

Design Code PART 4 SUMMARY

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PART 4

SUMMARY

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Part 4

8.0 SUMMARY

8.1 Design Code Schedule

The following table sets out mandatory and discretionary aspects of the Design Code and follows the structure of Parts 2 and 3 of the Design Code suite of documents. This schedule should be read in conjunction with the relevant sections within the Design Code which provide further context for the Codes, together with illustrations of how the Codes might be achieved.

3.0 DESIGN STRATEGIES		
3.1 Environmental and Views	All pathways and cycleways are to be afforded natural surveillance from habitable rooms within dwellings	Mandatory
	All areas of landscape corridor, either retained or new, are to be afforded natural surveillance from habitable rooms within dwellings	Mandatory
	Pathways, cycleways and landscape corridors are not to be faced with back garden boundaries as a general principle	Mandatory
	The layout of the development and individual homes should make best use of natural solar gain and protect against prevailing winds	Mandatory
	The layout of the development and individual homes should make best use of natural views out of the site	Mandatory
	Buildings set back from cliff edge by minimum of 30m	Mandatory
	Homes towards the existing trees on the eastern boundary should be designed with first floor living space	Discretionary
3.2 Nature Corridors	The layout of the development is to maximise the retention of existing landscape corridor habitat	Mandatory
	The layout of the development should provide new landscape corridors habitat to create a continuous network for wildlife	Mandatory
	Where landscape habitat corridors must be broken by roads or paths, the design must provide for the movement of wildlife	Mandatory
3.3 Movement and Streets	The development must promote and prioritise active travel over use of the private car	Mandatory
	NCN 88 is to be extended through the development. General width 3.5m. This route takes precedence where it crosses vehicular routes	Mandatory
	A new active travel corridor is to be provided linking the coastal path to Lavernock Road and Cosmeston Lakes	Mandatory
	Two new vehicular access points are to be created onto Lavernock Road. There are to be no other vehicular connections other than an emergency vehicle provision at the Eastern Gateway.	Mandatory
	Primary vehicle route to be minimum width of 6.5m and designed for buses	Mandatory
	The existing landscape corridors and plateau edges have been preserved by only crossing them once each with a vehicular road, located where the level change is minimised and where there are existing gaps in the vegetation. This concept should be retained.	Mandatory
	Secondary Streets - minimum carriageway width of 5.5m.	Mandatory
	Home Zones - adopt minimum carriageway dimensions with passing places. Limit straight road sections to maximum of 30m.	Mandatory
	Emergency vehicle route minimum width of 3.8m	Mandatory
	A new pedestrian crossing is to be provided across Lavernock Road linking new pedestrian and cycle routes to Cosmeston Lakes	Mandatory

