PART TWO: URBAN DESIGN GUIDELINES

09 INTRODUCTION TO URBAN DESIGN GUIDELINES

9.0 INTRODUCTION

The purpose of Part Two is to provide design guidance and examples for future development of the settlement types discussed in Part One of this document.

Part Two is divided into three sections:

Section A identifies the principles of growth management for a whole of settlement. The principles are illustrated by a series of examples. Firstly, an example of growth by consolidation is provided for each of the previously cited typologies by way of overlay. Then an illustration of expansion in a fictitious settlement is provided and lastly, an example of the desirable qualities of growth on a greenfields site.

Section B identifies the principles of growth management at the streetscape level. The principles are illustrated by examples of positive streetscape and block design for a major town, a regional centre, a fringe expansion of an existing settlement and a new greenfields settlement.

Section C identifies the principles for the management of settlement at the building design level. It provides examples for six key housing typologies. The drawn examples typify the positive attributes of designing for housing on the North Coast; these are reinforced by photographic precedents.

10 SECTION A: SETTLEMENT GROWTH GUIDELINES

10 SECTION A: SETTLEMENT GROWTH GUIDELINES

10.0 SUMMARY OF PRINCIPLES

These principles outline issues to be considered in the planning and development of North Coast settlements to enable environmentally and socially sustainable growth. Guiding development to reinforce the character of settlements and to minimise impact on the natural environment is critical to the future success of this region.

Acknowledging that growth may occur by consolidation of the existing settlement, by expansion of its boundaries or by new development on 'greenfield' sites, principles for each direction have been established.

Examples of three settlements of the region illustrate these principles applied to a variety of settlement scales in different contexts.

Principles to apply to all future development

- Maintain and protect the key natural features throughout and around the settlement (coastal environment, river landscape, forested areas) to ensure the unique character they provide for the town is retained
- Prevent future growth in areas of high environmental or natural resource value and areas prone to flooding, erosion and inundation.
- Maintain public open space and public access along foreshores, reserves and bushland and set development back from areas of high ecological value
- Encourage plant species which are compatible with the local climate, topography and natural vegetation
- Prevent privatisation of foreshore and riparian edges
- Ensure interconnectivity of parks, public spaces, main streets, services, infrastructure and natural features
- Ensure development responds sensitively to the density and scale of the existing settlement
- Ensure planning and development respond to the local topography and climate
- Ensure provision of commercial and community services

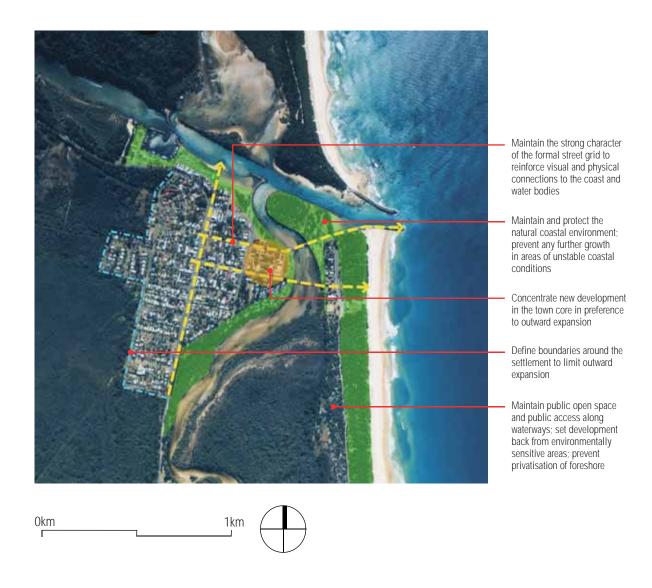
Principles for Consolidated Growth

- Define boundaries around settlement to limit further outward expansion
- Use existing transport infrastructure to inform an urban boundary and minimise outward growth
- Consolidate disconnected urban areas and maintain the character of each before expanding main settlement boundaries
- Reconnect existing disconnected urban areas by consolidating the large scale public spaces that isolate them from the settlement centre
- Enhance connections between disconnected urban areas and the town centre
- Concentrate new development and increased heights and densities in town centres and in areas of greatest public amenity/services/infrastructure that have already been influenced by urban development

