

Monkton Heathfield Garden Town phase 2 'critical friend' review and next steps suggestions.

July 2020

1. Executive summary

It could be argued that the scheme in its current form reflects that of a suburban housing estate, reworked to fit the garden town 'vision' but in fact not profoundly changed at all. Although both the Concept Plan and Design Guidance are not without real strengths, which we set out below, it cannot be denied that both could be very majorly improved. If the council wishes to improve the outcome, here are some suggested actions. Some are quite easy to change at this stage of the process. Others, we recognise, are harder.

Easy

1. *Change the language from 'engineer' to 'human.'* Throughout, much of the plan documentation uses engineering and infrastructure terms when it should be speaking the language of people and places. Examples that could be substituted include 'town centre' for 'district centre core', 'park' for 'green necklace', 'nodes' for 'neighbourhood centres' and 'high street' for 'spine street.' Changing these won't of themselves change reality but it should start helping the teams think a little differently about what they are doing and why.
2. *Make Design Guidance clearer, more visual and more consistent*
 - Within sections '10.0 Integration of MH 1 and 2', '11.0 District Centre' and '12.0 Eastern Relief Road (ERR)', visual illustrations of the desired building types are confusing and contradictory. The current photos should be removed and replaced with more consistent images that set out a vision rather than a series of contradictions. Otherwise you risk giving no effective guidance
 - create a new section within the Design Guidance that highlights the different spatial types. This will include all built areas within the development and should be visualised through a map and façade types
 - Review section '3.0 Planning Policy', in particular reference to core strategy, and whether it aligns with the wider ambitions on carbon neutrality and climate resilience.
 - Remove section '7.0 Sustainability Principles.' Replace with '18.0 Sustainability / Energy / Climate change'.
 - Reconsider whether three storey homes could be better integrated within the design, beyond just the district centre.

Feasible

3. *Rethink the role of the A38.* Review whether it could be repurposed to be a high quality, car free cycle and pedestrian route. Any change should be reflected within both the Concept Plan and section '13.0 Downgrading of the A38' of the Design Guidance.

4. *Provide clearer guidance on street design and locations for smaller streets.* The A38 and eastern relief road are not the only roads within the development. Sections '10.0 Integration of MH1 and 2', '12.0 Eastern Relief Road' and '13.0 Downgrading of A38' should all be improved. These should include birds' eye cross sections, as well as details on road materials, junction and intersection, street trees and street furniture.
5. *Relocate the bus and ride to the heart of the development.* The 'bus & ride' will not offer a viable alternative to a car if it is at the edge of the development. The 'bus and ride' should be relocated so that it is no longer dissected by the ERR and 'green necklace'. The Design Guidance (section '14.0 Bus & Ride') should change to reflect this.

Harder

6. *The spine road risks constraining the effectiveness of district centre.* Two options might resolve this.
 - Either update the Concept Plan so that the main spine road no longer dissects through the district centre by moving the ERR/spine road roundabout more centrally, recreating the district centre route as a secondary road off the spine road.
 - Or keep the road in its location and use section '11.0 District Centre', to set out far more clearly steps to make it pedestrian first. This should include patterns and details on extended pavements, 'Copenhagen crossings', raised platforms, street trees and planters, tight junction radii, high quality road materials and restricted speeds
7. *The 'Green Necklace' is a poor use of space.* Keeping some form of buffer to the M5, the Concept Plan should put this space to better use by spreading it across the development through the use of smaller parks and square.
8. *The zoned approach will not create a cohesive environment.* The scheme has the opportunity to better integrate (where possible) the employment land within the overall development, creating neighbourhood centres across the development. The Concept Plan should illustrate this and section '15.0 Employment Land Reserve' should be adjusted accordingly.

2. Context

2.1 *Research undertaken.* We have conducted a desk review of the following documents:

- *Taunton- The Vision for Our Garden Town*
- *Monkton Heathfield - Phase 2 Development Concept Plan*
- *Draft Somerset West and Taunton Carbon Neutrality and Climate Resilience Plan*
- *Draft Somerset Climate Emergency Framework*
- *Taunton Deane Borough Council Adopted Core Strategy 2011-2028*
- *West Monkton and Cheddon Fitzpaine Neighbourhood Plan, 2017*
- *Creech St Michael Neighbourhood Development Plan 2018-2028*

2.2 *Our approach.*

This 'critical friend' review of the Design Guidance and Concept Plan to date makes use of our and others' research on (i) correlations between design with sustainability at level of building, place and location; (ii) correlations between design with resident wellbeing, (physical and mental health,

physical activity, neighbourly connectedness and likely pro-social behaviour); and (iii) correlations with long term value. Appendix one sets out a very high-level summary of some of these from our recent book, *Of Streets and Squares*. Our research takes account of issues of deliverability, planning process, evolving highways rules and best practice (Healthy Streets etc).

3. Key strengths

The Design Guidance and Concept Plan have a number of strengths and are getting some of the fundamental elements of urban design 'right.' Amongst these are;

- *The garden town has a middle.* The fundamentals of the 'district core' are good. The ambition to implement a mixed-use neighbourhood with a range of use classes, whilst encouraging higher densities and greater enclosure ratios could create a desirable town centre that people can use and enjoy.
- *The garden town has an edge.* The development proposal is designed to provide a positive edge to the open countryside by placing the buildings on the periphery looking outward not inward. This approach ensures that when the development is viewed in the wider landscape, it is the 'public fronts' of buildings that are seen and not the 'private backs' of gardens.
- *The school is in the right place.* The central location of the school offers all residents convenient walkable access to the institution. It is part of the town, not remote from it. This is right.
- *There is a good network of green pedestrian routes.* The network of footways running vertically and horizontally throughout the town should provide pleasant green routes to most areas on the site.
- *There is clear guidance as to what is obligatory and optional.* The Design Guidance has the right framework of 'must', 'should' and 'could'.

