



Wirral Density Study

Stage 4: Detailed design assessment

Wirral Metropolitan Borough Council

September 2020

urban imprint

PROJECT NAME AND NUMBER
Wirral density study 19-027

DOCUMENT NAME AND REVISION
19-027_rpt_003_Stage 4, RevB

PREPARED BY
BP / JG / AF

REVIEWED BY
JP / JG / AF / KK

PROOFED BY
JP / AF / SC

DATE OF ISSUE
28 September 2020



Urban Imprint Limited | .Company number 8059162 | Registered in England and Wales
Registered Office | 82 Reddish Road | Stockport | SK5 7QU

Wirral Density Study

Stage 4: Detailed design assessment

Contents

1. Introduction.....	4
2. Methodology.....	5
3. Local density context	12
4. Site specific densities	23
5. Neighbourhood densification.....	33
6. Overall conclusions from the stage 3 and 4 report	47
Appendix 1: Table 3 - Sites / Neighbourhoods Opportunities and Constraints ...	52

1. Introduction

Links to earlier work

- 1.1 Stage 3 of this workstream has set out five different zones for where either higher density developments could occur, or where densification (encouragement of certain forms of development to increase the number of dwellings in a given area) of existing urban areas could occur within acceptable limits. This focused on criteria which are set out in paragraph 122 of the Framework (2019). One of the goals of this work is to prevent the unnecessary need for development within the Green Belt in line with paragraph 137 of the Framework.
- 1.2 It has identified five broad types of areas (1. Waterfront sites, 2. Inner Urban sites, 3. Transit Densification, 4. Suburban Densification and 5. Urban Edge) where increased densities could be expected to be delivered to achieve higher housing delivery figures within acceptable limits. At this time, it is unclear whether greenfield sites will form part of the housing delivery solution. If needed it will be important that density is also considered in these locations in line with guidance in the Framework.
- 1.3 The approach has very much focused on accessibility (to shops, services, and public transport) as well as opportunities afforded by the availability and nature of previously developed sites – making efficient use of these sites in line with guidance in the Framework. Stage 3 is not intended to specify or recommend what these final densities should be but only highlights the ‘strategic’ opportunities and constraints for higher densities - as a result of the detailed assessment of the Borough - to explore increased densities.
- 1.4 Stage 4 now focuses in more detail on the ‘site specific’ opportunities and constraints that may apply to development in each of these zones and the impacts that these may have on densities. These elements include physical constraints but also wider policy drivers such as the provision of appropriate open space and public realm, which would otherwise create unattractive and unhealthy environments. It does this through a series of case studies of various sites and neighbourhoods within each of the defined zones.
- Purpose**
- 1.5 The purpose of this stage is simply to define three matters:
- 1.6 In zones 1 and 2 – to establish a minimum density that should be applied to residential development coming forward in these zones, and to explore the likely density that should be applied to any site in this area for plan making purposes [site based assessment].
- 1.7 In zones 3 and 4 – to set out a methodology in which density might be increased in other built up areas [neighbourhood based assessment].
- 1.8 In zone 5 – outside of the existing urban areas – two sites will be studied to explore the potential implications of density on such sites and the possible approach to density in these locations [site based assessment]. It should be stressed that the assessment of these sites does not mean that they are to be included in the overall housing strategy, but simply ensures that density is considered if they are required.
- 1.9 In order to ensure that this work responds to the overall Wirral context it is important to understand current density in relation to local character - what is considered ‘high’ or ‘low’ density based on the current townscape. As a result, this stage also seeks to review this and establish a density scale that can be used as the basis for future decision making.

2. Methodology

- 2.1 To deliver the requirements there are three parts to the methodology. Part 1 of this methodology focuses on establishing the local density characteristics within Wirral and how they might be used to increase densities (as shown in chapter 3). Parts 2 and 3 (as shown in chapters 4 and 5 respectively) examine two slightly different approaches to increasing density – minimum densities in certain areas or zones (to enforce a site led increase in density), and densification to make more efficient use of the land within an existing neighbourhood (by encouraging particular types of development).
- 2.2 The table below sets out how the different approaches (set out in Parts 2 and 3) could be applied to each of the density zones. Both methodologies follow a design led approach and simply focus on the physical aspects of sites in order to arrive at appropriate, contextually responsive density approaches. It does not therefore take account of viability or wider infrastructure requirements.

Density Zones	Methodology
1. Waterfront 2. Urban Core 5. Urban Edge	Minimum densities established for sites that may come forward [to enforce]
3. Transit Densification 4. Suburban Densification	Increased density through 'densification' of the existing urban form [to encourage]

Choosing the case studies:

- 2.3 This work is supported by 14 site and neighbourhood specific case studies. The way in which these sites and neighbourhoods have been chosen is set out below based on the density zone within which they sit.
- 2.4 **Choosing the site specific case studies:** Is an important element of this study, and choosing the correct sites is vital to ensuring that balanced conclusions can be reached. The eight case study sites (3 Waterfront sites, 3 Urban Core sites and 2 greenfield sites) have been the subject of discussions between officers and the project team based on the main types of opportunity likely to come forward within the Local Plan period. In both cases the sites chosen are a variety of sizes, some of which are cleared and others which included built elements. This variation allows for any conclusions to accommodate considerations of scale and complexity, as well as simple spatial considerations. Sites have been chosen based on a number of factors including:
- Sites that have been identified in the SHLAA as being possible housing sites
 - Sites that have been identified in the Council's brownfield register

- Sites, currently allocated for employment use, that have been identified by an Employment Land Options Study (Avison Young 2019) as being potentially suitable for other uses
- Sites within clearly defined boundaries adjacent to main transport routes

- 2.5 **Choosing the neighbourhood case studies:** As with the first method, the choice of the neighbourhood case study locations is vitally important. As stage 3 identified, the difference between zones 3 and 4 is simply the relationship to high frequency public transport routes (such as the Merseyrail network or a high frequency bus route mainly with a specific night service), and areas which are already well-served by a range of retail and community infrastructure. In both zones, neighbourhoods have been chosen in different geographical locations across Wirral to ensure that local variations are minimised.

- 2.6 Further details of all the sites and neighbourhoods chosen as part of this study are included in table 1, along with a summary of the key characteristics of each site. Figure 2.1 shows the location of the 14 case studies.

Location of case study sites / neighbourhoods

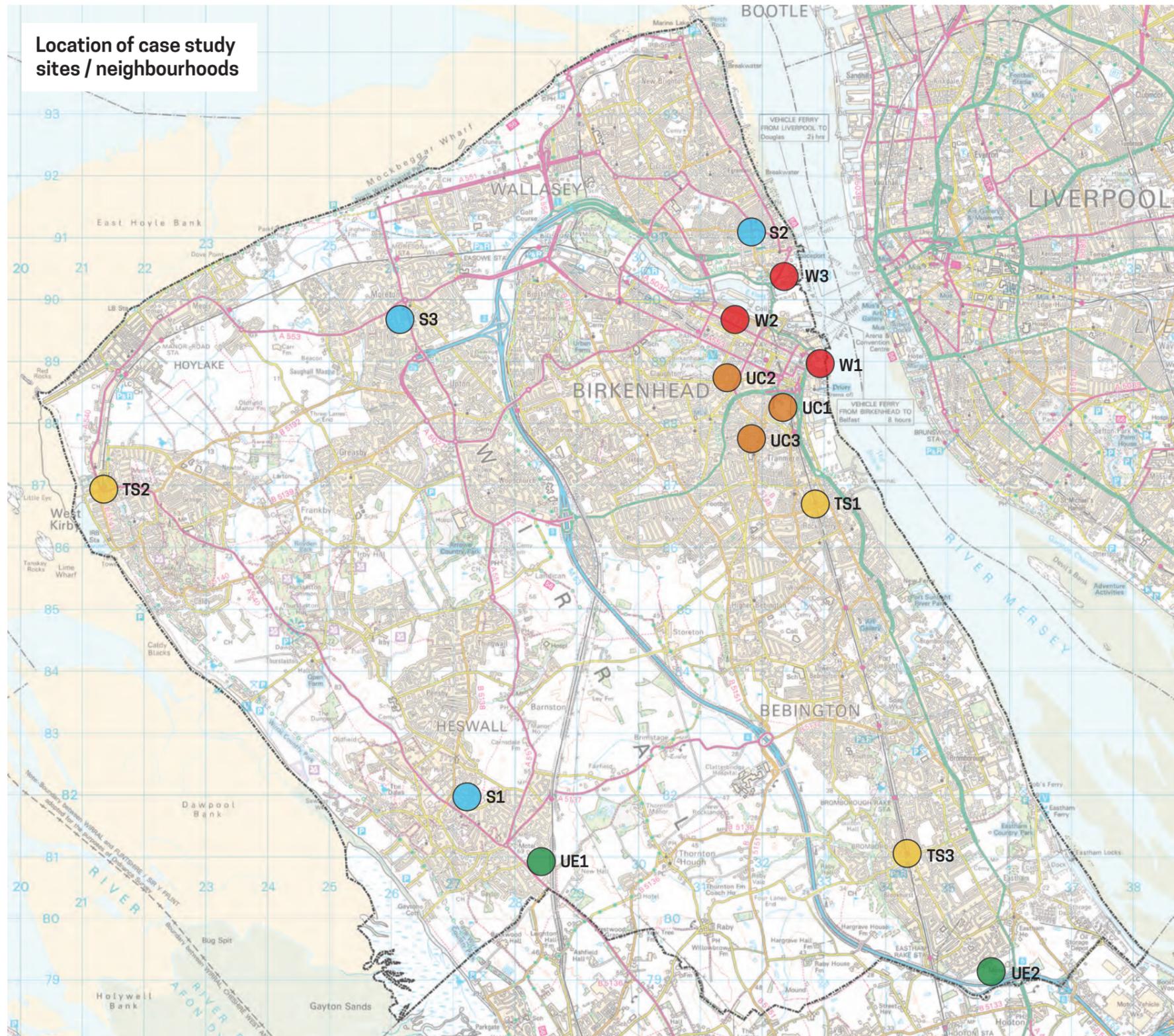


Figure 2.1

- **WATERFRONT SITES**
 - W1 - ROSE BRAE
 - W2 - LIVINGSTONE STREET
 - W3 - BIRKENHEAD ROAD
- **URBAN CORE SITES**
 - UC1 - HIND STREET
 - UC2 - BENTINCK STREET
 - UC3 - WHITFIELD STREET
- **TRANSIT STOP NEIGHBOURHOODS**
 - TS1 - ROCK FERRY
 - TS2 - WEST KIRBY
 - TS3 - BROMBOROUGH
- **SUBURBAN NEIGHBOURHOODS**
 - S1 - HESWALL
 - S2 - SEACOMBE
 - S3 - MORETON
- **URBAN EDGE SITES**
 - UE1 - HESWALL / GAYTON
 - UE2 - EASTHAM

Table 1 - Site selection and justification

UI Code	Density Zone	Site Address / Neighbourhood Description	SHLAA 2018 Designation	Site Area (ha)	Site capacity at 30dph	Rational for choice
UI_W1	Waterfront	Former Rose Brae, Church Street, Birkenhead §	0478	2.18	65.4	Large site fronting the Mersey adjacent to Ferry terminal and industrial areas. It has been a mixed use allocation in the previous draft options and is relatively square. This is also one of the largest single sites in this area which is not Wirral Waters and is also part of the planned redevelopment of Woodside. The site has a River Mersey frontage.
UI_W2	Waterfront	Land at Livingstone Street, Birkenhead*	0587	0.8	24	This is a site slightly back from the waterfront but within the zone that would normally be considered waterfront in other sites and locations (being within 5 minutes walk). The site is recommended for release as part of the review of employment land (Avison Young) and is well accessed by public transport. There is also an issue from the ability to connect between the Waterfront sites and Birkenhead town centre. This is a good example of a small site that will undoubtedly come forward in the hinterlands of the dockland areas. Is adjacent to the Wirral Waters development to the north.
UI_W3	Waterfront	Land at Birkenhead Road, Seacombe*	0756	3.8	114	This is a site that has been recommended for removal from employment use by Avison Young, but importantly is one that is in the initial supply calculations at a very high density. This is a prominent location within the waterfront and includes land that is both vacant and under-utilised. The site is constrained by the tank farm, which may limit residential development, but it is certainly not an uncommon situation in this zone and as such this should form part of the density consideration. This is also a site that is north of the docks and thus not clearly able to link to Birkenhead Town Centre.
UI_UC1	Urban Core	Hind Street Regeneration Area, Birkenhead*	2084 & 2085	8.12	243.6	This is a large site that has been vacant for some time and is the subject on ongoing viability and deliverability work. Again it is released from employment use by Avison Young, but is well located to the town centre and Birkenhead Central railway station. This is a typical urban core site and the importance of the site to the supply calculation in the reg 18 document is important. Looking carefully at how this site can not only deliver an appropriate density, but also an appropriate regeneration potential is an important cornerstone of this local plan.
UI_UC2	Urban Core	Former Works, Bentinck Street, Birkenhead +	0602	0.38	11.4	This is a typical small site in an edge of centre residential area. The works themselves may be a heritage asset and there are surrounding residential properties that may incur amenity issues. This is in an area to the south and east of Birkenhead Town Centre where access to facilities is good, but there is a mixture of sites here that are under 1.0 hectare. Previous studies have shown that the LPA has a strong track record in delivering high density on these sites.
UI_UC3	Urban Core	Car Park, Whitfield Street, Birkenhead ^		0.31	9.3	This is another typical small site (a former school) where previous demolition has occurred and now is being used on a temporary basis by the nearby hospital. The area around is currently undergoing significant infill development. Access can be provided from Whitfield Street and Mill Street. The site is well serviced by bus routes and local services. High rise development is unlikely to be considered acceptable.
UI_TS1	Transit Stop	Rock Ferry - land 10 minutes walk of station	N/A	N/A	N/A	Much of the land to the east and north has been the subject of recent redevelopment, however the south and east includes some cleared sites, some large plots and many larger Victorian and Edwardian buildings which offers opportunities for infill development, backland and possible subdivision to smaller units. The area has good access to the railway and local shops and services including a regular bus route.
UI_TS2	Transit Stop	West Kirby - land within 10 minutes walk of the railway station	N/A	N/A	N/A	This is a small township with a wide selection of shops and services, whilst there are some gap sites there are also other opportunities such as sub-division, backland conversion and the use of upper floors - especially in the retail area.
UI_TS3	Transit Stop	Bromborough - land within 10 minutes walk of the station	N/A	N/A	N/A	Area of larger properties and many nursing homes and specialist living and housing elements. Much of the area to the west includes bungalows, whilst the east is typically suburban semi-detached dwellings. Much of the capacity here is from property and plot subdivision and some backland sites.

^ Denotes site is within the brownfield register

* Denotes a site that is released from employment (Avison Young)

+ Denotes was previous housing allocation in draft options

§ Denotes was previous mixed use allocation in draft options

Table 1 - Site selection and justification *CONTINUED*

UI Code	Density Zone	Site Address / Neighbourhood Description	SHLAA 2018 Designation	Site Area (ha)	Site capacity at 30dph	Rational for choice
UI_S1	Suburban	Area north-east of Heswall centre (Downham Rd, Downham Drive & Forest Lane)	N/A	N/A	N/A	This is a mixed residential neighbourhood directly adjacent to Heswall town centre which provides a wealth of retail, leisure and other public services as well as good public transport connections. The housing stock here is a mixture of semi-detached dwellings (many with long gardens), bungalows and there is a great deal of backland former and existing commercial and industrial development.
UI_S2	Suburban	Area around the Seacombe district centre (Junction of Borough Road and Wheatland Street)	N/A	N/A	N/A	Whilst this area has good access to public transport and a good selection of shops and services, clearance has over the last 50 years have left many sites either vacant or under-utilised. In some areas the large houses, and space above shops is not being used effectively. Much of the land appears to be in the ownership of the Council and its partners and housing associations.
UI_S3	Suburban	Area south of Moreton centre (Borrowdale Road and Rosslyn Drive)	N/A	N/A	N/A	This is a typical suburban neighbourhood to the north and west of the Borough with a mixture of large homes in large plots, bungalow developments and semi-detached dwellings. There is good access to shops and services (Moreton centre) as well as schools and other facilities for housing development
UI_UE1	Urban Edge	Land adjacent to Chester Road, Gayton, Heswell	0878, 1549, 1767 and 1817	19	570	A site in the west of the Borough. Well surrounded by settlement on two sides and railway on the other. Close to the station and services. A clear boundary is provided by the railway line. There is a clear main road frontage (for access) and no flood risk. Excludes land to the north used as parkland and playing fields (including the local football club and raquette club).
UI_UE2	Urban Edge	Land to the south of Eastham (junction 56 M53)	0930, 0891 and 1769	23	690	A site in the south east of the Borough that includes access to a railway station and the motorway. The southern and western boundary is the motorway and the northern the existing settlement edge. The impact of road noise should be explored as well as how the development connects back to the neighbourhood to the north. This scheme ought to explore how 'grafting' onto the edge can explore mutual benefits to both this site and the adjacent neighbourhoods.

Establishing the local density context:

- 2.7 As noted before approaching the detailed explanation of the two detailed methodologies, it is important that the baseline context for density in Wirral is understood. As noted in early reports, density and measures of density are strongly related to local context and character. Density is not simply a measure of dwellings per hectare (dph). Density can also be identified as a plot ratio (the area of a plot covered by buildings, or even the number of people living in a given area). Clearly the housing density varies across Wirral, and what might be considered low density in one area, might be considered much higher density elsewhere.
- 2.8 It is important to establish a 'density scale' for Wirral Borough and then to use this as the basis for assessing the appropriateness of any suggested densities within each of the zones. This has been established using a four step process:

Step 1: Desktop study.

