does not require dedication of public open space.
- d. Development involving infill subdivision or laneway subdivision may require a monetary contribution in lieu of public open space in accordance with a Contributions Plan adopted by Upper Lachlan Shire Council.

B.2.6. Landscape Design and Management

OBJECTIVE

To enable the legislative process required for the naming of public roads in NSW.

STANDARDS

- a. Development involving more than 4 lots is to be supported by a Landscape Plan prepared by a suitably qualified professional that adequately demonstrates the objectives of this Part are being met.
- b. Development of landscaping in public open spaces required under Part B1.5 is designed in accordance with a Landscape Plan prepared by a suitably qualified professional.
- c. Development of ground surfaces of public open space must be suitably graded, irrigated, turfed and drained to a legal point of discharge.
- d. Development of ground surfaces of the footpath within the public road reserve must be suitably graded towards the top of concrete kerb at a minimum grade of 2%.
- e. Development of ground surfaces of public drainage reserves must be suitably graded away from buildings and fence lines and drained to a legal point of discharge.
- f. Development is to be provided with street trees in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- g. Development of public reserves / open space must be maintained by the subdivider under a Deed of Agreement with Council for a minimum period of 12 months (commencing after completion to the satisfaction of Council).

B.2.7. Utility and Service Provision

OBJECTIVE

To ensure village lots are provided with essential services and infrastructure that are engineered to minimum design standards.

STANDARDS

- | | |
|---|--|
| <p>a. Development of each new lot is connected to the centralised electricity supply network in accordance with the Essential Energy Connecting to the network information pack 2018.</p> | <p>f. Development that cannot connect to a reticulated sewerage main is to be supported by a geotechnical report prepared by a suitably qualified professional that demonstrates proposed lots are of sufficient land area to comply with the Environmental Health Protection Guidelines On-site Sewerage Management for Single Households (latest version).</p> |
| <p>b. Development is provided with street lighting in accordance with AS/NZS 1158: 2010 Lighting for roads and public spaces.</p> | <p>g. Development that cannot connect to a reticulated sewerage system and is shown as vulnerable groundwater in the Upper Lachlan Local Environmental Plan 2010 as being affected by vulnerable groundwater, the Geotechnical Report includes an assessment of the potential impacts of the development on the groundwater aquifer system.</p> |
| <p>c. Development of each new lot is connected to telecommunications in accordance with the Australian Government's Telecommunications Infrastructure in New Developments policy.</p> | <p>h. Development is provided with common trenching used for compatible services and infrastructure, generally in accordance with the NSW Streets Opening Coordination Council Model Agreement for Local Councils and utility / service providers 2018 and the Streets Opening Coordination Council Guide to Codes and Practices for Streets Opening.</p> |
| <p>d. Development of each new lot is connected to a reticulated water main via a minimum 20mm service and meter in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | |
| <p>e. Development of each new lot is connected to reticulated sewerage (where available) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | |

B.3. | LARGE LOT SUBDIVISION

APPLICATION OF THIS PART

Part B.3 applies to subdivisions on land zoned R5 Large Lot Residential under Upper Lachlan Local Environmental Plan 2010.

TERMS AND DEFINITIONS

Part B.3 uses a number of specific terms that are explained below:

Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian Height Datum (AHD) is the common national surface level datum approximately corresponding to mean sea level.

Building Code of Australia (BCA) is a set of technical provisions for the design and construction of buildings and other structures in Australia, and is now part of the National Construction Code.

Flood Hazard is the potential loss of life, injury and economic loss caused by a future flood event.

Flood Prone Land is land that is susceptible to flooding as per the Upper Lachlan Floodplain Risk Management Plan and Study.

Flood Planning Area is the area of land at or below the Flood Planning Level and thus subject to flood related development controls.

Flood Planning Level (FPL) is the level of the 1% AEP plus a safety freeboard, which is 500mm as adopted by Upper Lachlan Shire Council.

Freeboard is the factor of safety typically used in relation to the setting of floor levels, levees and the like, and is usually expressed as a height above a flood planning level.

Hill is a minimum change in elevation of 20m over a 100m distance.

Landholding means an area of land constituted or worked as a single property, and if comprising more than 1 lot—the lots are contiguous, or separated only by a road or watercourse.

Legal Point of Discharge is the designated location where stormwater from a property is legally permitted to drain into a public stormwater system.

National Construction Code (NCC) is a set of technical provisions for the design, construction, and performance of buildings and plumbing systems in Australia.

On Site Detention (OSD) is a stormwater management system that is designed to temporarily store excess stormwater runoff on a property for controlled release in a manner that ensures it doesn't overwhelm the local drainage system, and may employ design features such as detention basins, water tanks, sumps and the like.

Primary Road is the primary road used to access a property.

Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location.

Ridgeline refers to the highest line (crest) along a hill or mountain ridge.

Site Coverage is the proportion of a site that is covered by buildings / structures.

B.3.1. Earthworks and Retaining Walls

OBJECTIVE

To ensure earthworks associated with large lot residential subdivisions does not negatively impact on soil and water quality, adjoining properties and the wider public realm.

STANDARDS

- a. Development is designed to respond to the natural topography and landform, to minimise cut and fill and maintain drainage flows.
- b. Development involving earthworks and where the land slopes at a grade of 6% or greater, the predominant road alignment should be perpendicular to the contours of the site, wherever practicable.
- c. Development of new roads are constructed at the natural ground level of the site wherever practical, taking into account the constraints of the site and road design requirements.
- d. Development is designed to the natural landform and if the land is sloping prior to subdivisions works, lots are to be designed to reflect inherited slopes.
- e. Development is designed to have a minimum 2% fall towards the proposed stormwater drainage system (roadside drainage infrastructure or drainage reserve / easement), in order to allow for suitable stormwater run-off from the site.
- f. Development involving earthworks is to be suitably protected from soil erosion, soil movement and sedimentation as per Landcom Managing Urban Stormwater Soils and Construction (Blue Book).
- g. Development involving the imported fill must be certified Virgin Excavated Natural Material (VENM).
- h. Development involving retaining walls or other structural supports, including footings and drainage, must be located wholly within private property boundaries and not within proposed public road reservations.
- i. Development is designed to drain stormwater from excavation areas to a legal point of discharge (e.g. inter-allotment drainage pipes, street gutter system or drainage reserve).

