

7. DESIGN EVOLUTION

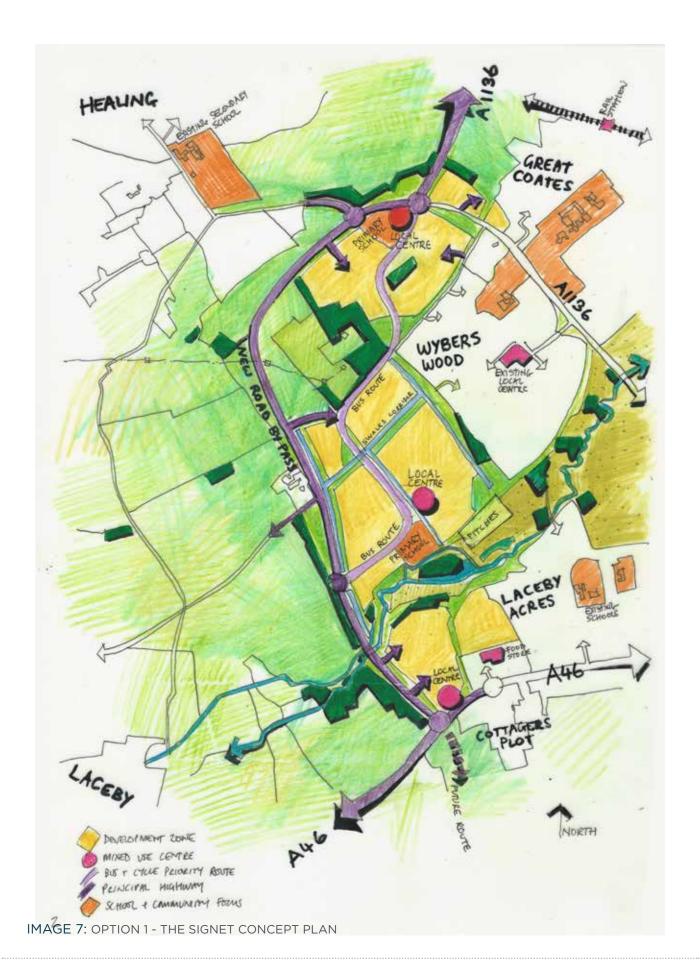
DESIGN EVOLUTION

GENERAL APPROACH

- 7.1 As set out in Section 1 there have been a number of workshop sessions facilitated by ATLAS to support the design evolution and testing a range of emerging concept plan options as part of the collaborative working arrangement between North East Lincolnshire Council and the land owner's team. At various stages of the project there has also been an ongoing opportunity to review key aspects of the masterplan approach, as well as develop the overall vision for the site. This work has been influenced and informed by an iterative process using a proportionate level of technical and environmental assessment work to gain a clearer understanding of the site's constraints and opportunity to help inform and reach consensus about inter-related judgements and issues.
- 7.2 At a workshop session held in March 2015, the baseline assessment analysis was collectively reviewed by North East Lincolnshire Council and the landowner consultant representative. The workshop helped to set clear development objectives and agree some initial options around how the site could be delivered. Specifically, one of the purposes of the session was to agree a set of development principles in order to inform a framework for the site's development and allow alternative options to be developed that could form the basis of further engagement and consultation. The testing of the evidence has highlighted: areas of agreement; where changes and options were debated; and the acknowledgment of additional areas of work needed to make clear decisions.
- 7.3 A further workshop in July 2015 included a range of local stakeholders and statutory consultees in order to ensure that the vision for the development was specific and tailored to the wider community.

ALTERNATIVE OPTIONS:

- 7.4 At the workshop sessions a number of draft Concept Plans were developed with these being themed around: economy growth; building a strong community; and improving environmental quality. Prior to the development of these Concept Plans the first concept option related to work undertaken in early 2013 by the landowners and their team of experts. The alternative options that have therefore been considered on an iterative basis by project team and the community are:
 - Option 1 the Signet Concept Plan (July 2015);
 - Option 2 Socio-Economic Group Concept Plan (March 2015);
 - Option 3 Environmental Group Concept Plan (March 2015)



