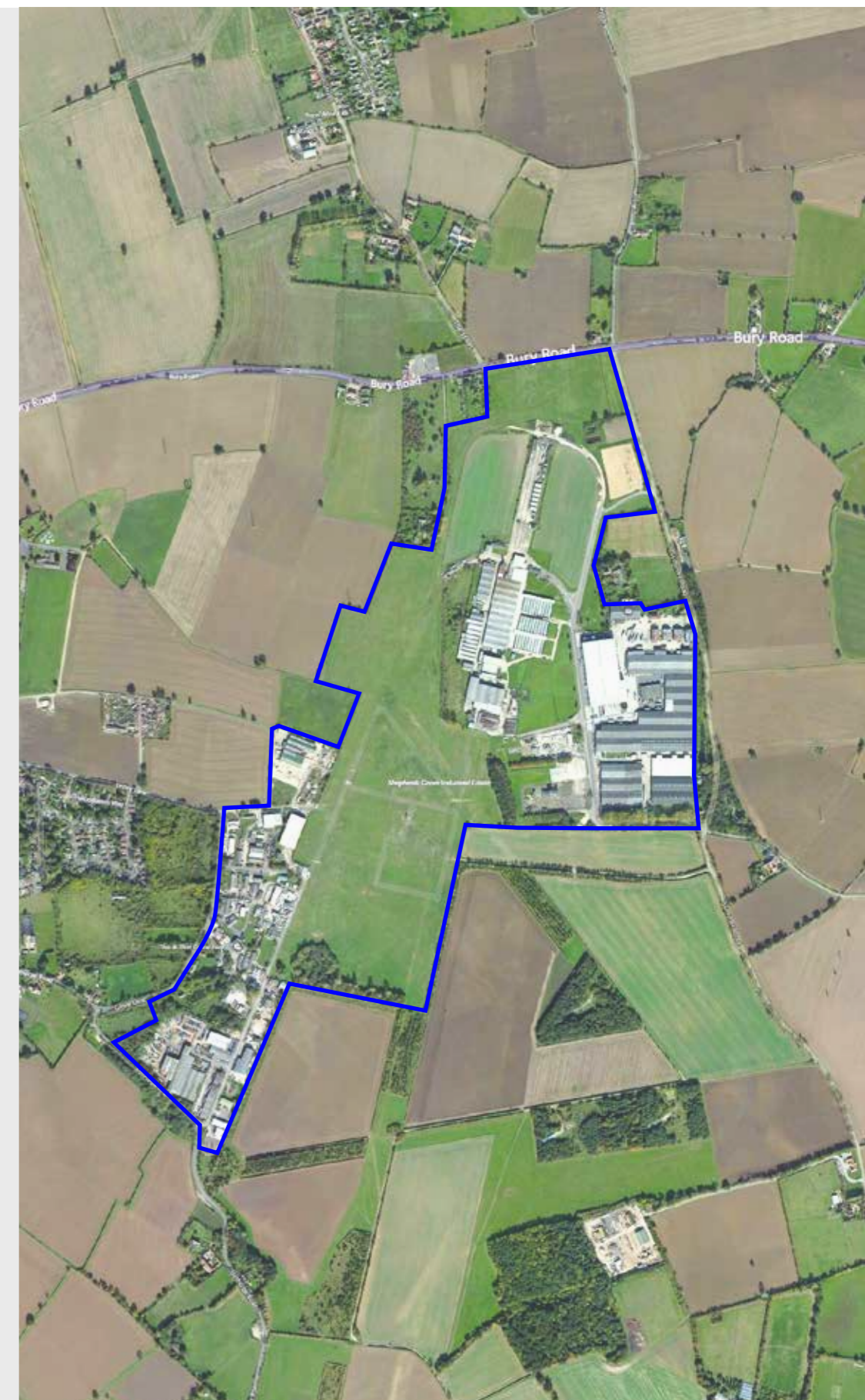


LAND AT  
SHEPHERD'S GROVE RURAL  
EMPLOYMENT AREA, STANTON  
Bury St Edmunds

MASTERPLAN  
October 2019



# CONTENTS

<b>1.0 INTRODUCTION .....</b>	<b>1</b>	<b>4.0 EVALUATION.....</b>	<b>17</b>
1.1 PURPOSE OF MASTERPLAN		4.1 INTRODUCTION	
1.2 WHAT MAKES A SUCCESSFUL MASTERPLAN?		4.2 CONSTRAINTS	
1.3 SHEPHERD'S GROVE - LOCATION AND CHARACTER OF WIDER AREA (STANTON)		4.3 POTENTIAL LAND USES	
1.4 PLANNING POLICY CONTEXT		4.4 OPPORTUNITIES	
<b>2.0 DESIGN VISION .....</b>	<b>7</b>	4.5 DESIGN PRINCIPLES	
2.1 INTRODUCTION		4.6 STAKEHOLDER ENGAGEMENT	
2.2 DESIGN & PLACE-MAKING OBJECTIVES		<b>5.0 MASTERPLAN .....</b>	<b>23</b>
2.3 MOVEMENT & ACCESS OBJECTIVES		5.1 KEY DESIGN FEATURES	
2.4 LANDSCAPE & OPEN SPACE OBJECTIVES		5.2 LAND USES	
2.5 SUSTAINABILITY OBJECTIVES		5.3 ACCESS, STREET HIERARCHY AND PUBLIC TRANSPORT	
<b>3.0 ASSESSMENT .....</b>	<b>8</b>	5.4 PEDESTRIAN AND CYCLE LINKS	
3.1 OVERVIEW OF SITE (VISUAL CONTEXT)		5.5 BUILT FORM & PLACE-MAKING	
3.2 TOPOGRAPHY .....		5.6 ARCHITECTURAL QUALITY	
3.3 LANDSCAPE		5.7 LANDSCAPE STRUCTURE, VIEWS AND OPEN SPACE	
3.4 ECOLOGY & BIODIVERSITY		5.8 BIODIVERSITY NETWORK	
3.5 FLOOD RISK		5.9 DRAINAGE / SUDS	
3.6 ACCESS & TRANSPORT		5.10 ARCHAEOLOGY / HERITAGE	
3.7 LOCAL SERVICES AND FACILITIES		5.11 SUSTAINABILITY & RENEWABLE ENERGY	
3.8 HISTORIC ENVIRONMENT		5.12 INDICATIVE MASTERPLAN	
3.9 OVERHEAD LINES		<b>6.0 PHASING &amp; IMPLEMENTATION.....</b>	<b>38</b>
3.10 ADJOINING LAND USES		6.1 TIMETABLE TO SUBMISSION OF OUTLINE PLANNING APPLICATION	
3.11 LAND QUALITY			

# FIGURES

## LIST OF FIGURES

- Fig. 1: Sub-regional Context Map of the Site Location
- Fig. 2: Ordnance Survey showing the Site Location
- Fig. 3: OS Diagram showing the Ownerships
- Fig. 4: Google Earth historical photo dated 1945
- Fig. 5: Google Earth historical photo dated 1999
- Fig. 6: St Edmundsbury Borough Council Local Plan Inset Map 48
- Fig. 7: Aerial map (Bing.com) showing the location of the Site Photos
- Fig. 8: Site Photos
- Fig. 9: Diagram illustrating the Ancient Plateau Claylands typology
- Fig. 10: Flood Risk Extracts
- Fig. 11: Layout of Proposed New Access Roundabout on A143 (as approved under Application Ref. SE/02/1747/P)
- Fig. 12: Diagram illustrating the existing routes & connections
- Fig. 13: Diagram illustrating the existing local services
- Fig. 14: Diagram illustrating the existing heritage context
- Fig. 15: Site Photos
- Fig. 16: Diagram illustrating the undeveloped available land
- Fig. 17: Diagram illustrating the site constraints
- Fig. 18: Diagram illustrating the potential land uses
- Fig. 19: Diagram illustrating the opportunities
- Fig. 20: Indicative images of the design principles
- Fig. 21: Diagram illustrating the masterplan zones
- Fig. 22: Movement Diagram
- Fig. 23: Diagram illustrating the new / improved footpaths
- Fig. 24: Diagram illustrating the new / improved footpaths -Insert AA
- Fig. 25: Diagram illustrating the new / improved footpaths -Insert BB
- Fig. 26: Diagram illustrating the new / improved footpaths -Insert CC
- Fig. 27: Diagram illustrating the new / improved footpaths -Insert DD
- Fig. 28: Diagram illustrating proposed footpaths and the existing routes & connections
- Fig. 29: Images illustrating the urban form
- Fig. 30: Indicative example of a section through the landscape buffer zone to the residential area
- Fig. 31: Residential Area Diagram
- Fig. 32: Indicative architectural quality
- Fig. 33: Diagram illustrating the main views and existing boundary screens
- Fig. 34: Diagram illustrating augmented and new landscape
- Fig. 35: Diagram illustrating the surface water drainage extents
- Fig. 36: Energy Hierarchy
- Fig. 37: Dynamic simulation model
- Fig. 38: Analysis of increased wind speed due to climate change
- Fig. 39: Photo voltaic panels located on roof
- Fig. 40: Diagram illustrating the masterplan
- Fig. 41: Masterplan Inset within St Edmundsbury Borough Council Local Plan Policies Map 2015 Inset Map 48
- Fig. 42: Indicative timetable

# APPENDICES

- Appendix 1: The Protocol on the preparation of Masterplans (Sept 2006)
- Appendix 2: Economic Viability

# 1.0 INTRODUCTION

## 1.1 PURPOSE OF MASTERPLAN

The purpose of this Masterplan is to:

- Set out a 'vision' for the development of Shepherd's Grove, in accordance with Local Plan policy;
- Provide a framework masterplan to identify developable areas, potential land uses, access arrangements, phasing of development, overall design, layout and landscaping;
- Explain and justify the inclusion of residential development to make the provision of the necessary infrastructure economically viable; and,
- Describe how the detailed assessment of the masterplan area has influenced the 'vision' and the framework masterplan.

