

SECTION 6 – RESIDENTIAL DEVELOPMENT

Overview

Muswellbrook Local Government Area allows for a wide range of residential development. This development ranges from single dwellings, dual occupancies and residential flat buildings. This type of development is important to create a streetscape for newly release urban areas.

This Section contains the following sub-sections:-

- 6.1 - Built Form
- 6.2 - Urban Landscape
- 6.3 - Dual Occupancies, Multi Dwelling Housing and Granny Flats
- 6.4 - Environmental
- 6.5 – Site Operation

This Section applies to residential development in Zones R1, R5, and RU5 only.

6.1 BUILT FORM

This section addresses the various elements involved in building design. Emphasis is placed on the appearance, height and scale of buildings, together with measures for energy conservation and water management. Good neighbour measures are also included, particularly for maintenance of views and privacy. Other important elements include the provision of car parking and heritage considerations.

6.1.1 Context

Objectives

- a) Site layout and building design responds to the existing characteristics, opportunities and constraints of the site and its context (adjoining land and the locality).

Controls

- (i) Undertake a site analysis in accordance with Section 3 of this DCP.
- (ii) Design the development to respond to the issues identified in the site analysis.

6.1.2 Front Setbacks

Objectives

- a) The character and pattern of setbacks and building orientation within the street is reinforced
- b) New development establishes a characteristic setback pattern to provide a consistent and landscaped setback that reduces the visual impact of buildings on the public domain.

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Controls

- (i) Front setback matches the alignment of the primary facades of adjoining buildings. Where different setbacks occur, use the average of the setbacks of those primary facades.
- (ii) The minimum building line in new residential areas (where there are no adjoining dwelling houses) are to be:

STREET TYPE	MINIMUM FRONTAGE SETBACK
Local Street	4.5 metres
Collector Street	4.5 metres
Bulb of cul-de-sac	4.5 metres
New England Highway	10 metres
Corner allotment	4.5 metres for primary frontage (dwelling entry) Secondary frontage: 2 metres for lots 450m ² - 600m ² ; 3 metres for lots 600m ² - 1500m ² ; 5 metres for lots > 1500m ² . (where no driveway access is proposed or provide 5.5m setback to garage door)

- (iii) The garage width on allotments should not exceed 50% of the site frontage, the remainder of which shall be landscaped.

6.1.3 Side and rear setbacks

Objectives

- a) Adequate side and rear building setbacks for landscaping, privacy, natural light and ventilation between dwellings.

Controls

- (i) A minimum side or rear setback for all dwellings of:
 - 0.9m for walls up to 3m in height;
 - 0.9m plus 0.3m for every metre of wall height over 3m and less than 7.2m
 - For that part of a wall over 7.2m in height, the minimum setback should be increased by 1m for every metre of height over 7.2m.
- (ii) Walls may be built to the side and/or rear boundaries where:
 - The maximum wall height is 3m and there will be no impact on privacy, use of private open space and solar access to adjoining properties;
 - Any openings comply with the fire resistance levels of the Building Code of Australia and are in filled with translucent or opaque materials.
 - The wall height and length match an existing or similarly constructed wall on the adjoining site.

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- Satisfactory arrangements in place for the maintenance of the wall or gutters
- (ii) Application for zero building line will only be considered where the relevant lot or lots are part of an integrated subdivision design.
- (iii) Garages, carports, sheds and other ancillary structures shall be setback at least 450mm from a side boundary to ensure they do not encroach upon adjoining lots. Council may vary this requirement where a site survey can be provided to demonstrate boundary alignments relative to constructed fencing locations.
- (iv) Separation fencing is provided between development land and any adjoining rail corridor.

6.1.4 Building Height and Scale

Refer to the relevant section in Muswellbrook's LEP to determine the height restrictions on buildings within the Shire area.

Objectives

- a) The design of new buildings reflects and reinforces, or is complementary to, the existing character of the locality.
- b) The provision of good design which provides continuity of character between the local building forms and new development by using a selection and / or combination of characteristic elements and massing.