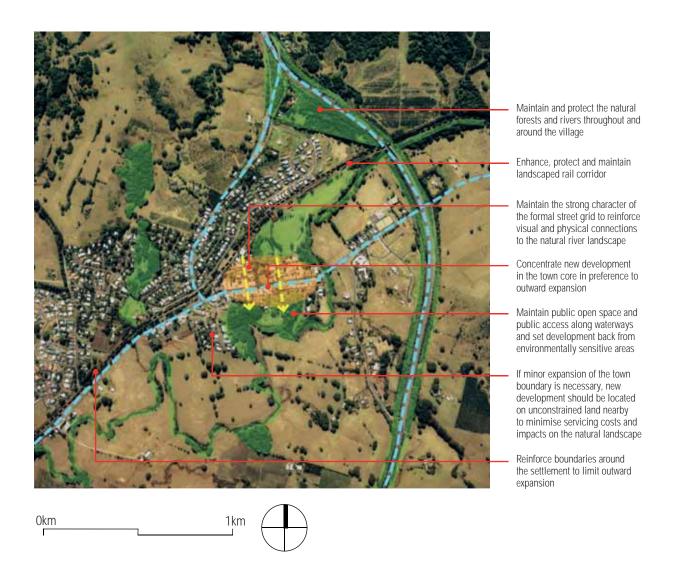
Principles for growth by expansion at the fringe or new 'greenfield' development

- Encourage new development on existing unconstrained land to minimise impact on natural environment and resources
- Maintain the character of the formal street grid to reinforce visual and physical connections to the natural landscape
- continue grid with expanding development

10.1 SETTLEMENT CONSOLIDATION - COASTAL VILLAGE



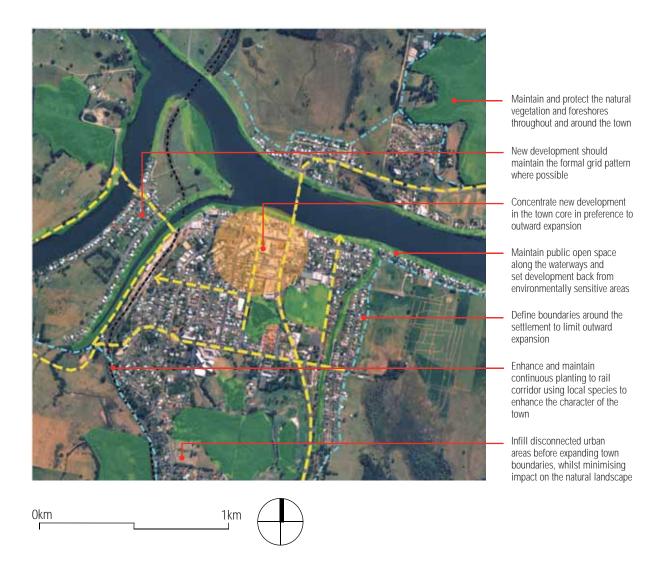
10.2 SETTLEMENT CONSOLIDATION - INLAND VILLAGE



10.3 SETTLEMENT CONSOLIDATION - TOWN



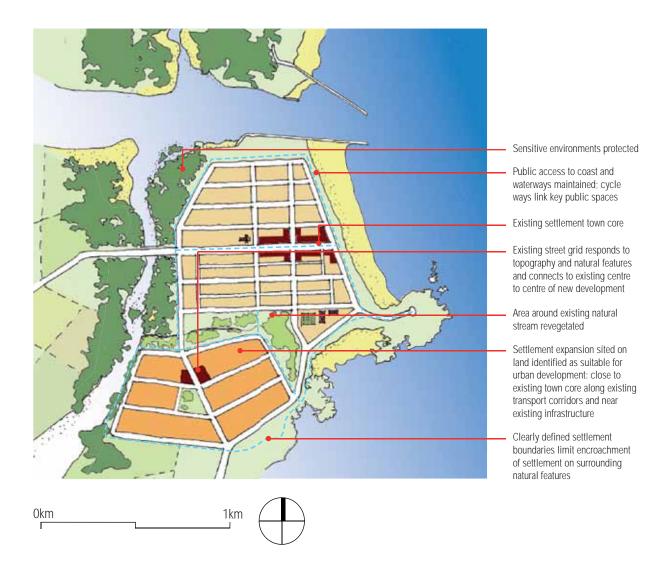
10.4 SETTLEMENT CONSOLIDATION - MAJOR TOWN