## 1.2 WHAT MAKES A SUCCESSFUL MASTERPLAN?

A Successful Masterplan should be:

- Visionary
- Deliverable
- Fully integrated
- Flexible, and
- Part of a Participatory Process

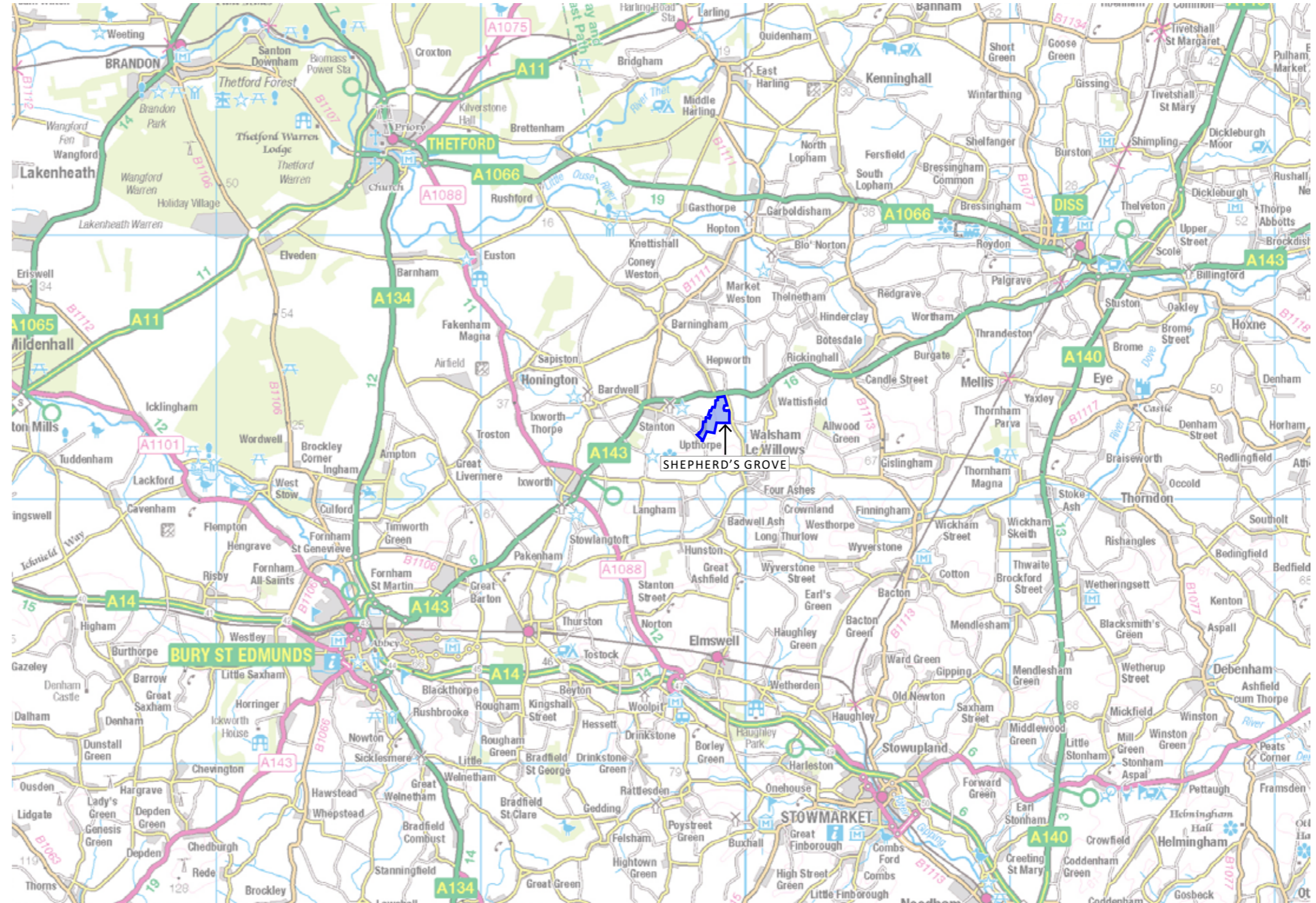


Fig. 1: Sub-regional Context Map of the Site Location

# 1.0 INTRODUCTION

## 1.3 SHEPHERD'S GROVE - LOCATION AND CHARACTER OF WIDER AREA (STANTON)

### Location

Shepherd's Grove is located 2.5km (1.5 miles) east of the centre of the village of Stanton, south of the A143 Bury Road, which runs between Bury St Edmund's and Diss at this point (see Figure 1).

The Parish of Stanton had a population of 2,507 at the time of the 2011 Census. The nearest other villages in this part of rural north Suffolk are Hepworth (to the north), Wattisfield (to the east), and Walsham Le Willows (to the south).

### Context

Shepherd's Grove is a former RAF Airfield site that is currently used for a variety of purposes, including: industrial; warehousing; storage; and other commercial uses. These uses developed during the 1970s and 1980s and are located in two distinct areas – Shepherd's Grove East, and Shepherd's Grove West – which are separated by an area of brownfield land that is now cleared of buildings, structures and hardstandings.

To the north, Shepherd's Grove is bounded by the A143 Bury Road, and to the east by Sumner Road, which leads from the A143 southwards to Walsham Le Willows. To the south, Shepherd's Grove adjoins open countryside in arable use, interspersed by small areas of woodland. To the south-west, Shepherd's Grove West adjoins the hamlet of Upthorpe and Shepherd's Grove Park (a residential park homes site). To the west (north of Shepherd's Grove West), the adjoining land is also in agricultural use with a few scattered residential properties along the south side of the A143.

At the present time, access to Shepherd's Grove West can only be obtained via Upthorpe Road and Grove Lane through the village of Stanton. This includes all commercial vehicles and HGVs. Shepherd's Grove East is accessed via two separate entrances from Sumner Road to the east.

The proximity of Shepherd's Grove to the A143 and A14 (at Bury St Edmunds), allows good access to the M1 and A1, and the wider strategic road network within the UK, as well as giving easy access to/from the local ports of Harwich and Felixstowe.

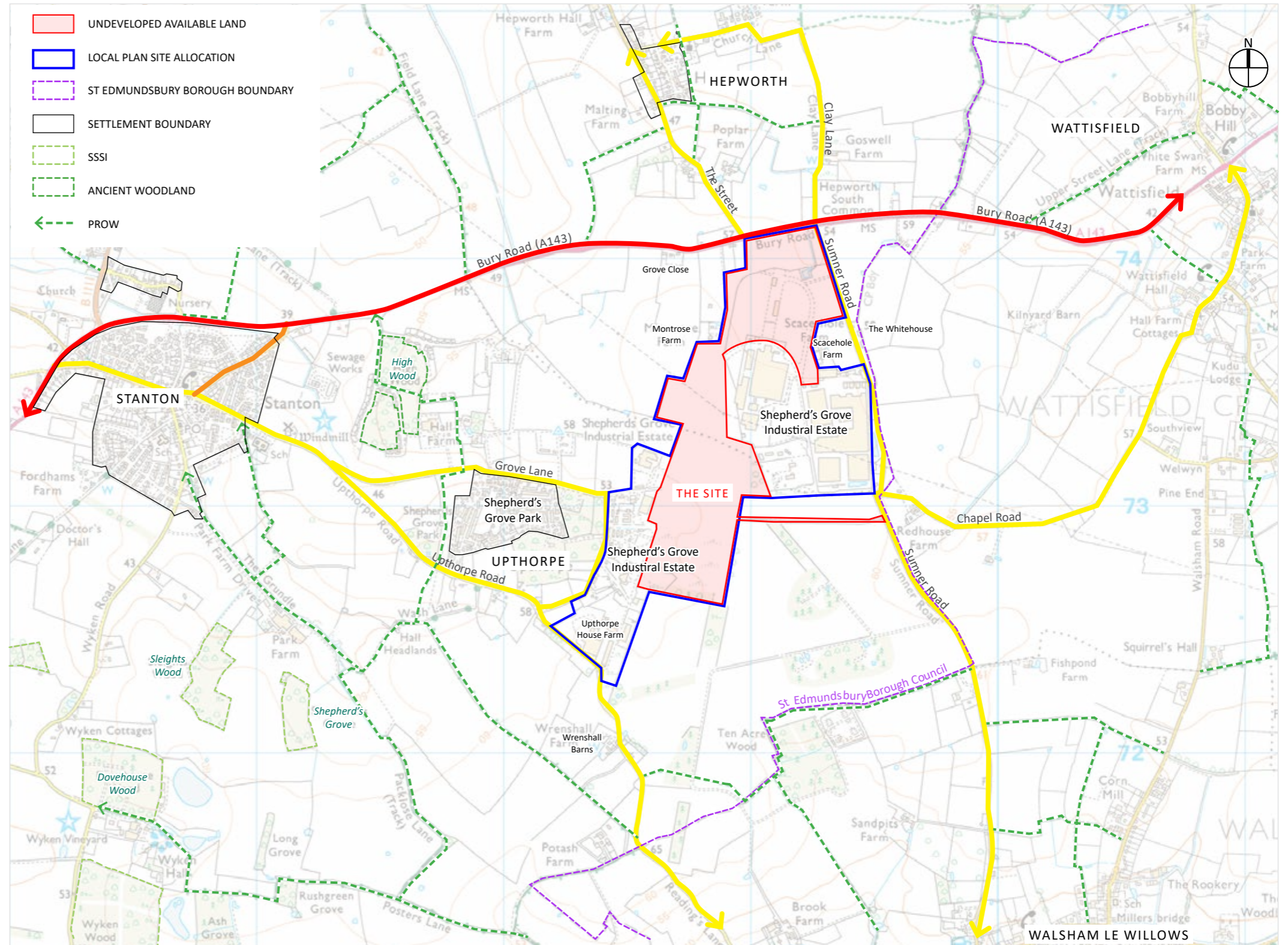


Fig. 2: Ordnance Survey showing the Site Location  
The Undeveloped Available Land is outlined in red and the Allocated Masterplan Area is outlined in blue

# 1.0 INTRODUCTION

## 1.3 SHEPHERD'S GROVE - LOCATION AND CHARACTER OF WIDER AREA (STANTON)

### Land Ownerships

The plan below (Figure 3) shows the known land ownerships within the Masterplan area. Shepherd's Grove West is understood to be in a multitude of different ownerships.

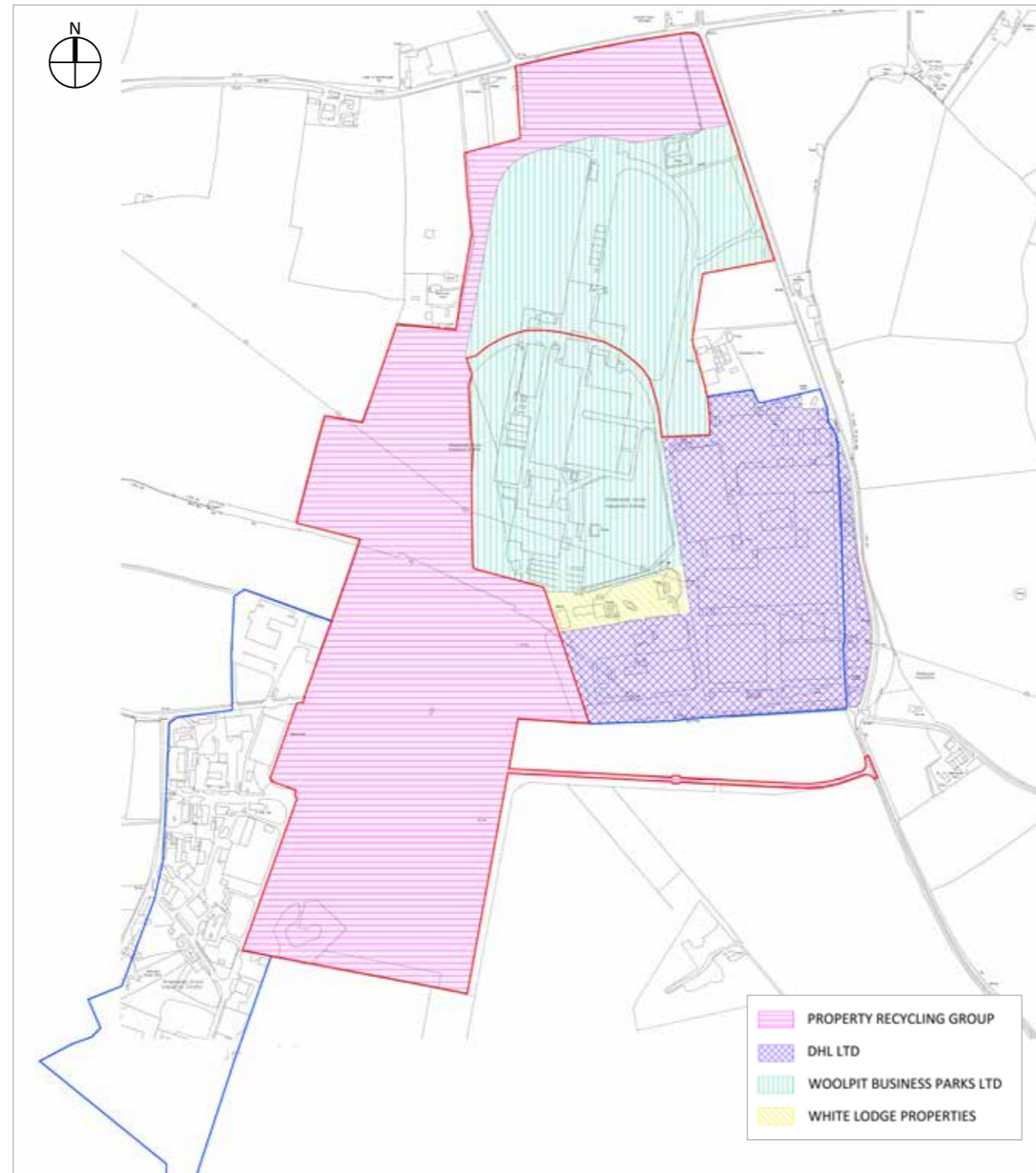


Fig. 3: OS Diagram showing the Ownerships  
The Undeveloped Available Land is outlined in red and the Allocated Masterplan Area is outlined in blue