B.3.2. Subdivision Lot Design

OBJECTIVE

To ensure large lot residential subdivision design provides housing choice and is practical, efficient and consistent with the dominant street patterns in the locality.

STANDARDS

- a. Development is designed to respond to the Upper Lachlan Local Environmental Plan 2010 in relation to watercourses, riparian areas, flooding, vulnerable groundwater, riparian areas, wetlands, heritage and biodiversity.
- b. Development is designed to be consistent with the dominant lot size configuration along the street servicing the development site, or within the immediate vicinity of the development site.
- c. Development is designed to have a minimum lot frontage that is consistent with the existing dominant subdivision pattern within 200m of the subject land.
- d. Development of corner lots are designed to incorporate a 3m splay parallel to front and side boundaries of the corner allotment.
- e. Development design for battle-axe shaped lots are avoided where possible and only permitted where there is no other means of gaining access to a public road, and compliance with the following is achieved:
 - i. The lot meets the minimum lot size for the zone in Upper Lachlan LEP 2010, exclusive of the access handle. The minimum area is increased to not less than 900m² for lots without any street or park frontage.
 - ii. Single access handles are not less than 6m in width, not more than 30m long, and are constructed with a sealed, paved or concreted driveway that is not less than 3m in width.
 - iii. Dual access handles created with a reciprocal right of way) are not less than 10m in width, not more than 30m long, and are constructed with a sealed, paved or concreted driveway that is not less than 5.5m in width.
 - iv. Adequate provision is made for the collection of kerbside garbage.
 - v. Adequate provision is made for the maneuvering of vehicles.
- f. Development design for street network is to involve:
 - i. Is uncomplicated and fosters walking, cycling and use of public transport for access to daily activities.
 - ii. Enables new housing to front streets, urban parks and natural areas.
 - iii. Makes provision for connections to be made to adjacent future urban areas.
 - iv. Enable travel from any address to the most convenient collector street or higher order road in less than three turning movements.
 - v. Promotes active transport movement between local and higher order streets and roads.

B.3.3. Subdivision Road Design

OBJECTIVE

To ensure large lot residential subdivisions are provided with roads and vehicle accesses that are safe and efficient and engineered to minimum design standards.

STANDARDS

- a. Development is designed to have practical, legal and safe access to each lot.
- b. Development is designed to the road system that is required to service the proposed subdivision and is appropriately designed to respond to geotechnical, topographical and specific site features in accordance with Councils requirements.
- c. Development is designed to the sign-posted speed limit for the area (e.g. 50km/hr, 60km/hr, 80km/hr, 100km/hr) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- d. Development of roads / vehicle access to each lot is gained onto the local road network in accordance with the Austroads Guide to Road Design Part 4 - Intersections and crossings and Part 4a - Unsignalised and signalised intersections, and not directly onto a classified road, unless there are no other practical means of access available to the lot(s) and access / intersections comply with TfNSW requirements.
- e. Development of existing public road infrastructure abutting the subdivision, including roads, intersections, kerb and gutter and pedestrian and cycling facilities are upgraded / replaced where they do not meet the requirements of Upper Lachlan Shire Council.
- f. Development involving the creation of new public roads, or the extension of an existing public road, comply with Table 3 and Upper Lachlan Shire Council Engineering Guidelines (latest version).
- g. Development of street furniture (e.g. lights, trees, signs) is provided in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version), unless otherwise specified in this Part.
- h. Development of driveway locations do not require removal of established street trees.
- i. Development involving dedication of a public road is accompanied by a statement from the applicant suggesting names for the new road that are consistent with the NSW Geographical Names Board Guidelines for the Naming of Roads.

Table 3. Road Design Requirements - Large Lot Subdivisions

Average Annual Daily Traffic	Dwelling Equivalent	Road Reserve	Road Shoulder	Width	Street Lighting	Street Lighting Standard
< 100	Up to 14	20m	1.2m	6m seal	Yes	P5
100-500	14 - 70	30m	1.2m	7m seal	Yes	P5
500-1000	70-140	30m	1.2m	7m seal	Yes	P4
>2000	>285	30m	1.8m	8m seal	Yes	P4

