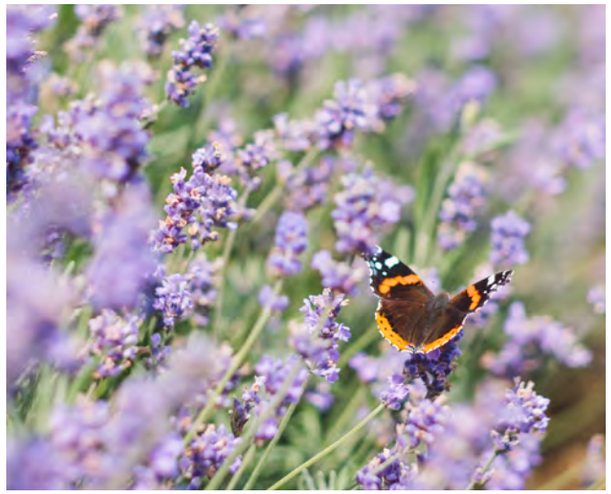


Photo by Dan Freeman on Unsplash

Pollinators

Pollinators, especially bees, require forage from early spring through to late autumn, and native trees, including hazel, alder and pussy willow can provide early sources of pollen when few plants are in flower. Several non natives provide late summer nectar too. Connected avenues with pollinator street trees can link areas of urban forage green spaces with one another enabling flying insects to negotiate a nutritious path through urban areas.

Ecosystem approach

2.19.3

The Tree Planting Strategy will take a multifunctional ecosystem approach to implementing the council's Green Infrastructure Strategy:

- creates a linked network of linear routes and stepping stones - for habitat linkage and active travel corridors
- some private and some public land (to maintain viability)
- provides diverse habitats
- reinforces the natural landscape backbone of the town reflecting its topography, watercourses and flood zones
- enhance tree cover as community carbon sink and sequestration
- help achieve net biodiversity gain

Historic environments

2.19.4

Care needs to be taken to avoid and/or minimise any negative impacts on the significance of heritage assets, either:

- directly, e.g. damage or destroy buried heritage assets or affect foundations of buildings or other structures; and/or
- indirectly, e.g. affect the setting of historic buildings, disrupt important views in historic streetscapes and within and through towns and affect the character of wider townscapes.

In historic and/or Registered Parks and Gardens tree layout and planting may have significant effects and this should be explored prior to recommending major changes. Planting in cemeteries and churchyards also needs careful consideration as this may impact on burials and archaeology.

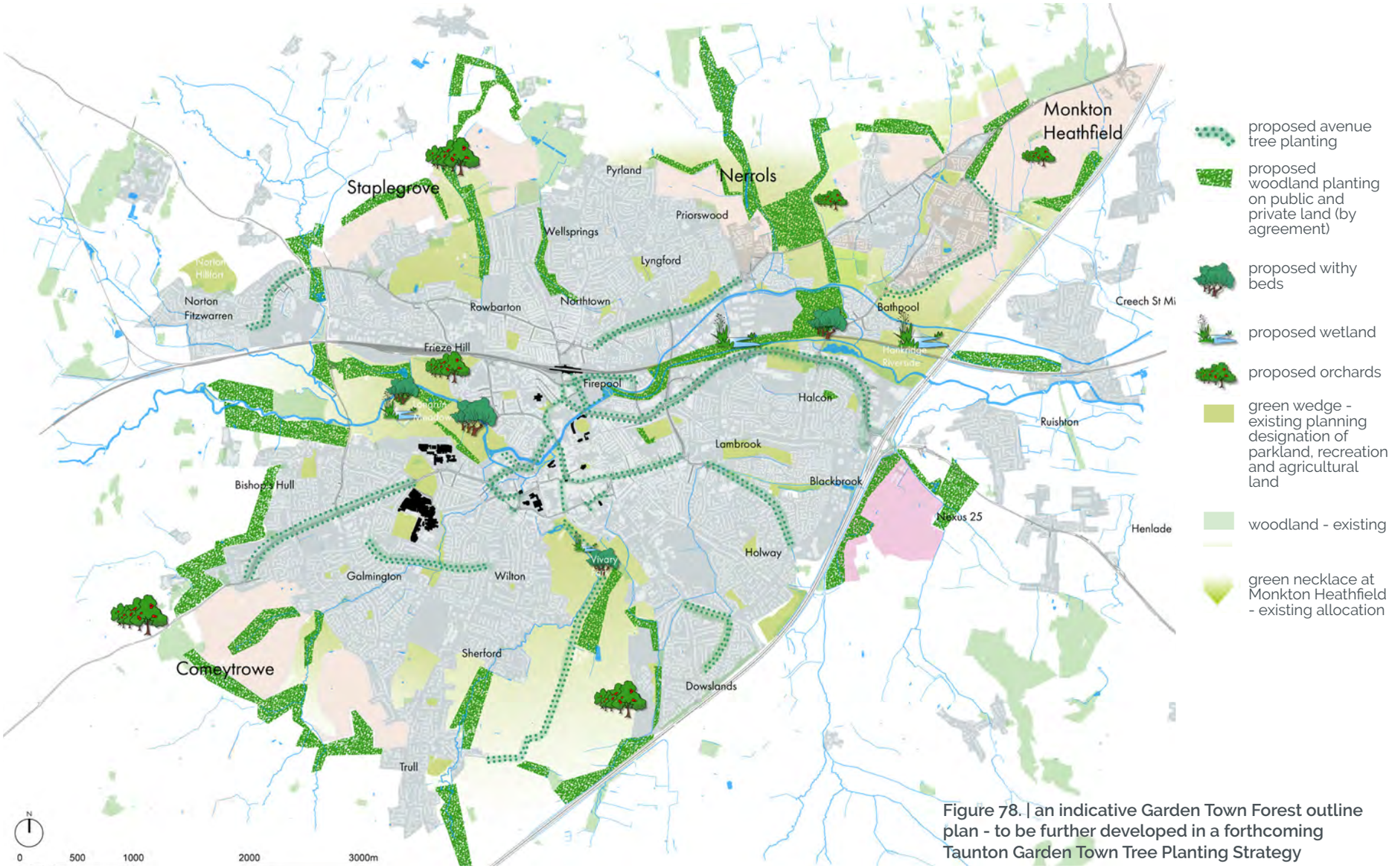


Figure 78. | an indicative Garden Town Forest outline plan - to be further developed in a forthcoming Taunton Garden Town Tree Planting Strategy

Figure 80. | Trees of all kinds make a major contribution to the character of the town. They filter air pollution, encourage wildlife and provide urban shading.

Figure 79. | Small clusters of cherry trees link neighbourhoods to the Vale of Taunton's rich heritage in fruit tree growing

Partnering for planting

2.19.5

While an element of this forest will involve public land, we appreciate that we will need to partner with private and other public land owners, utility companies etc. to accomplish a greener town.

The Garden Town Forest will be assisted by a carbon sequestration initiative that will benefit wildlife and provide a far stronger green character to the town. Developers will contribute through CIL and S106, and farmers through future Environmental Land Management Systems as they emerge, Local organisations, neighbourhoods and friends /groups may contribute to it as part of their carbon offsetting. This requires a partnership approach to delivery and we will look to work with:

- Somerset Wildlife Trust
- DEFRA
- Natural England
- Forestry Commission
- National Farmers Union
- Country Landowners Association
- Woodland Trust
- Canal & River Trust
- Environment Agency
- Key local landowners such as the NHS, schools, National Highways etc

Neighbourhood friends

2.19.6

There is potential for the council and developers to partner with local volunteers/ friends groups and residents associations to help maintain green infrastructure - including on council owned land like public gardens, car parks and public housing land.

Green gyms

2.19.7

Green gyms are communal growing and green spaces that encourage people to get outside and get involved in exercise through nature conservation volunteering and involve warm ups and cool downs. Active spaces encourage social connections and mental wellbeing.

Street trees

Figure 81. | street trees have served Taunton well enhancing streets and adding value to an area.

Figure 82. | Tree planting in a parking court softens the hard landscape, provides shade and frames the space.

Street trees and highways

2.19.8

Street trees usually become the responsibility of the highway authority who has powers to plant and maintain trees under the Highways Act. Due to the cost of maintaining trees in the highway the local highway authority Somerset County Council prefer that planting is carried out in areas outside the highway boundary and will look at ways to do this in new streets. Tree planting in the highway should only be considered when it can be demonstrated that all other options to plant beyond the highway boundary are not feasible. This may particularly be the case in existing streets, where utilities and other constraints exist but where planting may be needed to achieve our Garden Town objectives.

The highway authority should be consulted and each decision will be considered on its merits.

All steps will be taken to both achieve the increase in tree cover and also protect the structure and integrity of other highway assets and utilities. Methods used must also provide for healthy growth of the tree, so using the correct tree species, size and planting method is essential in meeting these goals.

Somerset West and Taunton Council will work with Somerset County Council to achieve the increase in tree cover required in our streets as part of establishing our Garden Town and providing the shade, rainwater runoff interception and natural assets we need to combat the climate and biodiversity emergency.

Planting in new streets

2.19.9

On a new development, proposals for tree planting should be planned for at the outset, in terms of location and zones of planting and location of service trenches/ducts, appropriate species and safe highway operational layout. See also the Districtwide Design Guide SPD[1].

Designers should look for opportunities to provide street trees as required by the National Planning Policy Framework, but in a way that lessens the liability of the highway authority to maintain the them. This can be by:

- planting in single or grouped 'unadopted islands', usually within a street verge or wide paved area that is not part of the main footway.
- planting in areas outside the back edge of the adopted highway boundary

In either case the trees must have a long term management plan and responsible body agreed.

1 Somerset West and Taunton Districtwide Design Guide - for a zero carbon, healthy, resilient and distinctive environment SPD, Somerset West and Taunton Council, 2021

This can be through community management trusts, residents' groups or similar.

Note that trees in planters are not normally recommended (other than as temporary measures such as for parklets - see Figure 84), as they do not usually allow for large enough root space and require higher levels of maintenance. Very large (>50 sq.m) low raised planters for wide street spaces may be considered where other options are not suitable and if they do not obstruct pedestrian and cycle routes

Commuted sums for new trees

2.19.10

Where street trees are to be adopted by the highway authority, the appropriate commuted sum will be required[2] to ensure that trees of an appropriate species and stage of maturity are selected and an appropriate management regime established. (The highway authority is considering the revision of these sums at the time of writing).

2 Somerset Technical Advice Note 14/21 Commuted Sums Protocol for Highway Infrastructure

Figure 83. | trees in the public realm provide significant visual amenity as well as shelter and wildlife opportunities

Photo @CarolineRussell

Figure 84. | Parklets allow for more sociable use of carriageway space without disruptive and costly highway engineering works

Tree selection
2.19.11

Trees species and sizes for street tree planting must be of suitable growth habit, size and leaf or fruit drop for highway situations. See Figure 86. They shall be agreed with the arboricultural officer at Somerset County Council or for other public spaces with the Somerset West & Taunton Council tree officer. Street trees shall be from the list shown unless otherwise agreed in writing and shall be provided root balled. Installation will be by underground guying with root irrigation pipe. Trees for streets shall be minimum 20-25cm Advanced Nursery Stock. There is a tradition of pleached tree use in the town centre and consideration will be given to their use where their maintenance allows.

Figure 85. | providing space for trees in our streets must be provided for at an early design stage and agreed with the highway authority

Consideration shall be given to the tree's potential size at maturity and potential to affect nearby buildings, structures or underground utilities in order to safeguard the trees for the future.

Sourcing of trees should be from UKISG endorsed nurseries to reduce the risk of introducing pests and diseases.

Tree pit location
2.19.12

Careful consideration shall be given to street tree location to ensure they do not have an adverse impact on highway safety such as visibility splays or other obstruction.

Tree pits and trenches
2.19.13

Where possible a minimum soil volume of 5 cu m should be provided. The shape of the soil area need not be regular and can be altered to suite site conditions. Volume cannot be achieved by providing extra depth. The maximum useful depth of topsoil for tree planting is 900mm. It is acceptable for more than one tree in the same soil.

Tree pit surfacing
2.19.14

Surface treatment choices should balance considerations of tree health and the use of the space around the tree. The following surfacing may be used:

location	type
Core standard	Specialist permeable resin coated aggregate.
Town standard	Gravel – porous self-binding inorganic hoggin / 20mm down aggregate
General standard	Gravel – porous self-binding inorganic 20mm down OR single size loose gravel 10mm in cellular constraint in very low foot traffic areas only.

Large trees for streets
Acre rubrum 'Doric'
Alnus cordata
Carpinus betulus' Frans Fontaine'
Fagus sylvatica 'Dawyck' or 'Anniek'
Gingko biloba – also varieties: 'Tremonia' or fastigiata 'Blagon'
Liquidambar styraciflua 'Festival'
Platanus x hispanica 'Tremonia'
Quercus palustris 'Green Pillar'
Quercus robur 'Fastigiata Koster'
Tilia cordata 'Green Spire', 'Streetwise' or 'Rancho'

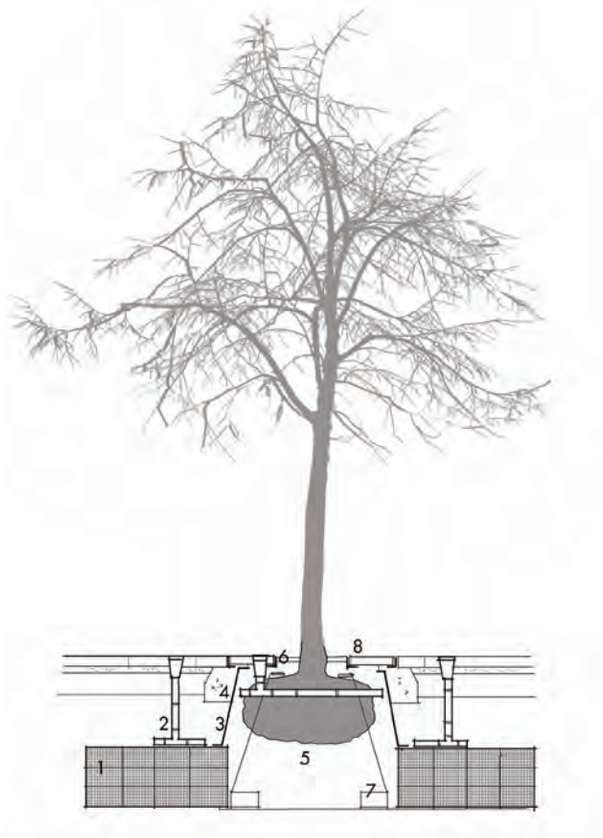
Medium Trees for streets
Acer campestre - varieties: 'Elsrijk' or 'Streetwise'
Alnus incana
Betula ermanii
Betula pendula 'Dalecarlica'
Gelditsia triacanthos varieties
Liquidambar styraciflua 'Worplesdon'
Prunus 'Sunset Boulevard'
Pyrus calleryana 'Chanticleer'
Sorbus aucuparia 'Asplenifolia'
Sorbus intermedia
Sorbus latifolia 'Henk Vink'
Sorbus 'Sheerwater Seedling'
Tilia cordata 'Mongolica'

Small trees for streets
Acer capillipes
Acer platanoides 'Globosum'
Acer campestre 'Streetwise'
Amelanchier lamarckii
Amelanchier alnifolia 'Obelisk'
Corlyus colurna
Koelreuteria paniculata fastigiata
Malus baccata 'Street Parade'
Prunus 'Sunset Boulevard'
Pyrus calleryana 'Chanticleer'

Trees for pollinators
Acer campestre 'Elsrijk'
Alnus glutinosa
Amelanchier lamarckii
Crataegus laevigata 'Paul Scarlet'
Liquidambar styracifolia
Liriodendron tulipfera
Malus 'Evereste'
Malus 'Rudolph'
Prunus cerasifera
Salix caprea
Sorbus aucuparia
Tilia cordata

Pleached or espalier trees
Tilia spp.
Liquidambar styraciflua
Carpinus betulus

Figure 86. | Tree species selection for street tree planting



1. Root Cell system
2. Root rain irrigation pipe
3. Root director
4. concrete ST1 haunch to tree grille
5. urban tree soil
6. mulch - resin bonded gravel
7. dead man guy support
8. galvanised tree grille with inset paving

Figure 87. | Street tree pit/trench section: street trees to have underground guying, and root cells with urban tree soil for pavement support integrity and to provide correct nourishment and suitable conditions that promote healthy growth

Paving support

2.19.17

All street tree planting requires structurally sound pavement installation while enhancing the amount of rooting space for urban trees and encouraging root growth away from the pavement. These include root paths, structural soil and suspended pavement systems and each has benefits and drawbacks. Seek expert arboricultural guidance to identify the best approach for your project.