That said, we do believe that there remain important unresolved challenges to the Design Guidance and Concept Plan for phase 2 of the Monkton Heathfield Garden Town. These we have categorised under two headings; Design Guidance and Concept Plan. Our detailed concerns and recommendations are set out below.

4. Design Guidance

4.1.a. Issue: it's not clear what good looks like

The Design Guidance fails to offer clear and concise direction on the scale and identity of a number of important sections within the development.

In its current form, the Design Guidance fails to distinguish between the majority of residential areas and nodes, omitting them from the section labelled 'Identity Areas'. This means guidance can only be drawn from section '8.0 Overall Placemaking Strategy' of the Design Guidance. Unfortunately, this is vague and ambiguous and assumes the majority of these areas will form around a set of similar principles on block form, townscape, density and building height. This is fundamentally wrong; a development of this size cannot simply be treated like a normal housing development. Variety in design and subtle nuances throughout the different sections should be clearly specified, if the development wishes to actually be a garden town.



The development needs to define what good looks like or.....

4.1.b. Recommendation: define all urban spatial types

Our recommendation is to first characterise these areas. Create specific sections within the document that map out the character of these sections, as with the district centre, for example. This will be crucial in ensuring that the principles of a garden town are upheld if and when a developer becomes involved.

There are a number of ways in which this can be done. The Poundbury design brief, for example, splits the development into four key sections. But this does not have to be the limit. The other Duchy of Cornwall development at Nansledan, Newquay highlighted 13 individual urban spatial types in order to form sections with their own local identity and community.

Suggested action: create a new section within the Design Guidance that highlights the different spatial types. This will include all built areas within the development and should be superimposed onto a copy of the latest Concept Plan (see below).



The Poundbury design guide clearly differentiated its urban areas.

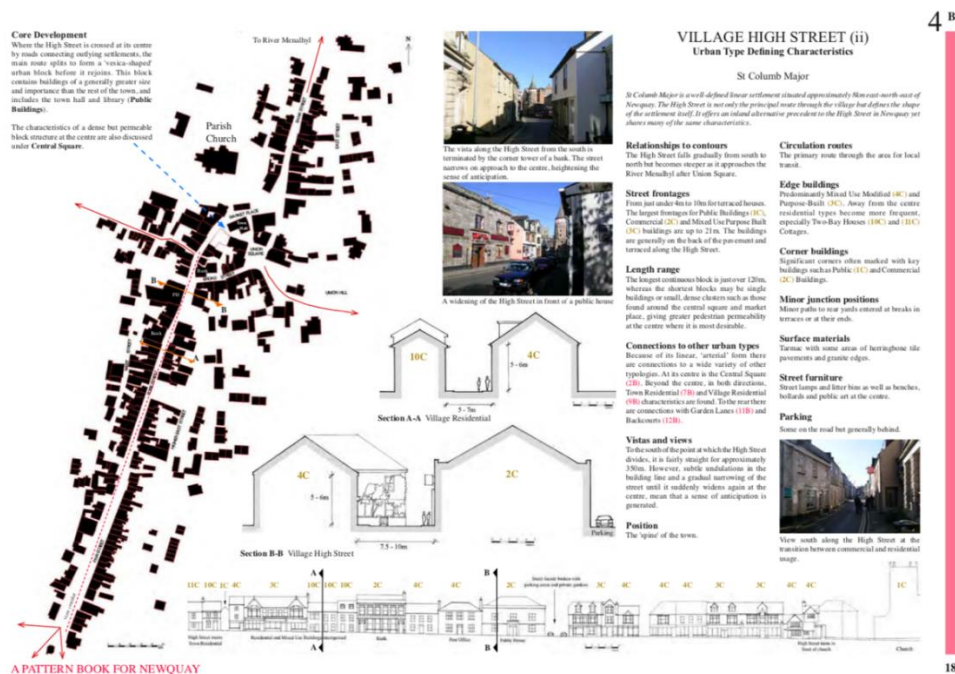
4.1.c. Recommendation: provide detailed visual and spatial information for all urban areas across the site.

Once each section has been agreed, they should form part of the 'identity area'. Section '8.o Overall Placemaking Strategy' should also be removed and redefined in greater detail within the identity area section.

Just as parts of the 'identity area' section has begun to do, each part should be packed with information (visually illustrated where possible), that will help dictate the character of each area. This should include a precise catalogue of elements form architectural façade patterns, materials, building heights, enclosure ratios, street transects, density requirements and bay or plot widths. Without this section on buildings it is almost impossible to respond to the vision of the garden movement, entirely abandoning the 'vertical infrastructure' of the site as something you wish to influence let alone control.

