4.0 Development Proposals
4.1 Introduction

The principles established through the masterplanning process have been rigorously followed in creating detailed proposals for the proposed development. This section includes information relating to the final planning application stage design and adds commentary to its characteristics and detail.
4.2 Use and Amount

4.2.1 Use

The development proposals include a strong mix of residential homes throughout.

4.2.2 Amount

The density of housing on the site has been developed sensitively through a design-lead process establishing a pattern of public spaces and resultant urban blocks. The pattern of housing uses vernacular precedents to create detached and semi-detached homes building on local character. The amount of housing units is also guided by the approach to massing. The lack of any buildings over two storeys in the area has guided our housing density in shaping the decision to avoid taller higher density housing models.

The adjacent illustration sets out the areas used in defining the density for the proposals

<table>
<thead>
<tr>
<th>Residential Mix:</th>
<th>No. of units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 bed</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3 bed</td>
<td>100</td>
<td>54</td>
</tr>
<tr>
<td>4 bed</td>
<td>77</td>
<td>41</td>
</tr>
<tr>
<td>5 bed</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Affordable Units</th>
<th>No. of units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 bed</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>3 bed</td>
<td>39</td>
<td>44</td>
</tr>
<tr>
<td>4 bed</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Overall Total 274
4.3 Scale

The scale of buildings responds to the contextual form in a similar manner to the ‘amount’ of development. We propose predominantly two storey homes in support of the extensive two storey characteristics of the Formby fabric. We have chosen to enhance the massing subtly around the central park. This location has a large sectional relationship across the space and as such, introducing dormer windows within the roof scape adds enclosure to the space yet, does not increase the massing in a significant or in appropriate manner.

Within the block structure a number of apartments have been used to aid the delivery of the affordable housing and meet the needs of the local community. These buildings have been designed with 2.5 storey massing and are located well within the block structure to ensure these buildings create a successful relationship with the existing housing.
4.4 Layout

4.4.1 Key principles

The masterplan development sections of this document record the evolution of the principles of the layout. The detailed layout plan has been developed faithfully in accordance with the masterplan to ensure that the strong detail matches the aspirations. The plan provides a range of home styles laid out to support the creation of hierarchies in the space. The adjacent plan illustrate the key features of the planning application layout.

The design narrative evolved to form the adjacent Masterplan. The key principles of which are presented and noted.

1. Compensatory storage area for surface water
2. Buildings placed to face out towards the bypass and fields to reduce traffic noise penetration into site and existing housing whilst also benefitting from views.
3. Hierarchy of landscaped swales set as part of the public realm composition.
4. Layout uses a system of copses to provide open space for leisure and play whilst forming a narrative of landscaped events to the route through the site
5. Access point located to minimise disruption of existing hedgerows and maximise user safety.
6. Formal avenue street created organised introduction into the site using rhythmically planted street trees.
7. Buildings surrounding the main park use a rendered upper floor bind their appearance as a single composition.
8. Building form orientated to create end response opposite existing housing and minimise the presence of form to existing residents.
9. New form aligned with existing streets to future proof connectivity possibilities (current land ransom strips preclude creating formal connections).
10. Buildings set back to retain the existing openness to this section of Alt Road whilst embellishing the area with new public open space.
11. Informal shared surface lanes with informal visitor parking and intimate geometry of building fronts.
12. Existing footpath across the site is retained and enhanced as part of a landscape-lead public realm experience.
4.4.2 Street Hierarchy

A legible and navigable pattern of streets requires the embedding of hierarchy principles. The masterplan uses changes in dimensions across streets, hierarchy in the scale of the swale system and landscape to commence this process. To further enhance the character of the scheme, we propose to create a set of house types that also follow the same hierarchy. As such, the buildings, landscape and geometry of space will all work together to the same aim of strong place-making.
4.4.3 Noise Control Plan

The adjacent plan illustrates how buildings are placed in the final layout to uphold the principles set out earlier in this document to use buildings to screen traffic noise and promote stronger public realm and views as opposed to the use of acoustic fencing.

4.4.4 Swale Hierarchy Plan

A key feature of the layout is the incorporation of the network of swales and canals within the public realm structure. As part of the overall hierarchy of streets and hierarchy of street characterisation, the swales further reinforce this with designs based upon an analogue hierarchy. Further details of the drainage strategy are confined within the supporting planning documents.
This plan records the position of frontages containing windows to habitable rooms and access to dwellings. As such, there is a best practice approach ensuring maximised natural surveillance of public realm.

