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Sustainability Appraisal for the Welborne Plan

**Sustainability Report on the Publication Draft
Welborne Plan**

January 2014



Sustainability Appraisal of the Welborne Plan

Sustainability Report on the Publication Welborne Plan

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Abbreviations

AAP	Area Action Plan	NOx	Nitrogen oxides
AQMA	Air Quality Management Area	NPPF	National Planning Policy Framework
ATLAS	Advisory Team for Large Applications	ODPM	Office of the Deputy Prime Minister
BAP	Biodiversity Action Plan	ONS	Office of National Statistics
BMV	Best and Most Valuable	PAYE	Pay-as-you-earn
BOA	Biodiversity Opportunity Area	PPPs	Policies, plans and programmes
BRE	Building Research Establishment	PUSH	Partnership for Urban South Hampshire
CAMS	Catchment Abstraction Management Strategy	RVEI	Road Verges of Ecological Importance
CO ₂	Carbon dioxide	SA	Sustainability Appraisal
CLG	Department of Communities and Local Government	SAC	Special Area of Conservation
DPD	Development Plan Document	SANG	Suitable Alternative Natural Greenspace
DEFRA	Department of the Environment, Food and Rural Affairs	SDA	Strategic Development Area
FBC	Fareham Borough Council	SDMP	Solent Disturbance Mitigation Project
GI	Green Infrastructure	SEA	Strategic Environmental Assessment
GIS	Geographic information systems	SFRA	Strategic Flood Risk Assessment
HCA	Homes and Community Agency	SI	Statutory Instrument
HCC	Hampshire County Council	SINC	Site of Importance for Nature Conservation
HGV	Heavy Goods Vehicle	SPA	Special Protection Area
HLA	High Level Assessment	SPZ	Source Protection Zones
HRA	Habitats Regulations Assessment	SSSI	Site of Special Scientific Interest
HWRC	Household Waste Recycling Centre	SuDS	Sustainable Drainage Systems
IMD	Indices of Multiple Deprivation	UKCIP	UK Climate Impacts Programme
LBAP	Local Biodiversity Action Plan	VOC	Volatile Organic Compounds
LDF	Local Development Framework	WRAP	Waste and Resources Action Programme
LNR	Local Nature Reserve	WRMP	Water Resource Management Plan
NCNF	New Community North of Fareham	µg/m ³	Micrograms per cubic meter
NH ₃	Ammonia		
NO ₂	Nitrogen dioxide		



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Sustainability Appraisal for the Welborne Plan

**Sustainability Report on the Publication Draft
Welborne Plan - Non Technical Summary**

January 2014

Non Technical Summary

About Sustainability Appraisal

A Sustainability Appraisal (SA) is being carried out alongside the development of the Welborne Plan.

Local Planning Authorities such as Fareham Borough Council use SA to assess plans against a set of sustainability objectives developed in consultation with local stakeholders and communities. This assessment helps the Council to identify the relative environmental, social and economic performance of possible strategic, policy and site options, and to evaluate which of these may be more sustainable.

SA is a statutory process incorporating the requirements of the European Union Strategic Environmental Assessment Directive.

About the Welborne Plan

The Welborne Plan is a development plan which sets out what the new community in the north of Fareham borough, named Welborne, will be like. Designed to guide decision-making on future planning applications for the site, it will include planning policies and Policy Map which delineates the area within which policies will apply and allocates certain land uses. These are accompanied by a Strategic Framework Diagram which is a spatial expression of the planning policies. As part of the evidence base a Concept Masterplan has been developed as a visual illustration of how the plan might be delivered.

The Publication Draft Welborne Plan provides for around 6,000 new homes, 20ha of employment land, and supporting infrastructure and services. Accompanying the Fareham Core Strategy, the Fareham Development Sites and Policies Plan and the Hampshire Minerals and Waste Plan, the Welborne Plan is one of four documents which will make up the Fareham Local Plan.

Purpose and Content of the Sustainability Report

The purpose of this Sustainability Report is to:

- ▶ Identify, describe and evaluate the likely significant effects of the Welborne Plan and its reasonable alternatives; and
- ▶ Provide an opportunity for statutory consultees, interested parties and the public to offer views on any aspect of the SA process which has been carried out to date.

The Sustainability Report contains:

- ▶ An outline of the contents and main objectives of the Welborne Plan and its relationship with other plans, programmes and strategies;
- ▶ Relevant aspects of the current state of the environment and key sustainability issues for the borough;
- ▶ The SA Framework of objectives and decision-making criteria against which the Welborne Plan has been assessed;
- ▶ The appraisal of alternative options for the Welborne Plan;
- ▶ A summary of the appraisal carried out for early versions of the Welborne Plan;
- ▶ The likely significant effects of the Welborne Plan in sustainability terms;

- ▶ The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects which may arise as a result of the Welborne Plan;
- ▶ A description of the measures envisaged concerning monitoring; and
- ▶ The next steps for the SA.

The Sustainability Appraisal Scoping Stage

An SA Scoping Report was prepared and submitted to stakeholders in July 2012. This set out the intended scope and level of detail to be included in the Sustainability Report and included a plan, programme and strategy review, an evidence base for the assessment, key issues and environmental challenges to address, and an SA Framework against which the Welborne Plan can be assessed. Following consultation on the Scoping Report, the information presented in the document was updated to take account of the responses received. The baseline information on which the assessment is based has since been updated to take account of new evidence studies completed in recent years.

Assessment of Alternative Options

Following the conclusion of the scoping stage, the SA team contributed to the development of options work carried out for the Welborne Plan. The purpose of this interaction between the SA and the Welborne Plan was to inform and influence initial stages of the plan's development and to provide an early and effective sustainability input.

Sustainability Appraisal Options Assessment Report (April 2013)

In early 2012, as part of development of the Welborne Plan, initial masterplanning (also known as 'concept masterplanning') was undertaken to identify options for the broad location of uses on the site, including homes, employment areas, schools and open spaces. This resulted in the preparation of an options consultation document, which was released for consultation in July 2012. Following consultation on the document in summer 2012, a number of further options for Welborne were distilled from the masterplanning work, consultation responses and ongoing work with landowners and stakeholders.

The Sustainability Appraisal Options Assessment Report (April 2013) presented an appraisal of the main masterplanning options that were consulted on during summer 2012, together with the additional options that were subsequently identified. A total of 110 separate options were appraised using a high level assessment technique. The main purpose of this stage was to provide plan-makers with information on the sustainability performance of each option, to inform and influence their selection for the preferred approach set out in the Draft Welborne Plan. It was undertaken iteratively over the six months between November 2012 and April 2013, with each iteration being passed back to planning officers for information and review.

Detailed assessment of alternative options (summer/autumn 2013)

During summer/autumn 2013, a range of options which had been assessed at the high level stage as leading to complex, negative or uncertain effects were subject to further assessment. Additional options which had been generated during and following consultation on the Draft Welborne Plan were also assessed at this time. The purpose of this stage was to inform and influence

decisions that were being taken on which policy proposals to include in the Publication Draft Welborne Plan.

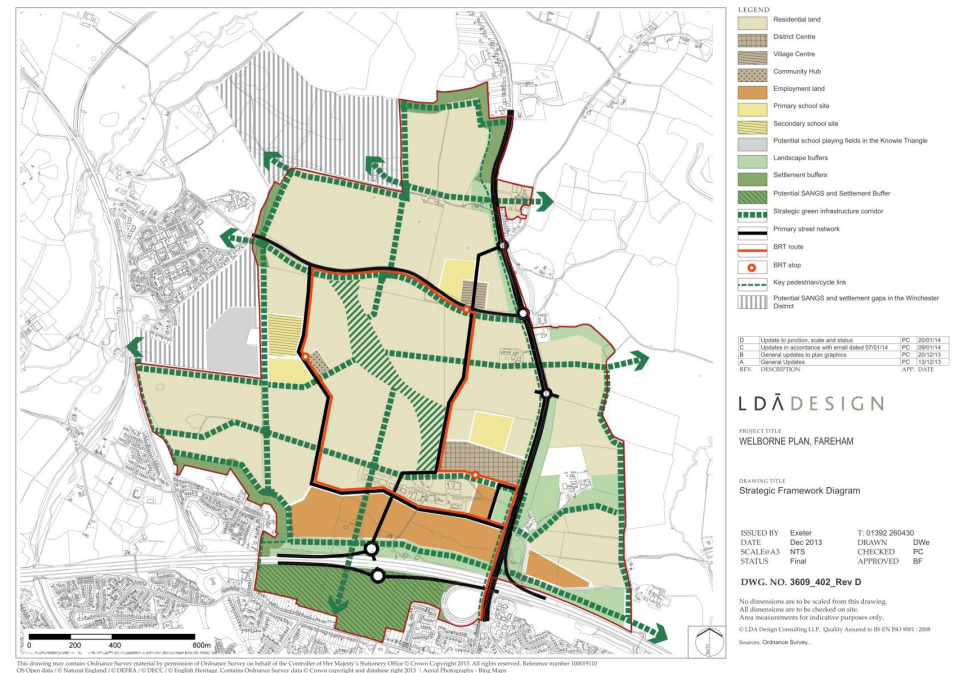
Sustainability Report on the Draft Welborne Plan (October 2013)

In autumn 2013 the Council took the opportunity to re-consult on the Draft Welborne Plan (unchanged from April 2013) and publish the first full Sustainability Report alongside it. The Sustainability Report addressed the full suite of requirements of an Environmental Report as defined by the SEA Directive.

The Sustainability Report presented a re-cap of the findings of the Options Assessment Report, and how these had influenced the contents of the Draft Plan. It then subjected all Draft Plan policies to high level assessment, and a number were also taken forward for more detailed assessment. The compatibility of the Welborne Plan's objectives was tested against the SA Objectives, and the cumulative, synergistic and secondary effects of the plan were appraised. The Sustainability Report concluded with a summary of the appraisal by sustainability theme, recommendations and an outline proposed monitoring framework.

Assessment of the Publication Draft Welborne Plan

The current Sustainability Report accompanies the Publication Draft Welborne Plan, a visual expression of which is given in the Strategic Framework Diagram opposite. The report presents an overall assessment of the Welborne Plan as currently proposed, and presents the rationale for selection of preferred policies, and the reasons for rejecting their alternatives. As with the previous stage, it also addresses the full suite of requirements of an Environmental Report as defined by the SEA Directive.



The findings of the appraisal of the Publication Draft Plan can be summarised as follows:

Summary of significant effects of the Publication Draft Welborne Plan

Accessibility and transportation

The development of Welborne, incorporating 6,000 dwellings by 2036, c.20ha of employment land and associated infrastructure, coupled with anticipated growth in the demand for travel from existing communities within the sub-region, will place further demands on already congested transport networks in the area, including the M27, A27 and A32. However, several of the proposed policies aim to reduce the effects of Welborne on transport networks by introducing a range of transport interventions to improve the flow of road traffic and reduce the need to travel by car.

A major junction improvement is planned for the M27 junction 10, which will be the principal point of access to the strategic road network, while a new spine network within the new community will distribute traffic to different places within Welborne, and provide at least four connections to the A32. The A32 itself will be subject to a range of treatments to calm traffic and provide for several safe crossing points between the eastern and western development zones. Transport modelling carried out to establish the traffic impacts of proposed development indicates that volumes of traffic will decrease on some of the more congested strategic roads, including parts of the M27 and A27. Despite this, significant increases in traffic volumes will occur in some locations, and the Plan aims to deliver a number of local road improvements to improve traffic flow, capacity and safety, while reducing rat-running in Funtley, Knowle and Wickham.

The Plan seeks to ensure key areas within Welborne are linked by sustainable modes of transport. For example the Plan aims to ensure that primary and secondary schools, employment land and residential areas will all be accessible by public transport and walking and cycling networks. But residual effects are nonetheless likely as a result of increasing traffic flows.

Air quality

Existing air quality in the plan area is dominated by the road network, and in particular is affected by the proximity of the M27 motorway to the site. The allocation of employment land within Welborne has been designed to make an efficient use of land which would be unsuitable for residential uses because of air quality and noise impacts emanating from the motorway. However, air quality may worsen in locations close to new or upgraded road junctions, or roads which are predicted to receive significantly increased volumes of traffic.

Biodiversity, flora and fauna

The plan area consists largely of arable fields and improved grassland habitats, much of which is of relatively low intrinsic nature conservation

value, but a range of botanically rich habitats are present locally with the potential to support notable, protected and priority species. Remnants of ancient semi-natural woodland survive at the western site boundary near Knowle and along the east verge of the A32 southern section, and there are six current or proposed Sites of Importance to Nature Conservation on site or adjacent. These locally important habitats are all at risk of impact during both construction and operation and will need special consideration to ensure their continued contribution to nature conservation. Initial field survey work has confirmed that the site supports a range of nationally and European protected species, including badger, bats, birds, dormouse, great crested newt and reptiles.

The Plan seeks to ensure that a full assessment of the impacts on habitats and protected species is carried out, to protect and enhance existing patches of species-rich habitat and populations of protected species on-site. Landscaping and green infrastructure proposals aim to increase the overall area of semi-natural habitat within the site, which could contribute to an increase in biodiversity within the site if correctly implemented. Overall, short-term significant effects to locally important habitats and populations of protected species could occur, but in the long-term the Plan presents a considerable opportunity for biodiversity gain.

The accompanying Habitats Regulations Assessment has examined a range of possible effects on internationally important Special Areas of Conservation and Special Protection Areas in and around the borough. It has concluded that adverse effects on the integrity of the sites in relation to all but one of these impacts are unlikely to occur. Impacts associated with waste water treatment and discharge cannot be fully assessed at the current stage because the preferred wastewater option has not yet been defined.

Climate change

Development of 6,000 dwellings, c.20ha of employment land and associated uses within Welborne will increase greenhouse gas emissions by

expanding the built footprint of Fareham borough.

The Welborne Plan will support the use of sustainable modes of transport, including Bus Rapid Transit, buses, walking and cycling, and aims to limit traffic growth and reduce the need to travel. This will support climate change mitigation by limiting carbon emissions from transport. The Energy policy and High Level Development Principles help to limit emissions from homes, community buildings and employment premises through high energy efficiency standards and the development of localised renewable energy generation. Nevertheless, the Plan is predicted to make a residual contribution to climate change due to increasing carbon emissions.

Although the plan area is not within a zone of elevated flood risk, proposed policies require flood risk assessments to demonstrate that development will not increase flood risk on the site or elsewhere. This will be supported by the Plan's requirement for sustainable drainage systems.

Economic factors

The development of 6,000 dwellings, c.20ha of employment land and associated uses will increase the local market for goods, services and amenities. This will support the economic vitality of Welborne and the surrounding area and provide new employment opportunities locally. The Welborne Plan includes measures to support business start-ups and facilitate the growth of small businesses, while requirements for local employment and skills training during construction are included within the implementation plan. Overall, the plan is considered to have a positive impact on economic factors.

Health

Health and wellbeing in Welborne will be supported by the Plan's encouragement of healthier modes of travel. This includes policies' on high quality pedestrian and cycle networks and enhanced public transport links. Opportunities for health and wellbeing will also be provided by the development of high quality open spaces, accessible natural greenspace,

sports and recreation facilities, formal and informal play and green corridors through the green infrastructure strategy of the Plan.

Demographic trends such as an ageing population are likely to have implications for the provision of health services locally. In this context the Plan's focus on local service provision and ensuring that new areas of development are easily accessible to new residential areas will support the effectiveness of local health care provision in Welborne. Overall, the Plan is predicted to have a positive effect on human health by distributing sensitive land uses to avoid possible hazards, and providing for new health care facilities and substantial amounts of new sports and recreational facilities.

Historic environment

A number of features and areas of historic importance exist within and near to the plan area. For example, to the west of the A32 are the Grade II* listed Dean Farmhouse and the recently discovered Neolithic long barrow. To the east of the A32, the proposals will affect the setting of the Lodge and Boundary Oak School, including the historic parkland at Roche Court. The setting of North Fareham Farmhouse and Mill House (Forest Lane), lying just outside the eastern policy boundary, will also be affected. In the wider area, views from and the setting of, historic landscapes and views associated with Fort Nelson on Portsdown Hill, the Forest of Bere, and historic settlement of Wickham will be altered. The Plan seeks to protect and enhance significant cultural heritage features and ensure new uses are consistent with the conservation of heritage assets. The Plan requires all new development to adhere to a Heritage Strategy and Historic Environment Management Plan.

In summary, residual impacts are considered to be both positive and negative; the Plan provides an opportunity to discover, record and preserve heritage features, and present them to the community, but nonetheless the setting of some features will be permanently altered and there is a risk of loss or damage to unknown buried assets during construction.

Housing

The Welborne Plan will support the delivery of around 6,000 dwellings in Welborne in the period to 2036, thereby making a significant contribution to the housing needs of the borough and wider housing market area. The Plan sets the framework for varying types and tenures of housing in Welborne, including market housing, affordable housing, private rented housing and specialist housing for older people.

The sustainability and efficiency of new housing in Welborne is promoted by the Plan which seeks to optimise energy and water efficiency in new dwellings, including the requirement for 10% of new dwellings to be built to 'Passivhaus' standard. This will be supported by the installation of water meters in all residential dwellings. The quality and vitality of residential areas and neighbourhoods will benefit from the development of comprehensive walking and cycling networks and multifunctional green infrastructure, and the integration of residential areas with other land uses. Overall, the Welborne Plan is considered to have a significant positive effect on the housing objective.

Landscape

Landscape sensitivity analyses show that the centre of the proposed allocation is an area of low landscape sensitivity, but that the site's fringes to the north, south, east and west are medium sensitivity, while areas of high sensitivity associated with the Forest of Bere and Portsdown Hill lie to the north and east respectively. The Welborne Plan sets out a response to these constraints, including an accompanying landscape strategy which aims to prevent or significantly reduce views of Welborne from Wickham and the South Downs National Park to the north, and defines character areas within the policy boundary.

Important elements of the Plan's approach to structural landscaping include the new central park in the Downland area, buffers to maintain separation from existing settlements, woodland belts to provide screening and to

break views from the east of the A32, and enhancements to the visual separation of Wickham and Fareham. The Plan's focus on the development of high quality green infrastructure networks in Welborne as an integral part of wider sub-regional networks will support the quality of townscape and landscape in the area, and provide a key means of creating a high quality built and natural environment. Nevertheless, the scale of development proposed and allocation of land to the east of A32 in an area of medium landscape sensitivity will result in unavoidable residual impacts on landscape character.

Material assets

The layout of the new community responds to material asset constraints on site, including the gas mains which traverse the site from north-west to south-east. Opportunities to extract resources from the Minerals Safeguarding Area to the site's fringes should be explored during the design and phasing of development proposals. As discussed above in relation to climate change, the Plan seeks to encourage energy efficiency and the development of low and zero carbon energy generation.

The Plan aims to minimise waste and encourage recycling in Welborne by requiring that all domestic properties incorporate storage facilities for recyclables as part of their design. The Plan also allocates a new Household Waste Recycling Centre within the employment area to avoid negative effects on residential amenity. However, construction and operation of the new community will inevitably result in significant resource usage and the Plan is assessed as leading to mixed effects in this respect.

Population and quality of life

The Plan provides for a wide range of residential, employment and community land types within Welborne, including services, facilities and amenities within district and local centres and the community hub which are in close proximity and easily accessible to residential areas. In this context the land use allocations proposed through the Plan will reduce barriers to

service provision within Welborne.

The introduction of high quality green infrastructure in Welborne will provide significant opportunities for recreation and amenity and help facilitate a high quality outdoors living environment. The development of open space and playing field provision and green corridors through the green infrastructure proposals for Welborne will enhance formal and informal leisure and recreation opportunities, encourage walking and cycling, and help promote healthier and more active lifestyles.

The Plan will generate a range of new employment opportunities during operation, while construction phases will be accompanied by employment and training plans demonstrating how local people will be included in the development process and can develop relevant construction and related skills and find employment during the development of Welborne.

Overall, the Welborne Plan is considered to have a range of positive effects on population and quality of life over the long-term, despite negative effects for neighbouring communities during the construction phase.

Soil

Allocating the site for Welborne will result in a loss of best and most versatile agricultural land, the principle of which has been tested in higher tier plans (the South East Plan and Fareham Core Strategy) and is not revisited here. Nevertheless, the Plan will result in significant negative effects on soil resources.

Water

The Plan acknowledges the significance of the nearby aquifer by ensuring that proposals which could result in surface water entering the aquifer demonstrate that risks of contamination will be avoided. Sustainable management of water run-off in Welborne will be achieved through the Plan's requirement for sustainable drainage systems. Water efficiency measures are incorporated to achieve residential consumption rates of no greater than 105 litres per person per day.

The policy takes a permissive approach to wastewater treatment options, allowing the preferred solution to be decided following further feasibility studies. One of these options would require wastewater to be treated at the Knowle works, which would need significant upgrades and expansion to be able to cope with the additional volume of waste. The Knowle treatment option is likely to have a range of environmental effects which would affect residents of Knowle most acutely, including landscape and visual, ecological, air and noise pollution impacts. However, the alternative option of conveying wastewater to Peel Common treatment works is also significantly constrained. It is likely to lead to a broadly similar range of impacts, which may affect a higher number of people, has the added complication of needing to cross the M27, and would lock-in high energy and carbon costs of pumping wastewater over a much longer distance.

In conclusion, the Welborne Plan is predicted to have mixed impacts for the water environment, largely as a result of the uncertainties associated with the final wastewater treatment solution.

Recommendations

The Publication Draft Welborne Plan is predicted to bring a range of positive and negative sustainability effects, and a number of recommendations are proposed to help the Welborne Plan further improve its sustainability performance. These include the following:

- ▶ While the loss of agricultural land will be unavoidable if development objectives are to be met, opportunities to extract minerals deposits prior to development should be explored to avoid sterilising these resources.
- ▶ Noise screening measures, use of low noise road surfacing, low-spill lighting design and planted vegetation buffer zones could be installed at the new M27 junction 10, and junction improvements in Wickham,

Knowle, Funtley and Fareham, to reduce impacts to existing homes in Funtley and north Fareham, if project-level impact assessment indicates that significant increases in air, noise or light pollution would occur.

- ▶ Slip-roads both north and south of the M27 could include planted vegetation buffer zones to screen the visual impact from existing and newly developed areas to the north and south.
- ▶ Junction improvements on the local road network could be accompanied by measures to lessen townscape impacts, such as area of new planting, high quality street furniture and signage, interpretation boards for features of local interest.
- ▶ Careful route planning and design of construction methods for the M27 junction 10 slip-roads and internal spine network will be required to avoid or minimise loss or damage to areas of priority habitat, ancient woodland remnant or botanically rich road verges. Appropriate planting and habitat creation should also take place alongside the construction of these new routes as part of the wider landscaping and GI strategy for Welborne, to contribute to sub-regional biodiversity networks.
- ▶ The technological selection, location, design and layout of new renewable energy infrastructure should seek to avoid noise pollution or negative effects on the fabric of cultural heritage assets, and aim to complement landscape/townscape character and the setting of the historic environment. Proposals for renewable energy installations will need to demonstrate that they can be delivered without significant ecological impacts or increasing air pollution.
- ▶ Much remains to be decided regarding the final wastewater conveyance and treatment solution. Negative effects on landscape, cultural heritage assets, air, noise, water and light pollution, and ecological impacts could

result from both the Knowle and Peel Common option to a greater or lesser extent. Specific mitigation proposals will need to be drawn up during selection and design of the preferred option.

- ▶ Regarding landscape, it is likely that a pipeline to Peel Common would be buried, thereby limiting operational effects on landscape character. Site-level landscaping proposals (e.g. bunds or tree planting) may be sufficient to mitigate the effects of expanding the Knowle works.
- ▶ The Knowle wastewater treatment option is likely to require slurry to be removed from site by lorry, resulting in increased traffic and associated impacts in the local area. HGV route-planning, road upgrades and fleet improvements could help to reduce these impacts on Knowle residents.

Monitoring

Chapter 8 of the Sustainability Report contains revised proposals for a monitoring programme to measure the Welborne Plan's implementation in relation to aspects of the environmental, social and economic baseline which are assessed as likely to be significantly, or where opportunities for an improvement in sustainability performance may arise. Monitoring for the SA will be aligned with or incorporated within monitoring that is scheduled for the plan itself, both to avoid duplication and ensure that appropriate remedial action can be taken.

