DESIGN GUIDELINES: BUILDING YOUR SUSTAINABLE HOME

AN EXTRAORDINARY COASTAL LOCATION HAS INSPIRED PEET TO SET NEW BENCHMARKS IN THE CREATION OF A UNIQUE WESTERN AUSTRALIAN COMMUNITY.

shorehaven
ALKIMOS

INTRODUCTION

Shorehaven at Alkimos not only offers you an enviable coastal lifestyle, but with its focus on sustainability, Shorehaven has an eye on taking care of your future. The information contained in these guidelines will ensure that Shorehaven is built around a strong community while still preserving the unique natural, coastal environment for you and future generations to enjoy.

At Peet, we believe that sustainable design is really about smart design. The key to sustainable design is about building the perfect home to suit your lifestyle by also ensuring they use less power and water, produce less waste and ultimately save you and the community money.

Sustainable design is also about planting a garden that suits Alkimos' local conditions and most importantly, the Western Australian climate.

As well as incorporating the Federal Government's Building Code of Australia (BCA) minimum home design requirements, Peet has also developed a number of its own design styles that allow you to choose the sustainable features that you would like to incorporate into your home. It is recommended Purchasers work closely with their Builder to identify the sustainable features suitable to their needs.

Building your Sustainable Home comprises three separate sections, which are:

1. Your Guide to Better Home Design;
2. Your Guide to Eco Landscaping;
3. Your Guide to Sustainable Living.

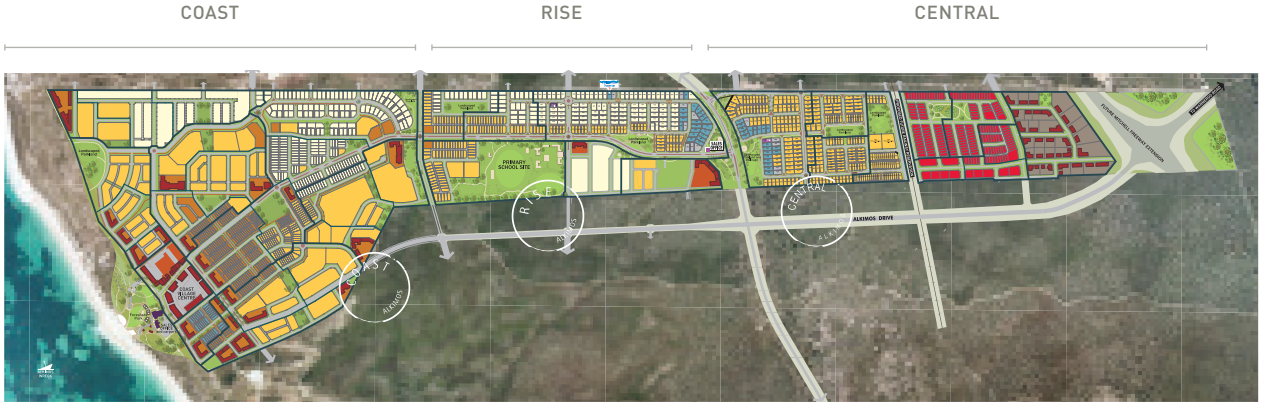
Each of these sections represents an element of home design that will be of great importance to the look and feel of the estate overall, as well as making sure that we are careful to consider the natural environment. That's why we recommend that you read these sections carefully so that you can take them into consideration when you and your builder are designing your new home at Shorehaven.

We've developed a points system for each of the precincts at Shorehaven; so when it comes to designing your new home, you must achieve a minimum number of points to ensure that your home fits within the guidelines and allows Shorehaven to reach its full potential as a truly sustainable community.

The points required are set out in the table below.

You will need to fill out the checklists, found at the back of these guidelines. You will need to complete a checklist for each of the three sections and submit them with your home drawings to Peet for approval before lodging them with the City of Wanneroo (CoW). The approval process that follows is detailed in the section entitled, 'Approval Procedure'.

	COAST PRECINCT
1. Your Guide to Better Home Design	15 points
2. Your Guide to Eco Landscaping	6 points
3. Your Guide to Sustainable Living	10 points



Shorehaven at Alkimos Masterplan

SHOREHAVEN VISION

SHOREHAVEN IS MADE UP OF THREE SEPARATE PRECINCTS - COAST, RISE AND CENTRAL, WHERE EACH HAS ITS OWN UNIQUE STYLE AND NATURAL ATTRACTIONS THAT COMBINE TO CREATE A FULLY INTEGRATED COASTAL LIFESTYLE.

Walking trails, cycling trails and boulevards will stretch from the Coast to the Central precinct, allowing residents and visitors to enjoy a journey through Shorehaven and take in the beauty of its many parks, and enjoy the natural surroundings.

At Shorehaven, Peet is landscaping all of the parks and streets in an environmentally conscious way so that they need less water and create habitats for native birds and animals.

Each of the precincts has its own unique environment. The Coastal Village will embrace the beach lifestyle and will be home to cafés, shops, bars and restaurants.

Each home at Shorehaven will reflect Western Australia's beachside lifestyle through the use of a 'Touch of White' colour scheme as well as colours that represent the ocean, sky, beach and coastal bushland.

At Shorehaven everything is at your doorstep. You will be able to walk the kids to school, ride to work, shop locally and at the end of the day, relax and unwind as the sun sets over your very own beach.

OTHER REQUIREMENTS

PROTECTIVE COVENANTS

Protective Covenants are in place to benefit and provide you with confidence by ensuring minimum standards of development are achieved throughout the entire estate. The covenants will include some, but not necessarily all of the design elements covered in these Guidelines.

DETAILED AREA PLANS

Detailed Area Plans (DAPs) have been prepared for all lots within the estate as part of the subdivision planning/approval process to illustrate elements including (but not limited to) building envelopes, recommended outdoor living or courtyard locations, mandated garage locations, R Code variations and landmark building element locations.

DAPs are adopted as a planning policy by the CoW and as such, compliance will be assessed by the City following your lodgement of a development application or building licence application with Council.

OTHER APPLICABLE DOCUMENTS

The Guidelines are to be read in conjunction with the Protective Covenants, DAPs and any other relevant and current statutory documents including the following:

- → Building Code of Australia (BCA) including the minimum standards for sustainable housing;
- → Residential Design Codes of Western Australia (R Codes);
- → CoW District Planning Scheme No 2;
- → Where these Guidelines differ from Protective Covenants or the DAPs, the Protective Covenant followed by DAP shall take precedence over the Guidelines;
- → Where the Guidelines differ from the R Codes, the R Codes shall take precedence unless they have been varied by the relevant DAP.

APPROVAL PROCEDURE

MINIMUM PERFORMANCE REQUIREMENTS

In processing development proposals, adherence to the requirements of these Guidelines as well as the applicable Protective Covenants will be assessed by a Peet nominated representative. You are advised that the requirements of DAPs will also be assessed by the City.

PEET DESIGN ENDORSEMENT

Development proposals will require the stamped endorsement of Peet's nominated representative prior to the lodging of plans with the City for Development or Building Approval.

Three paper copies or one digital copy of an Endorsement Application which is to include a site plan, floor plans and elevations illustrating the proposed built form, external materials and finishes and the location of any mechanical plant and services, together with an external colour schedule and the three completed checklists, are to be submitted to the nominated Peet representative for approval.

CITY OF WANNEROO

Following assessment and endorsement by Peet, one paper or scanned copy of the application will be returned to the property owner stamped 'Approved'. Upon receipt of a stamped approval, an application containing a copy of the approval can then be made to the CoW for Development Approval (or in the case of single dwellings not requiring planning assessment, for Building Approval).

APPROVAL PROCESS

PREPARE DESIGN DRAWINGS IN ACCORDANCE WITH COVENANTS, DAP'S AND GUIDELINES

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SUBMIT TO PEET NOMINATED REPRESENTATIVE

3 Copies or 1 digital copy
→ Building Plans
→ External Finishes Schedule
→ Location of air conditioning/evaporative cooling plant. (Colour if roof mounted)
→ 3 completed Checklists

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APPLICATION ENDORSED BY PEET NOMINATED REPRESENTATIVE

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SINGLE DWELLING

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DESIGN COMPLIES WITH COVENANTS, GUIDELINES AND DETAILED AREA PLANS

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VARIATIONS SOUGHT

↓

SUBMIT DEVELOPMENT APPROVAL APPLICATION TO CoW

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DEVELOPMENT APPLICTION APPROVAL (DA) RECEIVED

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PREPARE DETAILED CONSTRUCTION DRAWINGS

↓

SUBMIT BUILDING LICENCE APPLICATION TO CoW

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APPROVAL RECEIVED

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COMMENCE CONSTRUCTION

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YOUR GUIDE TO BETTER HOME DESIGN

BUILDING APPEARANCE

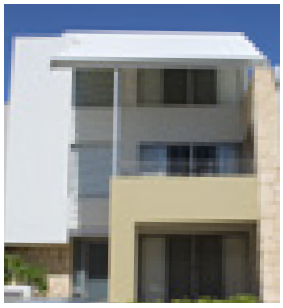
Development at Shorehaven will reflect Western Australia's beachside lifestyle through the application of a colour theme which draws on the State's coastal environment. This will be reflected in the application of a 'Touch of White', in the form of an off-white colour palette in coastal hues to be applied to every approved dwelling within the estate. The key design elements of colour, building form and materials will work together to create Shorehaven's distinctive local character.

Street elevations within the estate shall be articulated to feature clearly defined elements with a composite of exterior finishes. Primary wall materials such as painted render, stonework, rammed earth or face brickwork are encouraged and should be complemented by minor elements including painted or stained weatherboards, sheet metal or fibre cement sheet cladding or variations in colour.

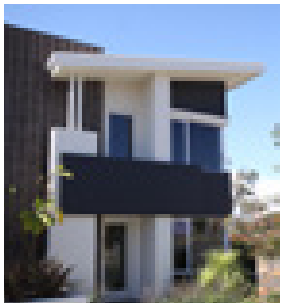
Roof forms within Shorehaven are not restricted. The architectural character of coastal communities has historically exhibited an eclectic range of roof profiles including conventional hipped and gabled roofs of varying pitches, low pitched skillions and flat or parapet style roofs, while recent design trends such as vaulted 'wave forms' also have relevance to the coastal context.

ACCEPTABLE

3 storey max height featuring a coastal palette of materials and colours.



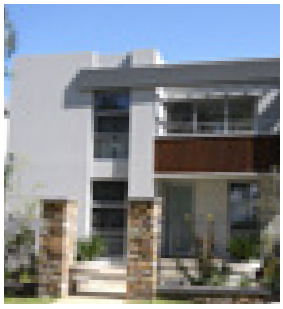
Strong 'Touch of White' emphasis.



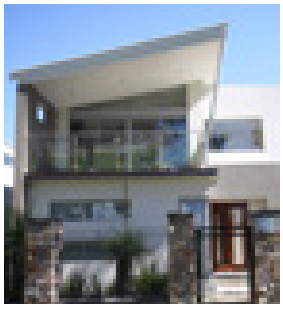
'Touch of White' offset by darker accent elements.

Single storey dwelling articulated and featuring differing elements of composite finishes.

Coastal hues with natural cedar look door sashes.



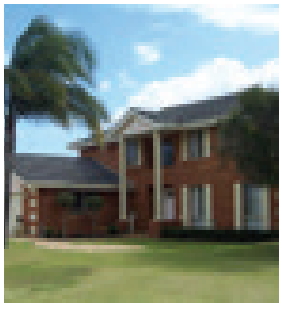
Composite of materials and finishes. White recessed walls with natural timber and coastal blues.

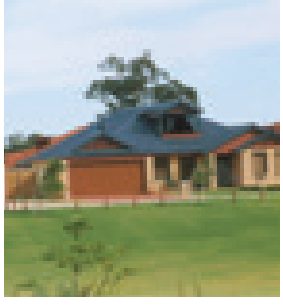


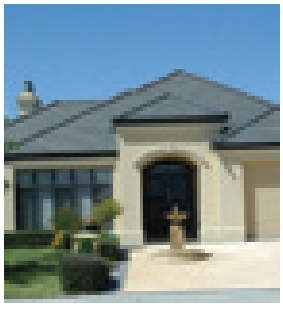
Highly articulated street elevations. 1st floor balcony providing street outlook.

'Touch of White' utilising composite materials.

NOT ACCEPTABLE







Dark roofs are exhibited. Colours are incompatible with 'Touch of White' colour palette.

BUILDING APPEARANCE

SHOREHAVEN 'TOUCH OF WHITE' STYLE REQUIREMENTS

Each dwelling will be required to contribute to the Shorehaven coastal style in that an element of white shall be exhibited on elevations fronting primary and secondary streets and public open spaces. This can be used in conjunction with other accent or complementary colours from an expanded coastal colour palette, or with other materials and finishes.

The definition of 'white' shall include off-whites and creams in coastal hues.

The following table indicates the number of points scored per building element for the application of a white or off-white colour palette. A minimum of 15 points must be achieved to obtain approval from Peet

Where individual elements score less than 15 points, a combination shall be used in order to achieve the minimum score.

A 'TOUCH OF WHITE' INDICATIVE BUILDING ELEMENTS

BUILDING APPEARANCE

BETTER HOME DESIGN APPROVAL CRITERIA

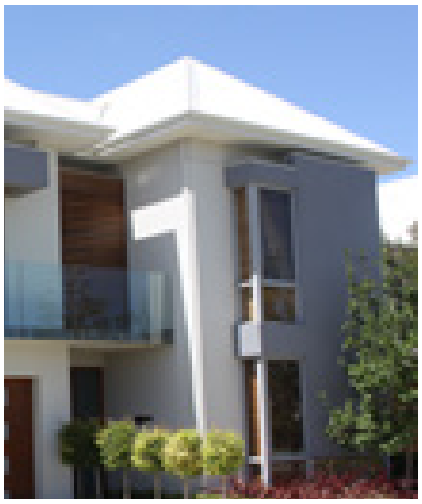
CRITERIA NO.	BUILDING ELEMENT (refer to sketch on previous page)	POINTS SCORED
1	**Walls:**	
1.1*	A significant full wall.	10
1.2*	Walls above or below a dado line for the full extent of the elevation.	10
1.3	A significant wall panel above or below a dado line.	6
1.4	A significant structure featuring walls and/or piers such as an entry portico or landmark tower element.	6
1.5	Rendered bands, window sills, keystones and coining.	3
1.6	A significant gable treatment.	4
1.7	More then 1 gable treatment.	6
1.8	All gablets.	3
2	**Front door(s).**	**2**
3	**Garage door(s) (not applicable to laneway lots).**	**4**
4	**Window & door frames.**	**5**
5	**Roof.**	**7**
6	**Feature trim elements:**	
6.1	Fascias, bargeboards, rafters and gutters.	5
6.2	Verandah/balcony elements: posts/beams, balcony edge trim and balustrades.	6
6.3	Decorative shutters.	5
6.4	Awnings.	4
7	**Street fence elements: rendered masonry walls and/or piers, timber palisade infills, visually permeable infills.**	**5**

* Where a design features wall finishes such as natural stone, ply or sheet metal cladding which could be considered an appropriate response to Shorehaven's promoted coastal theme but otherwise does not satisfy 'Touch of White' criteria, the design shall be assessed on its merits.

BUILDING APPEARANCE

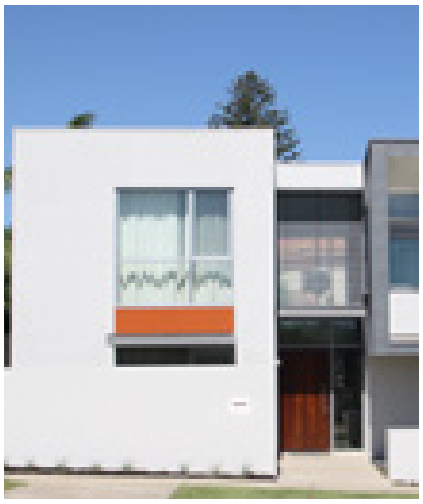
EXAMPLES OF 'TOUCH OF WHITE' ELEMENTS

ROOFS



White roof with complementing wall elements.