A key indicator of the future success of the built fabric of development is indicated by the strength of the definition of public and private space. The adjacent plan shows how private spaces are defined within the block structure, and public spaces are clearly public within a well-defined geometry of building layout.
4.4.7 Parking Strategy

The manner in which parking has been provided in the plan again commences from the contextual appraisal which suggests a prevalence of paired buildings in the area. As such, this format lends itself towards on-plot parking solutions. Parking is primarily on plot between pairs of homes in the primary and formal areas of the site. This obscure cars from the streetscene and provides a convenient and usable parking solution. Where the streets are located in areas that the character structure defines as more informal, the parking strategy is allowed to be more flexible and front court type solutions are introduced.

The following plan extracts demonstrate the variety of parking options incorporated to aid variety in the streetscene and create options.

### On plot parking

The majority of houses have parking directly adjacent, accessed directly from the road maximising usability of private spaces and minimising ad-hoc on street parking.

### Off plot rear court

Small, contained parking courts, sat within perimeter blocks allow cars to be removed from the streetscene. These are designed in accordance with Manual for Streets principles to keep their scale small and local. Boundary treatments and lighting considerations will ensure surveillance of a court from homes.

### Off plot front court

In informal locations this detail has been used to balance enclosure of public realm by enabling more continuous frontage development and more a more intimate street concept.

### On street visitor parking

Visitor parking is provided parallel to the road within public realm and within informal bays throughout the informal street structure. These are sensitively located to limit uncontrolled parking and to provide visitor parking for all residents throughout the development.
4.4.8 Refuse Strategy

The accommodation of refuse and recycling receptacles has been embedded in the design process. Firstly, by choosing to avoid terraced house type configurations, the problem of long distances from back garden storage points to on street collection points has been avoided. As such, by having simple access from the rear gardens to the curb side for collection, the potential for residents to clutter the streetscene with bins etc is minimised. The linking of buildings with garages has been avoided in principle such that residents do not need to manoeuvre bins through a garage to access the street.

For the small apartment buildings within the development, communal refuse and recycling storage will be provided with receptacles suitable for collection by the local authority in compliance with their recycling stream items.

The adjacent layout extract shows how each of the above principles will work in plan.
4.5 Appearance

4.5.1 Place-making Code Structure

By combining the street hierarchy and the character structure of the open spaces, the following character structure was brought together as a framework to guide the detailing of the architectural pieces. This uses a hierarchy of formality analogue to the hierarchy of streets, i.e:

Primary Street = Formal
Tertiary Street = Informal.

The above overall character structure is then further subdivided, where the masterplan suggests differences occur. This allows for some variance in the detailing and composition, but within a unifying set of principles. This character structure sets the framework for Design Code Detailing.
4.5.2 Details for Design Coding

In support of the hierarchy and place-making code structure, we have created a set of details that are to be applied to the buildings in each of the Formal, Semi-formal and Informal areas of the site as identified in 3.18. The details cover nine broad areas of detail: Window arrangement; Window Colour; Window detailing; Doors; Canopies; Eaves; Verges; Front Boundaries and plinths. The broad styling of the detailing has been inspired by vernacular precedents as set out in the site analysis and context section of the document. As will be evident, some details thread through all three of the Formal, Semi-formal and Informal zones, whilst other create differences that reinforce the spatial hierarchy of the development.

Formal Details

Vertically orientated balanced casements with transom defining top third of the window and top hung style with smaller panes defined

Segmented flat gauged arches with two course plain tiled cill detail

Contemporary door detail

Simple flat canopy

Small boxed eaves detail with minimal facia depth. Black rainwater goods.

Brick string verge with 10mm projection

Brickwork, wall, pier and steel railing 900mm high with plain tile crease and brick on edge coping

Blue brick base with 10mm projecting red brick string course
Vertically orientated balanced casements with transom defining top third of the window and top hung style with smaller panes defined.

Dark grey window finish.

Generally, windows at ground floor to be finished with change in facing material to upper floor and projecting string. Two course plain tiled cill detail.

Contemporary door detail colour matched to windows and canopy, less glazing than 'Formal' detail.

Pitched plain tiled canopies and hipped where appropriate.

Small boxed eaves detail with minimal facia depth. Black rainwater goods.

Bargeboards to secondary front gables (not main roof). Tile course corbel to close boxed eaves.

Black painted steel railings 900mm high with soft landscaping behind. Alternatively, soft landscaping to set back building lines. Bollards define entrances where appropriate.