# 1.0 INTRODUCTION

## 1.3 SHEPHERD'S GROVE - LOCATION AND CHARACTER OF WIDER AREA (STANTON)

### Site History

Shepherd's Grove is a former World War II airfield (RAF Shepherd's Grove) and during the last years of the war, it was used as a base for Stirling bombers. However, it was in fact built for the United States Air Force (USAF) in 1943. The airfield became an RAF support base in 1944 and in May 1946 the station was used as a satellite of RAF Watton Radio Warfare Establishment. The base was used by Bomber Command and Transport Command which involved dropping supplies and troops including SOE operations dropping small units of SAS men into occupied territories.

The base also took part in Operation Varsity in 1945, which saw allied forces cross the River Rhine into Germany. It was the largest airborne operation to be conducted on a single day and in one location involving more than 16,000 paratroopers and several thousand aircraft. The station was put on "care and maintenance" in 1950, but was then loaned to the USAF in 1951. They used the station to base several jet fighter squadrons during the "Cold War" period. In 1959 Shepherd's Grove became an RAF "Thor" Missile Base, initially for Mark 7 missiles and later for Mark 28 thermo-nuclear weapons. The missiles were removed in 1963 and the "undeveloped" areas of the airfield were returned to agricultural use. Two industrial estates were developed on those "built" areas of the airfield, utilising some of the original airfield buildings – particularly in the area now known as Shepherd's Grove West.

### Planning History

Outline planning permission for industrial and commercial development (B1, B2 and B8 uses without floor area or hours of use restrictions) was granted for the 'undeveloped part' of the Masterplan area in May 2000, subject to a Section 106 Agreement, and was renewed in 2004. These permissions have since lapsed. A further planning permission was granted on the same site in July 2006 for a distribution centre comprising 114,900 square metres (1,236,772 sq.ft) of B8 floorspace plus ancillary offices, parking and service areas, and a new roundabout access on the A143. This permission was also subject to a Section 106 and Section 278 Agreements (in respect of the road improvements). This permission (LPA Ref: SE/02/1747/P), which was obtained by IKEA for a new distribution centre, expired on 6th July 2011.



Fig. 4: Google Earth historical photo dated 1945



Fig. 5: Google Earth historical photo dated 1999

# 1.0 INTRODUCTION

## 1.4 PLANNING POLICY CONTEXT

### Introduction

The St Edmundsbury Local Plan sets out the long term planning and land use policies within the Borough. The Local Plan includes documents previously referred to as the Local Development Framework (LDF). The Local Plan is made up of the following documents: Core Strategy; Vision 2031 Local Plans (for Bury St Edmunds, Haverhill, and the Rural Areas); Joint Development Management Policies Document; and Policies Maps.

**A new district council was formed on 1st April 2019, West Suffolk Council, which has replaced the two former district councils of St Edmundsbury and Forest Heath.**

### Core Strategy

Core Strategy - adopted in December 2010, this document sets out the vision, objectives, spatial strategy and overarching policies for the provision of new development in the Borough up to 2031. Within the spatial strategy, Stanton is identified as a 'key service centre' – the largest of five villages within the Borough that generally have a wide range of services, as well as local employment provision, and which are identified as the main focus for additional homes, jobs and community facilities outside of Bury St Edmunds and Haverhill.

Policy CS9 of the Core Strategy aims to deliver at least 13,000 additional jobs by 2026, including through existing employment areas such as Shepherd's Grove, Stanton. The Core Strategy also sets out a strategy for the rural areas, including key service centres, and encourages a scale of new development that reflects the need to maintain the sustainability of local services for the communities they serve.

Stanton is a large village that has a good range of local services and facilities, such as primary school, shop, post office, two public houses, petrol station, village hall, recreational, sport and play facilities, a veterinary practice, and health facilities, as well as good accessibility to Diss and Bury St Edmunds via the A143.

### Vision 2031 Local Plans

Vision 2031 Local Plans – Shepherd's Grove, Stanton is included within the 'Rural Vision 2031' Local Plan, which was adopted in September 2014. Policy RV4 designates Shepherd's Grove, Stanton as one of eleven 'Rural Employment Areas' for new business uses within Use Classes B1, B2 and B8 (offices, 'research and development' and light industrial; general industrial; and storage and distribution). The policy also states that within the Shepherd's Grove Stanton rural employment area there is 53 hectares of developable site area, but that new infrastructure is required to facilitate development – specifically, a new access road to serve the Shepherd's Grove Industrial Estates (Shepherd's Grove East and Shepherd's Grove West). The route of the required new access road is identified on the Policies Map (Inset Map 48 - see Fig. 6).

In addition, the policy allows for the inclusion of a proportion of residential and/or other higher value development, subject to certain criteria relating to the economic viability of any development and the exclusion of town centre uses. The policy also states that the amount, location and nature of any higher-value development will need to be specified in a masterplan that must be prepared for the site. Applications for planning permission will only be determined once the masterplan has been adopted by the local planning authority.

### Emerging Local Plan

**West Suffolk Council has now embarked on a review of the current St Edmundsbury and Forest Heath Local Plans and aims to produce a new Local Plan for the combined authority area. The Council's Local Development Scheme (LDS) dated December 2018 sets out the expected timescales for the adoption of the emerging Local Plan and confirms that the Council anticipate submitting the Plan for examination in July 2021, with adoption in May 2023. The emerging West Suffolk Local Plan is therefore at an early stage and, in accordance with paragraph 48 of the NPPF, it can only be afforded very limited weight.**

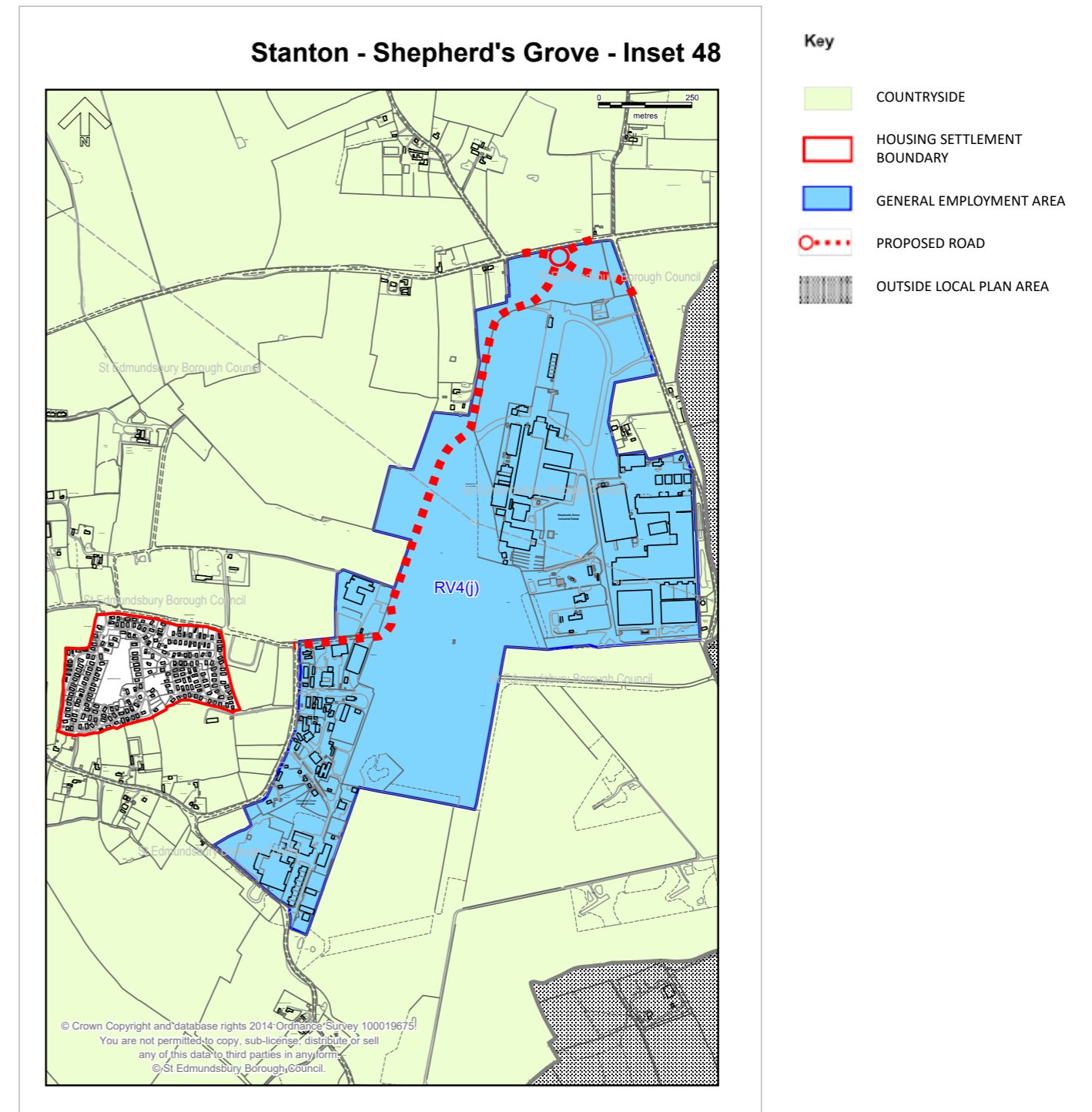


Fig. 6: St Edmundsbury Borough Council Local Plan Inset Map 48  
St Edmundsbury policies map book (rural inset maps) - February 2015



# 1.0 INTRODUCTION

## 1.4 PLANNING POLICY CONTEXT

### Economic Viability

Policy RV4 allows for the inclusion of residential and / or other higher value uses to help fund the necessary infrastructure identified in the policy.