Next Steps

Following publication of the Welborne Plan and its Sustainability Report, the Plan will move towards Examination in Public. Representations received on the Publication Draft Plan may necessitate further changes to the plan and, if so, significant changes will also be subject to further Sustainability Appraisal. This

may lead to a further edition of the Sustainability Report being produced, or perhaps an Addendum to the current report, so that the findings of further appraisal can be circulated.

The representations, along with any proposed changes to the plan and SA information will be submitted to the Planning Inspector to consider during the Examination in Public.

Following Examination, a Post Adoption Statement will be published with the adopted version of the Welborne Plan. The purpose of the Post Adoption Statement is to outline how the SA process has informed and influenced the Welborne Plan development process and demonstrate how consultation on the SA was taken into account.

Publication

The Publication Draft Welborne Plan and this Sustainability Report are being made available for representations for a period of six weeks, from 28 February until 5.00pm on Friday 11 April 2014.

Documents can be inspected online, at Fareham Library or the Council's office. Representations can be submitted via the online response form, or sent to planningpolicy@fareham.gov.uk or the Council's address given opposite.

Email:

planningpolicy@fareham.gov.uk

Online:

www.fareham.gov.uk/planning/new_community/intro.aspx

Hard copy:

**Fareham Borough Council
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1 Introduction

1.1 Purpose of this Report

- 1.1.1 This Sustainability Report has been prepared for Fareham Borough Council as part of the combined Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) process for the Welborne Plan. The report was prepared for the Publication Draft Welborne Plan which is being published for a period of representations between 28 February and 11 April 2014.
- 1.1.2 The Sustainability Report has been produced in compliance with the Town and Country Planning (Local Planning) (England) Regulations 2012 and Environmental Assessment of Plans and Programmes Regulations 2004. It incorporates the Environmental Report which is required in accordance with EU Directive 2001/42/EC on Environmental Assessment of Plans and Programmes (the SEA Directive). The report represents the latest stage in the SA/SEA and forms part of the evidence base upon which the Plan is based.

1.2 The Welborne Plan

- 1.2.1 The principle of developing a new community north of Fareham was established by the Fareham Borough Core Strategy and, before that, the South East Plan. The Core Strategy describes the vision for the new community – to be named Welborne – and defined the Broad Area of Search for locating the community together with overall development objectives, including provision for 6,500-7,500 dwellings and up to 90,750m² of employment floorspace¹. It allows for flexibility in the Welborne Plan to adjust these objectives where necessary in order to achieve a successful, sustainable development. The Welborne Plan sets the policy boundary (Figure 1.2) and is exploring a range of alternative options, including the number of new homes to be developed, jobs to be provided, a transport strategy, and quantity and layout of green infrastructure.
- 1.2.2 To guide decision-making on future planning applications for the site, the Welborne Plan is being prepared by Fareham Borough Council. It includes planning policies and the Policy Map which delineates the area within which policies will apply and allocates certain land uses. These are accompanied by a Strategic Framework Diagram which is a spatial expression of the planning policies. As part of the evidence base a Concept Masterplan has been developed as a visual illustration of how the plan might be delivered on the ground. The Welborne Plan addresses housing development and the level of affordable housing, the amount, nature and location of employment opportunities and infrastructure needed to support the new community such as roads, public transport, schools and community facilities. It incorporates a green infrastructure strategy outlining how new open spaces will be created and maintained, and how connections to the countryside can be improved.

¹ Policy CS13 of the Fareham Core Strategy presents the broad development principles for the SDA.

1.2.3 The Welborne Plan will form the fourth part of the Fareham Borough Development Plan, sitting alongside the Development Sites and Policies Plan beneath the Core Strategy and Hampshire Minerals and Waste Plan (Figure 1.1). Box 1 sets out the key facts relating to the Welborne Plan.

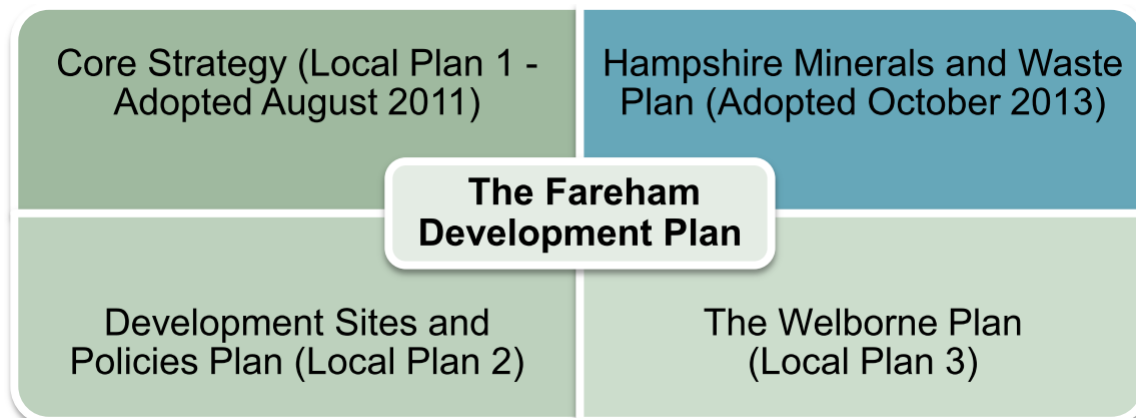
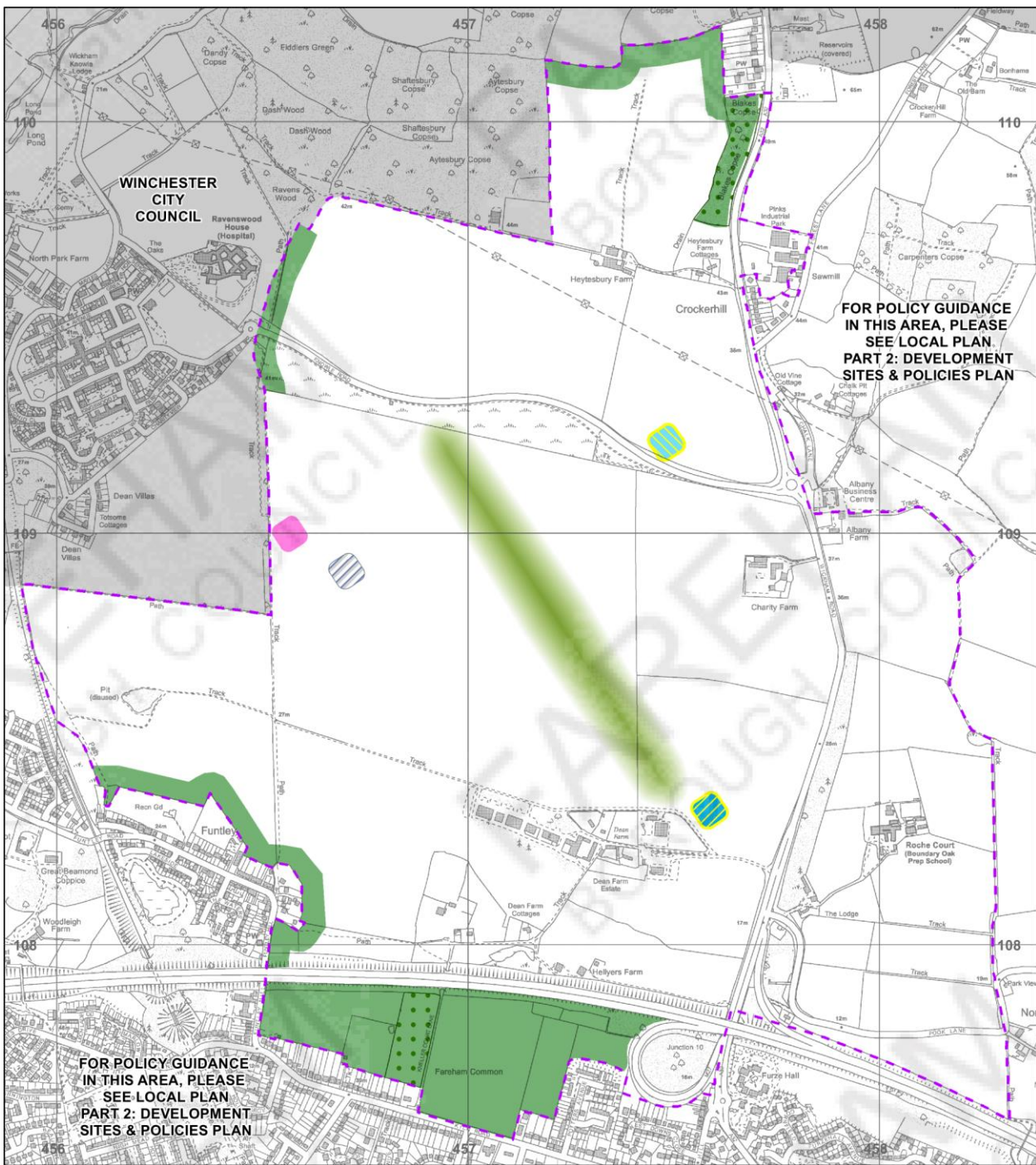


Figure 1.1: The Fareham Local Plan (source: FBC)

Box 1: Key facts about the Welborne Plan	
Name of Responsible Authority:	Fareham Borough Council.
Title of plan:	Welborne Plan.
What prompted the plan (e.g. legislative, regulatory or administrative provision):	The Welborne Plan is the part of the Fareham Development Plan which sets out how the new community of Welborne should take shape over the period to 2036. Once adopted, the Welborne Plan will, alongside the Core Strategy, the Hampshire Minerals and Waste Plan, and the Development Sites and Policies Plan, and form part of the Council’s Statutory Development Plan.
Subject (e.g. transport):	Spatial plan.
Period covered:	To 2036.
Frequency of updates:	When required.
Area covered:	The proposed area covered by the Welborne Plan (Figure 1.2), which incorporates land to the north and south of the M27 and to the east and west of the A32.
Purpose and scope of the plan:	The Welborne Plan develops in more detail the Core Strategy policy approach for the new community north of Fareham. Introducing a Strategic Framework Diagram for the area, it will set out detailed objectives, community and infrastructure provisions and the disposition and phasing of land uses for Welborne.
Contact point:	Planning Strategy and Environment Fareham Borough Council Civic Offices, Civic Way, Fareham Hampshire, PO16 7AZ Telephone: 01329 236100 E-Mail: planningpolicy@fareham.gov.uk



Legend

- WELBORNE BOUNDARY (WEL3)
- SITES OF IMPORTANCE FOR NATURE CONSERVATION (CS4, DSP13)
- SECONDARY SCHOOL APPROXIMATE LOCATION
- WELBORNE SETTLEMENT BUFFERS
- WELBORNE CENTRAL PARK APPROXIMATE LOCATION
- LOCAL CENTRE APPROXIMATE LOCATION
- DISTRICT CENTRE APPROXIMATE LOCATION
- COMMUNITY HUB APPROXIMATE LOCATION

1:10,000



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Scale 1:10,000

Figure 1.2: Welborne Policy Map (including key land use allocations)

1.3 The Study Area

- 1.3.1 Welborne will be a greenfield development located to the north of Junction 10 of the M27 motorway, to the north of Fareham town centre. It is strategically located approximately eight miles north west of Portsmouth city centre, 14 miles east of Southampton city centre, and 23 miles south east of Winchester.
- 1.3.2 As indicated by the Policy Map in Figure 1.2, the Welborne plan area comprises approximately 371 hectares in Fareham Borough². The boundaries broadly follow the M27 to the south, a line to the east of Funtley and Knowle in the west, Heytesbury Farm and Crockerhill in the north, to North Fareham Farm in the east, and Fareham Common to the south of the M27.
- 1.3.3 The wider area is characterised by good quality countryside and attractive settlements, some of which have retained much of their historic character. Existing accessibility in the area is led by the presence of the M27 and the A32, the former being a physical barrier which will maintain separation between Welborne and the rest of the borough.

1.4 Sustainable Development

- 1.4.1 The UK's sustainable development agenda is shaped by the Sustainable Development Strategy, Securing the Future (2005) and in planning terms by the National Planning Policy Framework (NPPF), which replaced previous national planning policy (Planning Policy Statements and Planning Policy Guidance notes) in March 2012. The NPPF includes a presumption in favour of sustainable development, which it goes on to interpret in a planning context with reference to the Sustainable Development Strategy.

The UK Sustainable Development Strategy

- 1.4.2 Securing the Future (2005) suggests that for a policy to be sustainable, it must respect all five of the principles set out in Figure 1.3. The strategy also recognises that some policies, while underpinned by all five principles, will place more emphasis on certain principles than others. The strategy states that "we want to achieve our goals of living within environmental limits and a just society, and we will do it by means of a sustainable economy, good governance, and sound science" (Securing the Future, 2005).
- 1.4.3 The strategy states that the five guiding principles are promoted through four shared priorities:
- "Sustainable Consumption and Production – Sustainable consumption and production is about achieving more with less. This means not only looking at how goods and services are produced, but also the impacts of products and materials across their whole lifecycle and building on people's awareness of social and environmental concerns. This includes reducing the inefficient use of resources which are a drag on the economy, so helping boost business competitiveness and to break the link between economic growth and environmental degradation.*

² A small area of the SDA also extends into Winchester District to the north, although this will not be used for built development.

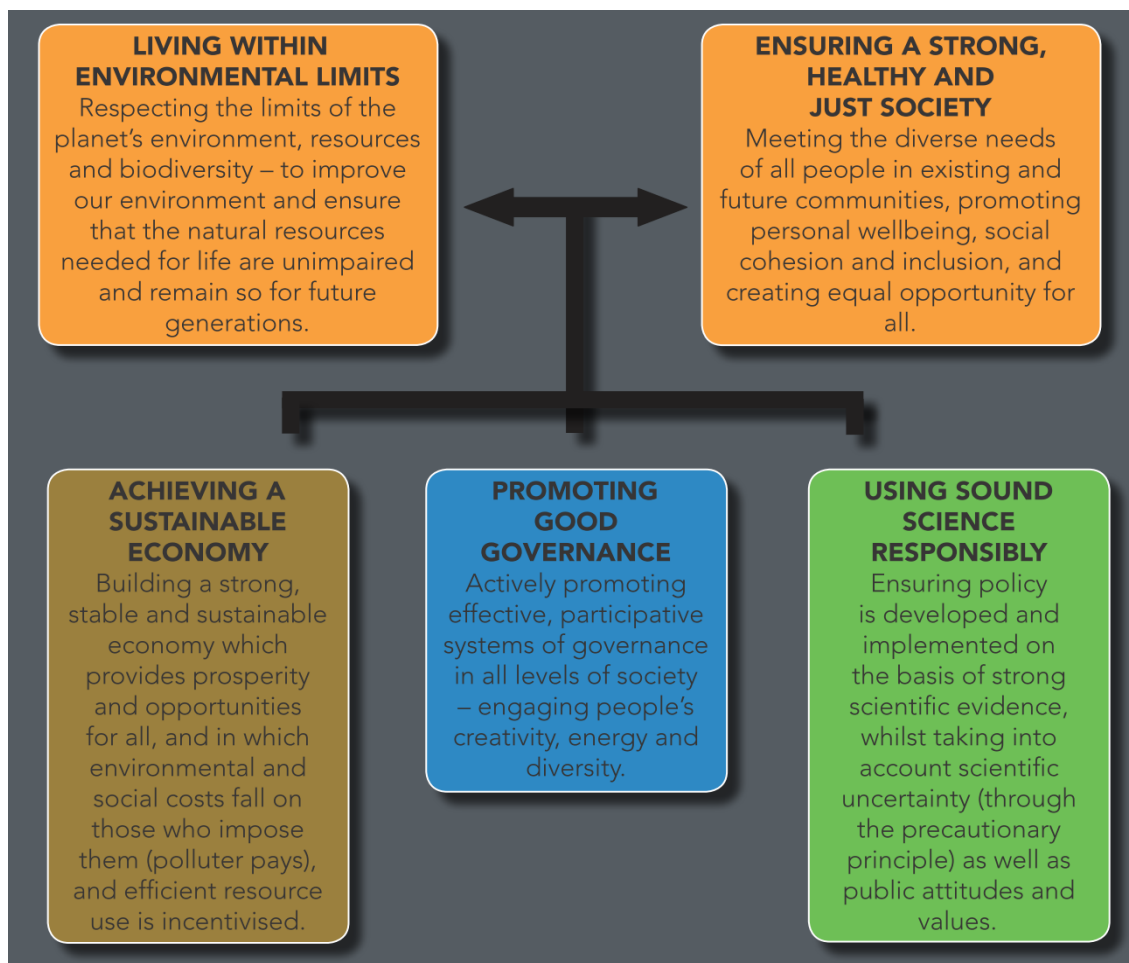


Figure 1.3: Five guiding principles of the UK Sustainable Development Strategy, Securing the Future (2005)

“Climate Change and Energy – The effects of a changing climate can already be seen. Temperatures and sea levels are rising, ice and snow cover are declining, and the consequences could be catastrophic for the natural world and society. Scientific evidence points to the release of greenhouse gases, such as carbon dioxide and methane, into the atmosphere by human activity as the primary cause of climatic change. We will seek to secure a profound change in the way we generate and use energy, and in other activities that release these gases. At the same time we must prepare for the climate change that cannot now be avoided. We must set a good example and will encourage others to follow it.

“Natural Resource Protection and Environmental Enhancement – Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the environment is most degraded to ensure a decent environment for everyone, and a more integrated policy framework.

“Sustainable Communities – Our aim is to create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power in the decisions that affect them and working in partnership at the right level to get things done. The UK uses the same principles of engagement, partnership,

and programmes of aid in order to tackle poverty and environmental degradation and to ensure good governance in overseas communities. These priorities for action within the UK will also help to shape the way the UK works internationally, in ensuring that our objectives and activities are aligned with international goals.”

- 1.4.4 The Sustainability Appraisal for the Welborne Plan will incorporate these key principles at the heart of the assessment process.

2 Methodology

2.1 Integrated Sustainability Appraisal

2.1.1 The Welborne Plan is subject to the following assessments:

- ▶ Sustainability Appraisal; and
- ▶ Strategic Environmental Assessment.

2.1.2 A Habitats Regulations Assessment (under the Conservation of Habitats and Species Regulations 2010 (as amended)) is also being carried out, but reported on separately.

2.1.3 Strategic Environmental Assessment is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision making. Sustainability Appraisals are broader and promote sustainable development through integration of environmental, social and economic considerations into the plan's preparation.

2.1.4 Strategic Environmental Assessment was introduced to the UK through EU Directive 2001/42/EC. In England the Directive was transposed via the Environmental Assessment of Plans and Programmes Regulations 2004. Sustainability Appraisal is a requirement of the Planning and Compulsory Purchase Act 2004 and applies to Development Plan Documents. Integrated SA combines these processes to allow for a single appraisal to be carried out by integrating the requirements of SEA³ into the SA process. SA should therefore fulfil the requirements for producing an Environmental Report under the Annex 1 of the SEA Directive (see Appendix A which also includes a compliance checklist).

2.1.5 In the interests of efficiency, following guidelines and the desire to avoid duplication, the two assessment types, SA and SEA, are integrated under the umbrella of SA and are being undertaken simultaneously for Local Plan documents. The combined approach is based upon the following principles:

- ▶ SA Objectives are used for appraising potential impacts of plan policies and proposals on various environmental, social and economic components;
- ▶ Baseline information including environmental, social and economic factors is collected and collated. Predicted effects of plan policies and proposals are evaluated against the baseline and likely evolution thereof in the absence of the plan;
- ▶ Alternative options and preferred options for the plan are appraised using an SA Framework, combined with careful consideration of baseline conditions; and

³ Office of the Deputy Prime Minister (September 2005): *A Practical Guide to the SEA Directive*. The SEA guidance can be found at : <https://www.gov.uk/government/publications/strategic-environmental-assessment-directive-guidance>

- ▶ Indicators and decision-making criteria are devised to assist in monitoring delivery of the plan and any significant effects thereof.

2.2 Stages of Sustainability Appraisal

2.2.1 Table 2.1 provides a summary of the procedural steps for the appraisal. The steps shaded in green are the stages covered in this report. The second column indicates where information about each respective stage can be found in this document. This Sustainability Report accompanies the Publication Draft Welborne Plan. It presents information on the SA process carried out to date and incorporates an appraisal of the Publication Draft Welborne Plan. Chapter 9 discusses the next steps for the SA process subsequent to the completion of consultation on the current Sustainability Report.

Table 2.1: SA/SEA stages and those addressed in this report

Setting the context and objectives, establishing the baseline, and deciding on the scope	Location in the report
Identifying relevant policies, plans and programmes	Section 3.3
Collecting baseline information	Section 3.4 and Appendix B
Identifying environmental and sustainability issues	Section 3.5 and Appendix B
Identifying appraisal objectives	Section 3.6
Consulting on the scope of the appraisal	Section 3.2
Developing and refining options and assessing effects	
Testing the Plan objectives against the appraisal objectives	Section 5.2
Developing and refining the alternative options for the Plan	Chapter 4
Predicting, appraising and evaluating the significant effects of the options and alternatives	Chapters 5 and 6
Considering ways of mitigating adverse effects and maximising beneficial impacts	Chapter 7
Proposing measures to monitor the significant effects of implementing the Plan	Chapter 8
Preparing the Sustainability Report	
Including the SEA requirements for an Environmental Report	Whole document
Consultation	
Consulting on the Plan and Sustainability Report	Chapter 9
Assessing significant changes	n/a: following consultation
Making decisions and providing information	n/a: Post Adoption Statement
Monitoring	
Monitoring the significant effects of implementing the Plan	n/a: Following adoption of plan

2.3 Presenting the SA Information

2.3.1 Where appropriate, this Sustainability Report has presented the SA information through a series of sustainability themes. The selected sustainability themes incorporate the SEA ‘topics’ derived from Annex I(f) of the SEA Directive (see Appendix A): biodiversity, flora and fauna, population, human health, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape and the inter-relationship between these factors. These were expanded to encompass a fuller range of factors as is required for a Sustainability Appraisal.

2.3.2 Table 2.2 presents details about the content of each sustainability theme and how it relates to the requirements of the SEA Directive. It is intended that presenting the SA information through these sustainability themes where appropriate will help enable the reader to easily locate the SA information representing their specific areas of interest.

2.4 Approach to the Assessment of the Welborne Plan

2.4.1 The following sections describe the techniques used for appraising the Welborne Plan.

High level assessment stages

2.4.2 A process known as high level assessment has been undertaken at each main stage of the plan’s development to date. High level assessment utilises the SA Framework, drawing on the review of plans, programmes and policies and baseline data, to assess each proposal that is being considered for inclusion in the plan. Findings are presented in matrix format and impacts are noted as Strong Negative, Negative, Neutral, Positive or Strong Positive.

2.4.3 The main function of the high level assessment is to identify whether or not a given proposal is likely to bring positive, negative or uncertain effects in relation to the SA Objectives. A benefit of this approach is that a high number and wide range of options policies can be tested and consistently compared with regard to their relative sustainability performance. Options which are relatively benign in sustainability terms (such as incorporating particular design standards, e.g. Lifetime Homes) can be de-prioritised for detailed assessment, while their benefits are noted for discussion during later stages of the appraisal process. Options which are more complex and lead to a range of negative or uncertain sustainability effects are selected for more detailed scrutiny as described below.