Controls

- (i) Where a building is part of a uniform group of buildings of similar character locate any additions or alterations to the rear and not visible from the street or any public place.
- (ii) Where a building is to be located amongst buildings having a consistent façade repeat the size, location and proportions of window, door openings and other distinctive features such as roof form.
- (iii) Dual occupancies, multi dwelling housing and residential flat building developments must be designed and constructed in a form and scale that resembles the detached character of dwelling-houses in the surrounding neighbourhood.
- (iv) Finishes which are 'textured' rather than bland, through the use of light and shade, diversity in materials and finishes and appropriate decorative treatments.
- (v) Traditional relationship of roof mass to wall ratio, roof pitch and design, length of unbroken ridgelines, parapets, eaves and roofwater guttering detailing.
- (vi) The amount and length of unbroken roof ridge lines, unpunctuated facades, fencing and repetitive form should be minimized.

6.1.5 Front Fencing and Retaining Walls

Objectives

- (a) Front fences contribute to the character pattern of fences.

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- (b) Front fences are well designed, do not dominate the street and contribute to the garden setting.

Controls

- (i) Front fence includes any fence that is forward of the building.
- (ii) Do not obscure views of the building and garden, from the street, with high front fences.
- (iii) Do not build semi-transparent front fences (with no more than 50% solid construction – eg. open picket fences) higher than 1.5m.
- (iv) Do not build solid front fences higher than 1.0m (such as masonry, lapped and capped timber, brushwood).
- (v) Terracing and retaining walls are not more than 1.5 metres in height below or 1 metre above existing ground level within the front setback.
- (vi) Slopes between retaining walls/terracing shall be landscaped and are not to be greater than 4 horizontal to 1 vertical.

6.1.6 Garages, Carports and Sheds

Objectives

- a) To ensure that ancillary buildings do not dominate the streetscape and reflects the existing location of ancillary buildings within the streetscape.

Controls

- (i) Garages, carports and sheds visible from the street shall compliment (i.e. not detract from) the colour and roof form (i.e. pitch) of the dwelling on that allotment.
- (ii) Garages and sheds are not located forward of the established building line.
- (iii) Open carports, less than 36m² in roof area and no greater than 6m wide, may be built to the side boundary or no closer than 1m to the street frontage provided they meet the objectives of this clause.

6.1.7 Dwelling Entry

Objectives

- (a) The entry of any dwelling is readily apparent from the street and conveys a sense of address.
- (b) Safe access to dwellings and security for residents.

Controls

- (i) Create an address to the street or any public access-point by incorporating the front door and/or windows of habitable rooms in the façade facing the street or public access-point.
- (ii) Provide an entry that is clearly identifiable from the street, has adequate lighting and has direct access to the street frontage – do not conceal or recess dwelling entries.

6.1.8 Accessibility and Adaptability

Objectives

- a) To ensure that new multi dwelling housing stock incorporate design features that meet a variety of housing needs.

Controls

- (i) Provide a minimum of 10% (or part thereof) of dwellings as adaptable housing designed in accordance with the provisions of AS4299.
- (ii) The required adaptable housing units are to be designed with accessible features for people with disabilities, and to incorporate level entries and wider doorways and corridors, slip resistant surfaces, reachable power points, disabled toilet, and lever door handles and taps; such features to be designed generally in accordance with Australian Standard 4299.
- (iii) Integrate the adaptable housing components, do not isolate them or use a different standard of materials and finishes - show proposed adaptable units on any development application plans submitted.