Diagram 21. Road Standards - Local Distributor Road

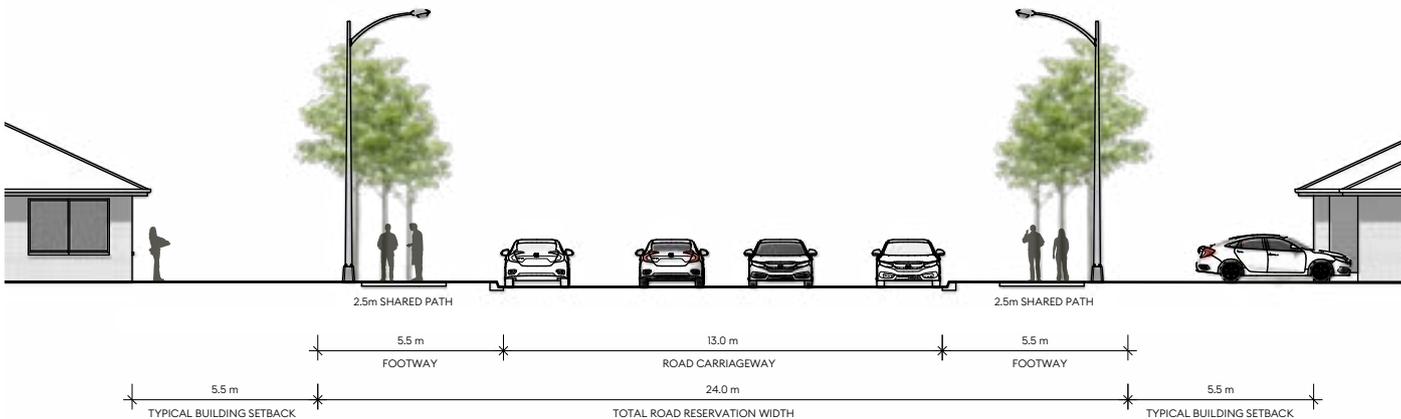


Diagram 22. Road Standards - Collector Road

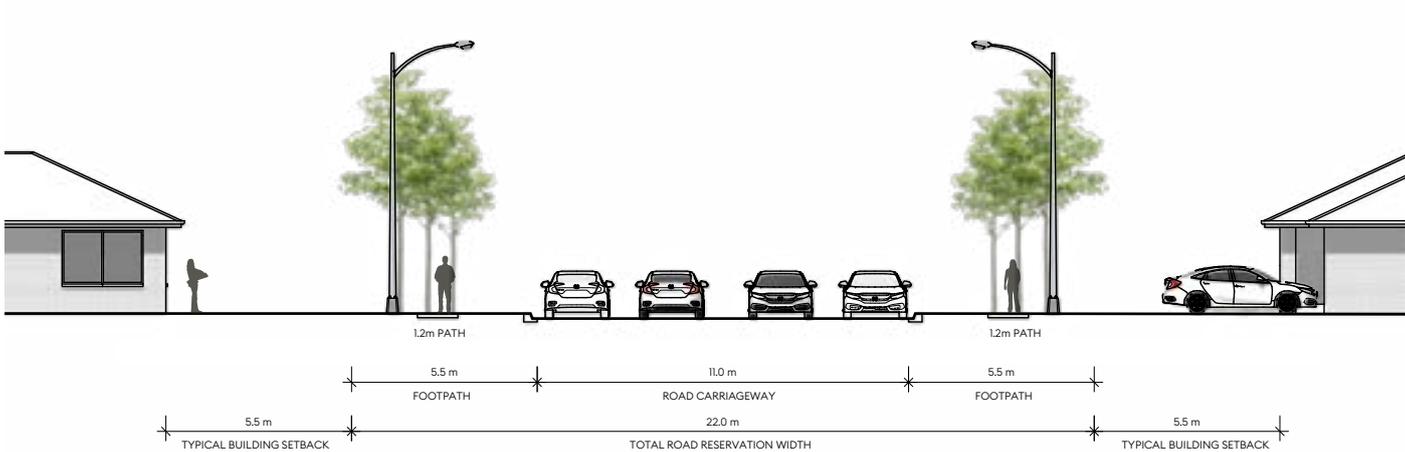


Diagram 23. Road Standards - Local Access Road

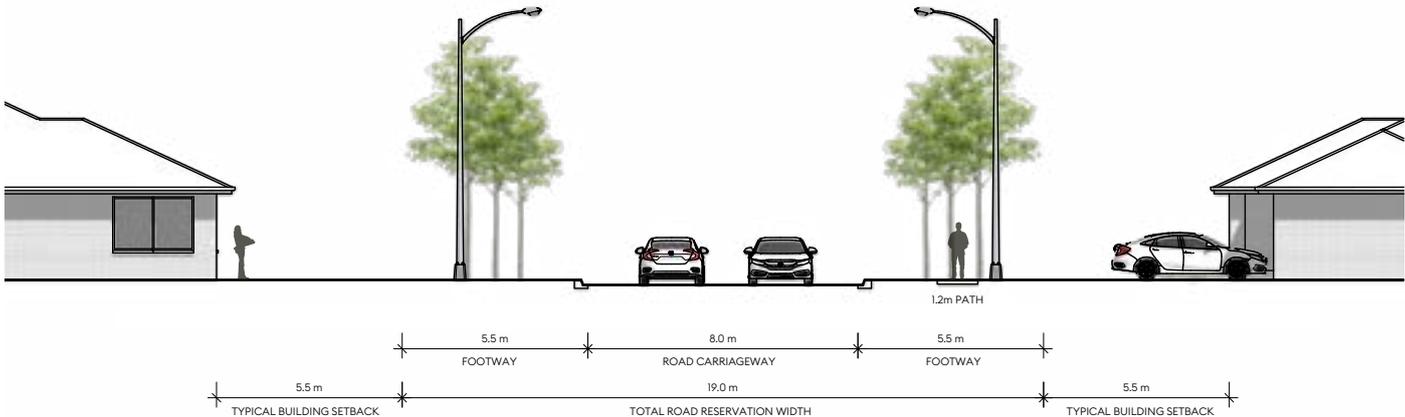
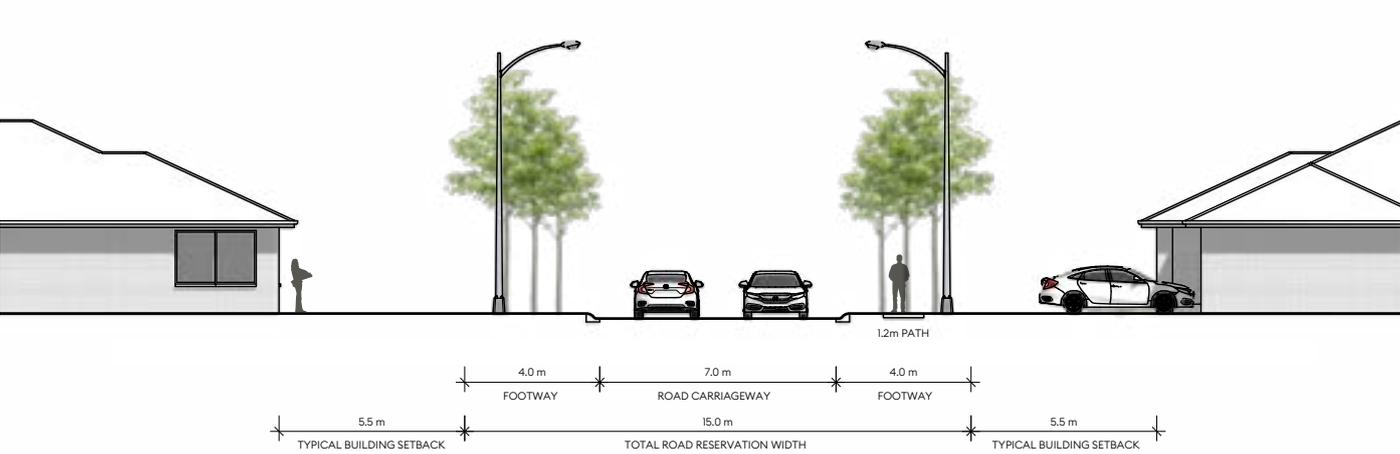


Diagram 24. Road Standards - Local Access (Minor) Road



B.3.4. Stormwater Design and Management

OBJECTIVE

To ensure stormwater from large lot residential subdivisions is properly managed so as not to impact on public infrastructure, downslope properties or the quality of receiving waters.