WALLS

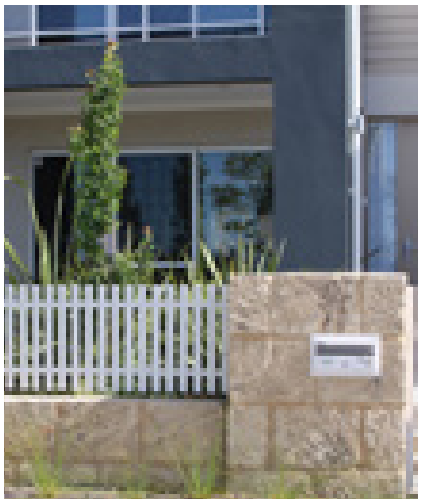


White walls offset by feature colour, natural timber door and zinc cladding.

FRONT GARDEN WALLS

White garden walls and planters.

FENCING



Coastal limestone fence with white timber palisades.

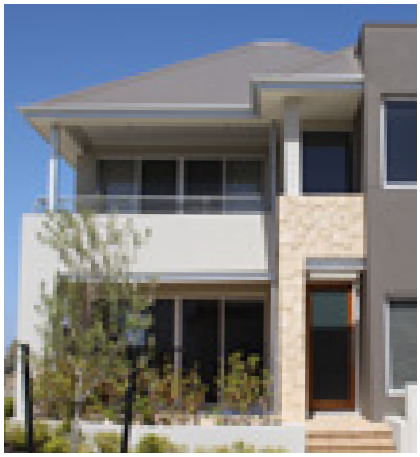
BUILDING APPEARANCE

ARTICULATION OF FACADES

Elevations to streets, rear laneways and public open spaces are to be articulated to feature clearly defined architectural elements, including:

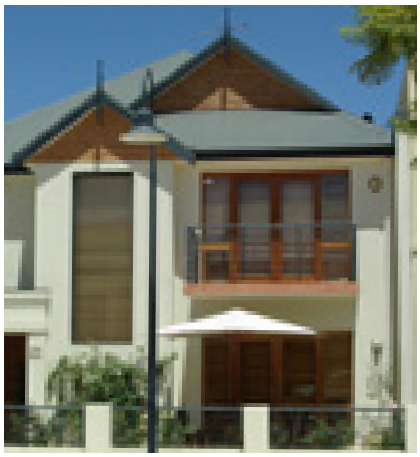
- → Defined front entries which are identifiable from the street through expressed elements such as entry porticos, awnings, dominant front doors, glazing etc.
- → The avoidance of blank facades through the provision of projections and indentations in the floor plan and also balcony projections and changes in material.
- → The inclusion of awnings, verandahs and other shading devices.
- → A minimum of one major opening to a habitable room providing outlook to the primary street, including bedrooms, living rooms etc.
- → For two-storey development, balconies or terraces providing outlook to both the primary and secondary street (where applicable).
- → For two-storey development at rear laneways, windows or balconies providing outlook over the lane are recommended.
- → The application of a 'Touch of White'.
- → Accent materials and colours applied to specific elements of the built form (refer to 'Building Materials' provisions).

FRONT FACADES



Coastal palette – sandstone and weatherboard cladding with painted sand finish render.

Architectural element utilised to articulate front facade.

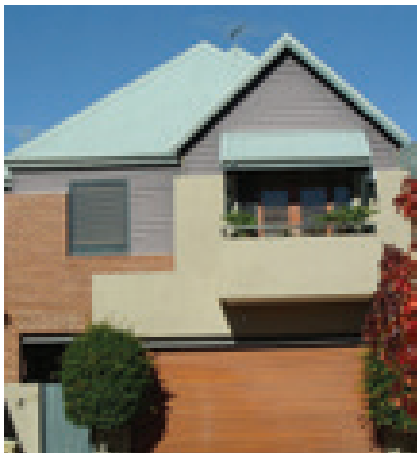


White walls offset with cedar doors and gables.

Inclusion of verandah in front facade to create interest and shaded outdoor areas.

LANEWAY FACADES

Articulated laneway elevations. Composite of finishes and materials.



Use of a balcony to articulate laneway facade and create casual surveillance opportunities.

BUILDING APPEARANCE

BUILDING ON BOUNDARY

On most properties it is permitted to build the dwelling against a side boundary line. This is referred to as the zero lot-line. On narrower lots it is permitted to have two zero lot-lines in order to maximise the extent of lot available to build on, while on other lots it is permitted to have one zero lot-line.

This is usually located on the southern or western most boundary in order to maximise solar amenity along the opposite side boundary. The location of zero lot-lines is indicated on the relevant DAPs.

Examples of abutting zero lot line walls.

FRONT SETBACKS

Where minimum front setbacks have been varied from the R Codes, the acceptable development criteria of the relevant section of the R Codes shall otherwise apply.

STREETSCAPE AMENITY

Where a home design is repeated within a block of 5 lots, an otherwise complying design may be required to incorporate design amendments to elements of colour, materials and/or form in order to ensure an appropriate level of variety within the streetscape.

BUILDING APPEARANCE

SECONDARY STREET ELEVATIONS

Development on corner lots is required to address both the primary and secondary streets. A secondary street elevation is to be articulated and feature a suitable level of detail including windows and the application of a 'Touch of White', in a manner that is consistent with that of a primary street elevation.

SECONDARY STREET ELEVATIONS

Articulated elevation with first floor street outlook and visually permeable fencing.

Composite of wall materials with white timber palisade fencing.

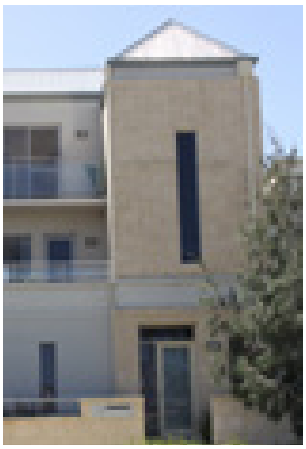
BUILDING APPEARANCE

LANDMARK ELEMENTS

Building landmarks can serve to facilitate mental recognition of locations within a neighbourhood.

At highly visible sites such as corner lots, lots at the end of a street vista or adjacent to public open space the opportunity exists to draw attention to the location through the application of additional architectural emphasis such as an element of increased height, a distinctive roof form, articulation of wall elements or the bold us e of colour, detailing, etc.

LANDMARK ELEMENTS



BUILDING HEIGHT

To ensure an appropriate urban scale, the maximum allowable height for single and grouped dwellings is three storeys. The maximum building height shall be as per applicable DAPs.

Maximum building height shall be as per the R Codes for Category B development except that, subject to approval by the CoW, all maximum permissible heights shall be increased by 1m with additional height permitted to landmark elements limited in area, in accordance with approved LSP's and DAP's.

SITE LEVELS AND RETAINING WALLS

To maintain views and avoid overlooking issues, additional retaining on existing retained boundaries is not permitted. Existing site levels may not be raised by more than 200mm without the specific approval of the Peet Customer Relations Team. Approval from Peet does not remove the requirement to seek approval from the CoW or any other approval agency.

GEOTECHNICAL CONDITIONS

It is the responsibility of the property purchaser to ensure that the structural engineering design of buildings and associated structures including boundary and screen walls are suitable for the site conditions applicable to the lot.

BUILDING MATERIALS

BUILDING MATERIALS: PROFILES AND COLOURS

In keeping with Shorehaven's coastal theme, the use of an off-white colour such as Colorbond 'surfmist' or 'shale grey' is promoted as the estate's preferred signature roof colour.

Otherwise, roof cladding materials shall be of low or neutral visual impact with highly profiled tiles and overly bright, variegated or dark heat absorbing colours not permitted as listed below. The use of zincalume finish is permitted within the estate. In keeping with the promoted contemporary coastal urban form, roof tiles are recommended to be slate style in neutral or light grey colours.

The list of following colours is not extensive and as outlined above the principles of "off-white" prevail, dark roofs will not be supported even if the proposed dwelling scores enough points in other design criteria to obtain approval.

CORRUGATED METAL ROOFING COLORBOND OR EQUIVALENT	
PREFERRED COLOURS	
✓ Surfmist	✓ Cove
✓ Shale Grey	✓ Evening Haze
✓ Dune	✓ Gully
PROHIBITED COLOURS INCLUDE:	
✗ Cottage Green	✗ Basalt
✗ Manor Red	✗ Ironstone
✗ Monument	✗ Jasper
✗ Headland	✗ Mangrove

TILES
PREFERRED PROFILES
✓ Low profile, slate look
PROHIBITED COLOURS INCLUDE:
✗ Black/Ebony
✗ Dark charcoal greys
✗ Bright orange/terracotta
✗ Red
✗ Overly variegated blends such as red/charcoal and terracotta blends

PREFERRED COLOUR PALETTE

PREFERRED ROOF TILE PROFILE

EXAMPLES OF ACCEPTABLE ROOF MATERIAL AND COLOURS

Grey roof offset by white walls.

White roof complemented by coastal hues.

White roof with coastal wall palette.

White roof and walls offset by accent colour.

BUILDING MATERIALS

WALL MATERIALS

Elevations visible from a street or other public open space areas are required to feature a 'Touch of White'. A design featuring a fully rendered off-white facade offset by elements such as a verandah, portico or awnings is considered appropriate for Shorehaven's coastal setting. Otherwise, walls visible from a street or other public space should feature a composite of construction materials. A dominant material such as painted or coloured render/bagging, face brickwork, stone, rammed earth or block work should be complemented by minor elements of alternative materials such as:

- Face and rendered/painted brickwork/ block work of contrasting colours;
- Stone cladding;
- Clear glazing;
- Weatherboards, painted or natural finish;
- Sheet metal cladding; or
- Compressed fibre cement cladding.

Tilt up or precast concrete will only be approved for internal walls or where the design exhibits sufficient components of detail or glazing to satisfy the spirit of the Guidelines.

STREETSCAPE FEATURING ACCEPTABLE WALL MATERIALS AND COMPOSITION

BUILDING MATERIALS

COLOURS

The application of a unifying 'Touch of White' to public elevations, the use of complementary colours from an expanded coastal palette is considered a valuable means of contributing to the character of Shorehaven. In keeping with its coastal setting, the colour indicators should be derived from the natural elements of ocean, sky, beach, dunal heath and coastal bush.

The intent is to provide a common colour base which contributes to the Shorehaven style and which can be accentuated through the thoughtful application of tonal variations and bolder accent colours.

RECOMMENDED WALL COLOURS

- → The application of a 'Touch of White' to public elevations, as outlined previously.
- → Base walls: (i.e. to distinct wall panels, up to a dado line or change in material) coloured/rendered masonry or stone cladding in earth/sandy and blue/green tones.
- → Bold accent colours offset from white tinted hues, in conjunction with natural timber and metal finishes suitable for a coastal village marine environment.
- → Colours differentiated from base wall colours.

BOLD ACCENT COLOUR

'TOUCH OF WHITE'

ACCEPTABLE COMPOSITION OF MATERIALS AND COLOURS

BUILDING MATERIALS

FRONT FENCING

It is the design intent for Shorehaven to achieve an open street character that allows clear views from the dwellings to the street and encourages interaction between activity in front gardens and the public realm. This is to encourage neighbourhood security and opportunities for community engagement. If fencing and boundary definition is desired then all fences and walls to front boundaries shall not exceed a height of 750 mm from the lot level.

Materials will complement the house design in colour and texture. Materials could include limestone, masonry, render and timber finished to match the colours of the building.

All materials higher than 350 mm (with the exception of brick and masonry piers) shall be visually permeable (i.e. wrought iron, picket, horizontal panels, or pool type fencing) to a maximum height of 750 mm.

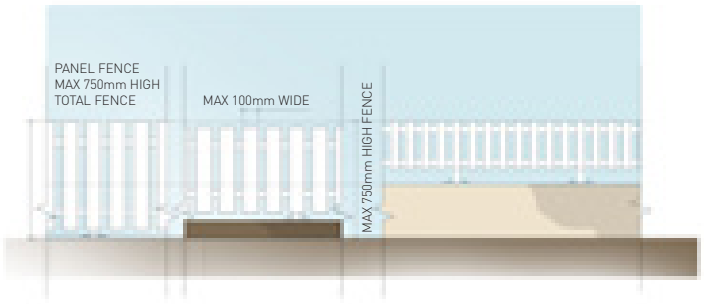
DIVIDING FENCING

Dividing fencing forward of the front building line shall be of a height and constructed of materials as for front fencing.

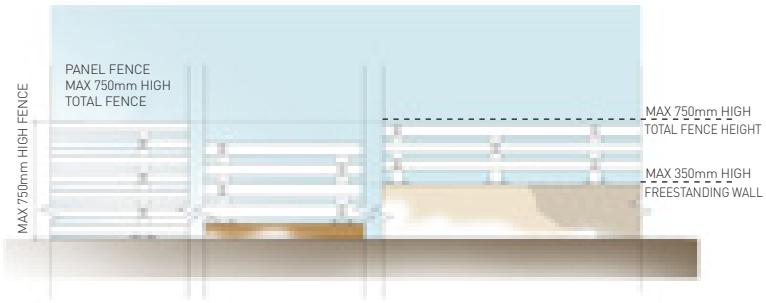
SECONDARY STREET FENCING

In line with aim of providing an open streetscape at corner residences, any fencing along a corner truncation and secondary street boundary to at least 20% of the lot depth shall be of a height and constructed of materials as for front fencing. The balance of secondary street fencing may be solid to suit individual privacy requirements.

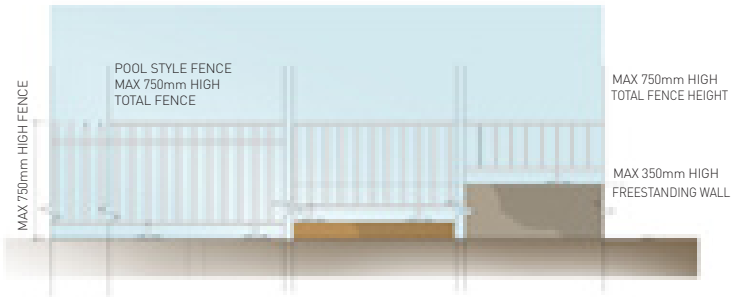
Boundary treatments can also include vegetation in the form of informal and formal hedging.