- 2.9 Focused on the key neighbourhoods and sites that formed part of the wider study (see methodology below) to identify the existing densities that are present within each of these areas using desk based materials. This allowed various characteristics and types of development to be identified from aerial mapping and a simple dph calculation. Two separate areas were studied as part of each site / neighbourhood, looking for different built forms in order to provide a realistic range of urban forms. Please note that this doesn't include zone five (Urban Edge) as there is generally no existing urban built form in these areas.
- 2.10 As part of this stage, a review of densities in the designated Conservation Areas was also undertaken to understand how density relates to areas particularly singled out for their distinctive character and appearance.
- 2.11 **Output:** Average densities across studied neighbourhoods and sites accompanied by a comparison to designated Conservation Areas.

Step 2: Fieldwork to reinforce character.

- 2.12 Undertook a site visit, focusing on the areas that are identified as being suitable for higher density and the sites identified for future work. This allowed the initial desktop assessment from map based work to be ground tested and reinforced. The characteristics and qualities of these areas could also then be fully understood.
- 2.13 In doing so, areas were identified that have a range of different housing characteristics, layouts, and densities, which were later used to reinforce the understanding of the nature of densities within Wirral. These are accompanied by a sketch to demonstrate the characteristics and design of potential new residential development.
- 2.14 **Output:** A density scale mapped to the typologies of residential development found within Wirral and accompanied by a typical residential layout (static scale to allow ease of comparison).

Step 3: Establish (or calibrate) the density scale for the local area

- 2.15 This step focuses on establishing, based on the data collected, exactly what 'high', 'medium' and 'low' density can be defined as in the context of the Borough. This allows for the study to define what can already be considered 'high', 'medium' and 'low' density based on the existing urban form, plot ratio (ratio of the built form to the plot size) and linked to local character and appearance. A study was also undertaken of a number of conservation areas by way of comparison.
- 2.16 This establishes (or calibrates) the existing density scale for Wirral. In arriving at this density scale, evidence generated during steps 1 and 2 (as outlined on the previous page) were used. This included the average densities from across Wirral (from the output of step 1) linked to the local characteristics of the built form within each area studied (i.e. the type, layout and plot relationship of the dwellings - the output from step 2).
- 2.17 **Output:** A density scale (see figure 3.1) which has been calibrated and simplified to reflect the unique local characteristics in Wirral, but which can be used as the basis for policy making.

Step 4: Recommending the proposed densities for each 'density zone'

- 2.18 This step recommends the range of densities that would be appropriate within each of the density zones. It was important that each of the zones was linked to local built form and character and had an appropriate density.
- 2.19 It is also important to consider here the elements set out by review of similar plans and programmes which formed stage 2 of this methodology. In many cases there was an acceptance that in order to make the most efficient use of land (as required by chapter 11 of the Framework) that densities needed to be boosted where the local character will allow, including accepting a change in character in some key locations.
- 2.20 **Output:** Density scale which has the proposed or recommended densities for each of the four density zones, linked with the development characteristics that would allow such densities (see figure 3.3).

Method to establishing target / minimum densities on sites (site specific)

- 2.21 This approach follows a typical urban design approach to site development, based around a series of case study 'real world' examples within the zones identified. The methodology includes four steps.

Step 1: Opportunities and constraints

- 2.22 Each of the site based case studies (three for zone 1, three for zone 2 and the two Urban Edge sites) as identified in table 1, have had an urban design led opportunities and constraints assessment undertaken. This looked at the site and immediate surroundings and considered the implications for the overall design approach in achieving higher density. Following this assessment these opportunities and constraints were recorded collectively in a table.
- 2.23 It should be noted that a number of the sites that are included within steps 1 and 2 of this methodology form part of the more detailed work being undertaken for the Birkenhead Regeneration Framework (BRF) by Avison Young and OP-EN on behalf of the Local Planning Authority. These are included in our Borough wide assessment to assist in calibrating the density scale based on the broad principles that have been set out within the BRF studies.

Step 2: Sketch design option

- 2.24 For each site a sketch scheme was prepared to illustrate a realistic potential design solution for achieving the deliverability and practicability of achieving higher densities on these sites. These sketch schemes are not intended to be a comprehensive urban design process, but act simply as a guide for testing the density zones. As part of this step, consideration was given to the provision of open space, public realm, and mixed uses all of which assisted in the creation of an attractive and liveable urban environment. The opportunities and constraints table (from step 1) was updated, as required.

Step 3: Evaluation and recommendations

- 2.25 This step brought together all of the lessons learnt through this testing process and, as required, modified the proposed density scale for zones 1, 2 and 5. This section also informed any likely policy recommendations. These recommendations made use of the opportunities and constraints table that had been prepared in steps 1 and 2.

Method to establishing approach to urban densification (neighbourhood densification)

Step 1: Possible densification approaches

- 2.26 This stage identified a number of different approaches to densification which could be applied in zones 3 and 4. Each is coupled with a sketch maquette which demonstrates the design principles and approach to achieving this as well as any design considerations that were required.

Step 2: Opportunities and constraints

- 2.27 For the six neighbourhoods identified in zones 3 and 4 an urban design led opportunities and constraints assessment was undertaken. This looked closely at the neighbourhood's characteristics. Following this assessment these opportunities and constraints were recorded in a table.

Step 3: Opportunities to introduce densification approaches

- 2.28 For each of the six neighbourhoods a plan was prepared showing the location and type of any densification that could be introduced in the neighbourhood. It identified sites and plots of various sizes and locations that may be able to contribute to densification. This included identifying any locations that have already been the subject of recent densification. This allowed the deliverability and practicality of these approaches to be considered in a real world example. The opportunities and constraints table (see step 2) was updated and amended accordingly.

Step 4: Evaluation and recommendations

- 2.29 This step brought together all of the lessons learnt through this testing process and, as required, modified the proposed density scale for zones 3 and 4. This section also made any likely policy recommendations. The recommendations made use of the opportunities and constraints table that has been prepared in steps 2 and 3.

3. Local density context

3.1 In planning terms, density in England has become somewhat arbitrarily defined. The last two decades have focused on identification of sites, assessing their deliverability and the use of standard density multipliers to arrive at estimated site-based housing capacity figures. This approach, has been at the expense of the understanding of density in relation to local character and identity. In most cases a standard density multiplier of 30 dph has been used, with densities below that considered ‘low density’ and those above it considered ‘high density’. However, this takes no account of the local characteristics or qualities of a particular location.

Step 1: Desktop assessment

The Conservation Areas

3.2 Wirral has 26 designated Conservation Areas. Whilst some designated areas focus on small areas of development - including key public buildings and dwellings which are of particular architectural merit, or areas of artificially low density – neither are a sensible starting point for understanding the vernacular approach to housing density. However, others also include a more domesticated mixed use vernacular that is identified for its overall historic character and

appearance, many reflecting either the traditional vernacular architecture of the area, or being a product of historical masterplanning or design and development enterprises.

3.3 The density of some of these vernacular areas is as low as 17 dph (Port Sunlight) and as high as 51 dph in areas around the centre of Oxtan (which is a mix of uses including residential). However, it is more common that a density of around 40 dph is found within Conservation Areas at Clifton Park, Eastham, West Kirby and Lower Heswall. The following table shows some of the localised densities within eight Conservation Areas across Wirral.

Conservation area	Broad location	Density (dph)*
Port Sunlight	Central east	17 - 20
West Kirby	North-west	35 - 41
The Magazines	North-east	38 - 41
Lower Heswall village	South-west	36 - 42
Clifton Park	North-east	38 - 42
Bromborough Pool	East	39 - 46
Eastham village	South-east	40 - 48
Oxtan village	Central east	37 - 51
Average density*		39

*Please note that the range of densities here changes with each Conservation Area as a result of the various layouts and characteristics of each area. Variation occurs as a result of measuring different areas within each Conservation Area. The midpoint is taken from the range for calculating this average

3.4 As a result, it is clear that densities of approximately 40 dph are common within Conservation Areas. This immediately calls into question the standard approach of applying an average baseline density of 30 dph or a further more conservative baseline of only 20 dph to sites within Conservation Areas as part of the Council's Strategic Housing Land Availability Assessment (SHLAA).

3.5 Whilst Conservation Areas have been excluded from the proposed density zones, this shows that the consideration of density in relation to site specific circumstances should not be automatically ruled out.

Average densities within neighbourhoods

3.6 This element of the study seeks to consider the characteristics and densities of typical neighbourhoods within Wirral. These wider areas have again been selected from across the Borough, to ensure that local variations can be taken into account. This section should be read in conjunction with table 2.

3.7 Table 2 shows the results of this assessment which demonstrate an average density of all the areas studied of 51 dph. Whilst this immediately supports the use of higher densities within the emerging Local Plan, there is still a variation in density within each of the neighbourhoods studied.

3.8 Table 2 demonstrates that in the Waterfront zones (Zone 1) and the Urban Core (Zone 2) – around Birkenhead town centre – the density is even higher, in some cases achieving in excess of 90 dph. In both these zones the average density was significantly above the standard land use planning density of 30 dph, with an average density of approximately 60 units per hectare. Even the very lowest densities found in these areas show a density in excess of 30 dph (the baseline previously used in the Council's SHLAA).

3.9 Table 2 also shows that average densities within the more suburban areas and around Transit Stops (Zones 3 and 4) are also currently above 30 dph, but, to a lesser extent with the average for both zones approximately 40 dph. In some cases, especially within the suburban zone the average density was as low as 21 dph, but must be balanced against areas within the same immediate locality that approach 70 dph.

3.10 This evidence strongly supports the abandonment of the 30 dph standard baseline currently used in calculating theoretical site capacities in Wirral. It thus supports the need to re-calibrate standard density assumptions, to respond to the actual local character and appearance of the Borough's residential areas. This includes the possibility of higher densities even within those areas outside of the identified density zones.

3.11 Please note, that there is a requirement to calibrate this to respond to the local character and appearance so that new residential areas do not look out of place within the townscape.

Table 2 - Existing densities assessment

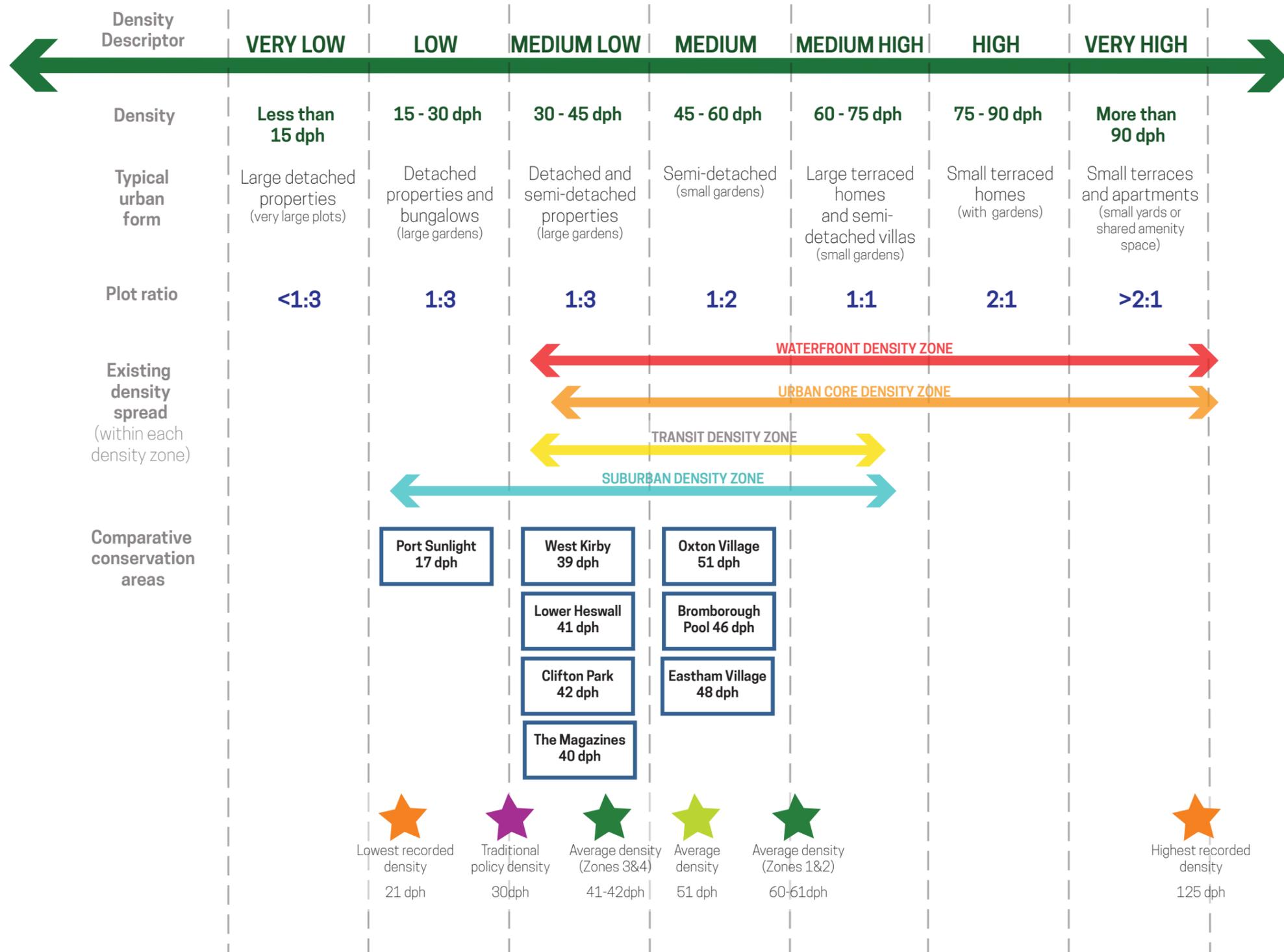
Density Zone	UI Code	Area	Specific Location	Area studied (in hectares)	No. dwellings	Description of the studied area	Calculated dph	Average for the Area
Suburban	S1	Heswall	Briar Drive	0.41	10	Semi-detached houses with drives and garages to the rear of the properties. Front gardens and long rear gardens	24	23
		Heswall	Andrews Walk	0.48	10	Detached bungalows. Gardens and access surrounding the building, including off street parking	21	
Suburban	S2	Seacombe	Hatherley Street/ Wickham Close	0.43	20	Terraced bungalows with front and rear gardens, however the layout is somewhat confusing and there are some issues of poor legibility and permeability within the overall layout.	47	59
		Seacombe	Hampstead Road/ Hallville Road and Barrington Road	0.56	40	2 storey semi-detached houses, with small front gardens and individual yards to the rear.	71	
Suburban	S3	Moreton	Witley Close	0.23	12	Terraced houses with off road parking. Rear yards/gardens and front gardens/ extended drives.	52	43
		Moreton	Grampian Way	0.26	9	Semi detached houses with drives and garages. Addition front garden and large rear gardens.	35	
							Suburban Average	42
Transit Stop	TS1	Rock Ferry	Between Clarke Avenue and Fieldside Road	0.82	55	Terraced houses, some with off street parking. Most are on street parking, shared rear access, all with private rear courtyards/gardens.	67	51
		Rock ferry	Boulton Avenue/ Eaton Road/ Thorburn Road	0.92	33	Semi detached houses with off street parking and rear gardens(which vary in size). One is a 1.5 storey detached property.	36	
Transit Stop	TS2	West Kirby	Salisbury Ave	0.4	16	Large semi-detached houses with and additional off street parking spaces. Garages to the rear of the property within large rear gardens.	40	36
		West Kirby	Hydro Ave	0.94	31	Mixed semi-detached houses . Large gardens and front gardens	33	
Transit Stop	TS3	Bromborough	Dale Avenue/ Oteley Ave/ Bradmore avenue	1.01	36	Terrace properties in a block of 4 dwellings, with a couple of semi-detached properties at the ends or corners. All with off street parking, gardens to the rear and sides.	36	34
		Bromborough	Corner of Allport Lane /Cambridge Road/ Harrow Grove	1.04	33	Semi detached properties, off street parking with front and rear gardens	32	
							Transit Stop Average	41