A detailed assessment of the total infrastructure costs has been undertaken, which taken with the economic viability assessment demonstrates the need for a residential area that could accommodate up to **400** dwellings assuming a requirement for policy compliant 30% affordable housing, to be included within the masterplan. **This figure is based on the current assumptions for 'Section 106' contributions (in respect of education, healthcare, early-years pre-school, libraries and public transport), and affordable housing mix/tenure.** However, given the need for residential is to pump prime the development rather than achieve residential in itself, it maybe that West Suffolk will consider relaxing the affordable housing percentage required. This would reduce the dwelling numbers required and reduce the land take, leaving more for employment. To deliver comparable land value with no affordable housing would only require 265 dwellings. A requirement for 10% affordable would only require 299 dwellings, whereas 20% would need 336 dwellings. Therefore a range of residential development between 265 – 380 dwellings is currently essential to make any scheme for the undeveloped land within the masterplan area viable and to ensure delivery of the required infrastructure.

An appendix to this masterplan sets out the detailed justification for this range of residential development, including the costs of the infrastructure to serve the overall masterplan development, which is estimated at £11.92m Should further value engineering be

possible and / or grant assistance became available for the project the number of dwellings required could be revised downwards substantially.

### Joint Development Management Policies Document

Joint Development Management Policies Document (JDMPD) – is a Local Plan document for both Forest Heath District Council and St Edmundsbury Borough Council areas. It was adopted by both Councils in February 2015. The policies within the document are intended to be used in the day to day determination of planning applications across both areas. Relevant policies within the JDMPD in respect of the development of a masterplan for the Shepherd's Grove Stanton allocation are set out below, and considered in more detail elsewhere in this masterplan:

- Policy DM1 – presumption in favour of sustainable development
- Policy DM2 – creating places – development principles and local distinctiveness
- Policy DM3 – masterplans
- Policy DM6 – flooding and sustainable drainage
- Policy DM6 – sustainable design and construction
- Policy DM8 – low and zero carbon energy generation
- Policy DM11 – protected species
- Policy DM12 – mitigation, enhancement, management and monitoring of biodiversity
- Policy DM20 – archaeology
- Policy DM22 – residential design
- Policy DM23 – special housing needs
- Policy DM41 – community facilities and services
- Policy DM42 – open space, sport and recreation

facilities

- Policy DM46 – parking standards

### Supplementary Planning Documents (SPDs) and Planning Guidance documents

Relevant adopted SPDs of relevance to the preparation of this masterplan include:

- Open Space, Sport and Recreation Facilities (December 2012) – sets out the Council's approach to the provision of open space and recreation facilities in conjunction with new housing development;
- Joint Affordable Housing (October 2013) – sets out the authorities' approach to delivering affordable housing in accordance with their local plan and national policy. For St Edmundsbury BC Core Strategy Policy CS5 requires 30% affordable housing for sites of 0.3ha and above or more than 10 dwellings: and,
- Planning Guidance documents – includes site specific 'Concept Statements' and 'Masterplans' for a number of individual sites, as well as protocols for their preparation and adoption as supplementary planning guidance. The protocol on the preparation of masterplans (Sept 2006) is included as Appendix 1 to this masterplan, and sets out the process and procedures required, including the need for community and

stakeholder engagement.

### National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG)

National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG) – states that the purpose of the planning system is to contribute to the achievement of sustainable development, and that there are three dimensions to 'sustainable development' – an economic role; a social role; and an environmental role. The NPPF constitutes guidance for local planning authorities and decision takers both in drawing up plans and as a material consideration in determining applications. The NPPF also sets out a 'presumption in favour of sustainable development' based on 12 core planning principles – including the need to: support a prosperous rural economy; promote sustainable transport; support communications infrastructure; deliver a wide choice of high quality homes; promote healthy communities and good design; protect Green Belt land; meet the challenge of climate change and flooding; and conserve and enhance the natural and historic environment.

## 2.0 DESIGN VISION

### 2.1 INTRODUCTION

The 'Vision' for the future of the undeveloped parts of the Shepherd's Grove Masterplan Area is to create a highly sustainable, employment-led, mixed-use development that will support and enhance existing services and facilities in Stanton and the wider local area. The Masterplan proposals will also provide a new access road from the A143 to serve the undeveloped land and both existing industrial estates (Shepherd's Grove East and Shepherd's Grove West), which will resolve a dangerous traffic situation at the junction of Sumner Road and the A143, and remove the need for HGVs to go through Stanton village to access Shepherd's Grove West.

### 2.2 DESIGN & PLACE-MAKING OBJECTIVES

- Develop an attractive and sustainable mixed-use development that will connect and integrate the existing employment areas of Shepherd's Grove East and Shepherd's Grove West to create a contemporary business park, supported by commercial and residential uses;
- Integrate new development with Stanton through the creation of improved footpaths and cycleways between the Masterplan area and the village;
- Create an attractive, principal entrance into the Masterplan area defined by new 'gateway' buildings focused on a new roundabout on the A143;
- Establish a new residential neighbourhood in the south of the Masterplan area to provide a variety of dwelling types and sizes (including affordable housing, starter homes, self-build housing and market housing), in an attractive, sustainable semi-rural community that can support local services and facilities in Stanton and create a strong sense of local identity;
- Consider the inclusion of a 'community hub' within the proposed residential neighbourhood, to provide a 'buffer' between the existing industrial area (Shepherd's Grove West) and the residential area.

### 2.3 MOVEMENT & ACCESS OBJECTIVES

- Provide clear and legible connections for commercial vehicles, cars, cyclists and pedestrians, through the development of a hierarchy of routes that will encourage safe and convenient movement into and through the Masterplan area;
- Establish a new primary entrance into the Masterplan area from the A143, which will also resolve the existing highway safety issues at the junction with Sumner Road;
- Improve pedestrian and cycle links from the Masterplan area to Stanton, via Grove Lane and Upton Road, and to local bus stops, thereby encouraging the use of sustainable transport options;
- Improve/widen the existing access into the Masterplan area from Grove Lane, linking up with the main 'spine' road running northwards to the A143;
- Provide access from the A143 for HGVs into the Masterplan area (including shepherd's grove west), without going through Stanton - i.e HGVs would no longer be able to go through the village.

### 2.4 LANDSCAPE & OPEN SPACE OBJECTIVES

- Preserve existing landscape features of value that are currently within the Masterplan area;
- Create a variety of attractive, well-landscaped spaces within the developable areas of the Masterplan area, reflecting the different uses and the need to screen larger buildings in views from the surrounding countryside;
- Provide a series of well-designed and landscaped open spaces within the proposed residential neighbourhood, including a focal open space at the entrance to the residential area from the main access road into the Masterplan area;
- Establish strong, well-landscaped 'buffer-strips' to the countryside edges of the developable land within the Masterplan area, to help reduce the visual impact of new buildings in wider views from the adjoining open countryside.

### 2.5 SUSTAINABILITY OBJECTIVES

- Seek to minimise any environmental impacts created by the development of the 'available land' within the Masterplan area;
- Incorporate strategies to ensure that all new development is designed to be as sustainable as possible, through the promotion of energy, waste and resource efficiency;
- Design a sustainable surface water drainage strategy for the developable land within the Masterplan area;
- Promote sustainable modes of transport (cycling, walking and public transport) through the development of integrated routes within the Masterplan area that link with existing services and facilities in Stanton and the surrounding area;
- Design and locate new buildings to maximise solar gain, wherever possible, and to incorporate features that will create renewable energy on site, through the use of solar panels, wind turbines and photo-voltaic cells, for example;
- Utilise low water demand technologies within new buildings wherever possible, such as grey water recycling and rainwater harvesting.
- Ensure that overall, there is a net ecological enhancement of the developable areas of the site through the provision of habitat corridors, native planting and SuDS features, as well as wildlife refuges such as bird and bat boxes;
- Promote the contribution of green infrastructure to 'place-making' in order to enhance the character and distinctiveness of the area.



## 3.0 ASSESSMENT

### 3.1 OVERVIEW OF SITE (VISUAL CONTEXT)

The Masterplan area is located approximately 2km east of the centre of the village of Stanton and immediately south of the A143 Bury Road, and includes the existing commercial/industrial areas of Shepherd's Grove East and Shepherd's Grove West. The area was formerly a WWII RAF airfield. Opposite the northern boundary is an arable field and an existing property at the junction of Bury Road and Clay Lane (Turnpike Farm). Sumner Road runs southwards from the A143 and forms a substantial part of the eastern boundary of the area, which includes the industrial buildings at Shepherd's Grove East. To the south of Shepherd's Grove East, arable fields adjoin the area, with a strong tree belt separating the area from these fields. A tree lined concrete access road leads to Sumner Road between the fields from this part of the eastern boundary. Arable fields adjoin the southern boundary of the area. Existing industrial and commercial buildings at Shepherd's Grove West occupy the south-west corner of the area, while there are arable fields further north and a number of smaller, wooded fields with farm buildings and detached residential properties adjoining the north western part of the Masterplan area;

To the west of Shepherd's Grove West Industrial Estate (south of Grove Lane), beyond an area of woodland and scrub is a large, well established 'retirement park homes' site known as Shepherd's Grove Park. Grove Lane runs westwards to meet Upton Road about 300 metres west of the village. Beyond Stanton, small villages and scattered farmsteads are scattered through the wider, mainly arable landscape, with the closest villages being Hepworth approximately 1.7km to the north, Wattisfield, approximately 2.3km to the east and Walsham le Willows approximately 2.5km to the southwest. Blocks of woodland are a feature of the wider landscape, with large fields bound by scattered hedgerow trees and limited topographical undulation which allows open views to wooded horizons;

The undeveloped parts of the Masterplan area (some 53ha in extent), comprise four distinct areas: a smaller northern parcel immediately south of the A143; a linear strip of land linking a much larger southern parcel, and an area adjoining the former airfield perimeter roads immediately north of Shepherd's Grove East.

The smaller northern parcel, Area A, is roughly rectangular in shape and is bounded on the northern and eastern sides by a ditch and a 'gappy' hedgerow and for the majority of the western side by an outgrown hedgerow with mature trees. The southern boundary is marked by a post and rail fence, with some trees and brambles at the south eastern corner, while the south western corner is open to the linking strip of land between the two larger areas. The interior of this part of the Site comprises poor semi-improved grassland, with a ditch and a hedgerow close to, and parallel with Sumner Road, and there is a line of post mounted overhead cables which reach into the southern part of the Area;

The narrow, linking strip of land, Area B, is bounded to the north and west by an outgrown hedgerow and mature trees, and to the east by a post and rail fence. The interior is open, comprising poor semi-improved grassland, with two lines of post mounted overhead cables crossing the area;

The southern larger parcel, Area C is irregular in shape and bounded to the north and the northern part of the western site boundary by an outgrown hedgerow with some mature trees. The majority of the concrete road which leads to Sumner Road is open to the field to the north, with the exception of a short section closest to Sumner Road where there is an outgrown hedgerow. A hedgerow and a narrow shelter belt of trees extend along the southern side of the concrete road, with the shelter belt continuing along the rest of the eastern boundary to the south eastern corner of the Site.

The majority of the western boundary is marked by a 1.8m high concrete post and wire fence, with intermittent vegetation and some stretches of hedgerow along it. The rest of the interior comprises semi-improved grassland, with a metal pylon close to the northern part of the eastern boundary, with overhead electricity cables stretching to the north western part of this parcel. A line of post mounted overhead cables crosses the northern part of the parcel on a southwest to northeast axis. In a limited number of areas, there are small sections of remnant tarmac relating to the area's previous use as an airfield;

Area D comprises a section of the former north-south runway, which is used for open storage, bounded by the curving, perimeter road of the former airfield. This area is made up of three separate fields in agricultural use, and a triangular grassed area immediately north of the DHL compound.