Table 2.2: Sustainability themes

Sustainability theme	SEA Directive topic	Datasets included
Accessibility and transportation	Population	Transportation infrastructure Traffic flows Walking and cycling Accessibility
Air quality	Air	Air pollution sources Air quality hotspots Air quality management

Sustainability theme	SEA Directive topic	Datasets included
Biodiversity and geodiversity	Biodiversity, flora and fauna	Habitats Species Nature conservation designations Geological features
Climate change	Climatic factors	Greenhouse gas emissions by source Greenhouse gas emissions trends Effects of climate change Climate change adaptation
Economic factors	Material assets	Economic sectors Business start-ups Employment sectors Education and skills Sites and premises
Health	Human health	Health indicators Healthcare inequalities Sport, fitness and activity levels Noise
Historic environment	Cultural heritage	Historic development of the borough Designated and non designated sites and areas Setting of cultural heritage assets Archaeological assets
Housing	Population Material assets	House prices and affordability Housing quality and vacancy rates Homelessness
Landscape	Landscape	Landscape character The South Downs National Park Tranquillity
Material assets	Material assets	Energy Waste arisings and recycling rates Minerals Previously developed land
Population and quality of life	Population	Population size and migration Population density Age structure Ethnicity Indices of Multiple Deprivation Unemployment Crime Recreation & amenity (including open space & GI)
Soil	Soil	Soil Resource Soil Quality
Water	Water	Watercourses Water resources Water quality Flooding

Detailed assessments

- 2.4.4 Where complex, negative or uncertain effects are identified through the high level assessment, a secondary level of assessment has taken place to examine the proposal in question in further detail. The process utilises Detailed Assessment Matrices to scrutinise potential effects with reference to the range of criteria identified in Annex II of the SEA Directive (Box 2 below), providing a greater level of detail than the high level assessment stage.

Box 2: Criteria for the assessment of significant effects

Criteria for determining the likely significance of effects referred to in Article 3(5) of the SEA Directive:

The characteristics of plans and programmes, having regard, in particular, to

- a. the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
- b. the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
- c. the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
- d. environmental problems relevant to the plan or programme;
- e. the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste management or water protection).

Characteristics of the effects and of the area likely to be affected, having regard, in particular, to

- a. the probability, duration, frequency and reversibility of the effects;
- b. the cumulative nature of the effects;
- c. the transboundary nature of the effects;
- d. the risks to human health or the environment (e.g. due to accidents);
- e. the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- f. the value and vulnerability of the area likely to be affected due to:
 - special natural characteristics or cultural heritage;
 - exceeded environmental quality standards or limit values;
 - intensive land-use;
 - the effects on areas or landscapes which have a recognised national, Community or international protection status.

- 2.4.5 Detailed Assessment Matrices include information relating to:

- ▶ A description of the predicted effect;
- ▶ The duration of the effect: whether the effect is long, medium or short term;
- ▶ The frequency of the effect: whether it will be ongoing;
- ▶ Whether the effect is temporary or permanent;
- ▶ The geographic significance: local, sub/regional, national or international;
- ▶ The magnitude of effect;

- ▶ The scale of significance;
- ▶ Whether mitigation is required/possible to reduce the effect; and
- ▶ Suggestions for mitigating the effect, or potential improvements to the proposals.

2.4.6 The Detailed Assessment Matrices, where appropriate, also include recommended mitigation measures to limit adverse effects where they arise. At a strategic level it is often difficult to assess significant effects in the absence of widespread data. Instead, orders of magnitude are used, based on geographic significance and impact magnitude. Table 2.3 illustrates this order of magnitude for positive and negative effects.

Table 2.3: Significance matrix

		Impact Magnitude								
		Negative				Neutral	Positive			
		High	Medium	Low	Negligible		Negligible	Low	Medium	High
Geographic Importance	International	Severe	Severe	Major	Moderate	Moderate	Major	Optimum	Optimum	
	National	Severe	Major	Moderate	Minor	Minor	Moderate	Major	Optimum	
	Sub/Regional	Major	Moderate	Minor	Negligible	Negligible	Minor	Moderate	Major	
	Local	Moderate	Minor	Negligible	Negligible	Negligible	Negligible	Minor	Moderate	

Cumulative effects assessment

2.4.7 As required by the SEA Regulations, cumulative, synergistic and indirect effects have been identified and evaluated during the assessment. An explanation of these is as follows:

- ▶ Indirect effects are effects that are not a direct result of the plan, but occur away from the original effect or as a result of a complex pathway;
- ▶ Cumulative effects arise where several developments each have insignificant effects but together have a significant effect, or where several individual effects of the plan have a combined effect;
- ▶ Synergistic effects interact to produce a total effect greater than the sum of the individual effects.

2.4.8 To enable a complete assessment of the sustainability effects resulting from the Publication Draft Welborne Plan, the full range of cumulative, incorporating secondary, indirect and synergistic effects were evaluated. Whilst some of these effects are recorded by the appraisal findings for each proposal, a number of these effects can only be established by examining all of the policies and proposals presented by the plan together. These interactions were examined in the Sustainability Report on the Draft Welborne Plan, the findings of which are updated in section 5.4 of this report.

2.5 Limitations to the Sustainability Appraisal

2.5.1 It is acknowledged that there are a number of limitations and difficulties surrounding the appraisal process carried out for the SA stemming largely from the nature of strategic assessment at the plan level, using secondary data. In most cases assessment has been undertaken without details of environmental limits. In some cases data has not been available (e.g. carbon footprint data) so assessment has in these circumstances erred on the side of caution. The Detailed Assessment Matrices include a column stating confidence of assessment according to a high medium or low scoring.

2.5.2 Many of the Detailed Assessment Matrices include ratings of medium or low confidence. This reflects lack of data, information associated with environmental limits or that the assessment conclusions are informed appraisals rather than affirmative decisions. To address these issues, monitoring proposals should seek address data gaps as well as monitor the effects of the plan.

The SA process and implementation of the Welborne Plan

2.5.3 The sustainability effects of the Welborne Plan will largely be dependent on how the plan is implemented. The Welborne Plan only provides a broad picture of the location, layout and design of new development. How it performs in sustainability terms is very much dependent on what happens at the micro-scale. For example if new development in Welborne does not comply with the aspirations presented in the plan (for example related to energy efficiency or flood risk) then the positive effects highlighted under the policies addressing these topics will be reduced. In another example, the effect of new development proposed through the Welborne Plan on resource use will depend on the exact nature of how new houses, offices, shops and community facilities are designed and built, the layout of development, and the actions of the people who will live and work there.

2.5.4 It is therefore noted that the sustainability performance of the Welborne Plan will be dependent on the implementation of the development principles and policies – in particular those which have been determined to lead to positive effects through the SA.

Mitigation measures

2.5.5 The Detailed Assessment Matrices (presented in Appendix H) and Chapter 7 set out a number of mitigation measures for reducing the potential negative effects of the Welborne Plan. However, these are necessarily broad-brush in approach because the design of mitigation measures to offset the negative effects of the plan will sometimes only realistically be achievable at the project level. The extent to which proposed mitigation measures will offset adverse effects is therefore open to interpretation.

2.5.6 Consequently, the SA process carried out to date on the Welborne Plan has not attempted to “upgrade” the assessment results to more positive findings through a presumption that the proposed mitigation measures will offset potential negative effects. Clearly where uncertainty of mitigation prevails, monitoring of the residual effect is crucial.

Bias towards social and economic factors

- 2.5.7 The SA/SEA processes carried out for Local Plan documents such as the Welborne Plan consider social and economic as well as environmental effects. An often stated weakness of the SA process is that environmental considerations are under-represented, and social and economic factors are over-represented. This may be for a number of reasons, including as a result of the social and economic focus of the plan, or the range and structure of the SA Framework.
- 2.5.8 Environmental sustainability considerations have been fully considered through the SA process for the Welborne Plan by utilising a set of SA Objectives which fully represent environmental sustainability considerations. Use of the sustainability themes (Table 2.2) in the summary of appraisal findings presented in Chapter 6 has purposefully separated the environmental sustainability themes from the socio-economic sustainability themes. In this respect environmental sustainability considerations are distinct from the socio-economic considerations, and no attempt to justify negative environmental effects on the basis of beneficial socio-economic effects has been made through the SA process.

3 Scoping

3.1 Scoping Report

- 3.1.1 The first phase of the SA carried out for the Welborne Plan was the scoping stage. Scoping is the process of deciding the scope and level of detail of an SA, including the relevant baseline information and environmental issues, the assessment methods to be used, and the anticipated structure and contents of the Sustainability Report. The purpose of the Scoping Report is to define and consult on the criteria for assessment, including the SA Framework of objectives and decision-making criteria.
- 3.1.2 Documenting this process, a Scoping Report⁴ was released in July 2012 and presented information in relation to the following tasks:
- ▶ Identifying other relevant policies, plans and programmes, and sustainability objectives;
 - ▶ Collecting baseline information;
 - ▶ Identifying sustainability opportunities and challenges; and
 - ▶ Developing the SA Framework.
- 3.1.3 The Scoping Report updated an earlier version of the Scoping Report released for consultation in summer 2009. The report was revised to reflect changes to the proposed plan, new sources of information that had become available since 2009, changes in legislation and policy, and comments received on the previous Scoping Report.

3.2 Scoping Consultation

- 3.2.1 The Scoping Report was published for consultation for a period of five weeks between 16th July and 20th August 2012.
- 3.2.2 Responses were received from the three Consultation Authorities (English Heritage, Environment Agency and Natural England) and a range of other bodies. Appendix C contains an analysis of scoping consultation responses including a description of how the comments have been taken into account. Following receipt of responses, the SA information, including the baseline and policy and plan review, was updated. The updated SA information is included in this Sustainability Report.

3.3 Policy and Plan Review

- 3.3.1 The Welborne Plan may be influenced in various ways by other policies, plans or programmes (PPPs), or by external sustainability objectives such as those put forward in other strategies or

⁴ The Scoping Report can be found at: <http://www.fareham.gov.uk/pdf/planning/sascopingreport.pdf>

initiatives. The SA process aims to take advantage of potential synergies between these PPPs and address any inconsistencies and constraints.

- 3.3.2 The Scoping Report presented an evaluation of the key PPPs that are likely to be relevant to the SA process and development within Fareham borough. Each PPP is discussed on the basis of how its objectives and sustainability requirements affect, or is affected by, local development. The review of PPPs is presented according to the sustainability themes discussed above, and a summary is given at the start of each baseline chapter. The review was updated in response to comments at the scoping consultation stage and is re-published at Appendix D.

3.4 Gathering Baseline Data

- 3.4.1 A key part of the scoping process is the collection of baseline data. The purpose of the exercise is to help identify key opportunities and challenges facing the area which might be addressed by the Welborne Plan, and to provide an evidence base from which to make the assessment.
- 3.4.2 The baseline section in the Scoping Report provided a review of social, economic and environmental conditions affecting the plan area. One of the purposes of consultation on the Scoping Report was to seek views on whether the data selected was appropriate. Comments were received from a range of stakeholders and in some cases new sources of baseline information were provided or suggested.
- 3.4.3 Included with the baseline data were a series of environmental constraints maps. Providing a spatial dimension to the baseline data, the constraints maps are a valuable tool for examining the likely effects of the Plan on specific assets in the borough (such as for example, biodiversity assets or historic environment features). They are also an effective means of understanding the key issues faced by specific areas in the borough (for example by providing a spatial perspective to local levels of deprivation or health).
- 3.4.4 A range of evidence studies have been completed in recent years to support development of the Welborne Plan. Relevant information from a number of these studies has been added to the original SA baseline collection since the previous version of the Sustainability Report was published. The revised baseline is re-produced in its entirety at Appendix B to this document, and has informed the findings of the appraisal for the Publication Draft Welborne Plan.

3.5 Key Sustainability Issues

- 3.5.1 The policy and plan review and the baseline data revealed a number of key social, environmental and economic issues and challenges for the plan area. These issues present the development of the Welborne Plan with a wide range of opportunities for achieving sustainability gain within the area, and are summarised at the end of each main baseline section presented at Appendix B.

3.6 The Sustainability Appraisal Framework

- 3.6.1 The purpose of the SA Framework is to provide a means of ensuring that the Welborne Plan considers the sustainability needs of the area in terms of its social, environmental and economic effects. It enables the sustainability effects of the plan to be consistently described, analysed and compared.
- 3.6.2 The SA Framework consists of sustainability objectives which, where practicable, can be expressed in the form of targets, the achievement of which is measurable using indicators. There is no statutory basis for setting objectives but they are a recognised way of considering the sustainability effects of a plan and comparing alternatives, and as such provide the basis from which effects of the plan can be tested.
- 3.6.3 The SA Objectives were derived through consideration of the PPP review, the baseline data collection, and the key sustainability issues identified for the plan area. Alongside these, the SEA topics identified in Annex I (f) of the SEA Directive (Appendix A) were a key determinant when considering which SA Objectives should be used for appraisal purposes. The SA Objectives seek to reflect each of these influences to ensure the assessment process is robust, balanced and comprehensive.
- 3.6.4 Following the receipt of responses on the Scoping Report, the SA Framework was updated to address the comments received. The updated SA Framework is presented at Appendix E. The SA Objectives included within the SA Framework, and the sustainability theme to which they relate are set out in Table 3.1.

Table 3.1: Sustainability Appraisal Objectives

No	Objective	Theme
1	To provide good quality and sustainable housing for all	Housing; Population & quality of life
2	To conserve and enhance built and cultural heritage	Landscape; Historic environment
3	To conserve and enhance the character of the landscape	Landscape; Historic environment
4	To promote accessibility and encourage travel by sustainable means	Transportation & accessibility; Population & quality of life; Air quality; Climate change
5	To minimise carbon emissions at the new community and promote adaptation to climate change	Air quality; Climate change; Material assets
6	To minimise air, water, light and noise pollution affecting the new community	Air quality; Population & quality of life; Water
7	To conserve and enhance biodiversity	Biodiversity & geodiversity
8	To conserve and manage natural resources (water, land, minerals, agricultural land, materials)	Material assets; Soil; Water
9	To strengthen the local economy and provide accessible jobs available to residents of the new community	Population & quality of life; Economic factors
10	To create vital and viable new centres which complement existing centres	Population & quality of life; Economic factors
11	To create a healthy and safe new community	Health; Population & quality of life

4 Assessment of Alternative Options

4.1 Responding to the Requirements of the SEA Directive

4.1.1 The SEA Directive requires that the Environmental Report should consider:

'Reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and give 'an outline of the reasons for selecting the alternatives dealt with' (Article 5.1 and Annex I (h)).

4.1.2 Following the conclusion of the scoping stage, the SA team contributed to the development of options work carried out for the Welborne Plan. The purpose of this interaction between the SA and the Welborne Plan was to inform and influence initial stages of the plan's development and to provide an early and effective sustainability input.

4.1.3 The following sections describe the process carried out to date and how the assessment of alternative options has informed and influenced the development of the Welborne Plan⁵.

4.2 Assessment of Alternative Options for the Welborne Plan

Sustainability Appraisal Options Assessment Report (April 2013)

4.2.1 In early 2012, as part of development of the Welborne Plan, initial masterplanning (also known as 'concept masterplanning') was undertaken to identify options for the broad location of uses on the site, including homes, employment areas, schools and open spaces. This work was supplemented by the development of a preliminary green infrastructure strategy and a study of the opportunities for providing and using water and energy in a sustainable way. Broad transport options were also prepared to accompany each of the masterplanning options. This resulted in the preparation of an options consultation document, which was released for consultation in July 2012⁶. Following consultation on the document in summer 2012, a number of further options for Welborne were distilled from the masterplanning work, consultation responses and ongoing work with landowners and stakeholders.

4.2.2 The Sustainability Appraisal Options Assessment Report (April 2013) presented an appraisal of the main masterplanning options that were consulted on during summer 2012, together with the additional options that were subsequently identified. A total of 110 separate options were appraised using the high level assessment (HLA) technique (as described in section 2.4.2). The main purpose of this stage was to provide plan-makers with information on the sustainability

⁵ Reports on previous stages for assessment for the Welborne Plan can be viewed online here:

http://www.fareham.gov.uk/planning/new_community/sustainabilityappraisal.aspx

⁶ FBC (July 2012) *New Community North of Fareham Options Consultation*. The document is available on:

http://www.fareham.gov.uk/pdf/planning/new_community/Webcondoc.pdf

performance of each option, to inform and influence their selection for the preferred approach set out in the Draft Welborne Plan. It was undertaken iteratively over the six months between November 2012 and April 2013, with each iteration being passed back to planning officers for information and review.

- 4.2.3 The findings of the HLA were summarised in matrix format (reproduced at Appendix F) which illustrates the impact of each alternative, on each of the SA Objectives. Commentary on the assessment findings was included within the Options Assessment Report⁷, grouped according to each of the main policy areas being considered for the plan, and cross-referring to the baseline collection. The concluding chapter of the Options Assessment Report summarised which alternative within each policy area was likely to perform most sustainably. These were recommended as preferred options to take forward within the Draft Welborne Plan.
- 4.2.4 The Options Assessment Report was published alongside the Draft Welborne Plan in April 2013.

Detailed assessment of alternative options (summer/autumn 2013)

- 4.2.5 During summer/autumn 2013, a range of options which had been assessed at the high level stage as leading to complex, negative or uncertain effects were subject to further assessment. Additional options which had been generated during and following consultation on the Draft Welborne Plan were also assessed at this time. The purpose of this stage was to inform and influence decisions that were being taken on which policy proposals to include in the Publication Draft Welborne Plan.
- 4.2.6 The detailed options assessments are presented in Appendix G and represent one point along the road towards preparing Publication Draft Welborne – they do not represent the preferred approach of either the Draft Plan or the Publication Draft Plan and are presented for information only.

Sustainability Report on the Draft Welborne Plan (October 2013)

- 4.2.7 In autumn 2013 the Council took the opportunity to re-consult informally on the Draft Welborne Plan (unchanged from April 2013) and publish the first full Sustainability Report alongside it. The Sustainability Report addressed the full suite of requirements of an Environmental Report as defined by the SEA Directive (see Appendix A).
- 4.2.8 The Sustainability Report presented a re-cap of the findings of the Options Assessment Report, and how these had influenced the contents of the Draft Plan. It then subjected all Draft Plan policies to high level assessment, and a number were also taken forward for more detailed assessment. The compatibility of the Welborne Plan's objectives was tested against the SA Objectives, and the cumulative, synergistic and secondary effects of the plan were appraised. The Sustainability Report concluded with a summary of the appraisal by sustainability theme, recommendations and an outline proposed monitoring framework.

⁷ The Options Assessment Report can be found at: www.fareham.gov.uk/planning/new_community/sustainabilityappraisal.aspx

Sustainability Report on the Publication Draft Welborne Plan (February 2014)

- 4.2.9 The current Sustainability Report accompanies the Publication Draft Welborne Plan. It presents an overall assessment of the Welborne Plan as currently proposed, as well as telling the story of the SA process so far. It presents the rationale for selection of preferred policies, and the reasons for rejecting their alternatives. As with the previous stage, it also addresses the full suite of requirements of an Environmental Report as defined by the SEA Directive.

4.3 Rationale for Selection of Preferred Policies, Reasons for Rejecting their Alternatives

- 4.3.1 A wide range of spatial, land use, infrastructure and thematic options have been considered during development of the Welborne Plan. This section seeks to summarise the main options which have been serious contenders for inclusion in the plan, relevant to each policy area addressed by the plan, and how preferred options have been selected.
- 4.3.2 As the Welborne Plan has progressed toward submission, the Council has undertaken a process of testing the concept masterplan and considering the planning strategy for delivering the new community. This process has drawn upon the results of consultation on the Draft Welborne Plan, the ongoing transport, infrastructure, viability and other evidence studies, the Sustainability Appraisal process, and ongoing discussions with landowners and other key bodies (including Environment Agency, Highways Agency and Natural England), Hampshire County Council, and Winchester City Council, supported and facilitated by the Advisory Team for Large Applications (ATLAS; part of the Homes and Communities Agency (HCA)). The focus has been on achieving a deliverable, sustainable new community which achieves the Vision for Welborne.
- 4.3.3 Table 4.1 takes each main policy area in turn and gives a brief explanation of the reasonable alternatives which were considered to be available to meet policy objectives. For each option, it states whether it was rejected, take forward for further development or selected as the preferred option for the Publication Draft Welborne Plan, together with an outline of the reasons for selection or rejection. Reasons for selection/rejection were varied but in many cases can be summarised as a consequence of one or more of the following:
- ▶ Evidence base studies to determine whether the option is deliverable and viable;
 - ▶ Discussions with key stakeholders, as set out above;
 - ▶ Public consultation on the options, Draft Plan or SA; or
 - ▶ Results of Sustainability Appraisal or Habitats Regulations Assessment.

Table 4.1: Rationale for Selection of Preferred Policies, Reasons for Rejecting their Alternatives

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
Allocation of land				
1. Land west and east of A32, including land at J11 REJECTED (following July 2012 Options Consultation): Landscape impact; isolation from rest of Welborne; competition with Cities First; traffic impacts on M27; environmental impact of link road	X		X	X
2. Land west and east of A32, not including land at J11 PREFERRED: Meets housing need with fewest impacts	X			X
3. Land west of A32 only REJECTED (following July 2012 Options Consultation): could not meet housing need at same time as achieving 'garden community' objectives	X			
Use of Winchester land: Knowle triangle				
1. Part housing, part semi-natural greenspace REJECTED: Not supported by WCC; strong public opposition; poor SA performance			X	X
2. Part playing fields / formal open space, part semi-natural greenspace PREFERRED: Allows reduced densities on main site, contributing to 'garden community' objectives	X			X
3. Semi-natural greenspace only PERMISSIVE: plan allows for this outcome because it would increase flexibility on delivery of GI/SANG, although housing densities would increase as a result which may impact development viability	X			X
Maintaining settlement separation				
1. No settlement buffers REJECTED: Separation is an essential part of masterplanning vision; strong opposition to removing buffers; separation was a requirement of South East Plan (until March 2013)	X		X	X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2. 50m buffer at Funtley, Knowle and Wickham TAKEN FORWARD: Concept masterplan concluded that 50m achieves balance between effective buffer and delivering required housing	X			X
3. >50m buffer at Funtley, Knowle and Wickham REJECTED: Supported by consultation but could not meet housing need	X			X
2a. Add new buffers at Knowle Hospital and Blakes Copse PREFERRED: Achieves more effective separation but does not significantly reduce housing capacity (Blakes Copse is a SINC in any case and therefore not developable)	X		X	X
Employment: amount				
1. One job per household (as per Core Strategy, reduced pro rata with housing) REJECTED: Undeliverable due to floorspace density requirements, i.e. would require large amounts of B1, competing with Cities First; not supported by travel-to-work patterns	X			
2. Constraint-led PREFERRED: c.20ha of land unsuitable for other uses due to noise constraints, within which a minimum of 3ha B1 is targeted to provide greatest number of jobs deliverable	X			
Employment: location				
1. Adjacent to M27 PREFERRED: Constraint-led; best use of available land; evidence-based increase in B8 is best located near to motorway which minimises possible impacts on residential amenity	X			
2. Distribute among other uses REJECTED: Although better in town planning and sustainability performance, would leave a significant amount of land to south unused, and may not be as attractive to investors	X			

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
Number of centres				
1. Two new centres plus better use of Knowle REJECTED: Improving Knowle is not within remit of plan (WCC jurisdiction); once decision taken to move schools to west (with community hub), option became redundant	X			X
2. Three new centres TAKEN FORWARD: Broad acceptance of need for at least two centres, including some provision in west of site, but landowner concern that three centres would compete with each other, thereby reducing viability of all three	X		X	X
3. Four new centres: REJECTED: Once residential quantum reduced to 6,000 the option became redundant	X			X
2a. Two new centres, plus community hub co-located with schools in west PREFERRED: Meets identified need without compromising viability; fits well with newly located schools in west of site	X		X	X
Location of centres				
1. Adjacent to A32 and Knowle Road TAKEN FORWARD: Few objections; the centre is viable but poorly related to employment areas; if it were to become a District Centre, it could have greater competition impact on Wickham than other more southerly locations			X	
2. Adjacent to A32 PREFERRED SITE FOR DISTRICT CENTRE: Few objections; is viable; provides for early deliverability of anchor foodstore as can capture passing traffic	X		X	
3. Halfway along Knowle Road REJECTED: Poorly related to employment areas; does not have passing trade benefit of A32 location; undeliverable at least until later phases	X			