Suggested actions:

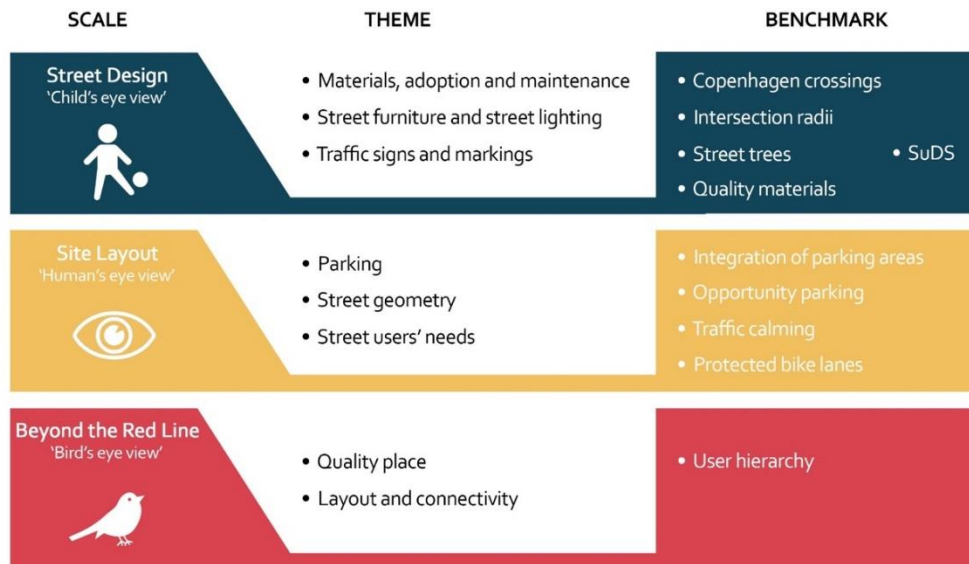
- Remove section '8.o Overall Placemaking Strategy'.
- Redraft the current district centre section within the 'the Identity Area' chapter. This needs more detail on architectural preferences, enclosure ratios, façade details, street transects, materials, location of commercial and retail space and presence of street trees.
- Add within 'the Identity Area' chapter newly defined spatial types. For the purposes of illustrating a point, these could be labelled as - neighbourhood centres, town residential, village residential, parks and leisure and development edge. These should include all of the recommendations set out in 4.1.b. and should form a chapter that includes the district centre.



There are many ways in which it can be done, but the Nansledan Design Guidance sets out an easy to navigate, visual breakdown of what is expected. This includes street transect, cross sections, façade patterns, enclosure ratios, building heights and a number of other relevant and important features.

4.2.a. Issue: don't forget internal streets

Once again, the Design Guidance and subsequently the Concept Plan fail to offer the level of detail that is required. While both the reduced A38 and the proposed ERR are expressed and illustrated to varying success, the internal street patterns are poorly defined. Section '8.o Overall Placemaking Strategy' offers the only guidance, but this is vague and sweeping.



This 'three eyes' assessment framework, lays out in detail how streets should be assessed in order to improve walkability. Detail within the three scales should all be reviewed when creating a design guide.

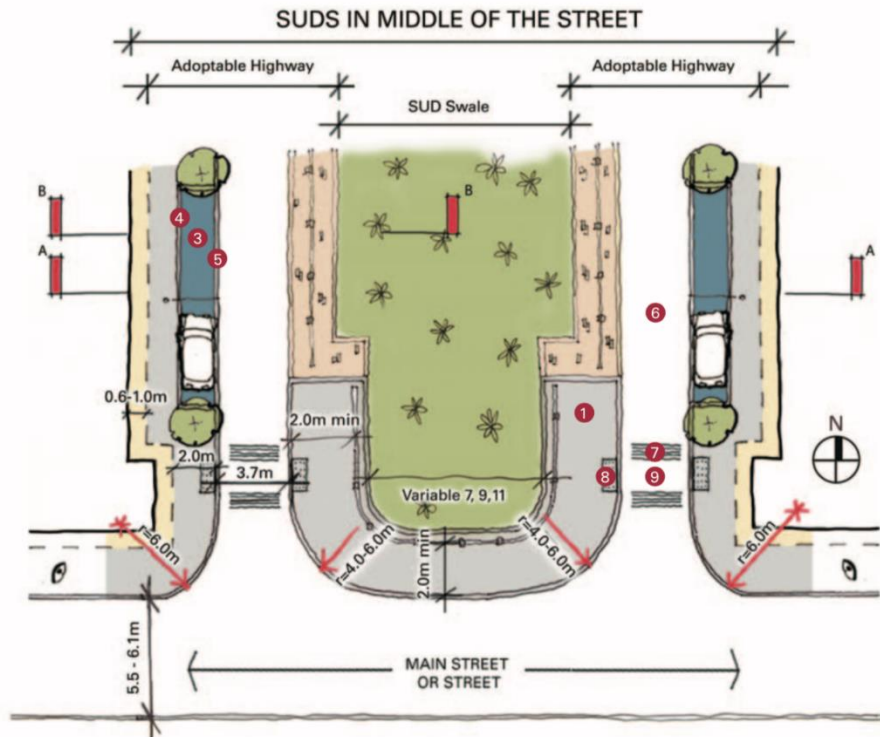
4.2.b. Recommendation: provide detailed design templates for all street types

There should be a new section in the Design Guidance, focusing on the detailed characteristics of different street types. Using the format already used for A38 and ERR, a detailed, visual and consistent definition of all road formations, including internal streets should be presented.

Primary, secondary or tertiary streets should be defined by the type of vehicle that will use them. Street lengths, junction types, surface materials and street furniture should all be identified and based broadly on the recommendations set out within Manual for Streets 2. The fundamental principle that should guide any recommendations must be one which places the pedestrian and cyclist at the top of the street hierarchy. The guide should also set out a much clearer position on parking. Many of the recommendations within section 8.o Overall Placemaking Strategy' were sensible, but they lacked visual detail at all three levels of street type.