STANDARDS

- a. Development is designed so as not to significantly alter pre-development stormwater patterns and flows.
- b. Development is designed to direct stormwater to a legal point of discharge.
- c. Development is designed by a suitably qualified professional in accordance with the Australian Rainfall and Runoff 2019 major and minor event philosophy, as follows:
 - i. Design to accommodate all stormwater in the 10% AEP via underground drainage infrastructure.
 - ii. Design to accommodate all stormwater above the 10% AEP up to the 1% AEP via roads and / or drainage reserves.
 - iii. Design so that post-development runoff rates are equal to or less than pre-development runoff rates for the 1% AEP.
- d. Development of existing stormwater management infrastructure abutting the subdivision development, including road drainage and drainage reserves is upgraded / replaced where it does not meet Upper Lachlan Shire Council Engineering Guidelines (latest version).
- e. Development takes into account any riverine flooding conditions and the stormwater management requirements of the whole site / stormwater drainage system, including stormwater from upslope areas in the catchment, based on a fully developed scenario.
- f. Development in a flood planning area is designed to allow future dwellings to achieve compliance with the flood planning requirements of Upper Lachlan LEP 2010 and the Upper Lachlan Shire Floodplain Risk Management Plan 2017.
- g. Development is designed with easements to drain stormwater over all pipelines, sumps, overland flow paths and channels (other than natural water courses).
- h. Development that cannot drain stormwater to a legal point of discharge via gravity must be supported by a site-specific Stormwater Management Plan prepared by a suitably qualified professional.
- i. Development involving discharge of stormwater to an existing rear lane way is only permitted where kerb and gutter or underground stormwater infrastructure exists, or provided as part of the development where is demonstrated capacity for this infrastructure to handle estimated stormwater runoff.

B.3.5. Landscape Design and Management

OBJECTIVE

To ensure public roads and reserves in large lot residential subdivisions are properly landscaped so as to improve the function and appearance of these spaces.

STANDARDS

- a. Development involving large lot residential subdivision generally does not require dedication of public open space.
- b. Development provides street trees in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- c. Development involving ground surfaces of the footpath within the public road reserve must be suitably graded towards the top of concrete kerb at a minimum grade of 2% in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- d. Development involving ground surfaces of public drainage reserves must be suitably graded away from buildings and fence lines and drained to a legal point of discharge in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- e. Development of lots are fenced along their boundaries with fencing that is consistent with the following minimum standards:
 - i. 1.2m high.
 - ii. Steel posts at a maximum of 5m intervals.
 - iii. One barbed wire and 75cm high ring lock or hinge joint attached with three plain wires (top middle and bottom), or 90cm high ring lock or hinge joint attached with three plain wires (top, middle and bottom).
 - iv. Strainer posts at the end of lines and change of direction points.

B.3.6. Utility and Service Provision

OBJECTIVE

To ensure large lot residential subdivision is provided with essential services and infrastructure that are engineered to minimum design standards.

STANDARDS

- | | | |
|---|--|--|
| <p>a. Development of each new lot is connected to the centralised electricity supply network in accordance with the Essential Energy Connecting to the network information pack 2018.</p> | <p>e. Development of each new lot is connected to a reticulated water main via a minimum 20mm service and meter in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | <p>h. Development that cannot connect to a reticulated sewerage system and is shown as vulnerable groundwater in the Upper Lachlan Local Environmental Plan 2010 as being affected by vulnerable groundwater, the Geotechnical Report includes an assessment of the potential impacts of the development on the groundwater aquifer system.</p> |
| <p>b. Development is provided with street lighting in accordance with AS/NZS 1158: 2010 Lighting for roads and public spaces.</p> | <p>f. Development of each new lot is connected to reticulated sewerage (where available) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | <p>i. Development is designed with common trenching and is used for compatible services and infrastructure, generally in accordance with the NSW Streets Opening Coordination Council Model Agreement for Local Councils and utility/service providers 2018 and the Streets Opening Coordination Council Guide to Codes and Practices for Streets Opening.</p> |
| <p>c. Development of each new lot is connected to telecommunications in accordance with the Australian Government's Telecommunications Infrastructure in New Developments policy.</p> | <p>g. Development that cannot connect to a reticulated sewerage main is to be supported by a geotechnical report prepared by a suitably qualified professional that demonstrates proposed lots are of sufficient land area to comply with the Environmental Health Protection Guidelines On-site Sewage Management for Single Households (latest version).</p> | |
| <p>d. Development of each new lot is connected to natural gas (where available) in accordance with the relevant service provider.</p> | | |

B.4. | RURAL SUBDIVISION

APPLICATION OF THIS PART

Part B.4 applies to subdivisions on land zoned RU4 Primary Production Small Lots, RU1 Primary Production and RU2 Rural Landscape under Upper Lachlan Local Environmental Plan 2010.

TERMS AND DEFINITIONS

Part B.4 uses a number of specific terms that are explained below:

Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian Height Datum (AHD) is the common national surface level datum approximately corresponding to mean sea level.

Building Code of Australia (BCA) is a set of technical provisions for the design and construction of buildings and other structures in Australia, and is now part of the National Construction Code.

Flood Hazard is the potential loss of life, injury and economic loss caused by a future flood event.