Where used on house types, single storey bays colour matched to windows with 450mm – 900mm projection.

Blue brick base with 10mm projecting brick string course.
**Informal Details**

<table>
<thead>
<tr>
<th>Window Arrangement</th>
<th>Window Colour</th>
<th>Window Detailing</th>
<th>Doors</th>
<th>Canopies</th>
<th>Eaves</th>
<th>Verges</th>
<th>Front Boundaries</th>
<th>Plinths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paired or tripled side hung balanced casements</td>
<td>White / cream finish</td>
<td>Generally, windows at ground floor to be finished with change in facing material to upper floor and projecting string. Two course plain tiled cill detail.</td>
<td>Contemporary door detail colour matched to windows and canopy, less glazing than 'Semi-Formal' detail.</td>
<td>Shallow projecting contemporary canopy in dark grey.</td>
<td>Two course 10mm corbelled eaves detail with minimal facia depth. Black rainwater goods.</td>
<td>Brick string verge with 10mm projection</td>
<td>Generally, soft landscaped front gardens to set back building lines. Bollards define entrances where appropriate.</td>
<td>Where used on house types, single storey bays colour matched to windows with 450mm – 900mm projection Non contrasting plinth brick base with 10mm projecting contrasting brick string course</td>
</tr>
</tbody>
</table>
4.5.3 Typical Streetscenes

The appearance of the development has developed sensitively through contextual study.

**Form** – The form of the urban blocks has been informed strongly be sensitive planning of views of the site and through the site. The placement and shaping of the form of the blocks has been choreographed to minimise the visual impact on existing views. The detail of this appraisal is set out in further detail in our Visual Impact assessment as part of the suite of planning application documents.

**Architectural Appearance** – The design coding section earlier in this document commences the recording of the architectural detail proposed for this development. Buildings are composed in two primary forms in support of the vernacular precedents prevalent in the area. However, a pastiche interpretation has not been the goal of our design process. The Formby settlement exhibits extensive parcels of large scale development that have taken place generally through the 20th century. These developments have in their own way respected the Formby vernacular, yet have brought in their own language and are in effect ‘of their time’. As such, a similar approach has been adopted in these proposals. To respect and acknowledge the context, yet provide strong buildings that demonstrate their place in the evolution of the settlement of Formby.

Building on the detail hierarchy coding, the house types have been detail specifically for their place within the hierarchy of the street network.

The adjacent streetscenes pick out a selection of street hierarchy components.
4.5.4 Illustrative Views

The following views have been produced to give an indicative sense of the massing in key locations and also the geometry of enclosure to key streets within the public realm network. These are not intended to demonstrate the full detail, instead the massing, surveillance, geometry and layering of space are described in three dimensions.
1 - Site wide illustrative massing view looking north
2 - Illustrative massing view east into Savon Hook Park
3 - Illustrative aerial view into Wedge Park
4 - Swale edged northern end of the Primary Street
5 - Edge form view north along Primary Street
6 - Informal street view north
4.5.5 Highway Surfacing

To add further richness and legibility to our street structure, we propose to use alternative surfacing techniques to aid the informality of the tertiary streets in the layout. The use of alternative surface treatments also aids the sense of the streets being shared spaces for pedestrians and vehicles. This aids the reduction in vehicle speeds and promotes pedestrian primacy. There are numerous approaches that can be taken to achieve the above aims including the use of modular paving solutions and dressed macadam designs as illustrated in the adjacent precedents.
4.5.6 Materials Distribution

The Place-making Code Structure has influenced and guided the use of materials across the site. The adjacent plan illustrates the broad distribution of materials and also records where we propose to embellish units with further detail where prominent views and spaces are located. Using render as a detailing embellishment to corners and to create a strong sense of ‘assembly’ to the park through the centre of the site, takes a strong contextual tool and uses this in a new way within the proposals.

**Formal**
- Red Brick
- Dark Red Brick beneath plinth course
- Grey Roof Tiles

**Semi-Formal**
- Light Red Brick
- Grey Roof Tiles

**Informal**
- Generally Light Red Brick
- Buff Brick as outlined in Green
- Red Brindle Roof Tiles

- Plot with rendered first floor level
- Whole rendered plots & brick plinth
4.6 Access

4.6.1 Site Access Points

Possibilities for access have informed the creation of a sensitive fine grained structure (fine grained in an urban context). The suggestions to possible pedestrian access points, made during the design process and pre application discussion, have also been located and informed the block structure. The resulting forces for movement imply the position of possible building lines. With the opportunity for further future development along the south western boundary, consideration is given when establishing access to appropriate block structuring along this boundary edge.