Suggested actions:

- Within the 'Identity Area' chapter, create a sub section for roads and streets.
- Sections '10.o Integration of MH1 and 2', '12.o Eastern Relief Road' and '13.o Downgrading of A38' should all be improved. These should include birds' eye cross sections, as well as details on road materials, junction and intersection, street trees and street furniture.
- New sections should be added offering similar detail on the remaining streets. This should include sections on the spine road, on secondary streets and on minor residential streets.



As well as providing cross sections, the Upton design code offers a visual example of streets at three levels. These drawings include details on road and pavement widths, intersections, parking details, trees and green space.

4.3.a. Issue: review the finer details

There are several further issues in Design Guidance which need review. These are;

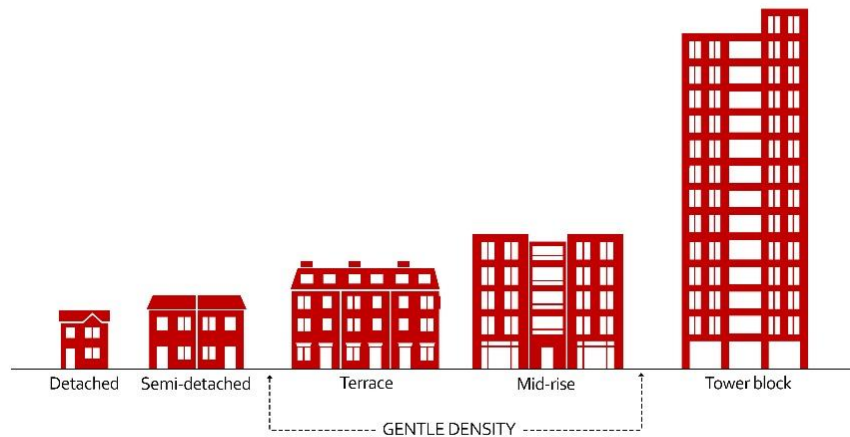
- Guidance on density;
- Reference to planning policy;
- Use of visual illustrations;
- Use of wording; and
- Duplications.

4.3.b. Recommendation: create beautiful gentle density not just suburban densities

So far, around 1,350 houses have been built of the 4,500 allocated new homes within the Monkton Heathfield area. Due to low densities on phase 1 it is unlikely that construction of phase 2 will meet this overall allocation. Nevertheless, phase 2 risks repeating familiar mistakes on densities. Other than specifying varied densities within the district centre, the rest of the development relies on section '8.0 Overall Placemaking Strategy' for guidance. In a sweeping manner the section promotes the desire for 'predominantly two storeys' across the development. While we appreciate the need for two storey homes as part of the town, we believe there is a missed opportunity to increase density through the use of 2.5-3 storey streets, without compromising the fabric of the scheme – in fact while enhancing it. We call this 'gentle density' and the wider research shows that it is associated with many of the advantages of higher density (more walkable, sustainable, healthy lifestyles) whilst also

bringing many of the advantages of lower densities (more personal space, more green space). It is right for more than just the town centre.

Suggested action: provide information on densities within each spatial type, as referenced to within recommendation 5.1.b. Reconsider whether three storey homes could be better integrated within the design, beyond just the district centre.



4.3.c. Recommendation: planning policy is historic and must be more forward looking.

Section 3.0 of the design guide refers to Taunton Deane’s Borough Council Adopted Core Strategy 2011-2028. Adopted in 2012, this document and its core policies are, to some degree, still bedded in a planning policy guidance (PPG) rhetoric and fail to align themselves with the more ambitious assurances around *Carbon Neutrality and Climate Resilience in later sections*.

Suggested action: review section ‘3.0 Planning Policy’, in particular reference to core strategy, and whether it aligns with the wider ambitions on carbon neutrality and climate resilience.

4.3.d. Recommendation: more consistent pictures please

The document fails conclusively to map out exactly the type of architectural standards it hopes to achieve. Indeed, some chosen images could be said to contradict each. As a result, the Design Guidance exposes the scheme to wildly differing interpretations. Arts and crafts, Edwardian and contemporary approaches are all mentioned but poorly defined. The Design Guidance must offer clarity on this, attributing a distinct approach to each spatial type through clearer and more visual methods.

Suggested actions:

- Within sections ‘10.0 Integration of MH 1 and 2’, ‘11.0 District Centre’ and ‘12.0 Eastern Relief Road (ERR)’, visual illustrations of the desired architectural form are confusing and contradictory. The current photos should be removed and replaced with more consistent images that set out a vision rather than a series of contradictions. At present no effective guidance is being given
- The newly formed spatial types, as defined within 5.1.b, should also adopt this approach, creating a joined-up approach to achieving their individual visions.



Tornagrain, Scotland



Both Poundbury and Tornagrain (above) provided comprehensive illustrations on architectural design within their design codes to safeguard their vision. This is now coming to life and has a 'sense of place'

4.3.e. Recommendation: change the language from 'engineer' to 'human.'

The current wording of a number of the key areas within the development are soulless and should be renamed. This includes the 'green necklace', 'spine road', 'nodes', and 'district centre', all of which fail to encapsulate the sense of place it hopes to create.

Suggested action: rename the 'green necklace' to 'park', 'spine road' to 'high street', 'nodes' to 'neighbourhood centres', and 'district centre' to 'town centre'.

4.3.f. Recommendation: do not duplicate

Section '7.0 Sustainability Principles' and '18.0 Sustainability / Energy / Climate change' are in most parts identical and should be reviewed.