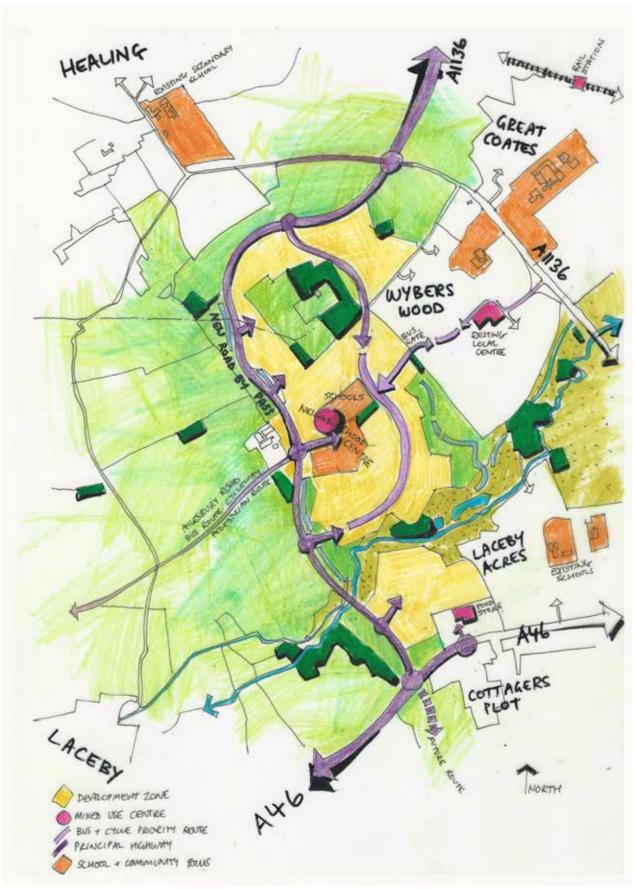


IMAGE 8: OPTION 2 - SOCIO-ECONOMIC GROUP CONCEPT PLAN

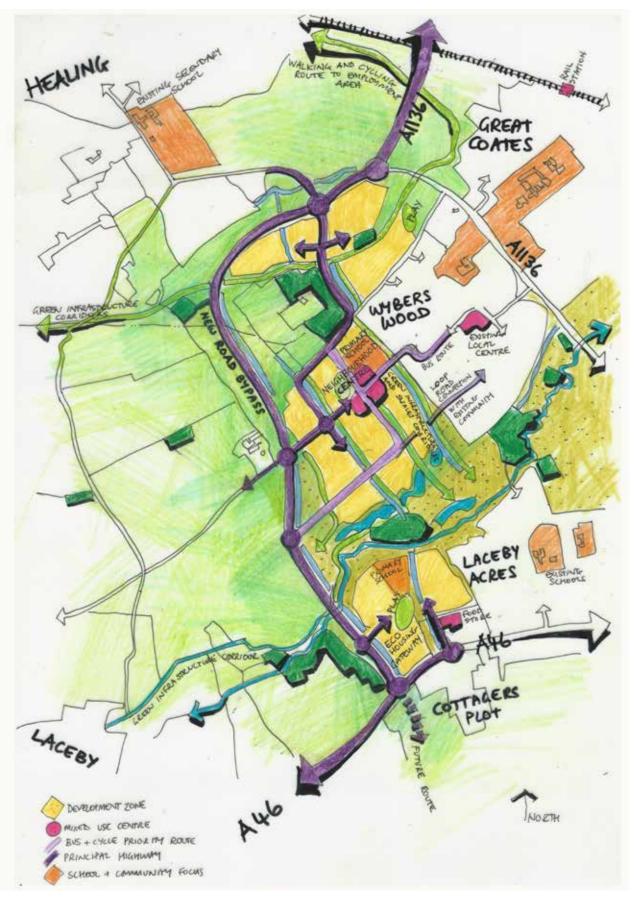


IMAGE 9: OPTION 3 - ENVIRONMENTAL GROUP CONCEPT PLAN

7.5 These three concept options have provided a sound basis to review and test at high level the form, composition and makeup of the development. The process has been informed by: the emerging vision for the site; established key development objectives; and a clear understanding of the constraints and opportunities arising from the technical assessment work that was available at that time. These three options are shown as images 6-8 and the key differences/similarities between them are set out in the following table:

TABLE 4: KEY DIFFERENCE BETWEEN LAYOUT OPTIONS

Elements	Signet	Socio-Economic	Environmental
3 Local Centres	✓	X	X
1 Central Neighbourhood Centre	Χ	✓	✓
2 Primary Schools	✓	X	X
1 Secondary School	X	✓	✓
Strategic Link Road	✓	X	✓
Local Link Road	X	✓	X
Bus Link to Wybers Wood	Х	✓	✓
Enhance set back distance to Great Coates C.A	Х	✓	X

- 7.6 The three concept options have informed and shaped the preferred option of the concept masterplan produced in October 2015 used by the Council to inform the Sustainability Appraisal work in connection with the emerging Local Plan process.
- 7.7 The 'preferred' concept masterplan (Oct 2015) was also taken forward by the project team, to understand the disposition of uses, site capacity, and phasing to inform likely housing trajectory and related infrastructure timing and delivery. This high level information was not only useful to inform the Local Plan process but also it provided the key parameters to test initial viability and deliverability.
- 7.8 Since this work we have subsequently taken a step back at this stage in the process and produced a less prescriptive Concept Plan to support the Local Plan Policy in order to set out a broad approach to the site. This approach acknowledges there will continue to be refinements and changes and the broad brush concept plan (which can be found in Section 10) allows the level of flexibility required that is reasonable for this stage in the process.

KEY OUTCOMES OF THE DESIGN EVOLUTION WORK

- 7.9 The option assessment process and the consultation events have identified a number of aspects that continue to be factored in subject to further work in particular the transport heritage and viability assessments. There is a general consensus around the following:
 - The form and function of a proposed outer link road will have a fundamental impact on the type of place to be created but it should be embraced as a key place making element of the development if the awaited highway evidence confirms this can be achieved.
 - As an alternative, there is an opportunity to create a local link road which could comprise
 an outer southern section of the Link Road between A46 and Aylesby Road and then
 between Aylesby Road and the A1136 provide an 'inner' local Link Road route as part of
 the development.
 - New junctions between the Link Road and the new development provides an opportunity for place making and could provide key gateway features to the site;
 - There should be a strong emphasis on the provision on green infrastructure across the site with links into the Freshney Valley. These corridors would not only provide amenity destinations but also linked to: the employment to the north, existing local facilities in the surrounding area; as well as to the Town Centre, further to the east;
 - Sustainable Urban Drainage should form a key physical feature of the development and should be combined with green infrastructure;
 - There should be a strong emphasis on the need to create a sense of community and to focus on the requirement to provide community/social facilities of the right level and in accessible location;
 - School provision should be seen as an opportunity to improve the community offer and the precise need and location should be given further consideration;
 - The development needs a strong landscape edge to the west and north given the interface with the open countryside and adjacent settlement;
 - Given the size of the development, there is an opportunity to provide for a number of built forms and styles across the site ranging from contemporary through to Garden Village principles. There appears to be the potential to create three/four character areas;
 - Listed buildings and the conservation area, especially to the north should be recognised as a major asset that requires a suitable settle;
 - Opportunity should be explored to fully integrate the new communities with the existing housing estates of Wybers Wood and Laceby Acres.
- 7.10 Since the outcomes of the workshop sessions, there continues to be ongoing joint working arrangements to discuss key issues within the context of the management structure of the project team as new evidence and outcomes of specific studies are known: for example the transport modelling work, heritage assessment and green space provision analysis. The latest version of the Concept Plan is provided in Section 10.

8. INFRASTRUCTURE REQUIREMENTS

INFRASTRUCTURE REQUIREMENTS

8.1 The infrastructure requirements have been informed by the evidence work found within the Infrastructure Delivery Study and the technical work relating to the site area that forms the proposed strategic allocation. The likely infrastructure requirements are justified and identified below although further testing is required to ensure the mitigation levels are required and the project remains viable.