4.6.2 Inclusive Access

As set out in section 3.8 ‘Movement Framework’, the development site has been edged with numerous connection points to promote sustainable and simple movement through the site and across its boundaries. Access is created for all users and is delivered with inclusive design criteria at the forefront. The network of pedestrian and cycle paths are sized for all users to access and progress safely. At junctions, pedestrians and cyclists are given priority by using build-outs and surfacing changes in the highway to induce lower powered vehicle speeds. Public routes will be adequately lit to promote a sense of safe night-time movement, whilst natural surveillance of public realm is maximised throughout the layout. The site includes numerous shared space streets. These are detailed to promote pedestrian primacy in the street space and use build outs and horizontal deflections to minimise vehicle speeds, promoting safer pedestrian and cycle movement. Where appropriate, textured surfacing is used to aid movement through the street structure of the visually impaired.
4.6.3 Detailed Vehicular Access Design

The adjacent drawings demonstrate the detail of the vehicular access point into the site. For further detail, refer to specific drawing produced by our transportation consultants.
The adjacent plan illustrates the likely phasing of the development. The proposed scheme will include individual phases from both Barratt and David Wilson Homes each with their own build programme. This is proposed to commence towards the southern boundary of the site moving north over time.
5.0 Supporting Statements
5.1 Building for Life

5.1.1 The BfL Structure

The general structure of this design and access statement has been constructed around the Building for Life structure. The Building for Life criteria have been pivotal to the design process and have been used as a guide to the structuring and consideration of all aspects of the masterplanning, landscape and architecture.

The Building for Life scheme sets 12 questions that promote good design practice in housing design. The design team response to these forms the next section of this document.

5.1.2 The 12 Questions

We have endeavoured to communicate the key principles we have embedded into our proposals. Underpinning the information compiled in this document is a thorough understanding of best practice urban design factors that should be achieved in the creation of a truly sustainable ‘place-lead’ development proposal that:

- Is sustainable;
- Has ‘place’ focus;
- Has a strong character;
- Has structured and attractive public realm;
- Will deliver homes for all members of the community;
- Create community benefits;
- Is a ‘great place to live’ (as promoted by the Building For Life scheme).

The building for Life scheme has evolved over the years, and the Barratt Group along with our design team, have a proven track record in delivering the strong values promoted by the building for life scheme. As such, we have summarised how we believe the proposals deliver the aspirations of BFL, as follows:-

(Please note that the scoring of each question is against a traffic light system of Red, Amber and Green – Green being the ideal and best response possible).

 Integrating into the neighbourhood

1. Connections

Does the scheme integrate into its surroundings by reinforcing existing connections and creating new ones; whilst also respecting existing buildings and land uses along the boundaries of the development site?

**Green:**

For this site, the possibilities to connect into the wider fabric are not as numerous as one might expect due to the eastern boundary effectively having ransom strips adjacent to the existing streets. However, we have ensured that the new block structure is shaped by the existing streets and expect that over time the new and existing streets will connect physically. In all other instances possible, the design connects to form pedestrian and cycle routes from the new development into the existing fabric. Connections are also made by means of architectural vocabulary, taking influence from the patterns of development and architectural principles and embedding these into the new proposals.

2. Facilities and services

Does the development provide (or is it close to) community facilities, such as shops, schools, workplaces, parks, play areas, pubs or cafes?

**Green:**

The extensive facilities of the town centre are within an easy walking distance, whilst further local facilities are located close to the site on Liverpool Road. Again, schools are located within easy walking distances.
3 Public transport
Does the scheme have good access to public transport to help reduce car dependency?

Green:-
The site is in close proximity to major bus routes on Liverpool Road. The design includes a new pedestrian / cycle route that connect directly to the bus stops located on Liverpool Road.

4 Meeting local housing requirements
Does the development have a mix of housing types and tenures that suit local requirements?

Green:-
Our development team have been working with local RSLs incorporating their local knowledge of local housing needs into the housing mix. A full range of homes from one bedroom apartments to five bedroom detached homes have been provided.