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
4. Centre of site REJECTED: Community and SA supported this option most strongly when considered in isolation from other centres, but lack of passing trade constrains its deliverability in early phases and places long-term viability in doubt	X			
1a. Local Centre at A32/Knowle Road PREFERRED FOR LOCAL CENTRE: Generally accepted as suitable location for a lower order centre to serve the north of the site	X		X	
Retail quantum				
1. Allocate Core Strategy quantum (9,000m ²) REJECTED: Undue competition with Fareham and Wickham; reduces housing capacity	X			X
2. Allocate more than Core Strategy REJECTED: Undue competition with Fareham and Wickham; reduces housing capacity	X			X
3. Allocate less than Core Strategy PREFERRED: Evidence suggested that 1,900m ² convenience would be appropriate; consultation recommended that more than this amount would be needed to support viability and encourage self-containment; evidence confirmed that up to 2,500m ² could be supported (together with 3,600m ² comparison)	X		X	X
Provision of school capacity				
1. Provide capacity to serve catchment greater than Welborne REJECTED: Unviable; detracts from principle of self-containment; reduces housing capacity	X			X
2. Provide capacity to serve catchment smaller than Welborne REJECTED: Uncertain delivery/timing of Whiteley 2ary; could not be relied on to meet early Welborne need; does not support self-containment	X			X
3. Sufficient capacity to serve Welborne only TAKEN FORWARD: Contributes to self-containment; maintains housing capacity; does not rely on timely	X			X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
provision elsewhere; but level of need requires clarification				
3a. Welborne: 7 Forms of Entry PREFERRED: Chelmer population modelling indicates this would meet needs of peak pupil population within Welborne	X			X
3b. Welborne: 9 Forms of Entry REJECTED: Not evidence based (see also option 1)	X			X
Location of secondary school				
1. East of Funtley, adjacent to M27 REJECTED: Noise and air pollution constraints; outcome of public consultation on Options	X		X	
2. East of A32 adjacent to M27 REJECTED: Noise and air pollution constraints; difficult to achieve safe, sustainable access from west	X		X	X
3. East of A32 north of Boundary Oak School REJECTED: Difficult to achieve safe, sustainable access from west; little support through consultation on Draft Plan; land may not be available in time for school to open in 2026			X	X
4. Adjacent to district centre (suggested during consultation on Draft Plan) REJECTED: Unviable; reduced level of housing in this area reduces viability of centre	X			
5. Adjacent to Knowle Triangle PREFERRED: Not constrained by M27; few objections; relatively sustainably located; provision of playing fields in Knowle Triangle maintains housing capacity of site without having to increase the average housing density	X		X	X
Location of primary schools				
1. All three to west of A32 TAKEN FORWARD: High consultation support; good sustainability performance			X	X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2. Two to west of A32, one to east (with secondary / all-through) REJECTED: When secondary school moved west of A32			X	X
3. All three adjacent to district or local centre TAKEN FORWARD: High consultation support; good sustainability performance			X	X
4. Combination of 1,2,3: PREFERRED: All west of A32; all adjacent to a centre/hub, without reducing viability of district centre (primary only); one adjacent to secondary or combined all-through provision	X		X	X
Housing: amount				
1. 7,500 dwellings REJECTED: Not deliverable once Land at J11 rejected	X			X
2. 6,500 dwellings REJECTED: Theoretically deliverable at 38dph, but constrained 'garden community' objectives and potentially constrains viability	X		X	X
3. 6,000 dwellings PREFERRED: Maximum deliverable quantum to help meet Fareham's long term housing needs, but without compromising on densities which could affect the ability to achieve 'garden community' objectives	X		X	X
4. 5,400 dwellings REJECTED: Reduced environmental impacts, but does not meet housing need to 2036, thereby increasing development pressures elsewhere in borough; potentially removes need for secondary school (impacts on self-containment); reduces overall viability	X			
Market housing (size, adaptability, private rented)				
1. Prescriptive policy REJECTED: Provides certainty that currently evidenced market needs would be met, including larger homes, and homes for private rent; did not provide flexibility to changing market conditions	X	X		X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2. Less prescriptive policy PREFERRED: Encourages provision to currently evidenced needs; allows for flexibility to changing market conditions; provides clear guidance on need for adaptable homes and homes for private rent (including Joint Venture Housing Company)	X	X		X
Affordable housing (amount, tenure)				
1. 40% of total housing quantum REJECTED: Meets Core Strategy objectives, but not viable	X	X		X
2. 30% of total housing quantum PREFERRED: Meets Core Strategy objectives, and likely to be viable	X	X		X
3. 0% of total housing quantum: REJECTED: Is viable, but does not meet Core Strategy objectives or vision for Welborne	X	X		X
4. Tenure target (70% affordable/social, 30% intermediate) but with flexibility PREFERRED: Meets Core Strategy objectives; evidence based and likely to be viable; allows for changing market conditions	X	X		X
Older person's accommodation				
1. Provide for Welborne's extra care need only (19 units) PERMISSIVE: Evidence shows that smaller scale extra care units may not be viable, but will be permitted if promoted because it meets Welborne's needs	X			X
2. Provide for more than Welborne's extra care needs (60 or 120 units) PERMISSIVE: Higher level provision will be permitted because it is a viable scale of extra care provision and meets more than Welborne's needs	X			X
Gypsies, travellers and travelling showpeople				
1. Allocate a site GTT accommodation REJECTED: Does not contribute to development objectives; needs being met elsewhere in the borough	X			

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2. Include a criteria-based policy PREFERRED: Required to fill policy gap following adoption of Development Sites and Policies Plan (which does not apply to Welborne)	X			
Strategic road access				
1. Access from M27 J11 REJECTED: Landscape sensitivity; deliverability of link road (cost, environmental impact); does not achieve wider strategic road network benefits	X		X	X
2. Access from M27 J10 TAKEN FORWARD: Improved traffic flow on wider strategic road network; lesser landscape impact; no link road required; reduces need for development in sensitive area to east; opportunity to convert to all-moves	X		X	X
2a. J10 Option A: Existing westbound (WB) offslip+gyratory+new WB onslip beneath existing offslip, new EB slip close to A32 PERMISSIVE: Concerns about use of 3rd party land and deliverability; focuses site traffic on gyratory thereby reducing traffic levels in other parts of site; permissible if constraints can be overcome	X			X
2b. J10 Option B: New EB offslip moved west (adjacent to Funtley); new WB onslip running beneath existing WB offslip REJECTED: Increases severance of site to pedestrians/cyclists; impacts on Funtley (noise, visual, air pollution) not acceptable	X			X
2c. J10 Option C: Dumbbells west of Dean Farm to provide new EB offslip+new WB onslip, existing WB offslip retained PREFERRED 2nd: Reduces visual, noise, pollution and severance impacts; better in masterplanning terms when compared to options B/D, especially in relation to walking/cycling connections within Welborne, and from Welborne to Fareham	X			X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2d. J10 Option D: New EB offslip moved east (not adjacent to Funtley); new WB onslip running beneath existing WB offslip PERMISSIVE: : Increases severance of site to pedestrians/cyclists; impacts on Funtley reduced in comparison to B by moving eastbound off-slip further east	X			X
2e. J10 Option E: Dumbbells west of Dean Farm to provide new EB offslip+new WB on&offslips, existing WB offslip removed PREFERRED 1ST: Reduces visual, noise, pollution and severance impacts; better in masterplanning terms when compared to options B/D, especially in relation to walking/cycling connections within Welborne, and from Welborne to Fareham; resolves concerns over existing Westbound offslip	X			X
<i>Note: J10 Options A-E have broadly comparable traffic impacts on the strategic and local road network; decisive factors are likely to be deliverability and impacts on neighbouring settlements</i>	X			X
Local road access				
1. Use A32 as main local road access PREFERRED: No reasonable alternative	X			
2. Close Pook Lane to through traffic to prevent rat-run to J11 PREFERRED: No reasonable alternative	X			
3. Junction and capacity improvements to A32 and other local roads PREFERRED: No reasonable alternative	X			
Public transport				
1. Bus Rapid Transit (BRT) to serve site PREFERRED: Builds on existing BRT; sustainably links into Fareham town centre & rail station; links Gosport to new strategic employment area; assists in long-term creation of comprehensive south Hampshire BRT network	X			X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2. New rail halt at Knowle PERMISSIVE: Development in this part of site is unlikely to commence before +5yrs; land safeguarded to reconsider option at future stage	X			X
3. New and/or re-routed local bus services PREFERRED: No reasonable alternative; provides vital service especially in early phases; flexible early provision of sustainable mode	X			X
Walking and cycling				
1. New strategic north-south link from Wickham through Welborne to Fareham PREFERRED: Location and size of site provides opportunity to improve access; current link provided via busy A32	X			
2. Improved links to Funtley, Knowle, Wickham and wider countryside PREFERRED: No reasonable alternative	X			
3. Access across the A32 - pedestrian/cycle bridge REJECTED: Not required once 2ary school moved to west; unviable	X			X
3a. Access across the A32 - treatment of southern section to provide multiple at-grade crossing opportunities PREFERRED: Improved accessibility still required to link eastern part of site with west, but from a distributed source (multiple dwellings) rather than to a single destination (school); provides attractive, conveniently located east-west links; deliverable in comparison to a bridge which is no longer suited to needs of allocated land uses	X			X
On site green infrastructure				
1. Adopt Core Strategy open space standards TAKEN FORWARD: Conforms to CS policy; provides for Welborne's needs on site (self-containment)	X		X	X
2. Quantum of GI to be determined from what remains after allocating other uses REJECTED: Does not conform to CS policy, nor meet 'garden community' objectives; performs poorly against	X		X	X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
SA/HRA				
3. Require Strategic GI corridors and links: PREFERRED: Provides links to countryside; promotes sustainable travel; contributes to quality of life, health; performs well against SA/HRA	X		X	X
1a. Prescribe quantum and location of open space typologies REJECTED: does not allow for flexibility during comprehensive masterplanning	X	X	X	
1b. Allow comprehensive masterplanning to decide PREFERRED: Allows for flexibility; increases deliverability; achieves required outcome	X	X	X	
Off-site GI, and avoiding and mitigating impacts on internationally protected sites				
1. Avoid impacts via GI on site and/or adjoining land REJECTED: Not feasible - in sufficient land available; not desirable - does not mitigate impact of residual coastal trips	X	X		X
2. Mitigate all impacts through contributions to Solent Disturbance & Mitigation Project REJECTED: SDMP not designed to mitigate impacts from large scale developments; does not mitigate impacts to New Forest SPA	X	X		X
3. Reduce development size (in conformity with Core Strategy) to avoid impacts onsite PERMISSIVE: Does not meet development objectives; reduces viability, deliverability; but still a possibility at project stage	X	X		X
4. Avoid & mitigate impacts through combination of on-site GI and contributions to SDMP PREFERRED: Avoids majority of impact through onsite/adjacent GI, while contributing to SDMP to mitigate residual impact	X	X		X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
Landscaping				
1. Provide policy guidance on structural landscaping PREFERRED: Character Areas address landscape sensitivities identified through concept masterplanning	X			
2. Allow structural landscaping to be guided by promoter's own analysis PREFERRED: Provides flexibility within policy guidance to respond to changing circumstances	X			
3. Provide policy guidance on detailed landscaping PREFERRED: Delivers 'garden community' objectives; retains existing features	X			
4. Allow detailed landscaping to be agreed through development management process REJECTED: Could lead to loss of existing features	X			
Governance and maintenance of GI				
1. Include policy on governance and maintenance PREFERRED: Provides certainty of deliverability and maintenance in perpetuity; meets HRA requirements	X			X
2. Do not include policy on governance and maintenance REJECTED: Does not provide certainty of deliverability or maintenance in perpetuity; does not meet HRA requirements	X			X
Energy efficiency and supply				
1. Site-wide generation (e.g. Combined Heat & Power) PERMISSIVE: Site could be well suited to site-wide solution; policy allows for flexibility	X			X
2. Individual building generation PERMISSIVE: Policy allows for flexibility if site-wide solution not, or partially delivered	X			X
3. Prescribe energy efficiency standards TAKEN FORWARD: Conforms with Core Strategy; meets wider development aims	X			X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
3a. Code Level 4 equivalent REJECTED: Conforms with Core Strategy; but Code could be retracted; not considered appropriate to require all homes to 2036 to meet all requirements of Code 4	X			
3b. Zero carbon REJECTED: Unviable alongside other infrastructure requirements	X			
3c. No standard (Building Regulations only) REJECTED: Not sustainable; does not meet wider development aims; does not maximise opportunities presented by site	X			
3d. Building Regulations plus 10% Passivhaus PREFERRED: Site's position on south-facing slope is well suited to Passivhaus approach	X			X
Water efficiency and supply				
1. Do not prescribe water efficiency standard (i.e. Building Regulations: 125l/p/d) REJECTED: Not sustainable; consultation responses opposed	X		X	X
2. Prescribe standard: 105l/p/d PREFERRED: Supported by consultation responses and SA; achievable and deliverable; supported by Portsmouth Water and Environment Agency	X		X	X
3. Prescribe standard: 80l/p/d REJECTED: Portsmouth Water area no longer classed as water-stressed, abstractions are Water Framework Directive compliant; additional cost is not supported by evidence	X		X	
Waste water disposal				
1. Treatment at Knowle TAKEN FORWARD: Provides opportunity for blackwater recycling; but traffic impacts on Mayles Lane, uncertain deliverability, possible health & safety concerns regarding dual supply, additional cost of dual infrastructure	X		X	X

Reasonable Alternatives	Reasons for Selection/Rejection			
	Evidence	Stakeholder	Public	SA/HRA
2. Treatment at Peel Common TAKEN FORWARD: More certain of capacity at treatment works; requires construction of new trunk sewer main, with route/cost uncertainties	X		X	
3. Permissive policy PREFERRED: Both are acceptable if environmental (discharge) standards are met; feasibility studies are required to inform commercial decision	X		X	
Household waste and recycling centre				
1. No HWRC REJECTED: Hampshire County Council identifies a need in Fareham area due to a number of developments, of which Welborne is the largest contributor and has space to accommodate	X			X
2. Locate HWRC at Crockerhill as a result of evidence and SA/HRA REJECTED (following consultation): Suitable well-contained site if employment use continues; opposition from nearby residents (noise, traffic, odour); HCC road traffic safety concerns	X			X
3. Locate HWRC in an employment area PREFERRED: Not suited to allocation within residential areas	X		X	X

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5 Assessment of the Publication Draft Welborne Plan

5.1 Vision and Objectives of the Publication Draft Plan

Welborne Plan: Vision

- 5.1.1 The Adopted Fareham Core Strategy (August 2011) presented an initial vision for the Welborne Plan. The vision represented the views and aspirations of Fareham Borough Council at the time the Core Strategy was adopted and drew on extensive community engagement.
- 5.1.2 Following the adoption of the Core Strategy, the vision was updated to reflect further work on the plan carried out through the concept masterplanning work, evidence studies and updates to the national and local planning context. The revised vision as presented in the Publication Draft Welborne Plan is reproduced in Box 3:

Box 3: Vision of the Welborne Plan

"A distinct new community set apart but connected to Fareham, whose spirit, character and form are inspired by its landscape setting.

"Welborne will create a diverse and well integrated new community. It will encourage self-containment with a significant proportion of its inhabitants' life needs being accessible within a main centre and smaller neighbourhood centres. It will contain a mix of dwelling types which meet the needs of the increasing numbers of single person households, families, and the needs of an ageing population. There will be a range of accessible new jobs created which contribute towards meeting the employment needs of this diverse new community.

"It will have an integrated movement system connecting it with its surrounding settlements and destinations. It will incorporate footpaths, cycle ways, and vehicular traffic in a way that encourages walking and cycling, provides excellent public transport, and feels comfortable and safe to use.

"The development will have a distinctive character. Its layout and design will complement local topography, landscape features and historic structures to produce a place that is distinctive whilst responding to its wider context. It will encourage contemporary design in a manner that is flexible and is capable of accommodating change.

"It will have an integrated and linked green network of multi-functional open spaces, civic spaces, public open spaces, private outside space, and green routes. The green network will incorporate the site's natural features, hedgerows, tree lines, and woodlands to provide habitat, recreational facilities, to frame new development and to link to the wider countryside.

"It will take advantage of natural features, such as hedges/green corridors/woods; it will maximise orientation; incorporate Sustainable Drainage (SuDS); and provide opportunities for local food production. It will aim to meet its own renewable energy needs in a viable fashion, and deal effectively and sustainably with waste. Buildings will be thermally and water efficient. Access to services and a high quality public transport system all within easy walking distance of homes will reduce the need to travel by car.

"Socially and economically Welborne will complement rather than compete with the surrounding settlements and it will allow existing residents to benefit from the new facilities."

Objectives of the Publication Draft Welborne Plan

5.1.3 The Publication Draft Welborne Plan sets out four broad objectives described as “*the fundamental things that need to be achieved if the vision for the Welborne vision to be delivered*”. The objectives were developed through the concept masterplanning and vision review process and are as follows:

Objective 1: Welborne will comprise deliverable and viable development that will support a diverse, balanced, integrated and interacting community:

- ▶ A mix of deliverable development types, sizes, tenures and governance that meet the needs of a growing and thriving community at each phase of development;
- ▶ A diverse mix of uses, layouts and connections that create and sustain a successful, vibrant, inclusive and cohesive community;
- ▶ A range of employment development which provides opportunities for residents and (along with community services and facilities) encourages self-containment; and
- ▶ Flexibility of land and building use that allows adaptation to changing needs and opportunities over time to ensure that the development remains viable and continues to reflect market demand.

Objective 2: Welborne will respond positively to its distinctive and diverse landscape setting and surrounding countryside:

- ▶ A strong sense of place and community identity that reflects the qualities of the landscape in which it sits;
- ▶ A place that draws heavily on its setting for design inspiration and urban form;
- ▶ A community that uses its setting and identity to support its commercial success and long term economic viability; and
- ▶ Access to a wide range of natural assets, achieved through a network of interconnected multi-functional green links and spaces that serve the whole community and provide links to wider green networks.

Objective 3: Welborne will be distinct from other settlements, but connected to them physically and functionally:

- ▶ Being designed as a separate, standalone settlement with a distinctive identity and physical buffers that distinguish it from Fareham, Wickham, Funtley and Knowle;
- ▶ Facilitating direct, safe and attractive connections between Welborne and surrounding settlements by sustainable transport modes;
- ▶ Fostering improvements to the A32 as the principal connection between Welborne and Fareham and the route for the BRT, buses and other vehicles, supplemented by a choice of pedestrian and cycle connections; and
- ▶ Providing for deliverable retail and leisure facilities of a scale and type compatible with and complementary to existing retail centres in Fareham and Wickham.

Objective 4: The principles of sustainability will be embedded in every aspect of Welborne:

- ▶ Fostering the principles of sustainability and resource efficiency in all development types, including reductions in water consumption and carbon emissions arising from operational energy use in buildings and infrastructure;
- ▶ Providing for a robust sustainable drainage system to be fully integrated into the network of open space; and
- ▶ Planning for a distribution of uses and a network of places and connections to ensure that important day to day destinations and sustainable transport links are within easy walking distance from home and work, to discourage unnecessary use of the car.

5.2 Assessing the Plan's Objectives against the SA Objectives

5.2.1 Table 5.1 presents a compatibility appraisal of the four Publication Draft Welborne Plan objectives against the eleven SA Objectives. The assessment shows that the plan objectives broadly support the full range of SA Objectives and that there is limited potential for conflict between the two sets of objectives.

5.3 Appraisal Findings

5.3.1 To implement the vision and objectives of the plan, the Publication Draft Welborne Plan sets out a series of development principles and policies. These 43 proposed policies provide the delivery framework to guide development within Welborne, and are listed in Table 5.2. More detailed information on each of the policies can be found in the Publication Draft Welborne Plan (February 2014).

High level assessment findings

5.3.2 As discussed in section 2.4.2, a high level assessment of the 43 proposed policies of the Publication Draft Welborne Plan was carried out against the SA Framework. Appendix H presents the results in matrix form, and identifies where potential positive, negative or uncertain sustainability effects were predicted as a result of implementation of the proposals.

5.3.3 The matrix shows that the Publication Draft Welborne Plan is likely to bring a broad range of positive sustainability effects related to the socio-economic SA Objectives. These include: maximising accessibility to services and facilities; supporting residents' health and wellbeing; facilitating a range of housing types and tenures; supporting the vitality and viability of Welborne's centres and those nearby; promoting the development of a range of services, facilities and amenities; and improving employment opportunities.

5.3.4 The policies are also predicted to, with a number of exceptions, bring a range of positive effects in relation to the environmental SA Objectives by introducing measures which seek to both minimise environmental effects and enable environmental enhancements.

Table 5.1: Compatibility matrix between the objectives of the Publication Draft Welborne Plan and the SA Objectives

SA Objective		Publication Draft Welborne Plan Objectives			
		1: Welborne will comprise deliverable and viable development that will support a diverse, balanced, integrated and interacting community	2: Welborne will respond positively to its distinctive and diverse landscape setting and surrounding countryside	3: Welborne will be distinct from other settlements, but connected to them physically and functionally	4: The principles of sustainability will be embedded in every aspect of Welborne
1	To provide good quality and sustainable housing for all	✓	-	-	✓
2	To conserve and enhance built and cultural heritage	-	✓	✓	✓
3	To conserve and enhance the character of the landscape	-	✓	✓	✓
4	To promote accessibility and encourage travel by sustainable means	✓	✓	✓	✓
5	To minimise carbon emissions at the new community and promote adaptation to climate change	✓	✓	-	✓
6	To minimise air, water, light and noise pollution affecting the new community	-	✓	-	✓
7	To conserve and enhance biodiversity	-	✓	-	✓
8	To conserve and manage natural resources (water, land, minerals, agricultural land, materials)	-	✓	-	✓
9	To strengthen the local economy and provide accessible jobs available to residents of the new community	✓	✓	✓	✓
10	To create vital and viable new centres which complement existing centres	✓	✓	✓	✓
11	To create a healthy and safe new community	✓	✓	-	✓

Table 5.2: Publication Draft Welborne Plan proposed policies

Publication Draft Welborne Plan proposed policies	
Development Principles	
WEL1	Sustainable Development
WEL2	High Level Development Principles
Allocation of Land and the Comprehensive Approach	
WEL3	Allocation of Land
WEL4	Comprehensive Approach
Maintaining Settlement Separation	
WEL5	Maintaining Settlement Separation
Character Areas, Design Principles and Heritage Assets	
WEL6	General Design Principles
WEL7	Strategic Design Code
WEL8	Protection and Enhancement of the Historic Environment
Economy and Self-Containment	
WEL9	Employment
WEL10	The District Centre
WEL11	The Local Centre
WEL12	Community Hub
WEL13	Community Buildings
WEL14	Healthcare Services
WEL15	Primary and Pre-School Provision
WEL16	Secondary School Provision
Homes	
WEL17	Market Housing
WEL18	Affordable Housing
WEL19	Specialist Accommodation for Older People
WEL20	Wheelchair Adapted Homes
WEL21	Custom Build Homes
WEL22	Gypsies, Travellers and Travelling Showpeople
Transport, Access and Movement	
WEL23	Transport Principles for Welborne
WEL24	Strategic Road Access
WEL25	Local Road Transport and Access

Publication Draft Welborne Plan proposed policies	
WEL26	Public Transport
WEL27	Encouraging Sustainable Choices
WEL28	Walking and Cycling
Green Infrastructure, Biodiversity and Landscape	
WEL29	On-site Green Infrastructure
WEL30	Avoiding and Mitigating the Impact on Internationally Protected Sites and Off-Site Green Infrastructure
WEL31	Conserving and Enhancing Biodiversity
WEL32	Strategic Green Infrastructure Corridors and Connections
WEL33	Structural Landscaping
WEL34	Detailed Landscaping
WEL35	Governance and Maintenance of Green Infrastructure
Energy, Water and Waste	
WEL36	Energy
WEL37	Water Efficiency, Supply and Disposal
WEL38	Water Quality and Aquifer Protection
WEL39	Flooding and Sustainable Drainage Systems
WEL40	Household Waste Recycling Centre and Recycling
Delivering the New Community	
WEL41	Phasing and Delivery
WEL42	Safeguarding Land for Specific Development
WEL43	Development Construction and Quality Control

5.3.5 Six proposed policies from the Publication Draft Plan were assessed as leading to significant negative and uncertain effects against the SA Objectives:

- ▶ WEL3: Allocation of Land
- ▶ WEL9: Employment
- ▶ WEL24: Strategic Road Access
- ▶ WEL25: Local Road Transport and Access
- ▶ WEL36: Energy
- ▶ Part of WEL37 in relation to the uncertain water disposal strategy

Detailed assessment findings

- 5.3.6 While the high level assessment provides a broad indication of the sustainability issues likely to arise as a result of the proposed policies, to gain a closer understanding of these issues, a more in depth assessment was carried out utilising Detailed Assessment Matrices. This enables a clearer understanding of the potential negative or uncertain effects which were raised by the high level assessment. The following commentaries should be read in conjunction with the Detailed Assessment Matrices presented at Appendix I, and the Strategic Framework Diagram given at Figure 5.1.