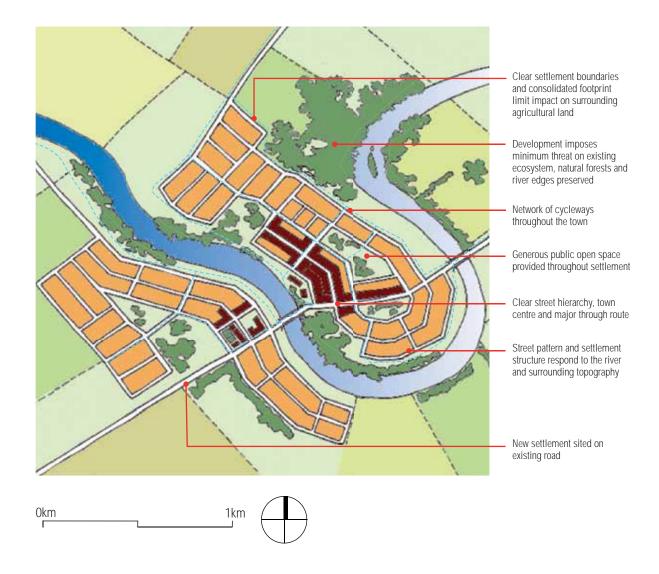
10.5 SETTLEMENT CONSOLIDATION - REGIONAL CENTRE



10.6 SETTLEMENT EXPANSION - EXISTING TOWN



10.7 NEW SETTLEMENT - 'GREENFIELD SITES'



11 SECTION B: STREETSCAPE GUIDELINES

11.0 SUMMARY OF PRINCIPLES

The strategies below detail a number of methods for implementing the principles of settlement growth at streetscape level and are applicable in all locations of settlement growth. Annotated diagrams in this section detail their application to the settlement typologies identified in Part One.

Principles to apply to all future development

- Ensure local and regional transport connectivity
- Street hierarchy developed in accordance with required size and function; topography and natural features determine lot and street layouts
- Plan services and infrastructure to accommodate future growth strategies and ensure development is located for cost effective service provision
- Establish a development scale and density which is supportive of public transport, cyclist and pedestrian use; provide pedestrian and cycle routes that connect key community facilities, parks and open spaces
- In new subdivisions, continue the established city grid and maintain direct physical and visual connections, avoid car-dependent, cul-de-sac development
- Ensure that street patterns provide maximum physical and visual connectivity, offer a choice of routes and allow for double sided blocks such that development is oriented towards the street frontage
- In multi-dwelling development, provide a street entry for each dwelling, avoid battle-axe, villa-style development and design appropriately to topography, climate and aspect
- Reinforce original subdivision patterns and streetscapes that characterise the settlement, maintain consistent setbacks from front and rear of lots in low density areas and continuous street and awning edges along core streets/perimeters of major blocks
- Encourage deep soil zones to centre of blocks to allow the cultivation of large trees with large canopies and to permit infiltration of rainwater to the watertable
- Maintain axes with views and vistas towards watercourses and surrounding natural landscape, enhance and maintain river, coastal and landscape edge treatments, whilst minimising risk of flooding
- Maintain and protect any local heritage, natural or manmade, of physical, social or cultural significance in the community to establish an understanding of the collective past
- Define public open spaces and parks with consistent carriageway treatment and landscaping along the urban/ natural edge

11.1 STREETSCAPE - MAJOR TOWN

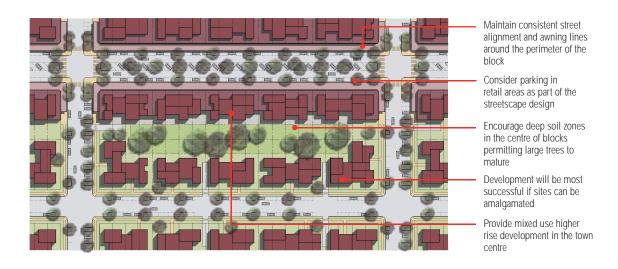
This Major Town is undergoing settlement growth by consolidation. The positive streetscape features identified below contribute to maintaining the character and improving the amenity of the existing settlement. The streetscape below shows a moderate density residential block, with new semi-detached houses amongst the existing traditional dwellings.