Root barriers

2.19.18

Measures to prevent tree roots interfering with the structure of the highway should be considered. Root barriers should be used only in circumstances that need to redirect root growth away from a structure, not to restrict roots completely within a confined zone.

Drainage

2.19.19

Tree pits shall have a 200 mm deep layer of clean 50mm nominal size aggregate in the base topped with a geotextile blanket.

Planting adds value; it helps to soften the urban street-scene, creates visual and sensory interest, and improves the air quality and microclimate. It can also provide habitats for wildlife.

Manual for Streets, DfT 2007

Figure 88. | Castle Tree Grille: Heavy duty galvanised steel segmented tree grilles with insets for paving, Green Blue

Figure 89. | Monza Tree Grille: Heavy duty galvanised steel segmented tree grilles with insets for paving, Green Blue

Tree grilles/ surrounds/edging

2.19.20

Segmented integrated tree grilles shall be used with a deep construction. The grille shall incorporate a continuation of the surrounding hard surface. Gaps between the sections allow water and air through and sections can be removed to allow for tree growth.

Specification

Type:	Paving infill type: Castle Tree Grate. (see Figure 88)
	Steel grille type: Monza Tree Grille (see figure 89)
Sizes:	1m , 1.2m, 1.5m, 1.8m, 2m and 2.4m square
Source:	Green Blue Urban

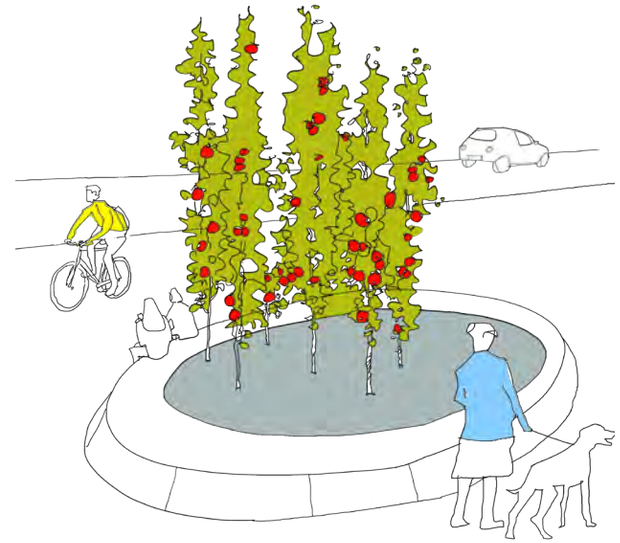


Figure 90. | Street tree planter: for micro-orchards or tree clusters with planter retained edges to help contain fruit drop and provide seating - Kellen Elementale, Grande bastion Stones 40/32 (750mm high) and Planter Section 40 (500mm high), Hardscape

Management plan
2.19.21

Tree planting in streets and public spaces shall be supported by a management plan. This should cover pruning, irrigation/watering. weedkilling and maintenance. of any supports.

Watering
2.19.22

New planting needs to have an appropriate programme of irrigation to establish and thrive. This might involve hand watering or an automatic system. Slow release watering bags shall be used in soft landscape planting areas. Irrigation systems may be used only if tree pits have adequate active drainage and water is directed through a root ball.

Figure 91. | Watering tubes and bags make good water reservoirs that can help new trees establish

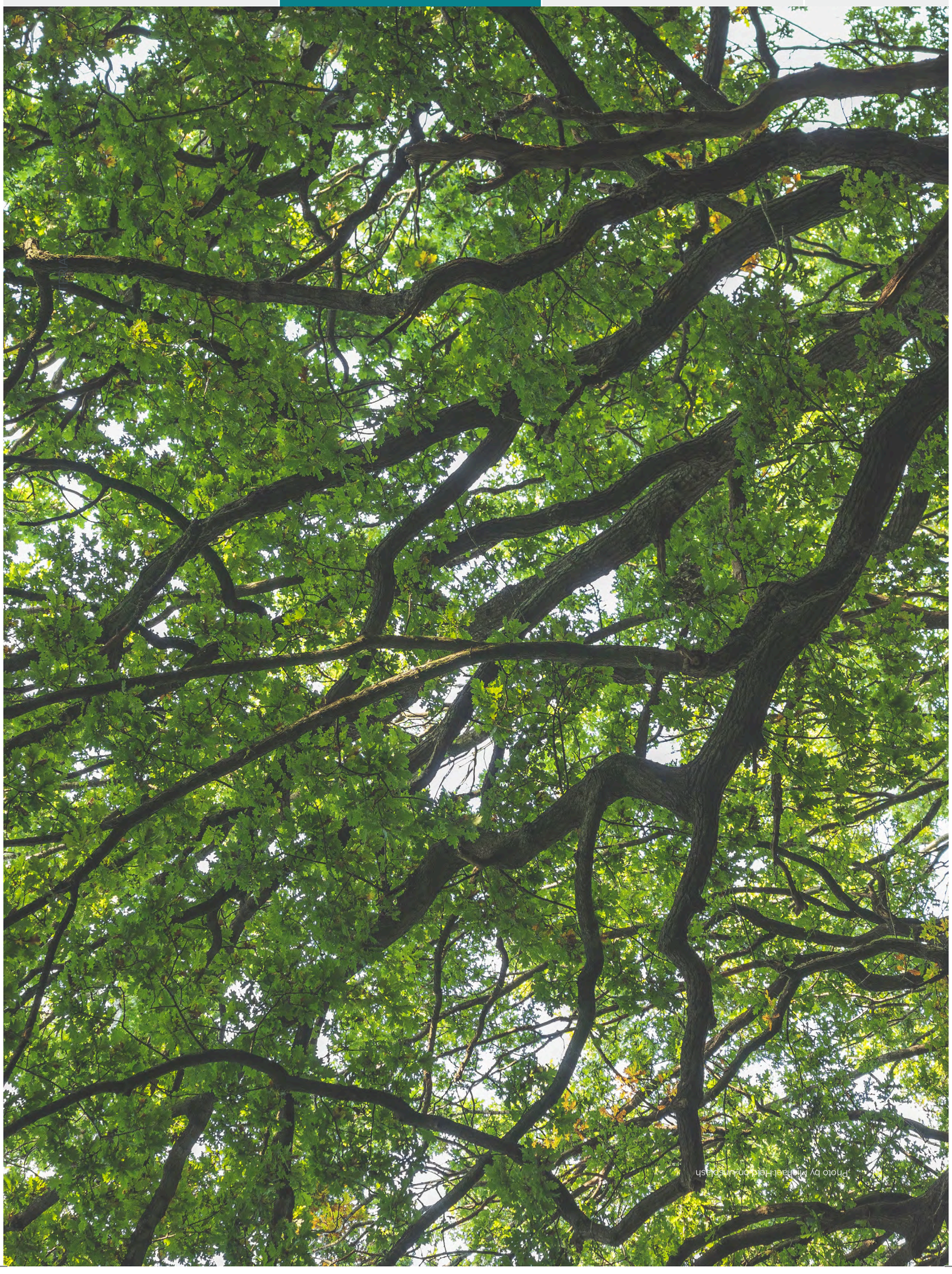


Photo by Michael Heck on Unsplash

Street gardens

Absorbing water - Sponge Town
2.19.23
With the increasing prevalence of extreme weather events and sudden high surface water runoff, the need for attenuating surface flows is ever greater. Making our hard surfaces more permeable and sponge-like will slow flows and reduce flooding impacts. Taunton is built at the confluence of several streams that feed our River Tone and the Canal. Some of these streams have been re-routed, filled in and culverted with development over the years and this system can get blocked and overcome in extreme events and cause flooding. One of the measures to assist in overcoming this is to create a more absorbent and flood resilient public realm, a Sponge Town, by depaving and providing more natural water attenuation features. Figure 93 shows how this might be applied across the town centre.

Connecting nature
2.19.24
Opening up soft areas and water capture areas in the public realm means there will also be opportunities for providing green areas and habitats for wildlife, particularly for pollinators. Features should be referred to Somerset County Council, as Lead Local Flood Authority for agreement.

Figure 92. | example of a street sponge garden that capture surface water and provide for planting of pollinators

The public realm shall include sustainable urban drainage and pollution reducing Street Garden features that will de-pave some of the public realm and include:

- street sponge gardens (see Figures 92 and 95)
- leats and water rills
- pollinator planting
- green walls

Further opportunities for planting include use of green roofs, living walls, wildflower matting and a host of similar green technologies on schools, bus shelters, central reserves and retaining walls that will provide a greener and more healthy town environment.

The Garden Forest for Taunton will be supplemented at street level by green-blue infrastructure of street gardens.

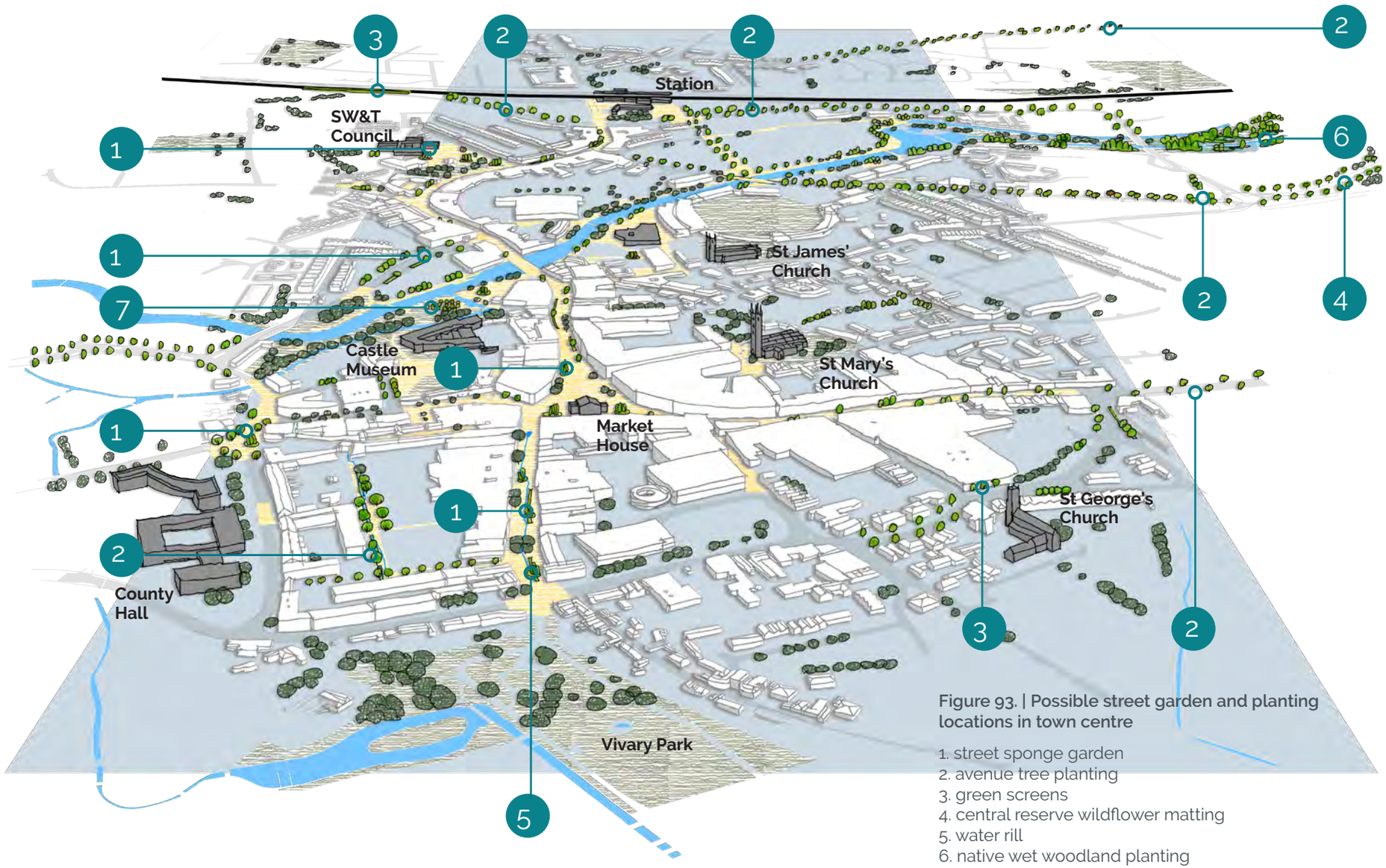


Figure 93. | Possible street garden and planting locations in town centre

1. street sponge garden
2. avenue tree planting
3. green screens
4. central reserve wildflower matting
5. water rill
6. native wet woodland planting
7. mini orchards

Figure 94. | Above and above right. Planting in footway spaces to encourage water infiltration - Rotterdam (paving specials www.struykverwoinfra.nl/)

Figure 95. | example of a street sponge garden that threads small water attenuation features into narrow street spaces

Figure 96. | Taunton once had many orchards and is still famous for its apple juice and cider. Community orchards can be of all sizes, restore the connection with our rich landscape heritage and are fun social places.

Growing edible places

2.19.25

As a Garden Town we want to be able to diversify the way we grow and use our land and produce food. Taunton is well known as a place where apples were grown for cider and we have a successful community orchard at Frieze Hill. We have large areas of green space in parks and housing estates, in greens and verges.

We want to increase opportunities for neighbourhoods to grow food without having to take on a whole allotment and so will encourage community groups to utilise appropriate and safely laid out public spaces for growing spaces with well managed fruit trees and plants and with vegetable beds, in raised beds or other suitable spaces.

New developments shall provide suitable micro-allotment growing spaces in streets, squares and parks. These should include raised beds for inclusive access and use. Community groups, schools and perhaps other residential other institutions will be encouraged to take up growing spaces as these are enjoyable social opportunities, good for health and wellbeing and promote biodiversity and lower food miles. Urban orchards can be large fields or just one or two trees and heritage fruit and nut trees abound in Somerset, so there is ample opportunity to find the right sort.

Alongside community orchards and mini orchards there may also be opportunity for jam making, fruit drink and cider making, vegetable growing and bee-keeping,

Consider safety factors associated with planters in highways such as positioning in relation to vehicles, visibility splays and the safety of volunteers if they are to be working at on or near moving vehicles. Agree locations with highway authority.

Riparian planting

Riverside planting
2.19.26
River and canalside planting shall be native species where possible. Planting should provide a range of natural habitats for wildlife and maintain the wetter corridors as part of the towns green network,. Planting also provides for visual amenity whilst allowing for flood risk maintenance activities.

Marginal vegetation and trees will be encouraged wherever possible

Sourcing of trees should be from UKISG endorsed nurseries to reduce the risk of introducing pests and diseases.

Trees and soils for carbon sequestration
2.19.27
Tree planting and formation of wetlands, improved floodplain connections, scrapes, wet woodlands, and scrub provides additional carbon sequestration for our environment. Tree pnating also helps retain and enhance soil depth and quality through retention and addition of organic compounds and prevents soil depletion through runoff.

See Section 3.2 for more Canal & River Corridor design guidance.

Figure 97. | river corridor riparian planting of native willows, alders and other wet habitat trees along with scrub, wet grassland and marginal reed.