WEL3: Allocation of Land

- 5.3.7 WEL3 will facilitate the delivery of approximately 6,000 houses. This will increase the availability of housing locally and for the wider sub-region, including market housing, private rented, affordable, adaptable, extra care and accommodation for older people, helping to meet local and sub-regional housing needs. The extent to which the policy provides a mix of dwelling sizes and types to support the local housing market will depend on how policies WEL17-22 are implemented.
- 5.3.8 The development of c.6,000 dwellings, 20ha of employment land and associated uses will affect the setting of cultural heritage assets in and around Welborne, including to the west and east of the A32. To the west of the A32 the option will affect the setting of the Grade II* listed Dean Farmhouse and the recently discovered Neolithic long barrow. To the east of the A32, the proposals will affect the setting of the Lodge and Boundary Oak School, including the historic parkland at Roche Court. The setting of North Fareham Farmhouse and Mill House (Forest Lane), lying just outside the eastern policy boundary, will also be affected. In the wider area, views from and the setting of, historic landscapes and views associated with Fort Nelson on Portsdown Hill, the Forest of Bere, and historic settlement of Wickham will be altered. Secondary effects on listed buildings in the wider area are also possible, particularly those close to the A32 in Fareham and Wickham. The site contains a number of features on the Historic Environment Record, and it is likely that further archaeological finds will be recorded during development.
- 5.3.9 The design and layout of development areas in the vicinity of the listed buildings and known heritage assets should seek to enhance the features' setting, communicate their importance and utilise them to promote local distinctiveness, in accordance with WEL8. New development should incorporate designs which complement and enhances individual heritage assets and their setting, records their character and importance, preserves and enhances them where possible, and interprets and presents them to the local community. Proposals will need to be consistent with the Heritage Strategy and Historic Environment Management Plan that will be agreed with the Council and its archaeological advisors prior to the first stages of development, as required by WEL8. However, the scale and scope of development to take place in the area is likely to lead to some residual effects on historic environment assets within and in the vicinity of Welborne.

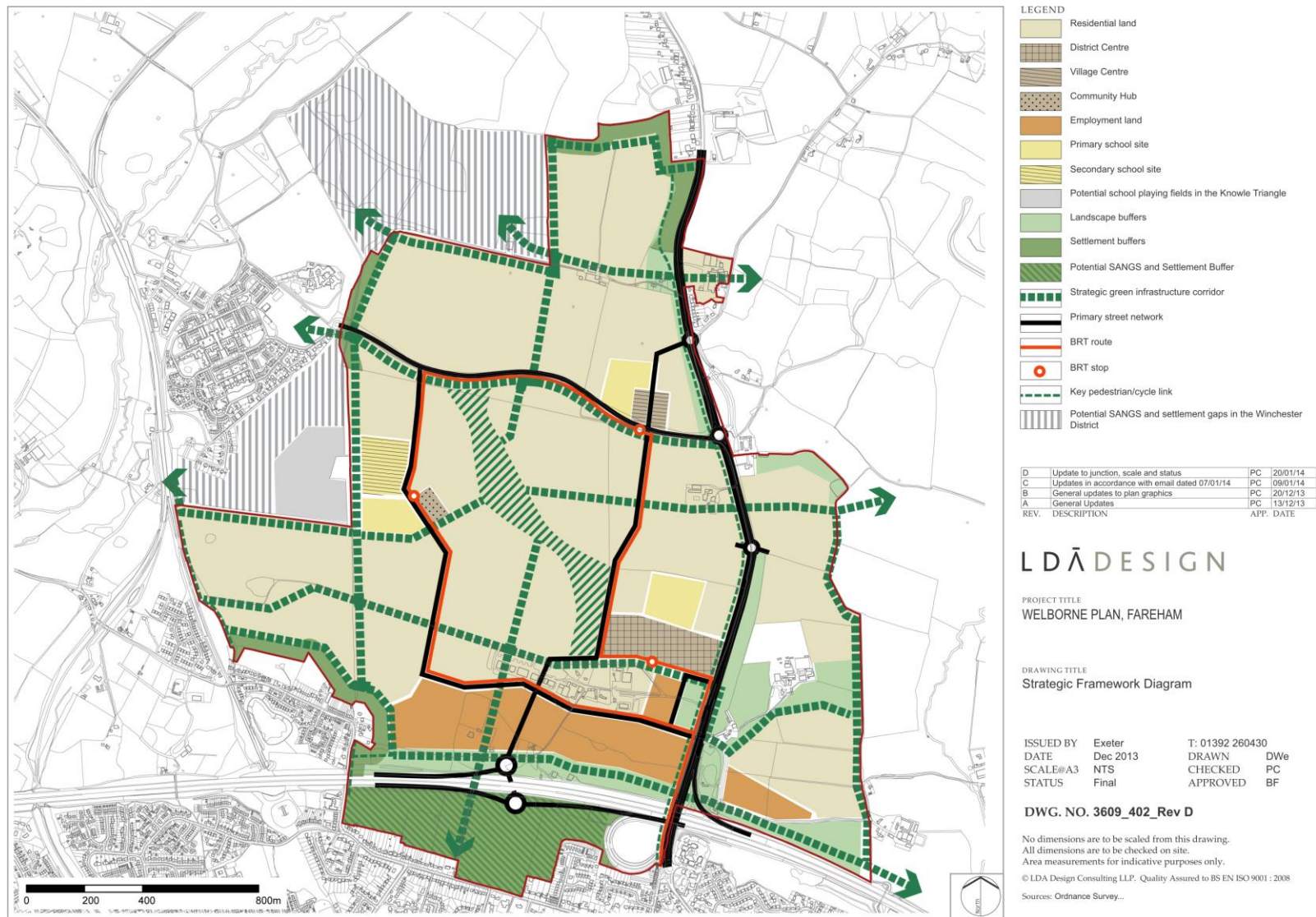


Figure 5.1: Strategic Framework Diagram (Source: LDA Design / FBC)

- 5.3.10 Landscape sensitivity analyses show that the centre of the proposed allocation is an area of low landscape sensitivity, but that the site's fringes to the north, south, east and west are medium sensitivity, while areas of high sensitivity associated with the Forest of Bere and Portsdown Hill lie to the north and east respectively. Initial Zone of Theoretical Visibility work undertaken by the site promoters confirms that the eastern part of the allocation in particular is likely to be most visible from Portsdown Hill to the east. The Welborne Plan sets out a response to these constraints, including an accompanying landscape strategy which aims to prevent or significantly reduce views of Welborne from Wickham and the South Downs National Park to the north, and defines character areas within the policy boundary. WEL 6 and 7 require development to consider the landscape setting of character areas and respond with high quality design, while WEL29-35 contain strategic green infrastructure, structural and detailed landscaping requirements, including protection of existing features within the policy boundary. WEL5 implements settlement buffers to protect the visual integrity of neighbouring settlements at Funtley, Knowle and Wickham. However, the nature and scale of Welborne as a new community will nevertheless lead to residual effects on landscape character in the area.
- 5.3.11 Policies WEL5-7 and 29-35 set out the planning response to landscape impacts associated with delivering the plan. WEL4 requires the preparation of a comprehensive masterplan for the site to be prepared and agreed with the Council during the early stages of development. The masterplan will be required to demonstrate how landscape impacts have been considered within the design and layout of the community, and how existing features are incorporated within it. Subsequent phases will then be required to adhere to both the Welborne Plan and comprehensive masterplan.
- 5.3.12 As a strategic allocation of land, Welborne is in a relatively accessible location with good access to strategic and local roads, and the opportunity to connect to public transport, walking and cycling routes. But many of these roads are already subject to congestion at peak time, especially the M27, A27 and A32. The very close proximity of the motorway suggests that an over-reliance on private car transport could be an outcome of the plan, and the allocation of employment land adjacent to the motorway is likely to contribute to congestion. However, the plan incorporates several changes to the strategic and local road network, as well as public transport, walking and cycling links, to encourage sustainable transport and mitigate the effects of congestion. A range of transport interventions tested within the Sub-Regional Transport Model show that significant decreases in traffic flow on parts of the strategic road network are achievable (e.g. a decrease in AM peak-hour traffic flow on the M27 westbound from junction 11). Nonetheless, traffic growth on certain roads will be unavoidable, including the A32 north to Wickham and south through Fareham, and the M27 west from junction 10.
- 5.3.13 The effect of the proposals depends on the degree to which sustainable transport networks are effectively integrated within the planning of Welborne. In this context the policies on transportation and green infrastructure (WEL23-35) promote the use of sustainable modes of transport and accessibility, including connections to Bus Rapid Transit (BRT), local bus routes, new strategic walking and cycling routes, and connections to existing routes. The spatial distribution of land uses has taken account of the need to reduce travel demand where possible, by positioning trip generating uses (e.g. centres, schools, retail) in sustainably accessible locations. Requirements for a transport strategy and travel planning during

implementation and operational stages target behavioural change to achieve the desired level of modal shift. The success of this combination of measures will be the governing factor in embedding sustainable travel patterns from the outset.

- 5.3.14 The development of 6,000 dwellings, 20ha of employment land and associated uses will increase greenhouse gas emissions, during both construction and operation, by increasing the built footprint of Fareham Borough, its population and economic activity. The magnitude of the impact in relation to the international significance of the issue is considered to be low. The plan seeks to address its carbon emissions through sustainable transport measures (see above) as well as by promoting energy efficiency and good design, and by requiring developments to be supplied at least partially from renewable and low carbon energy sources. Although Welborne is not situated in an area of flood risk, WEL39 requires flood risk assessments to be prepared to reduce the risk of surface water flooding or increasing flood risk off-site, and comprehensively planned approach to sustainable drainage systems is stipulated. The extent to which Welborne successfully minimises carbon emissions will depend on the effective implementation of integrated sustainable transport networks, (WEL23-28 and 32) and energy efficient design WEL36. The risk of flooding on and off-site will be managed through WEL39. Nonetheless, a residual carbon emission impact is predicted as a result of the allocation of land.
- 5.3.15 Lying adjacent to the M27 and A32, parts of the Welborne area currently suffer from noise and air pollution. The plan responds to this by allocating more sensitive uses (i.e. residential) outside of the 63dB zone, away from main transport routes. A water source protection zone (SPZ) to the east of Welborne is largely protected through the allocation of land mainly to the west of the A32, outside of the main area of risk. Sustainable drainage schemes will be required to take account of the SPZ in accordance with WEL37. The plan will nonetheless contribute to increasing noise and air pollution, during both construction and operation, predominantly by increasing traffic volumes on new and existing roads. Welborne can also be expected to increase ambient light pollution across the site, which is largely undeveloped at present, and these impacts are likely to be most acute for existing residents in Funtley, Knowle, north Fareham and Forest Lane. The plan's distribution of development and provisions for green infrastructure will help to reduce the negative effects of noise, air and light pollution on residents within and near to Welborne. Policies 38 and 39 on sustainable drainage and aquifer protection will manage the risk of water pollution.
- 5.3.16 The Welborne site is predominantly arable land of relatively low intrinsic ecological value. However, remnants of ancient semi-natural woodland survive at the western site boundary near Knowle and along the east verge of the A32 southern section. Sites of Importance to Nature Conservation on site or adjacent include: Knowle Copse, Dash Wood and Ravens Woods; Ravenswood Row; Blakes Copse; Martin's Copse; Birchfrith Copse; and Fareham Common. These locally important habitats are all at risk of impact during both construction and operation and will need special consideration to ensure their continued contribution to nature conservation. Initial field survey work has confirmed that the site supports a range of nationally and European protected species, including badger, bats, birds, dormouse, great crested newt and reptiles. The local population status of these species may be at risk unless suitable avoidance, mitigation and enhancement measures are incorporated into the development plan. Looking further afield, Botley Woods SSSI, which lies between strategic development areas at

Welborne and north Whiteley, could be subject to cumulative effects from both developments, particularly with regard to recreational use.

- 5.3.17 A range of internationally important habitats and species assemblages exist at the Solent coastline which may also be subject to increasing recreational impact in combination with other developments, while significant effects on the New Forest, River Itchen and Butser Hill are possible but less likely. Impacts to international designations are assessed in the accompanying Habitats Regulations Assessment (HRA). The Welborne Plan's response to the risk of ecological impacts seeks to address impacts at each level of geographic significance. WEL31 requires development proposals to protect and enhance existing patches of species-rich habitat and populations of protected species on-site. WEL29 and WEL 32 seek to increase the overall area of semi-natural habitat within the site, which could contribute to an increase in biodiversity within the site if correctly implemented. WEL30 aims to ensure that disturbance impacts to internationally important sites can be adequately avoided and mitigated by contributing to coastal management measures and enhancing accessibility to areas of semi-natural greenspace both on-site and adjacent, while acknowledging the need to manage recreational access to SINC's to reduce the risk of adversely affecting the ecology of these sites.
- 5.3.18 Pre-1988 Agricultural Land Classification maps indicate that the majority of land within the policy area is classified as being of Grade 2 agricultural value. Post-1988 maps indicate that approximately 60% of the site is classified as being Grade 3a (mainly the northern section) with the remainder being Grade 3b (mainly the south of the site). Both Grades 2 and 3a are classed as best and most versatile (BMV) agricultural land. Allocating the site for Welborne will result in a loss of BMV land, the principle of which has been tested in higher tier plans (the South East Plan and Fareham Core Strategy). Additionally, significant areas towards the periphery of the site are allocated as Minerals Safeguarded Areas. Development of the scale proposed at Welborne will lead to significant water and resource use during both construction and operational stages.
- 5.3.19 While the loss of BMV agricultural land will be unavoidable if development objectives for the site are to be met, opportunities to extract minerals deposits prior to development should be explored to avoid sterilising these resources, in accordance with the Hampshire Minerals and Waste Plan. The plan's response to the need to manage resource use - including waste management, and energy and water efficiency - is set out in policies WEL36, 37 and 40.
- 5.3.20 The development of 6,000 dwellings, 20ha of employment land and associated uses will increase the local market for goods, services and amenities, and provide high quality premises for new and expanding businesses in the sub-region. Measures to encourage indigenous economic growth during operation are promoted, for example a business incubator facility, and requirements for local employment and skills training during construction are included within the implementation plan, helping to support the economic vitality of Welborne and the surrounding area. The Welborne Plan has moved away from the target of one job per household because it allows very little flexibility for the planned mix of employment uses which would make it difficult to respond to market conditions, changes in technology, changes in how commercial buildings are used, and changing patterns of employment. In addition this could drive up the required amount of employment floorspace and negatively affect the sub-regionally agreed "Cities First" approach.

- 5.3.21 The allocation of land facilitates development of a new District Centre, Local Centre and Community Hub to provide for the needs of the new community without unduly competing with existing centres. Requirements for green infrastructure and structural and detailed landscaping will contribute towards developing local distinctiveness. This will be supported by the other policies in the Welborne Plan, which focus on the provision of educational, community, retail and sustainable transport networks to promote self-containment within the new community.
- 5.3.22 The allocation of land will facilitate the delivery of new health facilities, including GP surgeries, dental and pharmacy facilities, while promoting healthy living through new sports, recreational and sustainable transport networks. This will be supported by the other policies in the Welborne Plan, which focus on the provision of allotments, formal and informal play spaces and access to natural greenspace.

WEL9: Employment

- 5.3.23 A range of positive and negative effects are predicted to result from proposed policy WEL9, many of which are closely related to the overall allocation of land insofar as it relates to the proposed employment areas. Locating employment development immediately north of the M27 is considered to be an efficient use of land on which more sensitive uses would be constrained as a result of noise and air pollution from the motorway.
- 5.3.24 The development of c.20ha of employment land at the locations proposed through the policy has the potential to have effects on the setting of cultural heritage assets. Due to the proposed location of development, effects on the historic environment will take place both to the west and east of the A32. To the west of the A32 the option may affect the setting of the Grade II* listed Dean Farmhouse. To the east of the A32, the proposals may affect the setting of the Lodge at Boundary Oak School. The proposals may also affect the historic setting of the landscape of the area, including the setting of Fort Nelson on Portsdown Hill to the east (although it should be noted that land will not be developed to the north of Junction 11 of the M27, the area closest to Portsdown Hill).
- 5.3.25 The design and layout of development areas in the vicinity of the listed buildings should seek to enhance the buildings' setting and complement their curtilage, in accordance with WEL8. New development should incorporate design which complements and enhances individual heritage assets and their settings, reducing its impact on designated and non designated sites and the townscape and landscape of the area. The historic environment and setting of the area should be utilised to promote local distinctiveness. Archaeological finds should be appropriately catalogued in consultation with the Council and its archaeological advisors, in accordance with the agreed Heritage Strategy and Historic Environment Management Plan. Policies WEL8 and 33-34 set out detailed provisions for the historic environment and landscape and townscape quality. However due to the scale and scope of development to take place in the area there is potential for employment land at this location to lead to some residual effects on historic environment assets.
- 5.3.26 Landscape sensitivity analyses show that allocated employment land to the west of the A32 is in an area of low landscape sensitivity, but that the site's fringes to east are medium sensitivity and associated with Portsdown Hill. This is confirmed by Zone of Theoretical Visibility work

undertaken by the site promoters. Policies WEL5-7 and 29-35 set out the planning response to landscape impacts associated with delivering the plan. While many of these policies will help to minimise landscape and visual impacts through design, layout and landscaping commensurate with the 'parkland' character area, together with implementation of a high quality GI network, developing employment land at this location is nonetheless predicted to have residual effects on landscape character.

- 5.3.27 Employment land to the east of the A32 will be situated within SPZ2, and so strict adherence to WEL38 will be particularly important here. Noise and air pollution impacts are likely to arise from construction activities and, during operation, traffic movements will also contribute to these impacts. The extent to which air, noise, water and light pollution is minimised depends on the design and layout of development, green infrastructure networks, the use of low noise road surfacing, high quality drainage systems, appropriate lighting design and other factors. The employment land allocation is partly intended to reduce the negative health impacts of noise and air pollution emanating from the M27.
- 5.3.28 Development of c.20ha of employment land adjacent to the M27 will add to congestion on the local and strategic road network, while the very close proximity of the motorway suggests that an over-reliance on private car transport could result. The plan incorporates changes to the road network, as well as public transport, walking and cycling links, to encourage sustainable transport and mitigate the effects of congestion. Transport modelling indicates that some benefits may be achieved, but traffic flows on the M27 and A32 would be likely to increase. The planning response is set out by policies on transportation and green infrastructure (WEL23-35) which promote the use of sustainable modes of transport and accessibility, including connections to BRT, local bus routes, new strategic walking and cycling routes, and connections to existing routes. Requirements for a transport strategy and travel planning during implementation and operational stages target behavioural change to achieve the desired level of modal shift.
- 5.3.29 Employment floorspace and associated uses will increase greenhouse gas emissions, during both construction and operation, by increasing the built footprint of Fareham Borough, its population and economic activity. The magnitude of the impact in relation to the international significance of the issue is considered to be negligible. The area is not subject to flood risk. Whilst many of the plan's policies will support a limitation of greenhouse gas emissions, there will be an unavoidable increase in emission as a result of the development of employment land.
- 5.3.30 Site development, including 20ha of employment land, will increase pressures on habitats, species and designated sites if implemented without a range of avoidance, mitigation and enhancement measures. However it is not anticipated that employment uses at the locations proposed will lead to the loss of features of ecological importance. Occasional flocks of curlew were observed in the pasture south of Pook Lane during overwintering bird surveys but this area is not scheduled for development. The plan's response to the risk of ecological impacts requires development proposals to protect and enhance existing fragments of species-rich habitat and populations of protected species on-site (WEL31). WEL29 and WEL 32 seek to increase the overall area of semi-natural habitat within the site, which could contribute to an increase in biodiversity within the site if correctly implemented.

- 5.3.31 A small part of the employment allocation to the west is within a Minerals Safeguarding Area, while all of it is classified as grade 3b agricultural land according to post-1988 maps. Opportunities to extract minerals deposits prior to development should be explored to avoid sterilising these resources. Development of the scale proposed at is predicted to lead to significant water and resource use during both construction and operational stages. The plan's response to the need to manage resource use - including waste management, and energy and water efficiency - is set out in policies WEL36, 37 and 40.
- 5.3.32 Site development, including 20ha of employment land, will increase employment opportunities and support the economic vitality of Welborne and the surrounding area. This will be supported by a range of employment land types, including offices and industrial / warehousing and measures to support start-ups and the growth of small businesses, while requirements for local employment and skills training during construction are included within the implementation plan. An increase in economic activity will support an increase in employment opportunities locally. The adjacency of employment areas to the District Centre and the development of a Business Incubation Centre will also support the economic viability of the main centre of Welborne. The Welborne Plan has moved away from the target of one job per household because it allows very little flexibility for the planned mix of employment uses which would make it difficult to respond to market conditions, changes in technology, changes in how commercial buildings are used, and changing patterns of employment. In addition this could drive up the required amount of employment floorspace and negatively affect the sub-regionally agreed "Cities First" approach.

WEL24: Strategic Road Access

- 5.3.33 The currently preferred option for strategic road access is an upgrade to junction 10 of the M27 to provide an 'all-moves' facility. The exact design is yet to be finalised but likely features include new on and off slip-roads would be constructed, with a new underpass located 600m to the west of the existing junction. A replacement westbound off-slip would also connect to the new underpass.
- 5.3.34 The three new slip-roads proposed as part of the solution could affect the quality of the residential environment at Funtley (dwellings on Funtley Road) and north Fareham (dwellings on Funtley Hill, Kiln Road and Potters Avenue) by increasing noise and light pollution. The construction and operation of the eastbound off slip-road may have some additional noise and visual impacts on the setting of the Grade II listed Church of St Francis. Noise from the eastbound off slip-road may worsen the impact of existing road noise in the vicinity of the Grade II* listed Dean Farmhouse. New on and off slip-roads west of the existing junction will lead to land-take to the south of the motorway at Fareham Common. This will affect landscape and townscape quality in the area (although it should be noted that the existing motorway already has a significant influence on the quality of the public realm in the area). However, some improvements may result from removal of the current circular off-slip. Noise screening measures, use of low noise road surfacing, low-spill lighting design and planted vegetation buffer zones could be installed to reduce impacts if project-level impact assessment indicates that a significant increase in air, noise or light pollution or visual impacts would occur.

5.3.35 Traffic modelling indicates that converting junction 10 to all-moves will alleviate congestion on parts of the strategic road network. For example, AM peak-hour traffic between junctions 10 and 11 will decrease both eastbound and westbound, while traffic on A27 Eastern Way will decrease northbound and southbound vehicle movements. Despite this, new on and off slip-roads will improve accessibility to the M27 to and from Welborne by private car. This will contribute to an increase in greenhouse gas emissions from transport. The preferred option helps to reduce the severance impact of a more westerly eastbound off-slip, while also avoiding congestion that would occur under the gyratory scenario at the A32 Wickham Road (J10 Option A). WEL24 also seeks to incorporate BRT and bus priority measures at junction 10, safe cycle and pedestrian access between Fareham and Welborne, and improvements to junctions 9 and 11 if needed.