WALL & FENCE DETAIL VERTICAL PANELS

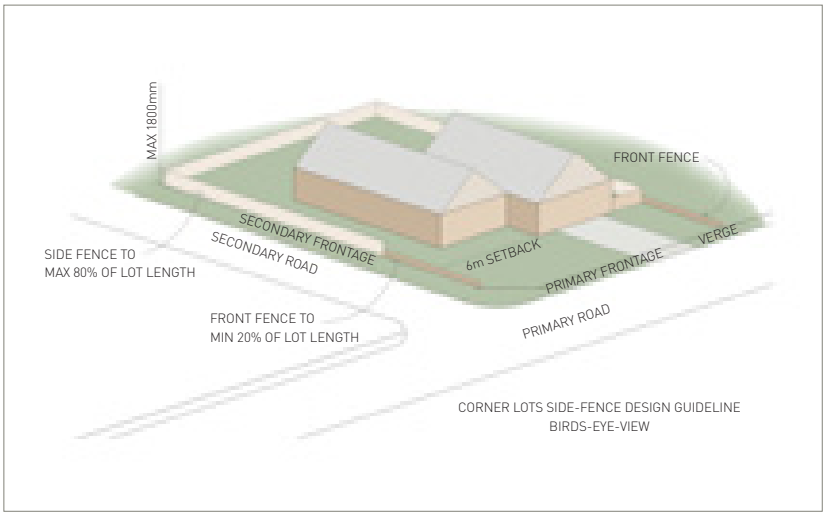


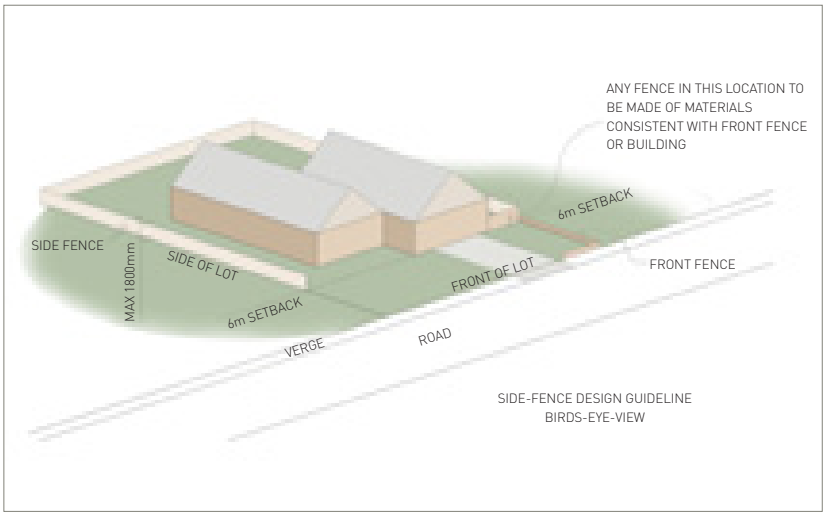
WALL & FENCE DETAIL HORIZONTAL SLATS



WALL & FENCE DETAIL 'POOL' STYLE FENCE

BUILDING MATERIALS





FENCING MATERIALS

Colorbond capped metal, corrugated fibre cement, brushwood or timberlap fencing is not permitted to front street fences, dividing fences in front of the building line or secondary street fences within the front 20% of lot depth.

WALLS/FENCES PROVIDED BY THE DEVELOPER

Where walls, fences and front fencing have been provided by the developer it shall not be altered or removed.

BUILDING ORIENTATION AND SITE PLANNING

BUILDING DESIGN AND ENERGY EFFICIENCY

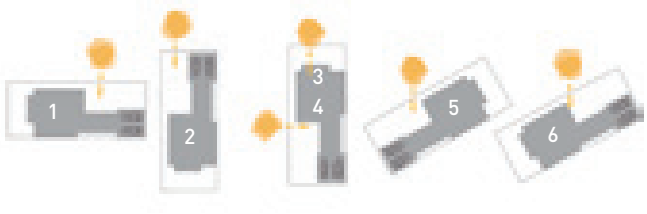
In keeping with sustainability principles and the Energy Efficiency requirements of the BCA, dwellings shall be designed to minimise energy consumption.The nature of the coast subdivision is such that with zero lot-lines to both side boundaries for many lots, the extent of direct solar load on external walls and openings will be limited, thus contributing to energy efficient design.

To facilitate energy efficiency, it is recommended that the following considerations in relation to orientation and design be taken into account:

- → Where lot orientation permits, dwelling design should be optimised to allow maximum winter solar penetration to indoor and outdoor living areas. Daytime living areas should be located such that major openings face north to allow winter sunlight penetration. Thermal mass (materials which collect, store and re-release heat) should be used appropriately to take advantage of winter sun.
- → For narrow lot design solar accessibility and cross ventilation effectiveness can be enhanced by the use of internal open courtyards.
- → North facing walls and windows requiring solar access are set well back from large obstructions.
- → Protection of north-facing openings from summer sun is provided with adequate internal and external shading, such as curtains, blinds, awnings, eaves, shade sails, pergolas or the use of deciduous shrubs and trees.
- → Openings are located to facilitate cross ventilation through habitable spaces and roof spaces. Long, narrow design and location of openings on opposite sides of the home will facilitate cross ventilation.
- → Windows to the east and west sides of the dwelling are minimised or protected. Where openings are provided to take advantage of westerly views, these can be protected with blinds, screening devices or solar shutters.

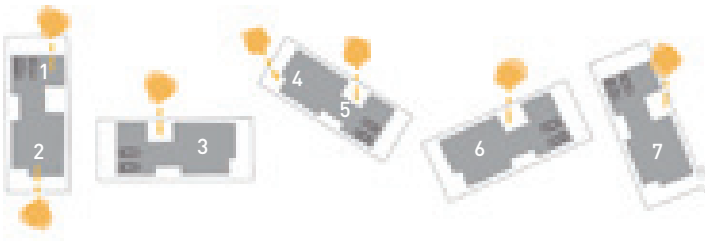
House layout principles for optimal solar access to houses with a laneway garage.

LANEWAY LOTS
1. WEST PRIMARY STREET FRONTAGE
2. SOUTH PRIMARY STREET FRONTAGE
3. NORTH PRIMARY STREET FRONTAGE
4. EAST PRIMARY STREET FRONTAGE
5. NORTH-EAST PRIMARY STREET FRONTAGE
6. SOUTH-WEST PRIMARY STREET FRONTAGE



House layout principles for optimal solar access to houses with a street garage.

FRONT LOADED LOTS
1. NORTH PRIMARY STREET FRONTAGE
2. SOUTH PRIMARY STREET FRONTAGE
3. WEST PRIMARY STREET FRONTAGE
4/5. SOUTH-EAST PRIMARY STREET FRONTAGE
6. NORTH-WEST PRIMARY STREET FRONTAGE
7. NORTH-WEST PRIMARY SCHOOL FRONTAGE



BUILDING ORIENTATION AND SITE PLANNING

SITE PLANNING

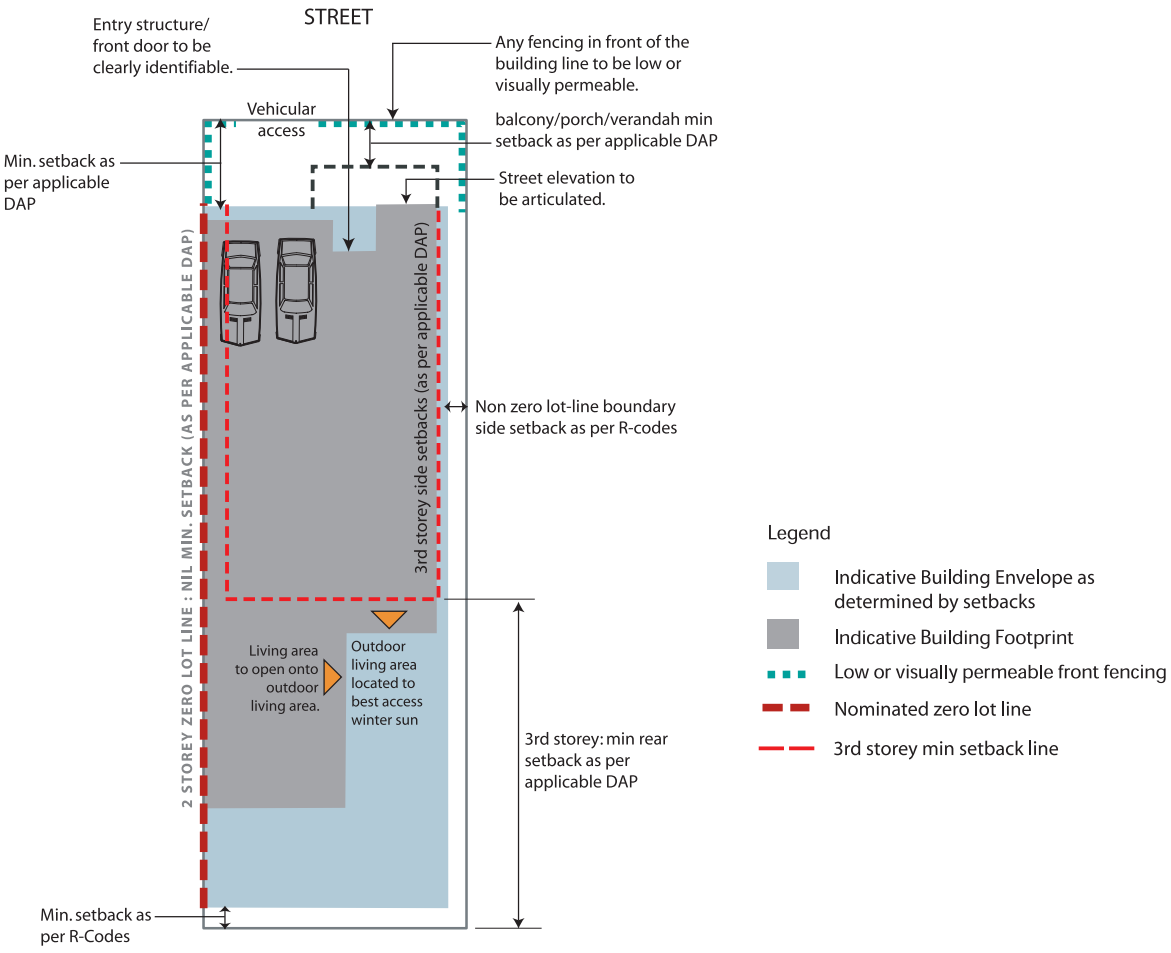
All site planning must be in accordance with the requirements of the relevant DAP. The optimisation of individual site characteristics should be considered during the design phase including:

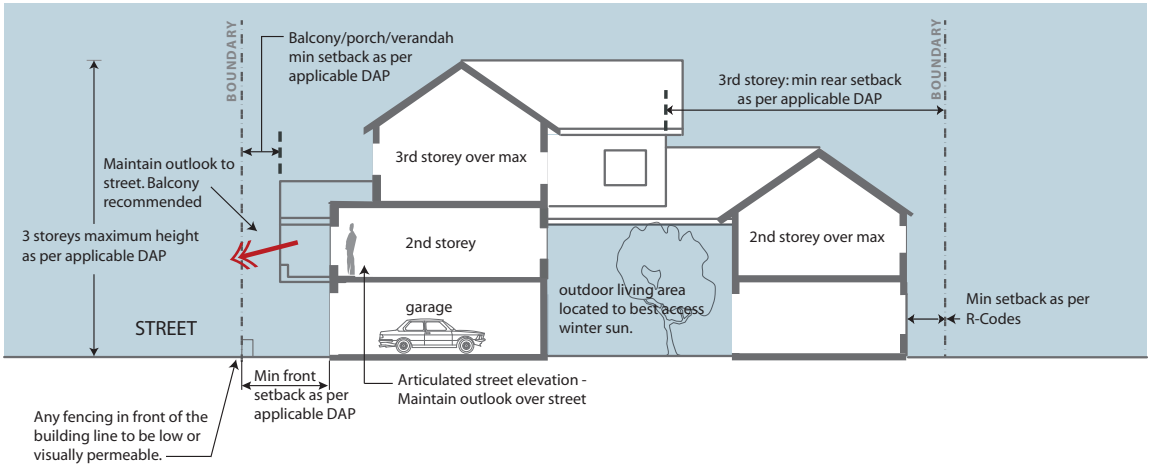
- → Orientation and prevailing breezes
- → Solar access
- → Topographic characteristics and drainage lines
- → Points of access
- → Views and vistas
- → Service easements and designated driveway locations
- → Relationships to adjoining allotments and buildings (existing or proposed)

The following information highlights the key site planning considerations for various lot types within the Coast precinct.