TRANSPORT INFRASTRUCTURE

- 8.2 A key aspect of the highway strategy for the Grimsby West site is achieving a Link Road between the A46 and A1136 as well as achieving suitable access points into the development area.
- 8.3 WSP Parsons Brinkenhoff (WSP-PB) were commissioned by the Council to undertake a Feasibility Study of a Western Access Route. The initial stages of work confirmed that Phase 1 (a link between A1136 and A46) was the most deliverable part of the scheme. It was therefore agreed with the Council that priority would be given to the delivery of this phase.
- 8.4 There have been a number of Phase 1 options considered ranging from an alignment where the road operates on the basis of a strategic function to a local highway link running through the development.
- 8.5 In terms of establishing the traffic flow forecast, WSP-PB have focused on modelling two scenarios for Phase 1 and these are identified as:
 - Preferred Alignment (a peripheral strategic route);
 - Alternative Alignment (southern section peripheral route, northern section internal local distributor road through the development with increased number of development accesses along the length of this route).
- 8.6 The WSP-PB results identify that both the preferred and alternative alignments of the Phase 1 element of the road can not only accommodate the strategic allocation but also deliver mitigation benefits within the wider highway network over and above that required for the development.
- 8.7 The Preferred Alignment assumes the design of the road would be a maximum speed of 50mph whereas the Alternative Alignment currently assumes a 40mph speed limited for the south section (between A46 and Aylesby Road) and 30mph for the northern internal section (between Aylesby Road and the A1136). This route would be a single carriageway road and the traffic flows would be such that direct access to residential properties would not be appropriate. However side road junctions will be provided and so placemaking features can integrate with the link road purpose.
- 8.8 Throughout the evolution of the concept framework, there has been a clear appreciation that the on-going testing of the highway technical work relating to the link road has been seen in the context of achieving both a strong sense of place and creating an attractive environment whilst being able to deliver sustainable transport requirements as well as giving careful consideration to the viability of the project.
- 8.9 In terms of the latter issue, it will be noted that the viability modelling work undertaken to date only assumes the delivery of the Alternative Alignment which would be developed in a phased manner over the lifetime of the development. It has been assumed that the delivery of the Preferred Alignment route can only be delivered through securing external public funding sources although the landowners have agreed to the principle of a fair and

reasonable contribution towards this funding initiative.

8.10 Further work relating to offsite highway mitigation measures is required. As the mitigation provided by the Link Road (whichever scenario identified) would be over and above that required for the likely highway impact of this development there may be an opportunity to justify a direct correlation between the landowners contribution to the Link Road and a reduced requirement to provide offsite mitigation measure against other highway impacts. Further work is required to quantify this issue to clarify the benefit of establishing the Link Road in terms of mitigating the impacts of Grimsby West as well as the impact of all the other development proposed to come forward as part of the Local Plan.

SUSTAINABLE TRANSPORT MEASURES

8.11 In terms of the suggested interventions for cycle and pedestrian movements, these can be divided into internal provision that will be picked up by the masterplan and are largely matters of good urban design in any event and offsite interventions that may require a cost allowance.

INTERNAL PROVISION

- Traffic free cycle routes to the school and retail area, linked via a continuation of the existing Freshney cycle route.
- Pedestrian/cycle crossings provided when interaction with the highway is unavoidable.
- High quality, covered, cycle parking at destination points.
- Safe north/south provision for cyclists preferably through the development site rather than on the outer Link Road.
- Public rights of way will need to be retained.
- Any sections of Aylesby Road that remain through the development should be retained for cycle/pedestrian routes.
- Lighting to be provided on off road cycle routes.
- Shared footway/cycle way to be 2.5m wide.

OFFSITE INTERVENTIONS

- A1136 Great Coates Road East to West to be provided with appropriate crossing provision for anticipated use, this may require a cycle/accessibility bridge.
- A46 cycle lane to Laceby requires specific provision at the new roundabout.
- Sustainable transport links should be made wherever possible into the Wybers Wood Estate.
- 8.12 For buses the following infrastructure interventions are being considered:
 - All houses should be within 400m of a bus stop which should be equipped with Real Time Information (RTI) displays.
 - Highway link through to Wybers Wood would be important for bus services.
 - Link wherever possible to existing bus services for early delivery phases.