5 Character
Does the scheme create a place with a locally inspired or otherwise distinctive character?

Green:-
By undertaking a study of the patterns of development form and architectural vocabulary, we have been able to embed the design with string queues from the immediate and wider vernacular. We have balanced the strong influence of the Garden Suburb characteristics prevalent in the area, with the needs on 21st century sustainable housing. The linear blocks of the areas plan have been interpreted into a similar grid, whilst also balancing in the need for current parking standards and principles of solar orientation. Local materials are to be used within the design, used in similar patterns to create a dialogue with the existing setting.

6 Working with the site and its context
Does the scheme take advantage of existing topography, landscape features (including water courses), wildlife habitats, existing buildings, site orientation and microclimates?

Green:-
The site currently exhibits numerous existing hedgerows and trees. We have retained much of this benefit and made these the focus of our masterplan. We have developed a system of strong landscaped spaces that aid the improvement of the ecological features over and above the existing land use.

7 Creating well defined streets and spaces
Are buildings designed and positioned with landscaping to define and enhance streets and spaces and are buildings designed to turn street corners well?

Green:-
As is evident from our design narrative, the structure of landscape to inform our block structure is fundamental to the approach we have taken. Landscape is at the heart of many of our streets and spaces, which incorporate: formal and informal avenue tree planting; community parks and small pocket green spaces. This is to the extent that no two streets will read the same in the development, adding a richness and narrative to the experience.

All corners within the development will use buildings that create natural surveillance of the public realm and reinforce the hierarchy of the streets they face.

8 Easy to find your way around
Is the scheme designed to make it easy to find your way around?

Green:-
The proposals embed a narrative and hierarchy of streets and space into the layout. Our hierarchy is delivered through careful structuring of the façade positions and building massing. Our wide primary avenue display themselves as the ‘routes in’ to the development. Bleeding away from these routes are small simple systems of shared space streets that are much more informal in their composition. This hierarchy is also informed within our character structure in which more formal streets will have more formal buildings and detailing. In turn, informal streets are to be more varied, informal and intimate. The block structure is rarely more than a single block in depth with views through to the green edges of the site, ensuring way finding is natural and simple for the visitor. Architecture, landscape and urbanism will be fully analogue.
Street & Home

9 Streets for all
Are streets designed in a way that encourage low vehicle speeds and allow them to function as social spaces?

**Green:**
A fully walkable neighbourhood has been formed, aided by the use of shared surface informal tertiary streets. These streets create a network of spaces that promote the primacy of the pedestrian over the private car, aiding the ability of residents to socialise informally within the street. Within our primary avenue street, protection to the pedestrian has been incorporated by inserting a green verge and on street parking, separating the car and pedestrian in the more trafficked areas. The primacy of our public parks also takes primacy over the highway, by creating changes in surfacing and / or horizontal or vertical deflection. The driver is informed by these features that the space is more important than the road.

10 Car parking
Is resident and visitor parking sufficient and well integrated so that it does not dominate the street?

**Green:**
Parking is a key consideration that is fundamental to the entire block structure and pattern of built form. Parking is sensitively placed to promote ease of use and not to dominate views and public realm composition. An approach that uses on plot parking as the primary detail, ensures that parking is simple to manage and that it will be used effectively. This maximises the potential that ad-hoc parking in public realm will be avoided. Our shared surface streets also incorporate informal on street parking in locations where the design controls them sensitively through the use of build outs and street trees etc. Visitor parking threads through the entire development, in all the formal and informal streets. Parking court details have been avoided wherever possible. Where used, these will use quality surfacing and follow best practice Secured By Design principles with respect to surveillance, lighting and arrangement. Size of courts will also follow Manual For Street guidelines.

11 Public and private spaces
Will public and private spaces be clearly defined and designed to be attractive, well managed and safe?

**Green:**
The urban design approach uses clarity of public – private space definition as its linch-pin. It is a well understood fact that great places to live usually exhibit absolute clarity between the areas that are perceived to be for public use and those that are private for residents and home owners. Our design uses the strong active frontages of our shallow depth block structure to create definition of the rear private spaces from the public streets and parks. Our frontage landscapes will be defined with walls, railings and soft landscaping appropriate to their role in the hierarchy of space, to define the private fronts.

12 External storage and amenity space
Is there adequate external storage space for bins and recycling as well as vehicles and cycles?