	New bus stops are to be provided on Lavernock Road along the development frontage	Mandatory
	A bicycle rental station should be created close to the NCN 88	Discretionary
	To create a development which promotes and prioritises active travel, the development should provide a MAXIMUM of 1.8 parking spaces per dwelling for Character Areas 01 and 03, 1.6 parking spaces per dwelling for Character Area 02 and 2.2 parking spaces per dwelling for Area 04.	Mandatory
	Car parking should generally be provided on street and not on private driveways as this will compromise the continuity of SUDs swales and also result in a 'predictable' car dominated environment.	Mandatory
	On street parking should be regularly interspersed with planting areas	Mandatory
	Electric charging or contemporary equivalent infrastructure to be provided to all parking spaces	Mandatory
	Dedicated car rental spaces should be provided	Discretionary
3.4 Frontage Hierarchy	Primary frontages must be created along the newly created link from coast to lakes	Mandatory
	Primary frontage must be created at the Western Gateway facing onto Lavernock Road	Mandatory
	The corners of development 'blocks' and primary frontages must be acknowledged through the architectural form of the buildings	Mandatory
	Key, taller buildings are to be created to mark the highpoint of the site/public square and Southern Gateway promontory.	Mandatory
3.5 Activation and Uses	A 2FE primary school is to be provided	Mandatory
	All housing is to comply with DQR internal space standards. External space standards may treated more flexibly to enable innovation in layout and densities provided high quality public open space is easily accessible.	Mandatory
	50% of all housing site-wide is to be Affordable	Mandatory
	The development is to achieve Net Zero Operational Energy performance . A fabric first approach is to be adopted whilst all suitable types of renewable energy are to be identified. Evidence must be provided to prove this requirement is met. This will include Building Energy Modelling for each dwelling type, confirmation of the overall energy demand for the site and energy modelling (using IES or PHPP software) to show how this requirement is being met using renewable energy sources on site. Energy models are to be stress tested using 2050 and 2080 climate datasets to show the dwellings will not overheat in future years.	Mandatory
	Responsible sourcing of materials must be evidenced based on RICS Whole Life Carbon Assessment.	Mandatory
	Fast and reliable broadband infrastructure provision to all homes, school, community and commercial areas	Mandatory
	The design of the housing should promote options for home working	Discretionary
	Commercial and community spaces are to be provided within the development	Mandatory
	Co-working facilities should be provided within the development	Discretionary
	Educational and recreational trails are to be created	Mandatory
	Public open space is to be provided throughout the development and in particular through a significant open space at the sw corner of the eastern plateau and through a new 'linear park' from the Eastern Gateway to the 'high point' at of the site Limestone Square	Mandatory
	A football pitch, suitable for 7 a-side and community access is to be located on the Western plateau adjacent to the school	Mandatory
	Areas of play are to be provided throughout the development as scheduled. Exact locations by agreement.	Mandatory

	A bicycle rental station should be created close to the NCN 88	Discretionary
	Allotments and orchards should be created	Discretionary
	Bicycle parking should be provided at all Key Spaces, Gateways and near play areas	Mandatory
	Bicycle storage provision to all homes	Mandatory
3.6 Community Safety	All pathways and cycleways are to be afforded natural surveillance from habitable rooms within dwellings	Mandatory
	All areas of landscape corridor, either retained or new, are to be afforded natural surveillance from habitable rooms within dwellings	Mandatory
	Pathways, cycleways and landscape corridors are not to be faced with back garden boundaries as a general principle	Mandatory
3.7 Sustainable Drainage	The development must be served by a SUDs system	Mandatory
	Drainage swales are to be fully integrated into the development layout, coordinated with the pedestrian and cycle network and designed to enhance biodiversity	Mandatory
	Attenuation ponds at the Western and Eastern Gateways are to be designed to retain water as 'features'	Mandatory
	Infiltration basins are to be fully integrated into the principal area of public open space, enhancing biodiversity and public amenity	Mandatory
4.0 KEY SPACES AND GATEWAYS		
4.1 Over-arching Principles	The development must promote and prioritise active travel over use of the private car	Mandatory
	NCN 88 is to be extended through the development. Minimum width of 3.5m. This route takes precedence where it crosses vehicular routes	Mandatory
	A new active travel corridor is to be provided linking the coastal path to Lavernock Road and Cosmeston Lakes	Mandatory
	Four Gateway spaces are to be created marking the points that the extended NCN 88 and new Coast to Lakes link meet the development boundary and connect with the wider travel and movement network. Those spaces are to provide high quality, well-designed public realm and an opportunity for 'orientation', enhancing the legibility of the development and movement through it.	Mandatory
	Two Key Spaces are to be created marking the point that the extended NCN 88 and new Coast to Lakes link meet and also the natural 'high point' of the existing topography. Those spaces are to provide high quality, well-designed public realm and an opportunity for 'orientation', enhancing the legibility of the development and movement through it.	Mandatory
	The Key Spaces and Gateways will incorporate interpretation boards as part of a site wide network of trails	Mandatory
4.2 Limestone Square	The natural 'high point' of the site is to be marked by this Key Space	Mandatory
	This will be high quality public realm providing flexibility for a range of uses through hard and soft landscaping.	Mandatory
	No vehicle access or parking	Mandatory
	The space should incorporate a LAP (or the LAP be located within close proximity)	Discretionary
	The space will afford long distance views to Severn Estuary from this natural high point	Mandatory
	The space will be partially enclosed and defined by taller, key buildings with commercial/community usages at ground floor	Mandatory
	Surface materials to reflect limestone found in Penarth cliffs with presumption for natural limestone.	Mandatory