6.1.9 Reflective Materials

Objectives

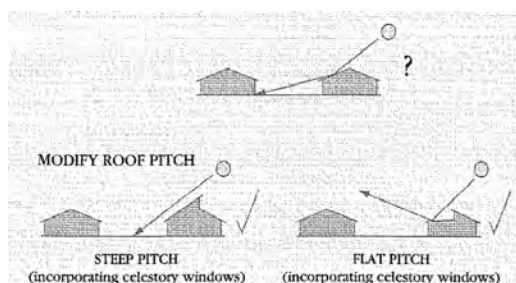
- (a) Colours and material used in new buildings reflects and reinforces the existing character of the locality.
- (b) Colours and materials used in new buildings do not result in adverse impacts to adjoining or nearby premises.

Controls

- (i) Use natural colours, muted and earth tones for major areas of the building, such as walls and roof, and restrict stronger colours to smaller features such as window frames, doors and decorative woodwork
- (ii) Avoid extensive use of highly reflective glass, highly reflective metal cladding (such as *Zincalume* and white *Colorbond*) and plastics on the exterior of buildings. Use factory pre-coloured materials with low reflective properties.
- (iii) If highly reflective materials are proposed to be used, the applicant must demonstrate to the satisfaction of Council that the proposed material compliments the surrounding locality, is the most appropriate outcome for the site, and that no nearby or adjoining properties will be adversely affected by glare nuisance. The applicant shall address in detail the alternative options considered in the design process, orientation of the buildings/proposed material, the roof pitch, sun angles, the location of properties and public places that may be affected by glare either in the immediate vicinity or within a wider area in likely to be affected, and any measure to be incorporated into the works to mitigate any potential impacts (eg landscaping, screens and the like)

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- (iv) In the event that a glare nuisance does arise from the use of a material, Council reserves the right to require materials to be treated to address glare nuisance.



6.2 URBAN LANDSCAPE

6.2.1 Usable Open Space

Usable open space can include private and communal open space but does not include public open space. The provision of public open space is also dealt with in the relevant Section 94 Contributions Plan.

To be included in usable open space calculations, open space at ground level must have a minimum dimension of 3m (and above ground level a minimum dimension of 2m).

Roof gardens, terraces, balconies and verandahs can count as usable open space provided they are not enclosed and if it can be demonstrated that the bulk of the building is satisfactory and no undue lack of privacy results:

Objectives

- (a) To provide sufficient and accessible open space for the reasonable recreational needs of residents.
- (b) To provide private open space meets requirement for privacy of the user and adjoining properties, safety, access, outdoor activities and landscaping.
- (c) To locate any open space to take account of outlook natural features of the site and neighbouring buildings or public open space.

Controls

- (i) In multi dwelling housing or residential flat buildings, provision of a minimum of 35m² of principal private open space shall be provided per dwelling which is located at or near ground level and directly accessible form the living area.
- (ii) Narrow elongated areas with any dimension less than 4m shall not be included as part of the principal private open space.
- (iii) Where the dwelling is located above ground level, a balcony is provided having a minimum area of 8m² and a minimum dimension of 2m with direct access from the main living area of the dwelling.
- (iv) Screening is to be provided where necessary to maintain privacy.

6.2.2 Carparking

Objectives

- (a) Adequate on-site carparking provisions for residents.
- (b) Car parking is provided on site to a standard that ensures safe and convenient manoeuvring of vehicles

Controls

- (i) Provide on-site carparking in accordance with AS2890.1 and Section 16 of this DCP.
- (iii) Design access ways and driveways for multi dwelling housing and residential flat buildings to enable vehicles to:
 - Enter the parking space or garage in a single turning movement.
 - Leave the parking space in no more than two turning movements.
 - Avoid queuing on public roads
- (iv) Comply with AS 1428 - Design for Access and Mobility for multi dwelling housing and residential flat buildings where adaptable housing units are to be provided.
- (v) Provide manoeuvring space on site for multi dwelling housing and residential flat buildings to allow cars to enter and leave the site in a forward direction.
- (vi) Provide separate driveway and pedestrian access for multi dwelling housing and residential flat buildings.
- (vii) Designate disable and visitor carparking for multi dwelling housing and residential flat buildings as common property in any strata plan.