**Green:**
Again, our design principles embed the sensitive issue of refuse and recycling management into the scheme in a passive manner. By avoiding the general use of terracing, we enable residents to move the receptacles from storage positions in rear gardens to kerb side for collection. Cycle storage will be delivered in line with the Local Authorities requirements as a minimum.
5.2 Design Review & Public Consultation

As above, we believe we have created a proposal that goes beyond all best practice principles and embeds all the hallmarks of a ‘Great Place to Live’. The development will feel safe to live in and use and sustainable to move through. It incorporates landscape strategies that control the visual appearance of the scheme, maximising the attractiveness and minimising the visual impact issues associated with this more sensitive location.

Our design strategies are integrated such that the masterplan principles are delivered in the fine detail of the building designs and plot structure. Further details of public consultation are included within planning application documents produced by Turley Associates.

As part of our design-lead process, we have sought the views of experts at the Places Matter! Design review panel.

We firstly consulted the panel prior to the commencement of the design process. This very usefully enabled us to embed their comments and advice in the strategies for the development. Furthermore, the resulting masterplan was presented to the panel. This again proved to be a very positive process, arising in an enviably positive response to our proposals. The two written response letters are recorded as follows:-
28 January 2013

Dear Ben,

Re: Liverpool Road, Formby

Thank you for bringing the next iteration of the housing masterplan back to Places Matter! Design Review. It is heartening to see that some of the recommendations made during the first review have been considered and taken on board. This is an example of how developments can be improved through thoughtful and detailed infrastructure planning.

This is a case where a piece of greenbelt land, which does not apparently serve a purpose, has been reconsidered. In a positive manner, it is actually being considered by a high-quality developer for residential development. The proposal includes a new road linking the existing roads and creating a more accessible neighborhood for Formby.

Your approach to involving the local community is commendable. We appreciate the effort in making the development more accessible to all residents. We understand that there have been meetings with local residents to discuss the proposals and ensure future connectivity.

You have created a unique and sustainable area that will be beneficial to the community. We are pleased to see your commitment to incorporating residents' feedback and making the area more accessible to all. We encourage you to continue your efforts in creating a sustainable and livable neighborhood.

Sincerely,

[Signature]

[Attached Signature]

[Design Review Manager]

[Design Review Manager]
Principles of sustainable place-making are embedded into the urban planning and detail of the proposals. Much of these sustainable details are discussed throughout this document since they underpin the proposals at every level. These include the consideration of factors including:

- Local and Global Environment
- Societal Factors
- Economic Issues
- Natural Resources

To summarise, the key sustainable principles include:

- Promotion of sustainable transport choices by: creating new pedestrian and cycle connections into the wider fabric; enhancing connections to bus stops; incorporation of new cycle routes with enhancements to existing routes; promoting pedestrian primacy in the public realm using hierarchy of detailing.
- Embedding sustainable drainage SUDS principles into the masterplan strategy to promote string public realm and an awareness of water usage.
- Using a development block structure that promotes solar orientation in the roof form for addition of solar panels and orientation of buildings to promote passive solar tools.
- The use of public consultation and design review to ensure the highest quality of development can be delivered that has a more positive perception and enduring quality.
- Creation of naturally overlooked public realm that feels safe to use.
- Strong landscape details to promote enhanced microclimate and biodiversity.
- Protection of ecologically sensitive assets.
- Strong open spaces with play facilities.
- A strong embedded recycling strategy in support of LA collection regimes.
- Detailing of landscape to maximise the usability by the physically impaired.
- Control of traffic noise by passive design means to ensure a quality appearance to the development whilst ensuring amenity space is comfortable to use.

- The use of robust enduring materials that have strong environmental credentials.
- The application of the Code For Sustainable Homes Level 3 ensures a further wide ranging set of strong environmental performance characteristics that are recognised internationally.

The emphasis placed upon the design of the proposals aids the creation of strongly sustainable place for people. This builds upon paragraph 56 of the National Planning Policy Framework which states: “The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is invisible from good planning and should contribute positively to making places better for people.”
5.4 Transportation Summary

5.4.1 SBA have been commissioned by David Wilson Homes North West and Barratt Homes (Manchester) to provide transport and highways advice in support of proposals to develop a site for residential use off Liverpool Road in Formby, Sefton.

5.4.2 A Transport Assessment (TA) has been prepared in line with the guidance set out in the Department for Transport (DfT) ‘Guidelines for Transport Assessment’ (March 2007) and also takes account of more recently published guidance set out in the National Planning Policy Framework and other relevant local and national guidance.

5.4.3 The TA considered the accessibility of the site and demonstrated that the site is ideally located to facilitate trips by non-car modes including walking, cycling and public transport.