# 3.0 ASSESSMENT

## 3.1 OVERVIEW OF SITE (VISUAL CONTEXT)

### Existing Site Photos

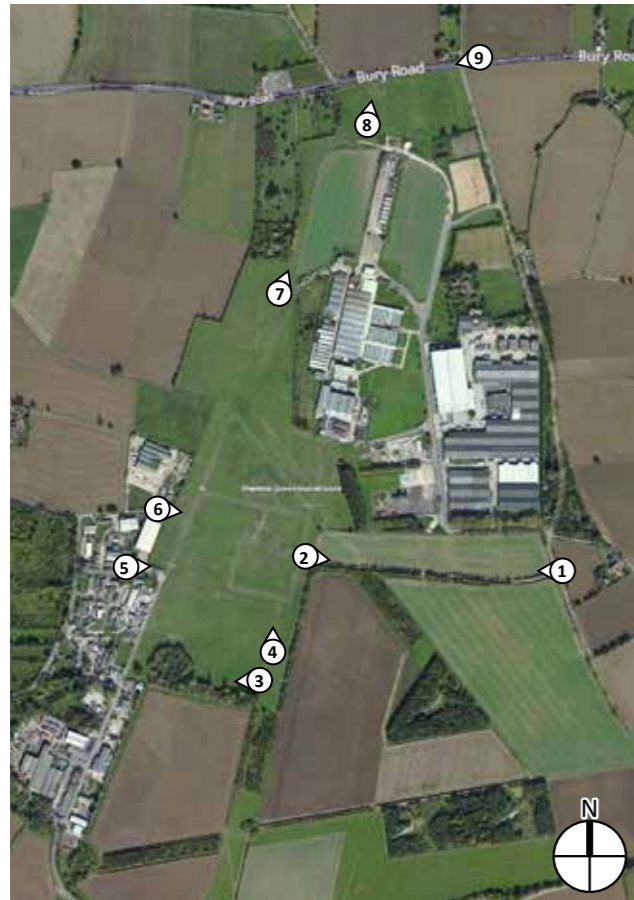


Fig. 7: Aerial map (Bing.com) showing the location of the Site Photos



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9

Fig. 8: Site Photos

## 3.0 ASSESSMENT

### 3.2 TOPOGRAPHY

Historic use of the Shepherd's Grove site as an airfield means that the land is generally flat with no significant changes in level – although the land does rise gently southwards from around 56 metres AOD at the A143, to around 60 metres towards the centre of the Masterplan area. The highest point in the surrounding area is 65 metres AOD at the entrance to Potash Farm on Upthorpe Road, to the south of Shepherd's Grove (the southern extent of the original airfield);

The majority of the area lies on a larger 'plateau' at around 60 metres AOD, which is located between Stanton, Walsham le Willows and Wattisfield, with limited and gentle undulation being a feature of the wider area. This leads to a very gentle rise in the landform to the north and north-east of the Masterplan area, while to the east and west the landform gradually falls.

### 3.3 LANDSCAPE

Shepherd's Grove is located within the 'ancient plateau claylands' typology, as described in the Suffolk Landscape Character Assessment. The key characteristics of these areas are described as: *flat or gently rolling arable landscape of clay soils dissected by small river valleys with scattered ancient woodlands. It is also noted that substantial open areas were created for WWII airfields, which are often the focus of industrial and transport orientated development, as well as the construction of large-scale wind turbines, all of which can have a considerable local impact;*

Suffolk County Council Landscape Guidance for the Ancient Plateau Claylands areas notes that one of the key forces for change in these areas is the redevelopment of former airfield sites to new uses. In terms of Development Management, the Guidance notes that in most cases a specific masterplan approach is the most effective way to deal with the development of these sites. This can allow for strategic planting schemes to be implemented to mitigate the visual impact of long-term growth on the site, rather than dealing with proposals and mitigation on a piecemeal basis;

The Masterplan area is well contained from the wider landscape by the existing commercial/industrial estates to the east and west, and by the generally well wooded southern boundaries of the site. In addition, a very gently undulating topography and woodland blocks in the wider landscape prevent all but a limited number of views of the undeveloped parts of the site;

Given the well contained nature of the undeveloped parts of the Masterplan area, and their location between Shepherd's Grove East and West, it is considered that new development within these sites could be accommodated without significant landscape or visual impacts.

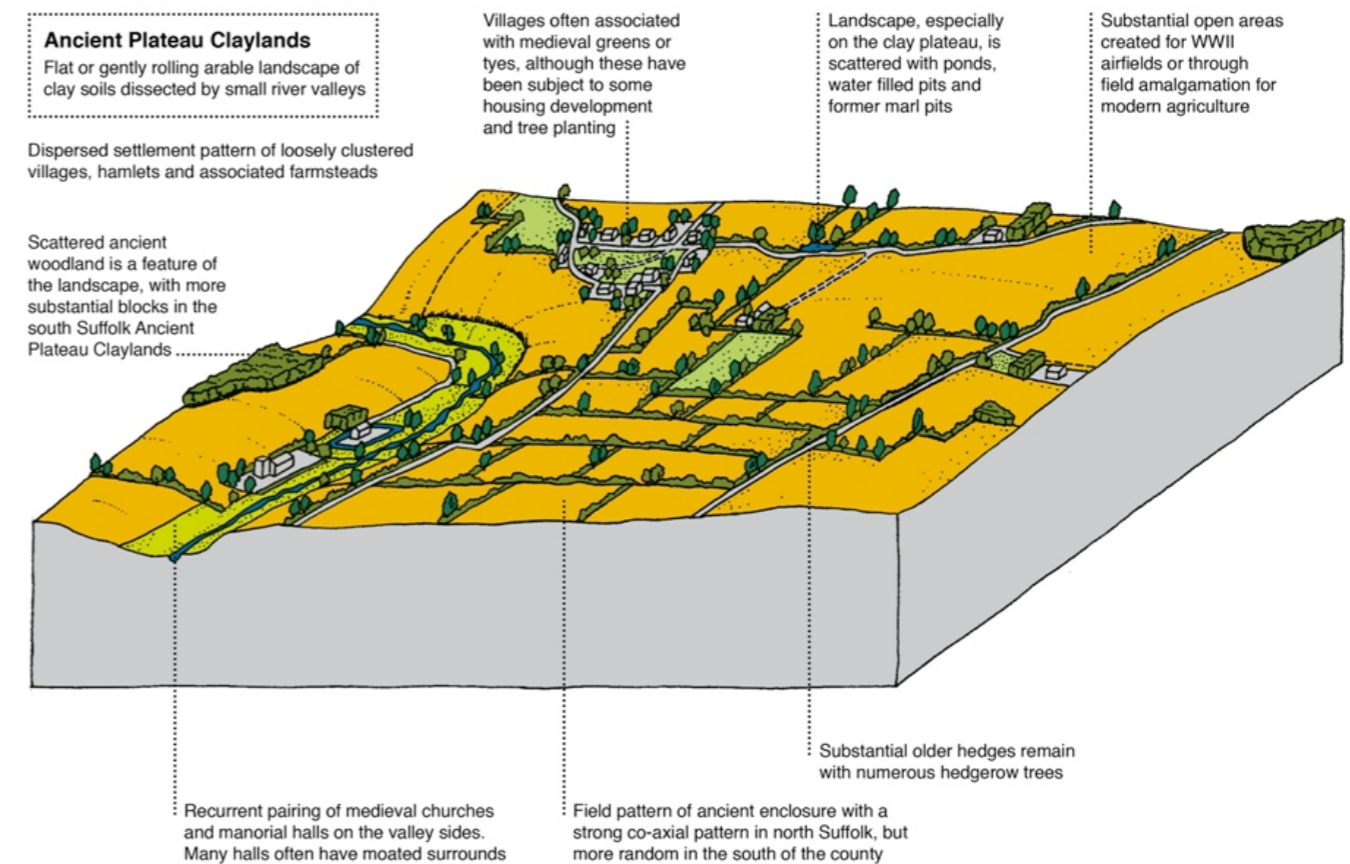


Fig. 9: Diagram illustrating the Ancient Plateau Claylands typology

# 3.0 ASSESSMENT

## 3.4 ECOLOGY & BIODIVERSITY

A Preliminary Ecological Appraisal (PEA) has been undertaken of the area, as well as a Phase 1 Habitat Survey, in order to assess the on-site habitats and their potential to support notable and protected species;

The developable sites within the Masterplan area are dominated by semi-improved grassland, which has been maintained through regular cutting dissuading both scrub encroachment and development of more species-rich swards. A 0.5ha 'pocket' of mature broad-leaved plantation woodland exists on the west side of the Shepherd's Grove East Estate containing oak standards with a sycamore dominated understorey and limited ground flora. A larger area (1.3ha) of broad-leaved plantation woodland exists to the east of Shepherds Grove West which would fall within the proposed residential area. It contains cherry, field maple, sycamore, hazel, oak, elder, blackthorn, willow and ash with a common ground flora;

A number of hedgerows are present across the developable areas of the site, including both managed and unmanaged sections, with a modest range of woody species. The hedgerows are considered to be of some ecological importance and therefore should be retained and enhanced where possible;

The development of the undeveloped parts of the Masterplan area would result in the loss of the extensive grassland habitats, so mitigation would be required to avoid net-loss of biodiversity. Such mitigation is likely to take the form of creating/restoring smaller areas of more ecologically diverse habitats as part of open space, structural landscaping and/or drainage features, such as wildflower grassland areas, wildlife ponds/wetlands, woodland planting and hedgerows;

No impacts are anticipated in respect of nature conservation designations.

## 3.5 FLOOD RISK

The development site is located on the north and east of a plateau upon which the former airfield was constructed. This area is higher than the surrounding land and hence is not at risk of flooding from fluvial or reservoir failure flooding.

The ground conditions in this area are clays of the Lowestoft Diamicton which are impermeable and not suited to Ground water flooding.

The site falls to the west and north towards a number of local watercourses which flow away from the site. There are areas of surface water flood risk shown on the mapping for the area. In the high-risk storm (1 in 30-year event) the surface water flood risk within the site is limited to isolated low points within the development. There is water trapped by local low spots, with no flow routes from them. In the Medium risk storm (1 in 100-year event) these areas are slightly more extensive but still have no flow routes associated with them. In the Low risk storm (1 in 1000-year event) flow routes in the south west and north of the site have developed. These flow routes are limited in area and the masterplanning process will take note of these areas to ensure that the flows are not inhibited by development. Public Open Space provision within the development can be tailored to facilitate these extreme flood routes.

This development site is at very low risk of flooding from all water sources and is therefore suited to all types of development in flood risk terms.