6.2.3 Landscaped area

Objectives

- (a) Residential development incorporates or retains areas of the site as a landscaped setting to promote a desirable character for the neighbourhood
- (b) Residential development meets the definition of “landscaped area” in the LEP and provides usable areas of outdoor space, for the enjoyment of residents.
- (c) To provide a landscaped buffer between adjoining properties, and
- (d) To maximise retention and absorption of surface drainage water on site

Controls

- (i) Residential development must not be carried out in a R1 Residential or RU5 Village zone unless a minimum of 35% of the total site area is “landscaped area” as defined in the LEP.
(**landscaped area** in the LEP means a part of a residential site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area)

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- (ii) Do not break landscaped area into a series of small fragmented areas that are unusable.
- (iii) Retain existing mature vegetation and trees and show what measures are to be implemented to protect this vegetation during construction.
- (iv) Landscaped area is located to the rear or northern boundary of the site
- (v) Use pervious material or stepping stones where pathway is incorporated in side setback.
- (vi) For dual occupancies, multi dwelling housing and residential flat buildings, a landscape plan is to be submitted
- (vii) The selection of tree species indicated on the landscaping plan must be in a scale with the size of the proposed building/s. For example, buildings of 2 storeys must include trees with an achievable mature height of at least 8 metres.

6.2.4 Landscaping

Objectives

- (a) Landscaping and planting satisfies minimum performance standards and is sustainable and appropriate to the site.
- (b) Landscaping design contributes positively to the character of the locality

Controls

- (i) Include locally occurring native species to extend habitats for fauna and reduce water and fertilizer requirements.
- (ii) Minimise disturbance of natural ground levels, native vegetation and topography in the vicinity of identified significant trees.

6.2.5 Dual Occupancy Housing, Multi Dwelling Housing and Secondary Dwellings

Dual Occupancy is the development of two dwellings on a single site, either detached or attached. Dual Occupancy housing occurs throughout the Muswellbrook Shire within residential areas. Dual Occupancy buildings provide for greater residential densities whilst being consistent with the general low-density residential character of an area.

Careful consideration needs to be given to the site layout of dual occupancies and multi dwelling housing to ensure privacy is retained on neighbouring lots and that the building has a quality frontage along the street. The key outcome of successful dual occupancy development and multi dwelling housing is to retain similar characteristics to dwelling houses particularly the buildings appearance and landscaping when viewed for the street as well as ensuring privacy on neighbouring lots.

Secondary dwellings occur where one of the two dwellings is far smaller than the other giving the overall building the appearance of a single dwelling. Allotments with a dwelling and a granny flat are always Torrens title, they cannot be subdivided or strata subdivided.

The impacts of multi dwelling housing also needs to be considered in relation to existing infrastructure capacity, to ensure that the need for additional infrastructure is not required to service increased residential densities in a residential area. Such issues

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include sewer and water capacity, road capacity and on street car parking, waste collection, and stormwater disposal.

For the above reasons, residential density controls have been imposed to ensure that residential densities do not exceed the density envisaged at the time of subdivision estate approval, or that infill development reflects densities relative to site areas in established areas of Muswellbrook and Denman.

Suitable Locations for Dual Occupancy Housing

Dual occupancy housing is suitable within most residential locations and are more easily achieved on lots with a wide street frontage or on corner sites.

Occupancy Rates

For the purposes of establishing residential densities, occupancy rates will be as follows:

One (1) bedroom dwelling =	1.23 persons
Two (2) bedroom dwelling =	1.79 persons
Three (3) bedroom dwelling =	2.52 persons
Four (4) or more bedroom dwelling =	3.02 persons

Objectives

- a) To provide an alternative form of housing that is able to be serviced by existing infrastructure capacity.
- b) To ensure compatibility with the character of dwelling houses and surrounding development.
- c) To ensure compatibility with the existing streetscape.

