### Table of Changes

<table>
<thead>
<tr>
<th>Old Section</th>
<th>New Section</th>
<th>Recommended Change</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>-</td>
<td>Insert text box below A1.1 to include reference to Clauses 7.5 and 7.6 of the Shoalhaven LEP 2014 and inserted link to Office of Water’s Guidelines for Riparian Corridors on Waterfront Land.</td>
<td>In consideration of MIN14.726.</td>
</tr>
<tr>
<td>5.2</td>
<td>-</td>
<td>Amended A2.1 to include further detail on the NSW Land and Environment Court Planning Principle ‘Impact on Solar Access on Neighbours’ with inclusion of a hyperlink to the case law.</td>
<td>In consideration of MIN14.726</td>
</tr>
<tr>
<td>5.3</td>
<td>-</td>
<td>Moved relevant content of POL12/127 – Reflective Building Materials – Use in Coastal and Rural Areas into this Chapter.</td>
<td>To rationalise and consolidate existing policies of Council into the DCP where considered advantageous as per resolution D15/17098.</td>
</tr>
<tr>
<td>5.3</td>
<td>-</td>
<td>Moved relevant content of POL12/217 – Coastal Areas – Planning and Development into a note box below A4.1.</td>
<td>To rationalise and consolidate existing policies of Council into the DCP where considered advantageous as per resolution D15/17098.</td>
</tr>
</tbody>
</table>
Chapter G1: Site Analysis, Sustainable Design and Building Materials in Rural, Coastal and Environmental Areas

Contents

1 Purpose.........................................................................................................................3
2 Application.....................................................................................................................3
3 Context..........................................................................................................................3
4 Objectives .....................................................................................................................4
5 Controls.........................................................................................................................4
5.1 Site Analysis ...........................................................................................................4
5.2 Energy Efficiency & Solar Access ...........................................................................9
5.3 Building Materials in Rural and Environmental Areas ..........................................11
6 Advisory Information ..................................................................................................13
6.1 Other legislation or policies you may need to check .............................................13

Figures

Figure 1: Example of a site analysis plan .............................................................................6
Figure 2: Example of a site analysis plan .............................................................................7
Figure 3: Site Development Plan .........................................................................................8
Figure 4: Solar Access .......................................................................................................10
Figure 5: Energy Efficient Site Design ...............................................................................11

Amendment history

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Date Adopted by Council</th>
<th>Commencement Date</th>
<th>Amendment Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14 October 2014</td>
<td>22 October 2014</td>
<td>New</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>Draft</td>
</tr>
</tbody>
</table>
1 Purpose

The purpose of this Chapter is to outline controls for the management of the natural and built environment. This Chapter provides controls particularly for:

- Site analysis.
- Energy efficiency and solar access.
- Building materials in rural and coastal areas.

2 Application

This Chapter applies to all development applications for:

- Subdivision;
- Multi-dwelling housing;
- Dwelling houses;
- Dual occupancy;
- Tourist and visitor accommodation;
- Commercial premises;
- Industrial development; and
- Any other land use applications.

3 Context

Site analysis assists in considering the characteristics of the site and adjacent or adjoining sites at the outset of the design process as well as any constraints or opportunities to ensure that these are reflected in the design. An effective site analysis can assist in implementing long-lasting sustainable building design principles, such as solar passive design to increase energy efficiency and solar access, ultimately resulting in long-term environmental and financial savings.

The type and quality of materials in coastal and rural areas is also important to Council. The location of a building and choice of materials help to maintain and protect views and provide amenity to surrounding residents.
4 Objectives

The objectives are to:

i. Consider the constraints and opportunities of the site for the proposed development.

ii. Ensure compatibility between the site and the proposal.

iii. Maximise the potential for energy efficiency and conservation in building design.

iv. Minimise overshadowing impacts of a development on adjoining dwellings.

v. Preserve solar access to north facing solar collectors serving adjoining dwellings e.g. solar hot water panels, photovoltaic cells.

vi. Ensure development is compatible with the natural landscape and any identified natural hazards.

vii. Ensure buildings are constructed of such materials and finishes and are not intrusive upon the landscape.

viii. Ensure that views from public road, public places and private properties are protected from highly reflective building materials.

5 Controls

5.1 Site Analysis

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Acceptable Solutions</th>
</tr>
</thead>
</table>
| P1                   | A1.1 A site analysis is provided with a development application that shows the following constraints and opportunities: Constraints (including but not limited to):  
- Location of services such as power, sewer, water and drainage lines.  
- Existing vegetation within and adjacent to the land being developed.  
Natural hazards which are likely to impact upon the development such as bushfire prone land, coastal hazard areas or flood prone land, particularly in regard to solar access and existing mature vegetation.  
**Note:** You should consider clauses 7.5 Terrestrial biodiversity and 7.6 Riparian land and watercourses of Shoalhaven LEP 2014 when preparing your site analysis. You should also consider the Office of Water’s Guidelines for Riparian Corridors on Waterfront Land. |
Shoalhaven Development Control Plan 2014

Chapter G1: Site Analysis, Sustainable Design and Building Materials in Rural, Coastal and Environmental Areas

Opportunities (including but not limited to)

- Views from the site.
- Solar access.
- Existing mature vegetation.