Table 2 - Existing densities assessment *CONTINUED*

Density Zone	UI Code	Area	Specific Location	Area studied (in hectares)	No. dwellings	Description of the studied area	Calculated dph	Average for the Area
Urban Core	UC1	Hind Street	Hinderton Road	0.82	49	Row of terraces, semi-detached and quads. Some larger housing with garden areas, but much is simply smaller yards / gardens	60	50
		Hind Street	Thompson St / Leighton Road/ Fairfax Road/ Lightbound Road	0.88	36	Row of terraces of varying heights, semi-detached bungalows and semi-detached dwellings. Low density bungalows have front and rear gardens. Terraces with front parking areas and narrow gardens. Modern more spacious development to the west.	41	
Urban Core	UC2	Bentinck Street	Bentinck Street/ Gladstone Close/ Craven Street/ Park Close	0.84	40	Block of terrace housing some with narrow backyards and parking spots to the front, others with no parking upfront - on street parking required. Small perpendicular closes adjoining parallel main streets.	48	51
		Bentinck Street	Park Road South/ Grange Road West / Merton Place/ Radnor Place	0.79	54	3 distinct types of development in small block - 4 storey apartments (rear parking and shared garden), semi-detached family dwellings and narrow terraces with rear bin run.	54	
Urban Core	UC3	Whitfield Street	Harland Road/ Liversidge Road	0.88	36	Two rows of mostly semi-detached dwellings with occasional block of terraces (3-4 dwellings). On street parking.	41	83
		Whitfield Street	Briardale Road/ Woodville Road	0.77	96	Two unbroken rows of narrow terraced housing. Back to back rear gardens. On street parking.	125	
							Urban Core Average	61
Waterfront	W1	Brae Rose	Duncan Street/ Chester Street	0.53	25	Modern rectangular gated community block with adjacent terraces and semi-detached. Shops below residential accommodation?	47	87
		Brae Rose	Water Street/ Castle Street/ Hornby Street	0.65	83	Compact wedge of development near riverside. Entirely terraced housing. Narrow streets and dwellings. Doors open onto pavement.	128	
Waterfront	W2	Livingstone Street	St Anne Street/ Beckwith Street	0.85	31	Mix of housing. Row of terraces, several bungalows, vacant land, semi detached housing. Parking on front drive, some spacious gardens.	36	35
		Livingstone Street	Brassey Street/ Patten Street	0.88	30	Bungalows and spacious modern development. Front and rear gardens and green space between rows of housing. Long paths to front doors.	34	
Waterfront	W3	Birkenhead Road	Hawthorne Grove/ Briardale Road	0.48	26	Terraces surrounding, spacious square of bungalows with shared garden area.	54	58
		Birkenhead Road	New Street/ Birkenhead Road/ Bridle Road	1.03	64	Terraces and semi-detached with narrow, confined backyards.	62	
							Waterfront Average	60

DENSITY SCALE (calibrated for Wirral)

Figure 3.1



Step 2: Design characteristics for densities in Wirral

- 3.12 A thorough 2 day field visit of neighbourhoods throughout the Borough, including a focus on the 14 specific sites and neighbourhoods that have formed the basis of this study, has been undertaken. As previously noted, there is a wide range of different residential typologies found within the Borough, all of which have different densities, and many of which accommodate over 200 people per hectare.
- 3.13 Figure 3.1 has been developed as the conclusion to this step and shows six 'model' urban blocks ranging from those that might be considered low density towards those which have a traditionally higher density. It is important to note that high rise development (over 5 storeys) is currently infrequent within Wirral and did not form a component of any of the areas studied. The majority of the neighbourhoods studied have either 2 or 2.5 storey development, with semi-detached units (either inter-war or Victorian paired villas) being by far the most common types in areas outside of the more established urban core (Zones 1 and 2), where there was a greater proportion of terraced homes.
- 3.14 In some cases, the typical blocks have been adapted to conform to modern construction and development standards. For example, long runs of terraced housing with small rear yards built to the back of the pavement are now unlikely to meet the required standards for amenity, parking, and modern building regulations. Regulations and terraced housing previously provided at over 100 dph are unlikely to be practicable or deliverable today.
- 3.15 It should be noted that low density bungalow developments are not shown on this diagram as these fall below the 30 dph standard density but where these were identified as part of the field work these were predominantly in zone 4 (suburban).
- 3.16 Figure 3.1 shows that a number of typical types of development in Wirral already exceed 30 dph, even excluding the flat/apartment typologies. This supports the case for not slavishly following the standard 30 dph, when calibrating the density scale for Wirral (Step 3).

Step 3: A calibrated (existing) density scale

- 3.17 Figure 3.2 shows the resulting calibrated density scale for Wirral. The format and content broadly follows the process and presentational style that was found within the Croydon design guide which was studied as part of stage 2 of this workstream. This calibrated density scale does not specifically suggest the minimum densities that should be sought, just the range of densities that could be appropriate. In this regard, any final density 'targets' that could be set by the policy should not necessarily reflect the lowest point in this range.
- 3.18 It brings together all the information collected from steps 1 and 2 (above) and seeks to establish these under different density descriptors – i.e. high density, medium density etc. The important message is that this clearly demonstrates that even in the existing context and character of the Borough, 30 dph may be considered a low density with much of the current townscape falling within the 40 – 50 dwelling per hectare zone, including many of the Conservation Areas studied.

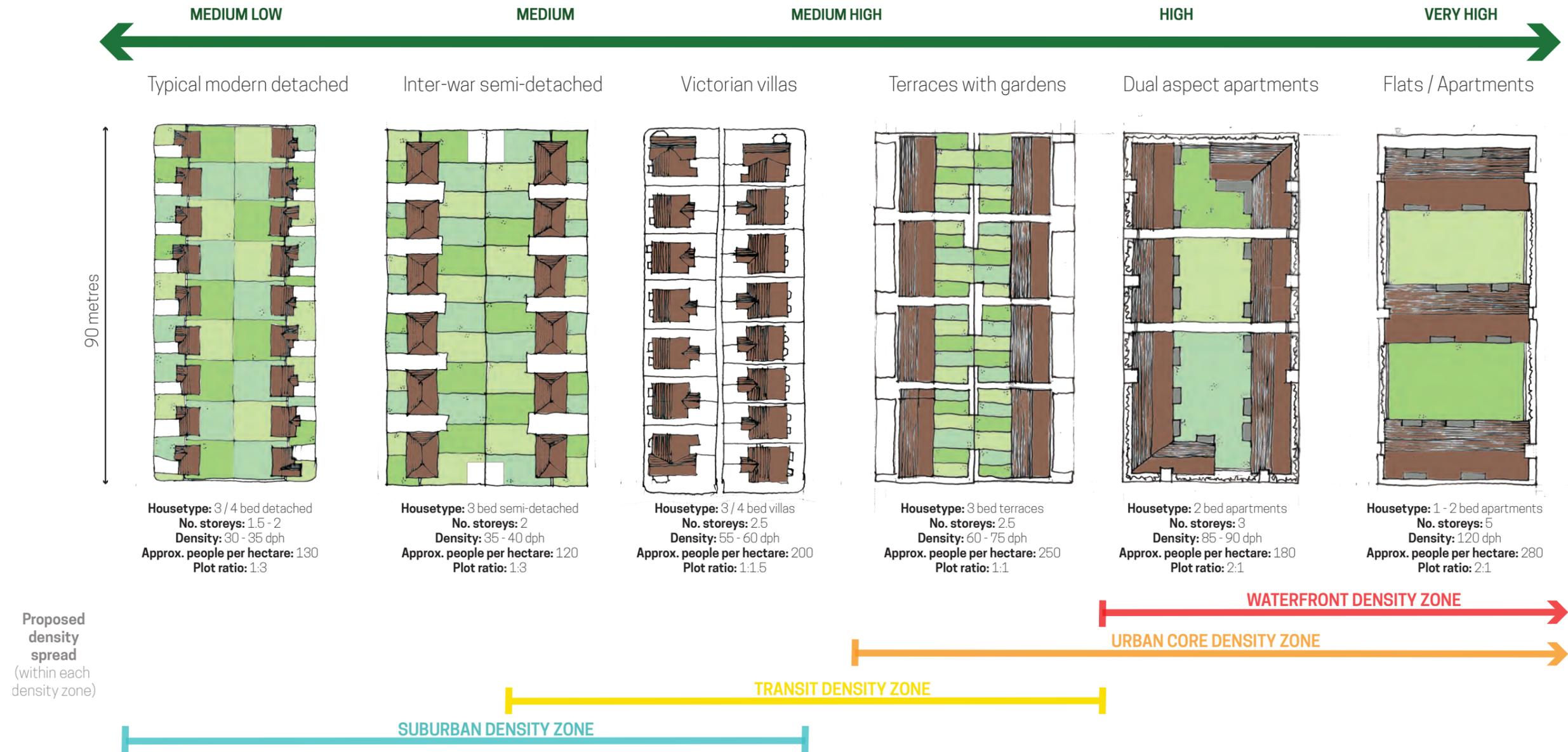
- 3.19 This not only takes account of the predominance of the semi-detached dwellings throughout the majority of Suburban and Transit zones (zones 3 and 4) but also the greater proportion of terraced homes and Victorian villas within the Urban Core and Waterfront zones (zones 1 and 2). Unsurprisingly, the Suburban Density zone has the lowest range and includes the only form of development that, in the Wirral context, may be considered 'low'.
- 3.20 This density range corresponds with data collected as part of the stage 1 review of past permissions which demonstrated that approvals had been regularly granted for densities commensurate with this scale.
- 3.21 It is worth pointing out that within zone 1 even higher densities have already been approved in the more commercial setting of Wirral Waters, which may indicate that even higher densities may be achievable within other similar areas within zone 1 and zone 2.

Step 4: Proposing a recommended future density scale

- 3.22 Figure 3.3 is similar to Figure 3.2, but seeks to set out the proposed densities for each of the four zones studied. The figure proposes a minimum density for each zone within a range, which steps up towards the higher densities proposed for zones 1 and 2. Urban designers have for a long period used density in order to aid wayfinding, interest, and legibility within the townscape and thus it is accepted that some flexibility within each of the zones is required.
- 3.23 The Suburban Zone (4) and the Transit zone (3) broadly reflect the spread of densities that is currently already found within each of these zones, with the lower end of the outlying density values from each density range (from Figure 3.2) removed. Both have a proposed density spread of 30 dph within the medium-low and medium categories. In this case there is an ability to introduce a mix of housing typologies including some detached and semi-detached homes as well as where appropriate some terraced housing.

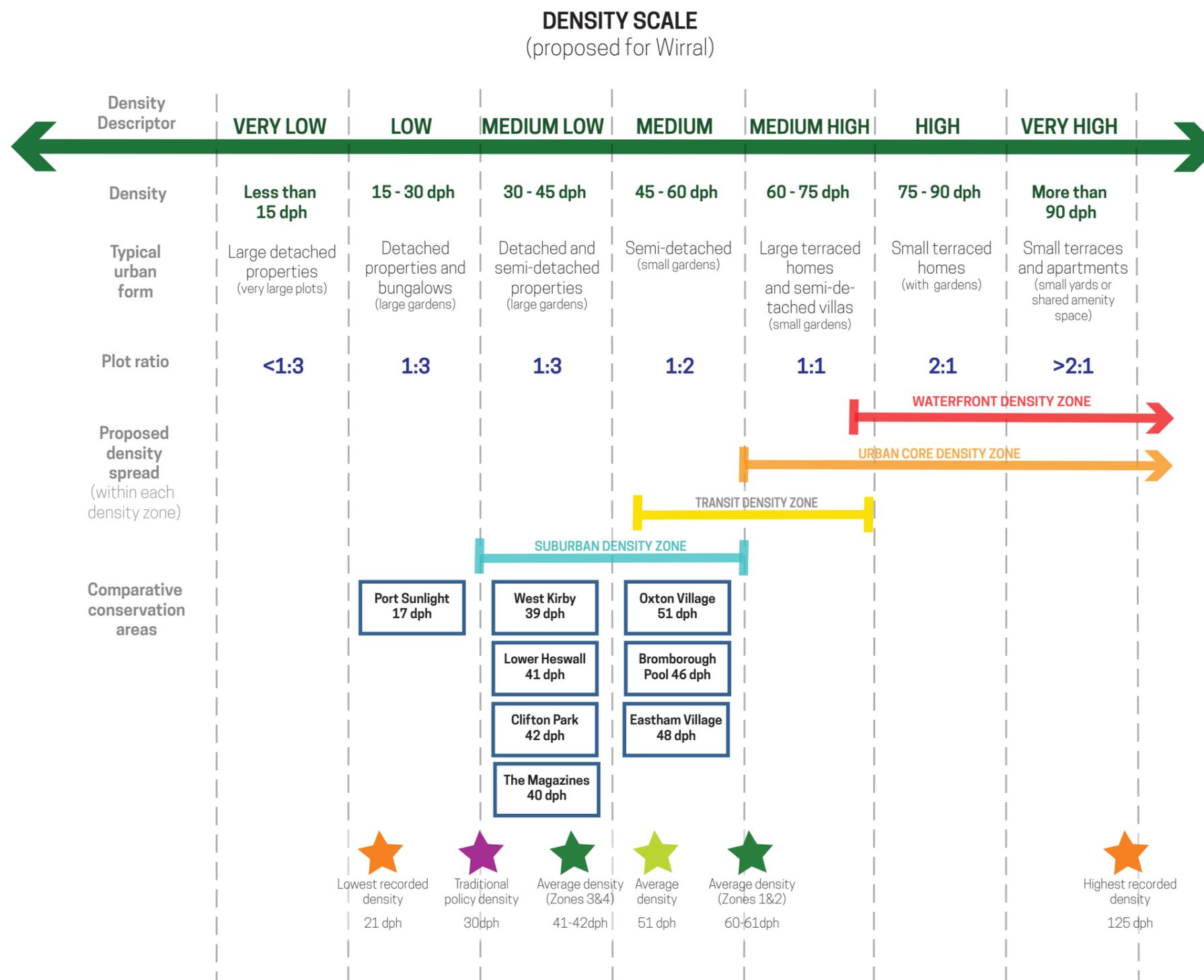
Figure 3.2

Typical block form and densities
(Typologies developed from those in Wirral)



NOTES:
All blocks are approx 1:100 @ A3
Each block is approximately 0.5 hectares
when coupled with road infrastructure

Figure 3.3



-
- 3.24 This approach matches well with the overarching approach in these areas of 'densification', however smaller previously developed sites in these areas could also use these densities to achieve efficient use of the land available. It is unlikely however, that detached properties would be acceptable within the transit zones given that they make inefficient use of the land within these highly accessible locations. This is in accordance with paragraph 122b of the Framework.
- 3.25 Zones 1 and 2 (Waterfront and Urban Core) both allow for higher densities. A different approach has been taken with these zones. A greater proportion of the lower densities within the spread identified in table 2 and illustrated in figure 3.2 have been discounted, and more attention has been paid to recent planning permissions identified in stage 1. This approach accords with guidance within the Framework where locations that are well located with regard to shops, services and public transport could accommodate higher densities.
- 3.26 In both locations there is no upper limit to densities which also reflects recent permissions – especially at Wirral Waters. In these locations this assumes that a change in the character of these areas is expected. This also reflects guidance in the Framework (paragraph 123a) which includes proposals to include a significant uplift in densities in appropriate areas.
- 3.27 Zone 5 (Urban Edge) has not formed any part of this assessment. In accordance with paragraph 122d of the Framework, the prevailing character of an area should form part of the decision about appropriate densities, including access to public transport (which was formed as part of stage 3). Given that the prevailing character in the suburban areas has been in the medium-low and medium density descriptors then this seems to be a sensible starting point but will need to be varied in locations that would also be considered as falling within a Transit zone (zone 3). This will of course need to be tested through the case studies identified.
- 3.28 Whilst none of the zones identified include a density less than 30 dph, it should be noted that there are a great deal of urban areas throughout the Borough that do not form part of the zones identified in stage 3 of this workstream. In these locations a lower density of development could be accommodated. The zones also exclude Conservation Areas and protected open spaces both of which will be controlled by local and national policies pertaining the character and appearance of these specific assets.
- 3.29 As part of the development of the future policies, decisions could be made to reduce the spread of the densities (currently set at intervals of 30) to achieve higher densities as outlined in paragraph 123 of the Framework. This could have the benefit of increasing the deliverability of these sites.