Flood Prone Land is land that is susceptible to flooding as per the Upper Lachlan Floodplain Risk Management Plan and Study.

Flood Planning Area is the area of land at or below the Flood Planning Level and thus subject to flood related development controls.

Flood Planning Level (FPL) is the level of the 1% AEP plus a safety freeboard, which is 500mm as adopted by Upper Lachlan Shire Council.

Freeboard is the factor of safety typically used in relation to the setting of floor levels, levees and the like, and is usually expressed as a height above a flood planning level.

Hill is a minimum change in elevation of 20m over a 100m distance.

Landholding means an area of land constituted or worked as a single property, and if comprising more than 1 lot—the lots are contiguous, or separated only by a road or watercourse.

Legal Point of Discharge is the designated location where stormwater from a property is legally permitted to drain into a public stormwater system.

National Construction Code (NCC) is a set of technical provisions for the design, construction, and performance of buildings and plumbing systems in Australia.

On Site Detention (OSD) is a stormwater management system that is designed to temporarily store excess stormwater runoff on a property for controlled release in a manner that ensures it doesn't overwhelm the local drainage system, and may employ design features such as detention basins, water tanks, sumps and the like.

Primary Road is the primary road used to access a property.

Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location.

Ridgeline refers to the highest line (crest) along a hill or mountain ridge.

Site Coverage is the proportion of a site that is covered by buildings / structures.

B.4.1. Earthworks and Retaining Walls

OBJECTIVE

To ensure earthworks associated with rural subdivisions does not negatively impact on soil and water quality, adjoining properties and the wider public realm.

STANDARDS

- | | |
|--|--|
| <p>a. Development is designed to respond to the natural topography and landform, to minimise cut and fill and maintain drainage flows.</p> <p>b. Development of new roads are constructed at the natural ground level of the site wherever practical, taking into account the constraints of the site and road design requirements.</p> <p>c. Development is designed to the natural landform and if the land is sloping prior to subdivisions works, lots are to be designed to reflect inherited slopes.</p> <p>d. Development is designed to have a minimum 2% fall towards the proposed stormwater drainage system (roadside drainage infrastructure or drainage reserve / easement), in order to allow for suitable stormwater run-off from the site.</p> | <p>e. Development involving earthworks is to be suitably protected from soil erosion, soil movement and sedimentation as per Landcom Managing Urban Stormwater Soils and Construction (Blue Book).</p> <p>f. Development involving the imported fill must be certified Virgin Excavated Natural Material (VENM).</p> <p>g. Development involving retaining walls or other structural supports, including footings and drainage, must be located wholly within private property boundaries and not within proposed public road reservations.</p> <p>h. Development is designed to drain stormwater from excavation areas are to be properly drained away from buildings, structures and adjoining land.</p> |
|--|--|

B.4.2. Subdivision Lot Design

OBJECTIVE

To ensure rural subdivisions provide for a range of land-use opportunities permitted in the primary production zone without causing impacts on agricultural sustainability and environmentally sensitive lands.

STANDARDS

- a. Development is designed appropriately responds to the relevant provisions of Upper Lachlan Local Environmental Plan 2010 in relation to land mapped as flood planning area, groundwater vulnerable, riparian area, watercourse, wetland area, heritage or an area containing terrestrial biodiversity from inappropriate development.
- b. Development does not lead to fragmentation / alienation of Important Agricultural Land (IAL) identified in the DPI Agricultural Land Use Mapping Resources in NSW - User Guide 2017 and State Environmental Planning Policy (Primary Production) 2021.
- c. Development design minimises disturbance to the natural environment.
- d. Development is designed to be consistent with the dominant lot size configuration along adjoining streets.
- e. Development is designed to incorporate a mix of sizes to provide for a range of housing choice and diversity.

B.4.3. Subdivision Road Design

OBJECTIVE

To ensure rural subdivisions are provided with roads and vehicle accesses that are safe and efficient and engineered to minimum design standards.

STANDARDS

- a. Development is designed to have practical, legal and safe access to each lot.
- b. Development is designed to the road system that is required to service the proposed subdivision and is appropriately designed to respond to geotechnical, topographical and specific site features in accordance with Councils requirements.
- c. Development is designed to the sign-posted speed limit for the area (e.g. 50km/hr, 60km/hr, 80km/hr, 100km/hr) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- d. Development of roads / vehicle access to each lot is gained onto the local road network in accordance with the Austroads Guide to Road Design Part 4 - Intersections and crossings and Part 4a - Unsignalised and signalised intersections, and not directly onto a classified road, unless there are no other practical means of access available to the lot(s) and access / intersections comply with TfNSW requirements.
- e. Development of vehicle access points are grouped at existing or limited access points whenever practical.
- f. Development of existing public road infrastructure abutting the subdivision, including roads, intersections, kerb and gutter and pedestrian and cycling facilities are upgraded / replaced where they do not meet the requirements of Upper Lachlan Shire Council.
- g. Development involving the creation of new public roads, or the extension of an existing public road, comply with Table 4 and Upper Lachlan Shire Council Engineering Guidelines (latest version).
- h. Development of driveway locations do not require removal of established street trees.
- i. Development involving dedication of a public road is accompanied by a statement from the applicant suggesting names for the new road that are consistent with the NSW Geographical Names Board Guidelines for the Naming of Roads.

Table 4. Road Design Requirements - Rural Subdivisions

Average Annual Daily Traffic	Dwelling Equivalent	Road Reserve	Road Shoulder	Width	Street Lighting
< 100	Up to 14	20m	1.2m	6m seal	Yes, at intersections only
100-500	14 - 70	30m	1.2m	7m seal	Yes, at intersections only
500-1000	70-140	30m	1.2m	7m seal	Yes, at intersections only
>2000	>285	30m	1.8m	8m seal	Yes, at intersections only

B.4.4. Stormwater Design and Management

OBJECTIVE

To ensure stormwater from rural lots is properly managed so as not to impact on public infrastructure, downslope properties or the quality of receiving waters.