References

Surface materials round trees in hard landscapes, London Tree Officers Association, 2014

Tree Species Selection for Green Infrastructure: A Guide for Specifiers, Tree Design Action Group, 2019

UK sourced and grown trees: why is it important to buy them? Woodland Trust 2021

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Plants for pollinators, RHS

Somerset County Council Pollinator Action Plan 2018-2028 (Draft), Somerset County Council, (with Somerset Wildlife Trust and Friends of the Earth) 2018

Natural Environment Guidance, NPPF Planning Practice Guidance. MHCLG 2016 (updated 2019)

A Green Future: Our 25 Year Plan to Improve the Environment, DEFRA, 2018

Taunton Deane Green Infrastructure Strategy, LUC for Taunton Deane Borough Council 2009

Taunton Deane Green Infrastructure Update, LUC for Taunton Deane Borough Council, 2017

Taunton Strategic Flood Alleviation Improvements Scheme, Somerset Rivers Authority

Frieze Hill Community Orchard

Longrun Meadow - www.longrunmeadow.co.uk/

Incredible Edible - www.incredibleedible.org.uk

Trust for Conservation Volunteers - www.tcv.org.uk

Common Ground - www.commonground.org.uk/

ideas for a wicker dragon festival at Norton Fitzwarren camp

lighting can bring to life places and events, helping us see our neighbourhoods in a new way

We want our public realm to add vitality as well as safety after dark, to encourage an evening economy, and to bolster the sense of our place through arts and celebration.

nightscape & lighting

2.20 Street and path lighting

Street lighting
2.20.1

Street lighting will reflect more the historic character of whole streets rather than, as has been past practice, only varying designs strictly to a Conservation Area boundary,

Heritage style lighting should not be restricted always to Conservation Areas but at the same time offer good value and not overburden maintenance costs. In addition not all Conservation Areas require complex heritage style lighting - simple painting of standard street lamps can make them less obtrusive in the streetscape.

Garden Town lighting standards
2.20.2

The following area standards show the adjustments to the standard highway lighting for the Garden Town. They have been developed in consultation with the highway authority and form the starting point for selection of lighting fittings.

Whilst the final design must be agreed with the highway authority lighting engineer and conservation officer, this guidance shows how standard lighting fittings fit into the different public realm areas and take account of the historic characteristics across the town.

Highway lighting of streets is to British Standards to comply with safety requirements and will use best technology available for energy use and light type (currently LED). Wall mounted lighting shall continue to be used where proximity of tall enough buildings makes this possible.

wall mounted (without bracket) LED floodlights shall be used instead of columns where tall enough buildings abut the street or alley. Wayleave agreements will be required.

Photo: Urbis Schreder

Axia2 LED lamps are the elected mainstay of highway authority lighting. Generally mounted on standard straignt steel columns painted black. Dimmable. Also available focussed beam for pedestrian crossings)

Core standard

Objective

2.20.3

Lightly ornamented dark painted columns. Elegant simplicity to suit the settings of not only Conservation Areas but all the various heritage assets, listed and non-designated that make up the character of the street. Standard column with ornate bracket

Specification

2.20.4

Lamp: Urbis Schreder Albany

Bracket: square arm scrolled top entry bracket

Column: 4-8m standard tapered steel column

Painting: All columns and fittings finished in RAL 7024 graphite grey/ Raven 18B29 to BS4800.

Wall mounted

2.20.5

Urbis Schreder Neos wall mounted floodlight self coloured RAL 7024 graphite grey/ Raven 18B29 to BS4800

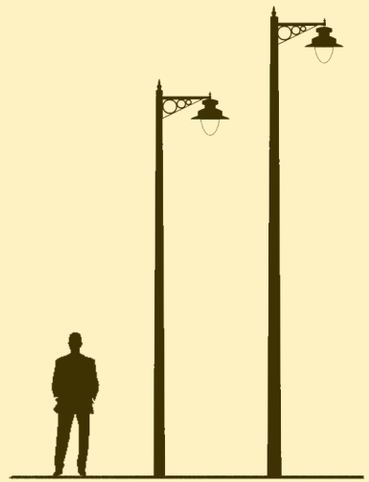


Figure 98. | Urbis Schreder Albany lantern with square scrolled top entry bracket on standard tapered column painted Raven

Figure 99. | Urbis Schreder Neos wall mounted LED floodlight

Figure 100. | Urbis Schreder Albany lantern - the simple teardrop form is suited to a number of urban settings including those with heritage value.

Town standard

Objective
2.20.6
Budget street light and column painted to reduce visual impact and help blend into background of streetscene.. Tapered column to provide more style without sever cost effects.

Specification
2.20.7
Lamp: Urbis Schreder Axia

Bracket: post top. Stub bracket for double arm

Column: 4m+ standard tapered steel column

Painting: All columns and fittings finished in RAL 7024 graphite grey/ Raven 18B29 to BS4800.

Wall mounted
2.20.8
Urbis Schreder Neos wall mounted floodlight self coloured RAL 7024 graphite grey/ Raven 18B29 to BS4800

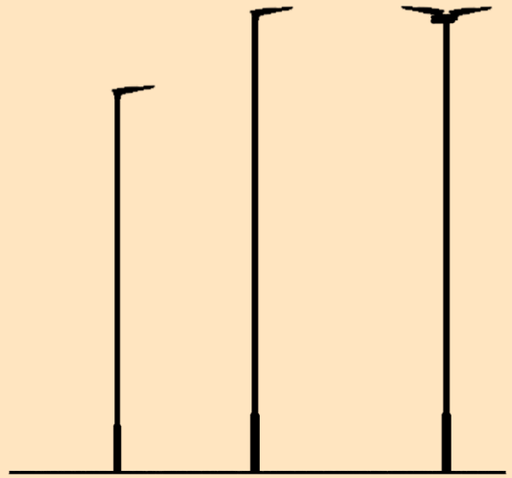


Figure 101. | Urbis Schreder Axia lantern (standard grey) with square scrolled top entry bracket on standard tapered column painted Raven

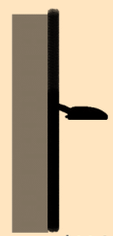


Figure 102. | Urbis Schreder Neos wall mounted floodlight

General standard

Objective

2.20.9

Budget street light and column painted to reduce visual impact and help blend into background of streetscene.. Straight column to maintain lower cost.

Specification

2.20.10

Lamp: Urbis Schreder Axia

Bracket: post top. Stub bracket for double arm

Column: 4m+ standard straight steel column

Painting: All columns and fittings finished in RAL 7024 graphite grey/ Raven 18B29 to BS4800.

Wall mounted

2.20.11

Urbis Schreder Neos wall mounted floodlight self coloured standard.

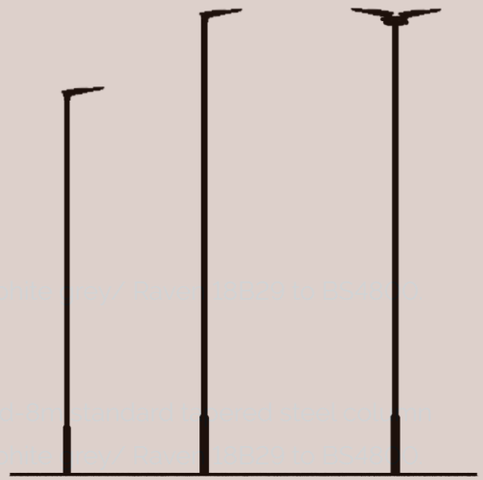


Figure 103. | Urbis Schreder Axia lantern (standard grey) with square scrolled top entry bracket on standard straight column painted Raven

Figure 104. | Urbis Schreder Neos wall mounted floodlight

Heritage specials

Objective
2.20.16
Reduce the range of heritage special street lights whilst matching styles to townscape character. Increase energy efficiency and maintain performance.

Use wall mounted lights whenever possible. All fittings and columns shall be painted Raven 18B29 to BS4800.

Retained lighting types
2.20.17
Retained specials: Around Market House and County Hall existing ornate Albany lamps are used with .scrolled arc brackets.

In The Crescent a replica heritage column, the Somerset Cockey with ladder arms features in the Conservation Area with an Abbey post top lantern..

The listed ornate lamp columns in Fore Street are listed are also to be retained.

Heritage specials
2.20.18
Taunton has a number of legacy special street lamps including stirrup bracketed Albany lights, Acorn lamps etc. Replacement will be phased with planned maintenance or when alternative funding e.g. from planning obligations, allows, using one of the Heritage Specials here. Other historic lamps shall be conserved.

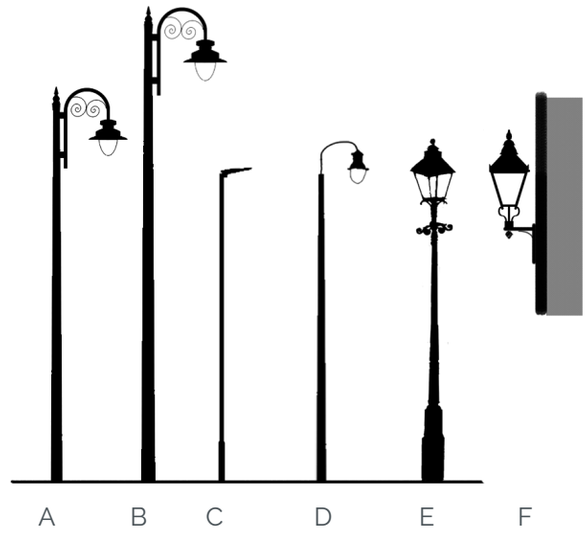


Figure 105. | Heritage Special lighting types in the Garden Town

Figure 106. | A - Albany with cascade/arc scroll bracket, top entry 4m tapered column - see lighting areas
B - as above 6m column - Park Street and Wellington Road Conservation Area
C - Axia2 on standard 4m tapered column - Staplegrove, Stpelegrove Road, Mount Street, South Road Conservation Areas
D - Acorn lamp on arc bracket - Trull Conservation Area
E - Somerset Cockey column with Abbey lantern - The Crescent Conservation Area
F - Abbey wall mounted lantern with fabricated frog on square bracket - St Mary and St James Conservation Area

Figure 107. | Traditional Abbey luminaire by Urbis Schreder

Figure 108. | Urbis Schreder Albany lantern - the simple teardrop form is suited to a number of urban settings including those with heritage value.

Staplegrove Road Conservation Area - simple Axia2 lights on painted tapered columns

Figure 109. | Somerset Cockey reproduction heritage column with Abbey lantern in The Crescent Conservation Area

Lighting should be sensitive to all historic character areas, not only Conservation Areas. Agree with conservation officer and highway authority lighting engineer

Green Standard

Green standard

Objectives
2.20.19

The waterside and green wedge areas of the town vary between urban parks and semi-natural and rural landscapes. The lighting here will reflect the less urban character and reinforce the connection to nature by largely using a timber column. Where cycle tracks are public highways, a small Axia lamp on painted steel column will be used.

Specifications
2.20.20

Two standard types are shown.

GA - for use in off highway public land areas such as parks, green corridors, public footpaths and riverside walks.

GB - for use on adopted cycle tracks and bridle paths where lighting is required.

Figure 110. | Green Standard lighting and columns
A - Citea NG LED lamp on Nemus Lite round tapered timber column by Urbis Schreder. Single bracket and extension acrylic spike finial option - with movement sensor controller
B - Axia2 post top mounted on 4m standard steel straight column, painted Raven 18B29 to BS4800

Light sensitive areas
2.20.21

We want to increase the safe use of waterside areas at all times of day and evening so the river corridor is well sued for active travel. Balanced with this is the need for waterside areas to be sensitive to bats who use the river and canal corridor as roosts and as flight paths at night. Here lighting may need to be restricted and baffled with full cut off lights, cowling and louvres to direct light to specific areas and restrict spill. The timing of lighting may also need to allow for only certain hours of use, or use of movement sensors where use is very low.

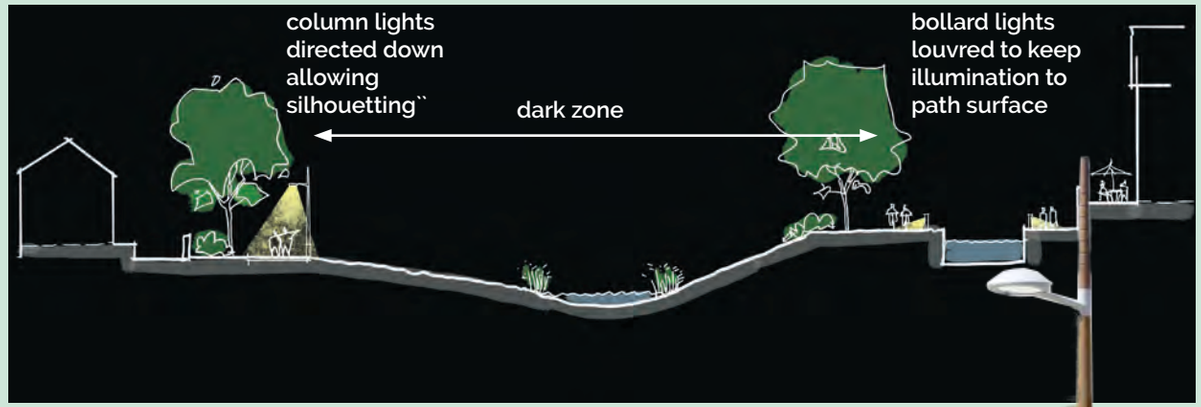
Footpaths and cycle routes should be directed away from watercourse edges where feasible, or have a buffer zone to minimise disturbance to riparian and aquatic wildlife. Keep any lighting away from the water edge and avoid directional down lights onto the water.

Dark areas will be designed in and low level louvred bollard lighting used to create silhouette lighting where this will be needed for safety and security. Where columns are used they shall be 4m mounting height and spaced widely. The character of the environment is also more rural and timber columns will be used to reflect this.

Cycle paths will be illuminated with ground level solar charged LED guide lights where higher illumination would be detrimental to wildlife.

NOTE: the Canal & River Trust do not normally advocate lighting along the canal towpath, except in very urban areas. As mentioned elsewhere, improvements should be discussed with the Trust and considered on a length by length basis, considering impact on wildlife and other canal users, on safety concerns as well as local precedent.

Any work within 8 metres of a watercourse will need careful consideration and design and should only be installed after prior consultation and/or Flood Risk Activity Permit (FRAP) from the Environment Agency.



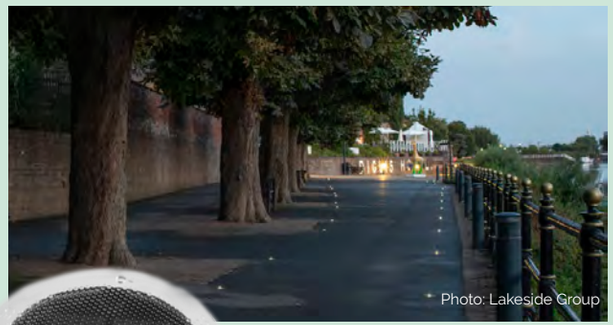
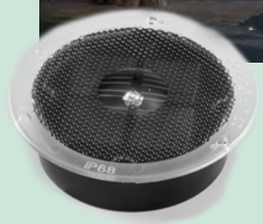


Photo: Lakeside Group



solar LED skid resistant 80mm dia. path indicator - Solareye80

Photo: Lakeside Group

illuminated bollard with louvre grille - Woodscape

Taunton illuminart

2.20.22

The use of illumination in an artistic or sculptural way is another method of revealing the hidden sub plots of a town and help re-imagine the nature of place after dark. Using public art both temporary through exhibits and permanent through commissions with developments, would bring a new life to the evening environment.

The Garden Town Illuminart will be a collaboration work with Taunton Arts and the Brewhouse to produce a sustained Illumination festival and permanent lightwork art pieces. These displays need create debate, dialogue and distortion, a slightly subversive undercurrent to the Garden Town that nevertheless ignite knowledge creation, that spark local self-managed industriousness which in turn will engage a new dialogue between institutions, commerce, people and place.

Tree uplighting

2.20.23

A tree illuminated from below reveals a new way of perceiving as so much of our environment is seen in daylight lit from above. It can add highlights and vitality to a place. It should be used in key places though due giving consideration to effects on the trees themselves and wildlife should be considered in the luminance level and amount of time the lighting is switched on.

Gateway art and lighting

2.20.24

We will promote use of imaginative illuminated public art as part of articulation of the gateways to the garden town. (See also Section 3.2 Gateways and Approaches).

Figure 111. | The simple uplighting of trees reveals place in a new way after dark.

Regulatory context

2.20.25

Planning permission may be required for certain lighting installations. Designers swill need to consult with the highway authority to ensure safety of road users is considered for signs or other illuminations close to highways.

Figure 112. | Revealing the urban fabric. 'Light a wish' by OGE Group, Amsterdam Light Festival 2018.

Photo Janu van Eijnden ©OGE Group

Figure 113. | 'Beacon' lightbox artwork by Mark Titchner

photo ©Luton Culture.