Controls

- (i) The residential density of dual occupancy developments and multi dwelling housing on residentially zoned land must be no greater than 60 persons per site hectare.
- (ii) Dual occupancy and multi dwelling housing must be located on significantly regular, rectangular or square, shaped lots and not on battle-axe lots.
- (iii) Each dwelling is to be designed so that the access way to the front door is clearly identifiable from the public street.
- (iv) Each dwelling with a street frontage is to be designed so that the front door faces the street.
- (v) Each dwelling must provide a ground level with at least one habitable room, which must have an adjacent external living area located on ground (car parking is not considered as a ground level). A ground level comprising solely car parking is not acceptable.
- (v) Each dwelling must have an external living area.
- (vi) Dual occupancy and multi dwelling housing is to be compatible with residential streetscape character.

Example:

The maximum residential density of a site with an area of 750m² would be:

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60 persons per site hectare (60 persons / 10,000m²) = 1 person / 166.67m²

750m² / 166.67m² = 4.5 persons

Therefore a site with an area of 750m² could accommodate one (1) two bedroom dwelling plus one (1) three bedroom dwelling (ie 1.79 + 2.52 persons = 4.31 persons)

6.3 ENVIRONMENTAL

6.3.1 Topography

Objectives

- (a) Natural topography and landform are maintained. The amount of excavation is minimised.

Controls

- (i) Finished ground levels are no greater than 1.5 metres below or 1 metre above ground level (existing).
- (ii) Locate habitable rooms (not including bathrooms, laundries and storerooms) above the ground level (existing).
- (iii) Retaining walls are no greater than 1.5 metres below or 1 metre in height above ground level (existing).

6.3.2 Solar Access

Objectives

- a) To provide dwellings with adequate daylight and natural ventilation to habitable rooms and adequate sunlight to private open spaces.
- b) To avoid significant overshadowing of habitable rooms and private open spaces on adjoining land.

Controls

- (i) Complete a site analysis as referred to in Section 3 of this DCP.
- (ii) Sunlight to the principal area of ground level private open space of adjacent properties should not be reduced to less than 4 hours between 9am and 3pm on June 21. Where existing overshadowing by buildings and fences is greater than this, sunlight should not be reduced by more than 20%. Where overshadowing may occur, a shadow diagram is required to demonstrate that this control has been met.
- (iii) The following measures may be required to reduce overshadowing:
 - a. The building resited or setbacks increased;
 - b. Heights reduced;
 - c. The roof design amended

6.3.3 Visual Privacy

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Objectives

- (a) Visual privacy for all residents is maintained

Controls

- (i) Locate windows and outdoor spaces to avoid direct or close views into the windows, balconies or private open space of adjoining dwellings as per the table below.
- (ii) Provide suitable permanent screening structures or mature planting to minimise overlooking from proposed dwellings to the windows, balconies or private open space of adjacent dwellings, to windows, balconies or private open space of dwellings within the same development.
- (iii) For multi dwelling and residential flat buildings, provide adequate separation between habitable rooms, balconies and non-habitable rooms, within the development and to adjoining development as follows:-

Habitable building separation		
Separation between windows in habitable rooms	Separation between habitable balconies /outdoor space and non-habitable rooms	Separation between non-habitable rooms
12	9	6

Note: The above separation distances can be reduced where suitable screening structures (in addition to landscaping) is provided to obscure direct views

6.3.4 Acoustic Privacy

Objectives

- a) To ensure that development does not result in adverse amenity impacts arising from noise generation.