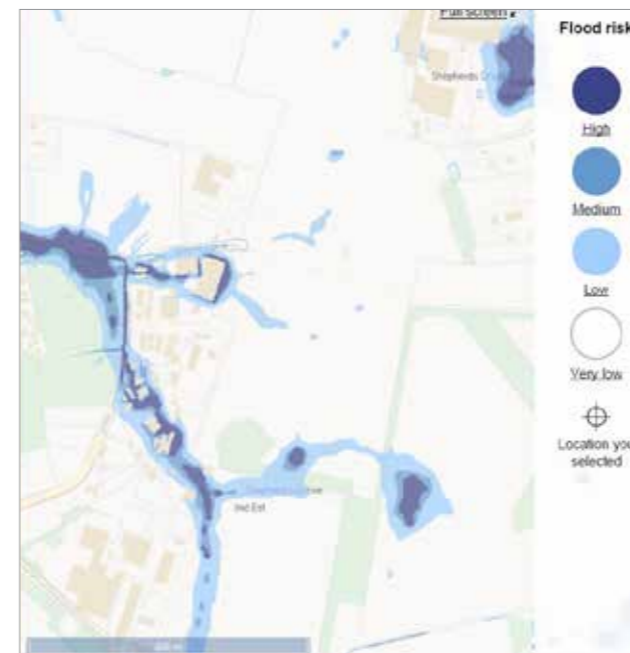
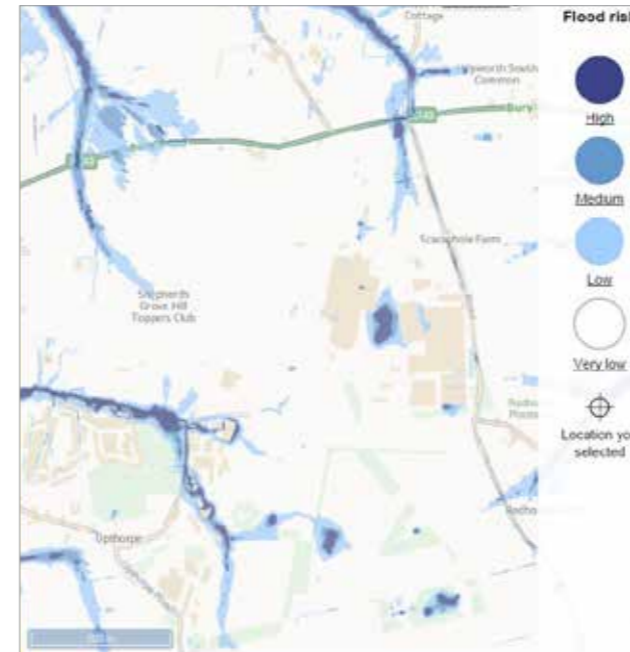


Fig. 10: Flood Risk Extracts

## 3.0 ASSESSMENT

### 3.6 ACCESS & TRANSPORT

Shepherd's Grove East is currently accessed via Sumner Road, which connects to the A143 Bury Road to the north and Walsham-le-Willows to the south. Shepherd's Grove West is currently accessed from either Grove Lane or Upthorpe Road (via Stanton to the west), or via Reading's Lane from the south. The developable land to the east of Shepherd's Grove West can also be accessed via a private service road leading from Sumner Road, just south of Shepherd's Grove East.

The A143 Bury Road, which runs immediately to the north of the Masterplan area, is a primary distributor road between Bury St Edmunds and the A14 Trunk road to the south-west, and Diss and Great Yarmouth to the north-east.

The introduction of a new roundabout junction on the A143 will provide a new access road to serve Shepherd's Grove West, which will provide an overall access strategy that will benefit the local road network by removing the need for HGVs and other large commercial vehicles to go through Stanton.

An appraisal of the existing concrete access road to Sumner Road has been undertaken to establish its

potential suitability to function as a primary point of access into the site and lower cost option. The appraisal concluded that forward visibility along Sumner Road is sub-standard for the permitted speed limit, and that there would be no justification to reduce this speed limit.

There is limited opportunity to improve the forward visibility along Sumner Road to the required standard due to third-party land constraints. Any intensification of traffic movements at the Concrete Access Road would therefore be detrimental to road safety at this location.

Early capacity assessments undertaken indicate that the proposed roundabout junction would provide sufficient capacity to accommodate the level of traffic generated by the development proposals, and the existing traffic from the Shepherds Grove Industrial Estates. Furthermore, this junction arrangement was approved by Suffolk County Council in principle as part of an earlier planning application for a large distribution facility on the site by Ikea. Alternative access options from the A143 have been explored in consultation with Suffolk County Council. All these options were shown to have insufficient operational capacity to cater for the development in full.

Pedestrian and cycle facilities will be provided at the new roundabout to provide links to the existing and proposed bus facilities located to the west along the A143. A preliminary layout of the roundabout proposal on the A143 Bury Road is provided below:

There are no existing Public Rights of Way (PROW) close to the site. A new footway connection will need to be provided to enable residents to access Grove Lane to the facilities and amenities located within Stanton. This connection could be provided adjacent to the site entrance to Shepherds Grove West Industrial Estate. A footpath connection exists at the entrance to Shepherds Grove Park home development located approximately 800m from the site. From this point Grove Lane provides a continuous footpath connection along Upthorpe Road into Stanton via the Primary School, which is located approximately 1.9km from the proposed residential neighbourhood.

There are existing bus stops within approximately 1km of the whole of the Masterplan area. The closest stops to the northern part of the site are the Duke of Marlborough stops located on the A143 Bury Road. There are currently four bus services operating along the A143. Services 304 and 338 operate between Bury St Edmunds via Stanton and Diss at an hourly frequency. Service 337 operates between Thurston and Garboldisham. The fourth service 143 operates once a week between Bury St Edmunds, Stanton and Norwich. Services 304 and 338 also operate along Grove Lane at a reduced frequency and serve the residential area at Shepherd's Grove Park.

It may be possible to extend these services in the future to serve the developable parts of the Masterplan area, to ensure the maximum recommended walking distance of 400m to a bus stop could be provided for both the residential and employment elements of the development. The proposed commercial development in the north of the Masterplan area is located within 200m of existing bus services operating along the A143 Bury Road.

As the proposals progress towards a planning application, a Transport Assessment will be produced, with the scope to be agreed with Suffolk County Council's highways department. This will include a detailed review of accessibility, including facilities in Stanton, public transport opportunities, trip generation, distribution and assignment of development trips on the network. Recent traffic counts and assessments of local junctions have been undertaken. Travel Plans will be prepared and then agreed with SCC for both residential and employment elements of the development.

The design and layout of new uses within the site will be developed to ensure permeability for walking, cycling and vehicular traffic. 'Swept path analysis' will be undertaken to demonstrate that refuse vehicles and fire tenders can be adequately accommodated within the proposed development areas.

Additional routes will be sought to connect into the network of current PROWs, albeit these are located some distance from the site (as illustrated on Figure 12 on the next page of this document) and this aspiration would require access over third party owned land.

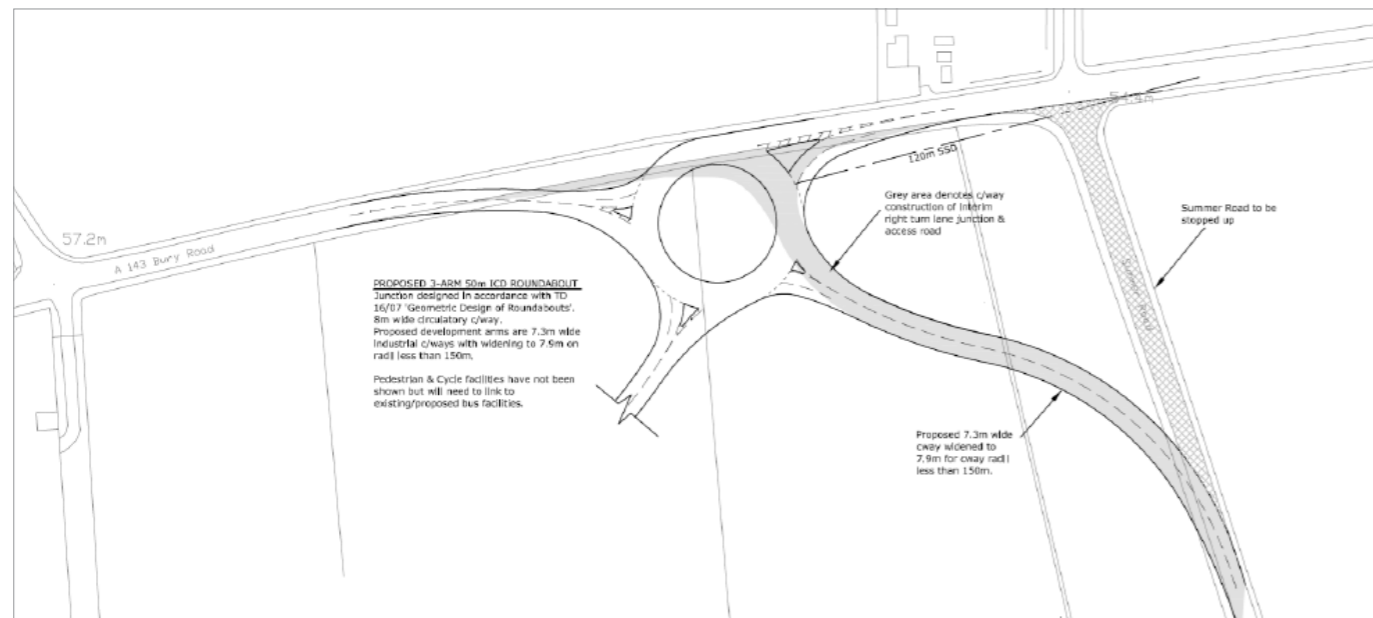


Fig. 11: Layout of Proposed New Access Roundabout on A143 (as approved under Application Ref. SE/02/1747/P)

# 3.0 ASSESSMENT

## 3.6 ACCESS & TRANSPORT

### Public Transport

- There are local bus stops within approximately 1km of the site. The closest stop to the site is the Duke of Marlborough stop on Bury Road.
- There are 3 main bus services operating along Bury Road. These services run on a regular basis with approximately 11 buses per day in each direction:
  - » 304 Bury St Edmunds - Stanton - Diss
  - » 337 Thurston Community College - Garboldisham
  - » 338 Bury St Edmunds - Stanton - Diss
- A 4th service runs once a week, along Bury Road, also stopping at the Duke of Marlborough stop:
  - » 143 Bury St Edmunds - Stanton - Norwich
- 143 route is operated by Suffolk Norse.
- 304, 337, 338 routes are operated by Simonds.