5.4.4 The Masterplan for the site has been carefully designed to incorporate high quality links to existing pedestrian/cycle infrastructure where appropriate, including the upgrading of the existing public right of way that passes through the site. A new bus stop with a lay-by will be provided on the south side of Liverpool Road and the existing bus stop will be upgraded to accommodate a bus shelter to make travel by public transport a more attractive option.

5.4.5 It is anticipated that the implementation of a Travel Plan will assist in promoting sustainable travel to and from the site while minimising the reliance of the private car thus complying with the aims of the National Planning Policy Framework (NPPF) which states in paragraph 35 that “Developments should be located and designed where practical to give priority to pedestrians and cycle movements, and have access to high quality public transport facilities”.

5.4.6 Access to the development will be taken from a new priority controlled junction off Liverpool Road that will comply with Sefton Metropolitan Borough Councils (SMBC) current design and safety guidance. The proposals will also seek to address existing road safety issues by the implementation of a reduction in speed limit along this stretch of Liverpool Road from the current 60mph limit to 40mph. In pre-application discussions, SMBC have indicated that they would be supportive of this safety measure.

5.4.7 The Transport Assessment considered the impact of the development on the adjoining highway network including the impact on the Formby Bypass. The assessments have demonstrated that impact of the development on the local roads will be minimal and will not have a severe impact. Notwithstanding this, modifications to the Liverpool road/Formby Bypass roundabout junction are proposed that will improve the existing situation and address the perceived congestion issues.

5.4.8 As such, the TA concludes that there are no highways related reasons that should prevent the granting of planning permission.
Assessment of Flood Risk from External Sources

Flood risk to the proposed development from various sources, such as fluvial, tidal overland flow, sewers and groundwater has been considered in this study. Part of the undeveloped site is at high risk from fluvial flooding and at some risk from sewer, surface water runoff and groundwater flooding. Mitigation measures have been proposed and these are summarised below.

Fluvial/ Tidal Flood Risk
The site is shown to be located within the EA's Flood Zone 1. However, it is anticipated that a hydraulic link exists between the existing on-site ditch and the Downholland Brook. As such, a small part of the development site lies within 1% Climate Change Floodplain.

Fluvial flood risk mitigation measures will be provided as follows:
• compensatory storage will be provided by lowering land within the southeastern region to compensate for the floodplain volume displaced arising from development.
• the site ground levels will be sufficiently raised and finished floor levels set accordingly to facilitate positive drainage from the site. This will ensure that the finished floor levels are set at least 600mm above the 1% + CC AEP flood level of 3.76m AOD, at 4.36mAOD.
• flood resilient and resistant construction techniques may also be incorporated into proposed dwellings.

Overland Flow Flood Risk
The site is subject to localised frequent surface water flooding incidents and ponding. Land within the site will be raised, suitably graded, localised low spots eliminated and a positive drainage system comprising swales will be implemented to manage site runoff. Setting finished floor levels at least 150mm above the adjoining ground levels and incorporation of flood resilient and resistant construction will also mitigate flood risk from this source.

Existing Sewer Overflow Flood Risk
The public drainage networks beneath the highways within the adjoining residential areas have been observed by local residents to frequently surcharge and overflow at times of heavy rainfall. Local residents have noted that they believed that the public sewer system was at capacity, and have cited a number of problems in the area with collapsed sewers.

Land within the site will be suitably raised and finished floor levels set accordingly to facilitate drainage from the development site. This will ensure that the proposed development remains safe from sewer overflows emanating from sewers located in adjoining highways. Any offsite sewer overflows entering the site will be routed safely via the proposed swale and highway corridor network towards the low lying landscaped area provided within the south-eastern corner. The development site will not be discharge any surface water runoff into the existing public sewerage system, and as such will not worsen existing flood risk within the existing sewerage system.

Groundwater Flood Risk
Site investigation works undertaken in September 2012 established groundwater table at depths varying between 1.0m and 2.5m bgl. Anecdotal evidence also suggests existence of shallow groundwater within the neighbourhood area. It therefore remains a possibility for groundwater to rise to the surface to cause flooding at the site.

Proposed flood mitigation measures including raised finished floor levels, land reprofiling and ground raising, incorporation of overland flow routes and a swale drainage network, and flood resilient and resistant construction to be implemented within the new development will afford protection to proposed dwellings.

Foul Water Disposal
Foul water discharge from the development will be disposed of via a new sewer connecting to an existing public sewer located just outside the sewage treatment works, some 760m from the development site.