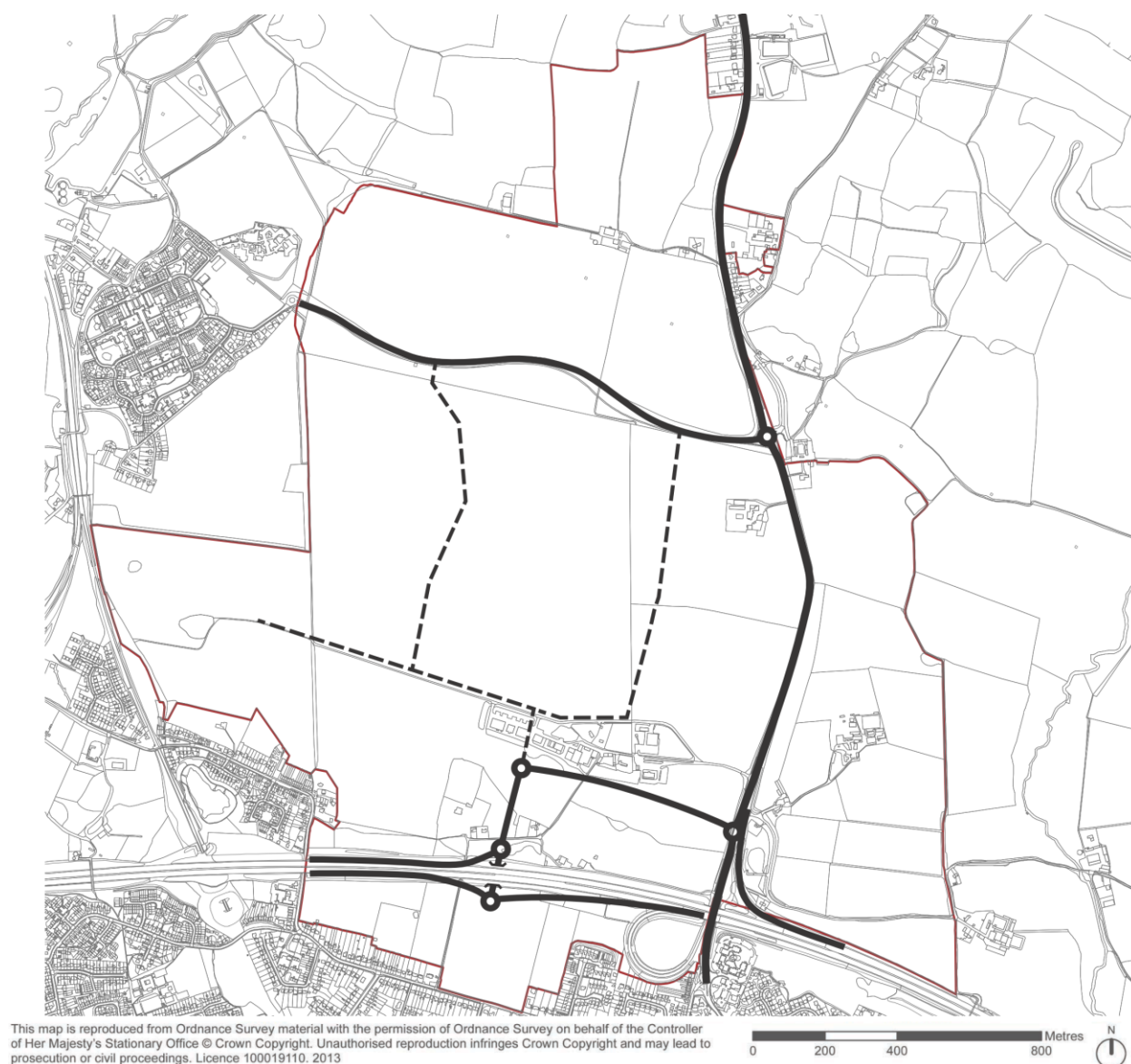


Figure 5.2: Strategic Road Access – Option 3 (Source: LDA Design / FBC)

5.3.36 The westbound on slip has the potential to lead to land-take at two areas of priority habitat (lowland mixed deciduous woodland) on Fareham Common, part of which is a SINC. The

northern part of the dumbbell is also situated adjacent to an area of priority woodland habitat. Habitat loss should be minimised through the routing and construction for the slip roads. Appropriate planting and habitat creation should also take place alongside the construction of the slip roads and the new road links as part of the wider landscaping and GI strategy for Welborne, to contribute to sub-regional biodiversity networks.

- 5.3.37 Land to the north and south of the M27 at this location is classified as Grade 3b agricultural land on post-1988 maps. Construction of the new and replacement slip roads will lead to the loss of the Grade 3b agricultural land to the south and north of the M27. However, land to the north would be lost to other forms of development in Welborne if the option is not taken forward, and so the option is assessed as neutral with respect to agricultural land north of the M27.
- 5.3.38 The strategic road network improvements resulting from three new slip-roads at junction 10 will enhance access to new employment areas in Welborne. This will support economic investment. An improvement in accessibility for motorised vehicles to the Strategic Road Network from Welborne may support the viability of centres by encouraging businesses to locate in the new community. The policy also seeks to incorporate BRT/bus priority measures, and improved cycle and pedestrian access between Fareham and Welborne helping to promote accessibility to employment opportunities.

WEL25: Local Road Transport and Access

- 5.3.39 Welborne is likely to increase traffic flow on roads in the local area, including Wickham, Knowle, Funtley and Fareham, during both construction and operation. Proposed policy WEL25 will deliver improvements to the A32, a new spine network of routes within Welborne, including a main north-south route parallel to the A32, closure of Pook Lane to through traffic, and a series of off-site improvements to the local road network
- 5.3.40 Traffic modelling indicates that proposed development is likely to increase traffic flows on local roads in the area. For instance, in the AM peak-hour, traffic flow heading north towards Wickham will increase, as will traffic at the western end of Knowle Road (westbound and eastbound); and southbound traffic on A32 Wickham Road (north of Southampton Road) will also increase. The policy is designed to keep traffic moving, prevent rat-running and implement BRT/bus priority measures to facilitate sustainable travel choices.
- 5.3.41 This policy aims to mitigate increasing traffic flow by improving the layout, circulation and capacity of key junctions which are expected to receive significantly more traffic. Nonetheless, residential amenity in homes close to these junctions may be adversely affected. Noise from a busier A32 is likely to worsen the impact of existing road noise in the vicinity of the Grade II listed Boundary Oak School gatehouse (The Lodge). Similarly, the setting of listed buildings and conservation areas close to the A32 may deteriorate, including: at Fareham, the Barn at Furzehall, Gate Piers at No.61(Uplands), Furzehall Farmhouse, The Potteries; at Wickham, Wickham Bridge, Bridge House, Chesapeake Mill, Church of St Nicholas and associated structures. Noise screening measures, use of low noise road surfacing, and low-spill lighting design could be installed to reduce impacts to existing buildings if project-level impact assessment indicates that a significant increase in noise or light pollution would occur.

- 5.3.42 Local road transport and access improvements are unlikely to significantly affect landscape character, although some small scale impacts on the character of the townscape could occur as a result of junction re-configurations in Fareham and Wickham. Junction improvements could be accompanied by measures to lessen townscape impacts, such as areas of new planting, high quality street furniture and signage, interpretation boards for features of local interest.
- 5.3.43 Proposed improvements to the A32, Knowle Road and the internal spine network could negatively affect or lead to small scale loss of valuable habitats, including ancient woodland remnants along the south-eastern edge of A32, and the Knowle Road verges which consultation respondents have indicated are botanically rich. Off-site junction improvements are unlikely to lead to significant ecological impacts. Habitat loss should be minimised through careful route planning and design of construction methods for the spine network. Appropriate planting and habitat creation should also take place alongside the construction of the spine network as part of the wider landscaping and GI strategy for Welborne, to contribute to sub-regional biodiversity networks.
- 5.3.44 The internal spine network and connections with BRT/bus, walking and cycling routes will help to link key nodes within the new community, including its centres, employment areas, schools and residential areas, contributing significantly to the vitality and viability of Welborne. Off-site junction improvements will help to mitigate traffic impacts on existing centres. The benefits of WEL25 will be further supported by WEL26-28 and 32, which encourage travel by sustainable modes and provide new walking and cycling routes and road crossings.

WEL36: Energy

- 5.3.45 Proposed policy WEL36 aims to optimise energy efficiency through building design, layout, orientation, landscaping and materials. It requires 10% of residential buildings to be built to Passivhaus standards and promotes energy supply which maximises low and zero carbon technology, including district heating.
- 5.3.46 By seeking to optimise energy efficiency in new dwellings, and requiring 10% to be built to 'Passivhaus' standards, the policy will promote the development of high quality housing which is healthy, warm and economical to run. The policy's focus on energy efficiency and utilisation of low and zero carbon technologies in Welborne will support the sustainable use of natural resources. Installation of smart meters, which will become standard, would further assist residents in managing their energy use, reducing costs and energy consumption.
- 5.3.47 New renewable energy infrastructure could negatively affect landscape and townscape character and the setting and fabric of cultural heritage assets if inappropriately designed or located. Depending on which technologies are installed, new renewable energy infrastructure (e.g. wind turbines or combined heat and power) could locally increase noise or air pollution. The technological selection, location, design and layout of new renewable energy infrastructure should seek to avoid noise pollution and negative effects on the fabric of cultural heritage assets, and aim to complement the landscape and setting of the historic environment.
- 5.3.48 Depending on which technologies are installed, new renewable energy infrastructure (e.g. wind turbines) could negatively affect protected species such as bats and birds. But wind turbines

are not discussed in the policy justification and the policy gives no spatial specification, meaning that the likelihood and significance of possible impacts cannot be assessed at the current stage. Proposals for renewable energy installations will need to demonstrate that they can be delivered without significant ecological impacts.

- 5.3.49 The policy's focus on energy efficiency and utilisation of low and zero carbon technologies in Welborne will support the development of a green economy locally. For example, supply, installation and maintenance of renewable energy infrastructure will provide local employment opportunities, and the use of sustainable building techniques will help promote a culture of 'green innovation'.

WEL37: Water Efficiency, Supply and Disposal

- 5.3.50 Proposed policy WEL37 addresses water efficiency measures to achieve residential consumption rates of no greater than 105 litres per person per day. By achieving high water efficiency in new dwellings, and installing water meters to all new homes, the policy will promote the development of high quality housing which is economical to run. In its Final Draft Water Resource Management Plan (WRMP) for 2014 Portsmouth Water has concluded that the Baseline Supply/Demand Balance under Average Conditions offers a surplus of supply over demand throughout the planning period, while a surplus also exists for the Baseline Peak Week and the Baseline Minimum Deployable Output scenarios. The policy also requires phased provision of water supply and wastewater conveyance and treatment infrastructure to service new and existing buildings, and to meet required environmental (discharge) standards. No preferred option for wastewater treatment currently exists; wastewater may ultimately be treated at Peel Common or Knowle wastewater treatment works.

- 5.3.51 Wastewater discharges could increase pollutant loads (e.g. nitrogen) in the receiving waters. Peel Common discharges via a long sea outfall to the Solent, whereas Knowle discharges to the River Meon which flows towards the Solent at Titchfield Haven. In both cases the ultimate receiving water is an internationally important biodiversity site. Adverse ecological effects from increased pollutant loads are possible, but it is likely that discharge consent parameters (permitted pollutant loads) for the quality of treated wastewater would remain broadly in line with the discharge consents of the current works. Given that both options ultimately meet with SAC/SPA designations at the Solent, it is likely that any increase in the volume of discharges would require a reduction in pollutant concentrations prior to a licence being issued. This will require investment in both cases to achieve treatment to higher standards prior to discharge. The accompanying HRA also addresses wastewater discharge impacts on internationally designated sites.

The Peel Common option

- 5.3.52 A buried pipeline would be less likely to affect the setting of cultural heritage assets, but there may be some disturbance of below-ground historic environment assets during construction, including designated sites and archaeological finds. The effect of the new pipeline on landscape quality depends on its routing. If routed through the countryside, negative effects on landscape character are likely during construction and early stages of operation.

- 5.3.53 Construction of a new pipeline would generate significant volumes of construction traffic, and several roads (including the M27) would need to be crossed, adversely affecting local accessibility in the short to medium term. The energy costs associated with pumping wastewater 5km from Welborne to Peel Common would increase the carbon footprint of developing the new community. The Knowle option is less likely to have significant impacts in this respect.
- 5.3.54 Ecological impacts will be unclear until more is known about a preferred route for a pipeline to Peel Common. Ecological impacts may include habitat loss and fragmentation, changes to the water table and impacts to protected species. Site specific mitigation proposals for construction impacts will need to be drawn up during selection and design of the preferred option.

The Knowle option

- 5.3.55 There may be some disturbance of historic environment assets during construction, including designated sites and archaeological finds. The option removes the need for a long distance pipeline however. This will reduce potential effects on cultural heritage assets to the south of Welborne, including in Fareham town centre. The effect of an expanded treatment plant on landscape quality depends on the design, layout and extent of new land-take at the facility.
- 5.3.56 Treatment at Knowle is likely to require slurry to be removed from site by lorry. Although possibly not affecting the new community, increased lorry movements will not help to promote accessibility or sustainable transport and could have negative air and noise pollution impacts on Knowle residents. HGV route-planning, road upgrades and fleet improvements could help to reduce impacts to Knowle residents.
- 5.3.57 Ecological impacts will be unclear until more is known about the scale, design and layout of an expanded Knowle works. Ecological impacts may include habitat loss and fragmentation, changes to the water table and impacts to protected species.
- 5.3.58 This option would involve recycling treated blackwater back into Welborne for use in toilet-flushing and irrigation. Overall water efficiency could therefore be maximised. The Peel Common option does not contribute to improved water efficiency. However, there is a potential risk that the dual supply of water to dwellings required in this option could lead to cross-contamination of potable and non-potable water supplies, leading to health and safety concerns, although the extent of this risk is unclear at present.

5.4 Cumulative Effects Assessment

- 5.4.1 This section considers the cumulative, synergistic and secondary effects of the Publication Draft Welborne Plan taken as whole. The potential for effects to act in combination with other nearby development plans and projects has also been considered, in particular:
- ▶ Strategic Development north of Whiteley
 - ▶ West of Waterlooville, Havant

- ▶ Boorley Green development in Eastleigh borough
- ▶ Developments proposed at Tipner and Horsea Island in Portsmouth
- ▶ The Fareham Development Sites and Policies Plan
- ▶ Eastleigh Adopted Local Plan Review 2001-2011 (adopted 2006)
- ▶ Eastleigh Draft Local Plan (LDF) 2011-2029
- ▶ Winchester saved adopted policies in the Local Plan 2006
- ▶ Winchester Local Plan Part 1 - Joint Core Strategy (adopted 2013)
- ▶ Winchester emerging Local Plan Part 2 – Development Management and Allocations Document.
- ▶ Gosport Local Plan Review 2001 to 2016 (Adopted 2006)
- ▶ Gosport Borough Draft Local Plan 2011 to 2029
- ▶ Portsmouth City Local Plan saved policies (adopted 2006)
- ▶ The Portsmouth Plan (adopted 2012)
- ▶ Portsmouth AAPs (Somersetown and North Southsea AAP & Southsea Town Centre AAP)
- ▶ Portsmouth emerging Site Allocations DPD
- ▶ North Solent Shoreline Management Plan (December 2010)
- ▶ Hampshire Local Transport Plan (2011-2031)
- ▶ Joint Hampshire Minerals and Waste Plan (adopted 2013) (includes Portsmouth, Southampton, New Forest National Park and South Downs National Park)

5.4.2 The results of the cumulative effects assessment are presented in Table 5.3.

Table 5.3: Cumulative, synergistic and indirect effects

SA Objective	Principles/policies which combine to bring cumulative/synergistic effects	Significance
1. To provide good quality and sustainable housing for all	WEL6, WEL7, WEL17, WEL18 and WEL36 will have cumulative, synergistic and indirect effects on housing quality by promoting the development of high quality, energy efficient housing, which are magnified when considered in combination with strategic developments and Local Plans in the wider area.	Significant positive effect over the short, medium and long term
2. To conserve and enhance built and cultural heritage	WEL3, WEL9, WEL10, WEL15, WEL16, WEL24, WEL25, WEL26 and WEL28 will have cumulative, synergistic and indirect effects on landscape quality by facilitating development on greenfield land and in relative proximity to heritage assets. WEL2, WEL4, WEL5, WEL6, WEL7, WEL10, WEL29-35 and WEL39 will have cumulative, synergistic and indirect effects on protecting the setting of cultural heritage assets by enhancing landscape and townscape quality, safeguarding	Significant negative effect over the short, medium and long term Significant positive effect over the short, medium and long term

SA Objective	Principles/policies which combine to bring cumulative/synergistic effects	Significance
	the distinctiveness and character of settlements and enhancing green infrastructure networks. WEL6, WEL7 and WEL8 will have cumulative, synergistic and indirect effects on supporting the protection and enhancement of cultural heritage assets in the plan area	Significant positive effect over the short, medium and long term
3. To conserve and enhance the character of the landscape	WEL3, WEL9-16, WEL25, WEL26 and WEL28 will have cumulative, synergistic and indirect effects on landscape quality by facilitating development on greenfield land, which are magnified when considered in combination with strategic developments and Local Plans in the wider area. WEL2, WEL4, WEL5, WEL29-35 and WEL39 will have cumulative, synergistic and indirect effects on landscape and townscape quality through the development of high quality green infrastructure networks in Welborne. WEL2, WEL6, WEL7, WEL8, WEL10, WEL33 and WEL 34 will have cumulative, synergistic and indirect effects on landscape and townscape quality by promoting high quality design in Welborne	Significant negative effect over the short, medium and long term Significant positive effect over the short, medium and long term Significant positive effect over the short, medium and long term
4. To promote accessibility and encourage travel by sustainable means	WEL2, WEL6, WEL10-16, WEL23, WEL25-2, and WEL32 will have cumulative, synergistic and indirect effects on supporting the uptake of sustainable modes of transport, including walking, cycling and public transport use in Welborne. WEL2, WEL9-17 and WEL19 will have cumulative and indirect effects on improving accessibility to facilities and employment by focusing development at locations accessible to services, facilities and amenities.	Significant positive effect over the short, medium and long term Significant positive effect over the short, medium and long term
5. To minimise carbon emissions at the new community and promote adaptation to climate change	WEL3, WEL9-16, WEL25, WEL26 and WEL28 will have cumulative and synergistic effects on greenhouse gas emissions by increasing the built footprint of the area and facilitating an increase in traffic in the area, which are magnified when considered in combination with strategic developments and Local Plans in the wider area. WEL2, WEL6, WEL9-16, WEL19, WEL23, WEL26-29, WEL32 and WEL35 will have cumulative, synergistic and indirect effects on limiting greenhouse gas emissions from transport by supporting sustainable transport use and reducing the need to travel. WEL2 and WEL36 will have cumulative and synergistic effects in supporting energy efficiency and renewable energy provision. WEL2, WEL4, WEL5, WEL29-32, WEL35, WEL37-39, WEL33 and WEL34 will have cumulative, synergistic and indirect effects for supporting climate change adaptation through the	Significant negative effect over the short, medium and long term Significant positive effect over the short, medium and long term Significant positive effect over the short, medium and long term Significant positive effect over the short, medium and long term

SA Objective	Principles/policies which combine to bring cumulative/synergistic effects	Significance
	<p>introduction of high quality green infrastructure networks and the measures to manage the effects of climate change including flooding, extreme weather events and effects on water resources.</p> <p>WEL2, WEL4, WEL5, WEL29-32, WEL35, WEL39, WEL33 and WEL34 will have cumulative effects on promoting a reduction in overall greenhouse gas emissions from Welborne through encouraging the planting of trees and other vegetation.</p>	Positive effect over the short, medium and long term
6. To minimise air, water, light and noise pollution affecting the new community	<p>WEL3, WEL9-16, WEL24-26 and WEL28 will have cumulative and synergistic and indirect effects on noise, air and light quality by increasing the built footprint of the area and facilitating an increase in traffic in the area.</p> <p>WEL2, WEL4, WEL5, WEL29-35 and WEL37-39 will have cumulative, synergistic and indirect effects for improving environmental quality through the introduction of high quality green infrastructure networks and measures to limit effects on environmental receptors.</p>	<p>Significant negative effect over the short, medium and long term</p> <p>Significant positive effect over the short, medium and long term</p>
7. To conserve and enhance biodiversity	<p>WEL2, WEL4, WEL5, WEL29-35 and WEL39 will have cumulative, synergistic and indirect effects for supporting biodiversity linkages and networks through improving green infrastructure networks and creating new habitats.</p> <p>WEL2, WEL4, WEL5, WEL29-35 and WEL39 will have indirect and synergistic effects on helping biodiversity adapt to the effects of climate change through supporting ecological networks and developing ecologically resilient landscape in Welborne.</p> <p>WEL3 will have cumulative, synergistic and indirect effects on designated nature conservation sites by increasing demand for recreational visits to these sites, effects which are magnified when considered in combination with strategic developments and Local Plans in the wider area.</p>	<p>Significant positive effect over the short, medium and long term</p> <p>Significant positive effect over the short, medium and long term</p> <p>Significant negative effect over the short, medium and long term</p>
8. To conserve and manage natural resources (water, land, minerals, agricultural land, materials)	<p>WEL3, WEL9-16, WEL25, WEL26 and WEL28 will have cumulative effects on the loss of the best and most versatile agricultural land by stimulating landtake on greenfield land.</p>	Significant negative effect over the short, medium and long term
9. To strengthen the local economy and provide accessible jobs available to	<p>WEL2, WEL9-16, WEL25, WEL26-29, WEL32 and WEL35 will have cumulative, synergistic and indirect effects by improving accessibility to jobs and educational opportunities in Welborne, effects which are magnified when considered in combination with strategic developments and</p>	Significant positive effect over the short, medium and long term

SA Objective	Principles/policies which combine to bring cumulative/synergistic effects	Significance
residents of the new community	Local Plans in the wider area.	
10. To create vital and viable new centres which complement existing centres	<p>WEL2, WEL6, WEL9-16, WEL23, WEL25-29, WEL32 and WEL35 will have cumulative, synergistic and indirect effects on supporting the vitality and viability of centres by promoting access to centres via sustainable modes of transport, including walking, cycling and public transport.</p> <p>WEL2, WEL6, WEL7, WEL8, WEL10-12 and WEL33 and WEL34 will have cumulative, synergistic and indirect effects on the quality of townscape and the built environment in the vicinity of centres. This will support their vitality.</p>	<p>Significant positive effect over the short, medium and long term</p> <p>Significant positive effect over the short, medium and long term</p>
11. To create a healthy and safe new community	<p>WEL2, WEL6, WEL10-16, WEL23, WEL25-30, WEL32 and WEL35 will have cumulative and indirect effects on health and well-being by maximising accessibility to health, leisure and recreational facilities in Welborne.</p> <p>WEL2, WEL6, WEL9-13, WEL15-16, WEL23-29, WEL32 and WEL35 will have cumulative and indirect effects on health and well-being by supporting healthier modes of travel including walking and cycling.</p> <p>WEL2, WEL4, WEL5, WEL6, WEL7, WEL10-13, WEL29-35 and WEL39 health and well-being through improvements to the quality and safety of the townscape and landscape and the promotion of green infrastructure networks</p> <p>WEL6, WEL7, WEL17, WEL18, WEL20 and WEL36 will have cumulative, synergistic and indirect effects on health and wellbeing by promoting the development of high quality, energy efficient housing</p>	<p>Significant positive effect over the short, medium and long term</p> <p>Significant positive effect over the short, medium and long term</p> <p>Significant positive effect over the short, medium and long term</p> <p>Significant positive effect over the short, medium and long term</p>

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6 Summary of the Appraisal of the Publication Draft Welborne Plan by Sustainability Theme

6.1 Introduction

6.1.1 This chapter summarises the sustainability performance of the Publication Draft Welborne Plan. The summary is presented by sustainability theme, as discussed in section 2.3, and illustrated with the Welborne Constraints Plan (Figure 6.1) and Strategic Framework Diagram (Figure 6.2).

6.2 Summary of Appraisal by Sustainability Theme

Accessibility and transportation

6.2.1 The development of Welborne, incorporating 6,000 dwellings by 2036, c.20ha of employment land and associated infrastructure, coupled with anticipated growth in the demand for travel from existing communities within the sub-region, will place further demands on already congested transport networks in the area, including the M27, A27 and A32. However, several of the proposed policies aim to reduce the effects of Welborne on transport networks by introducing a range of transport interventions to improve the flow of road traffic and reduce the need to travel by the private car.