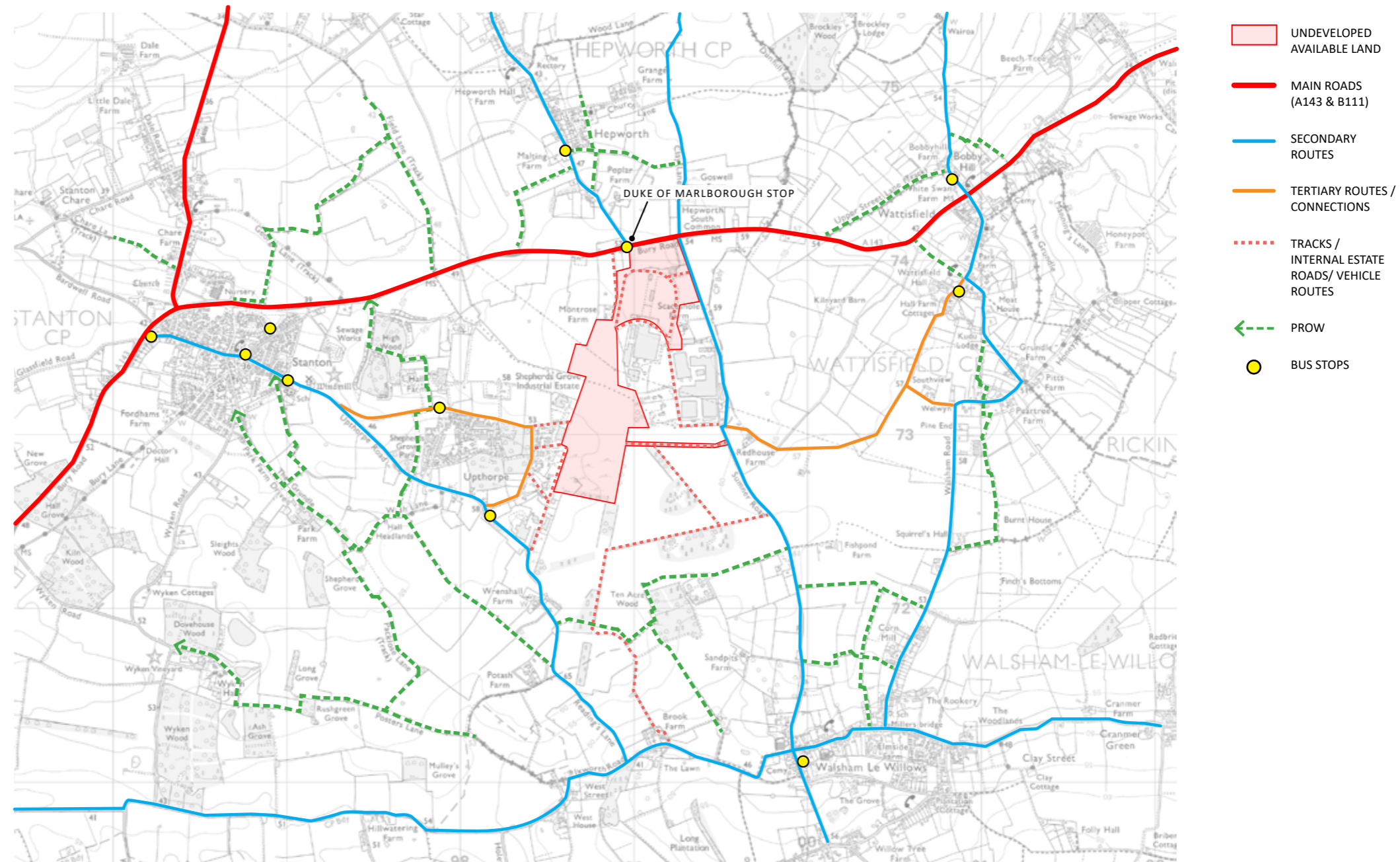


Fig. 12: Diagram illustrating the existing routes & connections



## 3.0 ASSESSMENT

### 3.7 LOCAL SERVICES AND FACILITIES

The village of Stanton is located approximately 2km west of the Masterplan area and provides a good range of local services and facilities, such as primary school, shop, post office, two public houses, petrol station, village hall, recreational, sport and play facilities, a veterinary practice, and health facilities, as well as good accessibility to Diss and Bury St Edmunds via the A143;

The village primary school, Stanton Community Primary School, was located in Bury Lane until recently. It has now moved to the former middle school site on the eastern edge of the village in Upthorpe Road, within 1.75km of the proposed residential area. Some of the buildings on the site have been mothballed, following the move, and the site is a large one with capacity for expansion. The most recent forecasts for the school show that capacity is currently available. However, the likely number of children that could be generated by the proposed residential neighbourhood depends on the number of dwellings being proposed. Only when the development exceeds around 400 dwellings would the number of primary school aged children generated by the development not be able to be accommodated at the school;

The nearest secondary schools are at Ixworth (Ixworth Free School) and Thurston (Thurston Community College). The latest forecasts for these schools show a reducing number of available/spare places, but overall, some spare capacity at present. However, significant new development has been permitted within the Thurston catchment over the last year, which has yet to be accounted for in the latest forecasts. The County Council has therefore advised that it should be assumed that there will be no available capacity at secondary and post-16 level to serve residential development within the site, and that therefore full contributions will be sought as part of any Section 106 Agreement;

~~Stanton Community Health Centre is located in The Chase and is operated by Suffolk Primary Care Trust. The Centre operates a branch of the Ixworth Surgery (under Dr Nicholas Redman) and is open every day except Saturdays and Sundays. The surgery has just over 9,000 registered patients and is accepting new patients who live within the catchment area.~~

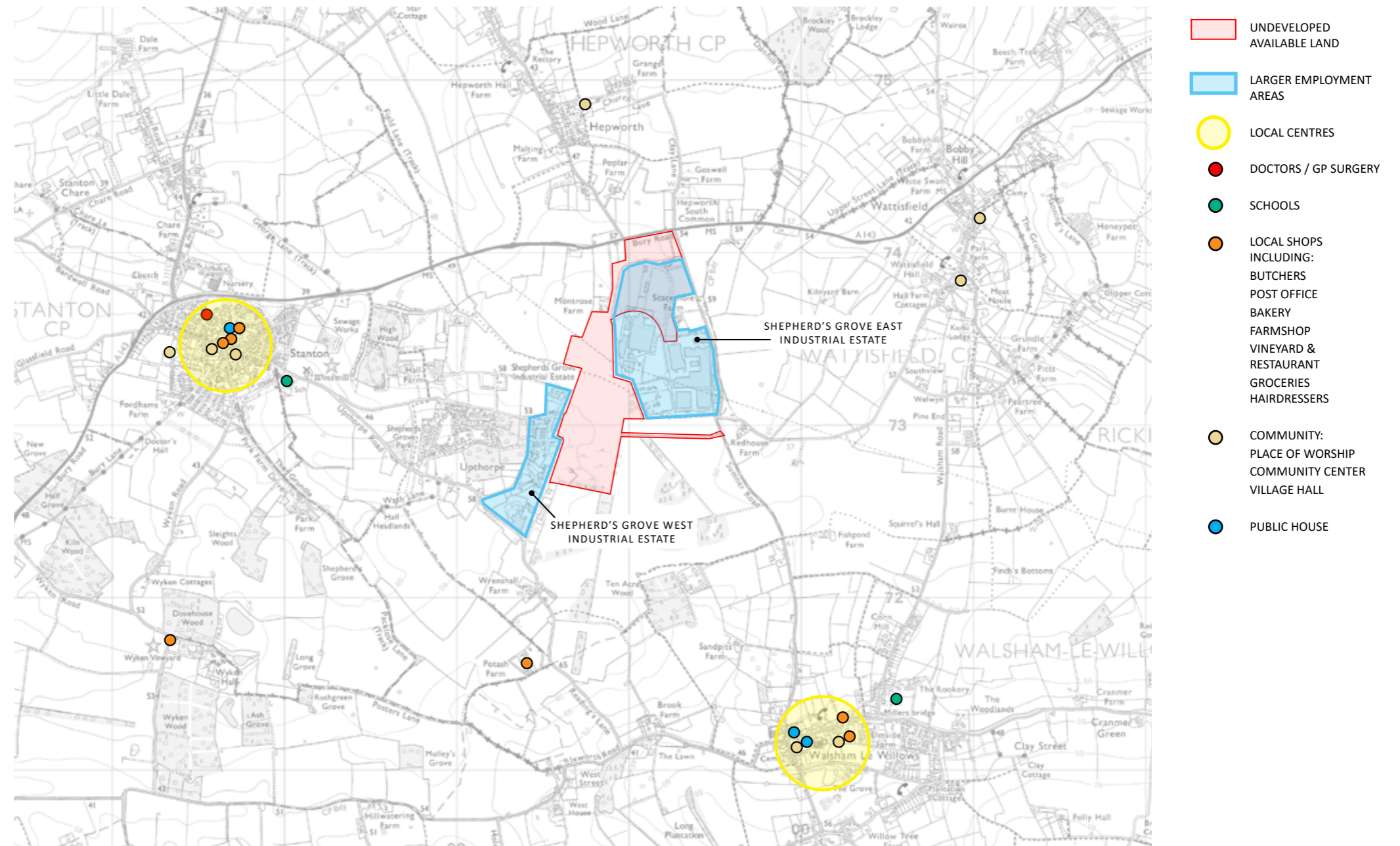


Fig. 13: Diagram illustrating the existing local services

**Stanton Surgery (senior partner Dr Nicholas Redman) is located at 10 The Chase, Stanton. This surgery currently provides healthcare for two thirds of the Stanton population as well as surrounding areas. Ixworth Surgery (senior partner Dr Anne Tebbit) utilises rooms four mornings a week in the Stanton Community Health Centre, 12 The Chase, Stanton for its branch surgery supporting the local population as well as at its main surgery site located a short distance away in Ixworth. Both practices are accepting new registrations but premises are limited and discussions are underway with the West Suffolk CCG to look at future expansion options, especially in view of the proposed new development. The Shepherd's Grove area would also be supported by the Botesdale Health Centre (senior partner Dr Tim Cooke) whose practice area also covers the Stanton area.**

# 3.0 ASSESSMENT

## 3.8 HISTORIC ENVIRONMENT

### Conservation Areas

The Masterplan area is not located within, or adjoining, any Conservation Areas (see Figure 14). The nearest Conservation Areas are located at Stanton (2km to the west), Wattisfield (1.5km to the east), and Walsham Le Willows (2km to the south east). While there are a number of Listed Buildings in the surrounding villages, there are no Listed Buildings within the Masterplan area and only four Listed Buildings within 500 metres of the boundary of the Masterplan area (Redhouse Farmhouse, High Elm Farmhouse, The Poplars, and Aspen Hall, which are all Grade II listed).

### Archaeology

The undeveloped land within the Masterplan area has significant potential for archaeological remains of Prehistoric, Roman, Anglo-Saxon and Medieval date, as indicated by sites and finds from the vicinity recorded on the County Historic Environment Record (HER). In addition, there is some potential for heritage assets relating to the former airfield use. Although the main structures relating to the airfield will have impacted upon the survival of remains from earlier periods, aerial photography appears to indicate that such disturbance was limited to areas such as runways, taxiways and structures. Field systems of medieval or earlier date can be seen between these features, indicating some potential for preserved archaeological remains across parts of the undeveloped areas of the site. Suffolk County Council Archaeological Service has recommended that a programme of archaeological field evaluation be undertaken to characterise the archaeological resource and to describe the significance of any heritage assets present, prior to the determination of any planning application. As a starting point, a 'Cultural Heritage Assessment' and walkover survey has been undertaken, which concluded that the developable areas of the site are considered to have a modest archaeological potential for below ground remains associated with the Late Prehistoric, Roman, Late Medieval, and Post Medieval periods, and low archaeological potential for all remaining periods.