Controls

- (i) Site layouts ensure parking areas, streets and shared driveways have a line of sight separation of at least 3m from bedroom windows.
- (ii) Openings of adjacent dwelling are separated by a distance of at least 3m.
- (iii) Shared walls and floors between dwellings are constructed to limit noise transmission.
- (iv) Dwellings adjacent to high levels of uncontrollable external noise are designed to minimise the entry of that noise.
- (v) Site layout and design separates active recreational areas, parking areas, vehicle access ways, and service equipment areas from bedroom areas of dwellings.
- (vi) Mechanical plant or equipment is designed, located or enclosed to minimise noise nuisance.
- (vii) Development adjacent to rail corridors identified in clause 31 of the LEP will require an acoustic report to be submitted to Council to address and

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indicate measures to mitigate potential impacts from noise and vibration. Relevant publications available from "Railcorp" for consideration are:-

- *Rail Related Noise and Vibration; Issue to Consider in Local Environmental Planning*
- *Interim Guidelines for Councils - consideration of rail noise and vibration in the planning process*
- *Guidelines for applicants - consideration of rail noise and vibration in the planning process*

6.4 SITE OPERATION

6.4.1 Energy Conservation

Objectives

- a) To achieve energy efficient housing, using passive solar design, that provides residence with year round comfort and reduce total energy consumption for heating and cooling.
- b) To encourage the use of building materials that are energy efficient, non-harmful and environmentally sound.

Controls

- (i) Complete a site analysis as referred to in Section 3 of this DCP.
- (ii) The requirements of any BASIX certificate issued for the proposed development are complied with.
- (iii) For minor alterations and additions to which BASIX does not apply, incorporate the following measures into the building design and construction where applicable:-
 - Hot water systems installed in dwellings have an energy star rating of at least 3.5 stars.
 - Incorporate insulated walls and ceilings to contribute to the effectiveness of thermal mass
 - Thermal insulation complies with Australian Standard AS 2627 Part 1-1993
 - Use water saving shower roses or shower flow restrictors, with a water conservation rating of 'AAA' or better in all dwellings
 - Use water saving dual flush cisterns in all dwellings
 - Install pool cover where proposed development includes a swimming pool

6.4.2 Stormwater Management

Objectives

- (a) To provide for more efficient usage of water and improve water quality which is sustainable and requires minimal maintenance.
- (b) To maintain existing site discharge rates.
- (c) To maintain existing or control flow paths in excess of design requirements.

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- (d) To cater for flows entering the site, and to ensure that there are no adverse effects from flows leaving the site.
- (e) To encourage water re-use within the dwelling and for landscaping purposes, through the installation of rainwater tanks.

Controls

- (i) Ultimate discharge for collected stormwater runoff shall be to a street drainage system, to an inter-allotment drainage line, or by approval, to a public area.
- (j) The system shall be “gravity” drained.
- (k) Pumping of stormwater is not permitted.
- (ii) The development site shall provide an overland flow path for the major storm event (1% AEP).
- (iv) Compliance with section 25 of this DCP

6.4.3 Stormwater Management

Refer to Section 25 of this DCP.

6.4.4 Security, Site Facilities and Services

Objectives

- (a) Site facilities are unobtrusive, integrated into developments, provide for needs of residents and reduce impact of development on the environment.

Controls

- (i) Provide open air clothes drying facilities in a sunny location, which is adequately screened from streets and public places and receives no less than 2 hours of direct sun per day.
- (ii) For three (3) or more units, a garbage storage area is to be provided on site so as to be readily accessible from within the site and serviceable by the waste collector from the adjoining public land.
- (iii) Garbage storage areas are to be provided with a water tap for wash down purposes and drained to connect to the sewer.
- (iv) Provide a lockable mail box, for each dwelling, close to each ground floor dwelling entry, or a mail box structure located close to the major pedestrian entry to the site and complying with the requirements of Australia Post.
- (v) Adequate numbering system and signage is provided.
- (vi) In order to minimise the amount of externally visible antennae equipment, dwellings within a multi unit housing development should be provided with wiring for a common television reception system.
- (vii) The design and provision of public utilities, including sewerage, water, electricity, street lighting, telephone and gas services to conform to the cost-effective performance measures of the relevant servicing authority.
- (viii) Adequate light is provided to all pedestrian paths, shared areas, parking areas and building entries.

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