Surface Water Disposal
All development runoff will be disposed of via a swale network to the nearby watercourse. Outflow from the swale system will be limited to the existing 100 year greenfield runoff rate using a flow control device. Post development runoff will discharge directly into the River Alt located to the south of the site, or to the Downholland Brook located to the east via onsite ditch. All on site SuDS drainage facilities will be offered for adoption by the SAB or maintained by a private management company.

There will be no off-site surface water discharge to the public drainage network, and therefore no increase in flood risk to areas that suffer from existing sewer flooding problems.

Design Exceedance
Should the onsite drainage system fail or block under extreme rainfall events exceeding the design standard, flooding may occur within the site. Any resultant floodwater would however be directed in a southeasterly direction along the highway corridor network to the floodplain compensatory storage area, and away from dwellings.

Similarly, raising finished flood levels within the dwellings by at least 150mm above the adjacent ground level and at least 600mm above the design (1% + CC AEP) flood level of 3.76m AOD, and incorporation of flood resilient and resistant construction techniques will help to mitigate residual flood risks associated with such design exceedance or drainage system failure events.

This study has been undertaken in accordance with the principles set out in the NPPF. We can conclude that the said development proposals can be accommodated without increasing flood risk within the locality and without placing the development itself at risk of flooding, all in accordance with objectives set by Central Government and the EA.

5.5 Flood Risk & Drainage Summary
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6.0 Conclusion
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6.1 Summary & Conclusions

The proposed development at Liverpool Road, Formby aims to create a place that addresses sustainable design principles and makes a positive contribution to the Formby settlement. The development enhances the character of the area whilst responding to the specific constraints and opportunities of the site. In summary, the proposals will:

1. Build upon the distinctiveness of the site
   This document demonstrates the thorough understanding of the site to be developed. The topographical, historical and physical relationship constraints have been harnessed and clearly understood to provide a framework for the development design which maximizes the synergy of the design to create a distinctive extension to the neighbourhood.

2. Synthesise with the context
   A well developed site and location analysis has been carried out in the form of a SWOT analysis and site visits. The analysis has looked at the street patterns, development patterns and architectural features and styles which work together to make this a distinct place and destination. By looking at all areas of surrounding development, the traditional language that underpins the wider area has been established, and it is upon this that the design has been developed.

3. Be Distinct
   Since the proposals are based upon an understanding of the vernacular, the new design will be distinct to the area and will support the wider identity of the area and dilute the prominence of poor precedents. All the construction details are simple and relevant to the location whilst the traditional materials will again reinforce the vernacular.

4. Have Values
   The design has been developed in a way which respects the need to ensure that the detail in a development needs to be fully considered at the outset in order that the strong concepts can be delivered.

5. Have a Sympathetic Visual & Site Impact
   The design has been developed based upon current urban design principles and good practice whilst ensuring there is a synergy with the surroundings. The massing and scale has not been designed to be over-powering in any way, instead the buildings enhance existing vistas. The simple topography of the site and considered design approach means that there is not an unacceptable re-sculpting of the existing ground.

6. Have a Strong Character
   The character structure for the development demonstrates that character has been the primary driver in setting a framework and pattern for the detail. The character of each street is considered with respect to its role within the wider urban fabric and the design has unfolded in detail to deliver the visions.

7. Be Based Upon the Guidance of Best Practice Agents
   i. Building For Life - Principles of the building for life system designed to create better residential developments are imprinted into this concept by means of our design coding process, strong street hierarchy and narrative of events. This document has been structured in order to demonstrate evidence in response to the BFL questions and it is believed that the design should score highly under this scheme.
   ii. Urban Design – At the heart of the design are the principles of urban design developed in the Urban Design Compendium and numerous other excellent documents illustrating best practice in residential design and planning.
   iii. Manual For Streets – This document has been instrumental in the development of a design which promotes the use of sustainable transport over the private car. The incorporation of 'lanes' which are adoptable and restriction of vehicle speed by natural means are imprinted into the proposals. Best practice design detail has been placed into the arrangement of streets and how they balance those who use them, with a bias towards the street as a place.

Overall the design will regenerate the area providing a new focal points and narrative for movement in a manner which encourages sustainable travel locally and regionally. Architecture is well structured and enduring, using simple materials that will soften and improve with age. It will work in harmony with adjacent uses and architectural styles to create an individual yet supportive character to the location. The design proposals will deliver an enriching environment in which to live and relax, with a landscape-led environment that enriches the local ecology.