Key matters for further consideration:

3.30 Following the calibration and setting of the proposed density scale for Wirral the following matters are highlighted for consideration as part of the case study led assessment (site specific and neighbourhood densification):

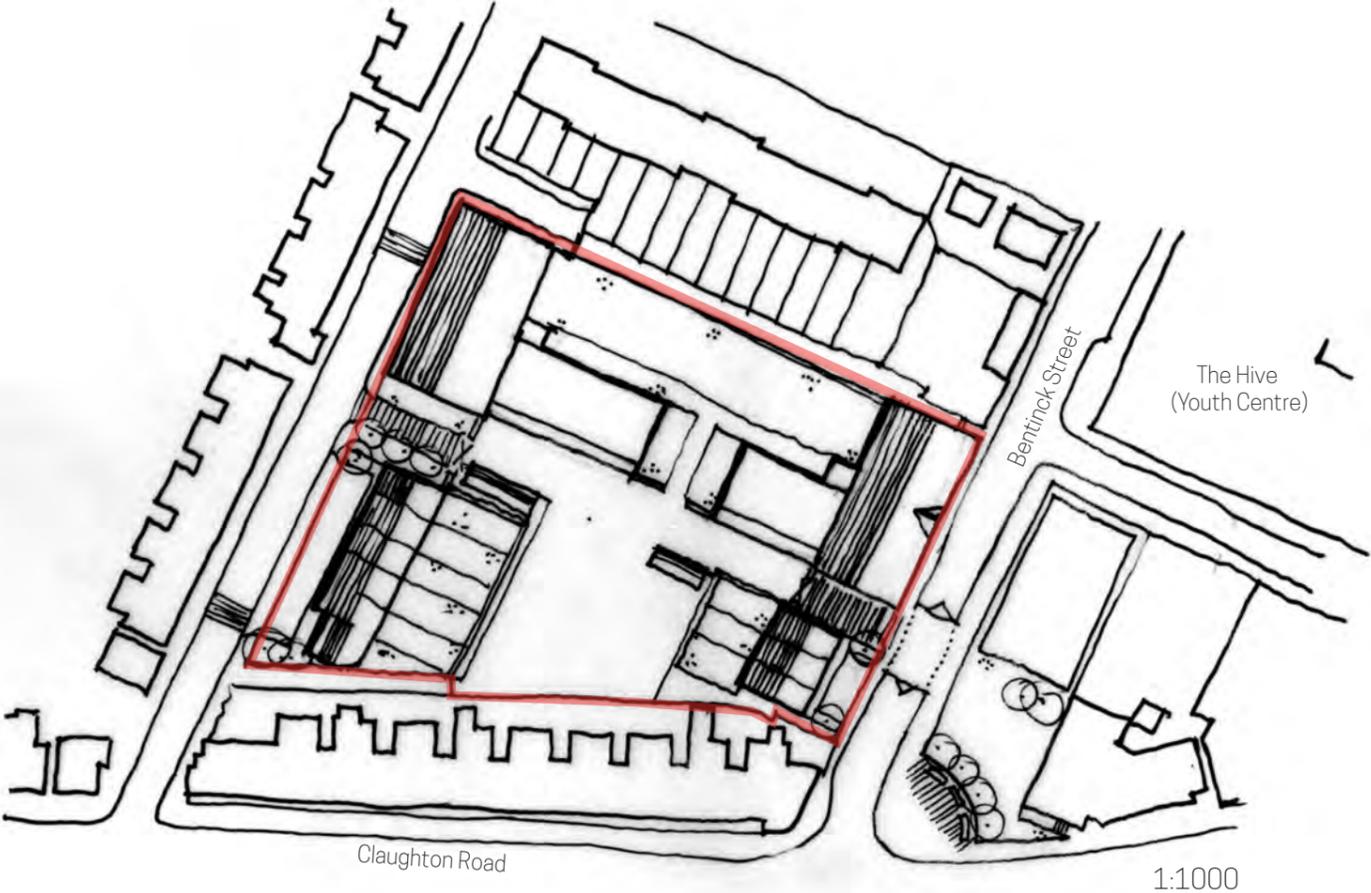
- The density spreads for each of the zones all propose an uplift (albeit minor) in the average densities for the local context and it is important to ensure that they can be delivered appropriately, and consideration at the policy development stage could raise the 'minimum' further.
 - How access to shops, services and public transport can be assured through design - since this forms such a cornerstone of the approach to density established in both stage 3 and in the calibration of the density scale.
 - At this stage, the target density spreads that have been set do not include any consideration of amenity, open space nor public realm which needs to be considered in the design of detailed sites or in the densification typologies.
- The site, scale and nature of specific sites should be considered further as part of any further site-specific assessment (responding to the surrounding design, socio-economic, market and land-use context and ground conditions etc.) which may also have an impact on delivering the higher densities
 - It is recommended that the Council's viability study takes account of these density requirements, to ensure that sites within each zone can still be delivered at these densities.

4. Site specific densities

Waterfront and Urban Core Sites

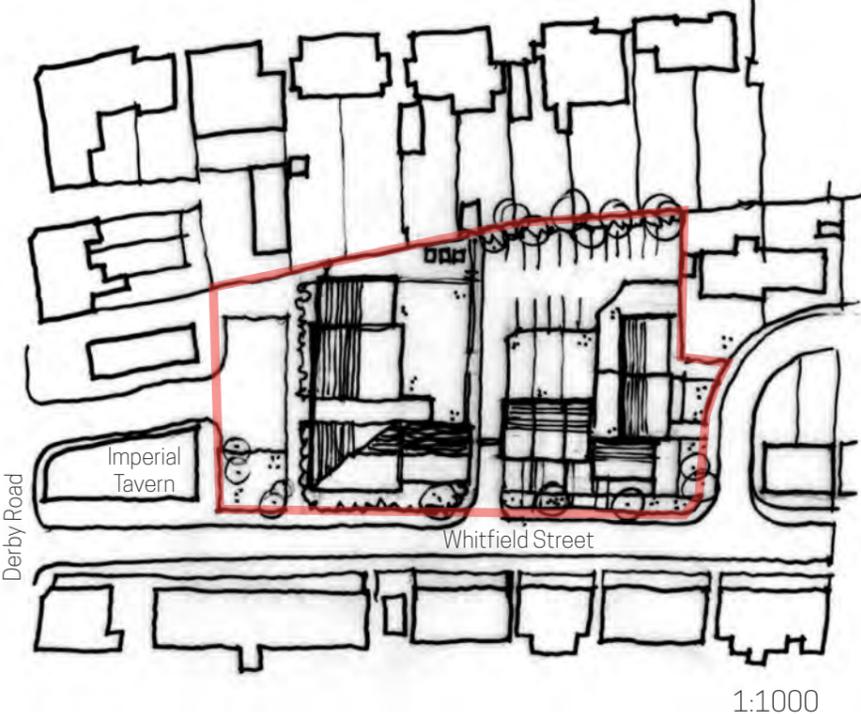
- 4.1 As set out in chapter 2 of this report, this element of the study focused on six case study sites in the Waterfront and Urban Core Zone (zones 1 and 2) that were identified as part of stage three. For each of these sites, a detailed site visit has been undertaken, opportunities and constraints have been identified (with a focus on implications for density) and a detailed sketch scheme has been developed to test whether the densities set out within Figure 3.3 (Density Scale) can actually be achieved in real terms.
- 4.2 Table 1 has set out why each of these sites has been chosen, many due to their unique characteristics and their ability to showcase a particular aspect of urban development as part of this process. The final sketch design schemes are set out for each of the six sites within figures 4.1, 4.2 and 4.3 alongside a brief summary of the key design characteristics (all related to density) that have driven the sketch scheme. These characteristics include: private and public space, car parking approaches, amenity, overlooking and scale (or height).
- 4.3 Each of the sketch schemes show clearly that for sites in both zones the sought after densities (in excess of 60 and 70 dph respectively as set out in figure 3.3) can be achieved in an effective manner. The sketches show one way of achieving this on these sites but it appears that the densities scale and density spread sought within Figure 3.3 can easily be achieved. As a result, it is recommended that the densities suggested as part of figure 3.3 for this zone forms the core of any further policy for sites within density zones 1 and 2, with minimum densities set using the scale outlined in Figure 3.3.
- 4.4 Parallel work being undertaken as part of the Birkenhead Regeneration Framework (BRF) has suggested that in some cases densities could be much higher than presently within the zone. This is acknowledged and as such, ultra-high densities (in excess of 100 dph) should also be acceptable against any policy where there is a clear design rationale.

**Figure 4.1
Urban Small Sites**



Site UC2: Bentinck Street, Birkenhead
 0.38 hectares - 40 units - approx. 100dph
 Mixture of 1 & 2 bed apartments (some converted)
 and three bed townhouses

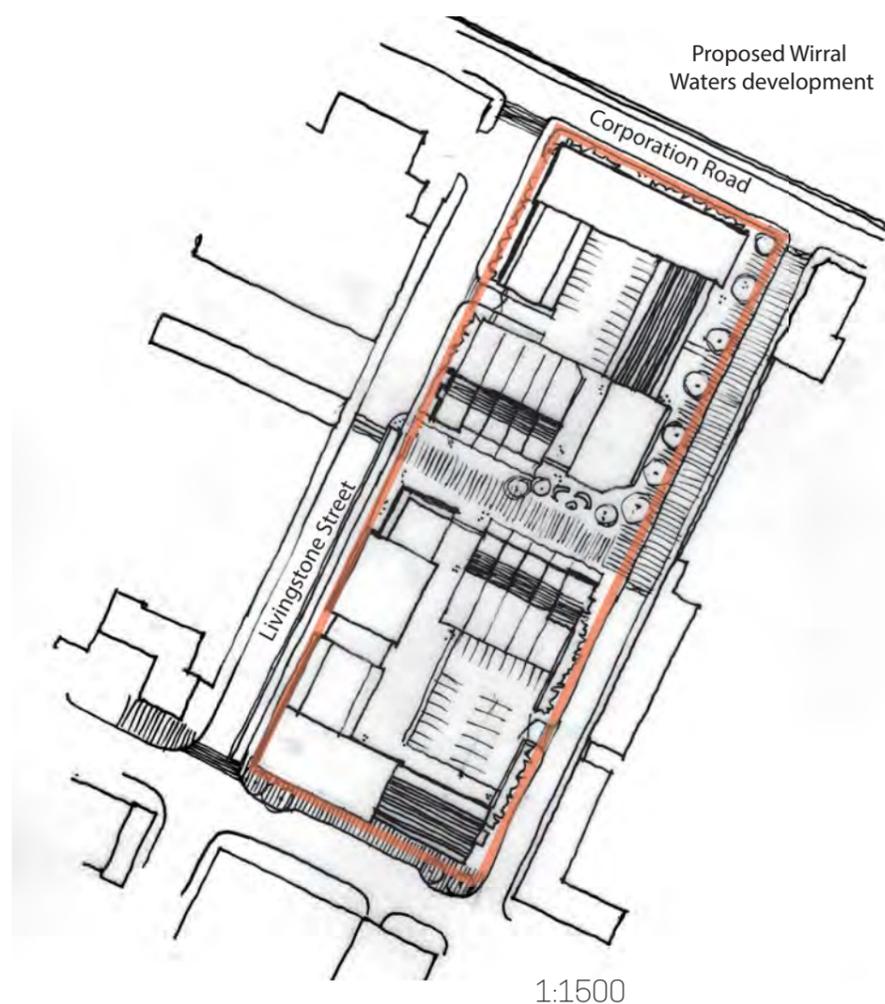
Design Features / measures
 Private space - gardens for houses and shared private space for apartments
 Public space - None provided - adjacent to Birkenhead Park
 Car parking - One space per apartment, two for each house
 Amenity / Overlooking - Relaxation of standard amenity distances internally
 Scale - Maximum 3 storey



Site UC3: Whitfield Street, Birkenhead
 0.31 hectares - 18 units - approx. 90dph
 Mixture of 2 bed-apartments, townhouses and bungalows

Design Features / measures
 Private space - gardens for houses and shared private space for apartments
 Public space - Small pocket park (also near to Mersey Park)
 Car parking - One space for each dwelling
 Amenity / Overlooking - All typical standards met front to front and back to back
 Scale - 2.5 storey using roofspace

**Figure 4.2
Waterfront Designs**



Site W2: Livingstone Street, Birkenhead

0.8 hectares - 64 units - approx. 80dph
Mixture of 2 bed apartments and three bed townhouses

Design Features / measures

Private space - gardens for house and shared private space for apartments
Public space - Small linear space provided including sitting area or local play area
Car parking - One space per unit with additional on street parking
Amenity / Overlooking - Relaxation of standard amenity distances internally
Scale - Mainly three storey but townhouses 2.5 storey



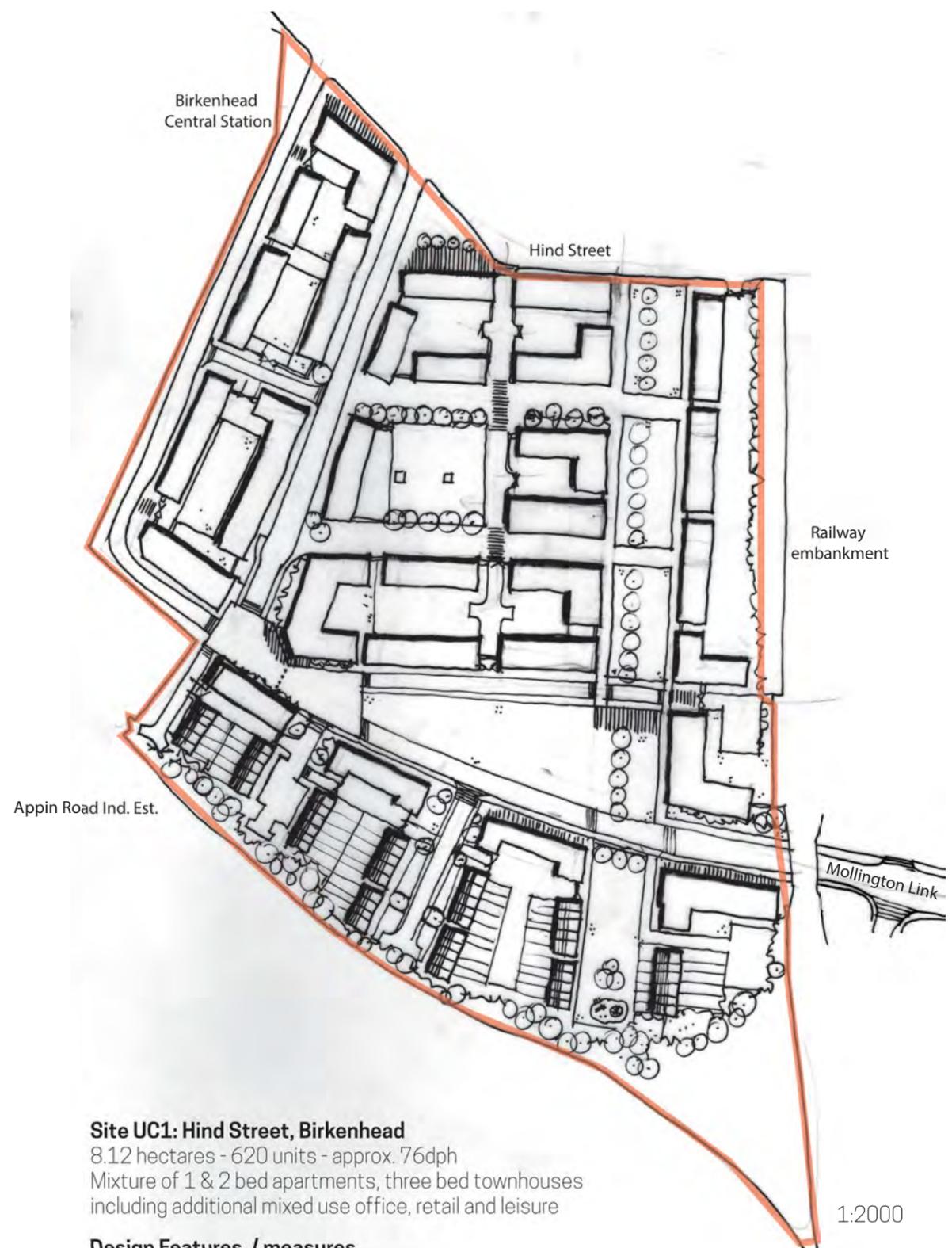
Site W1: Former Rose Brae, Birkenhead

2.18 hectares - 220 units - approx. 100dph
Mixture of 1 & 2 bed apartments and three bed townhouses

Design Features / measures

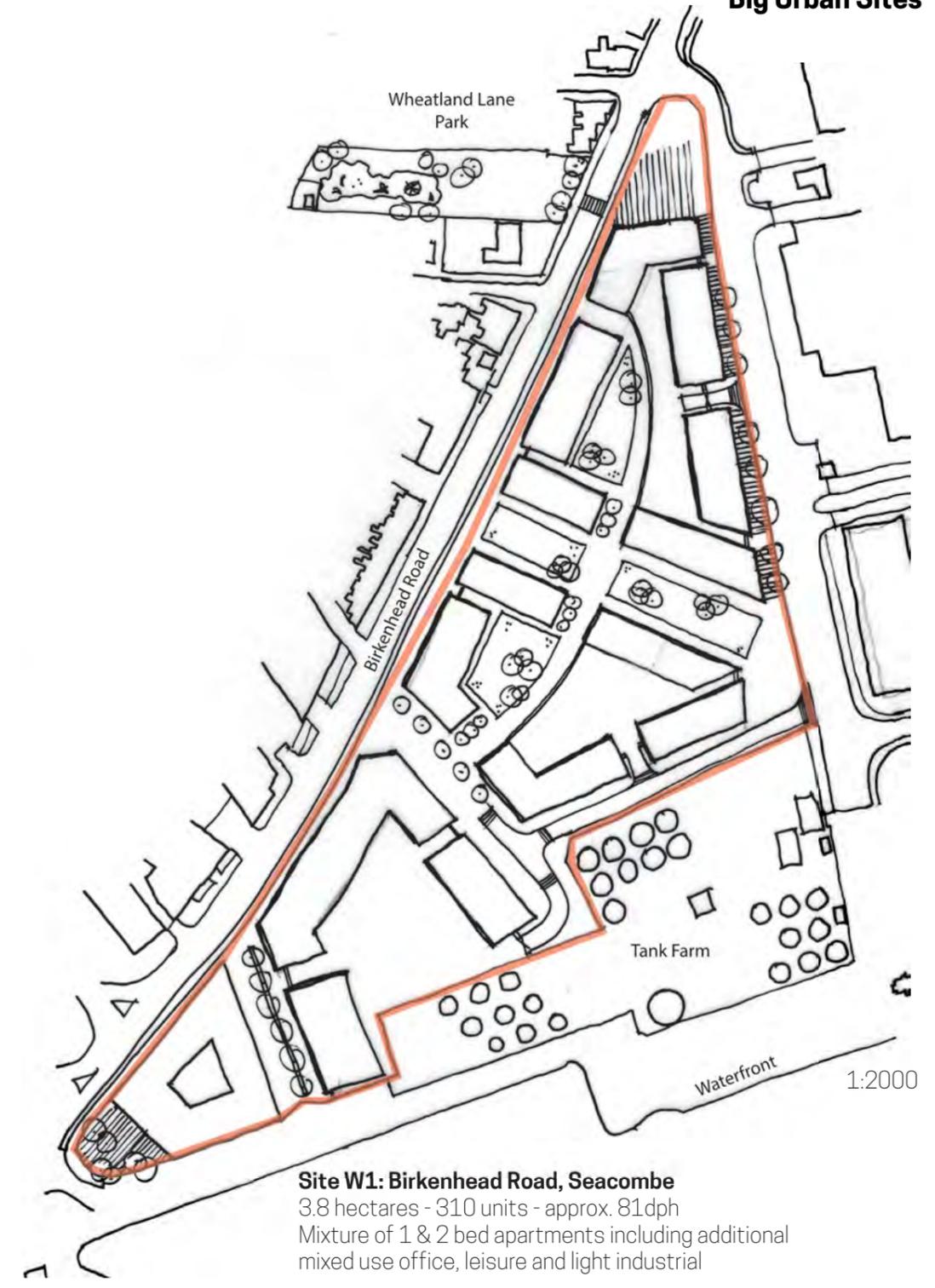
Private space - gardens for house and shared private space for apartments
Public space - new waterfront space, children play facility and linear park
Car parking - One space per apartment, two for each house
Amenity / Overlooking - Relaxation of standard amenity distances internally
Scale - 3 storey to west raising to 5 storeys on the waterfront