6.2.2 A major junction improvement is planned for the M27 junction 10, which will be the principal point of access to the strategic road network, while a new spine network within the new community will distribute traffic to different places within Welborne, and provide at least four connections to the A32. The A32 itself will be subject to a range of treatments to calm traffic and provide for several safe crossing points between the eastern and western development zones. Transport modelling carried out to establish the traffic impacts of proposed development indicates that volumes of traffic will decrease on some of the more congested strategic roads, including parts of the M27 and A27. Despite this, significant increases in traffic volumes will occur in some locations, and the Plan aims to deliver a number of local road improvements to improve traffic flow, capacity and safety, while reducing rat-running in Funtley, Knowle and Wickham.

6.2.3 In addition to introducing measures which will encourage the use of sustainable modes of transport, the Plan policies will support accessibility by introducing land use allocations which reduce the need to travel. This includes the provision of a wide range of residential, employment and community land uses within Welborne, and the provision of services, facilities and amenities within district centre, local centre and community hub which are in close proximity and easily accessible to residential areas. The quantum of retail floorspace to be developed has resulted from the need to contribute to self-containment and ensure its economic viability in the early stages of the new community, while not unduly competing with existing centres at Wickham, Fareham and beyond.

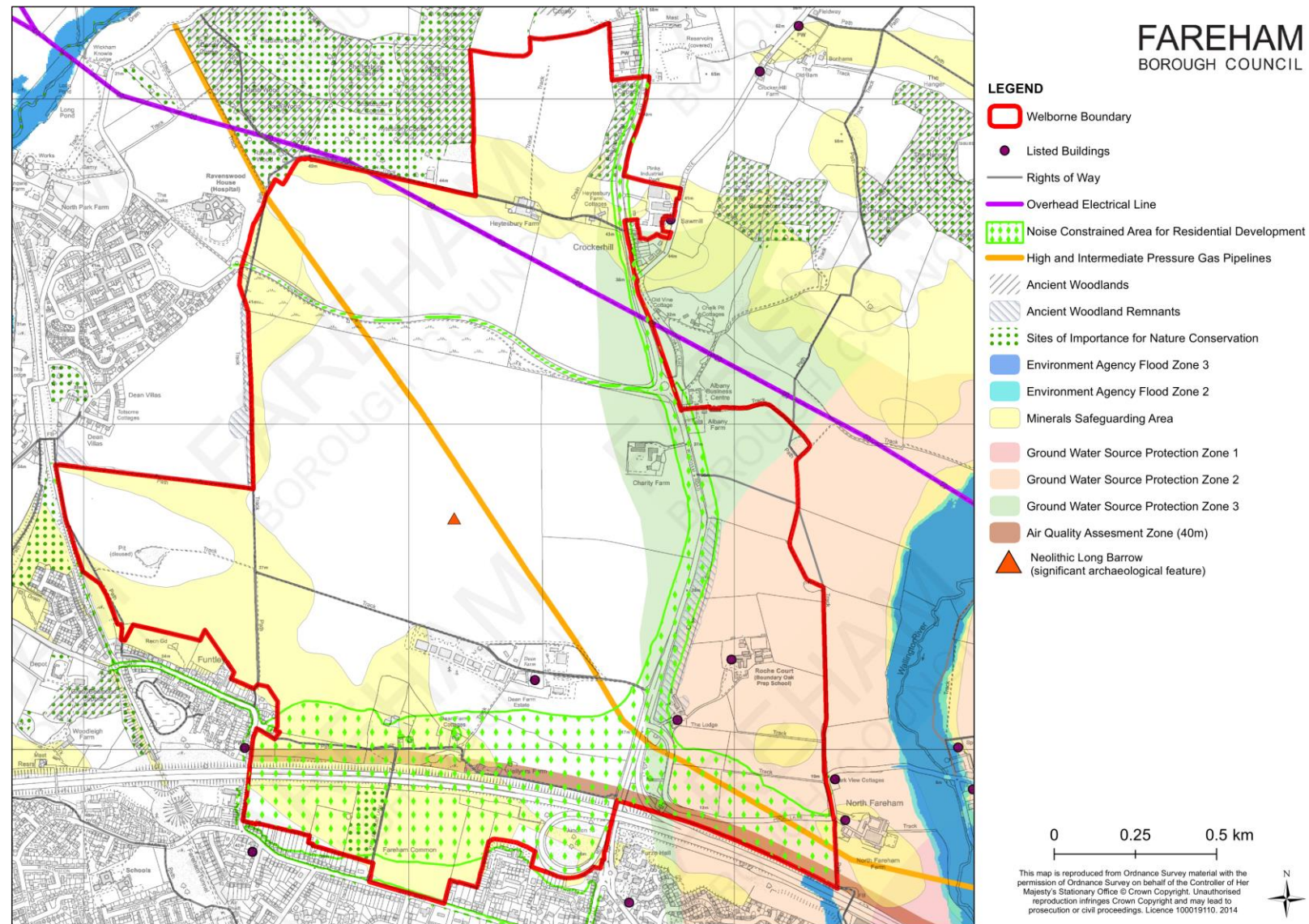


Figure 6.1: Welborne Constraints Plan (Source: FBC)

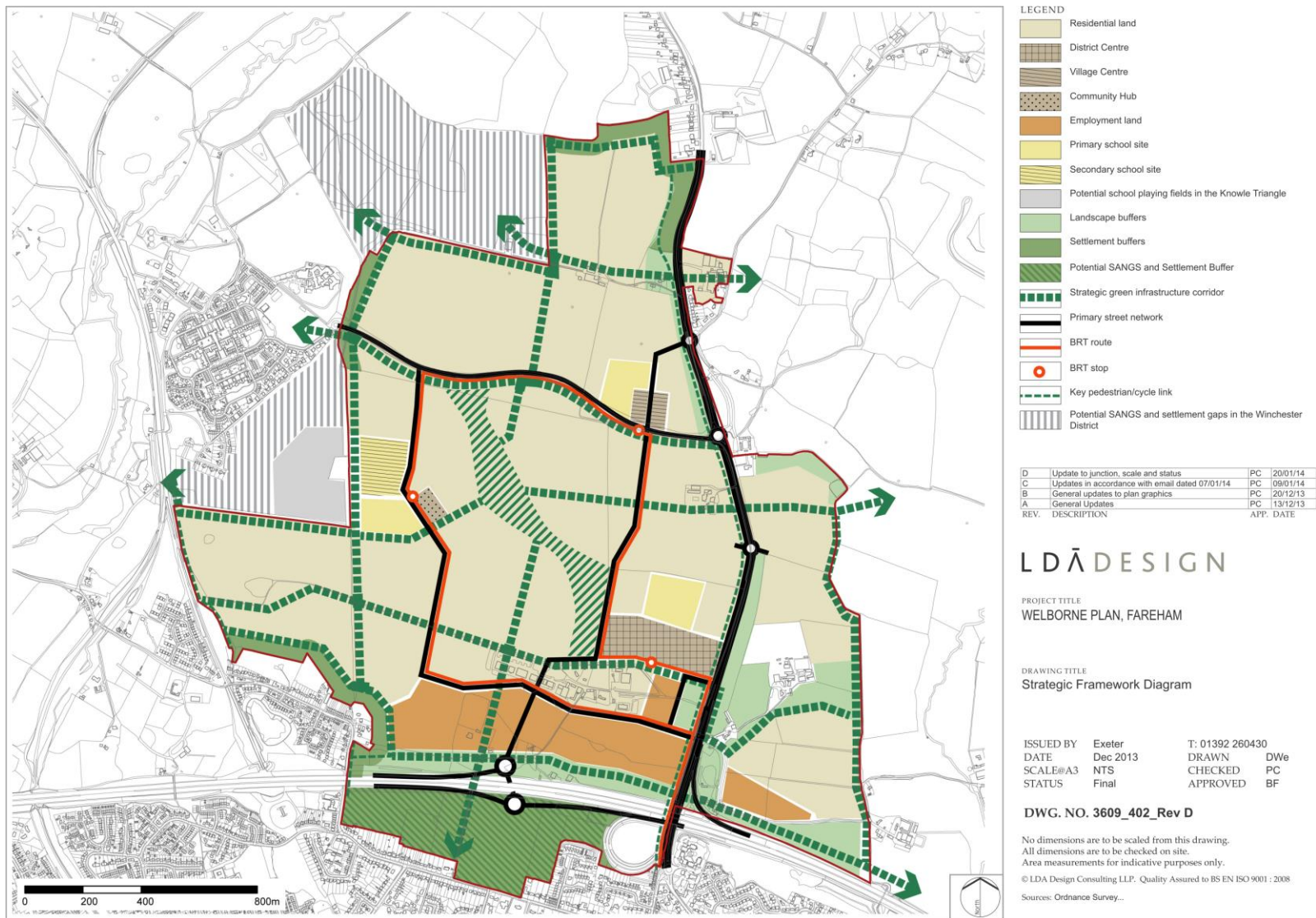


Figure 6.2: Strategic Framework Diagram (Source: LDA Design / FBC)

- 6.2.4 A number of the Plan's policies have a close focus on promoting accessibility by sustainable modes of transport, including through the introduction of high quality walking and cycling networks within Welborne, and between Welborne and surrounding communities, including Fareham town. These links will be incorporated within the green infrastructure network proposed for Welborne through the green infrastructure strategy. Welborne will also be linked to the wider borough and sub-region through high quality public transport networks. This includes the Bus Rapid Transit network, which will link the community with Fareham, Fareham rail station and Gosport, and eventually facilitate links to Portsmouth.
- 6.2.5 The Plan also seeks to ensure key areas within Welborne are linked by sustainable modes of transport. For example the Plan aims to ensure that primary and secondary schools, employment land and residential areas will all be accessible by public transport and walking and cycling networks. The district and local centres and community hub proposed for Welborne are designated as the key nodes of sustainable transport networks. The Plan's promotion of a high quality townscape and built environment will further support accessibility by promoting inclusive neighbourhoods and community integration, and encouraging walking and cycling. For these reasons the proposed policies are considered to limit the effects associated with potential impacts on transport infrastructure in the vicinity of the new community, but residual effects are nonetheless likely as a result of increasing traffic flows.

Air quality

- 6.2.6 Existing air quality in the plan area is dominated by the road network, and in particular is affected by the proximity of the M27 motorway to the site. The allocation of employment land within Welborne has been designed to make an efficient use of land which would be unsuitable for residential uses because of air quality and noise impacts emanating from the motorway. However, air quality may worsen in locations close to new or upgraded road junctions, or roads which are predicted to receive significantly increased volumes of traffic.
- 6.2.7 There are two Air Quality Management Areas (AQMA) in Fareham – Gosport Road and Portland Street. The impacts of additional traffic in these areas in particular will be closely monitored. The National Air Quality Standards will need to be met in these two locations. Strategic modelling results have so far shown limited impacts on these two locations in terms of traffic increase. The measures contained within the Transport Strategy, both in terms of infrastructure provision to reduce congestion and measures to reduce the level of private car use, will serve to mitigate impacts on these two locations.
- 6.2.8 The Welborne Plan's focus on improving accessibility and supporting sustainable modes of transport (see above) will help to limit the effect on air quality in the area. This will be further supported by the development hierarchy promoted by the Plan which, in addition to promoting the use of sustainable modes of transport, will help reduce the need to travel by car. The Plan's promotion of high quality open space provision and green infrastructure provision will also support improved air quality in the area by reducing the effects of airborne pollutants.
- 6.2.9 The accompanying Habitats Regulations Assessment has also examined the possible effects of traffic growth and air pollution on internationally important Special Areas of Conservation and

Special Protection Areas in and around the borough. This has concluded that adverse effects on the integrity of these sites are unlikely to occur.

Biodiversity, flora and fauna

- 6.2.10 Whilst the plan area consists largely of arable fields and improved grassland habitats, much of which is of relatively low intrinsic nature conservation value, a range of botanically rich habitats are present locally with the potential to support notable, protected and priority species. Remnants of ancient semi-natural woodland survive at the western site boundary near Knowle and along the east verge of the A32 southern section. Sites of Importance to Nature Conservation (SINC) on site or adjacent include: Knowle Copse, Dash Wood and Ravens Woods; Ravenswood Row; Blakes Copse; Martin's Copse; Birchfrith Copse; and Fareham Common. These locally important habitats are all at risk of impact during both construction and operation and will need special consideration to ensure their continued contribution to nature conservation. Initial field survey work has confirmed that the site supports a range of nationally and European protected species, including badger, bats, birds, dormouse, great crested newt and reptiles.
- 6.2.11 The loss of landscape features of value for biodiversity such as hedgerows and areas of woodland through the development of Welborne would lead to significant negative effects for habitat and species. Helping to minimise these effects, policies WEL29-35 focus on developing high quality green infrastructure networks in Welborne. Through appropriate planting, the provision of semi-natural greenspace and focusing on linkages between habitats, the Plan's focus on green infrastructure will encourage the restoration of fragmented habitats, and support improvements to wildlife corridors and ecological networks. These will help create stepping stones at the local level that contribute to strategic sub-regional biodiversity networks.
- 6.2.12 The Plan also seeks through policy WEL31 to ensure that a full assessment of the impacts on habitats and protected species is carried out, to protect and enhance existing patches of species-rich habitat and populations of protected species on-site. WEL29 and WEL 32 seek to increase the overall area of semi-natural habitat within the site, which could contribute to an increase in biodiversity within the site if correctly implemented. Overall, short-term significant effects to locally important habitats and populations of protected species could occur, but in the long-term the Plan presents a considerable opportunity for biodiversity gain.
- 6.2.13 WEL30 aims to ensure that disturbance impacts to internationally important sites can be adequately avoided and mitigated by contributing to coastal management measures and enhancing accessibility to areas of semi-natural greenspace both on-site and adjacent, while acknowledging the need to manage recreational access to SINCs to reduce the risk of adversely affecting the ecology of these sites. The accompanying Habitats Regulations Assessment has examined a range of possible effects on internationally important Special Areas of Conservation and Special Protection Areas in and around the borough, including:
- ▶ Atmospheric pollution;
 - ▶ Disturbance from recreation;
 - ▶ Effects on supporting habitats;

- ▶ Water abstraction and supply; and
- ▶ Waste water treatment and discharge.

6.2.14 It has concluded that adverse effects on the integrity of the sites in relation to all but one of these impacts are unlikely to occur. Impacts associated with waste water treatment and discharge cannot be fully assessed at the current stage because the preferred wastewater option has not yet been defined.

Climate change

6.2.15 Development of 6,000 dwellings, c.20ha of employment land and associated uses within Welborne will increase greenhouse gas emissions by expanding the built footprint of Fareham borough. However, the Welborne Plan contains a range of proposals limiting the growth in carbon emissions associated with the development of Welborne.

6.2.16 As discussed in more detail in relation to Accessibility and Transportation above, the Welborne Plan will support the use of sustainable modes of transport, including BRT, buses, walking and cycling, and aims to limit traffic growth and reduce the need to travel. This will support climate change mitigation by limiting greenhouse gas emissions from transport. The Energy policy and High Level Development Principles help ensure that emissions from homes, community buildings and employment premises are minimised through high energy efficiency standards and the development of localised renewable energy generation. This broad approach to energy efficiency and renewable energy generation is significant as domestic, industrial/commercial and emissions from road transport are equally high contributors to CO₂ emissions in the borough. Nevertheless, the Plan is predicted to make a residual contribution to climate change due to increasing carbon emissions.

6.2.17 Climate change in the area has the potential to lead to a range of impacts. Adapting to the effect of climate change in Welborne requires forward planning which considers future trends in the climate, including more extreme weather events, increased winter rainfall and increased occurrences of summer drought. Effective climate change adaptation will be promoted in large part by the Welborne Plan's provision for green infrastructure. Greenspace can help control surface water run-off, and support a reduction in increased temperatures experienced from the "heat island effect," where built up areas become significantly warmer than surrounding rural areas. The development of a high quality green infrastructure network in Welborne will therefore help increase the resilience of the area to the effects of climate change,

6.2.18 Although the plan area is not within a zone of elevated flood risk, proposed policies seek to require flood risk assessments to demonstrate that development will not increase flood risk on the site or elsewhere. This will be supported by the Plan's implementation of sustainable drainage systems (SuDS) within Welborne through policy WEL39. This seeks to ensure that all stages of the development will incorporate SuDS into the network of open space put forward through the green infrastructure strategy, all surface water run-off is contained within the site, and that SuDS are designed to accommodate a one hundred year rainfall event with a 30% allowance for climate change. The Plan has an emphasis on water efficiency measures, including installation of water meters in all dwellings and a target to achieve per capita water consumption of no more than 105 litres per person per day.

Economic factors

- 6.2.19 The development of 6,000 dwellings, c.20ha of employment land and associated uses will increase the local market for goods, services and amenities. This will support the economic vitality of Welborne and the surrounding area and provide new employment opportunities locally. Economic vitality will be further supported by the Plan through its allocations for a range of employment land types, including offices and industrial / warehousing, education and community uses. The Welborne Plan has moved away from the target of one job per household because it allows very little flexibility for the planned mix of employment uses which would make it difficult to respond to market conditions, changes in technology, changes in how commercial buildings are used, and changing patterns of employment. In addition this could drive up the required amount of employment floorspace and negatively affect the sub-regionally agreed "Cities First" approach.
- 6.2.20 The Plan promotes vitality of centres and employment areas by ensuring their accessibility to other parts of Welborne and encouraging housing growth in appropriate locations. This will be supported by the provision of high quality public transport and walking and cycling networks. The development of comprehensive green infrastructure networks, combined with the development of a well-designed townscape will also support the economic vitality of neighbourhoods in Welborne.
- 6.2.21 The Welborne Plan includes measures to support business start-ups and facilitate the growth of small businesses, while requirements for local employment and skills training during construction are set out within WEL43. Policy WEL9 seeks to introduce the development of flexible employment accommodation that can be adapted to meet the needs of small businesses to encourage small and new start businesses to locate in Welborne and enable them to be supported as they grow. Alongside this, the policy puts forward the development of a 'Business Incubation Centre' to provide office space, technology and provide business support for start-up companies. The provision of high speed fibre optic broadband through the Plan will also promote business start-ups. Overall, the plan is considered to have a positive impact on economic factors.

Health

- 6.2.22 Reflecting low levels of deprivation, crime and child poverty, indicators of health and wellbeing are favourable in Fareham when compared with the England average. Demographic trends such as an ageing population are likely to have implications for the provision of health services locally. In this context the Plan's focus on local service provision and ensuring that new areas of development are easily accessible to new residential areas will support the effectiveness of local health care provision in Welborne. Linked to this, the Plan introduces high quality sustainable transport networks within Welborne which will promote accessibility to health, leisure and recreational opportunities. This will help improve residents' health and wellbeing.
- 6.2.23 Health and wellbeing in Welborne will also be supported by the Plan's encouragement of non-car use and healthier modes of travel. This includes policies' on high quality pedestrian and cycle networks and enhanced public transport links. Opportunities for health and wellbeing will also be provided by the development of high quality open spaces, accessible natural

greenspace, sports and recreation facilities, formal and informal play and green corridors through the green infrastructure strategy of the Plan. This will enhance leisure and recreation opportunities, encourage walking and cycling, and help promote healthier and more active lifestyles in Welborne.

- 6.2.24 Within the Plan, residential areas are allocated away from the main zone of noise and air pollution impacts which result from the M27 motorway, helping to avoid the negative health impacts of these sources on future residents. The sustainability and energy efficiency of new housing in Welborne is promoted by the Plan through WEL36. By seeking to optimise energy efficiency in new dwellings, including the requirement for 10% of new dwellings to be built to 'Passivhaus' standard, the policy will promote the development of high quality housing which is healthy, comfortable and economical to run. Overall, the Plan is predicted to have a positive effect on human health by distributing sensitive land uses to avoid possible hazards, and providing for new health care and substantial amounts of new sports and recreational facilities.

Historic environment

- 6.2.25 A number of features and areas of historic importance exist within and near to the plan area. For example, to the west of the A32 are the Grade II* listed Dean Farmhouse and the recently discovered Neolithic long barrow. To the east of the A32, the proposals will affect the setting of the Lodge and Boundary Oak School, including the historic parkland at Roche Court. The setting of North Fareham Farmhouse and Mill House (Forest Lane), lying just outside the eastern policy boundary, will also be affected. In the wider area, views from and the setting of, historic landscapes and views associated with Fort Nelson on Portsdown Hill, the Forest of Bere, and historic settlement of Wickham will be altered. In this context the Plan seeks to protect and enhance significant cultural heritage features and ensure new uses are consistent with the conservation of heritage assets. The Plan requires all new development to adhere to a Heritage Strategy and Historic Environment Management Plan.
- 6.2.26 The area's historic environment extends beyond individual sites and features. The area's historic landscapes and townscapes must be considered as a whole in order to understand what gives the area its sense of place and identity. Alongside, the setting of individual sites and features is fundamental to their integrity. In this context the Plan's focus on the development of a high quality built environment and townscape, and on protecting local distinctiveness and a sense of place will support the setting of cultural heritage assets.
- 6.2.27 The provision of new open space through high quality green infrastructure networks will help improve the integrity of the historic environment and promote the use of areas of historic value for leisure and recreation. This will be supported by the Plan's aim to positively incorporate important aspects of the historic environment, including historic landscape character and any significant archaeological finds within Welborne's green infrastructure network.
- 6.2.28 The Plan recognises the archaeological potential of the area by seeking to ensure that archaeological field evaluation takes place to establish the presence, nature and extent of any archaeological sites that may be present. Part of this work has already been completed by the site promoters during preparation of the scoping stage for the forthcoming Environmental Impact Assessment. The work will continue to be carried out in consultation with Hampshire

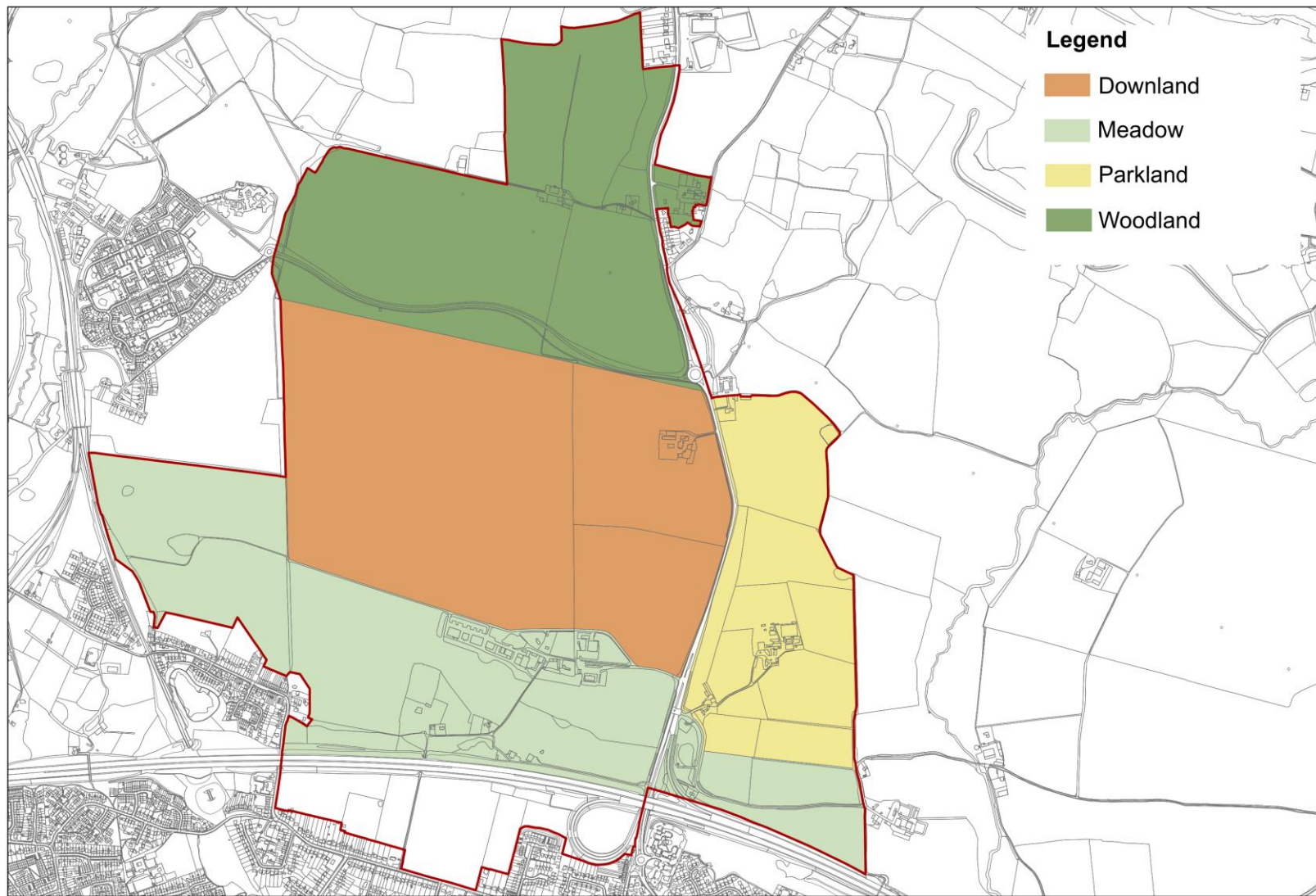
County Council and/or the Council's archaeological advisors, and English Heritage. Where the impact of the development on archaeological sites of local and regional interest is identified, the Plan states that a strategy for preservation and/or mitigation will be required which should include, where appropriate, mitigation through archaeological recording to enable further understanding and presentation of the historic environment to the community. In conclusion, residual impacts are considered to be both positive and negative; the Plan provides an opportunity to discover, record and preserve heritage features, and present them to the community, but nonetheless the setting of some features will be permanently altered and there is a risk of loss or damage to unknown buried assets during construction.