Suggested action: remove section '7.0 Sustainability Principles' and replace it with '18.0 Sustainability / Energy / Climate change'.

5. Concept Plan

5.1.a. Issue: the vision is road-led not place-led

As the Concept Plan makes clear, the council has declared a climate emergency. The new draft local plan seeks to deliver carbon neutrality by 2030. The importance of this is recognised in 'Taunton- The Vision for Our Garden Town'. Its core vision 'Branching out – moving cleaner, moving smarter' states the need for '*much better prioritised provision for walkers and cyclists encouraging healthier and more sustainable journey choices as attractive alternatives to travelling by car*'.

There is a critical challenge to this philosophy, however, and it is one that is difficult to change. The location of the development over 3.5 miles from the centre of Taunton, along with its convenient connections to the A38, A3259 and M5 creates an immediate barrier to a sustainable vision, even before the design has been agreed.

This seems to have been recognised within the decision making around the Concept Plan. But rather than improving this problem, confusingly the recommendations add to it, failing to fundamentally redefine our relationship with the car.

The Concept Plan poses a number of questions:

- Why simply reduce the A38 road only for it to be replaced with a something that is similar?
- Are the current recommendations around transport routes really the best use of resources?
- If the Eastern Relief Road (ERR) is to replace the A38, why not decommission the latter altogether?
- Is it sustainable to direct the main internal route through the district centre?

These are all questions that must be answered if the development wishes to create a sustainable strategy to travel.

5.1.b. Recommendation: design places for 10-year olds (high-quality pedestrian and cycle routes).

Although we completely appreciate the sensitivity around the A38 and its importance to local traffic, we believe the proposal ultimately misses a trick. If it is indeed the desire to relocate traffic to the ERR then the A38 route offers a strong opportunity to create a coherent 'green corridor' within the northern section of the development. Under the current Concept Plan, it is stipulated that the A38 (dual carriageway) will be reduced to a single sided carriageway of 6.5 meters and cycle/footway offering routes only for '*local traffic*' and a rapid bus service. Although we welcome this change, we believe that ultimately it may be a missed opportunity to be more ambitious.

Not only will the current A38 proposal be difficult to police, but it fails to place pedestrians and cyclists at the top of the street hierarchy, even when there is clear opportunity to do so. If the majority of the traffic is to be relocated to the ERR, then what is the real need in the road all together. If the bus route can be moved to a more accessible and convenient position, through the middle of the development and access to the development areas north of the A38 can be guaranteed, then why is it not possible to repurpose the A38 route to a high-quality cycle and pedestrian corridor.

The potential for this is immense. Other than creating a car free, pleasant environment along the northern perimeter of the development, it would also reduce infrastructure costs, encourage sustainable modes of transport to the new school and the wider area and create an environment that a 10-year-old would feel comfortable navigating.

Suggested action: rethink the role of the A38. Review whether it could be repurposed to be a high quality, car free cycle and pedestrian route. Any change should be reflected within both the Concept Plan and section '13.0 Downgrading of the A38' of the Concept Plan.



Scholarstown Road, Dublin is bounded by a cycleway as opposed to a road, creating a much more pleasant environment for users and adjacent homeowners.

5.1.c. Recommendation: humanise the 'district centre core' into a town centre

Quite rightly, the district centre has been earmarked as the focal point of the project. The blended mixed-use area aims to create 'an environment that is safe, well enclosed and a focus for social interaction'. Although this is the clear ambition for the scheme, does the Concept Plan, in its current form facilitate this?

Studies have shown that heavy vehicular traffic has a malign impact on social connectivity and neighbourliness in urban areas. In the current plan, the internal spine road dissects the heart of the district centre offering the only route into the development from the south west.

Can a cohesive pedestrian-oriented area really be achieved if it is to be used as one of the main routes for residents entering and leaving the development? It will certainly need very cautious design. As one of the key routes to the school, how will the area be affected by the increased use during school drop off times? There is a body of evidence to suggest that levels of traffic can have an adverse effect on footfall and trading within towns (see appendix). There are probably two options:

- *Move the spine road.* One option would be to move the main spine route away from the district centre in order to create a more pedestrian friendly environment. This would ensure that traffic, unrelated to the centre, does not jeopardise its intended function however would risk creating a traffic canyon a block away.
- *Create an environment where cars are the guests.* Alternatively, if the spine road were to remain in its current location, it is vital that steps are taken to ensure that pedestrians are at the top of the so-called 'movement hierarchy'. Design will be key and clearer guidance is necessary: extended pavements, 'Copenhagen crossings', raised platforms, street trees and planters, tight junction

radii, high quality road materials and restricted speeds all help to create shared spaces where the car is the 'guest'.

Suggested actions:

- Either update the Concept Plan so that the main spine road no longer dissects through the district centre by moving the ERR/spine road roundabout more centrally, recreating the district centre route as a secondary road off the spine road. Review whether this could also be pedestrianised.
- Or keep the road in its location and use section '11.0 District Centre', to set out far more clearly steps to make it pedestrian first. This should include patterns and details on extended pavements, 'Copenhagen crossings', raised platforms, street trees and planters, tight junction radii, high quality road materials and restricted speeds.



Waltham Forest – Little Holland scheme

5.2.a. Issue: zoned uses not a real mixed town

While we commend the effects to integrate a range of retail and commercial uses within the district centre of the development, we question why this cohesive strategy fails to extend to the employment land and the 'bus & ride' section within the eastern part of the site.

