

**22.03**17/11/2016  
C89**HEALTHY AND SUSTAINABLE NEIGHBOURHOOD DESIGN**

This policy applies to the subdivision and development of all urban land.

**Policy Basis**

This policy provides a local response to Clause 11 (Settlement) and Clause 15 (Built Environment and Heritage) of the SPPF, and builds on the provisions of the MSS in Clause 21.04 (Settlement and Housing) and 21.07 (Built Environment and Heritage) of the LPPF.

**Objectives**

To create an environmentally sustainable urban environment with reduced greenhouse emissions.

To increase the resilience of new neighbourhoods to respond to a changing climate and increases in extreme weather events.

To minimise energy use, especially at peak periods.

To improve the resilience of Mildura's natural systems.

To increase the amount of water retention and extent of vegetation within Mildura's urban areas.

To promote safety and encourage participation in community life through well designed public spaces.

To encourage the provision of housing that caters for the needs of Mildura's residents at different stages of their lives, and for different mobility, income and cultural groups.

To encourage a variety of medium density residential typologies suited to Mildura.

To encourage consideration of the provision of universal access in early stages of design.

To provide for new neighbourhoods that are walkable for the majority of residents, where access to key services and public spaces can be achieved in a safe, efficient and enjoyable manner.

**Policy**

It is policy to:

**Energy and resource efficiency**

- Seek to minimise energy use, and therefore reduce heat emissions within urban areas, through subdivision and building design.
- Encourage the design of new buildings, streets and public spaces to minimise their contribution to the urban heat island effect and contribute to cooling the suburbs.
- Encourage the planting of trees in locations that minimise the urban heat island effect by providing shade and shelter for dwellings and public spaces.
- Encourage the design and orientation of all new development to maximise the use of passive systems and climatic factors to reduce energy usage.
- Encourage the utilisation of landscape design to assist in passive solar heating and cooling and the introduction of vegetation to the east, west and northern side of dwellings.

- Support new developments that minimise their embodied energy by choice of materials, construction techniques or retention of existing building fabric.
- Encourage the use of energy efficient techniques that may include:
  - low energy lighting systems and lighting management controls;
  - solar and passive heating systems and natural or solar assisted ventilating and cooling systems;
  - laminating, tinting or double glazing to control heat gain and loss;
  - use of high thermal performance building materials;
  - energy recovery systems;
  - energy storage systems such as heat sinks and air conditioning automatic control systems; and / or
  - external facade elements which offer climate control benefits.
- Support on-site renewable and low emission energy generation, such as solar hot water or photovoltaic cells.
- Support the incorporation of water sensitive urban design, including stormwater harvesting and flow attenuation, and water recycling and reuse.
- In street design, acknowledge that north-west / south-east and north-east / south-west oriented streets are an appropriate outcome in Mildura's climatic context in balancing solar access requirements.
- Promote the use of lighter coloured roofs and paving treatments to reduce heat absorption.
- Require the provision of eaves on all new residential buildings to reduce heat absorption.
- Require building envelopes to be identified at planning application stage, identifying a maximum building footprint (which should be related to the lot size), location of garages and main internal living areas.
- Ensure that new development does not adversely affect the environmental performance of adjoining properties (e.g. overshadowing of solar panels).

**Landscape and water sensitive urban design**

- Increase tree cover as street trees, in backyards and as broad scale revegetation.
- Protect existing remnant patches of vegetation, where these can be integrated into urban areas as a first priority.
- Create green linkages or urban vegetation corridors through growth areas and encourage additional vegetation in the private realm.
- Emphasise the provision of vegetation around any water bodies, creeks or channels where vegetation growth can be maximised.
- Ensure provision for generous areas of public open space within any new growth area, and maintain and enhance existing 'left over' spaces through revegetation.
- Provide street tree planting in every new street in Mildura and develop a 'street tree planting guide' to identify trees that provide the greatest level of shade, while being suitable to the Mildura climate.
- Introduce street tree planting to existing streets where there is capacity to do so.

- Minimise the provision of hard surfaces in public open spaces, and where hard surfaces are provided, break these up with vegetation and encourage the use of permeable paving.
- Discourage the use of non-living landscape treatments such as artificial turf and tanbark, particularly in darker materials or non-natural colours.
- Require hard surfaces in new dwellings to utilise permeable treatments as a first priority.
- Encourage all new non-residential developments to provide landscaping in setback areas, ground floor open spaces and outdoor car parking areas that:
  - Integrate new buildings and pedestrian spaces into the surrounding neighbourhood and provide pleasant outlooks; and
  - Include vegetation species that are suitable to the climate, with indigenous planting preferred.
- Support the development of innovative responses which introduce additional vegetation into urban areas, such as green roofs or moveable gardens.
- Require any new areas of at-grade car parking providing more than 10 car spaces to incorporate canopy trees (preferred) or other shading mechanisms, and to include permeable areas.
- Ensure that planning at the precinct stage considers opportunities for the integration of water sensitive urban design in larger scale drainage systems.
- Integrate more localised on-site retention of water through the introduction of rain gardens or similar treatments within the public realm.
- Promote the introduction of water tanks in new development, as required by the Building Code of Australia, and ensure they are appropriately sited.
- Encourage landscape treatments to provide a green landscape character and quality along main boulevards, including Deakin Avenue, Fifteenth Street and Sixteenth Street.