STANDARDS

- a. Development takes into account the stormwater management requirements of the whole site / stormwater drainage system, including stormwater from upslope areas in the catchment.
- b. Development is provided with all necessary stormwater management infrastructure in a manner that does not create erosion, sedimentation or other downslope impacts.
- c. Development of easements to drain stormwater are provided over all pipelines, sumps, overland flow paths and channels (other than natural water courses).

B.4.5. Utility and Service Provision

OBJECTIVE

To ensure rural lots are provided with essential services and infrastructure that are engineered to minimum design standards.

STANDARDS

- | | |
|--|---|
| <p>a. Development of each new lot is connected to the centralised electricity supply network in accordance with the Essential Energy Connecting to the network information pack 2018.</p> <p>b. Development is provided with street lighting in accordance with AS/NZS 1158: 2010 Lighting for roads and public spaces.</p> <p>c. Development of each new lot is connected to telecommunications in accordance with the Australian Government's Telecommunications Infrastructure in New Developments policy.</p> <p>d. Development of each new lot is connected to a reticulated water main via a minimum 20mm service and meter in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> <p>e. Development of each new lot is connected to reticulated sewerage (where available) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | <p>f. Development that cannot connect to a reticulated sewerage main is to be supported by a geotechnical report prepared by a suitably qualified professional that demonstrates proposed lots are of sufficient land area to comply with the Environmental Health Protection Guidelines On-site Sewage Management for Single Households (latest version).</p> <p>g. Development that cannot connect to a reticulated sewerage system and is shown as vulnerable groundwater in the Upper Lachlan Local Environmental Plan 2010 as being affected by vulnerable groundwater, the Geotechnical Report includes an assessment of the potential impacts of the development on the groundwater aquifer system.</p> <p>h. Development is designed with common trenching and is used for compatible services and infrastructure, generally in accordance with the NSW Streets Opening Coordination Council Model Agreement for Local Councils and utility/service providers 2018 and the Streets Opening Coordination Council Guide to Codes and Practices for Streets Opening.</p> |
|--|---|

B.5. | INDUSTRIAL SUBDIVISIONS

APPLICATION OF THIS PART

Part B.5 applies to subdivisions on land zoned E4 General Industrial under Upper Lachlan Local Environmental Plan 2010.

TERMS AND DEFINITIONS

Part B.5 uses a number of specific terms that are explained below:

Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian Height Datum (AHD) is the common national surface level datum approximately corresponding to mean sea level.

Building Code of Australia (BCA) is a set of technical provisions for the design and construction of buildings and other structures in Australia, and is now part of the National Construction Code.

Flood Hazard is the potential loss of life, injury and economic loss caused by a future flood event.

Flood Prone Land is land that is susceptible to flooding as per the Upper Lachlan Floodplain Risk Management Plan and Study.

Flood Planning Area is the area of land at or below the Flood Planning Level and thus subject to flood related development controls.

Flood Planning Level (FPL) is the level of the 1% AEP plus a safety freeboard, which is 500mm as adopted by Upper Lachlan Shire Council.

Freeboard is the factor of safety typically used in relation to the setting of floor levels, levees and the like, and is usually expressed as a height above a flood planning level.

Hill is a minimum change in elevation of 20m over a 100m distance.

Landholding means an area of land constituted or worked as a single property, and if comprising more than 1 lot—the lots are contiguous, or separated only by a road or watercourse.

Legal Point of Discharge is the designated location where stormwater from a property is legally permitted to drain into a public stormwater system.

National Construction Code (NCC) is a set of technical provisions for the design, construction, and performance of buildings and plumbing systems in Australia.

On Site Detention (OSD) is a stormwater management system that is designed to temporarily store excess stormwater runoff on a property for controlled release in a manner that ensures it doesn't overwhelm the local drainage system, and may employ design features such as detention basins, water tanks, sumps and the like.

Primary Road is the primary road used to access a property.

Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location.

Ridgeline refers to the highest line (crest) along a hill or mountain ridge.

Site Coverage is the proportion of a site that is covered by buildings / structures.

B.5.1. Earthworks and Retaining Walls

OBJECTIVE

To ensure earthworks associated with industrial subdivisions does not negatively impact on the natural environment, adjoining properties, roads, drainage infrastructure and other public assets.

STANDARDS

- a. Development is designed to respond to the natural topography and landform, to minimise cut and fill and maintain drainage flows.
- b. Development involving earthworks and where the land slopes at a grade of 6% or greater, the predominant road alignment should be perpendicular to the contours of the site, wherever practicable.
- c. Development of new roads are constructed at the natural ground level of the site wherever practical, taking into account the constraints of the site and road design requirements.
- d. Development is designed to the natural landform and if the land is sloping prior to subdivisions works, lots are to be designed to reflect inherited slopes.
- e. Development is designed to have a minimum 2% fall towards the proposed stormwater drainage system (roadside drainage infrastructure or drainage reserve / easement), in order to allow for suitable stormwater run-off from the site.
- f. Development involving earthworks is to be suitably protected from soil erosion, soil movement and sedimentation as per Landcom Managing Urban Stormwater Soils and Construction (Blue Book).
- g. Development involving the imported fill must be certified Virgin Excavated Natural Material (VENM).
- h. Development involving retaining walls or other structural supports, including footings and drainage, must be located wholly within private property boundaries and not within proposed public road reservations.
- i. Development is designed to drain stormwater from excavation areas to a legal point of discharge (e.g. inter-allotment drainage pipes, street gutter system or drainage reserve).

B.5.2. Subdivision Lot Design

OBJECTIVE

To ensure that industrial subdivision lots have a size, layout and dimension that is suitable for industrial use.