BUILDING ORIENTATION AND SITE PLANNING

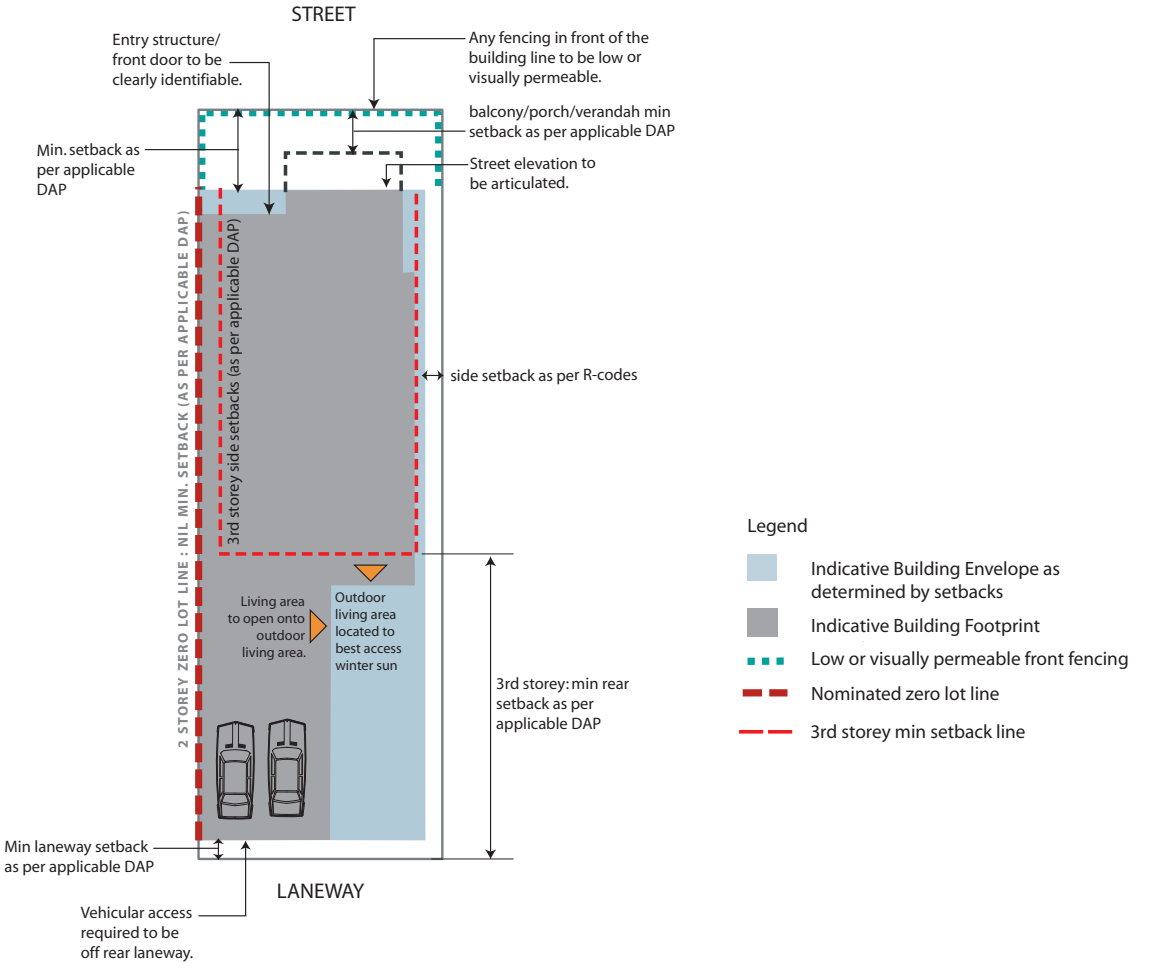
R30 FRONT GARAGE DWELLING

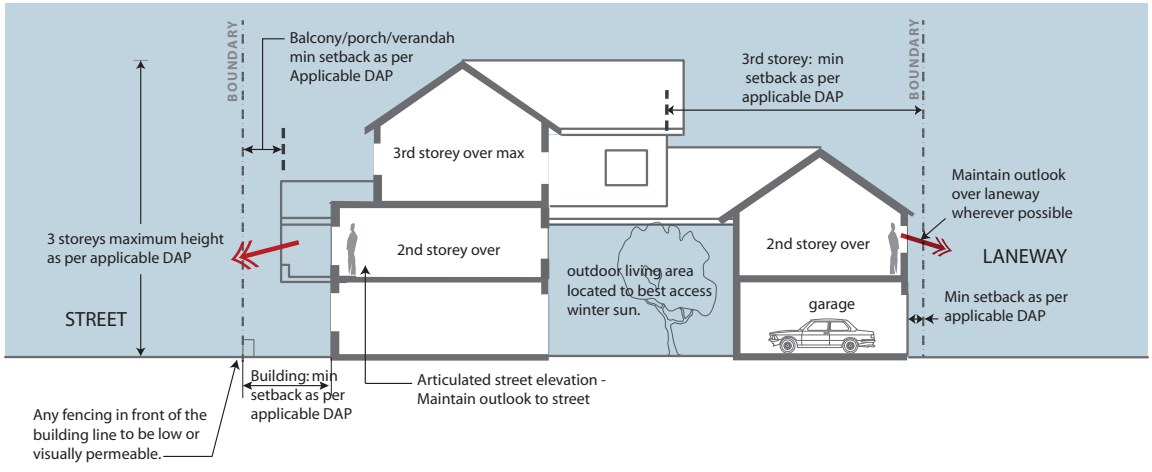




BUILDING ORIENTATION AND SITE PLANNING

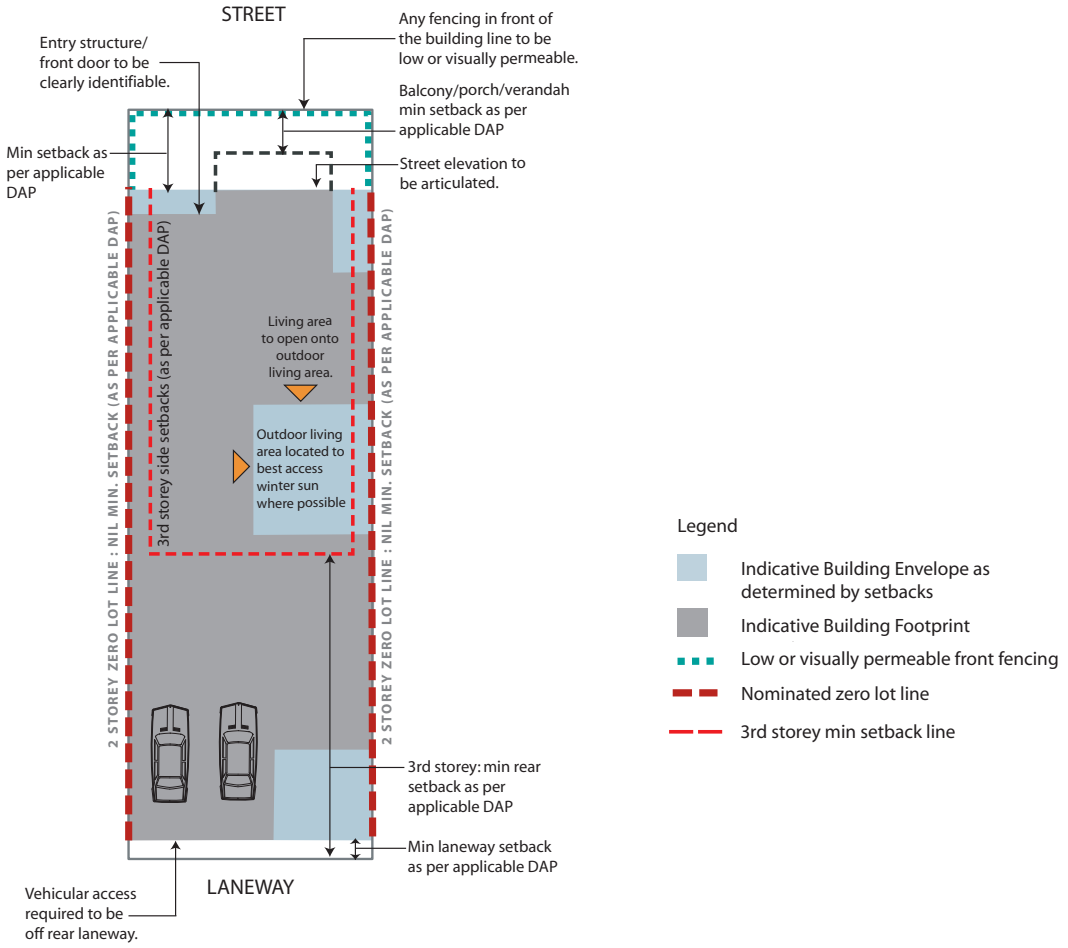
R30 LANEWAY DWELLING

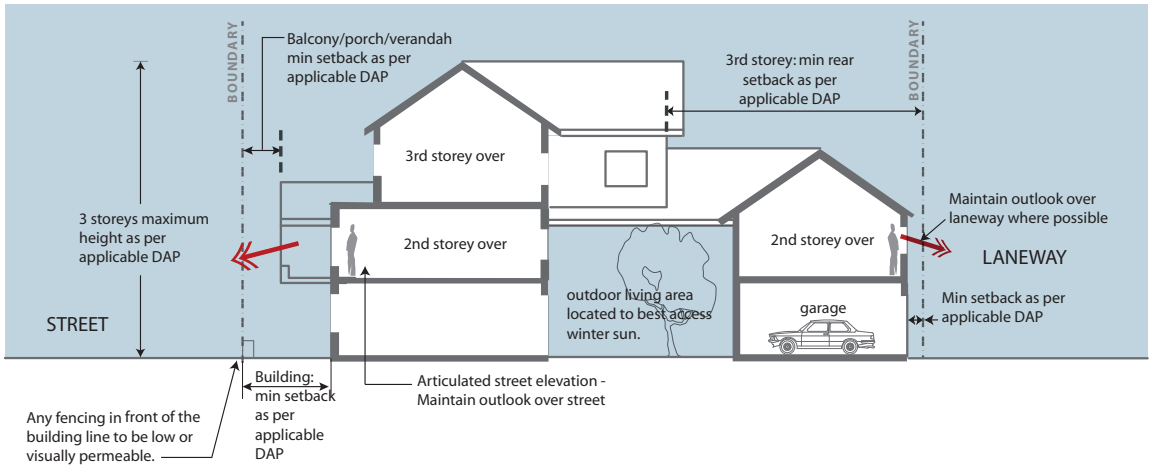




BUILDING ORIENTATION AND SITE PLANNING

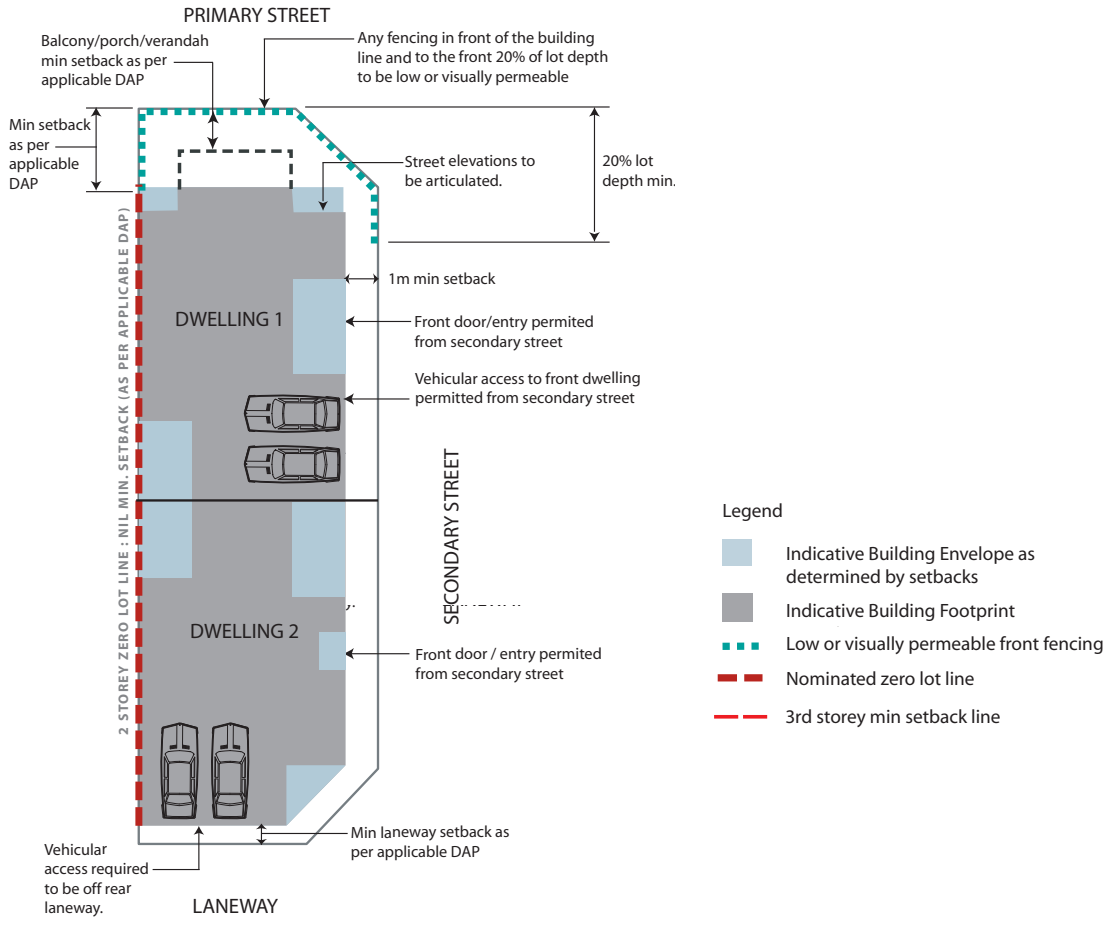
R60 LANEWAY DWELLING

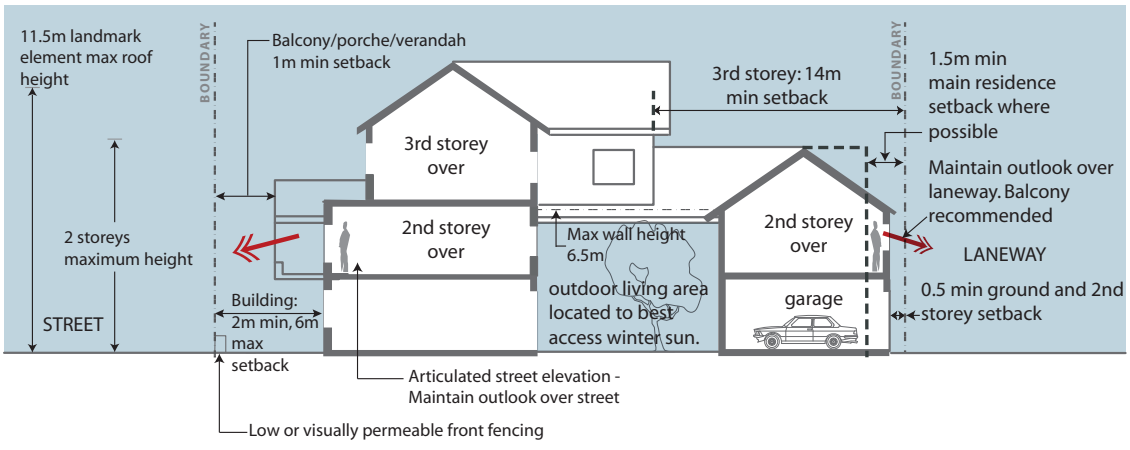




BUILDING ORIENTATION AND SITE PLANNING

R80 LANEWAY DWELLING





OTHER CONSIDERATIONS

VEHICLE ACCESS AND GARAGES

On site parking shall be as required by the R Codes and DAP.

For lots served by a rear laneway, vehicle access is required to be off the laneway with vehicle access not permitted off a primary or secondary street unless indicated on the relevant DAP.

SITE SERVICES

All piped and wired services including waste, vent pipes and rainwater tanks, refrigerant lines and cable ducts are required to be built into walls and are not to be visible from the street or adjoining properties.

LANEWAY LIGHTING

In order to contribute to safe traffic movement and to enhance levels of community security, street lighting is provided to all laneways.

To facilitate the installation of light poles, small easement or road reserve projections into the lot will be provided (where applicable). A building, wall or fence is not permitted to project into a laneway light easement or road reserve projection.

LETTERBOXES

For laneway lots, letterboxes are to be provided and located at the primary street frontage. Letterboxes are not permitted to be located on a laneway boundary, unless directed by Australia Post.

RUBBISH BINS

Rubbish bins should not be visible from public areas except on rubbish collection days. Bins shall be located in a screened storage area.

AIR CONDITIONERS

As air conditioning plants are noise generating and often unsightly, their impact on adjoining properties and public areas is to be mitigated.

Air conditioners are preferred to be located at ground level to minimise the impact on neighbours and are to be visually concealed from public areas. Any roof mounted air conditioning or evaporative cooling plant is required to be located so as to not be visible from a street or public open space and is to be finished in a colour to match that of the roof.

TV ANTENNAE AND SATELLITE DISHES

TV antennae are to be located at the rear of the roof, wherever reception permits. Where a TV antenna must project above a roof line to access the direction of reception the maximum projection should be 0.5m. The installation of satellite dishes shall be in accordance with the CoW relevant policy.

SOLAR COLLECTORS

The use of gas boosted solar hot water and swimming pool heating systems is encouraged, however solar collectors must not be visible from public spaces unless there is no other location which affords suitable solar exposure. In this case they should be installed on the plane of the roof, with water tanks ideally located within the roof space.

CLOTHES LINES AND DRYING AREAS

These should be located to access winter sunshine and prevailing breezes wherever possible and shall not be visible from public areas.

*Terms and conditions apply

YOUR GUIDE TO ECO LANDSCAPING

OVERVIEW

Shorehaven will be created as a unique Waterwise development and Peet is ensuring this by creating a landscape in parks and streets that is environmentally conscious, uses less water than conventional models of landscape, and creates a habitat for native animals.

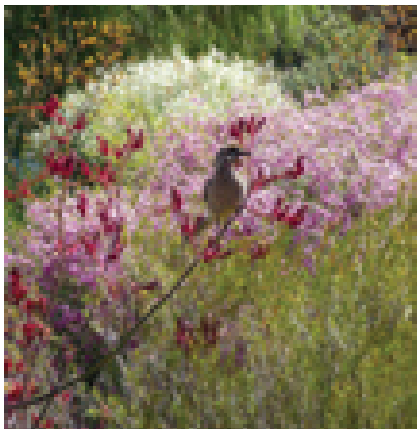
Peet is committed to responsible environmental and Waterwise design in Shorehaven. Peet will be installing front Waterwise garden packages for each lot purchased at Shorehaven*(on sold lots are not eligable).

*Terms and conditions apply.

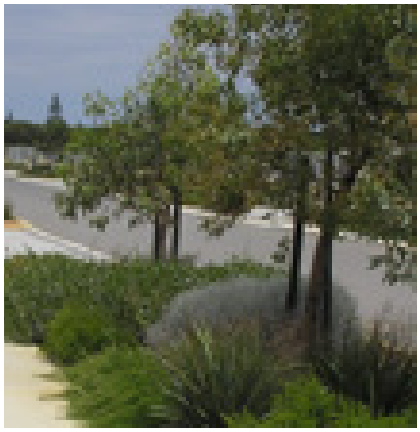
'Your Guide to Eco Landscaping' is intended to guide you towards best-practice landscape design and materials for all other landscaping on their lots, including backyard and side access areas.

As well as providing aesthetic value, your garden will act as a buffer to the street and your neighbours, provides shade where possible and shelter and be an extension of your home while creating habitat for native animals.