**Figure 4.3
Big Urban Sites**



Site UC1: Hind Street, Birkenhead
 8.12 hectares - 620 units - approx. 76dph
 Mixture of 1 & 2 bed apartments, three bed townhouses including additional mixed use office, retail and leisure

Design Features / measures
 Private space - gardens for houses and shared private space for apartments
 Public space - Large open space, linear park, wildlife area, x2 public squares
 Car parking - One space per unit for homes, 0.5 spaces for apartments
 Amenity / Overlooking - Relaxed in higher density areas to north of site towards town centre
 Scale - Up to five storeys, with houses being three storey townhouses



Site W1: Birkenhead Road, Seacombe
 3.8 hectares - 310 units - approx. 81dph
 Mixture of 1 & 2 bed apartments including additional mixed use office, leisure and light industrial

Design Features / measures
 Private space - Limited to small private areas
 Public space - Improvements to adjacent park, public square, x 2 pocket parks
 Car parking - between 0.5 and 1 space per apartment
 Amenity / Overlooking - All generous distances
 Scale - 3 storey to north raising to 5 storeys on the waterfront

Key design and density considerations

- 4.5 Notwithstanding the simple measure of density, a number of wider design and development issues - intrinsically linked to ensuring that the appropriate densities can be delivered acceptably - should be considered, as detailed further below.
- 4.6 **Character** - In all but two of the smallest case studies (UC2 and UC3 on Figure 4.2) all of the other sites have been required to develop a character and scale for the site, before delivering an appropriate density. Many zone 1 and zone 2 sites lack a suitable existing built context to respond to or tie in to. W1 - Livingstone Street (Figure 4.1), is the starkest example where the wider knowledge of the Wirral Waters development makes the site a more likely residential possibility, but in the physical absence of either that scheme or an adjacent residential development, the scheme for the site must develop its own character.
- 4.7 The other sites are all much larger, in excess of 2 hectares and as such have the opportunity to create their own character, with density being one component of this.
- 4.8 Nevertheless, the desire to achieve the higher densities limits the final character that can be achieved. For example, apartments and terraces will be needed, to achieve the required densities. When considering figure 3.1, the higher density developments in these areas have to favour apartment and terraces in order to allow the required densities to be achieved. When developing detailed design policies, it will be vital to stress the important link between character and density. It has already been discussed that in some of the very highest density areas, a new character may also be created. This is in line with guidance within the Birkenhead Regeneration Framework (BRF) that covers much of this area.
- 4.9 **Green and open space** - When considering the approach to green and open spaces, there is a difference between sites below and above 1 hectare. With smaller sites it is impracticable to deliver public spaces and parks as part of the development and the focus will need to be on creating a high quality public realm with strong connections to nearby routes. Zones 1 and 2 are well served by a number of local parks and other recreational routes (including the Wirral coastal path) and contributions to off-site improvements would be appropriate. For example, with scheme UC2 (Bentinck Street) the opportunity to support the enhancement of the adjacent multiuse games area and pocket park seems a sensible solution rather than developing new on site provision. This would enhance local provision, whilst ensuring that density can be maximised. This approach should be written into emerging Local Plan policies. Care will need to be taken to arrive at a specific threshold below which contributions might be sought as opposed to direct provision.
- 4.10 The larger sites have all been able to accommodate increased public realm and open space as part of the design. The exact design of these spaces will be the subject of detailed planning applications, but on sites W3 and UC1, almost 25% of the site area has been given over to parkland and open spaces, to maintain high quality design. On the Rose Brae site this has focused on providing a link between the urban area and the waterfront, whilst the Hind Street scheme focuses on providing a range of different typologies to serve the wider area.

-
- 4.11 This highlights two important qualitative design principles for higher density developments in either zone, which have also been identified within the work undertaken as part of the Birkenhead Regeneration Framework:
- That any public realm, open space, and green infrastructure should be designed to integrate with the surrounding townscape and route network.
 - That in larger high density schemes green and open spaces should be provided as a series of smaller elements offering further variety rather than as a single element - to meet both the needs of the site and the wider neighbourhood.
- 4.12 The final point worthy of note is that higher density development often shifts the provision of amenity space from personalised private space to shared spaces, especially where apartment complexes have little outdoor recreation and amenity space (See figure 4.1 and figure 4.3). A quantitative and qualitative balance will need to be struck in policies for larger, higher density sites (above 1 hectare), which accords with the approaches already being considered in this area as part of the Birkenhead Regeneration Framework.

- 4.13 **Parking** – One rationale behind the designation of the higher density zones 1 and 2 was the proximity to public transport and local shops, services, and facilities found within central Birkenhead. None of the sites are more than 5 minutes' walk from a railway station and most are directly adjacent to a high frequency transit routes. As a result, the need for developments to accommodate provision for the private car is significantly lessened. There are a number of different ways that this can be delivered through policies for these higher density areas.
- 4.14 Normally parking accounts for a significant proportion of the land area in residential developments. All of the schemes presented in zone 1 and zone 2 seek to reduce the amount of car parking provided which frees up land for additional built form. Policies in these zones should therefore at the same time seek to reduce car parking, with most of the schemes presented showing parking arrangements of 1 or fewer spaces per dwelling.

- 4.15 Furthermore, most of the schemes seek to accommodate parking through a variety of approaches including, but not limited to, on-street, in court (by far the most common), or bays to the rear or front. The traditional on-plot solutions sought by standard housebuilders are not present on any of the schemes presented and should be discouraged as an inefficient use of the land. Parking, like green space and public realm, should therefore be a key consideration as part of any policy seeking to increase density within these zones.
- 4.16 **Mixed Use** – On the two large sites at Hind Street and Birkenhead Road (Figure 4.3) the designs have integrated an assumed mix of other uses whilst still achieving the appropriate density as outlined in Figure 3.3. Mixed uses not only help to establish a character for the site and the wider neighbourhood but could also allow the sites to come forward and mitigate the unique constraints of both. This approach to mixed use is also outlined as part of the goal of the Birkenhead Regeneration Framework that covers both sites.

- 4.17 While mixed use schemes can be brought forward as part of the density zone and still achieve the densities set out in Figure 3.3, only densities at the lower end of the scale are likely to be achieved and the net developable residential area is likely to show far higher densities - closer to other sites in zones 1 and 2. Notwithstanding this, the design approach has sought to deliver schemes that have a maximum of 5 storeys.
- 4.18 Site UC1 has a gas distributor facility in the centre of the wider site and moving it would likely be cost prohibitive. Surrounding this with three-storey commercial and retail uses is likely to create a more attractive relationship with the rest of the site and allow more residual land to be developed for residential purposes.
- 4.19 Site W2 is adjacent to bulk liquid storage tanks for the docks. The design therefore proposes the inclusion of commercial development (at no more than 3 storeys) adjacent to the tanks providing a 'buffer' to allow for a more efficient and attractive residential development on the remainder of the site.
- 4.20 While mixed use is a key element of creating attractive, sustainable places (both as outlined in the Framework and the National Design Guide 2019) the need to achieve the high densities proposed should not

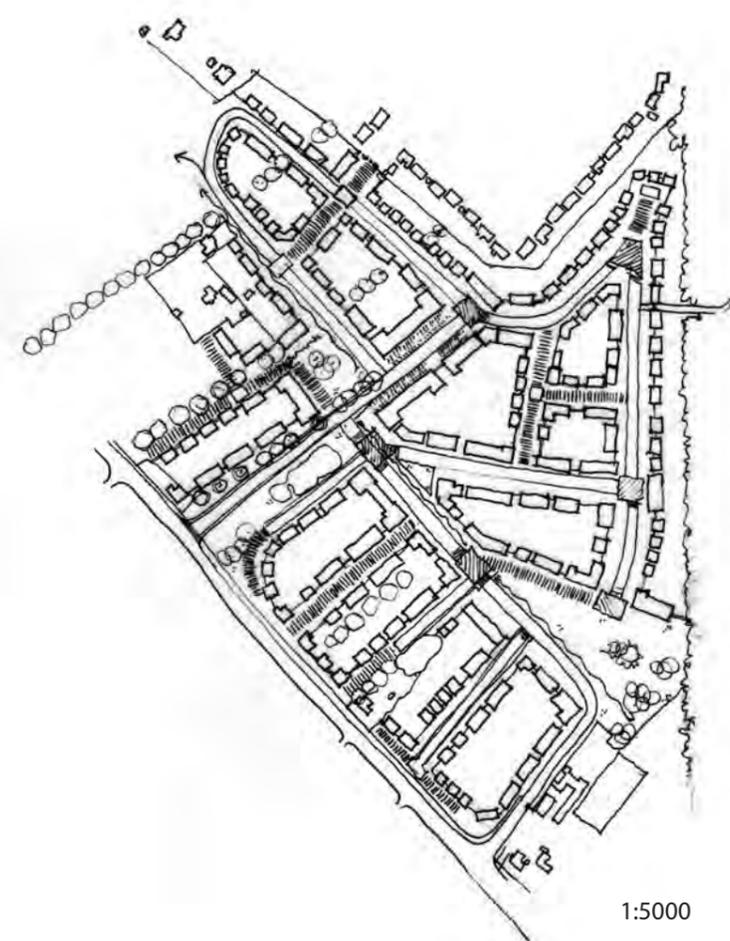
preclude the development of mixed uses within zones 1 and 2. This is so long as this is commensurate with the character and appearance of the high densities being sought. Site-specific policies may therefore need to consider specifying more strictly the nature and scale of these other mixed uses. This could be undertaken through the more detailed work being undertaken as part of the Birkenhead Regeneration Framework.

Sites at the urban edge

- 4.21 The previous paragraphs have set out the result of the work considering the most appropriate densities for sites within the Waterfront and Urban Core zones, finding the scale of densities proposed in chapter 3 of this report to be reasonably sound, subject to certain site specific policy adjustments.
- 4.22 Chapter 3 also suggested that, given the average density of the Borough, sites at the Urban Edge could be expected to deliver similar densities to those within the adjoining suburban zone. This is unless they too could reasonably be considered to fall within a transit zone where higher densities could be considered subject to wider policies in the Local Plan.

- 4.23 Please note that this report does not recommend the need or otherwise for this to occur and this is simply to ensure that should additional sites be required at the Urban Edge (which is not the preferred option for the emerging Local Plan) then an approach to density is considered in line with the approach in existing urban areas.
- 4.24 Figure 4.4 shows the results of the design work for both case study sites where a sensible and typical design approach has been followed. This seeks to provide the typical higher density housebuilder mix of detached, semi-detached, and short terraces, as well as some localised apartment buildings in key locations, to reflect the character of much of the surrounding areas. In many cases this achieves blocks that might otherwise be described overall as being medium density when considered against the recommended density scale set out in Figure 3.3. The overall density on the site would still however be very low – in both cases falling well below 30 dph.

Figure 4.3

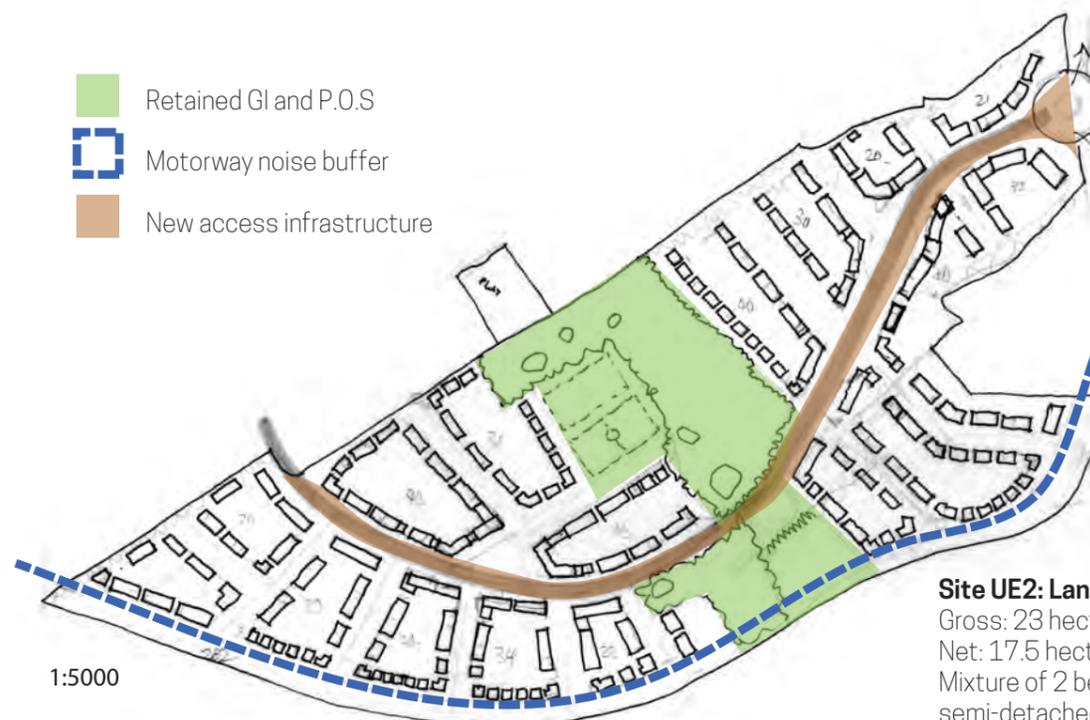


Site UE1: Chester Road, Gayton, Heswall

19 hectares - 490 units - approx. 25dph
 Mixture of 2 bed apartments, townhouses, bungalows & semi-detached and detached houses

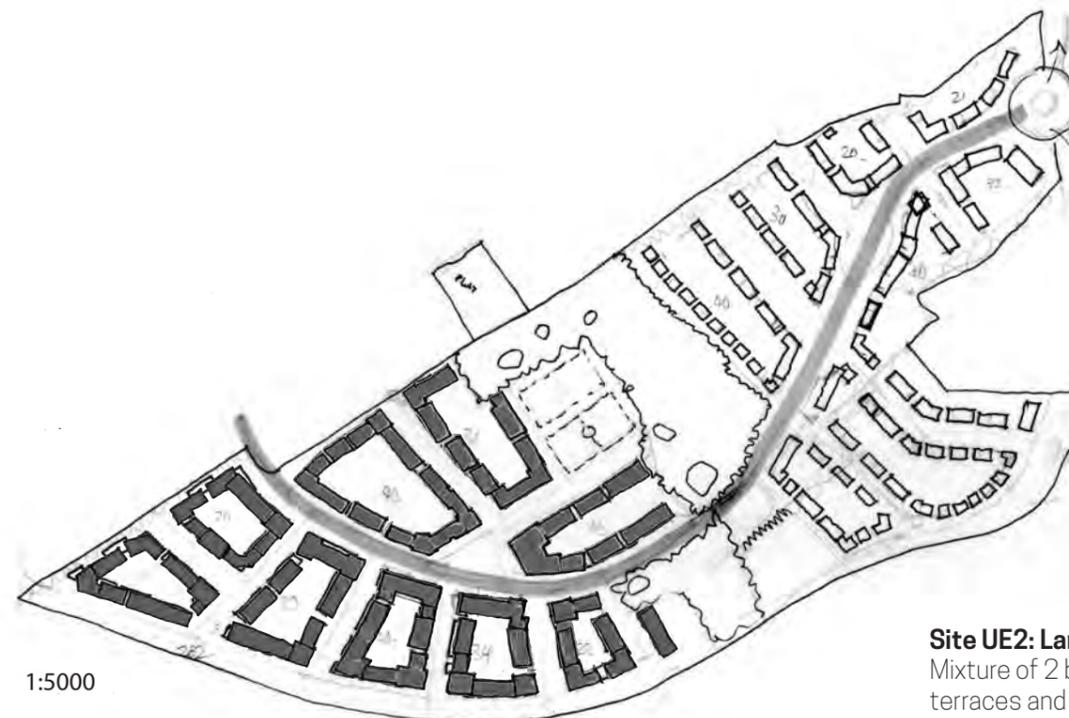
Design Features / measures

- Private space - gardens for houses and shared private space for apartments
- Public space - Large open space, linear park, wildlife area, x2 public squares (playing pitches etc. provided as improvements to adjacent existing park)
- Car parking - One space apartments, two spaces houses
- Amenity / Overlooking - All within typical standards
- Scale - 2 and 3 storeys for homes, upto 4 storeys for apartments



Site UE2: Land south of Eastham

Gross: 23 hectares - 500 units - approx. 21dph
 Net: 17.5 hectares - 500 units - approx 28 dph
 Mixture of 2 bed apartments, townhouses, bungalows & semi-detached and detached houses



Site UE2: Land south of Eastham [Revision]

Mixture of 2 bed apartments, townhouses, terraces and mews - approx 700 units total

This portion of the site redesigned around the same blocks using a different more urban mix allowing high density, infrastructure and green and open space to be delivered

Design approach changed (urban densities) to ensure gross density 30 dph across the site but now challenges the existing local character (Upton / Telford MC / Poundbury density approach)

Understanding these lower densities

- 4.25 There are a number of reasons for this:
- Within both of the Urban Edge case study sites there is a large noise generating piece of infrastructure (the railway and the motorway respectively) that means that dwellings should be setback from one edge of the site and thus the developable area is reduced. Providing other infrastructure such as new access roads (something other urban sites are not often faced with) also further reduces the site area.
 - Within both of the case study sites a significant proportion of existing and mature green and blue infrastructure - including ponds, mature trees and other features - is desirable to retain (both in the context of the landscape led design approach and the guidance in the Framework). This creates an inefficient block form and layout – this is especially the case with case study site UE1 (Chester Road).
 - The provision of public open space and sports and recreational facilities that may be required (based on the ‘Fields in Trust’ approach) further reduces the proportion of the land that would be available for development. Even considering an approach whereby site UE1 transfers some of its requirement to the adjacent playing fields and park (to the north), there is a reduction in the net developable area.