The desire to create a 'zoned area', isolated in its position by the eastern relief road and 'green necklace' risks creating an 'out of town' business park feel, that fails to incorporate itself with the fabric of the overall development. Zoned uses in this manner are associated with lower property values, less popular places and less sustainable living patterns. Why create them?

5.2.b. Recommendation: integrate places to work and places to live

The word 'mixed' should not simply be defined by the number of land uses on site, but rather by the way in which these uses are integrated together. Textured mixes of different land uses are nearly

always more successful, generating more diverse and engaging environments, mixing people at work, people at lunch and people at home.

The current design of the employment area does not allow for this. It is recommended, therefore, that this area (where possible) should be integrated within the body of the development, encouraging a less zoned approach to the Concept Plan.

We recognise that this may not always be appropriate for some B2 (industrial) & B8 (storage) use classes. But we would urge much greater integration of A1 (retail), A2 (professional services) and B1 (business). Successful and prosperous towns integrate these within and besides residential areas.

Suggested action: review location of employment land and update Concept Plan to reflect the changes.

5.2.c. Recommendation: don't create a future generation of 'boxland'

Buildings should not be wedded to the purpose that first requires them. Overly large, overly specialised buildings can be very hard to reinvent. The current Concept Plan and relevant illustrations create the possibility for the employment area to be dominated by large blocks divorced from local context and difficult to reinterpret. But in many places this type of 'boxland' is currently being dismantled.

You should distribute employment uses more evenly in various nodes across the site, creating secondary and tertiary neighbourhood centres to the development. This will not only improve the character and footfall of these areas. It will also allow the buildings to adopt the individual architectural characteristics specific to their local neighbourhood.

Suggested action: integrate (where possible) the employment land within the nodes currently highlighted within the Concept Plan. Each node or neighbourhood centre should then be defined clearly by the Concept Plan, specifically under the 'Identity Area' chapter, in accordance with recommendation 4.1.c.



Poundbury successfully integrates over 207 businesses within its district centre and neighbourhood centres across the site. This is, provably, how most people want to work

5.2.d. Recommendation: relocate the bus and ride to the heart of the development

Just as it is recommended that the employment area should be relocated within the curtilages of the built environment, so should the 'bus & ride'. You cannot expect the service to offer a viable alternative to a car if it is at the edge of the development. Furthermore, the current location of the site next to the unappealing employment area is only accessible via busy ERR and 'green necklace', all of which could be problematic during non-daylight hours.

Suggested action: redesign the bus and ride so that it is no longer dissected by the ERR and 'green necklace'. Update the Design Guidance and Concept Plan (section '14.0 Bus & Ride') to reflect this.

5.3.a. Issue: too much greenery in the wrong place

The difficulty of the location means that some form of buffer must be supplied in order to reduce the impact of the M5 running along the southern edge of the development. Nevertheless, the design of the scheme highlighted within the Concept Plan serves to create a meaningless incohesive green strip, cut off from the rest of the development by the ERR and uninviting to most users. This will not be much used.

5.3.b. Recommendation: reduce the size of the green necklace and redistribute it to places where it can be better used.

The common conception is that all greenery is good. This is often true, but not always. Large areas of flat unmanaged green space can be an eyesore especially if they are bounded by a large motorway on one side and a dual carriage way on the other. They can also be prone to higher levels of crime and antisocial behaviour (if poorly lit) or, even more frequently, to greater fear of crime.

There is a high risk that the green necklace will become such a space. It is recommended therefore that a smaller green buffer is retained. This should be filled with trees to offer a natural acoustic and visual screen to the M5. The rest of the area should be spread within the development. Greenery has the most impact on our personal wellbeing when it is little and often. Just as you have done with the area around the school and district centre, inter-weave more greenery into streets and squares to create popular, relaxing places where people can come together.

Suggested action: reduce the size of the green necklace and create a number of smaller squares and parks, highlighting them within the Concept Plan. Any changes should also be reflected with the Design Guidance within the relevant section.



Derwenthrope, York - small green areas act as a focus for the development

5.2.a. Issue: Where are the smaller streets?

Just as the Design Guidance failed to recognise the smallest streets, so has the Concept Plan. Although most of the infrastructure requirements are highlighted (A38, ERR, Spine Road and secondary routes), no account has been made for tertiary streets. As a result, the block structures fail to offer the level of detail needed to comprehend how exactly they will interconnect.

5.2.b. Recommendation: be clearer about where small streets should go within the Concept Plan

Gridded or block systems create rich walkable and cyclable systems. If it is the wish to create these formations, then the Concept Plan must offer clearer spatial suggestions for the internal road structure. The lack of clarity on this point, opens up the possibility of a cul-de-sac design that could serve to restrict interconnectivity and sustainable modes of transport.

Suggested action: redraw the Concept Plan to include all street forms (see drawing below).



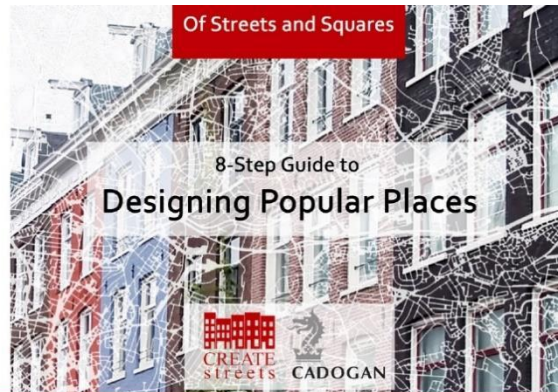
The Upton Design Code successfully identified streets on different level depending on their role.