11.2 STREETSCAPE - REGIONAL CENTRE

This Regional Centre is undergoing settlement growth by consolidation. The positive streetscape features identified below contribute to maintaining the character and improving the amenity of the existing settlement. The diagram shows desirable increased density and mixed use development in the settlement centre and main street.





11.3 STREETSCAPE - SETTLEMENT EXPANSION

This Town is undergoing settlement growth by expansion. The positive streetscape features identified below contribute to a consistency of character with the existing settlement. The streetscape below shows a new, lower density residential block, serviced by a small retail precinct and community facilities.





11.4 STREETSCAPE - GREENFIELD

This streetscape illustrates positive features to be considered in the planning and design of a new development on a greenfield site. The streetscape below shows a lower density residential block, serviced by a small retail/commercial precinct and community centre.



Maintain consistent setback from street

Small scale retail, public plaza and community centre with public off-street parking

Maintain public access and view corridors to natural landscape

Encourage deep soil zones in the centre of blocks permitting large trees to mature

Encourage siting garages at rear to reduce impact on streetscape

Allow for on-street parking

Encourage regular shaped blocks and building address to street frontages

Maintain street planting, formed footpaths, kerbs and guttering



12 SECTION C: BUILT FORM - URBAN DESIGN GUIDELINES

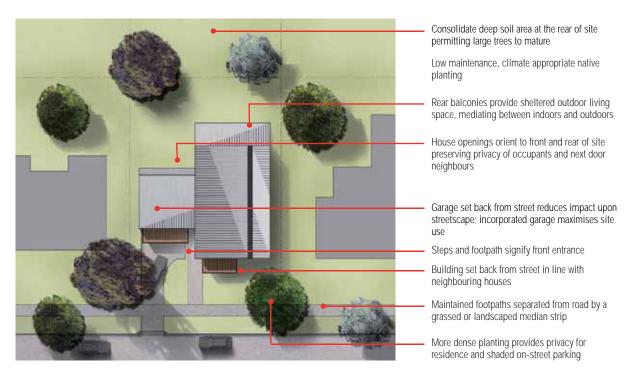
12.0 SUMMARY OF PRINCIPLES

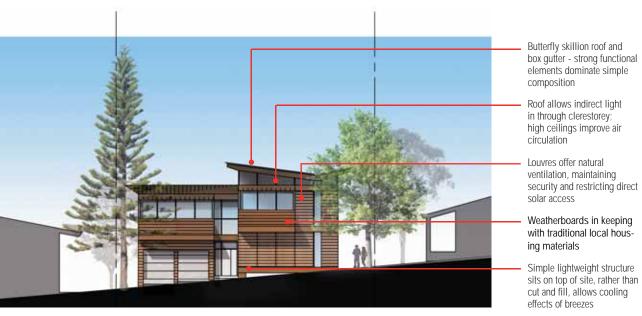
These guidelines identify key aspects of built form that contribute and respond to the local and regional character of North Coast settlements. These aspects should be encouraged in future development. They guide the provision of amenity for residents and pedestrians, and ensure the development of a variety of residential types, including mixed use developments, which contribute to the vibrancy and economic sustainability of the area.

Principles to apply to all housing types

- Encourage elevated, lightweight construction in response to climate and breezes
- Provide flexible sun-shading devices, louvres and natural ventilation systems to allow passive environmental control
- Provide semi-sheltered outdoor spaces of usable dimensions to mediate between indoors and outdoors
- Establish building orientation towards streetfront in keeping with the local settlement pattern with consistent scale, materials and setbacks, whilst maintaining built form diversity and contributing to the settlement character
- Allow for wide gutters to handle heavy rainfall
- Ensure building elements are integrated into the design of the façade and overall form
- Amalgamation and subdivision of lots may be necessary to accommodate a desired change in density of development
- Allow zones for street-side planting to provide shade for pedestrians and parked cars and provide screening and enhanced privacy of residential lots
- Maintain generous footpaths separated from street by a grassed or landscaped median strip
- Install services in a discreet way; place major cables underground in preference to overhead wires in areas of higher density

12.1 ONE TO TWO-STOREY DETACHED HOUSE







Reinforce local character with continued lightweight material and form



Raised, lightweight structure allows for undercroft parking: clerestory allows sunlight from the east and view to the coast