4.26 Figure 4.4 illustrates this within case study site UE2 – Land South of Eastham. In this case, these limitations effectively reduce the developable area of the site to closer to two thirds of the overall site area. Even so, when the density calculation is taken from the ‘net’ developable area, the densities achieved still do not effectively meet the bottom of the density spread proposed for this zone.

4.27 Departing from these clear design principles of integrating green infrastructure and the provision of appropriate open and recreation space would however undermine the delivery of sustainable development in line with the Framework. As a result, there is either a requirement to explore another overall design approach beyond the typical solution, or to accept lower densities on any greenfield release that may occur.

4.28 It is recommended that in developing policies for design and delivery in these areas that the emerging Local Plan considers green infrastructure and provides for sport and recreation carefully. A simple policy requirement for the delivery of higher densities would undoubtedly result in the erosion of these elements. This would be counter to the approach in the Framework.

The ‘urban village’ concept

4.29 As previous paragraphs have suggested, in the urban areas where higher density development could occur - due to their character and the approach taken - it is easier to allow for greater flexibility of different uses and the provision of green infrastructure, within schemes, without impacting on the overall density of development. The Framework does suggest (paragraphs 122 and 123) that a balance would need to be sought between making efficient use of land and reflecting local character – this might include the character provided by the green infrastructure on some sites.

4.30 Paragraph 122e of the Framework suggests that as part of the goal of achieving efficient use of land we should follow the principles of creating well-designed, attractive, and healthy places. In some locations the ‘urban village’ concept may be an appropriate solution. In these cases, a higher ‘urban density’ is delivered on the developable portion of the land – the net developable area, while still providing for other uses as necessary, thus increasing the overall supply of new homes.

4.31 The 'urban village' concept has been around for a number of years, and simply put, delivers a higher density development but with good access to services, public transport, and open space and recreational land. Well known examples include the Upton urban village near Northampton, Poundbury near Dorchester, and the Telford Millennium Community. All have taken very different aesthetic approaches in delivering the new townscape (a traditional vernacular in Poundbury and an ultra-modern approach in Telford) but all have a strong green network and high density design whilst still providing a range of different types and sizes of new dwellings.

4.32 The approach has perhaps three design components that are intrinsic to allowing higher density:

- Private motor-vehicle parking is significantly reduced, thus saving space within the urban environment and streets. This is replaced by high quality, frequent public transport, and small internal parking courts.
- Private amenity space is limited in some locations, especially in apartments, to be replaced by a higher proportion of shared publicly accessible greenspace and more green infrastructure within the streetscape.

- Traditional amenity and overlooking distances are reduced. In some cases front to front distances are as little as 16 metres from habitable room to habitable room, which allows more area for an increase in the amount of built form within a site. This matter will require further consideration as part of detailed policy development, however these distances are more 'urban in character'. Many of the existing higher density areas (e.g. the Borough's terraced streets) already do not meet the current adopted standards.

4.33 The final image in Figure 4.4 shows the western edge of the case study site UE2, being overlaid with an urban block form similar to that found in Upton, near Northampton. This almost doubled the density of development that can be achieved within the net area – to around 45 – 50 dph - allowing an overall density on these sites to make more effective use of the land.

4.34 Considering the three design components outlined in paragraph 4.32 it would make sense that any measure of density be considered over the net developable areas of any site released. This would allow for each site to be considered on a site by site basis using an assumed 30 – 40% reduction of the net site area. Even so, in order to deliver the most efficient use of land when developing sites adjacent to public transport (adjacent to the Transit zone 3), delivering the densities towards the top of the density scale outlined in Figure 3.3 would be recommended.

4.35 The drawback of this approach is clear, insofar as it cannot be delivered by a traditional housebuilder response, using detached and semi-detached units, and requires a more effective and co-ordinated urban design led response from the Local Planning Authority. In all three of the cases mentioned, national housebuilding agencies and single landowners have helped to provide a vision for these sites and to ensure consistency. In the absence of these types of land promoters the Local Planning Authority would have to fulfil this role through carefully enforced detailed policies and the preparation of site-specific design guidance.

5. Neighbourhood densification

- 5.1 Six neighbourhood areas have been analysed and opportunities for densification explored. These neighbourhoods are located within the Transit Density zone and the Suburban Density zone, see list below:

Transit Stop Neighbourhoods

- TS1 - Rock Ferry
- TS2 - West Kirby
- TS3 - Bromborough

Suburban Neighbourhoods

- S1 - Heswall
- S2 - Seacombe
- S3 - Moreton

Transit Stop Neighbourhoods

- 5.2 Each of the neighbourhoods within this section are centred on a railway station. They cover a 1km radius from each station as a reasonable distance that someone would walk from their home to access a railway service.
- 5.3 Due to the location of a station within these neighbourhoods their character varies from the suburban neighbourhoods. They tend to have a greater mix of land uses and have some uses which are directly as a result of the railway – for example public houses, railway cottages and general railway land.

TS1 - Rock Ferry (Figure 5.1)

- 5.4 Rock Ferry is a mixed neighbourhood with a range of retail commercial and community land uses. However, the neighbourhood is made up mainly of housing and of that housing the majority is terraced and of Victorian construction. The result of this is that the existing housing stock offers few opportunities for densification, particularly within the tightly knit terraced streets near the railway station.
- 5.5 However, areas around existing properties and commercial and 'other' land uses do provide some opportunities. The neighbourhood has a number of left over pieces of land, many of which are grassed but serve no recreational or amenity purpose. These are marked as 'other' on the land use analysis map. Some of these pieces of land are fenced off and offer no public access or are currently being used for surface car parking.
- 5.6 Rock Ferry has some examples of particularly challenging disused or underused land, such as the Bryne Avenue Baths. This is a large site within an existing residential area; however, the building is listed and makes a significant contribution to local character and cultural heritage. This type of heritage asset is common in neighbourhoods to the east of Wirral and represents an opportunity for increased density. This is only the case though if appropriate and viable redevelopment strategies can be formulated to convert these buildings to residential use without harming their contribution to local heritage and character.
- 5.7 Some densification has already taken place in Rock Ferry. These tend to involve the use of small sites for apartments. There certainly is scope for increased provision of apartments within the area, particularly in close proximity to the railway station. Apartments have also been provided through the subdivision of large Victorian villas. When these are on large plots amenity space and parking can be provided.
- 5.8 In summary, the greatest opportunities within Rock Ferry for densification are as follows:
- Left over land from historic social housing developments
 - Derelict sites and buildings
 - Subdivision and redevelopment of large houses, if they can be no longer retained
- 5.9 In all the above cases, there should be a presumption in favour of apartments of two to four storeys in height.

Figure 5.1



KEY

- Opportunities for increased density
- Past increases in density
- Retail use
- Transport related use
- Terraced housing
- Semi-detached housing
- Detached housing
- Apartments (includes extra care)
- Places of worship
- Other misc.
- Public open space
- Community or civic use
- Listed building

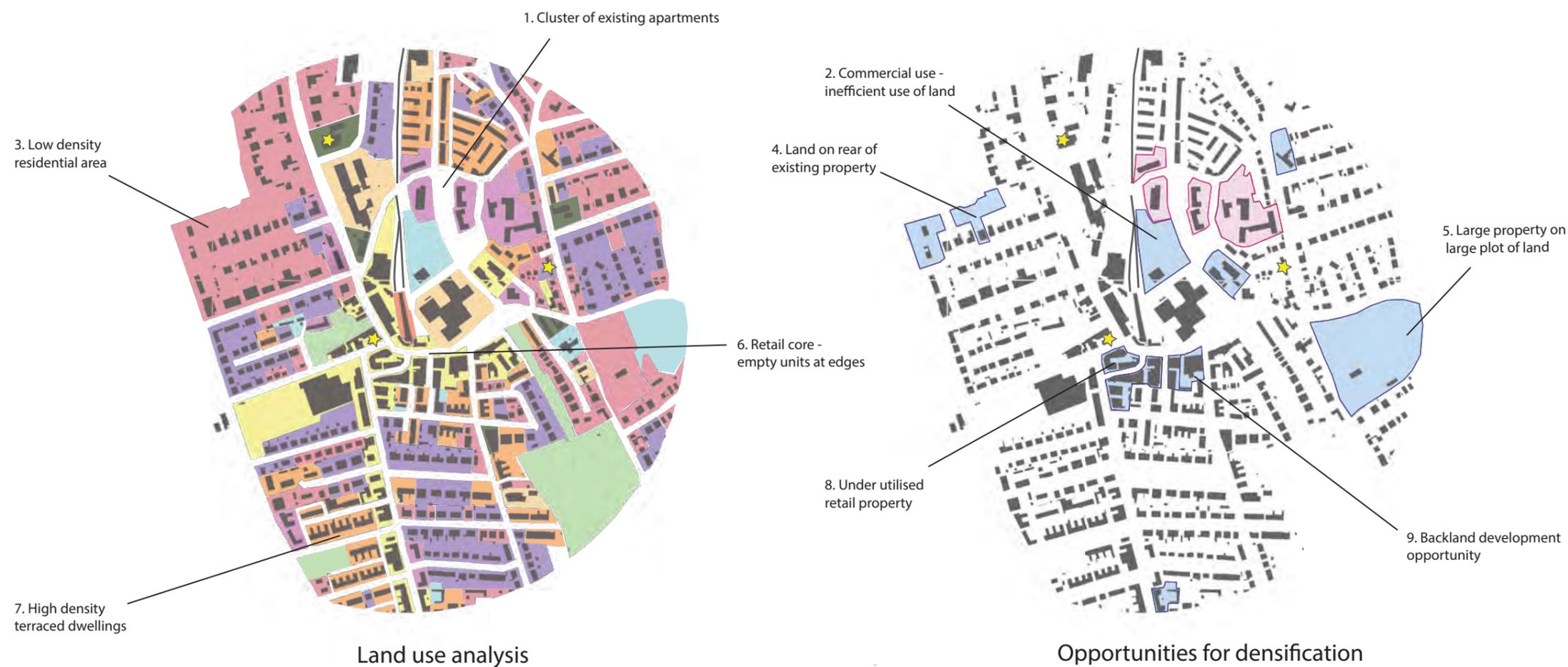


TS2 - West Kirby (Figure 5.2)

- 5.10 West Kirby is one of the largest settlements in the Borough, its centre is diverse with a good mix of uses and types of building. The town centre has a high level of retail activity concentrated around the railway station.
- 5.11 The town centre is full of high quality Victorian architecture. To the west of the railway station, housing is a mix of detached, semi-detached, terraced, and the occasional larger property subdivided into apartments. To the east of the railway station are lower density properties, mostly detached and semi-detached interspersed with apartment blocks – some of which are relatively new developments.
- 5.12 Opportunities for densification in West Kirby are quite diverse. Within the town centre a number of retail units are empty, a large number at first floor level. These spaces provide opportunities for residential use, particularly towards the periphery of the town centre, for smaller 1 and 2 bedroom units. Whilst parking might be an issue these premises offer excellent access to the rail and bus network and reduced parking provision could be justified.
- 5.13 Also close to the town centre are areas of mixed commercial land which may in time become available as windfall. Surface level parking associated with these uses also offer an opportunity for redevelopment. Apartments would be appropriate, particularly to the north of the railway station. Additional land is available to the rear of many existing low density detached properties.
- 5.14 In summary, the greatest opportunities within West Kirby for densification are as follows:
- Backland development (development of plots behind the building line) within the town centre
 - Backland development (to include plot subdivision, garden subdivision and development behind the building line) within low density residential areas
 - Reuse of empty retail units at ground and particularly at first floor level and above
 - Former commercial town centre edge sites where the small scale nature of the sites does not no allow for effective use of these sites as originally constructed, in line with densities in Figure 3.3
- 5.15 Provision of smaller units should be the focus within town centre locations and parking standards should be relaxed, in the most accessible areas or where on-street parking would not hinder highways safety. Within existing low density residential areas smaller units could be provided in maisonettes or terraced units or even, if deemed appropriate as small bungalows which have less impact on neighbouring amenity given the scale.

Figure 5.2

West Kirby



KEY

- | | |
|---|--|
| ■ Opportunities for increased density | ■ Apartments (includes extra care) |
| ■ Past increases in density | ■ Places of worship |
| ■ Retail use | ■ Other misc. |
| ■ Transport related use | ■ Public open space |
| ■ Terraced housing | ■ Community or civic use |
| ■ Semi-detached housing | ★ Listed building |
| ■ Detached housing | |



TS3 – Bromborough (Figure 5.3)

- 5.16 Bromborough is a suburban neighbourhood served by a railway station and thus falls into the Transit Stop density zone. The area is dominated by detached and bungalow dwellings at a very low density.
- 5.17 Around the railway station is a small cluster of retail uses and some apartments. These apartments have been built on what would have historically been large plots serving a single detached dwelling. Over time these have been replaced with apartment blocks or small pockets of multiple dwellings. This pattern can be seen on the opportunities for densification map.
- 5.18 Towards the periphery of the 1km radius is a former school site and playing fields. Sites such as these provide the opportunity for larger scale residential developments and in such close proximity to a railway station should be promoted for higher densities than the surrounding existing units.
- 5.19 Opportunities for densification also occur within the existing low density parts of the neighbourhood. Some existing properties sit on large plots which could be subdivided – there are already some examples of this having taken place historically. Larger dwellings can be demolished and replaced with a greater number of units. Larger dwellings which are listed could be subdivided to provide more units whilst retaining the contribution to local character.
- 5.20 In summary, the greatest opportunities within Bromborough for densification are as follows:
- Reuse of vacant sites for larger scale development (subject to achieving an uplift in density in accordance with Figure 3.3)
 - Backland development (behind the building line) in large gardens
 - Subdivision of plots to provide one and two dwellings in large side gardens of existing dwellings
 - Subdivision or redevelopment of larger dwellings into apartments or a greater number of units
- 5.21 Provision of smaller units should be the focus within town centre locations and parking standards should be relaxed. Within existing low density residential areas smaller units could be provided in apartments, maisonettes or terraced units.

Figure 5.3



KEY

- | | |
|---|--|
| ■ Opportunities for increased density | ■ Apartments (includes extra care) |
| ■ Past increases in density | ■ Places of worship |
| ■ Retail use | ■ Other misc. |
| ■ Transport related use | ■ Public open space |
| ■ Terraced housing | ■ Community or civic use |
| ■ Semi-detached housing | ★ Listed building |
| ■ Detached housing | |



Transit Stop Neighbourhoods

S1 - Heswall (Figure 5.4)

- 5.22 The suburb of Heswall has a centre with a successful high street with a good retail offer. To the north of this centre is an area of largely semi-detached and bungalow dwellings. These vary in density but in general are to the lower end of the density scale for the Borough.
- 5.23 Heswall already contains some good examples of how an area can be densified. This is due to the strong demand for housing which makes such schemes profitable to explore.
- 5.24 Some of the most interesting sites are located on the edge of the centre. Instances include the demolition of a pub and erection of apartments, the redevelopment of larger dwellings and backland development making use of the area's large rear gardens.
- 5.25 Opportunities within the area are still apparent, including commercial backland and car sales premises with a large land take for such a central position.
- 5.26 The prevalence of bungalows on large plots also offers the opportunity for demolition and intensification. Those with the highest potential are located within areas of semi-detached and other higher density uses.
- 5.27 In summary, the greatest opportunities within Heswall for densification are as follows:
- Backland development (either on side gardens or in large rear gardens of some plots)
 - Demolition and subdivision of plots (particularly those occupied by large bungalows)
 - Redevelopment of commercial land, particularly in areas adjacent to the retail centre
- 5.28 Provision of smaller units should be the focus. Apartments are most appropriate within locations nearer to the existing high street. Within existing low density residential areas smaller units could be provided in maisonettes, semi-detached or terraced units, or smaller bungalows where this is appropriate.