STANDARDS

- a. Development is designed appropriately responds to the relevant provisions of Upper Lachlan Local Environmental Plan 2010 in relation to land mapped as flood planning area, groundwater vulnerable, riparian area, watercourse, wetland area, heritage or an area containing terrestrial biodiversity from inappropriate development.
- b. Development is designed to create lots that are regular in shape and are of sufficient size and shape to enable the siting of future industrial buildings and ancillary structures, acceptable vehicle access and on-site parking.
- c. Development of lots are to have a minimum width of 40m, except where compliance with d) can be demonstrated the minimum width may be reduced.
- d. Development is designed to create lots that are sized and dimensioned to accommodate the industrial operations, allowing for possible future expansion and the proper and efficient functioning of the site, taking into account:
 - i. The need for provision of safe ingress for staff / visitors.
 - ii. The need for the provision of safe ingress and egress for heavy vehicles.
 - iii. The need for efficient vehicular movement within the new industrial lots (i.e. delivery vehicles, service vehicles and customers), based on the largest type of heavy vehicle anticipated for the subdivision.
 - iv. The need to accommodate on-site car parking.
 - v. The need to provide storage and bin areas.
 - vi. The provision of landscaped areas.
 - vii. The provision of buffer areas between future industrial activities and adjacent or nearby sensitive land-uses.
 - viii. The need to accommodate building setback requirements.
- e. Development of corner lot are designed to incorporate 3m splays parallel to front and side boundaries of the corner allotment.
- f. Development design avoids cul-de-sacs and battle-axe shaped lots which do not easily facilitate the movement of large vehicles.

B.5.3. Subdivision Road Design

OBJECTIVE

To ensure industrial subdivisions are provided with roads and vehicle accesses that are safe and efficient and engineered to minimum design standards.

STANDARDS

- a. Development is designed to have practical, legal and safe access to each lot.
- b. Development involving the creation of new public roads, or the extension of an existing public road, comply with Table 5 and Upper Lachlan Shire Council Engineering Guidelines (latest version).
- c. Development is designed to the road system that is required to service the proposed subdivision and is appropriately designed to respond to geotechnical, topographical and specific site features in accordance with Councils requirements.
- d. Development is designed to the sign-posted speed limit for the area (e.g. 50km/hr, 60km/hr, 80km/hr, 100km/hr) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- e. Development is designed to kerb and gutter is provided to all classes of roads having speed limits of 80km/hr or less.
- f. Development of roads / vehicle access to each lot is gained onto the local road network in accordance with the Austroads Guide to Road Design Part 4 - Intersections and crossings and Part 4a – Unsignalised and signalised intersections, and not directly onto a classified road, unless there are no other practical means of access available to the lot(s) and access / intersections comply with TfNSW requirements.
- g. Development of existing public road infrastructure abutting the subdivision, including roads, intersections, kerb and gutter and pedestrian and cycling facilities are upgraded / replaced where they do not meet the requirements of Upper Lachlan Shire Council.
- h. Development of street furniture (e.g. lights, trees, signs) is provided in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- i. Development of driveway locations do not require removal of established street trees.
- j. Development involving dedication of a public road is accompanied by a statement from the applicant suggesting names for the new road that are consistent with the NSW Geographical Names Board Guidelines for the Naming of Roads.
- k. Development of public roads, street lights, street trees, street signs and other road furniture are accommodated within existing / proposed road reserves.

Table 5. Road Design Requirements - Industrial Subdivisions

Road Reserve	Traffic Lanes	Parking Lane	Footpath	Street Lighting	Street Lighting Standard
30m	2 x 3.5m	2 x 3.5m	2 x 8m	Yes	P3

B.5.4. Stormwater Design and Management

OBJECTIVE

To ensure stormwater from industrial subdivisions is properly drained to a legal point of discharge without causing adverse impacts on public drainage infrastructure, downslope properties or the quality of receiving waters.

STANDARDS

- a. Development is designed so as not to significantly alter pre-development stormwater patterns and flows.
- b. Development is designed to direct stormwater to a legal point of discharge.
- c. Development is designed by a suitably qualified professional in accordance with the Australian Rainfall and Runoff 2019 major and minor event philosophy, as follows:
 - i. Design to accommodate all stormwater in the 10% AEP via underground drainage infrastructure.
 - ii. Design to accommodate all stormwater above the 10% AEP up to the 1% AEP via roads and / or drainage reserves.
 - iii. Design so that post-development runoff rates are equal to or less than pre-development runoff rates for the 1% AEP.
- d. Development of existing stormwater management infrastructure abutting the subdivision development, including road drainage and drainage reserves is upgraded / replaced where it does not meet Upper Lachlan Shire Council Engineering Guidelines (latest version).
- e. Development takes into account any riverine flooding conditions and the stormwater management requirements of the whole site / stormwater drainage system, including stormwater from upslope areas in the catchment, based on a fully developed scenario.
- f. Development in a flood planning area is designed to comply with the flood planning requirements of Upper Lachlan LEP 2010 and the Upper Lachlan Shire Floodplain Risk Management Plan 2017.
- g. Development is designed with easements to drain stormwater over all pipelines, sumps, overland flow paths and channels (other than natural water courses).
- h. Development that cannot drain stormwater to a legal point of discharge via gravity must be supported by a site-specific Stormwater Management Plan prepared by a suitably qualified professional.
- i. Development involving discharge of stormwater to an existing rear lane way is only permitted where kerb and gutter or underground stormwater infrastructure exists, or provided as part of the development where is demonstrated capacity for this infrastructure to handle estimated stormwater runoff.

B.5.5. Landscape Design and Management

OBJECTIVE

To ensure public roads and reserves in industrial subdivisions are properly landscaped and maintained for a reasonable period of establishment time so as to improve the function and appearance of these spaces.

STANDARDS

- a. Development involving industrial subdivision generally does not require dedication of public open space.
- b. Development provides street trees in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- c. Development involving ground surfaces of the footpath within the public road reserve must be suitably graded towards the top of concrete kerb at a minimum grade of 2% in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- d. Development involving ground surfaces of public drainage reserves must be suitably graded away from buildings and fence lines and drained to a legal point of discharge in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).

B.5.6. Utility and Service Provisions

OBJECTIVE

To ensure industrial lots are provided with essential services and infrastructure that are engineered to minimum design standards.