EXAMPLES



Native plants provide for native wildlife.



Coastal species soften streets and can provide quick growing shade and groundcover.

Flowering plants add aesthetic value.

Grouping of native coastal plant species provide strong architectural forms and colour.

Note: Plant examples are indicative and may differ from actual garden packages.

FRONT GARDEN PACKAGES

The front garden packages* will respond to the need to reduce water consumption and create a streetscape character unique to Shorehaven. A variety of packages are available to choose from, enabling residents to select a package suited to their individual taste. All options include plants that are drought tolerant and low water users. The planting can be arranged in formal or informal ways, defining small spaces that can comprise a small area of lawn or gravel or stone mulches.

The front garden packages have been individually assessed by Peet, and meet the requirements for Waterwise gardens and are in keeping with the theme and style of Shorehaven.

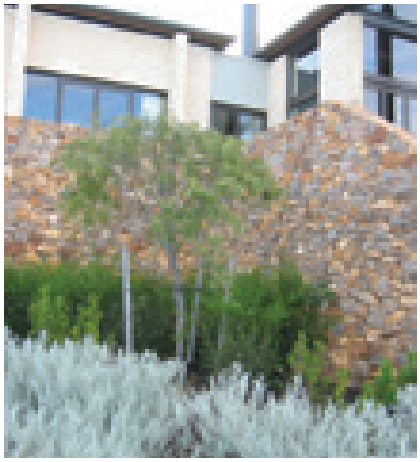
*Terms and conditions apply.

EXAMPLES

Hardy & low maintenance designs are on offer.

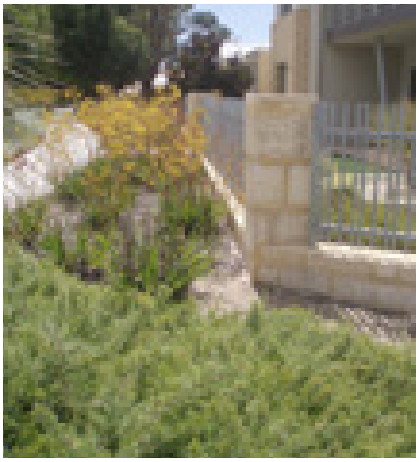
Waterwise garden principles without lawn are prefferable.

Modern coastal character using a mix of coastal grey coloured species and selected drought tolerant exotic plants.



A heavy focus on native plants will give Shorehaven a unique feel.

Medium to tall trees will add to the streetscape character.



Open planting of kangaroo paws providing low screening but clear views

GARDEN DESIGN

MAKING THE MOST OF YOUR LOT

When designing your garden, either yourself or with the aid/services of others, you must consider the opportunities and constraints that each lot presents.

Gardens should be designed to take advantage of the site, including views, orientation, and breezes. Shade and shelter create micro-climates in a garden to improve the amenity of the garden as well as improving the growing conditions for plants.

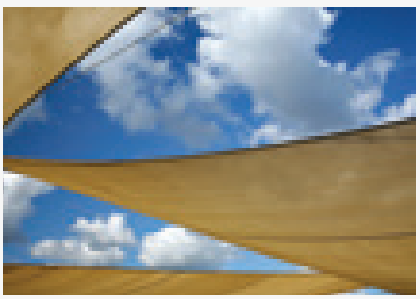
When you design your garden you should consider these points;

- → Allow for the natural cooling of the south-westerly breezes.
- → Create a garden that enhances the streetscape and the view of your house from the street.
- → Design outdoor areas that flow from the internal spaces of your home, and create views from within the house. This makes it easier to use your backyard and more enjoyable in winter months when you cannot sit outside.
- → Add shade features to enhance the micro-climate of your garden.
- → Assess all the aspects you would like to include in your garden design by comparing the cost of installation and maintenance with the rewards and benefits, as this will give you a good idea of what you are prepared for, and what may not be suitable.

EXAMPLES

Entertaining areas should be easily accessible.

Plants can be used to screen unwanted views.



Creating shade in your new garden will make it more useable.

Plants come in a variety of colours and textures, creating attractive views from inside your home.

GARDEN DESIGN

PLANTING APPROPRIATELY

By using predominantly indigenous plants which are native to the local area, landscapes should flourish and be easy care. We have provided a list of plants that are suitable for the conditions at Shorehaven and are locally available.

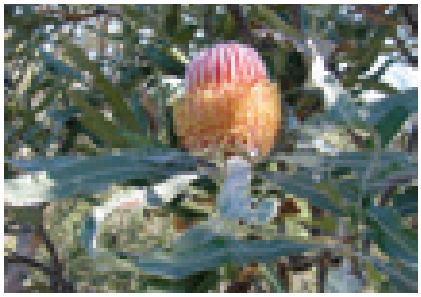
Your garden can also provide habitat for native animals, including small mammals, insects, butterflies, birds, frogs and reptiles such as lizards. By planting flowering plants you can attract birds and butterflies which can make your garden more enjoyable.

At Shorehaven we must live together with the protected Carnaby's Black Cockatoo. This black-coloured cockatoo with white cheeks has been facing habitat loss, and Peet have given an undertaking to help produce an urban area that provides for the bird. In the street and parks at Shorehaven, Peet are making sure that Carnaby's Cockatoo will still find valuable food sources and habitat. In your back garden you can help us help the Carnaby's Cockatoo by planting species from the recommended plant list. All of the Front Garden Design Packages include plants agreed with the Federal Government to provide for Carnaby's Cockatoo.

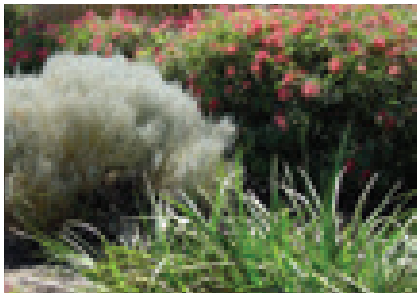
Generally, when creating and planning your garden;

- → Plant shade trees to the north and west of your house and outdoor areas to help shade and cool the garden especially in our long summer season;
- → Use trees, planted windbreaks, pergolas, screens, lattice, shadecloth, and climbing vines to shelter the house, outdoor living areas and plants from harsh summer sun and strong winds;
- → Create privacy by planting taller plants along property boundaries;
- → Try planting alternatives to lawn, where possible, such as local groundcovers that act like a lawn by spreading quickly over the ground, grasses and strappy leaved plants in places that you don't need lawn.
- → Consider synthetic turf to activity areas as it doesn't need watering, mowing or fertiliser; and
- → Mulch garden beds to reduce evaporation and to help protect the sensitive root zone of plants- stone mulches do get hotter than wooden mulches.

EXAMPLES

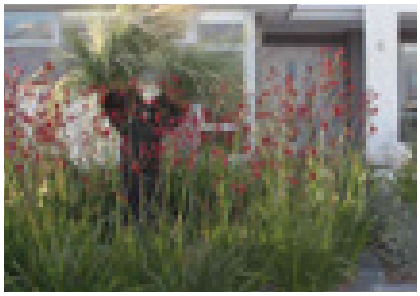


Use native plants that are suited to the local conditions (weather &soil).



Create privacy by planting taller plants along property boundaries.

Use trees to provide shelter to entertaining areas.



Try planting alternatives to lawn where possible.

GARDEN DESIGN

HARDSCAPE

A garden is more than just plants, and you may wish to have a paved entertainment area or feature a shade pergola. These should be located in places that also take the most advantage of your garden. It is important to consider the reasons for installing hard surfaces also - is it for dining under the pergola, or a path to the back of the garden? Paving can become a heat trap and care should be taken to position paving to avoid excessive heat build up, which can include making sure the paving is shaded in the afternoon.

A permeable surface, for example unit pavers (bricks or paving blocks), wooden or wood-composite decking and compressed gravels, allow rainfall to drain through to the ground. This helps reduce drainage problems in your garden and allows moisture back into the ground.

Non permeable surfaces include concrete slabs that are commonly used for driveways, and limestone mixed with concrete that is carved to look like paving. If using such products, construct them so as to direct rain and moisture into planted areas.

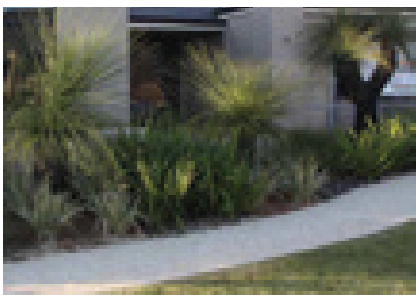
You could consider these ideas;

- → Use of stone mulch as a surface treatment because it allows rainfall to drain into the ground, however it can burn the root zone if used around sensitive plants.
- → Drain paved areas into lawns and garden beds for passive irrigation, especially during moments of heavy rainfall when the water cannot drain through fast enough.

EXAMPLES

Permeable surfaces allow rainfall to penetrate into the ground.

Create entertaining areas at a scale appropriate for you.



Pave access routes through your garden but only what you need.

Large gravels are good for mulching under big trees.

GARDEN DESIGN

REDUCING WATER USE

The Water Corporation have developed guidelines regarding the design, construction and maintenance of Waterwise gardens. The full set of these guidelines can be accessed at **www.watercorporation.com.au** or call **13 10 39** to contact a Waterwise specialist near you.

There are plenty of things to consider, including:

→ Install an underground fully automated irrigation system that can be programmed to suit sprinkler restrictions and will reduce the amount of wasted water by only irrigating areas that need to be watered.

→ Bubbler irrigation applies water directly to root zones of plants that require watering, Dripline irrigation reduces evaporation most efficiently but is more difficult to direct onto plants that need it; while spray irrigation is the least efficient method of watering as it evaporates quickly.

→ Ensure a rain-detector-override-switch is fitted to your irrigation system so you are not wasting water on rainy days.

→ Minimise lawn areas that require a lot of water and also lose a lot of water through evaporation.

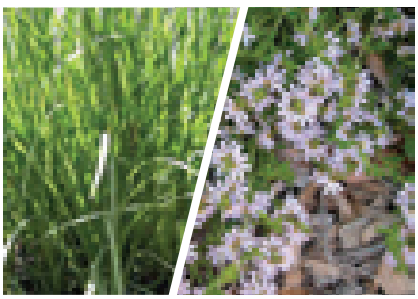
→ Use Waterwise plants that do not require a lot of watering to survive or thrive.

→ Mulch garden beds to reduce evaporation from soil.

EXAMPLES

Spray irrigation evaporates quickly.

Dripper Irrigation can be directed onto the root zones of plants.



Use Waterwise plants that do not require large amounts of water.

Apply mulch to garden beds to reduce evaporation from soil and minimise expanses of lawn.

RECOMMENDED PLANT LIST

LAWN

If you do decide to install a living lawn in your garden, it can be valuable to research which varieties are available at the time as there is a lot of research into lawn in Australia.

Important factors to consider are;

- → water-saving or water-hungry,
- → drought hardy,
- → hard-wearing,
- → tolerant of salty winds,
- → tolerance of shade and of sun, light or heavy, full or part,
- → growth rate which relates to maintenance and also invasiveness.

PLANT NAME
WATERWISE LAWN VARIETIES*
Santa Ana
Windsor Green
Greenlees Park
CT2
Wintergreen
Empress Zoysia
Empire Zoysia

*Lawn types subject to change

RECOMMENDED PLANT LIST

We have gathered a list of plants that would be suitable and can be recommended for use at Shorehaven. By selecting plants from this list you can achieve points as outlined further in this document.

CARNABY COCKATOO FORAGING SPECIES	PLANT NAME	COMMON NAME	DIMENSIONS HxW	
LOW GROUND COVERS				
	Acacia cognata	"Bower of Beauty"	0.5x1m	Bright green
	Acacia cognata	"Green Mist"	0.5x1m	Grey/Green
	Acacia cognata	"Limelight"	0.2x0.5m	Lime green
	Adenanthos cuneatus	"Coral Carpet"	0.3x1m	Apricot tips/pink
	Adenanthos cuneatus	"Coral Drift"	0.4x1m	Pink tips/purple
✓	Banksia "Coastal Cushion"	"Coastal Cushion"	0.5x1.5m	Orange banksia flowers
✓	Banksia "Honey Pots"	"Honey Pots"	0.4x0.4m	Red-orange flower
✓	Grevillea "Carpet Crawl"	"Carpet Crawl"	0.4x2-3m	Orange flower
✓	Grevillea "Fairy Floss"	"Fairy Floss"	0.5x0.75m	Pink/purple flower
✓	Grevillea "Gin Gin Gem"	"Gin Gin Gem"	0.3x2m	Red-orange flower
✓	Grevillea "Green Carpet"	"Green Carpet"	0.3x2m	Light yellow/green flowers
✓	Grevillea "Softly Softly"	"Softly Softly"	0.55x0.4m	Bunches pink/cream grey foliage
	Grevillea thelmanniana	Spider Net Grevillea	0.3x1m	Spreading red flower
	Grevillea "Tucker" Dwarf	Grevillea Tucker	0.6x1m	Red flower
	Hemiandra pungens	Snake vine	Spread to 1m	Yellow flower
	Scaevola	Fan Flower	0.1-0.4x1-2.5m	Pink-purple-blue flowers (See figure 24)

RECOMMENDED PLANT LIST

MEDIUM SHRUBS				
	Adenanthos cunninghamii Prostrata	Woolly bush		Light green with apricot tips
✓	Agonis flexuosa nana	WA Peppermint	1x1m	Green foliage with red new growth
	Alyogyne hakeifolia	Native Hibiscus	2-4x2m	White flowers
	Callistemon	"Little John"	1x1m	Green grey foliage with Red bottlebrush flowers
	Chamelaucium	Wax flowers	2x2m	Geraldton & Albany Wax Flowers
	Darwinia citriodora		0.5x0.5-1m	
	Eremophila	"Amber Carpet"		
	Eremophila nivea		Shrub to1m	Purple flowers on green/grey foliage
✓	Grevillea	"Bon Fire"	1.5x2m	
✓	Grevillea hyb.	"Boongala Spinebill"	1x2m	Long toothed leaves
✓	Grevillea	"Canterbury Gold"	1.5x2m	
✓	Grevillea crithmifolia		Low cover	
✓	Hakea bucculenta	"Red pokers"	4x3m	Woody large shrub
✓	Hakea francisiana	syn. Hakea coriacea	8x4m	Woody large shrub
✓	Hakea hyb.	"Burrendong Beauty"	1x2m sprawling	Prune regularly
✓	Hakea lissocarpha	Honey Bush	2x2.5m	Prickly
	Leucophyta brownii	Grey cushion bush	1x1m	Grey foliage with small yellow flowers
	Russelia equisetiformis	Firecracker bush	1.5x2.4m	Dark green leaves with red fluted flowers
	Westringia	"White Rambler"	1x3m	

STRAPPY / HIGHLIGHT PLANTS				
	Anigozanthos	Kangaroo Paw	0.5-1m varieties	
	Dianella "Cassa Blue"	"Cassa Blue"	0.4x0.4m	Blue foliage
	Dianella prunina	"Utopia"	0.5x0.5m	Blue/purple variegation
	Lomandra "Seascape"	"Seascape"	0.75x0.5m	
	Lomandra "Silver grace"	"Silver Grace"		Very stringy foliage
✓	Xanthorrhoea preissii		Mature Transplants	

RECOMMENDED PLANT LIST

CARNABY COCKATOO FORAGING SPECIES	PLANT NAME	COMMON NAME	DIMENSIONS HxW	
SMALL TREES				
✓	Agonis flexuosa	WA peppermint	to 8m	
✓	Agonis flexuosa After Dark	"After Dark"	to 5m	
	Alyogyne huegelii	Native Hibiscus	Large shrub to 2.5m	Fast growing plant with purple flowers
✓	Banksia prionotes	Candle Banksia	To 2m	
✓	Banksia menzeisii	Firewood Banksia	Slow growing to 5m	(See Figure 13)
✓	Grevillea "Pink Surprise"		6x4	Small tree bird attractant
✓	Hakea francisiana		0x0	Hedges, screens
✓	Hakea laurina	Pincushion hakea	3.5-8x3	Sea-urchin looking flowers
✓	Hakea multilineata		5m	
✓	Hakea petiolaris		6x3.5	Shrub or small tree
	Eucalyptus caesia	Silver Princess	to 7m	Weeping silver gum tree (See Figure 15)
	Eucalyptus erythrocorys	Illyarrie	4x4	Uniquely shaped tree with yellow flowers & red caps
	Eucalyptus marcocarpa	Mottlecah	Slow growing to 5m	Round grey leaves and large red/pink blossoms
	Eucalyptus tetragona. pleurocarpa	Tallerack	Slow growing to 4m	Grey/blue leaves and lemon blossoms
	Eucalyptus torquata	Coral Gum	4-7m	Dark blue/green foliage pink & cream blossoms

NON NATIVES				
	Argyranthemum	Federation Daisy	Shrub to 0.60	All colours available
	Tulbaghia violacea	Society Garlic	To 0.3	Grey foliage mauve flowers
	Hebe varieties	Hebe	Shrub to 1m	Hedging hardy wind tolerant, purple flowers
	Strelitzia reginae	Bird of Paradise	Large shrub to 1.5m	

OVERVIEW

The following table indicates the number of points scored per Waterwise landscape element. A mininum of 10 points must be achieved to obtain approval from Peet.