4.3 Marconi's Crossing	The intersection of the NCN 88 and primary access road is to be marked by this Key Space. The NCN 88 takes priority over the access road.	Mandatory
	This will be high quality public realm	Mandatory
	Whilst the centre of this space is functional and dynamic, designed for the passage of cycles, pedestrians and vehicles, it will be animated around its edges by the inclusion of public amenity space and facilities. Potential animation facilities include a NEAP, community allotments and a cycle hire station	Mandatory
	The space will include public art	Mandatory
	The access road is purposefully located at the point where natural level differences between the central and eastern plateau are minimised and the design should accommodate the remaining change in level in a well-considered and sensitive manner	Mandatory
	The access road unavoidably interrupts a strong north to south landscape corridor, whilst located at a point where it is already broken to an extent. The design should consider how wildlife movement can be accommodated.	Mandatory
4.4 Western Gateway	The interface of the development with Lavernock Road will be marked by this 'gateway' space	Mandatory
	This space incorporates two new vehicular access points and the intersection of the new Coast to Lakes link with Lavernock Road	Mandatory
	Continued movement across Lavernock Road will be accommodated by a new pedestrian crossing	Mandatory
	Access to the existing bus network will be improved through new bus stops	Mandatory
	The space includes an attenuation pond as part of the site-wide SUDs solution, designed to retain water as a feature. This together with a generous area of open public space including both retained and new high quality landscape will set the 'tone' for the new development at this important entrance point	Mandatory
	The space will incorporate interpretation boards as part of a site wide network of trails	Mandatory
	Primary frontage must be created at the Western Gateway facing onto Lavernock Road	Mandatory
	A LEAP will be provided	Mandatory
4.5 Eastern Gateway	The interface of the development with the existing Coastal Path and Esplanade will be marked by this 'gateway' space	Mandatory
	This space incorporates an emergency vehicle access point. Emergency vehicle route minimum width of 3.8m. Otherwise, there are to be no vehicles in this space.	Mandatory
	This space links the Coastal Path to a new active travel corridor through the site, connecting with Cosmeston Lakes with a new 'linear park' created from this gateway to the key space at the high point of the site.	Mandatory
	The space will comprise high quality public realm with hard and soft landscape providing an opportunity for 'orientation' on entering the development and choices for continued movement either through the site or along the Coastal Path or to dwell in seating areas	Mandatory
	The space will incorporate interpretation boards as part of a site wide network of trails	Mandatory
	The space includes an attenuation pond as part of the site-wide SUDs solution, designed to retain water as a feature. This together with a generous area of open public space including both retained and new high quality landscape will set the 'tone' for the new development at this important entrance point	Mandatory
	A LEAP will be provided	Mandatory
4.6 Northern Gateway	The intersection of the extended NCN 88 with the development boundary will be marked by this 'gateway' space	Mandatory
	The space opens up the underside of the existing Victorian rail bridge and accommodates the extended active travel corridor along the route of the former railway line. The historic bridge is a part of the defining character of this space and will be incorporated into the design	Mandatory