References

Somerset Technical Advice Note 22/20, Street Lighting, Guidance for the Design, Installation and Handover of Street Lighting and Illuminated Traffic Signs, Version 1, 2020

Streets in Residential Areas Design Guidance Notes, Somerset County Council, 2021

Protecting bats in waterside development, Waterspace Design Guidance, Bath and North East Somerset, 2018

Bats and Lighting Research Project, 2019

Institute of Lighting Professionals, 2019

'Technical Report Number 23: Lighting of Cycle Tracks, Institution of Lighting Engineers

BS 5489, Code of Practice for Road Lighting.

TA91/05 Designing for Walking, Cycling and Horse Riding, Highways England 2020

TA 501 Road lighting appraisal, Highways England 2020

TD 501 Road lighting design, Highways England 2020

External lighting of historic buildings, Historic England, Updated 16 October 2020

Designing, Installing and Maintaining an External Lighting Scheme, Historic England, 2020

3.0 APPLICATION TO PLACES

Our Garden Town's main streets will be gentle, quiet and slow spaces - full of vitality and showcasing our commitment to being the best a high street can offer.

town centre

3.1 Town centre street layouts

Illustrated examples

3.1.1

The following section shows a series of illustrative layouts for a range of urban conditions that demonstrate the application of these standards

These show design approaches for the streets marked in Figure 114 as being typical treatments of:

1. **all vehicle street**
2. **pedestrian street**
3. **restricted access street**
4. **urban square**

Note: All plans and street view sketches are of potential concept designs and are to be read as illustrative only. They are not intended as complete engineering designs (which will require full survey, analysis, relevant assessment and approvals) but of design approaches using the materials and concepts within this guide.

References

Taunton Town Centre Public Space Improvements Project, Stage 1: Project Scoping & Stage 2: Options, WSP for Taunton Deane Borough Council & Somerset County Council 2017

Conservation Area Appraisals - St Mary's and St James': Park Street: Castle Green & Bath Place; South Road; Stapolegrove Road; Th e Crescent, Thorn Falcon. Taunton Deane BC, various dates.

Local Air Quality Annual Status Report, Taunton Deane BC, 2018

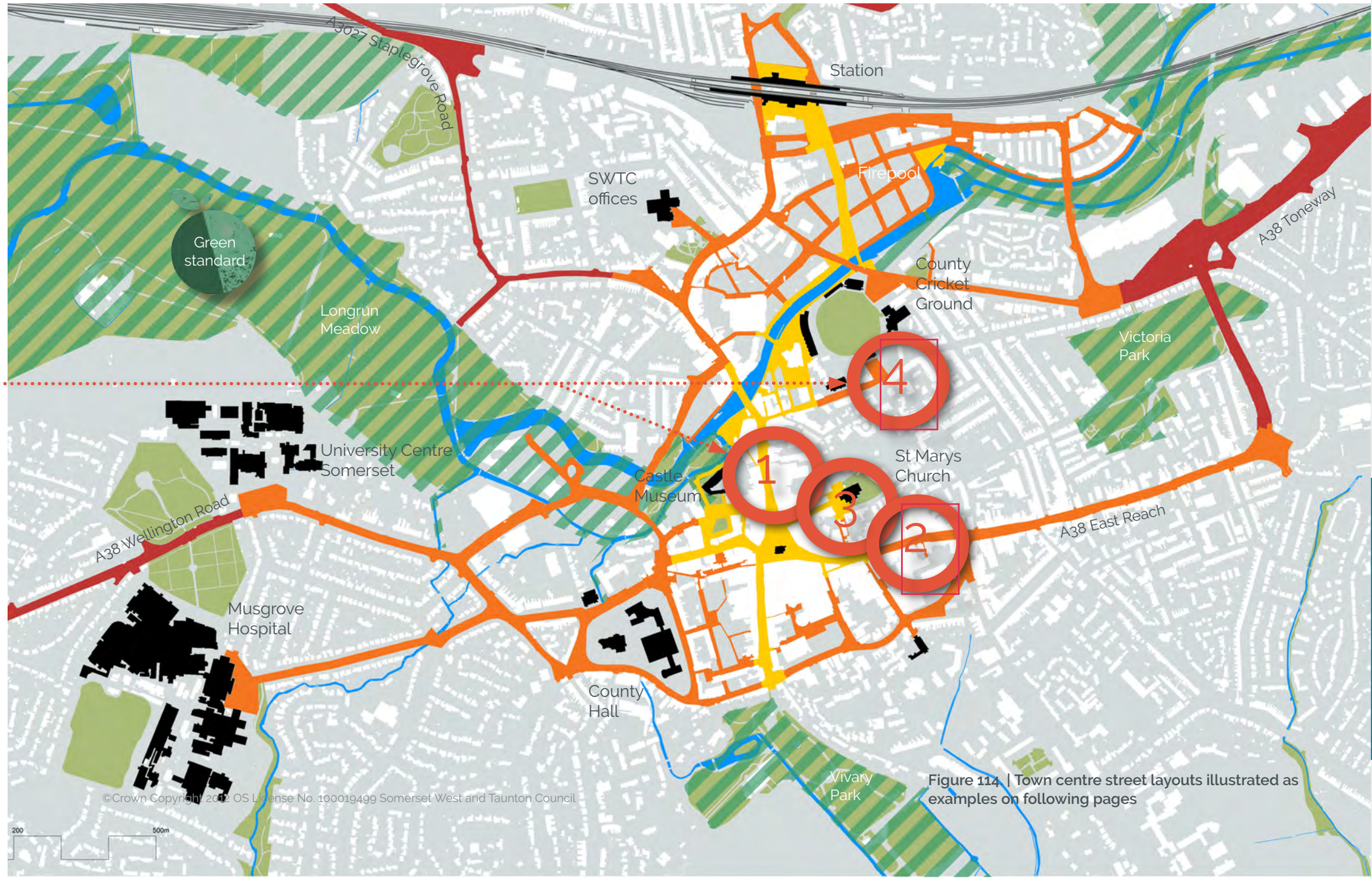


Figure 114 | Town centre street layouts illustrated as examples on following pages

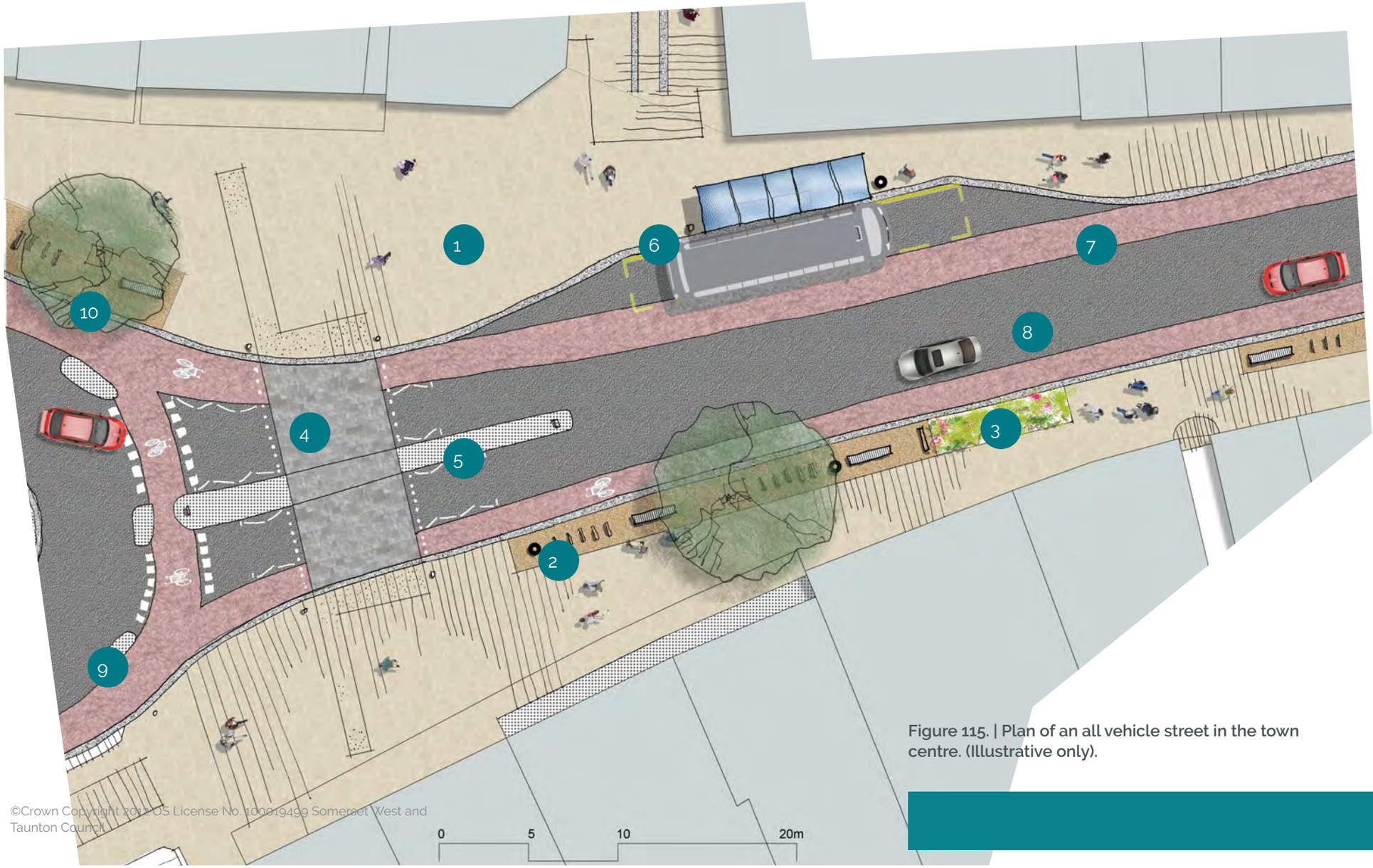


Figure 115. | Plan of an all vehicle street in the town centre. (Illustrative only).

1. all vehicle street

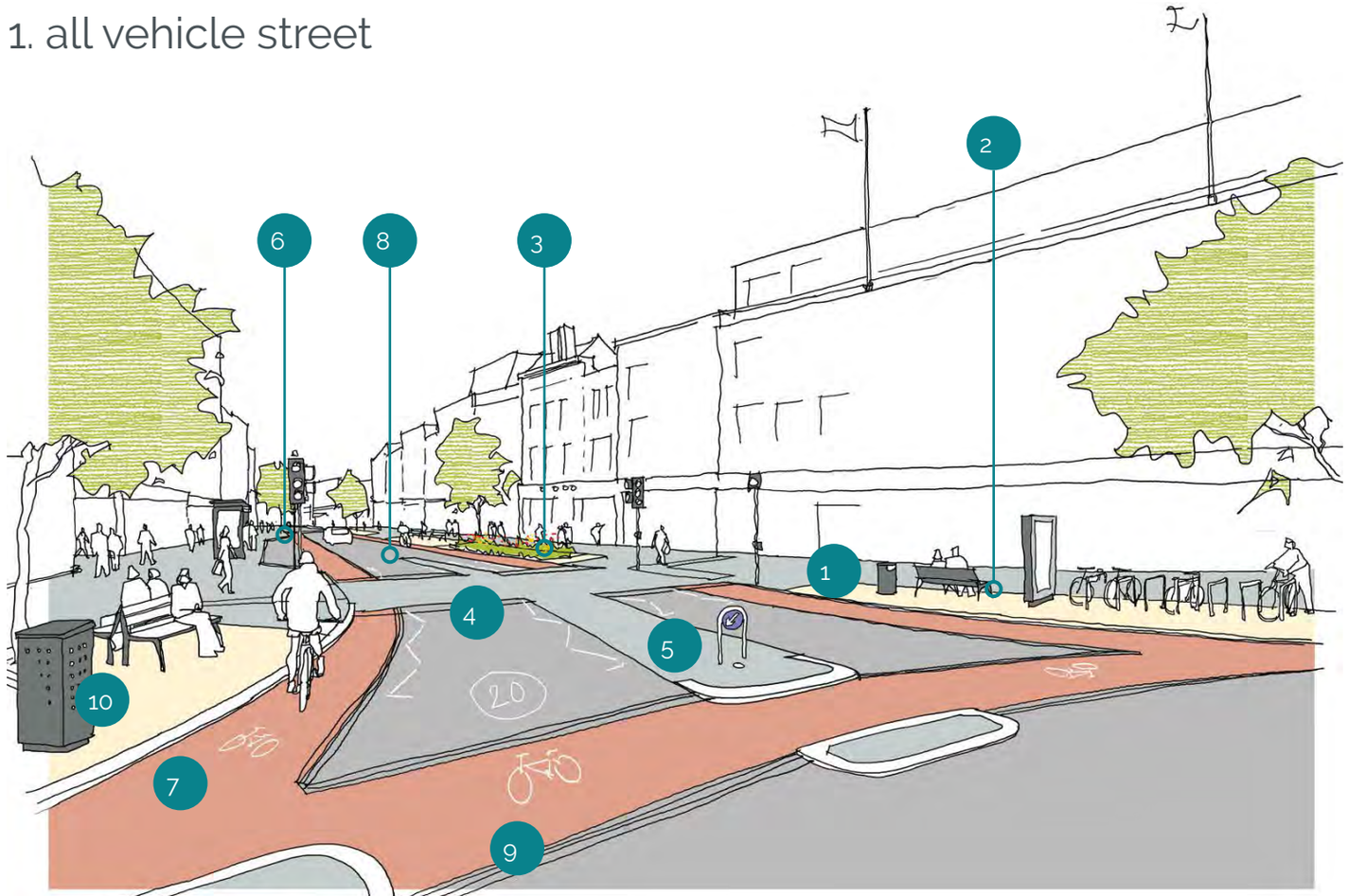


Figure 116. | Illustrative street view of a town centre all vehicle street

Core standard

1. Decluttered footway clear zone in high quality natural stone slabs
2. furniture zone with seats, cycle racks, advertising and tree planting - in resin bonded gravel where space allows. Drop kerb for cycle access.
3. street gardens taking surface water run off and planted with pollinators
4. raised mixed asphalt imprint paved crossing with minimal zig zags
5. flush or lightly domed central island in granite setts
6. bus stop in layby to avoid cycle lane interruption
7. generous width 2.5m cycle lane in distinguishing grey calcined bauxite bound surface
8. carriageway with no centre lines or yellow lines (restricted zone)
9. cycle lane around roundabout with separator islands in granite setts
10. street furniture including signal and telecoms boxes all painted Raven colour (cycle racks stainless steel)

Additonal ingredients

- 20 mph limit
- Restricted Zone and/or Vehicle Restricted Area
- hanging baskets and banners on lamp columns