Housing

- 6.2.29 The Welborne Plan will support the delivery of around 6,000 dwellings in Welborne in the period to 2036, thereby making a significant contribution to the housing needs of the borough and wider housing market area. The Plan sets the framework for varying types and tenures of housing in Welborne, including market housing, affordable housing, private rented housing and specialist housing for older people. This will help meet local and sub-regional housing needs.
- 6.2.30 The sustainability and efficiency of new housing in Welborne is promoted by the Plan through WEL36-37. By seeking to optimise energy and water efficiency in new dwellings, including a proportion of buildings to be built to 'Passivhaus' standard, the policy will promote the development of high quality housing which is healthy, comfortable and economical to run. This will be supported by the installation of water meters in all residential dwellings. The Plan also seeks to encourage high quality design within residential environments. The quality and vitality of residential areas and neighbourhoods will benefit from the development of comprehensive walking and cycling networks and multifunctional green infrastructure, and the integration of residential areas with other land uses. Overall, the Welborne Plan is considered to have a significant positive effect on the housing objective.

Landscape

- 6.2.31 Landscape sensitivity analyses show that the centre of the proposed allocation is an area of low landscape sensitivity, but that the site's fringes to the north, south, east and west are medium sensitivity, while areas of high sensitivity associated with the Forest of Bere and Portsdown Hill lie to the north and east respectively. The Welborne Plan sets out a response to these constraints, including an accompanying landscape strategy which aims to prevent or significantly reduce views of Welborne from Wickham and the South Downs National Park to the north, and defines character areas within the policy boundary.
- 6.2.32 Many of the policies proposed in the Plan aim to reduce these effects and deliver a high quality built environment and townscape. A key influence on townscape design in Welborne will be the implementation of the Plan's character areas; see Figure 6.3. These identify four distinctive types of landscape, including woodland to the north of the site, chalk downland running through the middle of the site, meadowland to the south of the site and a parkland typology framed by a strong woodland edge on the land east of the A32. Development proposals will be required to be of a scale, form and design that reflects the existing landscape influences in each main zone of the policy boundary.



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0 200 400 800 Meters

WELBORNE CHARACTER AREAS 14/01/14

Figure 6.3: Welborne Character Areas (Source: FBC)

- 6.2.33 Important elements of the Plan's approach to structural landscaping include the new central park in the Downland area, buffers to maintain separation from existing settlements, woodland belts to provide screening and to break views from the east of the A32, and enhancements to the visual separation of Wickham and Fareham. The Plan emphasises that these should be the key determinants for townscape and landscape design to accompany new development and the main influence on the design of open space and green infrastructure.
- 6.2.34 To support the implementation of this approach, the Plan requires that proposals for development at Welborne will need to include structural landscaping schemes to enhance the landscape setting of Welborne and demonstrate how the key landscape features on the site will be preserved. Landscape quality in Welborne will also be supported by the proposals to protect and enhance the historic environment in the plan area and incorporate such features within townscape and landscape design (see Historic Environment above) and appropriate screening in more sensitive areas of the plan area such as east of the A32.
- 6.2.35 The policies also seek to make use of key landscape assets, for example utilising extensive views to Portsdown Hill and the coast from the new central park, and allocating land as settlement buffers between Welborne and the existing settlements of Fareham, Funtley, Knowle and Wickham. Proposed use of land in the Knowle Triangle as playing pitches will help to preserve the open character of the land and maintain separation between the two communities, although there is a risk that formal sport facilities will lead to a sense of suburbanisation in this area despite the Plan's requirement for all engineered structures to be situated within the policy boundary.
- 6.2.36 The Plan's focus on the development of high quality green infrastructure networks in Welborne as an integral part of wider sub-regional networks will support the quality of townscape and landscape in the area, and provide a key means of creating a high quality built and natural environment. Policy WEL35 requires the governance and maintenance of green infrastructure to be secured in perpetuity which will help to ensure that the quality of landscaping will remain high as the new community progresses. Nevertheless, the scale of development proposed and allocation of land to the east of A32 in an area of medium landscape sensitivity will result in unavoidable residual impacts on landscape character.

Material assets

- 6.2.37 The layout of the new community responds to material asset constraints on site, including the gas mains which traverse the site from north-west to south-east. Opportunities to extract resources from the Minerals Safeguarding Area to the site's fringes should be explored during the design and phasing of development proposals. As discussed above in relation to climate change, proposed policy WEL36 seeks to encourage energy efficiency and the development of low and zero carbon energy generation.
- 6.2.38 The Plan aims to minimise waste and encourage recycling in Welborne by requiring that all domestic properties incorporate storage facilities for recyclables as part of their design. The Plan also seeks to ensure that appropriate waste management infrastructure is delivered in Welborne through the provision of a new Household Waste Recycling Centre. This will

complement the three existing nearby Household Waste Recycling Centres managed by Hampshire Country Council located at: Barnes Wallis Road, Segensworth; Port Solent; and Grange Road, Gosport. It should be located within the employment area so as to avoid the negative effects on residential amenity that could be associated with such a facility, for example increased traffic, noise and odour. However, construction and operation of the new community will inevitably result in significant resource usage and the Plan is assessed as leading to mixed effects in this respect.

Population and quality of life

6.2.39 In general, deprivation in the wider borough of Fareham is low. Based on the Indices of Multiple Deprivation 2010 (IMD), the Borough is ranked as the 15th least deprived out of 326 Local Authority areas in England and is the second least deprived of the districts of Hampshire. Overall the Borough is within the top 10% least deprived local authority areas in England. However of the deprivation which does exist in Fareham, the Borough experiences higher levels of deprivation within the following 'sub domains'⁸:

- ▶ Outdoors living environment;
- ▶ Geographical barriers to housing and services; and
- ▶ Adult skills.

6.2.40 The policies put forward within the Welborne Plan recognise these issues. In terms of potential geographical barriers to housing and services a number of the Plan's policies have a close focus on promoting accessibility. This includes through the provision of a wide range of residential, employment and community land types within Welborne, and the provision of services, facilities and amenities within district and local centres and the community hub which are in close proximity and easily accessible to residential areas. In this context the land use allocations proposed through the Plan will reduce barriers to service provision within Welborne.

6.2.41 Geographical barriers will also be overcome through the introduction of public transport and walking and cycling networks within Welborne, and between Welborne and surrounding communities, including Fareham town. For example Welborne will be linked to the wider borough and sub-region through high quality public transport networks, including Bus Rapid Transit, which will link the community with Fareham town centre and railway station, Gosport, and eventually facilitate links through to Portsmouth. The Plan also seeks to ensure key areas within Welborne such as schools, employment land and residential areas will all be accessible by public transport and walking and cycling networks, and that the district centre, local centre and community hub proposed for Welborne are designed as the key nodes for these networks.

6.2.42 The introduction of high quality green infrastructure in Welborne will provide significant opportunities for recreation and amenity and help facilitate a high quality outdoors living environment. The development of open space and playing field provision and green corridors through the green infrastructure proposals for Welborne will enhance formal and informal

⁸ The Indices of Multiple Deprivation are comprised of seven 'Domains' to highlight different aspects of deprivation. These include Income; Employment; Health and Disability; Education and Skills; Barriers to Housing and Services; Crime; and Living Environment. These are subsequently separated into a number of further 'Sub domains'.

leisure and recreation opportunities, encourage walking and cycling, and help promote healthier and more active lifestyles. The Plan's promotion of a high quality townscape and built environment will also support community and neighbourhood integration, with further benefits for the quality of life of residents.

- 6.2.43 Data from the ONS suggests that in the period July 2010 to June 2011, unemployment in Fareham was 4.4%, which was lower than the South East average (5.9%), and lower than the national average (7.7%), and that increases and falls in unemployment in the borough have mirrored regional trends. However it will be important for a range of employment opportunities to be provided in the new community to reflect population growth and skill sets within Welborne and the wider sub-region. In this context employment opportunities will be supported by the Plan through the promotion of a range of employment land types, including offices and industrial / warehousing and community uses and measures to integrate employment uses with the rest of the community through high quality sustainable transport networks and green infrastructure provision. Employment will further be supported by the Plan's focus on encouraging business start-ups and supporting new businesses in Welborne (see Economic Factors above).
- 6.2.44 The implementation plan requires initial planning applications to be accompanied by employment and training plans demonstrating how local people will be included in the development process and can develop relevant construction and related skills and find employment during the development of Welborne. Despite these positive opportunities, the Plan is predicted to lead to certain negative effects for neighbouring communities, especially during the construction phase, including increased traffic flow on local roads, noise and visual impacts and a general disruption to established ways of life while Welborne takes shape.
- 6.2.45 In forthcoming years the age group with the greatest projected percentage change in population is within the 65+ years age group. An ageing population and an increased dependency ratio in the area will have implications for service provision through increasing the demand for certain types of services and facilities. The Plan seeks to address these issues by providing of a range of accessible services within Welborne's district and local centres and housing provision which is flexible, energy efficient and well designed. The Plan also sets out a requirement for specialist accommodation for older people. Overall, the Welborne Plan is considered to have a range of positive effects on population and quality of life over the long-term, despite negative effects for neighbouring communities during the construction phase.

Soil

- 6.2.46 Pre-1988 Agricultural Land Classification maps indicate that the majority of land within the policy area is classified as being of Grade 2 agricultural value. Post-1988 maps indicate that approximately 60% of the site is classified as being Grade 3a (mainly the northern section) with the remainder being Grade 3b (mainly the south of the site). Both Grades 2 and 3a are classed as best and most versatile (BMV) agricultural land. Allocating the site for Welborne will result in a loss of BMV land, the principle of which has been tested in higher tier plans (the South East Plan and Fareham Core Strategy) and is not revisited here. Nevertheless, the Plan will result in significant negative effects on soil resources.

Water

- 6.2.47 Groundwater provides the majority of water in the area, either directly or indirectly. A major intermediate aquifer underlies the plan area and as such is an important source of water for the wider sub-region. This is designated as a Source Protection Zone (SPZ). Policy WEL38 and WEL39 acknowledge the significance of the aquifer by ensuring that proposals which could result in surface water entering the aquifer demonstrate that risks of contamination will be avoided. In particular it seeks to ensure that no run-off from Welborne enters SPZ Zone 1 and only uncontaminated run-off is allowed to be discharged through sustainable drainage systems, or allowed to infiltrate the ground within SPZ Zones 2 and 3.
- 6.2.48 The sustainable management of water run-off in Welborne will be achieved through the Plan's requirement for sustainable drainage systems (SuDS). Policy WEL39 seeks to ensure that all stages of the development will incorporate SuDS into the network of open space put forward through the green infrastructure strategy, all surface water run-off is contained within the site, and that SuDS are designed to accommodate a one hundred year rainfall event with a 30% allowance for climate change. Although the plan area is not within a zone of elevated flood risk, proposed policies require flood risk assessments to demonstrate that development will not increase flood risk on the site or elsewhere.
- 6.2.49 In its Final Draft Water Resource Management Plan (WRMP) for 2014 Portsmouth Water has concluded that the Baseline Supply/Demand Balance under Average Conditions offers a surplus of supply over demand throughout the planning period, while a surplus also exists for the Baseline Peak Week and the Baseline Minimum Deployable Output scenarios. Despite this positive outlook for water supply, policy WEL37 addresses water efficiency measures to achieve residential consumption rates of no greater than 105 litres per person per day. By achieving high water efficiency in new dwellings, and installing water meters to all new homes, the policy will promote the development of high quality housing which is economical to run.
- 6.2.50 The policy takes a permissive approach to wastewater treatment options, allowing the preferred solution to be decided following further feasibility studies. One of these options provides the opportunity for additional water efficiency to be achieved via the supply of treated blackwater for use in toilet flushing and irrigation in Welborne. This option would require wastewater to be treated at the Knowle works, which would need significant upgrades and expansion to be able to cope with the additional volume of waste. The Knowle treatment option is likely to have a range of environmental effects which would affect residents of Knowle most acutely, including landscape and visual, ecological, air and noise pollution impacts. However, the alternative option of conveying wastewater to Peel Common treatment works is also significantly constrained. It is likely to lead to a broadly similar range of impacts, which may affect a higher number of people, has the added complication of needing to cross the M27, and would lock-in high energy and carbon costs of pumping wastewater over a much longer distance.
- 6.2.51 Wastewater discharges could increase pollutant loads (e.g. nitrogen) in the receiving waters. Peel Common discharges via a long sea outfall to the Solent, whereas Knowle discharges to the River Meon which flows towards the Solent at Titchfield Haven. In both cases the ultimate receiving water is an internationally important biodiversity site. Adverse ecological effects from increased pollutant loads are possible, but it is likely that discharge consent parameters

(permitted pollutant loads) for the quality of treated wastewater would remain broadly in line with the discharge consents of the current works. Given that both options ultimately meet with SAC/SPA designations at the Solent, it is likely that any increase in the volume of discharges would require a reduction in pollutant concentrations prior to a licence being issued. This will require investment in both cases to achieve treatment to higher standards prior to discharge. The HRA also addresses wastewater discharge impacts on internationally designated sites. In conclusion, the Welborne Plan is predicted to have mixed impacts for the water environment, largely as a result of the uncertainties associated with the final wastewater treatment solution.

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7 Mitigation and Recommendations for the on-going development of the Welborne Plan

7.1 Introduction

7.1.1 The SA has recommended measures to prevent, reduce or offset the significant negative effects of implementing the Welborne Plan. These measures are collectively referred to as 'mitigation measures'. Where appropriate, recommendations for enhancement are made to help maximise the sustainability performance of the plan.

7.2 Mitigation Measures and Recommendations for Enhancement

7.2.1 Mitigation measures have been generated throughout the course of the SA for the Welborne Plan. Many of these, including for example recommendations on the most sustainable masterplanning options, have been incorporated within the plan as it has developed. Where significant negative effects remain, or opportunities for enhancement present themselves, additional measures are proposed in the Detailed Assessment Matrices included in Appendix I. By way of summary from Appendix I, the mitigation measures and recommendations for enhancement include:

- ▶ While the loss of BMV agricultural land will be unavoidable if development objectives for the site are to be met, opportunities to extract minerals deposits prior to development should be explored to avoid sterilising these resources, in accordance with the Hampshire Minerals and Waste Plan.
- ▶ Noise screening measures, use of low noise road surfacing, low-spill lighting design and planted vegetation buffer zones could be installed at the new M27 junction 10, and junction improvements in Wickham, Knowle, Funtley and Fareham, to reduce impacts to existing homes in Funtley and north Fareham, if project-level impact assessment indicates that significant increases in air, noise or light pollution would occur.
- ▶ Slip-roads both north and south of the M27 could include planted vegetation buffer zones to screen the visual impact from existing and newly developed areas to the north and south.
- ▶ Junction improvements on the local road network could be accompanied by measures to lessen townscape impacts, such as area of new planting, high quality street furniture and signage, interpretation boards for features of local interest.
- ▶ Careful route planning and design of construction methods for the M27 junction 10 slip-roads and internal spine network will be required to avoid or minimise loss or damage to areas of priority habitat, ancient woodland remnant or botanically rich road verges. Appropriate planting and habitat creation should also take place alongside the construction of these new routes as part of the wider landscaping and GI strategy for Welborne, to contribute to sub-regional biodiversity networks.

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- ▶ The technological selection, location, design and layout of new renewable energy infrastructure should seek to avoid noise pollution or negative effects on the fabric of cultural heritage assets, and aim to complement landscape/townscape character and the setting of the historic environment. Proposals for renewable energy installations will need to demonstrate that they can be delivered without significant ecological impacts or increasing air pollution.
 - ▶ Much remains to be decided regarding the final wastewater conveyance and treatment solution. Negative effects on landscape, cultural heritage assets, air, noise, water and light pollution, and ecological impacts could result from both the Knowle and Peel Common option to a greater or lesser extent. Specific mitigation proposals will need to be drawn up during selection and design of the preferred option.
 - ▶ Regarding landscape, it is likely that a pipeline to Peel Common would be buried, thereby limiting operational effects on landscape character. Site-level landscaping proposals (e.g. bunds or tree planting) may be sufficient to mitigate the effects of expanding the Knowle works.
 - ▶ The Knowle wastewater treatment option is likely to require slurry to be removed from site by lorry, resulting in increased traffic and associated impacts in the local area. HGV route-planning, road upgrades and fleet improvements could help to reduce these impacts on Knowle residents.

8 Monitoring

8.1 Introduction

8.1.1 The SEA Directive states that “Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action” (Article 10.1). In addition, the Environmental Report (or Sustainability Report) should provide “... a description of the measures envisaged concerning monitoring” (Annex I (i)).

8.1.2 The SA monitoring framework should be targeted towards the aspects of the environmental, social and economic baseline which are assessed as likely to be significantly affected during implementation of the plan. Ideally SA monitoring proposals should be aligned with or incorporated within monitoring that is scheduled for the plan itself, both to avoid duplication and ensure that appropriate remedial action can be taken.

8.1.3 Monitoring is particularly useful in helping to answer the following questions:

- ▶ Were the assessment’s predictions of sustainability effects accurate?
- ▶ Is the Welborne Plan contributing to the achievement of desired sustainability objectives?
- ▶ Are mitigation measures performing as well as expected?
- ▶ Are there any unforeseen adverse effects? Are these within acceptable limits, or is remedial action required?

8.2 SA Monitoring for the Welborne Plan

8.2.1 Table 8.1 provides proposals for a programme of monitoring to measure the plan’s performance in relation to the SA Objectives against which significant effects were identified, and seeks to monitor where uncertainties relating to the appraisal findings arose. The monitoring programme may still be adjusted in response to representations on the plan and its SA. The final monitoring programme will be included in the Post Adoption Statement. Consultees are invited to suggest any further indicators that they feel are necessary or suitable for inclusion in this monitoring programme.

Table 8.1: Proposed monitoring framework

Theme	Monitoring data	Objective
Accessibility	Modal share of trips undertaken to/from Welborne by: <ul style="list-style-type: none"> - Car/van; - Bus; - Bus Rapid Transit; 	To monitor success of sustainable transport measures

Theme	Monitoring data	Objective
	<ul style="list-style-type: none"> - Cycling; and - Walking. 	
Air quality	Air quality on main local routes, close to sensitive receptors and sites of biological interest	To provide early warning of adverse health or environmental effects, and help inform remedial action
Biodiversity	<ul style="list-style-type: none"> - Loss or degradation of areas of local ecological interest, including ancient woodland remnants and Knowle Road verges - Delivery of green infrastructure and habitat creation - Area change in extent of priority habitats - Delivery of SANGs (ha) in line with occupancy of dwellings - Contributions to SDMP and/or New Forest Recreation Management Strategy (£) 	To achieve net gains for biodiversity
Climate change	<ul style="list-style-type: none"> - Kilowatt hours of installed renewable and low carbon energy source - Proportion of Passivhaus homes delivered in each phase 	To reduce carbon emissions
Economic factors	<ul style="list-style-type: none"> - Number of local workers employed during construction - Amount (m²) of employment floorspace delivered 	To increase local employment opportunities
Food production	<ul style="list-style-type: none"> - Delivery of allotments & community gardens (ha) 	To maintain local food production
Heritage	<ul style="list-style-type: none"> - Number of artefacts discovered and recorded - Number of artefacts destroyed - Number of artefacts incorporated within development and/or interpreted & presented to public - Number of features added to the Heritage at Risk register 	To promote preservation, enhancement and enjoyment of heritage features
Human health	<ul style="list-style-type: none"> - Monitor extent of traffic-related noise pollution increases with reference to existing dwellings at Funtley and north Fareham - Amount of sports/recreation facilities delivered 	To avoid adverse health impacts
Housing	<ul style="list-style-type: none"> - Number of homes delivered (against trajectory) - Mix of size, type and tenure 	To encourage timely delivery of the necessary range of housing needs
Water	Per capita water consumption (105l/p/d)	To improve water efficiency

9 Summary

9.1 Summary and Next Steps

- 9.1.1 The Sustainability Report presents the findings of a combined Sustainability Appraisal and Strategic Environmental Assessment for the Welborne Plan.
- 9.1.2 The report accompanies the Publication Draft Plan, forming part of the evidence upon which the plan is based, and incorporates the Environmental Report which is required in accordance with the SEA Directive. It includes an assessment of the reasonable alternatives which were considered during preparation of the plan, and makes recommendations for mitigating and monitoring its significant effects.
- 9.1.3 The Sustainability Appraisal found that a broad range of positive effects across the spectrum of sustainability themes are associated with the plan in its current form. However, residual negative effects are also expected in relation to the following themes: accessibility and transportation; air quality; biodiversity; carbon emissions; landscape and the setting of heritage assets; loss of greenfield land of best and most versatile agricultural value; consumption of resources and materials; and wastewater disposal. Recommendations for mitigation, enhancement and monitoring are made.
- 9.1.4 Following publication of the Welborne Plan and its Sustainability Report, the Plan will move towards Examination in Public. Representations received on the Publication Draft Plan may necessitate further changes to the plan and, if so, significant changes will also be subject to further Sustainability Appraisal. This may lead to a further edition of the Sustainability Report being produced, or perhaps an Addendum to the current report, so that the findings of further appraisal can be circulated. The representations, along with any proposed changes to the plan and SA information will be submitted to the Planning Inspector to consider during the Examination in Public.
- 9.1.5 SEA Regulations 16.3c(iii) and 16.4 require that a 'statement' be made available to accompany the plan, as soon as possible after the adoption of the plan or programme. The purpose of the Post Adoption Statement is to outline how the SA process has informed and influenced the Welborne Plan development process and demonstrate how consultation on the SA was taken into account. The statement will contain the following information:
- ▶ The reasons for choosing the Welborne Plan as adopted in the light of other reasonable alternatives dealt with;
 - ▶ How environmental considerations were integrated into the Welborne Plan;
 - ▶ How consultation responses were taken into account; and
 - ▶ Measures that are to be taken to monitor the significant effects of the Welborne Plan.

9.2 Publication

- 9.2.1 The Publication Draft Welborne Plan and this Sustainability Report are being made available for representations for a period of six weeks, from 28 February until 5.00pm on Friday 11 April 2014.
- 9.2.2 Documents can be inspected online, at Fareham Library or the Council's office. Representations can be submitted via the online response form, or sent to planningpolicy@fareham.gov.uk or the Council's address given below.

Email:

planningpolicy@fareham.gov.uk

Online:

www.fareham.gov.uk/planning/new_community/intro.aspx

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