	The space will comprise high quality public realm with hard and soft landscape providing an opportunity for 'orientation' on entering the development and choices for continued movement either along the extended NCN 88 or up onto the elevated area of the eastern plateau and high level track, or to dwell in seating areas	Mandatory
	The space will incorporate interpretation boards as part of a site wide network of trails	Mandatory
	A LAP will be provided	Mandatory
	The space will be overlooked by homes on the elevated eastern plateau and central plateau, providing natural surveillance	Mandatory
	There are to be no vehicles in this space	Mandatory
4.7 Southern Gateway	The intersection of the extended NCN 88 with the development boundary will be marked by this 'gateway' space	Mandatory
	The space also marks an interface with the primary school and community sports facilities at a lower level on the western plateau and will include a well-designed, high quality connection for cycles and pedestrians	Mandatory
	Design to consider visual and physical connections to school	Mandatory
	The space will comprise high quality public realm with hard and soft landscape providing an opportunity for 'orientation' on entering the development and choices for continued movement either along the extended NCN 88 or up down to the lower area of the western plateau, or to dwell in seating areas	Mandatory
	The space will incorporate interpretation boards as part of a site wide network of trails	Mandatory
	A LEAP will be provided	Mandatory
	The space will be overlooked by a taller key building, providing natural surveillance	Mandatory
	There are to be no vehicles in this space	Mandatory
5.0 STREET TYPOLOGIES		
	The development is to incorporate a hierarchy of streets which prioritise pedestrian and cycle movement whilst enabling practical vehicular access for servicing and parking within the limitations set out in the parking targets.	Mandatory
	NCN 88 is to be extended through the development. Width 3.5m. This route takes precedence where it crosses vehicular routes.	Mandatory
	Lighting schemes to circulation routes throughout are to consider wildlife and ecology issues.	Mandatory
	Two new vehicular access points are to be created onto Lavernock Road. There are to be no other vehicular connections other than an emergency vehicle provision at the Eastern Gateway.	Mandatory
	Primary vehicle route to be minimum width of 6.5m and designed for buses.	Mandatory
	Secondary Streets road minimum width of 5.5m or 6m with perpendicular on street parking provision.	Mandatory
	Home Zones - adopt minimum carriageway dimensions with passing places. Entrance to the Home Zone should be clearly signposted and include gateway features such as change of paving material and colour, road narrowing framed by street trees and/or art, tactile paving. Limit straight road sections to maximum of 30m to slow vehicle speed. Use the pattern of paving or surface material to distinguish the carriageway from other areas. Incorporate rain gardens and swales, sitting and informal play areas.	Mandatory
	Emergency vehicle route minimum width of 3.8m	Mandatory
	The Main Boulevard is to incorporate segregated cycleways and paths, together with drainage swales and tree planting. Parallel parking is to be provided. Critical dimensions are shown in Section 5.0	Mandatory
	All parking spaces are to be on permeable surfaces	Mandatory

	Tree planting is to be introduced into streets wherever possible	Mandatory
	The existing landscape corridors and plateau edges have been preserved by only crossing them once each with a vehicular road, located where the level change is minimised and where there are existing gaps in the vegetation. This concept should be retained.	Mandatory
	Where landscape habitat corridors must be broken for pedestrian/cycle connectivity this should be designed to preserve wildlife movement. This could be by the use of raised timber bridges, boulder paths and connecting tree canopies.	Mandatory
6.0 ARCHITECTURAL CHARACTER		
	The architectural character of the development will respond directly to the context of Penarth and in particular those parts of the town that were created during the major growth period from 1865 to 1910 as these parts best define the whole. Crucially the development must capture the town's close relationship with green space and nature and its reputation as a Garden by the Sea	Mandatory
	There will be significant areas of retained landscape, reinforced by new, open, publicly accessible parkland and green space which pervades the whole development. There will be a range of green spaces created from a large scale community park, sports fields and a new 'linear park' to tree lined avenues, sustainable drainage swales and pockets of street landscape. The close relationship between the built form that overlooks these green spaces will characterise and unify the development.	Mandatory
	Primary streets and routes will gently curve revealing changing views as the development is passed through and lead to a network of smaller streets, efficiently laid out and regular. All streets will include soft landscape.	Mandatory
	The extent of meaningful and publicly accessible green space will be maximised by creating denser areas of housing, much of which will be arranged in terraces and have a rigour and simplicity to its arrangement. This rigour and density will only be broken towards the eastern edge where larger properties will stand in their own ground overlooking the Channel.	Mandatory
	Terraces will be largely of two or three storeys and include 'half storeys' where rooms are accommodated partially into the roofspace. Taller elements and gables will be used to accentuate terrace ends and corners.	Mandatory
	House types will include homes utilising bay windows to capture natural light.	Discretionary
	All homes will be designed specific to their location, orientation and views and 'standard' house types will not be employed.	Mandatory
	All homes will appear robust and elegant utilising natural materials of stone and brick. The proportions between stone and brick will vary across the site as will the textures of the façades whilst a commonality of material will bind them together. The development will reflect the historic use of limestone and ashlar sandstone as detailing, together with rich red brickwork.	Mandatory
	Facades will not be dominated by render. If render is used, it will be proportionally smaller than the main façade materials, generally located at upper storeys and arranged in defined panels, specified and detailed to avoid staining.	Mandatory
	Through-coloured composite panels may be used but not as the principal façade material.	Discretionary
	Window types will reflect the nature and usage of the rooms behind and display a hierarchy within the façade. The development will avoid the predominance of a 'standard' window design whilst a commonality of proportion will be sought to bind the development together. Window openings should principally be vertical in proportion.	Mandatory
	The development will reflect the use of the arch as a motif within the town as a selected 'highlight' to facades rather than a general principle, particularly in marking main entrances where the recessed external 'lobby' may also be used as an architectural device.	Discretionary