Figure 5.4



KEY

- Opportunities for increased density
- Past increases in density
- Retail use
- Transport related use
- Terraced housing
- Semi-detached housing
- Detached housing
- Apartments (includes extra care)
- Places of worship
- Other misc.
- Public open space
- Community or civic use
- ★
 Listed building



S2 - Seacombe (Figure 5.5)

- 5.29 Seacombe has the highest existing built form density of all the neighbourhoods analysed and in some ways the least scope for densification. However, opportunities do exist due to the level of vacancy within the high street and some associated dereliction.
- 5.30 The dominant housetype is Victorian terraced dwellings arranged on a narrow uniform grid. There is very little provision of public open space but a plethora of community and civic facilities in varying levels of use.
- 5.31 The high street in Seacombe has a very high rate of empty retail and commercial units. A large number of these have already been converted to residential use at ground, first and second floor. There is the opportunity to encourage this change of use more deliberately and to nurture a more concentrated retail core.

5.32 There has been intervention in the area through demolition of terraced properties and construction of apartments and terraced properties for social housing. These developments vary but many do not represent an efficient use of land often being at a lower density than the surroundings. Demolition has resulted in pockets of unused land around the neighbourhood. Some backland commercial premises also offer the opportunity for redevelopment.

- 5.33 In summary, the greatest opportunities within Seacombe for densification are as follows:
- Change of use from retail to residential use on the high street and utilisation of first floors and above, coupled with a concentration of the retail area
 - Re-development of derelict and vacant land including sites that are publicly accessible but have little or no use value, using the local character and the densities set out in Figure 3.3
 - Promotion of apartments on sites able to accommodate such intensification of use

5.34 Provision of smaller units should be the focus, with some apartments on sites which are large enough. Careful control of the high street should be implemented to ensure a viable retail core remains.

Figure 5.5



KEY

- | | |
|-------------------------------------|----------------------------------|
| Opportunities for increased density | Apartments (includes extra care) |
| Past increases in density | Places of worship |
| Retail use | Other misc. |
| Transport related use | Public open space |
| Terraced housing | Community or civic use |
| Semi-detached housing | Listed building |
| Detached housing | |



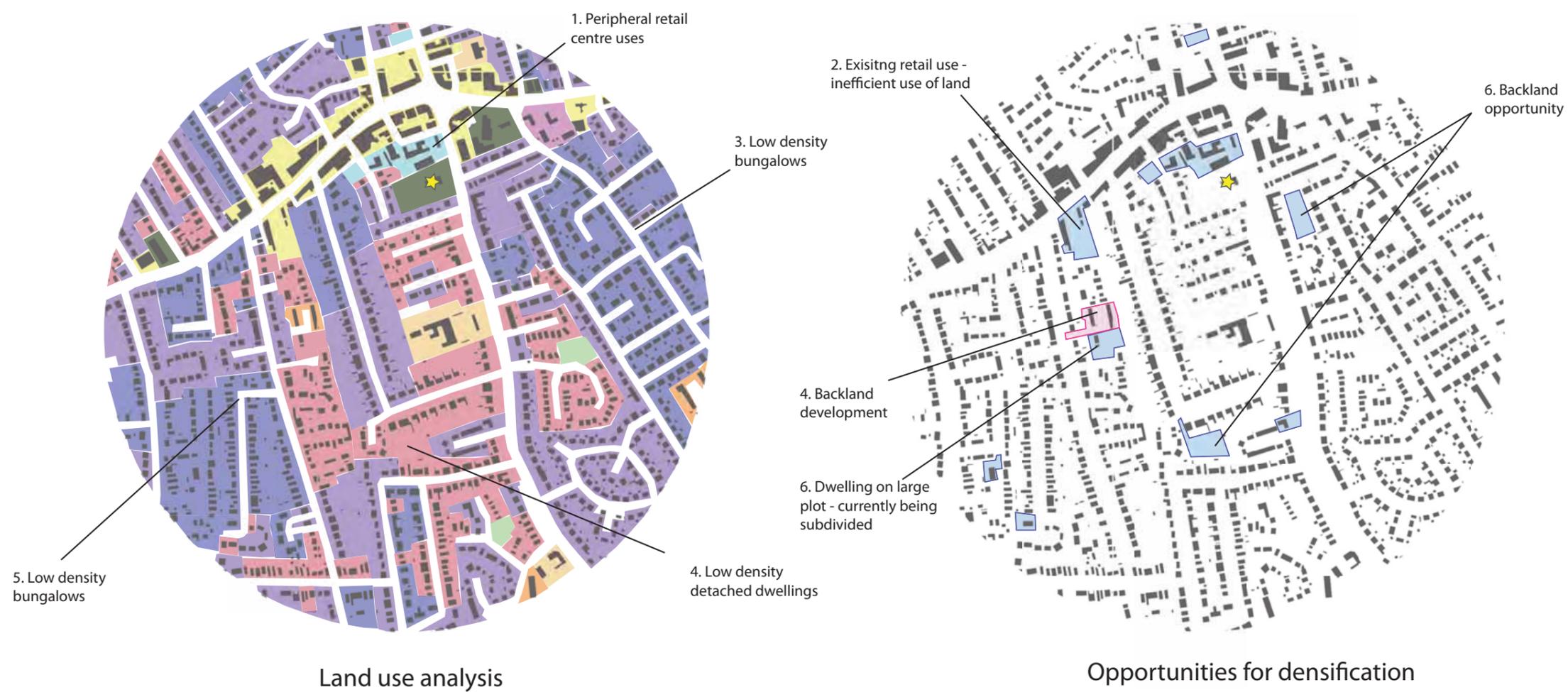
S3 - Moreton (Figure 5.6)

- 5.35 Moreton has the most suburban character of the three selected neighbourhoods in the Suburban Density zone. It is dominated by detached, semi-detached and bungalow properties all with large rear, and sometimes large front, gardens.
- 5.36 Some instances of subdivision have taken place with some of the larger Victorian villas divided into apartments. The redevelopment of side and rear gardens to provide new dwellings has taken place but many more opportunities exist for this type of densification.

- 5.37 Around the retail core peripheral sites are underused or inefficiently used. Surface car parking is common in this category. Units above shops could also provide scope for increases in density.
- 5.38 The dominance of bungalows is the biggest contributor to the area's low density. This could gradually be changed by permitting the subdivision of large plots or the demolition of multiple plots to provide apartments or semi-detached dwellings.
- 5.39 In summary, the greatest opportunities within Moreton for densification are as follows:
- Subdivision of larger properties to apartments
 - Backland development of rear gardens, or the redevelopment of large, low density bungalows into higher density developments
 - Redevelopment of surface level car parks/inefficient serviced retail units
 - Utilisation of space above retail units for small dwellings

- 5.40 Close to the retail centre higher density development such as apartments should be encouraged. Around the retail centre and the areas of large Victorian villas, a higher number of storeys would not harm local character and should be encouraged.

Figure 5.6



KEY

- Opportunities for increased density
- Past increases in density
- Retail use
- Transport related use
- Terraced housing
- Semi-detached housing
- Detached housing
- Apartments (includes extra care)
- Places of worship
- Other misc.
- Public open space
- Community or civic use
- Listed building

Summary of recommendations

5.41 The analysis of these neighbourhoods has led to the following broad conclusions and recommendations. Some of these comments are more appropriate within certain neighbourhoods and this will be noted. However, there are some general points which apply to all density zones.

- Parking standards should be reduced in the Transit Density zone, where highways safety will not be compromised
- Parking standards should be reduced in Suburban Density zones where they are within 1km of an active high street
- Subdivision of plots should be encouraged across the board. This includes backland development of gardens, side gardens and redevelopment of larger properties to provide a greater number of smaller units, where they are not suitable to be converted or retained, subject to their contribution to local character

- The subdivision of larger properties or buildings into apartments should be encouraged and the need for lower levels of parking explored
- Surface level car parks should be evaluated and their potential to contribute higher density residential development explored, subject to any impact on highways safety
- A preference should be established for apartments on larger sites within 1km of a railway station or in areas served by high frequency bus services
- Backland commercial or disused plots should be utilised for housing, particularly around the town centre
- Disused retail units and especially underutilised space on upper floors should be encouraged into residential use

5.42 Disused land (not designated or actively used open space) with no public value to be redeveloped at high densities, preferably apartments.

6. Overall conclusions from the stage 3 and 4 report

Density and policy making

- 6.1 As an overriding conclusion it is clear that Wirral has areas that are, or could be, built to densities higher than the 30 dwelling per hectare. Evidence provided on past planning permissions (see stage 1 and 2) as well as the calibrated density scale as part of stage 4 (Figure 3.1) show that on average densities are already higher in many places in the Borough. The opportunity therefore exists to ensure that the use of higher densities is maximised as part of any strategy for housing delivery in the Wirral Local Plan. This approach is entirely in line with paragraph 137b of the Framework.
- 6.2 There is also a clear opportunity to follow an approach to densification based on walking, cycling and high frequency public transport links. This approach is entirely in accordance with guidance set out in chapter 11 of the Framework.
- 6.3 The formalisation of the density zones set out in stage 3 though Local Plan policy clearly provides the greatest opportunity to make sure that density is delivered in a responsible and balanced way. The further work that has been undertaken as part of stage 4 shows how the opportunities that do exist can be maximised but this needs to be balanced against matters of character and design on a range of issues from amenity, to public and private space and the provision of car parking.
- Recommended approach to density and design policies**
- 6.4 Table 4 has been developed in order to draw together all of the findings and recommendations made within stage 3 (setting of the density zones) and stage 4 (setting the density approach) in order to provide a clear direction for the policies that might form part of the emerging Local Plan. It is clear that some form of policy regarding the operation and implementation of minimum densities, within each of the density zones, would be required in the Local Plan if the recommendations of the reports are to be followed and high quality placemaking safeguarded.
- 6.5 Table 4 is arranged in three parts; **the opportunity, the approach and the policy** (further detailed provided below), based around each of the five density zones. The table provides specific guidance for each density zone as well as including consideration of an approach to built-up areas that are not currently identified within any density zone. At this stage it should be noted that this table is not an adopted policy. The table seeks to bring together the conclusions and evidence and each element of it is described in the following three paragraphs.
- 6.6 **The Opportunity** - for each of the five density zones identified in this report, the opportunities for increasing densities has been considered and set out. Some of this justification comes from the rationale behind the designation of the zone as part of the work in stage 3, highlighting access to shops, services and public transport. Further detail to support it has been provided from our own detailed site work as well as other studies such as the most recent version of the Council's SHLAA and the Birkenhead Regeneration Framework (BRF). This section of the table also links this with the currently existing density spread for the area taken from Figure 3.3.

6.7 **The Approach** – The second element of the table seeks to provide some overarching thought about the nature and approach that may be taken to developments that come forward within these density zones. The first part based on the site visits, the SHLAA and the BRF sets out the characteristics of suitable development sites such as size. These have been paired with both a minimum density (where this is relevant) and the type of dwellings that could be used to achieve these densities on these sites. This of course makes reference to the design work undertaken for both the sites and neighbourhoods as part of stage 4, coupled with reference to the past permissions that have already been delivered as set out (in the stage 1 and 2 report).

6.8 **The Policy** – The final aspect of this work is to consider the role of design policies in delivering these higher densities. These conclusions are based not only on the findings of the stages 3 and 4 reports but also on a number of discussions with local planning officers and the design team developing the BRF to ensure that any recommendations are triangulated and robust. In addition, bringing forward these policies may also have implication for the wider range of policies within the Local Plan beyond those simply associated with density and these are highlighted for further consideration.

Next steps

- 6.9 Table 4 draws together the findings to date and organises them in such a way as to provide the recommended basis for policy making. Whilst Table 4 does not include specific policies, it is clear to see how a series of policies based on the density zones, or the size and nature of development proposals could be developed to integrate aspirations for higher densities and densification within the Wirral Local Plan. Table 4 can also be used to reinforce considerations regarding density and capacity of sites within the future development of the SHLAA.
- 6.10 Where appropriate Table 4 could also be used to inform specific details regarding the allocation of key strategic sites or the development of a Supplementary Planning Document on density and design akin to the Manchester’s Residential Quality Guidance or the Croydon Densification SPD that is referenced in the earlier stage 1 / 2 report.

Table 4 - Recommended approach to densities

The Opportunity			The Approach			The Policy	
Density Zone	Description of zone and opportunities	Density range (dph) from the scale	Recommended site or development type to be favoured by policies developed (those highlighted are a densification approach)	Recommended housing types and mix based on meeting SMHA identified need (may be part of a wider mix of uses)	Minimum net density (where site based)	Role of the design and density policies	Wider policy considerations or caveats
Waterfront	This zone is within five minutes walk of the principal waterfront which includes areas overlooking the Mersey, the Liverpool WHS and the former Birkenhead Docks. Some of this area is the subject of ongoing planning applications and the character will change over the next 20 years. Small and medium sites are common either as already cleared sites or underutilised yards, parking or low end storage uses. All of this area falls within the Birkenhead Regeneration Framework where there are number of sites that are already being promoted for mixed use development.	70 and above	Large site (over 2 hectare)	1 / 2 / 3 bed apartments, 2 / 3 bed townhouses & terraces	90	Opportunity to deliver the widest range of housing types and natures including mixed use as well as C2 and C3 accommodation. Focus on multi-generational living. Should include additional public open space and high quality public realm to relax private / personal space required. Parking standards relaxed but expectation for exploration of car clubs and shared transport. Contributions could be sought for public transport. Internal amenity distances could be reduced, but not to external dwellings or uses.	Allow 1 bed in these areas only as part of a mix of larger apartments in order to ensure that developments are not mono-cultured and that the housing need is met for larger properties. Could suggest that density of dwellings be relaxed if additional leisure or open space is proposed as part of a scheme.
			Small site (less than 2 hectare)	1 / 2 / 3 bed apartments, 2 / 3 bed townhouses & terraces	70	Must include private or shared private amenity space, but public space should be reduced / off-set. Parking can be relaxed but the approach should not rely on parking in surrounding streets. Internal amenity distances could be reduced, but not to external dwellings or uses. Mixed types is encouraged but not required on these sites.	Allow 1 bed in these areas only as part of a mix of larger apartments. Explore contributions for open space, public transport and public services for these sites.
			Conversions (of existing buildings)	Various - but may resist the loss of 3 / 4 bed family homes		There are few possibilities in this area, however those that are not necessarily suitable for residential conversion - some being heritage assets also. Design criteria about the suitability for conversion should be considered as part of the policy without substantial modification. Bin storage must be included as an important design criteria.	Must ensure that modest family homes are not the focus for conversion.
			Use of upper floors (above employment / retail)	1 / 2 bed apartments		Would require a relaxation of parking standards and provision of private and communal amenity space for these sites. Bin storage must be included as an important design criteria.	Explore contributions in lieu of open space and parking to ensure provision of public transport and local parks.
Urban Core and Town Centres	This zone includes the main town centres of Birkenhead, Liscard, Heswall, Moreton and West Kirby and a sensible walking distance from them. These town centres have a number of small and medium sites within them (Birkenhead having some large sites also) many of which have an existing or former industrial or commercial use. Upper floors in many of the town centres are underutilised. The surrounding townscape is often suburban in character and therefore some forms of densification could occur where there is good access to shops, services and facilities. Much of the area adjacent to Birkenhead is also within the Birkenhead Regeneration Framework area where a number of sites and opportunities are already being promoted.	60 and above	Large site in Birkenhead (over 2 hectare)	2 / 3 bed apartments, 3 / 4 bed townhouses & terraces	70	Opportunity to deliver the widest range of housing types and natures including mixed use as well as C2 and C3 accommodation. Should limit the use of 1 bed apartments in these areas. Focus on multi-generational living. Should include additional public open space and high quality public realm to relax private / personal space required. Parking standards relaxed but expectation for exploration of car clubs and shared transport. Contributions could be sought for public transport. Internal amenity distances could be reduced, but not to external dwellings or uses.	Explore contributions in lieu of open space and parking to ensure provision of public transport and local parks.
			Small site in Birkenhead (less than 2 hectare)	2 / 3 bed apartments, 2 / 3 bed townhouses & terraces	60	Small sites rarely provide new streets and often have little space for open space and public realm. They should focus closely on integrating with surrounding street network and ensuring surveillance and activity. Contributions for off site provision of public space could be sought but development must have shared or private spaces for residents.	Explore contributions for open space from development of this site.
			Site in Town Centre (including redevelopment) or adjacent to town centres	2 / 3 bed apartments, 2 / 3 bed townhouses & terraces	60	Car parking could be relaxed in these locations, as could the need to provide open space and public realm. Relaxation of amenity distances (increases in storeys may be appropriate where they replace previous based neighbour uses). Planning permissions should support mixed uses within the boundaries of town and district centres with residential on upper floors.	Explore contributions for open space from development of this site. Requirement to maintain active ground floor uses of retail, commercial or leisure.
			Conversions (of existing buildings)	Various - dependent on host building		Conversions are likely to favour apartment living needs to ensure that appropriate internal space is provided for residents and that semi-private or private space could be provided as part of schemes. Car parking requirements could be relaxed in this zone. Bin storage must be included as an important design criteria.	Must ensure that modest family homes are not the focus for conversion.
			Use of upper floors (above employment / retail)	1 / 2 bed apartments		Would require a relaxation of parking standards and provision of private and communal amenity space for these sites. Bin storage must be included as an important design criteria.	Explore contributions for open space in lieu of parking to ensure public transport and local parks. Noise needs to be considered including appropriate noise insulation.