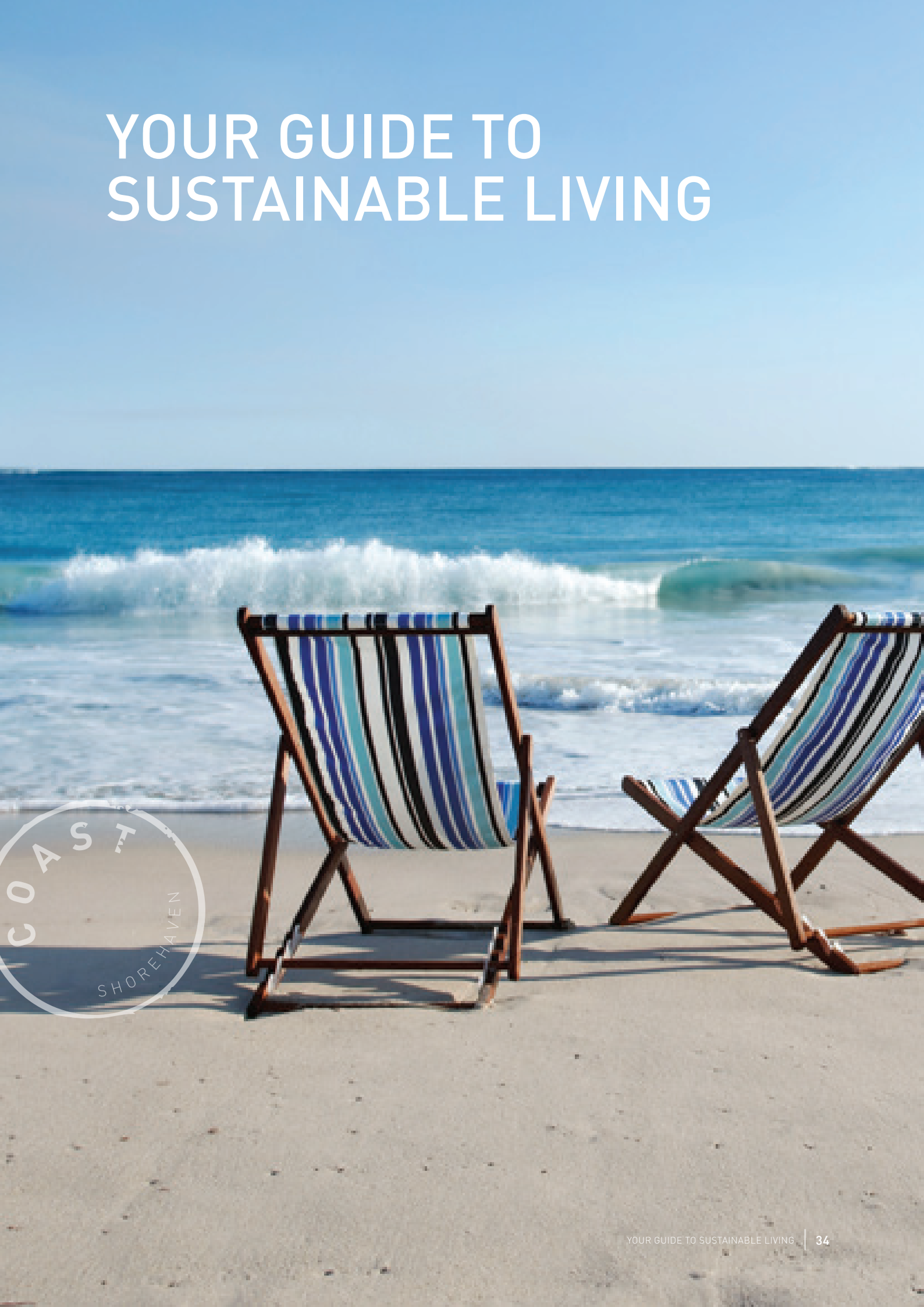
This checklist can be found at the back of this booklet and should be completed and attached to your plans when submitting them to Peet for approval

ECO LANDSCAPING OUTCOMES APPROVAL CRITERIA

CRITERIA NO.	LANDSCAPE ELEMENT	POINTS SCORED
1	**Lawn**	
1.1	Lawn to Less than 20% of Lot area excluding residence	8
1.2	Synthetic Lawn surface	10
2	Plants	
2.1	Shrubs selected from Recommended Plant List 30-50% of all planted	3
2.2	Shrubs selected from Recommended Plant List 50-100% of all planted	5
2.3	Trees selected from Recommended Plant List 30%-50% of all planted	3
2.4	Trees selected from Recommended Plant List 50-100% of all planted	5
2.5	100mm mulch applied to garden beds	5
3	**Water**	
3.1	Irrigation system with fully automated operation (eg. Spray sprinklers)	2
3.2	Bubbler, trickle or other non-spraying irrigation system with fully automated operation	5
3.3	Rain-detector-override-switch fitted to automated irrigation system*	5
4	**Paving**	
4.1	Permeable hardscape surface to between 10-20% of garden (eg. pavers, gravels, deck)	5
4.2	Drainage from Non-permeable surface directed to planted area	3
5	**Shade & Shelter**	
5.1	2 Shade trees to Northern or Western side of Lot	4
5.2	Pergola or shade sail located over hardscape areas	4

*Points additional to type of irrigation system (eg. If you present element 3.1 and 3.3 you achieve 7 points, but if you present element 3.2 and 3.3 you achieve 10 points)
*Where individual elements score less than 10 points, as per above, a combination of elements shall be used in order to achieve the mininum score.

YOUR GUIDE TO SUSTAINABLE LIVING



OVERVIEW

PEET IS COMMITTED TO THE PROMOTION OF SUSTAINABILITY AT SHOREHAVEN.

Sustainable design is about smart design. It is about being responsive to local conditions (most importantly climate), and building a more comfortable home that uses less water and energy, generates less waste and ultimately costs you less money to run.

Many small decisions made at the design and construction phase can reap ongoing benefits, making a difference to your health, comfort and lifestyle and reducing your ongoing operating costs year after year.

Importantly, sustainable design can ultimately maximise the long-term value of your home and prepare you for any future regulations.

'Your Guide to Sustainable Living' has been developed to assist purchasers with finding information and making decisions to help achieve more sustainable design outcomes. Information contained in this section covers a range of topics and ideas on sustainable design and construction, and also lifestyle considerations post-construction:

- → Designing and building an energy efficient home
- → Being Waterwise at home
- → Reducing, reusing and recycling waste at home
- → Managing waste during construction
- → Designing for life - the accessible, adaptable home

Each topic will cover the key home design elements home builders need to think about before building, as well as links to other useful sources of information.

OVERVIEW

SUSTAINABILITY REGULATORY REQUIREMENTS

All new homes in Western Australia must comply with the Energy Efficiency and Water Use requirements of the BCA.

Purchasers, along with their builders, should ensure their homes are compliant with the minimum BCA standards.

SUMMARY BCA REQUIREMENTS	
ENERGY EFFICIENCY	WATER EFFICIENCY
→ Required levels of roof and/or ceiling and wall insulation are installed.	→ All tap fittings, showerheads and sanitary flushing systems are appropriately WELS (as per Water Efficiency Labelling and Standards Act 2005 of the Commonwealth section 7) rated.
→ Appropriate size, type, orientation and shading of windows.	→ Installation of appropriate covers for swimming pools and spas.
→ Appropriate sealing of the building envelope against loss of warm or cool air (e.g. windows and doors fitted with seals; dampers fitted to chimneys, flues and exhaust fans).	→ All hot water pipes are insulated and located close to the hot water system, or a recirculating hot water supply system is installed.
→ Use of appropriate means to facilitate required air movement - including ceiling fans and cross ventilation.	
→ Hot water systems (including any associated components) with features that produce low levels of greenhouse gases and are appropriately rated: - Solar hot water system, or - Gas hot water system, or - A heat pump hot water system.	
→ Use of thermal insulation for central hot water pipes, and heating and cooling ductwork.	

SHOREHAVEN SUSTAINABILITY APPROVAL CRITERIA

Peet has developed a series of recommended sustainability outcomes designed to guide home builders to a more sustainable home and lifestyle.

These are contained on the Sustainable Living Application Form. It is up to the individual home builder to choose which elements to incorporate in order to achieve a minimum sustainability points score.

OVERVIEW

SUSTAINABLE DESIGN OUTCOMES APPROVAL CRITERIA

CRITERIA NO.	SUSTAINABILITY ELEMENT	POINTS SCORED
1.0	**Passive solar (energy efficient) design**	
1.1	At least one main living area with northerly solar access (minimum of 50% glazing (of gross wall area) on that northern elevation and area not permanently covered)	8
1.2	Maximum of 20% glazing (of gross wall area) on both eastern and western elevations, unless it can be demonstrated that thermal performance will not be affected by east and west windows	4
1.3	Minimum 450mm eaves/awnings installed on east, west and north facing walls to protect windows from full summer sun	6
1.4	Ceiling and/or roof insulation to value of R3.5 to reduce heat load	4
1.5	East and west cavity bricks walls are insulated (minimum value R2.0) to reduce heat load in summer	6
1.6	Openings (i.e. openablewindows and/or doors) are provided on opposite walls in all habitable rooms to allow good natural cross ventilation for all rooms	4
1.7	Outdoor living areas located on the north side to facilitate solar access	4
1.8	Roof space is naturally ventilated (i.e. not mechanical or requiring energy to operate) to minimise heat transfer into house	4
2.0	**Reducing energy use and greenhouse gas emissions**	
2.1	Centralised air conditioning is not installed	6
2.2	Ceiling fans will be installed in at least the main living areas and bedrooms	4
2.3	Renewable energy will be installed (photovoltaic solar panels or wind turbine)	10
3.0	**Reducing water use**	
3.1	Rainwater tanks are plumbed-in to toilet and laundry to reduce in-house potable water use	6
4.0	**Designing for Life**	
4.1	Design contains at least one of the following universal or adaptable design elements:	
4.2	At least one hobless shower	2
4.3	Reinforcement of bathroom walls in at least one bathroom (for later installation of grab rails)	2
4.4	At least one level entrance	2
4.5	Doorways widened to 900mm	2
4.6	75% of kitchen cupboard/pantry are roll-out drawers	2
4.7	Power outlets raised to 600mm	2

OVERVIEW

CRITERIA NO.	SUSTAINABILITY ELEMENT	POINTS SCORED
4.8	Light switch height lowered to 105cm off the ground	2
5.0	**Minimising waste and improving recycling**	
5.1	Minimum 15% construction (by volume) made from either (or a combination of) the following:	
	Reused resources and/or materials with recycled content (full or part). Examples include: - Bricks containing recycled content - Recycled based in concrete slab - Recycled timber (e.g. framing, flooring, indoor stairs) - Reuse of products such as steel or timber Sustainable, renewable sources (that are certified by a credible third party). Examples include: - Plantation grown, recycled or more sustainably forested timber (e.g. bamboo) for framing, flooring and other wood applications - Lower-embodied energy bricks have been used (e.g. Eco-brick)	5
5.2	Built-in space for separate organic, recyclable and general waste bins has been provided	2

A minimum of 10 points must be achieved. The initiatives are flexible and there are numerous options available.

Where individual elements score less than 10 points, a combination of elements shall be used in order to achieve the minimum score.

Your Guide to Sustainable Living contains ideas and options for how to meet the above sustainable design outcomes.

FURTHER INFORMATION

A good general source of information is the Your Home Technical Manual, produced by the Australian Government. The site below contains a wealth of information on a whole range of approaches to designing, building and living more sustainably, and covers all of the above topics and more.

Visit **www.yourhome.gov.au** to find out more.

BEING WATERWISE IN YOUR HOME

Water conservation is an important element of consideration at Shorehaven. A typical household in Perth uses about 770L of scheme water every day - over 280,000L every year.

Simple considerations during the design and construction of your home, and then later when you move in, can reduce the pressure on reticulated water supplies and reduce your water bills, without compromising your lifestyle.

DESIGN CONSIDERATIONS

Dwellings should be designed to minimise water consumption, using rainwater tanks or waterwise landscaping practices and plantings.

RAINWATER TANKS

Slimline rainwater tanks can be either used to supplement summer garden watering or connected for internal use in the laundry. Using rainwater can reduce your water bills and ease pressure on potable water sources. Ideally, rainwater tanks should be plumbed-in to flush toilets or service washing machines to make the most of this valuable resource.

This has the potential to save around 46,000L of water per household every year.

Construction provisions

If connecting your rainwater tank to a toilet or washing machine for internal use, the following provisions are required prior to installation to allow the system to operate correctly:

1. Flat level site suitable for tank size
2. Provide sufficient wall space suitable for tank size
3. External Weather proof GPO point within 1m of tank
4. Allocation of pump within 2m of tank
5. External 19mm copper cold water line within 1mtr of tank (as per schematic drawing)

Example of the rainwater tank.

BEING WATERWISE IN YOUR HOME

FIXTURES, FITTINGS AND APPLIANCES

In addition, to satisfy the water use requirements of the BCA, the following practices are recommended to further optimise water efficiency when designing your home:

- → Use tap aerators and pressure and/or flow reduction valves.
- → Select low volume baths, basins, sinks and troughs, which can equate to reduced water usage and heating costs.
- → Choose water efficient dishwashers and washing machines - when buying new appliances like dishwashers or washing machines, aim to buy the highest star rating that you can afford.

SAVING WATER INSIDE THE HOME

In addition to the above Waterwise design considerations, the following practices are recommended to further optimise water efficiency once you move in to your new home:

- → Run your dishwashers and washing machines only when full.
- → Don't let water run while cleaning your teeth or washing your hands.
- → Aim to take shorter showers. Installing a 4-minute shower timer can help here.
- → Fix leaky toilets or taps immediately.
- → Use a broom to clean a driveway or paved area (rather than hose or pressure cleaner).

FURTHER INFORMATION

For information about being Waterwise in your garden, see Your Guide to Eco Landscaping for Shorehaven at Alkimos.

Information on being Waterwise in the home is available on the Water Corporation website: **www.watercorporation.com.au**

ENERGY EFFICIENCY IN YOUR HOME

DESIGN CONSIDERATIONS

Residential design is required to meet the 'Deemed to Satisfy' or 'Alternative Solution' energy management ratings of the BCA, current at the time of submission for approval.