Appendix one: some proven best practice on what makes for popular places

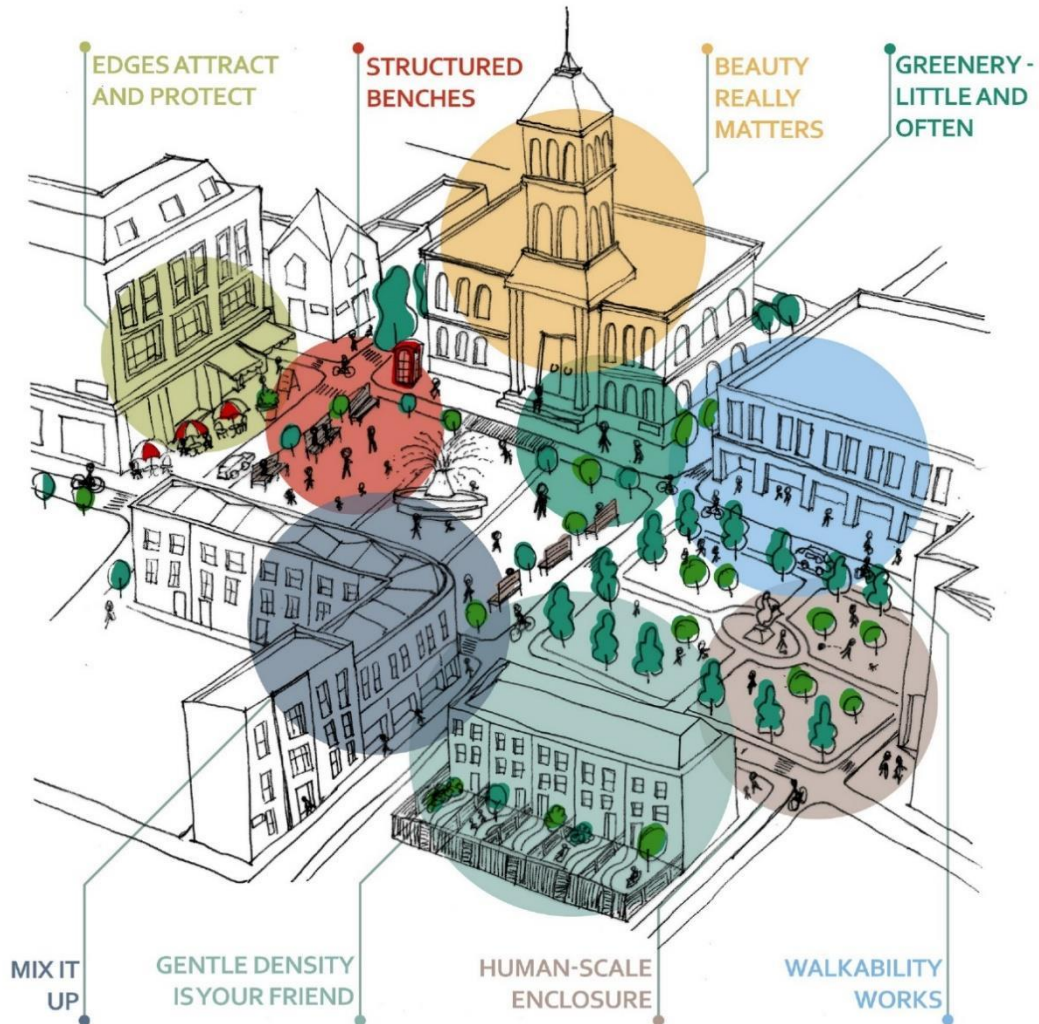


Create Streets is a London-based social enterprise which promotes beautiful street-based urban design. For more information:

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HOW TO DESIGN POPULAR PLACES





Gentle density is your friend



Open spaces should be 50-100 metres wide

The best and most beautiful streets and squares are typically in areas of 'gentle density', half way between the extremes of tower blocks and extended suburbia. Buildings that are 3-7 storeys high, built up space that is 4.5-6.5% of the total area, and blocks between 50-150 metres long are normally best.



Greenery - little and often



- Plant trees 8-15m apart
- 5-15% of land should be public gardens

People like being in green places. Urban greenery is associated with higher physical & mental wellbeing, as long as it is used. You can maximise this by planting street trees, interweaving green spaces into streets and squares. However, greenery on its own is not enough. Squares can be popular places without a blade of grass in sight.



Structured benches and statues



6-10% of squares should be seating

Where seating is matters. Siting your benches in a 'structured' way helps humans play the right roles: benches that face a fountain, an arcade that lines a square, with a statue or podium in it. But beware of 'bench wash', using seating to try to fix an ugly or windy chasm. Most people will avoid them.



Beauty really matters



Protected buildings improve perception of place by 19%

The most popular places with 70-90% of people have a strong sense of place, buildings worth protecting and 'could not be anywhere'. They have 'active facades' that 'live' and have variety in pattern. These developments also tend to be more long-lasting and resilient. Their organised complexity attracts, interests and reassures.



Mix it up!



60% of people prefer to live in a mixed use neighbourhood

Places with a textured mix of different land uses, and active façades, are nearly always more successful. They attract more people and generate more diverse and engaging environments. They can work for longer portions of the day by mixing people at work, lunch, home and play.



Edges attract and protect

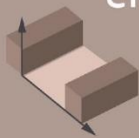


80% of people prefer to sit facing a court

The edges of streets and squares attract us. This is partly because we are used to pavements going there, even when a street is pedestrianised. But it also because there is more to look at (shop fronts, cafés) and (in a square) edges allow us to step back and either watch the world go past, or sample the space.