A1.2 For development other than for a single dwelling house and associated structures, your development application should show:

- Topographical features such as slope, existing natural vegetation and opportunities for the creation of views and vistas.
- Opportunities to orientate buildings and private open spaces having regard to solar access, winds and views.
- The character of the surrounding development, particularly to setbacks and subdivision layout.
- The likely impact on surrounding development, particularly with regard to overshadowing, privacy and obstruction of views.
- The extent to which driveways and/or parking areas are likely to dominate the appearance of the development.
- The visibility, width and design speed of proposed roads and/or driveways.
- Bush fire, flooding and drainage constraints, easements for services and extent of contaminated land.
- The character of any adjacent public land/reserves, particularly the location of mature trees in relation to the proposed development.
Figure 1: Example of a site analysis plan
Figure 2: Example of a site analysis plan
Chapter G1: Site Analysis, Sustainable Design and Building Materials in Rural, Coastal and Environmental Areas

Figure 3: Site Development Plan
5.2 Energy Efficiency & Solar Access

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Acceptable Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>P2</td>
<td>A2.1</td>
</tr>
<tr>
<td>To ensure that dwellings are designed to achieve the efficient use of energy and water, and to provide thermal comfort to occupants.</td>
<td>The dwelling complies with the NSW Building Sustainability Index (see <a href="http://www.basix.nsw.gov.au">www.basix.nsw.gov.au</a>).</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> For residential development, the Building Sustainability Index (BASIX) reduces water and energy consumption in homes across NSW. A BASIX assessment must be completed online and the BASIX certificate lodged with your development application.</td>
</tr>
<tr>
<td>P3</td>
<td>A3.1</td>
</tr>
<tr>
<td>To ensure that dwellings are designed and sited to maximise solar access to the north-facing windows of living areas of open space having regard to slope, views, existing vegetation and overshadowing.</td>
<td>Your dwelling design should be based on the NSW Land &amp; Environment Court Planning Principle ‘Impact on Solar Access of Neighbours’ from Parsonage v Ku-ring-gai [2004] NSWLEC 347.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Council will use the above principles to determine the impact of development upon adjoining land.</td>
</tr>
<tr>
<td>P4</td>
<td>A4.1</td>
</tr>
<tr>
<td>To ensure that dwellings are sited to minimise the overshadowing of neighbouring dwellings, such that the impact on adjoining residences is not unreasonable.</td>
<td>50% of the area of the windows or glazed doors of north facing living areas and principal open space of adjoining dwellings do not have their sunlight reduced to less than three hours of sun between the hours of 9am and 3pm on the 21st June (winter solstice).</td>
</tr>
<tr>
<td></td>
<td>A4.2</td>
</tr>
<tr>
<td></td>
<td>Where there are solar hot water collectors and/or photovoltaic cells on an adjoining property that may be impacted by the development structures, the application demonstrates there be no impact on the collectors and cells.</td>
</tr>
</tbody>
</table>

Principles of energy efficiency and solar access are provided in Figure 4 and Figure 5.

**Note:** You may need to submit an accurate shadow diagram for:
- Two-storey development particularly developments of streets running north-south
- Development on sloping lots with south-east to south-west aspects
- Development within the minimum setbacks to southern boundaries.
Figure 4: Solar Access
5.3 Building Materials in Rural and Environmental Areas

This control provides guidelines to ensure that appropriate choice of building materials and site design are used in new developments and additions to existing structures, when in Council’s opinion, they are of a substantial nature. The control applies to all development in the rural and environmental zones in Shoalhaven and all coastal areas.

Note: If your property is mapped in the Shoalhaven LEP 2014 as ‘Scenic Protection’ on the Scenic Protection Area Map, your application must also demonstrate compliance with Clause 7.8 in Shoalhaven LEP 2014.
Performance Criteria | Acceptable Solutions
--- | ---
P5 To ensure that buildings are designed, constructed and sited to compliment the landscape and minimise impacts on visual amenity from public places and private property. | A5.1 The building design satisfies the following to ensure the development does not detract from the scenic-value of the landscape:

- **Siting** – Buildings are suitably sited (i.e. below ridgelines and/or knolls) in a location which does not unreasonably impact on the outlook of any other dwelling house or a vista from a public road, public place or place frequented by the public;

  **Note:** Development including subdivisions, will not be permitted on headlands or other prominent coastal features – other than those which have already been subdivided and zoned for urban purposes.

- **Screening** – Utilise existing vegetation to provide a backdrop and/or for screening of buildings. Additional landscaping may also be used to implement screening;

- **Design** – roof pitch and orientation are designed to minimise or mitigate glare;

- **Materials and colours** – materials and colours are appropriate to the local landscape and or background to ensure that the building does not significantly detract from the scenic value of that landscape. Structures should not strongly contrast with the background whether by location, colour or choice of materials; and

- **Access roads and services** – designed and located to minimise soil and vegetation disturbance and visual impact.
To minimise the use of highly reflective building materials (e.g. galvanised steel) to protect views and the natural character of coastal and rural areas.

A visual assessment has been undertaken by the applicant which demonstrates that the building will not have a significant visual impact when viewed from any public road, public place, private property to which the public has access, National Park, walking trail or other dwelling.

Note: Use of traditional building materials, such as galvanised steel may be permitted in certain circumstances if it is justified in the context of the design of the building and/or it complements the heritage character of the building or area.

Some lighter colours in the range of pre-coloured metal products are usually not acceptable in prominent locations. The use of zincalume is generally not supported by Council.

### 6 Advisory Information

#### 6.1 Other legislation or policies you may need to check

**Note:** This section is not exclusive and you may be required to consider other legislation, policies and other documents with your application

<table>
<thead>
<tr>
<th>Council Policies &amp; Guidelines</th>
<th>Nil</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Policies &amp; Guidelines</td>
<td>NSW Land &amp; Environment Court Planning Principle ‘Impact on Solar Access of Neighbours’</td>
</tr>
<tr>
<td>Legislation</td>
<td>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</td>
</tr>
</tbody>
</table>