	Generally the terraces of homes and the private spaces in front of them should not be broken up by car parking at right angles. Parking should be accommodated on the streets, where they are permitted, be parallel to the street, and broken up by planting and trees.	Mandatory
	Some properties, particularly those creating playstreets, may sit directly onto the street whilst the majority will have some form of private defensible space to the front. These spaces will generally be shallow in depth and well defined by a low wall or railing with a gate. Low hedges combined with, and not instead of, a low wall will also be encouraged.	Mandatory
7.0 CHARACTER AREAS		
7.2 Lakeside Crescents	Site-wide mandatory Design Codes apply, generally in relation to Section 3 Design Strategies, Section 5 Street Typologies, Section 6 Architectural Character and specifically in relation to 4.4 Western Gateway.	Mandatory
	The character of this area is partly defined by gently curving terraces and this concept should be retained	Mandatory
	The housing mix and density set out in Section 7 is to be achieved	Discretionary
7.3 Limestone Terrace	Site-wide mandatory Design Codes apply, generally in relation to Section 3 Design Strategies, Section 5 Street Typologies, Section 6 Architectural Character and specifically in relation to 4.3 Marconi's Crossing, 4.6 Northern Gateway and 4.7 Southern Gateway.	Mandatory
	The character of this area is partly defined by denser, innovative housing typologies liberating more external space for public amenity and play and this concept should be retained	Mandatory
	The housing mix and density set out in Section 7 is to be achieved	Discretionary
	This area has been identified for potential self-build opportunities	Discretionary
	This area has been identified for potential allotments or orchard space	Discretionary
7.4 Garden by the Sea	Site-wide mandatory Design Codes apply, generally in relation to Section 3 Design Strategies, Section 5 Street Typologies, Section 6 Architectural Character and specifically in relation to 4.2 Limestone Square and 4.5 Eastern Gateway.	Mandatory
	The character of this area is partly defined by creating a new linear park as an active travel route as part of a new Coast to Lakes link. The park is overlooked by housing either side and is free of vehicles. The park leads to Limestone Square, a vibrant and high quality public space, animated by commercial and community ground floor uses and enclosed by high quality, taller key buildings. These concepts should be retained.	Mandatory
	The housing mix and density set out in Section 7 is to be achieved	Discretionary
7.5 Marconi's Vistas	Site-wide mandatory Design Codes apply, generally in relation to Section 3 Design Strategies, Section 5 Street Typologies, Section 6 Architectural Character and specifically in relation to 4.3 Marconi's Crossing	Mandatory
	The character of this area is partly defined by the inclusion of larger, more detached homes towards the eastern boundary. The layout transitions from denser housing towards the centre of the site and Limestone Square to the less densely planned eastern edges. These concepts should be retained.	Mandatory
	The larger properties in Area 4, whilst having unique, high quality designs will feel part of a family through a shared approach to materials and detailing.	Mandatory
	The housing mix and density set out in Section 7 is to be achieved	Discretionary
	This area has been identified for innovative high quality housing designed with living spaces on the upper floors to take advantage of long distance views over the Vale and above the existing tree lines across the Channel.	Discretionary
	A large area of Public Open Space in the form of a community park is located on the area of former landfill. This area will include a LAP and a NEAP and incorporate SUDs infiltration through reed beds.	Mandatory
	The area should provide pedestrian and cycle permeability to the Coastal Path.	Mandatory