Large eaves and louvred screens shade outdoor living spaces and walls of house, reducing solar gain $\,$



Well articulated two storey house with landscape softening impact upon streetscape



Traditional dwelling with shaded windows, defined street address and setback garage



Native landscaping screens houses from streetfront and filters direct sunlight

12.2 TWO TO THREE-STOREY TOWNHOUSES







Two lightweight, elevated dwellings composed as a single, well articulated structure



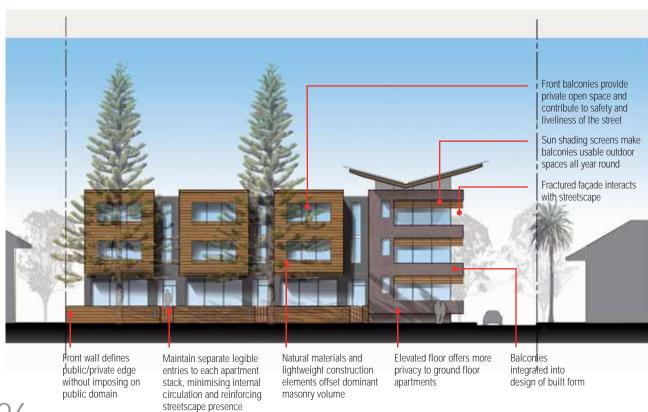
Townhouse with two dwellings designed as a single 'big house'



Modern masonry construction; fragmented composition reduces impact of scale on streetscape

12.3 THREE-STOREY APARTMENT BLOCKS





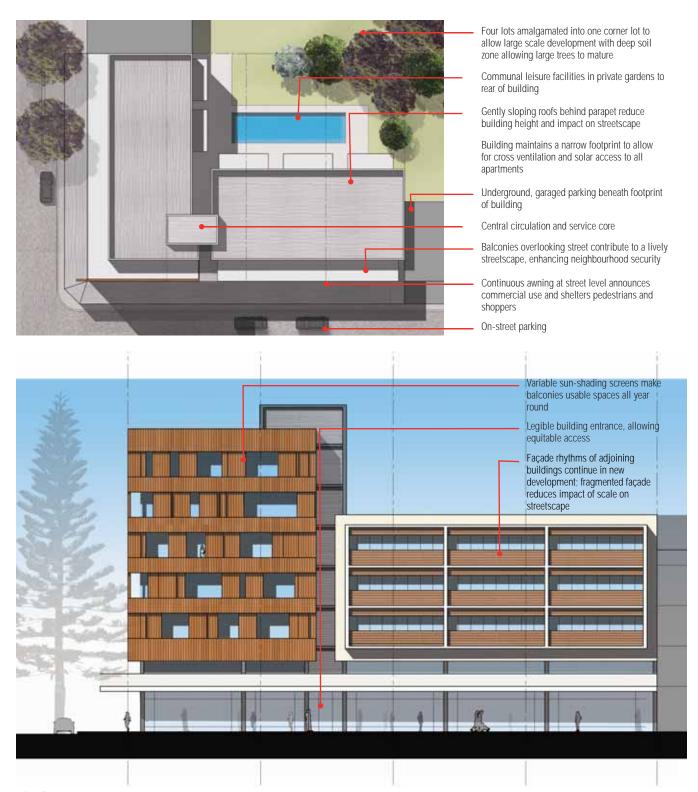


This three storey development with set back and sheltered balconies, echoes the existing rhythms of the streetscape rather than imitating existing built form



A three storey, mixed development with cafes and retail on the ground floor, residential above; contrasting materials break up the façade, reducing the impact of the volume on the streetscape; easy access to roadside parking is provided