STANDARDS

- | | |
|--|---|
| <p>a. Development of each new lot is connected to the centralised electricity supply network in accordance with the Essential Energy Connecting to the network information pack 2018.</p> <p>b. Development is provided with street lighting in accordance with AS/NZS 1158: 2010 Lighting for roads and public spaces.</p> <p>c. Development of each new lot is connected to telecommunications in accordance with the Australian Government's Telecommunications Infrastructure in New Developments policy.</p> <p>d. Development of each new lot is connected to a reticulated water main via a minimum 20mm service and meter in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> <p>e. Development of each new lot is connected to reticulated sewerage (where available) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).</p> | <p>f. Development that cannot connect to a reticulated sewerage main is to be supported by a geotechnical report prepared by a suitably qualified professional that demonstrates proposed lots are of sufficient land area to comply with the Environmental Health Protection Guidelines On-site Sewage Management for Single Households (latest version).</p> <p>g. Development that cannot connect to a reticulated sewerage system and is shown as vulnerable groundwater in the Upper Lachlan Local Environmental Plan 2010 as being affected by vulnerable groundwater, the Geotechnical Report includes an assessment of the potential impacts of the development on the groundwater aquifer system.</p> <p>h. Development is provided with common trenching is used for compatible services and infrastructure, generally in accordance with the NSW Streets Opening Coordination Council Model Agreement for Local Councils and utility / service providers 2018 and the Streets Opening Coordination Council Guide to Codes and Practices for Streets Opening.</p> |
|--|---|

B.6. | STRATA AND COMMUNITY TITLE

APPLICATION OF THIS PART

Part B.6 applies to subdivisions on any land in the Upper Lachlan Shire for strata or community title purposes.

TERMS AND DEFINITIONS

Part B.6 uses a number of specific terms that are explained below:

Annual Exceedance Probability (AEP) is the chance of a flood of a specific size occurring in any one year, expressed as a percentage. For example, a 1% AEP flood has a 1% or 1 in 100 chance of being reached or exceeded in any given year.

Australian Height Datum (AHD) is the common national surface level datum approximately corresponding to mean sea level.

Building Code of Australia (BCA) is a set of technical provisions for the design and construction of buildings and other structures in Australia, and is now part of the National Construction Code.

Community Title is a form of property ownership where an individual owns a specific lot (like a townhouse or apartment) while also sharing joint ownership of common property, such as driveways, gardens, or shared amenities, through a community association or body corporate. This legal structure allows for the subdivision of land into individual lots and communal areas, creating a community of owners who are collectively responsible for managing and maintaining the shared spaces and are bound by a community management statement.

Flood Hazard is the potential loss of life, injury and economic loss caused by a future flood event.

Flood Prone Land is land that is susceptible to flooding as per the Upper Lachlan Floodplain Risk Management Plan and Study.

Flood Planning Area is the area of land at or below the Flood Planning Level and thus subject to flood related development controls.

Flood Planning Level (FPL) is the level of the 1% AEP plus a safety freeboard, which is 500mm as adopted by Upper Lachlan Shire Council.

Freeboard is the factor of safety typically used in relation to the setting of floor levels, levees and the like, and is usually expressed as a height above a flood planning level.

Hill is a minimum change in elevation of 20m over a 100m distance.

Landholding means an area of land constituted or worked as a single property, and if comprising more than 1 lot—the lots are contiguous, or separated only by a road or watercourse.

Legal Point of Discharge is the designated location where stormwater from a property is legally permitted to drain into a public stormwater system.

National Construction Code (NCC) is a set of technical provisions for the design, construction, and performance of buildings and plumbing systems in Australia.

On Site Detention (OSD) is a stormwater management system that is designed to temporarily store excess stormwater runoff on a property for controlled release in a manner that ensures it doesn't overwhelm the local drainage system, and may employ design features such as detention basins, water tanks, sumps and the like.

Primary Road is the primary road used to access a property.

Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location.

Ridgeline refers to the highest line (crest) along a hill or mountain ridge.

Site Coverage is the proportion of a site that is covered by buildings / structures.

Strata Title is a system of property ownership for buildings like apartments and townhouses, where individual owners possess private units (called 'lots') and share joint ownership of communal spaces (like hallways, gardens, and roofs). This 'common property' is managed by a collective entity, such as an owners corporation or body corporate, which is funded by levies paid by the individual lot owners.

B.6.1. Strata and Community Title Controls

OBJECTIVE

To ensure strata and community title subdivisions comply with relevant building codes.

STANDARDS

- a. Development of strata or community title subdivision will not result in an existing building contravening the provisions of the National Construction Code.
- b. Development is to be provided with practical, legal and safe access to each strata or community title lot.
- c. Development of each new lot is connected to the centralised electricity supply network in accordance with the Essential Energy Connecting to the network information pack 2018.
- d. Development is provided with street lighting in accordance with AS/NZS 1158: 2010 Lighting for roads and public spaces.
- e. Development of each new lot is connected to telecommunications in accordance with the Australian Government's Telecommunications Infrastructure in New Developments policy.
- f. Development of each new lot is connected to natural gas (where available) in accordance with the relevant service provider.
- g. Development of each new lot is connected to a reticulated water main via a minimum 20mm service and meter in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- h. Development of each new lot is connected to reticulated sewerage (where available) in accordance with Upper Lachlan Shire Council Engineering Guidelines (latest version).
- i. Development that cannot connect to a reticulated sewerage main is to be supported by a geotechnical report prepared by a suitably qualified professional that demonstrates proposed lots are of sufficient land area to comply with the Environmental Health Protection Guidelines On-site Sewage Management for Single Households (latest version).
- j. Development that cannot connect to a reticulated sewerage system and is shown as vulnerable groundwater in the Upper Lachlan Local Environmental Plan 2010 as being affected by vulnerable groundwater, the Geotechnical Report includes an assessment of the potential impacts of the development on the groundwater aquifer system.
- k. Development is designed with common trenching and is used for compatible services and infrastructure, generally in accordance with the NSW Streets Opening Coordination Council Model Agreement for Local Councils and utility/service providers 2018 and the Streets Opening Coordination Council Guide to Codes and Practices for Streets Opening.