Energy efficient design measures over and above BCA requirements are strongly encouraged to help minimise heating and cooling costs. This can be done by incorporate passive solar design principles when building your home.

Passive solar design refers to making use of natural heat from the sun and natural night-time cooling to keep your home at a comfortable temperature year round. It is easy and possible to design your home's windows, walls and floors to collect, store and distribute heat in winter, and to incorporate measures to block heat entry in summer. Passive solar design can eliminate or reduce the need for expensive mechanical heating or cooling.

The following passive solar design practices are recommended to all home builders to improve the performance, comfort and value of their dwelling:

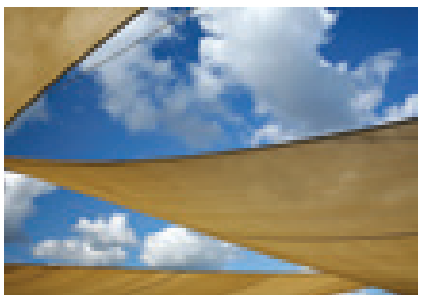
ORIENTATION

Consider the lot orientation and how best to take advantage of individual site characteristics. By designing and orientating your home appropriately you will not only maximise its efficiency in energy conservation but also enhance the liveability, for the occupants and neighbours. This process starts with block selection.

Suggestions:

- → Orientate your home with daytime living areas and large windows facing north, to allow passive heating from the low winter sun.
- → Incorporate eave overhangs (at least 450mm) to admit winter sun but shade the area from the summer sun. Deciduous trees and angled louvres can also be used to provide appropriate external shading.
- → Minimise or protect windows to the east and west, to reduce heat gain from the low morning and afternoon summer sun.
- → Ensure adequate external shading is provided with awnings, eaves, pergolas, shade sails or the use of shrubs and trees.
- → Make sure that north-facing walls requiring winter solar access are set well back from large obstructions.

ORIENTATION



ENERGY EFFICIENCY IN YOUR HOME

INCORPORATING THERMAL MASS

Thermal mass refers to any material (such as floors and walls) that can store heat from the sun during the day, and re-release it when required. When effectively incorporated into the home, thermal mass can help to 'even out' day and night temperature variations. Dense materials such as brick, stone, concrete and rammed earth heat up and cool down slowly - they have what is called a high 'thermal mass'. High thermal mass construction is ideal in Perth's climate.

With narrow lots, obtaining northern solar access can be difficult to achieve, particularly where double zero-lot lines are employed. Depending on lot orientation, the judicious placement of courtyards can assist in facilitating solar accessibility along the north-east, north or north-west sides of lots. Where this is possible, the following should be taken into consideration:

- → Locate thermal mass in living areas which are north facing for optimum results. Ensure north-facing windows allow the sun to enter in winter so heat can be absorbed by walls and floors, thereby warming your home naturally. North-facing windows shaded by covered pergolas or roofed patios will be less effective.
- → Ensure unwanted summer sun is kept out using internal and external shading devices, such as eaves, solar pergolas, awnings, blinds, curtains etc.
- → In summer, thermal mass can also help keep your home cooler during the day, provided you properly satisfactorily ventilate your home overnight (see cross-ventilation). The aim is to allow the night air to cool down the mass inside your home, resulting in more comfortable conditions the next day.
- → Hard surfaces such as tiles allow the sun to heat the slab more readily than materials like timber, carpet or cork.

ENSURING GOOD CROSS-VENTILATION

Good cross-ventilation can reduce the need to use air conditioning in summer, as well as contribute to a healthy home.

With narrow lots this can be enhanced by providing openings at both ends of the dwelling and at judiciously located courtyards. Considerations should include:

- → Ensure your home's design allows for natural cooling breezes (in this case, the sea and occasionally early morning easterly breezes) to easily enter and pass through your home. This flushes out any excess internal summer heat that may build up during the day. Early morning brisk easterly breezes in summer present another opportunity to 'purge', particularly after a still and warm night.
- → This can be achieved generally by a long, narrow design, by locating openings (such as windows and doors) on opposite sides of the home and by minimising barriers to air paths through the dwellings.
- → A larger opening on the leeward side (the side that faces away from the direction of the wind) of the home will maximise the airflow through rooms.
- → Install roof ventilation (such as Eco-Vents or Whirly-Birds) which do not use energy in operation) to further optimise the comfort of your home.
- → The level of dust, pollutants and chemicals can be significantly reduced in homes with good ventilation (see Design for Life - the Healthy Home).
- → Zone spaces (by incorporating doors between internal 'zones') to provide for maximum winter warmth and summer cooling through division of living spaces and reducing the areas to be heated or cooled.
- → Be aware that normal summer patterns can include brisk early morning easterlies.

ENERGY EFFICIENCY IN YOUR HOME

INSULATING YOUR HOME

Insulation acts as a barrier to heat flow, keeping your home warm in winter and cool in summer.

Insulation is a requirement of the BCA. The R-Value of insulation relates to its capacity to resist heat transfer. The higher the R-Value the greater the insulating effect a material will have.

Considerations:

- → Install a higher level of insulation than the minimum standard.
- → Both ceiling and under-roof insulation can help retain winter warmth and exclude summer heat.
- → Curtains or blinds, when used with sealed pelmets, also let you control heat flow according to the season and time of day. Floor-length curtains with a closed pelmet are the most effective form of 'internal insulation'. Curtains should be made from a heavy fabric with insulating backing for maximum effectiveness.
- → Insulation is particularly important in brick veneer, reverse brick veneers and timber-framed walls. For brick veneer construction, insulation is essential to protect the occupants from external temperature extremes. Reverse brick veneer construction is much more thermally efficient, because the thermal mass is located on the inside - however, insulation is still important.
- → Use foam insulation within the cavity space of double brick external walls (particularly on east and west sides) to help regulate internal temperatures in the home.

OUTDOOR AREAS

Functional, attractive outdoor spaces are important in the design of any home. Perth's temperate climate enables outdoor living areas to be utilised for much of the year.

Considerations:

- → Locate outdoor living areas to be directly accessible from an internal living area.
- → Position outdoor living areas on the north side to best facilitate winter solar access. Ideally, outdoor spaces on the north should be uncovered in winter to allow solar access. Removable shade devices like shade sails are ideal on this side of the home. However, many people of course desire a quality outdoor space that is usable all year round - which often requires an area of permanent cover. To maintain good solar passive principles, aim to locate permanent coverings to only a portion of north-facing glass.
- → Use landscaping to help maximise energy efficiency - use deciduous trees and shrubs on the north side to allow winter sun but shade summer sun, and use landscaping to protect east and west walls.

INSULATING YOUR HOME

Espaliered plants are an effective way to protect east and west walls.
(Source: Sustainable Gardening Austrlaia)

OUTDOOR AREAS

Solar accessible outdoor area.

FURTHER INFORMATION

Information on solar passive and energy efficient design is available on the Your Home Technical Manual website: **www.yourhome.gov.au/technical/fs41.html** and the Sustainable Energy Development Office (SEDO) website: **www.sedo.energy.wa.gov.au**

ENERGY EFFICIENCY IN YOUR HOME

SAVING ENERGY INSIDE THE HOME

In addition to the aforementioned energy efficiency design considerations, the following practices are recommended to further optimise energy efficiency once you move in to your home:

(Source: Sustainable Energy Development Office)

HOT WATER USE

Considerations:

→ Ensure the hot water system is sized according to the number of people in the home.

→ For solar hot water systems, only turn the booster on when required - in cloudy and winter conditions. Boosting is rarely required in summer.

→ Should a roof-mounted storage system be used, the tank must be integrated to match the roof colour and profile. Always locate hot water systems to minimise visual impact from neighbours and the street view, wherever possible.

HEATING AND COOLING

Heating and cooling is the other major contributor to energy use in the home (over 25%). Incorporating good passive solar design can, however, greatly reduce the need for mechanical heating and cooling.

Considerations:

→ Consider whether you need air conditioning at all, particularly if you can easily incorporate solar passive design. Ceiling mounted or portable electric fans provide direct cooling with very low running costs. Ensure ceilings are high enough to accommodate ceiling fans.

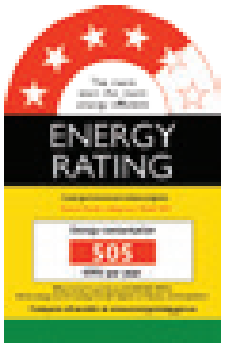
→ Consider whether you need air conditioning throughout the whole house. A split system in the living areas and ceiling fans in the bedrooms will create a more energy efficient mechanical cooling system.

→ When deciding on what system to install, consider the noise implications for neighbours as described in Your Guide to Better Home Design. Locate equipment as far as possible from neighbours or in a well-screened location.

→ Where an air conditioning system is installed:

- Select a system with the highest possible energy rating.
- Ensure it permits separate control of the living and sleeping areas, so you are not cooling unused rooms during the day.
- Ensure the thermostat is programmable to ensure an effective response to seasonal climate conditions.
- Clean air conditioning filters regularly and keep external air conditioners shaded.

ENERGY EFFICIENCY IN YOUR HOME



FIXTURES, FITTINGS AND APPLIANCES

Ongoing running costs can easily exceed the original purchase price of an appliance, so consider the full lifetime cost when choosing an appliance.

Lighting

The BCA Energy Efficiency lighting requirements relating to lamp or illumination power density must be satisfied. This has resulted in highly inefficient, heat producing lamps such as halogen and incandescent being phased out in favour of superior fittings such as LED and fluorescent. Smart use of lighting through the application of devices such as timers, dimmers and motion detectors can further improve efficiency.

Considerations:

- → Use LEDs as a highly energy-efficiency alternative to halogen downlights - they use a fraction of the energy and can last up to 15 years. Whilst there is an associated upfront cost, this will be recouped quickly through lower energy bills.
- → Install compact fluorescent light fittings in lieu of incandescent and halogen downlights. This can equate to annual savings in the hundreds of dollars.
- → Avoid having several lights activated by one switch - use separate switches for each light.
- → Use motion detectors or timers for outdoor security lighting.

LEDs are an energy effcient alternative to halogen downlights

Compact Fluorescent Lamp (CFL)

ENERGY EFFICIENCY IN YOUR HOME

White goods

The use of large appliances like fridges and freezers, dishwashers, clothes washers and clothes dryers collectively contribute to over a quarter of your energy use.

Refrigeration can be a significant source of household energy use - because the fridge or freezer usually runs all day everyday.

Considerations:

- → When purchasing new white goods, select one that is the right size for your needs with as high an energy efficiency rating as possible.
- → Locate fridges and freezers away from direct sunlight or heat producing appliances (such as cookers and dishwashers).
- → Ensure adequate ventilation at the rear, top and sides of the refrigerator.
- → If you have more than one fridge, switch the additional one off when not needed.
- → Install a clothes line (taking into account maximum solar benefit and privacy and screening issues). Avoid using electric clothes dryers.
- → Use cold water for clothes washing as much as possible.

Standby power

Standby power is about 10% of the typical household energy bill and is another easy target for reducing energy use around the home. Most of the energy used by appliances on standby is wasted.

Considerations:

- → Locate power switches at easy-to-reach heights to enable you to easily switch off equipment at the power point. This is also an important feature of universal access design.
- → Switch off the following electronic equipment at the power point when not in use:
  - Stereo, TV, games consoles, set top boxes, microwave, washing machine, mobile phone chargers, air conditioners, room heaters.
- → Do not turn off equipment like security systems, smoke alarms and time controlled equipment like reticulation systems.

Standby switch

ENERGY EFFICIENCY IN YOUR HOME

OUTDOORS

Consider how you can reduce energy use associated with outdoor activities.

Considerations:

- → Put timers on pump-driven reticulation systems.
- → If you have a pool, use a timer on your pool pump and reduce its operating time over winter.
- → Plant deciduous trees or vines, or provide solar shading devices at courtyards and along the north side of the home where exposed, to allow winter sun to penetrate whilst providing summer shading.
- → Aim to minimise the requirement for energy-hungry garden tools - like lawnmowers, leaf blowers and other electrical equipment.

USING RENEWABLE ENERGY

Most of WA's energy is comes from coal or gas fired generators that produce large amounts of greenhouse gases. Using renewable energy to meet some or all of your energy needs is an excellent way to reduce the cost of energy use and reduce your household's greenhouse gas emissions.

Considerations:

- → Consider installing a photo voltaic (PV) or wind-power system to supply your own energy. A PV system converts sunlight into electricity - allowing you to generate power whenever the sun shines. Government financial assistance is available via the Solar Credits Program.
- → Switch to a green power option, where energy is supplied as usual, but with the provider purchasing renewable energy on your behalf, resulting in a greater demand for sustainable energy.

FURTHER INFORMATION

Information on reducing energy use in the home can be found at the Australian Conservation Foundation's Green Home website:**www.acfonline.org.au** and click on the 'Green Home' icon.

Information on Synergy's GreenPower program can be found at: **www.synergy.net.au** and follow the Green Energy links.

For more information on the Australian Governments incentives to install renewable energy, visit: **www.environment.gov.au/settlements/renewable/pv/index.html**

GreenPower
Accredited Renewable Energy

Solar PV system generating power from the sun (Source: Sustainable Mandurah Home)

DESIGN FOR LIFE

Sustainability is not just about the environment - it is also about improving quality of life for everyone.

'Design for life' principles embrace an approach to building design and construction which is safe; meets the needs of people across a range of abilities and ages; and is adaptable to the changing needs of users.

UNIVERSAL DESIGN

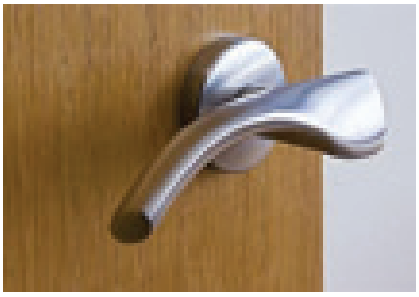
Universal design refers to housing intended for use by everybody - that is, people of all ages, levels of ability and mobility, health or lifestyle. Designing homes to take this into account means that the occupier does not need to move to a more accommodating residence should their health or mobility levels change; it extends the owner's life in their home, increases the value of their asset and the longevity of the house.

Considerations:

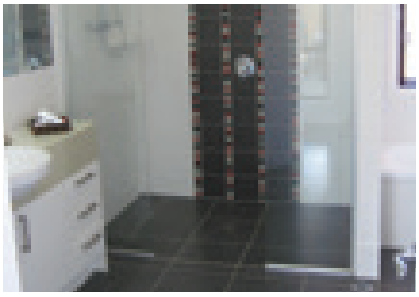
- → Provide at least one level entrance.
- → Provide parking with suitable paving gradients and additional clear space.
- → Provide accessible paths and ramps.
- → Use roll-out drawers and pantry cupboards in the kitchen - it provides easier access for those in a wheelchair.
- → Ensure door handles, window operating hardware and tapware is easily operable by anyone (e.g. people with arthritis).
- → Design bathrooms for easy adaptation (i.e. hobless shower, generous circulation spaces to enable future adaptation and reinforcement of bathroom walls to enable easy installation of grab-rails if required).
- → Use slip resistant floor finishes.
- → Ensure living areas and bedrooms, when furnished, allow for adequate circulation space for a person using a wheelchair.
- → Ensure doorways and corridors are wide enough to allow wheelchair users to manoeuvre into and out of rooms.
- → Ensure door furniture, switches, controls and outlets are within reach of and can be used by all. Raise power outlets to 600mm (an easy bending height).