Table 4 - Recommended approach to densities *CONTINUED*

The Opportunity			The Approach			The Policy	
Density Zone	Description of zone and opportunities	Density range (dph) from the scale	Recommended site or development type to be favoured by policies developed (those highlighted are a densification approach)	Recommended housing types and mix based on meeting SMHA identified need (may be part of a wider mix of uses)	Minimum net density (where site based)	Recommended non-standard design principles	Other planning considerations or caveats
Transit stops	These areas are all within 10 minutes walk of a railway or transit stop or along a high frequency bus route that offers a night service. As a result, whilst direct access to shops and services is more limited than the in other zones these areas can easily be accessed. In these areas there are a number of small and medium sized sites that can contribute to housing delivery, as well as a range of densification options including infill sites, plot sub-division and backland developments. A number of larger Edwardian and Victorian properties (often near railway stations) are also possible candidates for sub-division and conversion to smaller units subject to any impact on local character.	50 - 75	Development site (vacant or underutilised site)	2 / 3 bed apartments, 2 / 3 bed townhouses & terraces, C2 and C3 uses	50	Small sites rarely provide new streets and often have little space for open space and public realm. They should focus closely on integrating with surrounding street network and ensuring surveillance and activity. Contributions for off site provision of public space could be sought but development must have shared or private spaces for residents.	Explore contributions in lieu of open space and parking to ensure provision of public transport and local parks.
			Conversions (of existing buildings)	Various - but may resist the loss of 3 / 4 bed family homes		Conversions are likely to favour apartment living and therefore there is a need to ensure that appropriate internal space is provided for residents and that appropriate semi-private or private space could be provided as part of schemes. Car parking requirements could be relaxed in this zone. Bin storage must be included as an important design criteria.	Must ensure that modest family homes are not the focus for conversion. Care should be taken when considering this as part of heritage assets - may need integrated caveat.
			Use of upper floors (above employment / retail)	1 / 2 bed apartments		Would require a relaxation of parking standards and provision of private and communal amenity space for these sites. Bin storage must be included as an important design criteria.	Explore contributions for open space in lieu of parking to ensure public transport and local parks. Noise needs to be considered including appropriate noise insulation.
			Redevelopment or subdivision of large plot	Short terraces (2 / 3 bed), 3 / 4 bed semi-detached or 2 bed bungalows		Whilst minimum density for the zone should be the target there may need to be some flexibility given that they fit within surrounding townscape and within residential areas. Parking requirements could be relaxed.	Must ensure that modest family homes are not the focus for subdivision, but larger homes may have some heritage value so this ought to form part of the wider policy consideration.
			Backland development in large rear garden	2 / 3 bed detached houses or bungalow		Design must reflect the requirement for amenity distances and local character. Whilst density will increase, scale, mass, proportion and architectural detailing will allow new infill to assimilate into neighbourhoods. Parking, service and bin storage should be included as an important design criteria.	Need to review amenity distances and arrive at appropriate minimums. Could make a decision to favour bungalows over other types as they have less amenity impact and are suited to constrained sites.
Suburban	This zone covers areas that, whilst some distance from town centres and transit stops, do still have some good access to a range of community facilities (particularly schools) and have the ability to be within walking distance of district and local shopping opportunities. In these areas much of the area is already fully developed but there are some opportunities for 'densification' through backland sites, infill sites, conversions and even plot sub-division on larger properties subject to impact on local character.	30 - 60	Redevelopment or subdivision of large plot	Short terraces (2 / 3 bed), 3 / 4 bed semi-detached or 2 bed bungalows		Whilst minimum density for the zones should be the target there may need to be some flexibility given that they fit within surrounding townscape and within residential areas. Parking, service and bin storage should be included as an important design criteria.	Must ensure that modest family homes are not the focus for subdivision, but larger homes may have some heritage value so this ought to form part of the wider policy consideration.
			Backland development in large rear garden	2 / 3 bed detached houses or bungalow		Design must reflect the requirement for amenity distances and local character. Whilst density will increase scale, mass, proportion and architectural detailing will allow new infill to assimilate into neighbourhoods. Parking, service and bin storage should be included as an important design criteria.	Need to review amenity distances and arrive at appropriate minimums. Could make a decision to favour bungalows over other types as they have less amenity impact and are suited to constrained sites.
			Infill development (including corner plots)	2 / 3 bed detached houses or bungalow		Design must reflect the requirement for amenity distances and local character. Whilst density will increase scale, mass, proportion and architectural detailing will allow new infill to assimilate into neighbourhoods. Parking, service and bin storage should be included as an important design criteria.	Need to review amenity distances and arrive at appropriate minimums. Could make a decision to favour bungalows over other types as they have less amenity impact and are suited to constrained sites.
			Conversions (of existing buildings)	Various - but may resist the loss of 3 / 4 bed family homes		Conversions are likely to favour apartment living and therefore there is a need to ensure that appropriate internal space is provided for residents and that appropriate semi-private or private space could be provided as part of schemes. Car parking requirements could be relaxed in this zone. Bin storage must be included as an important design criteria.	Must ensure that modest family homes are not the focus for conversion. Care should be taken when considering this as part of heritage assets - may need integrated caveat.

Table 4 - Recommended approach to densities *CONTINUED*

The Opportunity			The Approach			The Policy	
Density Zone	Description of zone and opportunities	Density range (dph) from the scale	Recommended site or development type to be favoured by policies developed (those highlighted are a densification approach)	Recommended housing types and mix based on meeting SMHA identified need (may be part of a wider mix of uses)	Minimum net density (where site based)	Recommended non-standard design principles	Other planning considerations or caveats
Urban Edge	Inclusion in this table is not intended to endorse or promote the release of greenfield sites outside the existing urban area however, should they be required to be brought forward as part of a housing strategy, this provides density guidance to ensure that the most efficient use of land is brought forward. Some of the areas have the possibility of being within 1km or 10 - 15 minutes walk of a transit stop and so densities should reflect the opportunity for higher density.	30 - 60	Area within 1km of a transit stop	2 / 3 bed apartments, 2, 3 and 4 bed townhouses & terraces	45	These density targets are net and therefore do not include any provision for open space, public services or key transport connections and infrastructure which should be separated from the density calculation.	These would benefit from having specific policies if such sites are required. Detailed design and development SPDs are recommended for any such sites released to ensure that opportunities and constraints are effectively considered as well as the demands for public services, facilities and open space.
			Area beyond 1km of a transit stop	3 / 4 bed townhouses and semi-detached and 2 / 3 bed apartments and bungalows	30	These density targets are net and therefore do not include any provision for open space, public services or key transport connections and infrastructure which should be separated from the density calculation.	
Areas not covered by a zone	There are a number of areas not covered by density zones. These are more remote from shops, services and public transport and are not therefore areas that should be subjected to higher densities or densification. However these are often suburban housing areas where conversions and infill development is a possibility and occasionally small sites will come forward, any proposals should be required to at least meet the minimum density for the density scale, subject to impact on local character and access to public transport and local facilities. Existing design and density controls should only be retained within these areas where they are up-to-date and can be demonstrated to comply with the principles set out within the Framework and these wider recommendations.	30	Small and medium sites		30	Higher densities could be allowed where these are part of a mixed use scheme or deliver a range of different specialist or required housing types (i.e. bungalows, affordable housing etc.).	Should cover any site or development within the Borough to ensure that low density is not perpetuated - a general catch all.
			Conversions (of existing buildings)	Various - but may resist the loss of 3 / 4 bed family homes		Conversions are likely to favour apartment living and therefore there is a need to ensure that appropriate internal space is provided for residents and that appropriate semi-private or private space could be provided as part of schemes. Car parking requirements could be relaxed in this zone. Bin storage must be included as an important design criteria.	Must ensure that modest family homes are not the focus for sub-division, but larger homes may have some heritage value so this ought to form part of the wider policy consideration.
			Infill development (including corner plots)	2 / 3 bed detached houses or bungalow		Design must reflect the requirement for amenity distances and local character. Whilst density will increase scale, mass, proportion and architectural detailing will allow new infill to assimilate into neighbourhoods. Parking, service and bin storage should be included as an important design criteria.	Need to review amenity distances and arrive at appropriate minimums. Could make a decision to favour bungalows over other types as they have less amenity impact and are suited to constrained sites.

Appendix 1: Table 3 - Sites / Neighbourhoods Opportunities and Constraints

UI Code	Density Zone	Site Address / Neighbourhood Description	Opportunities to delivering higher density	Constraints to delivering higher densities
UI_W1	Waterfront	Former Rose Brae, Church Street, Birkenhead	Important Waterfront site with views from high ground across to the Liverpool waterfront. Directly adjacent to ferry terminal and bus station and five minutes walk from Hamilton Square station. High density apartment complex to the east and Victorian villas set a context for development. Waterfront circular walk allows for some public realm and public amenity space possibilities. Adjacent employment uses do not cause amenity issues	Site is gently sloping and includes some retaining structures so may require some groundworks. Hamilton Square Conservation Area and a number of listed structures are within visual proximity so large and tall building may be inappropriate in conservation terms.
UI_W2	Waterfront	Land at Livingstone Street, Birkenhead	This site is adjacent to the forthcoming Wirral Waters scheme so can match the density and approach (at least in part). The site is on the key route between Wirral Waters and Birkenhead Park and has some links to local community facilities within five minutes walk. Site is within easy access of high frequency bus routes and the railway station (Birkenhead Park).	This is a small and narrow site that is currently surrounded by almost entirely light industrial and commercial development - however, this is to change when Wirral Waters is developed adjacent. It is likely that this site may form part of a change in the character of this area as a result. The site lacks the physical depth which will restrict the design options available due to amenity and there is little in the way of local amenity space so this may need to be integral to the scheme reducing density.
UI_W3	Waterfront	Land at Birkenhead Road, Seacombe	Large site (albeit irregular in shape) which has a long frontage to a key bus route and opposite a relatively high density area. Good cycling and pedestrian links, as well as adjacent to the Mersey Ferry Terminal. Some limited local shops and local services exist but the site is within 15 minutes walk of Birkenhead Town Centre (albeit not an attractive walk) and 10 minutes walk from Seacombe. Land adjacent to the east is relatively low impact light industrial / commercial uses that are compatible.	The tank farm and fuel point for the docks is directly adjacent and will have health and safety issues and would also preclude placing residential development adjacent so the site must have some mixed use component that will limit the developable area. As a result the southern portion of the site may have be light industrial and commercial development.
UI_UC1	Urban Core	Hind Street Regeneration Area, Birkenhead	Large flat site that would take traditional urban blocks well allowing a variety of urban forms to be introduced. No surrounding properties to consider regarding amenity and overlooking. Multiple access opportunities. Almost adjacent to Birkenhead town centre. Directly adjacent to high frequency bus route to the south and the town centre and Birkenhead Central station. Medium high density development in immediate context.	Some concern over noise implications from the railway to the west and the nearby industrial estate to the south-west that may need to be addressed effectively. Some remnants of the former gas works on the site that may need either avoiding from development or remediation. Site is almost entirely surrounded by impermeable barriers of main roads, gyratory and the railway (embankment) which means it lacks connection to the town centre and other parts of the townscape.
UI_UC2	Urban Core	Former Works, Bentinck Street, Birkenhead	This is a small site with good access to Birkenhead Town Centre (five minutes walk) and a range of community infrastructure. It is also able to access Birkenhead Park within five minutes walk. A number of recent small scale infill developments and refurbishments have also occurred in the local area. The extant building on the site is capable of conversion to flats at a reasonably high density.	The small site gives little opportunity for infill, which is compounded by the fact that much of the site is occupied by a building of some architectural merit that ought to be retained and converted (this is a typical situation in edges of centre sites). Care needs to be taken to manage the design relationship with the adjacent properties and their back access routes for safety and security and also in terms of scale - 2 / 3 storeys being commonplace.
UI_UC3	Urban Core	Car Park, Whitfield Street, Birkenhead	Small flat site with multiple possible access points either from Whitfield Street or others. Site is directly adjacent to a number of good bus routes, close to local shops and services and some useful local healthcare facilities. High density infill development has already occurred on nearby sites which have set the precedent. Surrounding streets may provide some development potential without the need to deliver site specific road infrastructure.	Site is relatively small and once infrastructure has been delivered may mean that the site is restricted in capacity and design terms. There is a lack of public green space in the immediate surroundings and some may be required to meet aspirations for quality (e.g. Pocket park) but larger recreation is possible from Mersey Park (10 minutes walk). Care would need to be taken to ensure that the rear gardens on adjacent properties (north) was secured.
UI_TS1	Transit Stop	Rock Ferry - land 10 minutes walk of station	Rock Ferry has a wide mix of housing types and land uses, some of which provide opportunity for increased densities. Areas of land with no use or in a derelict state are pepper potted around the neighbourhood and a good number of apartment blocks already exist meaning that more would do little to change the local character. Larger dwellings also provide opportunities for more apartments through subdivision.	Parking provision is a constraint on subdivision and provision of apartments however, a relaxation of parking standards in proximity to the railway station could be appropriate. Some redevelopment has taken place already and so fewer opportunities exist.
UI_TS2	Transit Stop	West Kirby - land within 10 minutes walk of the railway station	West Kirby has a range of types of opportunity for densification. Backland development on large plots in addition to reuse of inefficient commercial land uses and parking areas could provide sites for apartments and smaller units. Within retail and commercial areas upper floors may provide opportunity for smaller residential units.	Parking provision is a constraint of changes of use within the retail centre, however, a relaxation of parking standards in proximity to the railway station would be appropriate. Some redevelopment of sites to provide apartments in the town centre has already taken place and so fewer opportunities exist currently.
UI_TS3	Transit Stop	Bromborough - land within 10 minutes walk of the station	Opportunities within Bromborough centre around backland development and demolition of larger dwellings to provide apartments and a greater number of smaller units. Some land is available however, in the form of a former school site and properties with very large side gardens.	The subdivision of plots relies on the availability of such sites and a willingness for landowners to explore such development. The demand for housing in this area is both an opportunity and a constraint as demand for detached and bungalow units may reduce the provision of smaller units.

Table 3 - Sites / Neighbourhoods Opportunities and Constraints *CONTINUED*

UI Code	Density Zone	Site Address / Neighbourhood Description	Opportunities to delivering higher density	Constraints to delivering higher densities
UI_S1	Suburban	Area north-east of Heswall centre (Downham Rd, Downham Drive & Forest Lane)	Heswall has already seen some good examples of how densification can be achieved. The redevelopment of vacant retail or commercial uses can provide apartments or small developments of terraced properties. A large number of bungalows on large plots exist in the area which could be subdivided or demolished to make way for smaller units.	The subdivision of existing plots and redevelopment of disused retail/ commercial uses relies on the availability of such sites and a willingness for landowners to explore such development. The demand for housing in this area is both an opportunity and a constraint as demand for detached and bungalow units may reduce the provision of smaller units.
UI_S2	Suburban	Area around the Seacombe district centre (Junction of Borough Road and Wheatland Street)	Seacombe has some instances of underutilised and 'leftover' land across the neighbourhood which offers opportunities for development of terraced dwellings or apartments. A major opportunity also exists within the retail centre where a large number of retail units are empty. These, and the space above them, could provide a good number of smaller homes.	Seacombe is limited by the prevalence of high density terraced housing within the neighbourhood. These properties are an extremely efficient use of land and are arranged in a very tight network of narrow blocks. There is therefore a reduced availability of sites suitable for backland development or subdivision of plots.
UI_S3	Suburban	Area south of Moreton centre (Borrowdale Road and Rosslyn Drive)	Moreton is dominated by low density bungalows and detached dwellings. Many have large rear and side gardens offering the opportunity to subdivide plots. Some peripheral retail uses are using land inefficiently and could provide apartments and smaller terraced units with good access to the retail centre.	The subdivision of existing plots relies on the availability of such sites and a willingness for landowners to explore such development. The demand for housing in this area is both an opportunity and a constraint as demand for detached and bungalow units may reduce the viability of provision of smaller units.
UI_UE1	Urban Edge	Land adjacent to Chester Road, Gayton, Heswall	Close to local services including nurseries and primary school, as well as being adjacent to a high frequency bus route (with night service) and within 10 minutes walk of a railway station. Adjacent park and leisure facilities means that contributions could be sought to improve local sports provision rather than delivering on-site provision. The site is relatively flat and thus topography will not restrict urban form.	Mature field pattern will restrict traditional urban blocks and may cause complications for the overall efficient use of the land. Local retail is a little distant from the site (10 minutes walk). The areas around this site are some of the lowest densities in the area so applying a high density will need to be carefully balanced against this local character. Railways and rear gardens adjacent need sensitive buffering which may further limit the developable area.
UI_UE2	Urban Edge	Land to the south of Eastham (junction 5 M53)	Large flat site with large parcels of land available for development which allows for flexibility in the overall design approach. Local shops and services and schooling provision is within close proximity as is the ability to tie into the extant neighbourhoods at the existing urban edge. Access to quality, high frequency bus routes and many different access possibilities allows some further flexibility.	Large portion of the site is mature vegetation which appears to have some merit and thus should be retained which reduces the overall developable area by some 5-6 hectares. Access to the railway station from the site is a little convoluted. The motorway creates noise and pollution and, whilst relatively well screened by vegetation, may require a further buffer including in the design.



Urban Imprint Limited
16 -18 Park Green
Macclesfield
SK11 7NA

01625 265232
info@urbanimprint.co.uk
www.urbanimprint.co.uk