12.4 FOUR TO EIGHT-STOREY MIXED USE BLOCKS







Seven storey mixed-use residential development with commercial ground floor

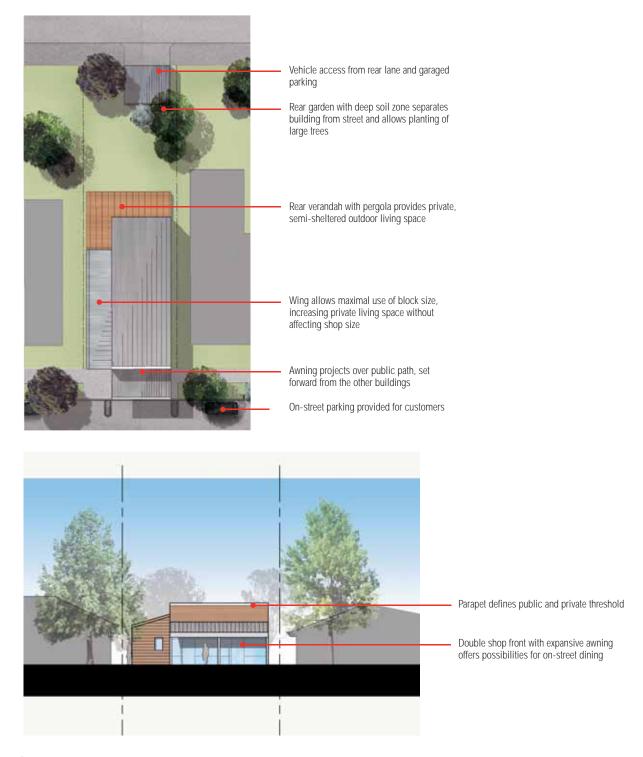


Five storey residential development with strong, component based composition featuring street-side balconies and single service core



Curved building form allows some shelter from harsh southerly winds

12.5 SINGLE-STOREY COMMERCIAL



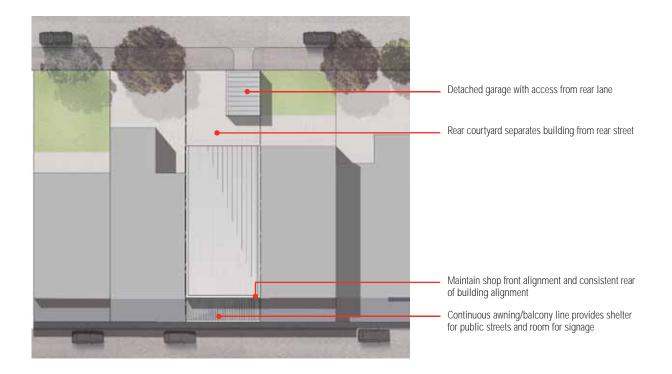


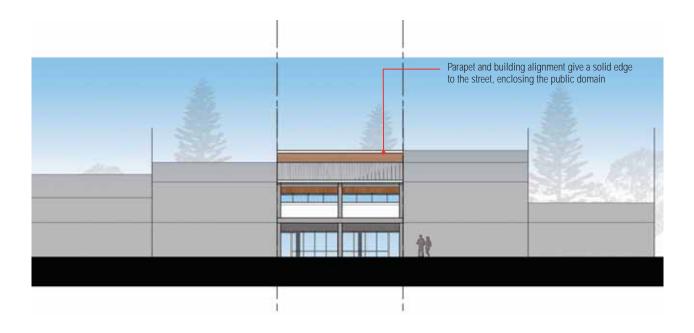
Small isolated specialist store close to the village centre but amidst residential development; parapet hides residence to rear and widened footpath and crossing make pedestrian access easier



Small strip of shops providing daily essentials to local inhabitants; awning to curb and wide footpaths announce retail facility

12.6 TWO-STOREY SHOP WITH 'SHOP TOP' DWELLING







This commercial centre has many unique awnings of an eclectic mix of colours and designs that define the character of the main street; planting beds separate the footpath from the street with insets providing street parking with easy access to facilities



Larger scale shop-top apartment housing in major town; awning lines are consistent with streetscape

13. REFERENCES AND FURTHER READING

13.0 REFERENCES AND FURTHER READING

Australia ICOMOS, The Burra Charter (Australia ICOMOS Charter for Places of Cultural Significance), Burra: Australia ICOMOS, 1999

Australian Heritage Commission, Natural Heritage Places Handbook: Applying the Australian Natural Heritage Charter to Conserve Places of Natural Significance, Sydney: Australian Heritage Commission in association with the Australian Committee for IUCN (World Conservation Union), 1999

Australian Heritage Commission, Protecting Local Heritage Places, Canberra: Australian Heritage Commission, 1999

Brown, G.Z. and DeKay, Mark, Sun, Wind and Light: Architectural Design Strategies, New York: John Wiley & Sons, 2001

Coastal Council of NSW, Coastal Design Guidelines for NSW, Coastal Council of NSW, 2003

Commission for Architecture and the Built Environment by Design, Urban Design in the Planning System, London: Department Environment Transport Regions, 2000

Healthy Rivers Commission, Independent Inquiry into North Coast Rivers, Draft Report, Sydney: Healthy Rivers Commission, 2002.