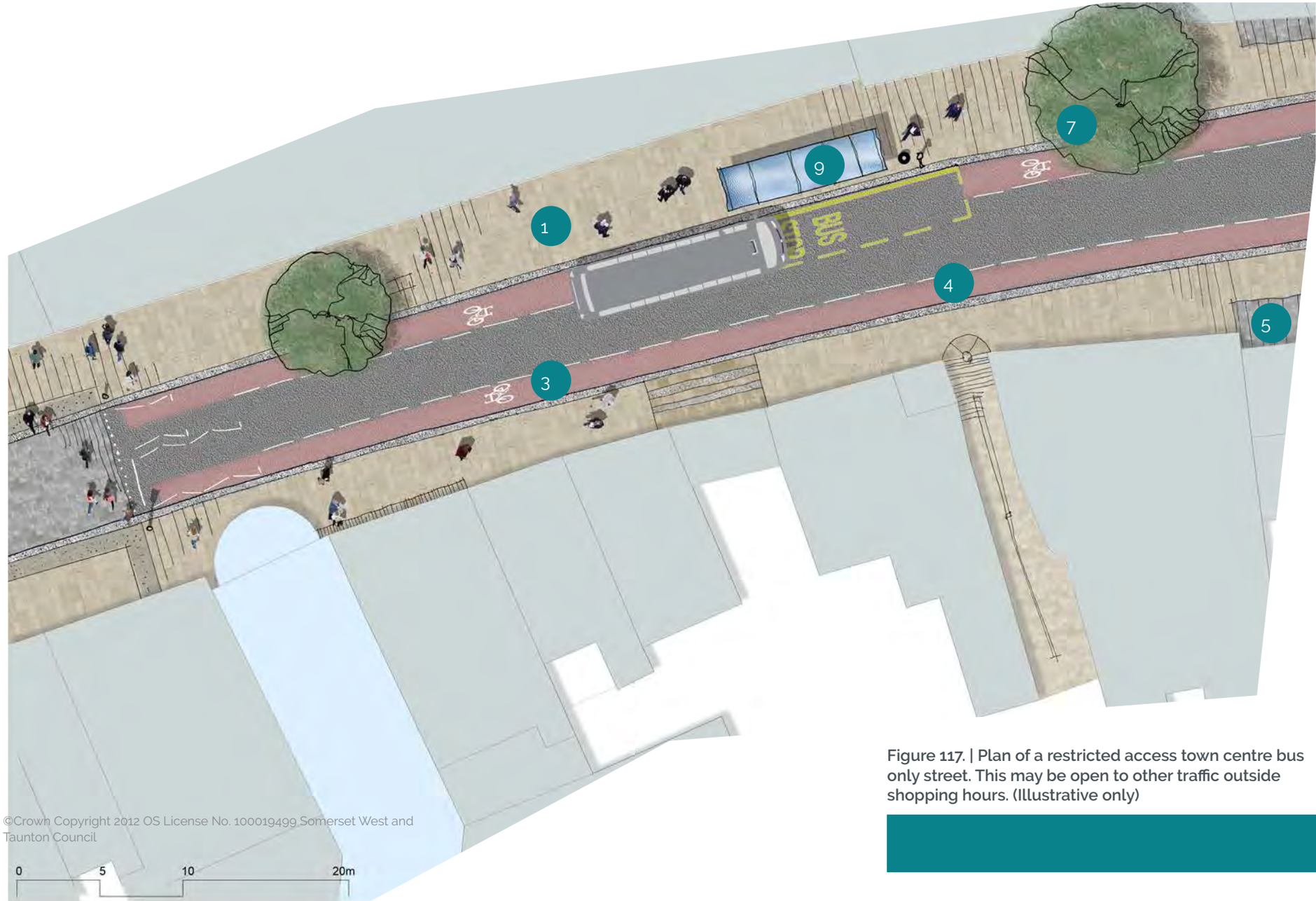


Figure 117. | Plan of a restricted access town centre bus only street. This may be open to other traffic outside shopping hours. (Illustrative only)

2. bus only streets

Figure 118. | Illustrative street view of a town centre restricted access bus only street

Core standard

1. Decluttered and widened footway clear zone in high quality natural stone slabs (loading bays on shared footway)
2. furniture zone with seats, cycle racks, advertising and tree planting - in resin bonded gravel where space allows
3. generous width 2.5m cycle lane in distinguishing grey calcined bauxite bound surface
4. carriageway with no centre lines or yellow lines (restricted zone)
5. heritage buildings to have distinguishing scaled slabs paving apron to part of frontage
6. street furniture including signal and telecoms boxes all painted Raven colour (cycle racks stainless steel)
7. trees on north side of street provide summer shade
8. street lighting wall mounted and wayleaves maintained
9. high quality bus shelter with real time information
10. pavement tables and chairs licensed with requirement to provide planting`

Additional ingredients
- 20 mph limit
- Bus, taxi and cycles only in daytime
- Loading off-peak only
- hanging baskets and banners on lamp columns

restricted access streets

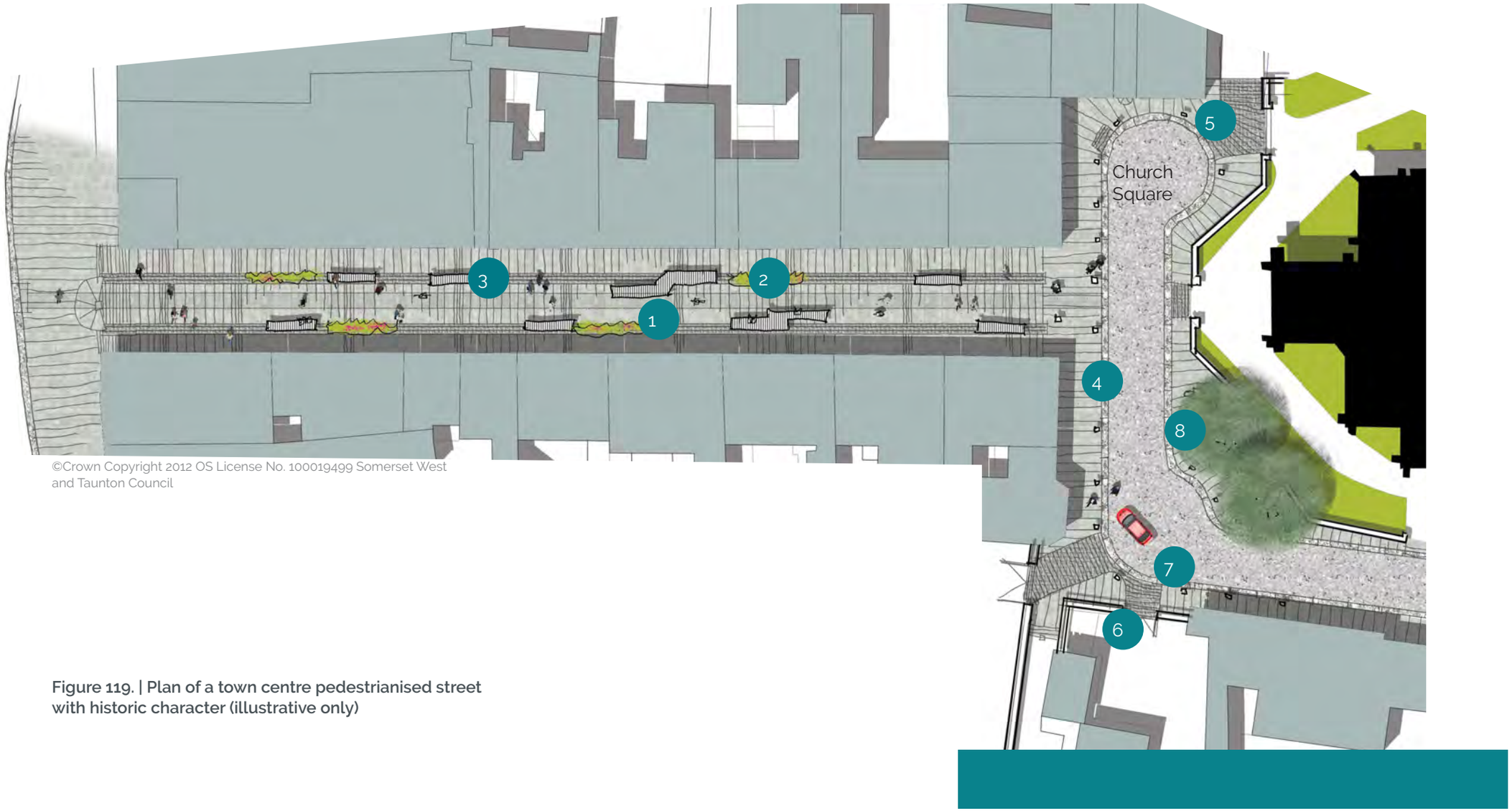


Figure 119. | Plan of a town centre pedestrianised street with historic character (illustrative only)

3. Pedestrian streets

1. paved natural stone shared surface with cycle lane marked in smaller sett units. Traditional kerb line may be marked with channel
2. street gardens taking surface water run off and planted with pollinators
3. furniture zone with seats, bins, and planting
4. repaved adjoining square with symmetry in kerb layout to match symmetry of buildings. Bollards to prevent pavement parking and emergency access to pedestrian area
5. sett crossover to side lane and church
6. walled and gated service areas to screen unsightly areas
7. sett crossovers to service yards
8. space for seating on south facing corner

Additonal ingredients
- allow for emergency vehicle access.
- 20 mph limit
- Restricted Zone
- hanging baskets and banners on lamp columns
- consult with local mobility and disability groups at planning stage.

3.1.2
Pedestrian streets (including those only pedestrianised during daytime) will need to be well landscaped with high quality materials and well ordered street furniture to maintain a range of people activities and interest - sitting, strolling lingering, walking rapidly and ambling slowly, easting, chatting are all part of what makes a pedestrian street work well.

Amenity not clutter
3.1.3
Pedestrian streets need to strike a balance between provision of seats and other furniture that allow the space to be active and well used, with clear space for movement and visual clarity. The proportion of furniture and features (such as planting) will depend on the scale of the street width and anticipated level of pedestrian activity, which any new design should expect to enhance significantly.

Maintain important vistas
3.1.4
Note that tree planting should not obstruct key views to important buildings and focal points such as St Mary's Church tower or the Burmah Cross.

Figure 120. | Plan of a town centre urban square created from traffic calming of junctions and new development used to make a strong edge to the space (illustrative only).

4. Urban squares

1. raised paved square in smaller element conservation paving slabs and setts with vehicular over run delineated with bollards
2. sett rhomboid shape at large intersection areas to camouflage any vehicle tracks (whilst allowing for them)
3. seating and furniture zone surfaced in resin bonded gravel
4. street rain garden with sedges and pollinator plants
5. paving square extends in front of important adjoining buildings that contribute to the place
6. conservation sett 'doormat' indicate vehicular entrance
7. important local building to have larger paving slabs to immediate frontage to indicate its status
8. new lighting in sympathetic heritage style

Additonal ingredients
- 20 mph limit
- Restricted Zone
- delineation of vehicular area edge with dished channel for visually impaired

3.1.5

Urban squares can be created from vehicular or pedestrian space and should be located where there is or will be some key interactivity between buildings and the street and usually at the meeting of movement routes. They are useful dissipaters of pedestrian activity and so will be found useful tools at school gates, transport hubs of various scales, or at key community buildings and facilities. They act as good social spaces and also form traffic slowing devices that will allow a place to develop where traffic might otherwise dominate. The form can follow any number of shapes and Manual for Streets has some useful guides on these.

References

Taunton Town Centre Public Space Improvements Project, Stage 1: Project Scoping & Stage 2: Options, WSP for Taunton Deane Borough Council & Somerset County Council 2017

Conservation Area Appraisals - St Mary's and St James': Park Street: Castle Green & Bath Place; South Road; Stapolegrove Road; Th e Crescent, Thorn Falcon. Taunton Deane BC, various dates. Somerset West & Taunton Council

Local Air Quality Annual Status Report, Taunton Deane BC, 2018

Active Design, Planning for health and wellbeing through sport and physical activity, Sport England, 2015

urban square

Our town's front doors will be friendly for families, welcoming, green and easy to use for all users - with excellent facilities for buses, walking and people on bicycles, as well as vehicles.

gateways and approaches

3.2 Gateways

3.2.1
The public realm at Gateways should act as the showcase for the Garden Town, There are 5 main gateways to the town by road and rail:

- the A38 Wellington Road at Stonegallows Hill;
- J25 on the M5;
- the A38 Bridgwater Road at Monkton Heathfield
- the A358 Staplegrove Road at Norton Fitzwarren (to Minehead).
- Taunton Station and environs

Other entrances occur at Cheddon Road and Kingston Road to the north and Honiton Road /Trull to the south, These have less obvious urban places as gateways but they and their road corridors also merit consideration for more balance in road space for cycling in particular.

Preparing for welcome
3.2.2
These gateways are our Garden Town thresholds and should demonstrate this in their quality of paving, furnishing and layout relationship with the adjacent built form.

They should provide a clear welcome to the town for visitors and regular town users alike in materials used, in the amount of space and priority given to walking and cycling and in presenting the town's ethos in public art and lighting. The public realm in such areas is often forgotten as it is the place where traffic dominates and road infrastructure takes precedence over buildings and human scale. Cheap materials and large scale infrastructure erode identity and should not be used.

Often the town edge is a 'shatter zone' populated by large floorplate uses and are a nowhere land of employment, car sales, corporate advertising, barriers and highway paraphernalia which removes any distinguishing marks of it being a point of arrival at Taunton rather than at any other town. Modern road building has often left the backs of buildings and plots exposed and homes and historic buildings are hidden behind bunds, screens and fences so there is little sign of the character of the town evident.

Figure 122. | our J25 gateway is dominated by vehicles, belittles people cycling and walking to Henlade and says little about Taunton to people arriving here

Figure 121. | arriving at Taunton station should be a welcoming experience

Figure 123. | gateways should demonstrate our commitment to our culture, our climate and our character where walking and cycling count

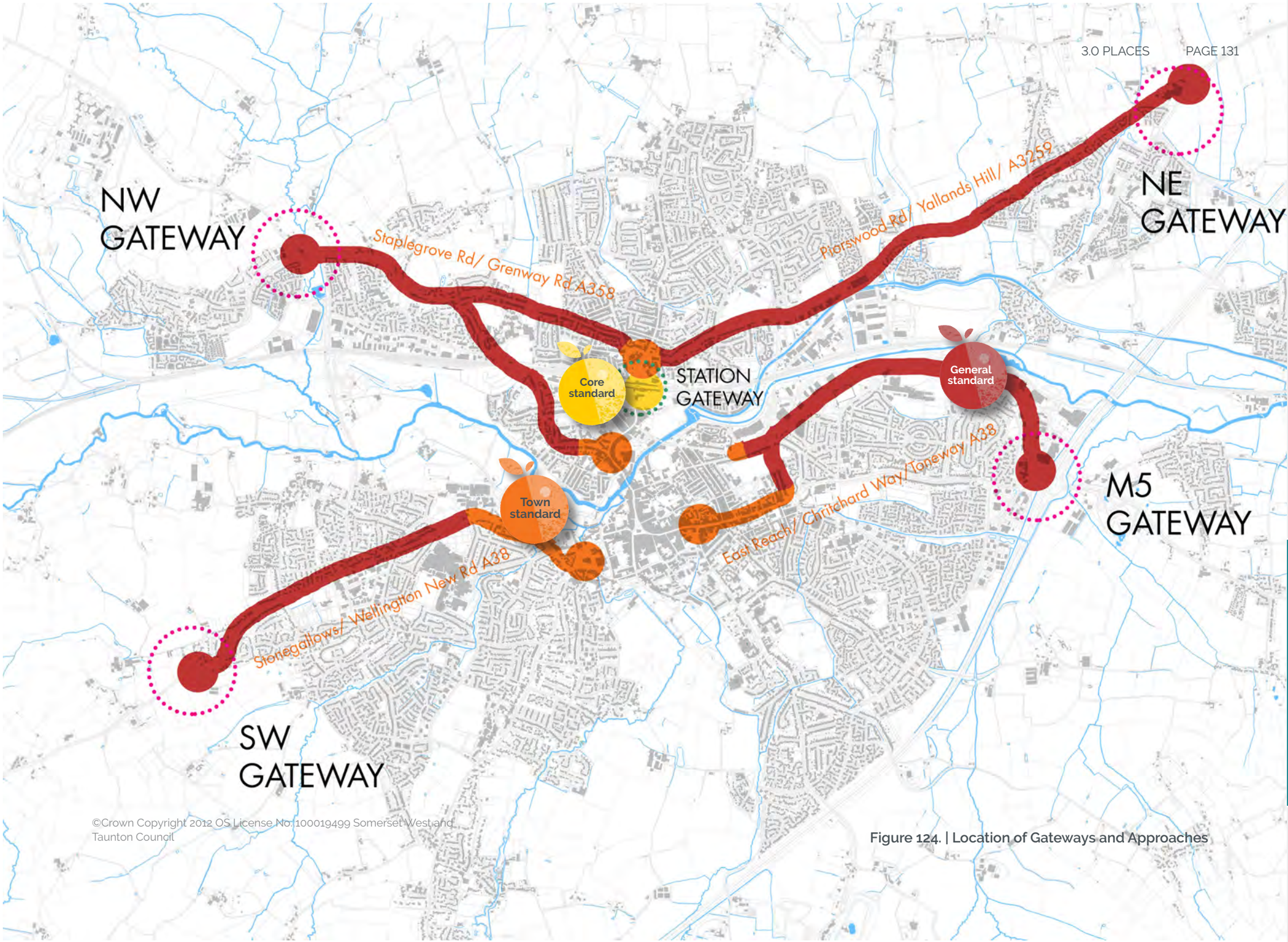


Figure 124. | Location of Gateways and Approaches

Inner gateway

Core standard

Station - inner gateway vision

3.2.3

The key factors in the vision for the station are

- Removing physical barriers to movement in and around it.
- Improving the image of a station and so levering wider development

Ingredients for success

3.2.4

The public realm therefore should facilitate this by providing high quality space for people:

- generous milling, seating and orientation space for pedestrians and paved and landscaped with the highest quality materials
- clear cycle rental and hire as an interchange priority
- comfortable and convenient bus stop facilities
- easy access to taxi rank
- kiss n ride placed away from main milling spaces
- quality of finishes and furnishings that demonstrates a warmth of welcome and a contemporary Garden Town style

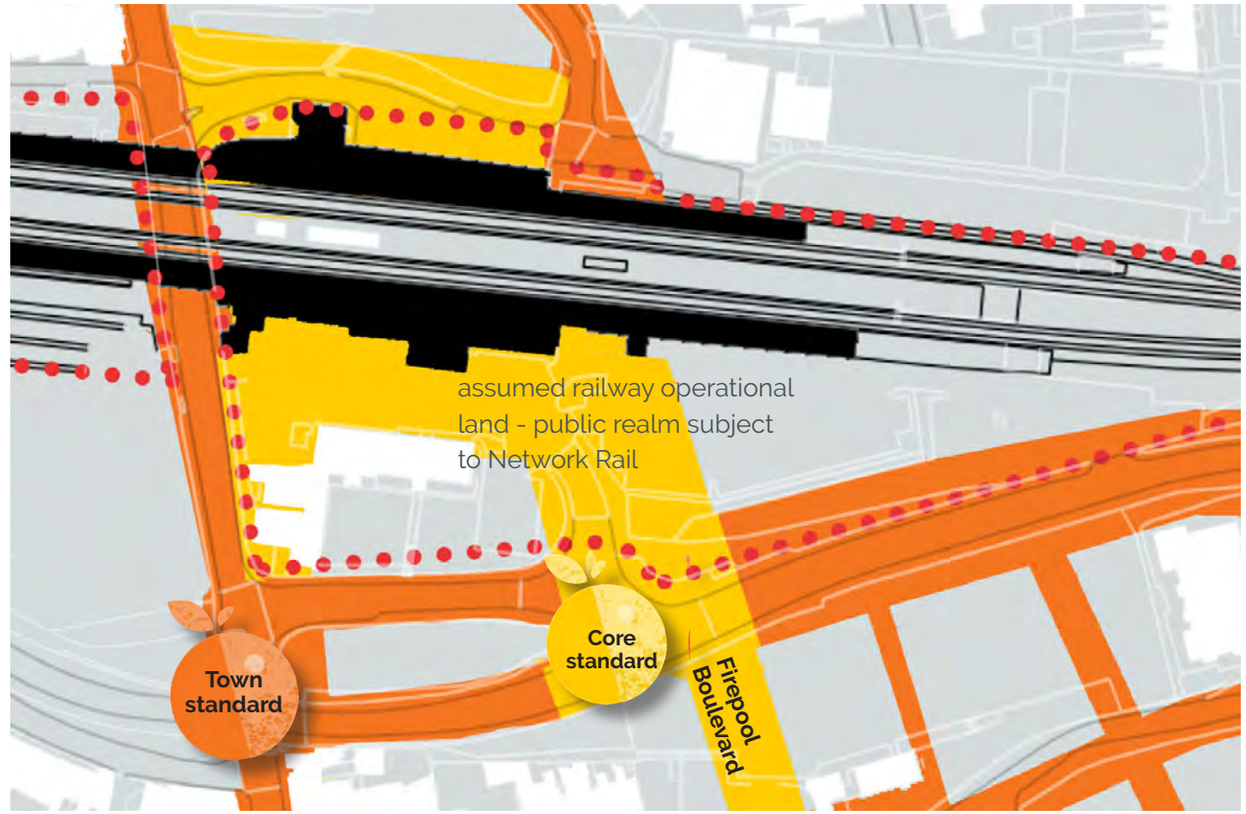


Figure 125. | Station gateway showing relationship to high quality Core and Town Standard public realm areas and how Network Rail land interacts with highways and especially the Firepool Boulevard

Image: LHC Design

Figure 126. | North side station from Station masterplan, 2012

Image: LHC Design

Figure 127. | Station gateway north side from Station masterplan, 2012

1. New glazed entrance lobby ticket gates into the underpass
2. Existing station buildings refurbished
3. Bus interchange
4. Taxi drop off
5. Passenger 20 minute parking
6. Station deliveries and access to passenger parking
7. Remodelled road levels to shallower / safer gradients
8. Bus and taxi only access
9. Wide crossing
10. High quality shared surface public realm

References

Creating a new gateway into Taunton, Taunton Railway Station Regeneration Area, LHC for Network Rail and Project Taunton, 2012.

Station public realm design guidance, Transport for London, 2015

Our Principles of Good Design, Network Rail, 2019

Cycle Rail Toolkit 2, Cycle Rail Working Group, Rail Delivery Group 2016

Secure Stations Scheme. British Transport Police Authority and DfT. 2018

Outer gateways

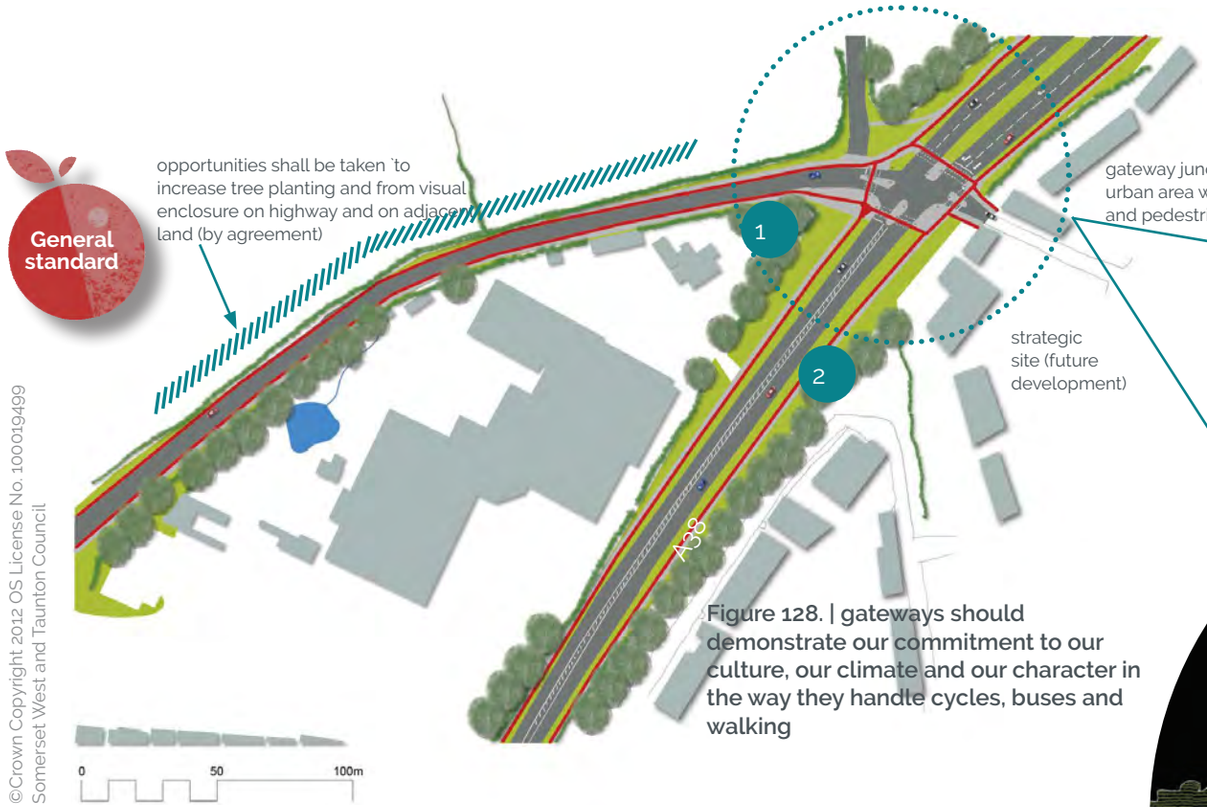


Figure 128. | gateways should demonstrate our commitment to our culture, our climate and our character in the way they handle cycles, buses and walking

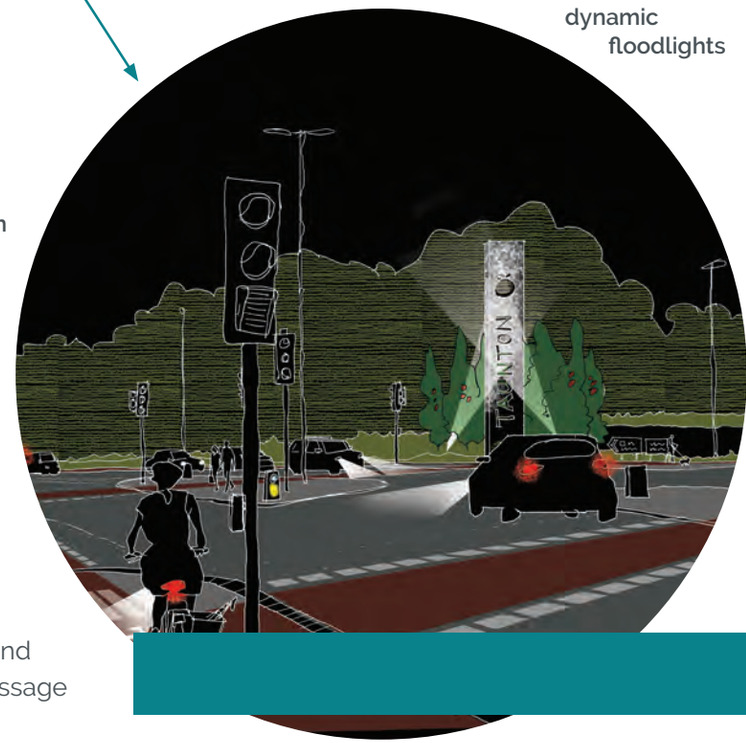


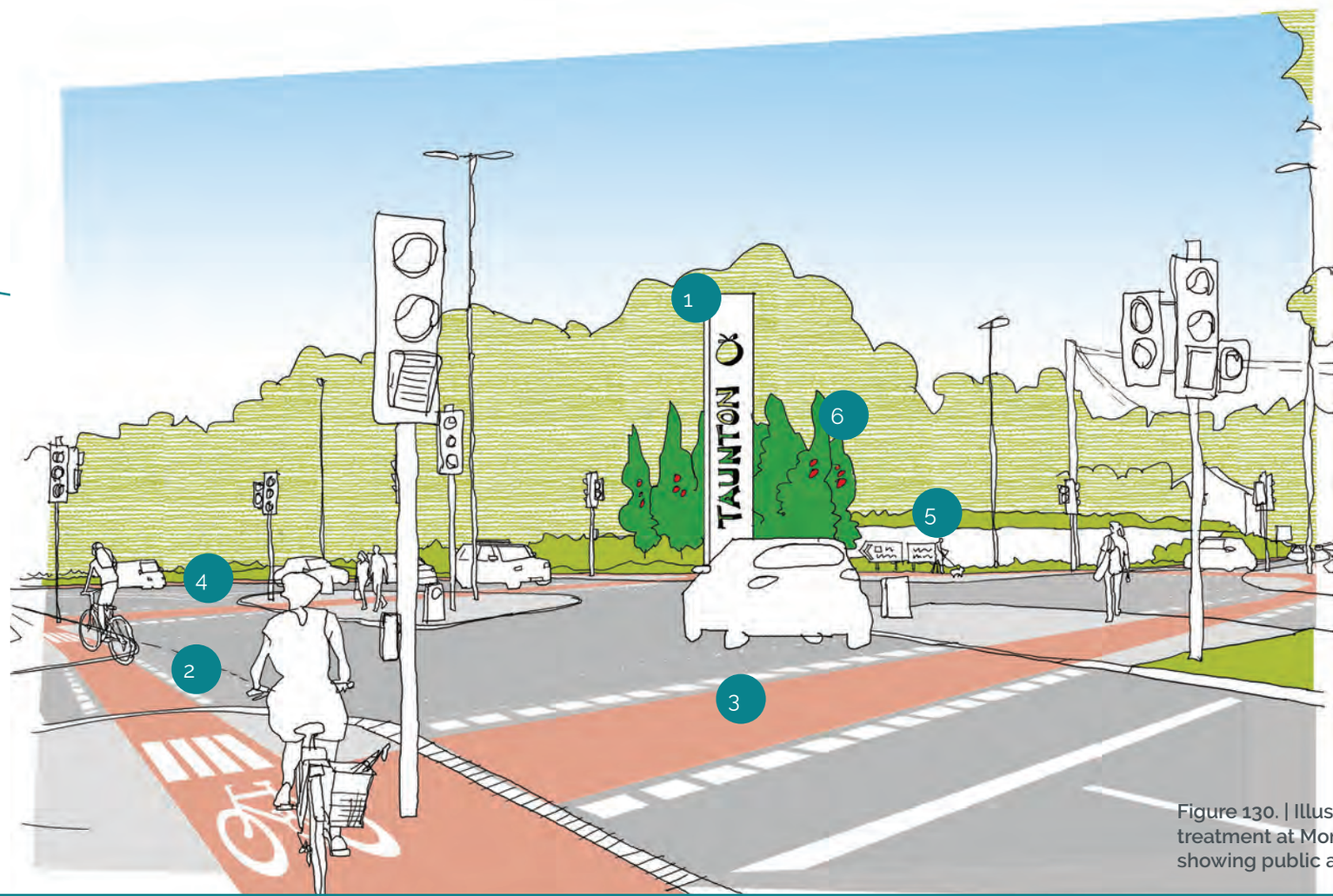
Figure 129. | after dark the totem signs illuminate with dynamic floodlights

Ingredients for success

3.2.5

The public realm design must consider the following when restoring or altering these gateways or designing new infrastructure in these places.

- slowing speeds as enter into new strategic site neighbourhoods that sit alongside what have previously been high speed roads
- provide welcome through public art, signage and lighting - clarify the threshold status of the place by marking with locally distinctive and culturally relevant orientation devices that improves wayfinding
- ensure buildings front the highway
- ensure public realm fuses direct cycle and walking routes in priority to vehicular passage



General standard

1. large scale Taunton timber totem with 3D lettering and apple brand - floodlit
2. new signalised junction with priority cycle lanes to give access to existing routes and new neighbourhood in strategic site
3. clear cycle lane crossing markings providing quickest route into the town - designed to LTN 1/20
4. dual carriageway narrowed to single carriageway to enhance connectivity between development and the road
5. direction signing to sign to Taunton, station and town centre or to motorway
6. fastigiate apple trees cluster to reinforce Taunton local identity

Additional ingredients
- reduced speed limit north of junction
- possible bridleway

Figure 130. | Illustrative street view pf possible gateway treatment at Monkton Heathfield A38 Bridgwater Road showing public art and cycle improvements

gateways

Figure 131. | Wellington Road A38 approach has space to provide wide single 2 lane vehicle route, access to homes on foot, footways, tree planting, grass verge, parking and bus lay bys and right turn lanes but currently no cycle lanes. It is not a pleasant walking environment. The road is also the emergency motorway closure traffic route.

3.3 Approaches

Challenges
3.3.1

The most challenging streets and roads are those where demands for local and through movement are both very high. These particular occur where main roads pass though local communities and places of local activity. Some issues arise as what were previously roads between village communities has been engulfed by development. The following challenges are the result in Taunton where we have a legacy of using through traffic design standards where local movement has only been been tolerated, not prioritised, by our town's designers.

- free flowing vehicles on gyratories, roundabouts and giant vehicle crossings allow vehicles to dominate movements
- scale of superwide streets with central reserves create severance, noise and intimidating environment for walking and cycling, and discriminate against pedestrians ,especially mobility impaired.
- pedestrian and cycle routes diverted a long way from desire lines, sometimes blocked off or not provided for at all - with staggered pedestrian phases (if any)
- lack of local identity and distinctiveness in public realm as highway standard infrastructure dominates the scene

Design solutions
3.3.2

The idea of allowing a place to develop around where through movement is important is seen as difficult to achieve, yet cities have often achieved such places by good design. Boulevards, urban squares, parallel service roads, and wide footways are all tools at the designer's disposal and can be accommodated to current highways standards, The design approach in the Garden Town will be to:

- prioritise walking and cycling environment and ensure retain and follow all desire lines
- permit through traffic graciously - but acknowledging local movement need
- use space to segregate cycling and provide parallel crossings
- small element paving for footways
- make free flow gyratories 2 way, remove wide sweeping radii, long sight lines and roundabouts in favour of signals
- allocate space to fruit trees, swales, wildflower planting and amenity boulevard trees with walls and fencing using local materials to promote Garden Town and enhance local identity
- promote future development with active frontage abutting the street with generous width footways, cycleways and verges - place car parking to rear.
- provide direct frictionless walking and cycling through routes.