#### **Public open spaces**

- Require an equitable spatial distribution of open space, and consideration of the range of different open spaces which may be required by the Mildura community.
- Require the design of open space to incorporate shade, shelter, seating and signage opportunities.
- Encourage community spaces and buildings to incorporate a range of uses, so that these facilities are activated in both the day and evening.
- Encourage the design of parks and open spaces to include connections to key pedestrian routes, as well as signage indicating direction and time to key destinations by active transport means.
- Support the development of linear open spaces throughout the urban area, including the use of:
  - ‘Greenways’ – active transport corridors which provide connections to key destinations and which include generous provision of landscaping, places to ‘pause’ and appropriate street furniture; and
  - ‘Blueways’ – open spaces which utilise the historic irrigation channels to create attractive features through new urban areas which assist in cooling the area.
- Encourage development of the public realm that provides for community safety and disability access and is ‘child friendly’.

- Ensure planning for open spaces in new growth areas includes an allowance for ‘unplanned’ spaces, to allow communities to be involved in the development of these spaces (e.g. for community gardens or other uses).
- Encourage the capture and reuse of water within public spaces, e.g. for watering open spaces.
- Reduce the amount of dark coloured impervious surfaces within urban areas by selecting lighter coloured paving treatments.
- Maximise access to sunlight from key public, recreational and open space areas, through the sensitive design and siting of new development.
- Require pedestrian amenities including seating and lighting, and the use of landscape treatments or public art, to create a safe and interesting pedestrian environment.

#### **Public realm interfaces**

- At key public interfaces, encourage low and / or transparent fencing and landscaping that allows for passive surveillance.
- Discourage dwellings which are dominated by garages and create a sense of disconnection between housing and the street.
- Ensure that public open spaces and parks are overlooked or partly contained by other uses (e.g. public plaza space fronted by active uses, or parks with residential interfaces), while providing clear definition between public and private space.
- Provide a mix of uses in activity centres, with areas that encourage activity at different times of the day.
- Encourage the design of building frontages at footpath level along key pedestrian routes to offer visual interest, passive surveillance, social interaction, safety, shelter and convenience.
- Discourage building designs that dominate or imply private ownership of public spaces.

#### **Accessible places**

- Encourage residential design which facilitates social interaction and community inclusion (e.g. opportunities for daily interactions, pause places, community gardens etc.).
- Require any publicly accessible places to meet the needs of people with impaired mobility.
- Encourage flexible and multi-functional housing that can be adapted for a wide range of people and lifestyles (e.g. people with disabilities, the aged and ageing, households whose size changes over time, home offices etc.).

#### **Housing diversity**

- Encourage the provision of density through a diversified rather than standardised approach.
- Encourage the provision of medium density housing in a range of settings and suitable areas throughout Mildura’s urban area.
- Accommodate some larger lots within growth areas to provide opportunities for future adaptability and change in these areas which would not otherwise be present.
- Achieve a greater diversity in lots sizes within growth areas by identifying percentages of development areas that should meet specific density targets. This policy will apply as follows:
  - To any area proposed for residential development over 3ha in size.

- The percentage requirement will apply to net residential developable area.
- The percentages are:
  - 5% of the net residential development area should achieve a density of 35 dwellings per hectare.
  - 20% of the net residential development area should achieve a density of 6 dwellings per hectare.
  - The density of the remaining 75% of residential land can be determined in line with market demand, provided the area is planned in a way which achieves any guidelines for building or neighbourhood design contained within the Mildura Planning Scheme.
- Review the percentage targets regularly, and increase the percentage of higher density housing in line with demographic change.
- Exercise discretion to allow the provision of land for retirement living or aged care to be considered as meeting the target for medium density housing, even where the specific density is not achieved.
- Accommodate higher density lots in areas with access or amenity benefits (e.g. along main roads, adjoining any areas of non-residential uses such as retail, open space, schools etc.).

#### **Movement and infrastructure**

- Allocate sufficient space within new road reserves for infrastructure provision.
- Require road alignments to incorporate a broad grid network, with local roads connecting to adjoining urban areas. While curvilinear local roads are acceptable, cul-de-sacs should be avoided.
- Where cul-de-sacs are unavoidable, pedestrian connections should be provided at the termination of the road to allow direct pedestrian access to services and facilities.
- Require individual subdivision road layouts to provide for future connections, including any necessary easements, where adjoining parcels are not developed concurrently.
- Use pedestrian and cycle paths to link key spaces, including new and existing parks and the river corridor, with residential settlements.
- Provide high quality lighting and shade along well defined cycle and walking paths.
- Where possible, encourage physical separation of bicycle lanes from vehicular movement, avoid conflict between bicycle lanes and car parking spaces, and require bicycle lanes to be clearly identified through road surface treatments.
- Encourage vehicle access points associated with residential development to be:
  - Via a single crossover or, if appropriate, from an existing crossover (multiple crossovers which result in a loss of on-street car parking and compromise street tree planting are discouraged);
  - Where possible for new crossovers, located adjoining existing crossovers to maximise verge space for planting; and
  - Encouraged to consider utilising alternate access arrangements, where possible, such as rear lanes along key pedestrian routes.
- Design landscaping and other features so that they do not visually obscure pathways, to provide good lines of sight and enhance perceptions of safety.
- Minimise hard paved areas (over and above the building footprint) to reduce stormwater runoff, and encourage the preferred use of permeable paving treatment.

**Decision guidelines**

Before deciding on an application, the responsible authority will consider, as appropriate:

The Mildura Housing and Settlement Strategy 2013; and

Healthy by Design (Heart Foundation guidelines, 2004).