- A 'tipping point' should be established which should trigger a developer subsidised bus service through the site.
- Consider dual/purpose school/public bus service.
- 8.13 Initial discussions with Stagecoach, the main bus operator in the area, and the local council, who subcontract some of the bus services, have taken place. Feedback has been positive and all parties have confirmed in principle support for serving the scheme. As a starting point, the following approach to bus phasing has been identified:
 - Identify those areas already within 400m of existing bus routes on Great Coates Road in the north and the A46 in the south.
 - Second Phase northern parcel could be served via diversion of existing services (2/20 or 5) which could be self supporting through the additional patronage and income from first phase passengers. The southern parcel of land where the existing service 3 and 4 travels along the A46 could be extended.
 - The central area will require a new service or a greater diversion from an existing service. A link could be established from Wybers Wood to allow the extension of services 1 and 20. However this would require third party land. Whilst the Wybers Wood link is beneficial for community integration and bus cycle and footpath links, even without establishing a link, a suitable bus service could be provided looping back to the main spine road.

EDUCATION REQUIREMENTS

- 8.14 Due to the scale of the development, it has been determined by the Council that additional school places will be required to meet the needs of the new community in both primary and secondary provision. There are presently five primary school providers within the locality with these being:
 - Laceby Acres;
 - Western;
 - Wybers Wood;
 - Great Coates;
 - Willows
- 8.15 The local area also supports two secondary school providers with these being:
 - · Healing;
 - Whitgift.
- 8.16 The Council acknowledge that some of the existing providers who serve this area of the borough currently have some spare capacity, but by the time pupil yield is realised from the development this may not be the case in some year groups due to national rise in birth rates.

PRIMARY EDUCATION PROVISION

8.17 The Council have identified that for the initial stages of development 210 spaces will need to be provided and it is currently thought that it can be accommodated through the expansion of existing schools/academies within the locality. It is assumed that the provision of the school facilities will be funded through developer contributions from on plot developers as

housing development progresses.

8.18 As the overall aim of the vision is to create a new sustainable urban extension and experience has shown that new primary schools have been a popular attractor to new housing developments, it is also proposed to develop a new primary school, although the timing of delivery is unlikely to be in the early part of the development period. The appraisal reflects a requirement to retain a site of 1.5Ha for this purpose and assumes that developer contributions generated from on-plot developers will be re-diverted to ensure delivery.

SECONDARY EDUCATION PROVISION

8.19 At the outset, the Council's education department has advised that a secondary school will be required on site. At this stage, the Educational Appraisal assumes a 500 place secondary school on a site of 4.25Ha to be provided within the first six years of the development assuming the indicative housing yield within this period is achieved.

GREEN INFRASTRUCTURE

- 8.20 The Council's assessment of open space identifies a strong supply of openspace but the quality varies and a number of openspaces are in need of investment to improve the quality standard.
- 8.21 The study sets the following standards regarding openspace and if we assume an average household of 2.26 based on the ONS sensors for the district and 3,337 units the results are as follows:

TABLE 5: GREEN INFRASTRUCTURE STANDARDS

Туре	Standard	Requirement	Delivery	Clarification
Children's Play	0.8ha/1000 population, of which 0.25 should be equipped play	6.03ha of which 1.88ha should be equipped play	Delivery as part of on plot developers.	
Natural Green space	1ha / 1000 population	7.54ha	Delivery from both on plot developers and by the master developer.	
Outdoor Sports	1.6ha/1000 population	12.06ha	Delivery of 3 pitches, possibly provided in combination with school through a community use agreement	One sports pitch equates to 1ha, 1.6ha includes provision for car parking changing facilities etc
Allotments	0.5ha/1000 population	1.67ha		
Woodland	Access to woodland 2Ha within 500m, 20Ha within 4km.	TBA	Local existing woodland areas to be included in assessment.	

- 8.22 Based on the Green Infrastructure Strategy, there will be multifunctional networks of greenspaces and routes creating new recreation space for future residents and adjoining communities as well as supporting and enhancing biodiversity. The Green Infrastructure Strategy for the site as shown on the Green Infrastructure Framework Plan is likely to include:
 - Natural and semi-natural greenspace (approximately 81.8Ha with a requirement to provide
 a minimum of 2Ha of natural greenspace within 300m of every home. The function of
 natural greenspace could include: civic space (including children's play), Country Park
 along the Freshney Valley, drainage attenuation ponds, existing woodland and structured
 landscaping to carefully soften the visual impact of the built form whilst making a positive
 edge to the new settlement edge.