Great places happen where through and approaching movement is subservient to people at their destination

Figure 132. | Maid Marion Way, Nottingham, improvements: formerly a dual carriageway roundabout with underpasses for pedestrians, made into a surface signalised crossing without detriment to through traffic

Area standard variety on Approaches
3.3.3

Approaches occur within both Town and General Area Standards and these standards will apply. There are places where the standards necessarily abut and here some interpretation of transition between them will be required. When there is doubt the higher level standard specifications shall be used.

Ingredients for success
3.3.4

- Generous footways with side roads made less dominant with continuous footway table crossings
- cycle tracks, segregated or light segregated cycle lanes to Local Transport Note 1/20 Cycle Infrastructure Design, DfT 2020 standards
- Dutch style cycle roundabouts
- Slab paved footways in all but most remote areas
- Fully verge segregated and light segregated cycle paths completely connected along main approaches
- Painted street light columns and street furniture using Taunton's standard Raven colour
- Boulevard tree planting

Illustrated examples
3.3.5

The following are illustrated by way of example of how Approach streets should be treated:

1. **Approach street - dual**
2. **Approach street - mixed**
3. **Approach street- single**

These are in the Town and General Standard areas with Priory Avenue Figure 134 being an example of where the area standards adjoin.

Note: All plans and street view sketches are of potential concept designs and are to be read as illustrative only. They are not intended as complete engineering designs (which will require full survey, analysis, relevant assessment and approvals) but of design approaches using the materials and concepts within this guide.

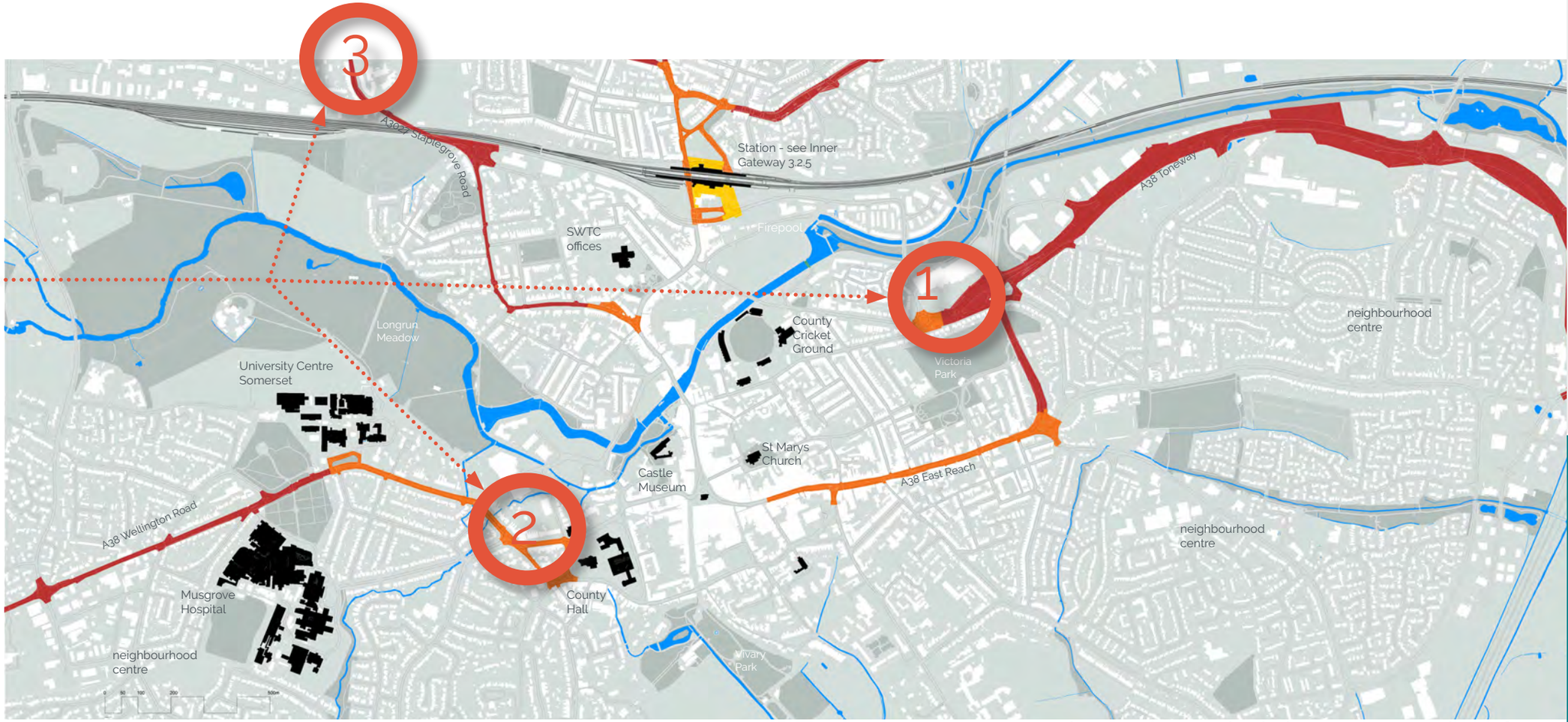
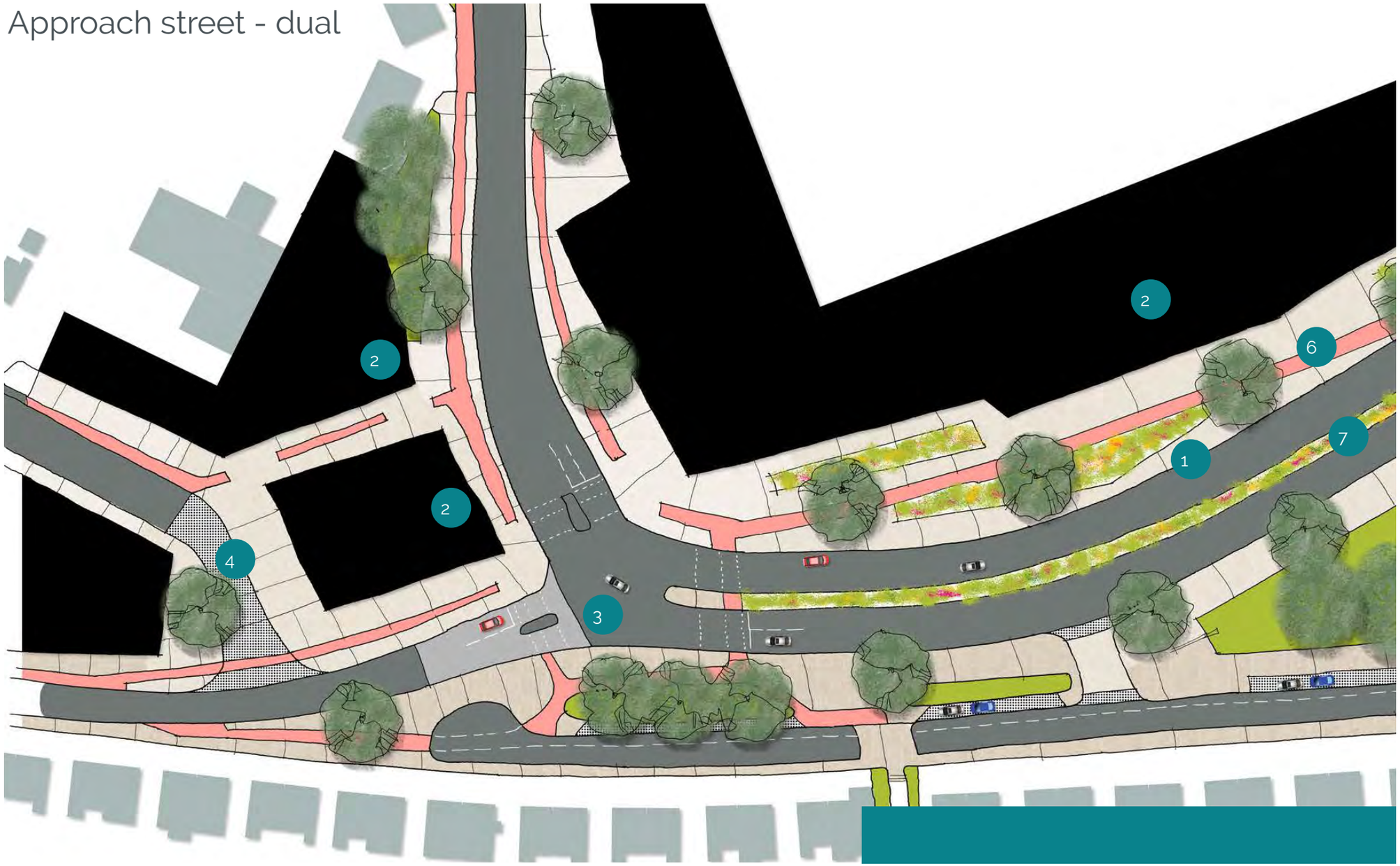


Figure 133. | Approaches in the town centre: made up of both Town and General Standard Areas

1. Approach street - dual



1. dual street with wide paved footways, generous boulevard planting and regular street lamps
2. encouraging new buildings to form frontage to street and parking behind or beneath
3. turn roundabouts to signalised crossings to improve pedestrian and cycle access
4. secondary street junction with shared surface table to reinforce historic route priority and allow free flow pedestrian movement
5. street rain garden SUDS features with pollinator plants
6. comprehensive cycle path network prioritised over vehicles
7. central; reserve with pollinator plant matting
8. new dual pedestrian and cycle (toucan) crossing

Additional ingredients
- 20 mph limit on inner urban roads
- underpasses replaced with surface crossings on desire lines
- clearer signing for through traffic and local traffic

Figure 134. | illustration showing how an approach street environment might be designed to accommodate the mix of goals of allowing through traffic whilst prioritising good movement for pedestrians and cycling

approach street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2
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7

1. Approach street - dual

1. dual street with wide paved footways, generous boulevard planting and regular street lamps
2. encouraging new buildings to form frontage to street and parking behind or beneath
3. turn roundabouts to signalised crossings to improve pedestrian and cycle access
4. secondary street junction with shared surface table to reinforce historic route priority and allow free flow pedestrian movement
5. street rain garden SUDS features with pollinator plants
6. comprehensive cycle path network prioritised over vehicles
7. central; reserve with pollinator plant matting
8. boulevard tree planting in wide footways and verges

Additional ingredients
- 20 mph limit on inner urban roads
- underpasses replaced with surface crossings on desire lines
- clearer signing for through traffic and local traffic

Figure 135. | illustrative streetview of Approach road as it meets inner street system

Figure 136. | Plan of a town centre inner main street with high through traffic level as well as local traffic (illustrative only)

2. Approach street - mixed

Figure 137. | Illustrative street view of a town centre inner main street with high through traffic level. Good quality direct walking and cycling connections and planting.

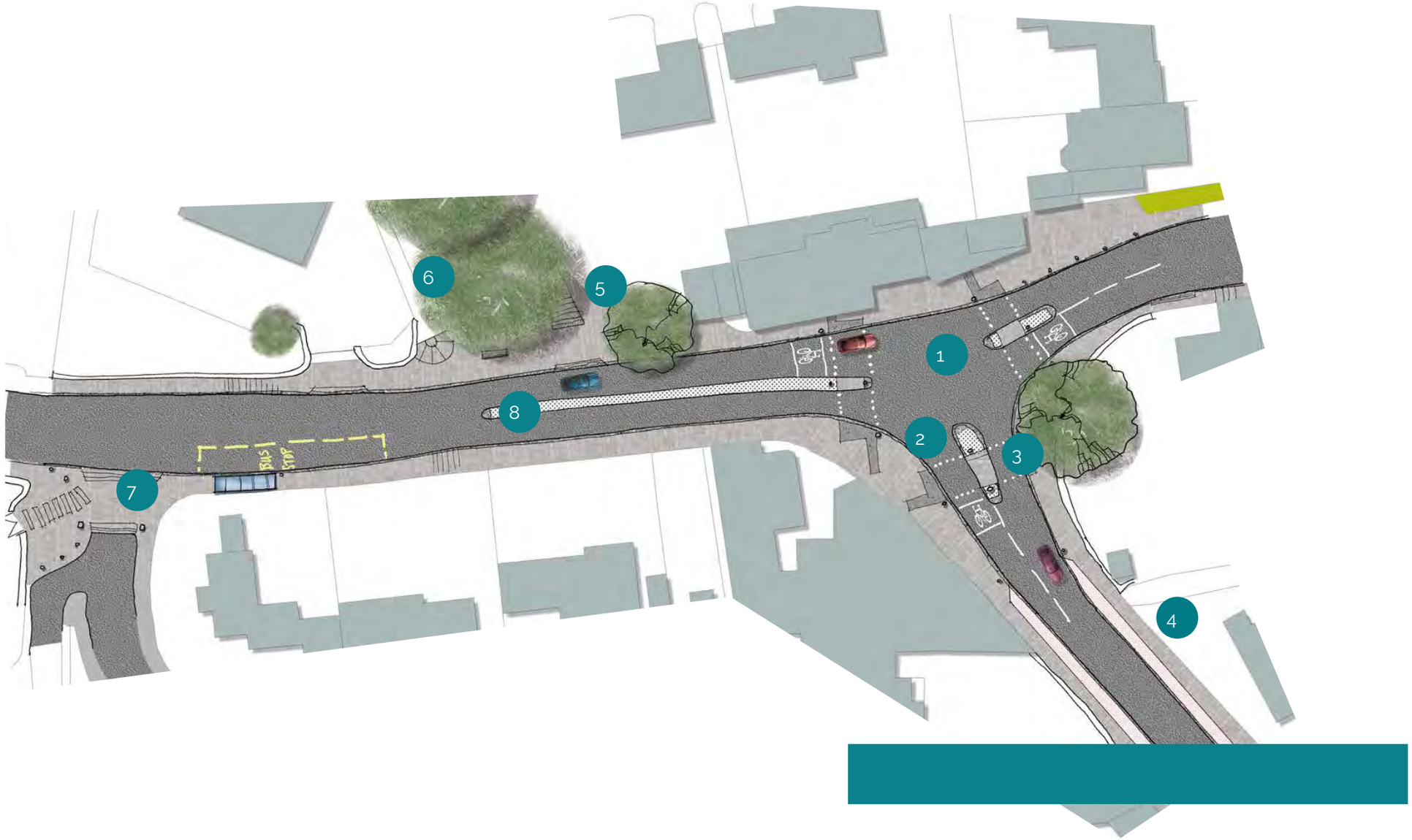
Town standard

1. gyratory arm closed to through traffic and made into paved square with steps on slope, planting and places to sit. Cycle access
2. SUDS street garden with pollinator plants
3. streets made 2 way with bus lane retained and footways paved in slabs
4. street rain garden with sedges and pollinator plants
5. direct pedestrian crossing at junction to provide most direct walking and cycling access to hospital from town centre
6. improved junction layout for walking and cycling with wider central island and cycle paths through junction
7. continuous footway treatment to side road junctions
8. central reserve widened using spare road space - guardrail removed and planting added
9. boulevard tree planting an pollinator plants to central reserve
10. linked signalised junction Parkfield Road with Park Street
11. flush rounded central reserve in setts to improve shadow crossing and reduce scale of street

Additonal ingredients

- 20 mph limit on Park Street and Parkfield Road
- Restricted Zone
- delineation of vehicular area edge with dished channel for visually impaired

inner major street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3
7
BUS STOP
4

3. Approach street - single

General standard

1. signalised junction allows good pedestrian movement and safer cycle turning
2. footways widened and paved indicating good pedestrian environment
3. direct pedestrian crossings on junction arms - islands may be needed but should not be staggered where scale of pedestrian demand is lower than town centre
4. fully segregated cycle lanes at footway level where road width is currently over generous to vehicles
5. side entries and crossovers to be paved flush with footways to clearly indicate priority to pedestrians on footway
6. routes to public footpaths clearly signed and paved with feature paving to indicate its threshold
7. continuous footway with raised table at side road entrance junction
8. flush edge rounded over sett paved central reserve

Additional ingredients

- 20 mph limit on inner urban roads
- roundabouts replaced with signals with good pedestrian phases and cycle crossings on desire lines
- clearer signing for through traffic and local traffic
- potential development sites next to junction to assist design intent

Figure 138. | illustration showing how a narrower part of an approach street might be designed to accommodate walking and cycling as higher priority whilst allowing through traffic

Neighbourhood centres are places - places where vehicles are slowed and the public realm reflects that people walking and cycling have priority

neighbourhood centres

3.4 Neighbourhood centres

Challenges

3.4.1

Neighbourhood centres provide the local convenience shop and often other services like pub, vets, hairdressers, etc, They often have a 5 -10 minute walki ng catchment. The main challenges are

- parking dominating the functional infrastructure makes centres mono-functional and one dimensional
- access to bus services conveniently close to shops and schools
- level and convenient paved footways and social spaces
- traffic segregated or slowed to 15mph where mixed
- generous car free space for playing close to home

Community Safety

Take into consideration Secure by Design principles and minimise opportunities for crime. Engage with Crime Prevention Design Advisors at Police for detailed advice.