Heritage Office and Department of Urban affairs and Planning, NSW Heritage Manual, Sydney: Heritage Office and NSW Department of Planning, 1996

Herzog, Thomas (editor), Solar Energy in Architecture and Urban Planning, Munich: Prestel, 1996

Hitchmough, J.D., Urban Landscape Management, Sydney: Inkata Press, 1994

Hollo, N, Warm House Cool House, Sydney: Choice Books, 1995

Land Systems EBC Pty Ltd, Better Drainage: Guidelines for the Multiple Use of Drainage Systems, Sydney: Department of Planning, 1993

Llewlyn-Davies in association with Urban Investment Metropolitan Transport Research Unit, Sustainable Residential Quality: Exploring the Housing Potential of Large Sites, London: London Planning Advisory Committee, 2000

Llewlyn-Davies with Alan Baxter and Associates, **Urban Design Compendium**, London: English Partnership, 2000

NSW Department of Land and Water Conservation, Coastal Dune Management: A Manual of Coastal Dune Management and Rehabilitation Techniques, Newcastle: Coastal Unit of DLWC, 2001

NSW Department of Planning, Far North Coast Regional Strategy, Sydney: NSW Department of Planning, 2006

NSW Department of Planning, Mid North Coast Regional Strategy, Sydney: NSW Department of Planning, 2008

NSW Department of Planning, Settlement Planning Guidelines: Mid and Far North Coast Regional Strategies, Sydney: NSW Department of Planning, 2007

NSW Department of Urban Affairs and Planning, Integrating Land Use and Transport: Improving Transport Choice - Guidelines for Planning and Development, Sydney: Department of Urban Affairs and Planning, 2001

NSW Department of Urban Affairs and Planning and NSW Department of Public Works and Services, Residential Flat Design Pattern Book, http://www.patternbook.nsw.gov.au, 2001

NSW Government, Coastal Management Manual, (Revised version anticipated) Sydney: NSW Government, 1990

NSW Government, Estuary Management Manual, Sydney: NSW Government, 1992

NSW Government, Floodplain Management Manual: The Management of Flood Liable Land, Sydney: NSW Department of Infrastructure, Planning and Natural Resources, 2005

NSW Government, NSW Coastal Policy 1997: A Sustainable Future for the NSW Coast, Sydney: NSW Government, 1997

NSW Department of Planning, Residential Flat Design Code, Sydney: NSW Department of Planning, 2002

NSW Rural Fire Service, **Planning for Bushfire Protection: A Guide for Councils, Planners, Fire Authorities and Developers and Home Owners,** Sydney: NSW Rural Fire Service, 2006

Phillips, RO., Sunshine and Shade in Australasia, Sydney: National Building Technology Centre, 1987

Urban Design Advisory Service, **Better Urban Living: Guidelines for Urban Housing in NSW,** Sydney: Department of Urban Affairs and Planning and NSW Government Architect, 2000

Urban Design Advisory Service, **Mixed Use in Urban Centres: Guidelines for Mixed Use Development,** Sydney: Department of Urban Affairs and Planning, 2000

Urban Design Advisory Service, **Neighbourhood Character: An Urban Design Approach for Identifying Neighbourhood Character**, Sydney: Department of Urban Affairs and Planning, 1998

Urban Design Advisory Service, **Residential Densities: A Handbook Illustrating the Urban Design Characteristics of Different Densities,** Sydney: Department of Urban Affairs and Planning, 1998

Urban Design Advisory Service, **Residential Subdivision: A Handbook for the Design and Planning of New Neighbourhoods,** Sydney: Department of Urban Affairs and Planning, 2000

Urban Design Advisory Service, **Urban Form: An Urban Design Approach for Understanding the Urban Form of Regional Centres,** Sydney: Department of Urban Affairs and Planning, 1998

Further information

Department of Planning

Locked Bag 9022 Grafton NSW 2460 Email: northcoast@planning.nsw.gov.au

Inquiries: 02 6641 6600