Human scale enclosure



Height to width ratio from 1:0.85 to 1:1.5

Most people like to spend time in places that are enclosed and human scale, without feeling too shut in. There is a necessary moment for views that open up as you round a corner, for grand vistas, for open parks, but many of the most popular streets surrounding and linking such views are surprisingly human-scale.



Walkability works

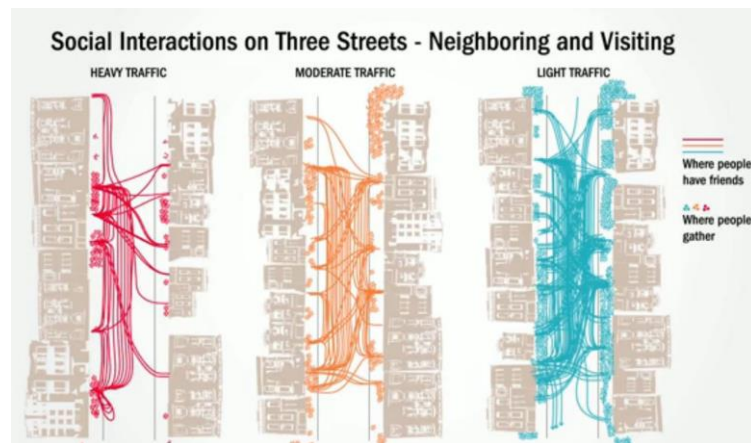


Residential roads should be 20mph

...but does not quite mean maximising space to walk. Compact, walkable & 'bikeable' environments are good for you. People walk in them more and are healthier and happier. This in turn drives higher values. More walking is encouraged by engaging façades, regularly spaced trees, presence of resting places, and wide pavements.

Appendix two: relationship between traffic and social connectivity

Heavy vehicular traffic also has a malign impact on social connectivity and neighbourliness in residential areas – both of which we know to be associated with wellbeing. The best-known study of the impact of traffic on neighbourliness is not perfect due to material differences in social demographics and length of tenure which cannot be completely controlled for. Nevertheless, its findings are intuitively compelling. As can be seen from the diagram below, on busy vehicular streets people know far fewer of their neighbours particularly from the other side of the carriageway. This must be in part due to differing lengths of residence. However, the researchers' notes on their interviews with residents are fairly convincing that traffic plays a far more than incidental role. They wrote of the lightly trafficked street: 'Front steps were used for sitting and chatting, sidewalks by children for playing, and for adults for standing and passing the time of day (especially around the corner store).' However, the heavy street had 'little or no sidewalk activity and was used solely as a corridor between the sanctuary of individual homes and the outside world. Residents kept very much to themselves so there was no felling of community at all.'¹



Study area	San Francisco (1972)			Bristol (2008)		
Street	Low	Medium	High	Low	Medium	High
Traffic volume	2,000	8,000	16,000	140	8,420	21,130
Avg. no friends	3	1.3	0.9	5.4	2.5	1.2
Avg. no acquaintances	6.3	4.1	3.1	6.1	3.7	2.8
Mean length of residence	8.0	9.2	16.3	-	-	-
Percentage of renters	50	67	92	-	-	-

Average number of friends and acquaintances in two studies over 40 years

In 2008 Joshua Hart and Graham Parkhurst replicated this study in Bristol². They took three streets with different levels of traffic and compared the average number of friends and acquaintances that people had on each street type. Then they compared the results with the mean values in San Francisco. The table below summarises the findings for both cities, showing the average number of friends and acquaintances in relation to the traffic volume for each street type. Both studies show that people living on streets with heavy vehicular traffic tend to have fewer friends on their street and not

¹ Appleyard, D., & Lintell, M., (1972) 'The environmental quality of streets: the residents' point of view', *Journal of the American Planning Association*, p.88

² Hart, J., Parkhurst, G. (2011) 'Driven to excess: Impacts of motor vehicles on the quality of life of residents of three streets in Bristol'.

many acquaintances. Those living on lightly trafficked streets appear to have three or four times as many friends and twice as many acquaintances. Lots of cars make for bad neighbours.

Reducing traffic in town centres is normally associated with more activity. For example, a review by Jan Gehl of the effects of widespread pedestrianisation in Melbourne, Australia concluded that:

- There had been a 39 per cent increase in the number of pedestrians from 1993 and people spent three times more in the city;
- Pedestrians' use of the city at night has doubled; and
- Activity in the city during the week has tripled.³

Similarly, in the late 1990s authorities in Kajaani, a small Finnish town of fewer than 40,000 people, pedestrianised the main square and part of the main street. The results were clear and measurable. After the pedestrianisation, 20 per cent more inhabitants said Kajaani was a good place to live; 13 per cent more inhabitants found the city centre beautiful; 55 per cent of them wanted a larger pedestrian area; and 52 per cent of shops and business said they had benefited.

Reducing traffic in town centres is normally associated with increased sales in local shops. Making places better for walking can boost footfall and trading by up to 40 per cent. Comparisons of spending by transport mode in Canada and New Zealand revealed that pedestrians spent up to six-times more than people arriving by car. In London town centres in 2011, walkers spent £147 more per month than those travelling by car. And retailers often overrate the importance of the car. A study in Graz (Austria), subsequently repeated in Bristol found that retailers overestimated the number of customers arriving by car by almost 100 per cent.⁴

³ City of Melbourne & Gehl Architects, (2004), *Places for People*.

⁴ Lawlor, E. (2013). *The pedestrian pound: the business case for better streets and places*.