Ingredients for success

3.4.2

Providing space that is attractive and easy to get to and use on foot and cycle will encourage less car use, provide safer environments for children and elderly, and make neighbourhoods more socially cohesive. Basing centres around social space rather than shop and car park will also strengthen their role as service centres releasing pressure from travel to other areas of the town.

- social spaces as squares and pocket greens
- seating, cycle parking and bus stops made available in prime, well-overlooked locations
- tree planting, food growing spaces, and play will enrich these spaces further

Figure 139. | Taunton older centres are now engulfed by later development but still operate as a focus for communities,

Figure 140. | neighbourhood centres based on car parking or through traffic alone have little sense of place.

Figure 141. | Play space for younger children close to the doorstep is easy to supervise and feels safer to use

Figure 142. | neighbourhood centres are the heart of the community and should provide good quality public space available for social use with vehicle given secondary priority. Local square at Lightmoor, Telford.

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Figure 143. | illustration showing how a neighbourhood centre street might be designed to provide a more benign environment for shoppers and users of local services and bus stops. Through traffic slowed and generous paving and amenity space provided.

neighbourhood centre

General standard

1. block paved carriageway with courtesy crossings in imprint asphalt in contrast bond direction. 20mph area with low kerb height to encourage a slow speed environment
2. parking bays in block paving allow passing traffic to stop
3. paving of footway extends across shopfront private forecourts (by agreement) and integrates with rest of street
4. seating, cycle stands and doorstep play furniture located close to shop fronts - steps and ramps allow access to shops on sloping ground and walls provide incidental seating
5. side road junctions with continuous footway treatments
6. mix of grass verges and street rain garden SUDS features with pollinator plants
7. bus stops paired across from each other with high quality shelters and real time information
8. new street tree planting in verges and paved areas to increase summer shading and improve biodiversity. Trees can be lit with fairy lights for festive occasions.

Additional ingredients

- 20 mph limit through neighbourhood centre
- priority parking for Car Share vehicles and EVs
- public electric vehicle fast charge points provided in off street car parks only
- crossovers to private drives flush with footway
- clearer signing for through traffic and local traffic

neighbourhood centre streets

Our river and canal corridor is the green heart of our Garden Town where the vale and its “opaque and sluggish stream” meet the castle, market and livelihoods of Tauntononians. A tranquil contrast to the town’s bustle

river and canal corridor

3.5 River and canal corridor

3.5.1

The River and Canal corridor is composed of meadows, riverside green space, towpath and canal edge, urban hard water edges and parkland. The Green Standard shall be used.

The public realm will reflect the green-semi-natural environment by using timber and other natural materials for furniture and structures being careful not to suburbanise these spaces. Treatments will be based on the changing character of the water corridors – from urban to rural. Off road strategic cycle paths will use sealed bitumen surface paths (or resin bound gravel in the town centre area - see Figure 133) while other routes and paths will use unsealed hoggin or remain unsurfaced. See also Figure 14.

Challenges

3.5.2

- mix of hard and soft landscapes
- severance of footpaths and cycle ways by roads
- walking and cycling routes difficult to orient around for visitors
- proximity to town centre and ease of getting there on foot or cycle not immediately apparent
- wildlife habitats under threat
- possible perceptions of safety due to remoteness of some areas

Ingredients for success

3.5.3

- enhance our connection to our waterways by water edge profile treatment
- good quality water access with slips, pontoons and steps for recreation
- well connected and legible off road routes
- maintain rural character using primarily natural materials
- well branded, signposted and appropriately illuminated strategic cycle routes
- create new marginal and wetland habitats to encourage new wildlife
- enrich area with reserve areas (not publicly accessible) to conserve wildlife - bird boxes,

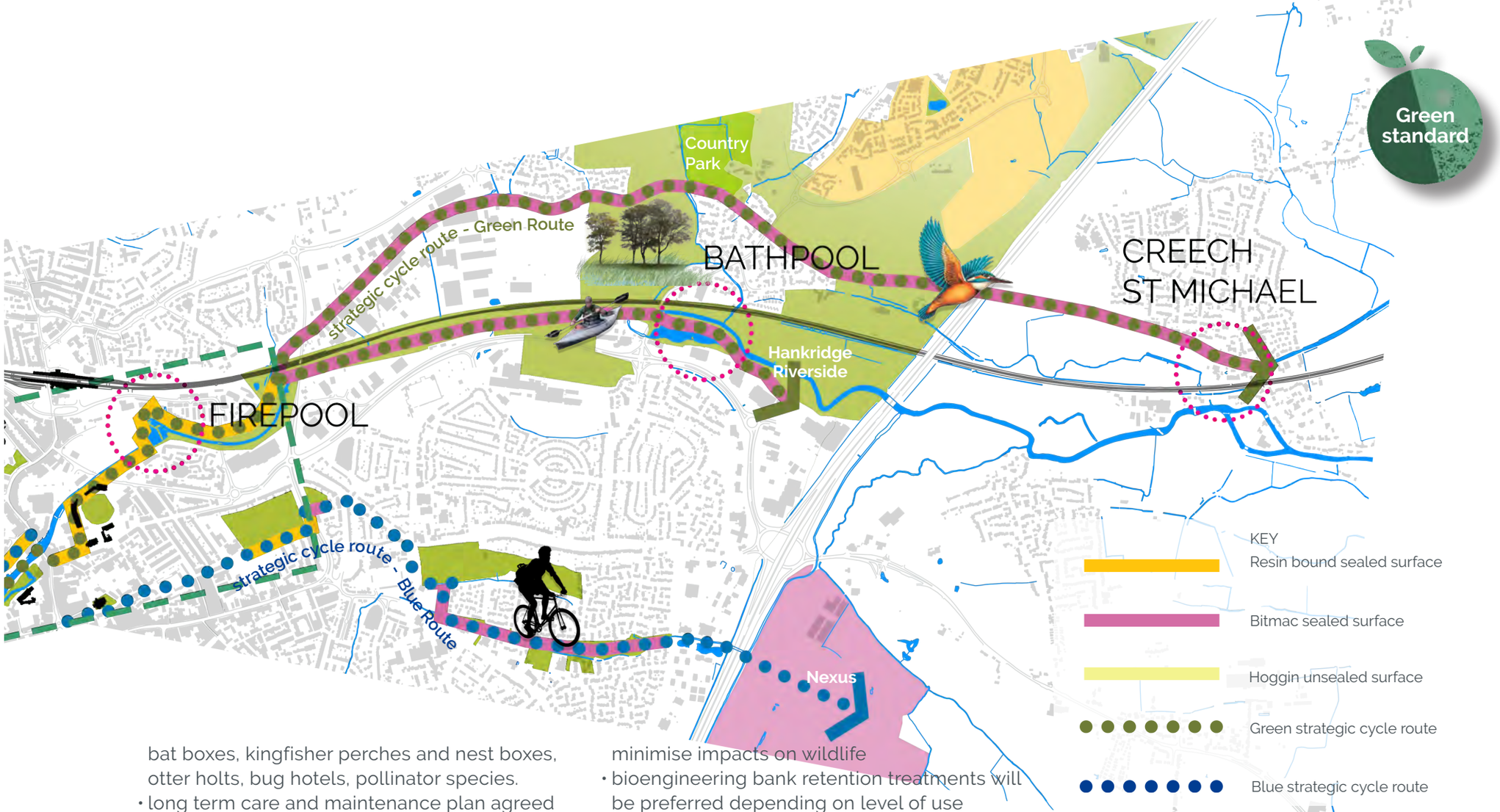

Figure 144. | plan showing the river and canal corridor and the strategic Blue and Green (NCR) cycle routes/ paths that connect the town centre quickly and quietly to Norton Fitzwarren and Nexus and to Silk Mills, Bathpool and Creech St Michael.

bat boxes, kingfisher perches and nest boxes, otter holts, bug hotels, pollinator species.
- long term care and maintenance plan agreed with responsible authorities.
- ensure water safety and design to avoid fear of crime is anticipated and designed into projects
- prevention of light spill from buildings, to minimise impacts on wildlife
- bioengineering bank retention treatments will be preferred depending on level of use
- riparian paths may require maintenance access - design to support tracked vehicle weight and wear. Consult with Environment Agency/Canal & River Trust

River and canal corridor

water edges - hard

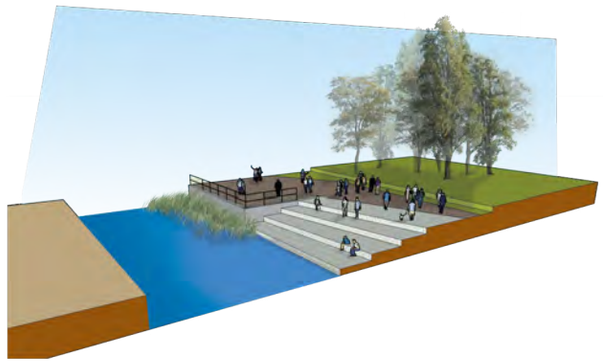

Figure 145. | river edges with retained wall edges, concrete construction slip access and steps

water edges -soft

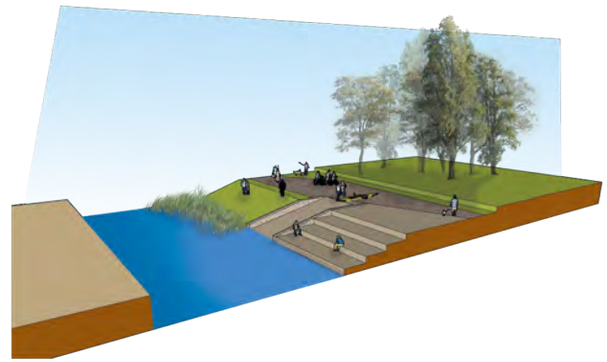

Figure 146. | river edges with soft sloping edges, gabion construction slip access and steps

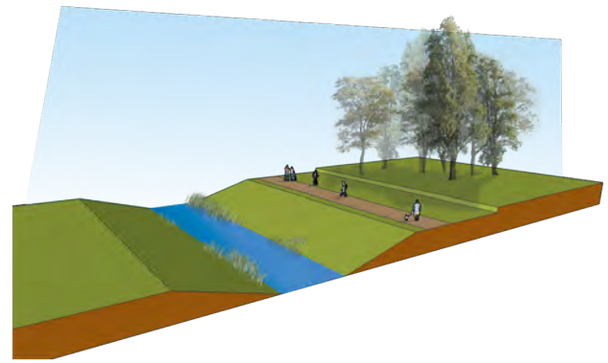

Figure 147. | river edges with soft edges and path

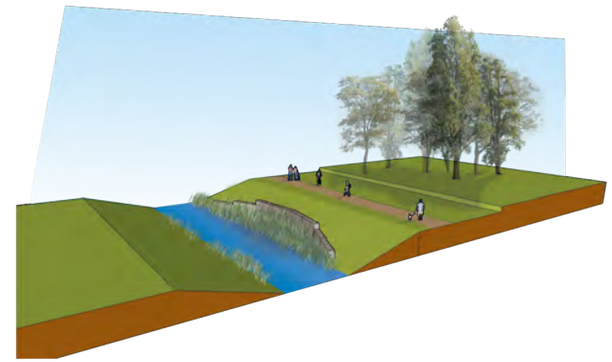

Figure 148. | river edges with soft edges, gabion construction reed wetland

Soften hard edges

3.5.4

In order to always encourage wildlife and biodiversity, even largely hard landscaped urban water edges should have some soft landscape edges along at least one bank. Any new planting adjacent to the canal should use suitable species, to provide habitat and foraging opportunities and also to ensure that roots do not cause structural damage to canal banks.

Works to riparian areas may require Flood Risk Activity Permit on a site by site basis – consult with the Environment Agency

Green standard

Figure 149. | River and canal corridor showing where hard and soft edges may be used

Wildlife enhancements and management
3.5.5

Enhancements such as bird boxes, bat boxes, kingfisher perches and nest boxes, otter holts, bug hotels, and pollinator species shall have a long term care and maintenance plan agreed

Publicly inaccessible Reserve areas should be created and conserved where wildlife can thrive without undue interference.

recreation and water access

Figure 150. | slips shall be installed at suitable places where leisure is appropriate and doesn't disturb wildlife

wildlife and wetlands

Figure 151. | reed edges are good for wildfowl, amphibians and pollinating insects

Figure 152. | scrub and reed edges to the river will be encouraged in areas to provide for wildlife

safe and secure

Figure 153. | rescue equipment shall be installed at intervals along river and canal

Figure 154. | good overlooking makes the watersides safer for all to use.

Community safety in the river and canal corridor 3.5.6

Take into consideration Secure by Design and Water Safety principles and minimise opportunities for crime. Engage with Crime Prevention Design Advisors at Police for detailed advice.

Figure 155. | timber signage suits the character of the more rural river and canal corridor

See also

Paving - see Section 2.4 for Green Standard - paving

Signs - see Section 2.6 for Green Standard signage

Furniture - see Section 2.7-2.18 for Green Standard Street Furniture

Lighting - see Section 2.20 for Green Standard lighting

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Key requirements

Checklist for public realm design

- ✓ 1.0 Public realm objectives: Is the strategic concept in keeping with the objectives to be healthy and well, quiet and slow, and green and clean?
- ✓ Does the public realm and street designs prioritise walking and cycling as the primary method of movement and follow Manual for Streets and LTN 1/20 guidance?
- ✓ Has an analysis of the historic character and local heritage assets been done and agreed with the Conservation Officer?

  Proposals should also refer to 'The Vision for Our Garden Town', 'Design Charter and Checklist' and 'Districtwide Design Guide'
- ✓ 2.0 Public Realm Area Standards: has the design applied the public realm area standards set out in Section 2?
- ✓ Has the design applied the paving, paving details, signs and marking, street furniture, and lighting standards in Section 2 that apply to your site or street?
- ✓ Has the design applied the public art recommendations in Section 2 and the Public Art Code SPD?
- ✓ Has street tree planting, street gardens and/or riverside type planting and a management plan been agreed with the highway authority, lead local flood authority (for runoff attenuation) and other statutory authorities as required?
- ✓ 3.0 Illustrative examples: has the design followed the example of the relevant illustrated examples for relevant type of urban realm?

  - town centre streets
  - bus only streets
  - pedestrian streets
  - urban squares
  - gateways and approaches
  - neighbourhood centres
  - river and canal; corridors?
- ✓ Has an Equality Assessment and inclusive mobility check been carried out?
- ✓ Has the scheme been appraised for Secure by Design and community safety?
- ✓ Has the design of the layouts and appearance of the public realm design been agreed with the Placemaking officer or development manager at Somerset West and Taunton prior to seeking statutory approvals?
- ✓ Are any of the specifications not Standard to the highway authority's specification and has the required commuted sum payment[1] to Somerset County Council for their adoption been agreed?

Where not provided by the developer or highway authority, S106 contributions may be required for on and/or off-site works to enable standards to be complied with.

- ✓ Have you submitted the public realm and highway design to SWTC for Design Review?.

1 Somerset Technical Advice Note 14/21 – Commuted Sums Protocol for Highway Infrastructure


next

APPENDIX

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