UNIVERSAL DESIGN

Roll-out drawers provide ease of access. (Source: Universal Design Living Laboratory)



Lever door handles are easy to operate for people of all abilities. (Source: ehow.com)



Hobless shower. (Source: Sustainable-homes.org.au)

FURTHER INFORMATION

For more information about incorporating universal design principles into your home, visit the Australian Network for Universal Housing Design website: **www.anuhd.org**

DESIGN FOR LIFE

THE ADAPTABLE HOME

'Adaptable housing' refers to a flexibility of home design which will accommodate the varied and changing needs of the user with a minimum of disruption and cost.

Considerations:

→ Home Based Business: Consider the provision of a flexible space which can be used as a home office if required. i.e. At ground floor level; or in a roof space; or over a garage. Make provision for access to technology through sufficient internal cabling to appropriate locations suitable for a home office.

→ Consider the design's ability to accommodate universal access elements at a later stage (if not provided initially).

→ Liveability: the home design should be sufficiently flexible to allow for a variety of furniture layouts and occupancy types such as family or rental, as well as create new opportunities for conversion of different rooms and spaces over time.

THE HEALTHY HOME

When designing and building your home, consider how you can create healthy, safe indoor living spaces by reducing and avoiding known allergens as much as possible, and minimising the conditions in which they occur.

Many indoor allergens are now prevalent in the modern home, due to the types of products and materials we use. Indoor allergens include moulds and fungal spores, dust mites, fumes and gases, and volatile organic compounds (VOCs). VOCs are chemicals that evaporate at room temperature, and are known to be toxic and hazardous to human health. Products like adhesives, paints, treated timbers, carpets and furniture all give off VOCs that can trigger an allergic reaction (including asthma).

Considerations:

→ Use non-toxic or low toxic alternatives for materials and finishes (e.g. furniture, paints, floor coverings and glues).

→ Use indoor plants to clean and purify the air inside your home; plants have been shown to be effective in the abatement of pollutants.

→ Provide adequate ventilation to help reduce the build up of allergens and toxins

→ Use alternatives to carpet wherever possible - they can easily become breeding grounds for mould and mites.

→ Avoid the use of wood or kerosene heaters and where gas is used, ensure the level of ventilation is sufficient (e.g. all gas heating and cooking appliances have been externally flued).

→ Avoid heating systems that use combustion gases, because gas significantly increases the risk of developing an allergic reaction.

→ Minimise areas where dust can settle easily (e.g. ledges, exposed tops of cupboards, open shelves, skirting boards).

→ Select materials that are easily cleaned, durable and require minimal maintenance.

→ Design cabinets with child proof latches.

→ Use less toxic and more environmentally friendly cleaning products within the home.

MINIMISING WASTE

Reducing, reusing and recycling waste all help to minimise pollution and greenhouse gas emissions, ease pressure on landfill sites and help conserve natural resources. It also helps to create markets for recycled products and materials, by reducing demand for new materials.

DURING CONSTRUCTION

MATERIALS SELECTION

The type of materials you select to build and finish your home have a significant effect on the ongoing or life cycle cost and environmental impact of the building. Construction that utilises environmentally responsible materials is encouraged in preference to other materials, where such options are available and will not significantly jeopardise functionality or liveability.

Considerations:

→ Use certified plantation timber wherever possible (e.g. plantation pine trusses and laminated veneer timber beams rather than hardwood rafters and structural beams).

→ Select materials from environmentally responsible sources, including:

- Reused sources (including buildings, structures and materials)
- Recycled resources
- Renewable sources
- Non-polluting sources
- Low lifecycle energy materials (that is, materials that are not energy-intensive to produce, are locally available and durable)
- Materials that are non-toxic and do not release toxic gases or dangerous particles

→ There are tools available which can help determine which materials are environmentally preferable. Visit **www.ecospecifier.org** for a comprehensive rating tool across a range of building products and technologies.

MINIMISING WASTE

DEALING WITH CONSTRUCTION WASTE

Builders are encouraged to take steps to minimise the production of non-recyclable waste and the impact of their construction activities on neighbouring properties.

Construction and demolition waste makes up over half of all waste going to landfill in Perth. Much of this waste is made up of valuable resources such as wood, concrete, plastic and metals. A construction management plan to minimise the amount of waste and to facilitate recycling is encouraged.

Presentation of Shorehaven is important for Peet and residents, should you witness any illegal dumping of demolition and construction waste please contact the CoW Ranger on 9405 5000.

Consider the following practices when building your home:

- → Setting in place designated waste storage areas to enable an extent of on-site sorting. i.e. separate areas or bins for metal, timber, plasterboard, masonry, glass/ceramics etc, as opposed to a single general waste pile.
- → Using waste collection agencies who carry out further sorting/recycling off-site.
- → Regularly removing waste from the site to minimise unsightly mess and the potential for spillage into neighbouring properties.
- → Using pre-fabricated components as much as possible (i.e. use of steel or timber roof trusses).
- → Accurately ordering amounts and lengths of materials.
- → Storing and recycling useable brick cut-offs into rendered walls rather then sending to landfill, and storing timber off-cuts for mulching and use for garden areas.
- → Providing secure storage areas, fencing and the use of security agents in the final stages of construction in order to minimise opportunities for break in and theft - a major source of additional cost for the residential construction industry.

CONSTRUCTION WASTE

Onsite separation of wastes for recycling or reuse. (Source: Zero Waste WA)

SITE MANAGEMENT DURING CONSTRUCTION

Managing site construction to minimise disturbance usually requires little effort and helps to maintain a healthy surrounding environment, as well as reduced disturbance to neighbouring sites.

Considerations:

- → Minimise the potential for dust or rubbish intrusion into neighbouring properties by watering down or through the use of screening (such as hessian or shade cloth clad fencing).
- → Retain stormwater on site to reduce the extent of water borne contaminants being deposited into waterways.
- → Prevent sand, soil, cement and other building materials from polluting waterways. Use barriers to filter coarse sediment at all points where stormwater leaves the site.
- → Use only a single vehicle access point.

MINIMISING WASTE

REDUCING WASTE IN THE HOME

Waste minimisation within the household is encouraged at Shorehaven, particularly the source separation and storage of recyclable materials, and the reuse of organic wastes.

Designs could provide appropriate space within the dwelling to separate recyclable waste from non-recyclables which will make it easier to achieve waste minimisation goals. This can be achieved through the provision in the kitchen area of a bin for recyclable waste, one bin for organic waste and one for non-recyclable waste.

REDUCING	REUSING
→ Buy only what you need.	→ Buy products which are available in refillable or reusable packs or shop where containers can be refilled or returned.
→ Consider buying second-hand, from places that support and encourage recycling or perhaps borrowing from a neighbour or friend - sharing resources is a great way to cut down on unnecessary waste.	→ Say 'no thank you' to plastic bags - use a canvas shopping tote or string bag every time you go shopping. Re-use envelopes and use both sides of paper.
→ Avoid disposable products.	→ Consider whether goods can be repaired rather than replaced.
→ Choose products made in environmentally friendly ways.	→ Donate unwanted clothing, furniture and white goods to charities.
→ Choose products made from recycled materials and products packaged in material that can be recycled.	→ Use glass bottles and jars, plastic bags, aluminium foil and take away food containers over and over again before recycling or disposing of them.

MINIMISING WASTE

RECYCLING

After you have avoided, reduced and/or reused, recycle materials like paper, plastic, glass and metal through the City of Wanneroo kerbside recycling service, and recycle your food scraps using a composting system.

Recycling is a key sustainability objective; by undertaking the following, residents will assist in minimizing waste generated from Shorehaven.

RECYCLING

→ Set up a compost bin to recycle or bokashi composting system (for smaller dwellings) to recycle food scraps and green waste. Household waste such as food scraps, weeds, lawn clippings, leaves and garden prunings can be recycled and turned into compost.

→ Place the following items in your yellow-topped recycling bin:

- Clean glass bottles and jars (lids removed)
- Aluminium cans, clean foil and trays
- Steel food cans (rinsed clean)
- Clear plastic cool drink bottles coded 1 (rinsed)
- Plastic milk bottles coded 2 (rinsed)
- Paper & cardboard - Newspaper, junk-mail, office paper

→ Never put dangerous materials such as syringes, chemicals or gas bottles out for recycling.

COMPOSTING

Compost bin

FURTHER INFORMATION

Information on responsible purchasing can be found at the Good Wood Guide: **www.goodwoodguide.org.au** and Ecospecifier **www.ecospecifier.org.au**

Information about Protective Covenants, DAPs and the implementation of these Guidelines prior to settlement should be directed to the Sales Agent. Information post settlement can be obtained from the Peet Customer Relations Team by emailing them at **cr@peet.com.au** or by phone on **9420 1111.**

Information about construction waste management and recycling can be found in the Master Builders Association Commercial Construction Waste Management Guide: **www.mbawa.com/site/files/57576/Waste%20Management% 20Guide% 2008-04-01.pdf**

Information on minimising waste in general can be found at the Zero Waste WA - **www.zerowastewa.com.au**

Information about how to recycle a range of other household items not included in the yellow recycling bin, from car tyres to old reading glasses, visit Planet Ark's 'Recycling Near You' website - **http://recyclingnearyou.com.au/**

APPLICATION FORMS

BETTER HOME DESIGN
APPLICATION FORM - COAST PRECINCT

A minimum of **15 points** is required to obtain development approval in the Coast Precinct.

Where individual elements score less than **15 points** a combination shall be used in order to achieve the minimum score.

Please indicate in the 'Element Present' column the relevant 'Touch of White' elements proposed.

CRITERIA NO.	BUILDING ELEMENT	POINTS SCORED	ELEMENT PRESENT
1	**Walls**		
1.1*	A significant full wall	10	
1.2*	Walls above or below a dado line for the full extent of the balance of the elevation	10	
1.3	A significant wall panel above or below a dado line	6	
1.4	A significant structure featuring walls and/or piers such as an entry portico or landmark tower element	6	
1.5	Rendered bands, window sills, keystones and coining	3	
1.6	A significant gable treatment	4	
1.7	More then 1 gable treatment	6	
1.8	All gablets	3	
2	**Front door(s)**	**4**	
3	**Garage door(s) (not applicable to laneway lots)**	**4**	
4	**Window & door frames**	**5**	
5	**Roof**	**7**	
6	**Feature trim elements**		
6.1	Fascias, bargeboards, rafters and gutters	5	
6.2	Verandah/balcony elements: posts/beams, balcony edge trim and balustrades	6	
6.3	Decorative shutters	5	
6.4	Awnings/Eaves	5	
7	**Street fence elements: rendered masonry walls and/or piers, timber palisade infills, visually permeable infills**	**5**	
Total Points			

* Where a design features wall finishes such as natural stone, ply or sheet metal cladding which could be considered an appropriate response to Shorehaven's promoted coastal theme but otherwise does not satisfy 'Touch of White' criteria, the design shall be assessed on its merits.

APPLICANT DETAILS

Name:

Property Details:

Signature: Date:

FOR PEET USE ONLY

Total number of Approved Points:

Touch of White Compliance: (Y/N):

Assessor Name:

Signature: Date:

Tear here

ECO LANDSCAPE
APPLICATION FORM - COAST PRECINCT

A minimum of **6 points** is required to obtain development approval in the Coast Precinct, with at least one of criteria 1.1, 1.2, 1.3 or 1.4 to be used.

Where individual elements score less than **6 points** a combination shall be used in order to achieve the minimum score.

Please indicate in the 'Element Present' column the relevant 'Sustainability' elements proposed.

CRITERIA NO.	SUSTAINABILITY ELEMENT	POINTS SCORED	ELEMENT PRESENT
1	**Plants**		
1.1	Shrubs selected from Recommended Plant List 30-50% of all planted	3	
1.2	Shrubs selected from Recommended Plant List 50-100% of all planted	5	
1.3	Trees selected from Recommended Plant List 30%-50% of all planted	3	
1.4	Trees selected from Recommended Plant List 50-100% of all planted	5	
1.5	100mm mulch applied to garden beds	5	
2	**Water**		
2.1	Irrigation system with fully automated operation (eg. Spray sprinklers)	2	
2.2	Bubbler, trickle or other non-spraying irrigation system with fully automated operation	5	
2.3	Rain-detector-override-switch fitted to automated irrigation system*	5	
3	**Paving**		
3.1	Permeable hardscape surface to between 10-20% of garden area (eg. pavers, gravels, deck)	5	
3.2	Drainage from Non-permeable surface directed to planted area	3	
4	**Shade & Shelter**		
4.1	Pergola or shade sail located over hardscape areas	4	
Total Points			

*Points additional to type of irrigation system (eg. If you present element 3.1 and 3.3 you achieve 7 points, but if you present element 3.2 and 3.3 you achieve 10 points)
*Where individual elements score less than 10 points, as per above, a combination of elements shall be used in order to achieve the mininum score.

APPLICANT DETAILS

Name:

Property Details:

Signature: Date:

FOR PEET USE ONLY

Total number of Approved Points:

Touch of White Compliance: (Y/N):

Assessor Name:

Signature: Date:

Tear here

SUSTAINABLE LIVING
APPLICATION FORM - COAST PRECINCT

A minimum of **10 points** is required to obtain development approval in the Coast Precinct.

Where individual elements score less than **10 points** a combination shall be used in order to achieve the minimum score.

Please indicate in the 'Element Present' column the relevant 'Sustainability' elements proposed.

CRITERIA NO.	SUSTAINABILITY ELEMENT	POINTS SCORED	ELEMENT PRESENT
1.0	**Passive solar (energy efficient) design**		
1.1	East and west cavity bricks walls are insulated (minimum value R2.0) to reduce heat load in summer	6	
1.2	Openings (i.e. openable windows and/or doors) are provided in habitable rooms to allow good natural cross ventilation for all rooms	4	
1.3	Outdoor living areas located on the north side to facilitate solar access	4	
1.4	Roof space is naturally ventilated (i.e. not mechanical or requiring energy to operate) to minimise heat transfer into house	4	
2.0	**Reducing energy use and greenhouse gas emissions**		
2.1	Centralised air conditioning is not installed	6	
2.2	Ceiling fans will be installed in at least the main living areas and bedrooms	4	
2.3	Renewable energy will be installed (photovoltaic solar panels or wind turbine)	10	
3.0	**Reducing water use**		
3.1	Rainwater tanks are installed and plumbed-in to toilet or laundry to reduce in-house potable water use	6	

Please continue over...

CRITERIA NO.	SUSTAINABILITY ELEMENT	POINTS SCORED	ELEMENT PRESENT
4.0	**Designing for Life**		
4.1	Design contains at least one of the following universal or adaptable design elements:		
	At least one hobless shower	2	
	Walls in at least one bathroom are structurally suitable for the later installation of grab rails	2	
	At least one level entrance	2	
	Doorways widened to 900mm	2	
	75% of kitchen cupboard/pantry are roll-out drawers	2	
	Power outlets raised to 600mm	2	
	Light switch height lowered to 105cm off the ground	2	
5.0	**Minimising waste and improving recycling**		
5.1	Minimum 15% construction (by volume) made from either (or a combination) of the following: → Reused resources and/or materials with recycled content (full or part). Examples include: - Bricks containing recycled content - Recycled based in concrete slab - Recycled timber (e.g. framing, flooring, indoor stairs) - Reuse of products such as steel or timber → Sustainable, renewable sources (that are certified by a credible third party). Examples include: - Plantation grown, recycled or more sustainably forested timber (e.g. bamboo) for framing, flooring and other wood applications - Concrete using lower cement content → Lower-embodied energy bricks have been used (e.g. Eco-brick)	5	
5.2	Built-in space for separate organic, recyclable and general waste bins has been provided	2	
Total Points			

APPLICANT DETAILS

Name:

Property Details:

Signature: Date:

FOR PEET USE ONLY

Total number of Approved Points:

Touch of White Compliance: (Y/N):

Assessor Name:

Signature: Date:

Tear here

PEET