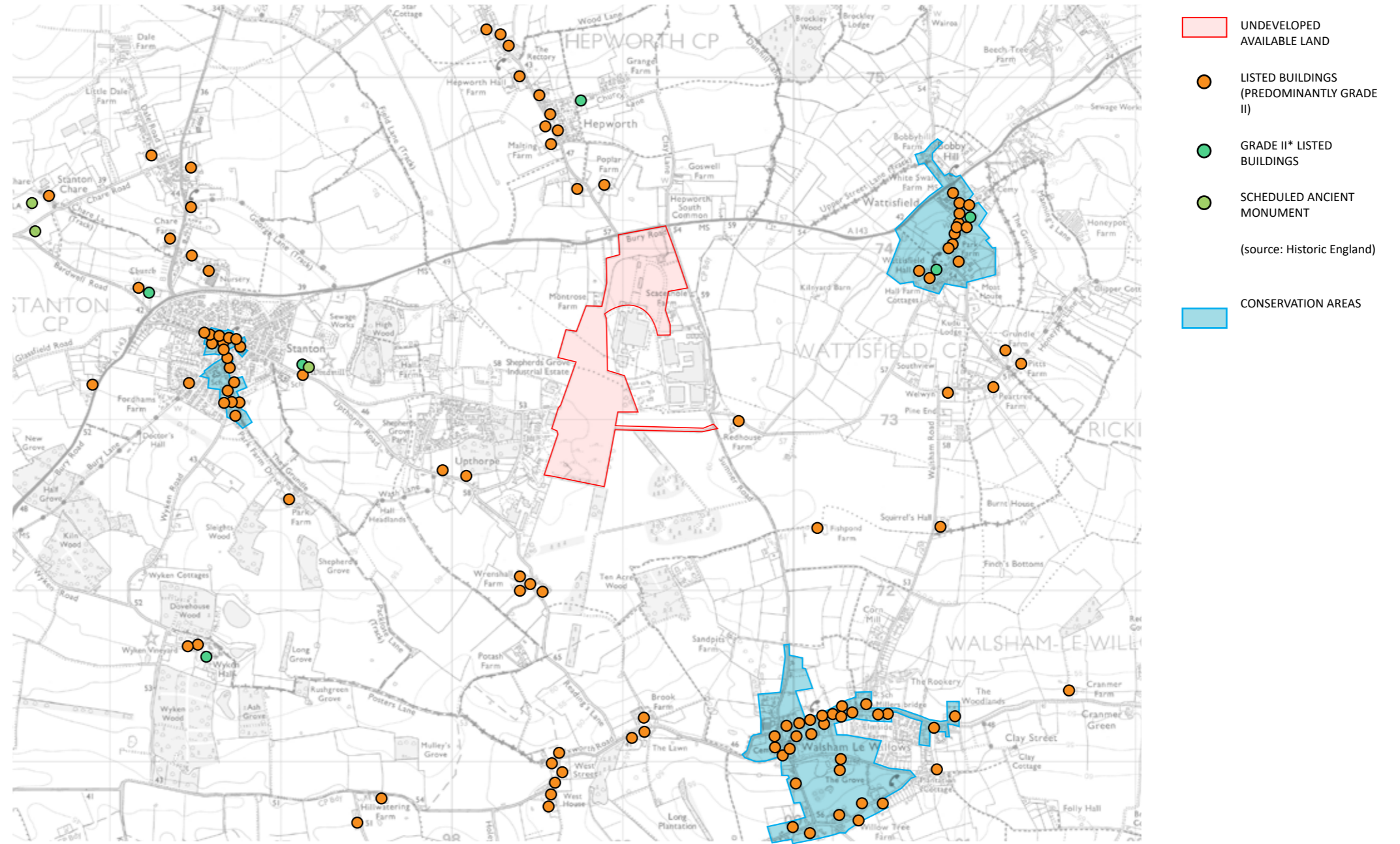


Fig. 14: Diagram illustrating the existing heritage context

## 3.0 ASSESSMENT

### 3.9 OVERHEAD LINES

The central part of the Masterplan area is crossed by high-voltage electricity cables set on pylons, which run approximately east-west through the area (see Figure 17 constraints plan ). Fortunately, within the undeveloped part of the site, the pylons are located on the edges of the site. However, this significant constraint still imposes a requirement for 'off-setting' of any built development by 20 metres, and/or replacement lines being set underground;

A series of lower level electricity lines on timber posts runs south-west to north-east through the same part of the site.

### 3.10 ADJOINING LAND USES

The majority of the land adjoining the Masterplan area is currently in agricultural production (mainly arable), although there are also some small blocks of woodland and plantations particularly to the south-east of the area;

There are also several detached residential properties set within large plots close to the boundary of the area, with the closest properties to the undeveloped parts of the site being: Montrose Farm; The Firs; Turnpike Farm; Scaceshole Farm; and The Whitehouse.

**Some existing uses within the Shepherd's Grove West Industrial Estate have the potential to create noise and/or fumes, consequently an initial noise assessment has been prepared to inform this masterplan and to assess any potential impacts on the location and siting of any residential development to the east. This assessment concluded that if the recommendations set out in the report are implemented, the noise impact is likely to be at a level regarded as having the 'lowest observed adverse effect' on residents. The recommendations included: double/secondary glazing being fitted to all bedroom and living room windows; trickle vents being fitted to all living rooms and bedrooms (or mechanical ventilation); specific detailed design of boundary treatments to private amenity areas (e.g. walls and fences).**

### 3.11 LAND QUALITY

Agricultural land within and adjoining the Masterplan area is classified as Grade 3 on the Agricultural Land Classification Map (Eastern Region), produced by Natural England. Grade 3 agricultural land is noted as being of 'good to moderate' value, on a scale of 1 – 5 with Grade 1 being 'excellent' and Grade 5 being 'very poor'. However, it should also be noted that those undeveloped parts of the Masterplan currently in (or last used for) agricultural purposes, is limited to Area D only, and that these fields are small, isolated parcels of land that would be unattractive to contract farmers and therefore of questionable viability as part of a larger agricultural operation.



Fig. 15: Site Photos

# 4.0 EVALUATION

## 4.1 INTRODUCTION

The Masterplan area is allocated in the 'Vision 2031 Local Plan' as a Rural Employment Area for new business uses (see Figure 6). However, the policy requires that the undeveloped/available parts of the area (see Figure 16), can only be developed once a new access road and roundabout on the A143 have been constructed, so that vehicular access to Shepherd's Grove West is no longer through the village of Stanton. As a consequence, the development of the available land for business purposes cannot be viably achieved without the inclusion of a proportion of residential and other commercial uses. Full details on the economic viability assessment contained in this Masterplan are set out in Section 5.

Figure 16 shows the extent of the undeveloped/available parts of the Masterplan area and the evaluation work carried out to date, in terms of development potential, has focused primarily on these areas.

Parts of the Masterplan area are within the wider impact zone of the Stanton Woods Site of Special Scientific Interest (SSSI), which comprises a group of nine individual woodland areas and a rare 'woodland gorge' (The Grundle, just south of the village). The woods are designated for their biological/botanical interest as they span the transition from Hornbeam and Oak-Ash-Hazel-Maple woodland on boulder clay, to Oak/Hazel woodland on the drier acid soil of the Breckland margin. The two types of woodland each have characteristic woodland flora plants and additional interest is provided by a series of wide, mown rides, small clearings and by areas of coppice management. The nearest part of the Stanton Woods SSSI (The Grundle) is approximately 1.25km from the nearest undeveloped part of the Masterplan area.

The whole of the Masterplan area is located within Flood Risk Zone 1, where there is a low probability (less than 1 in 1,000 annual probability) of river or sea flooding. However, because the potential developable area exceeds 1ha in extent, a Flood Risk Assessment will be prepared to support any future planning application for new development.

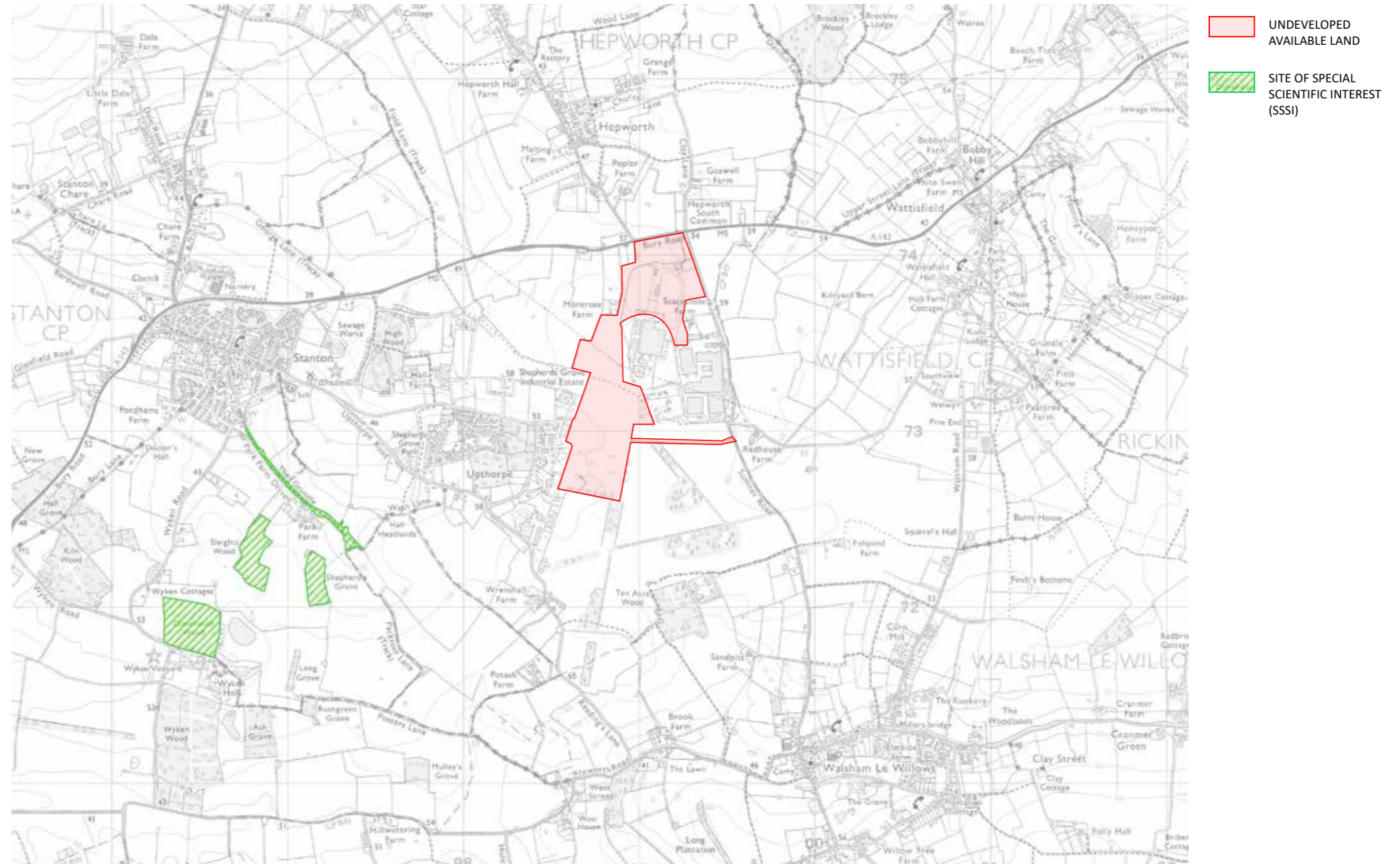


Fig. 16: Diagram illustrating the undeveloped available land

# 4.0 EVALUATION

## 4.2 CONSTRAINTS

- The Masterplan area is bounded by hedges along most boundaries. A blanket Tree Preservation Order covers the entirety of the site.
- Water bodies / ponds in and around the masterplan area could potentially be home to protected species.
- Ditches run along the north and north-east boundary adjacent to Bury Road and Sumner Road.
- Sensitivity / Proximity with boundaries to commercial uses, residential dwellings, open spaces, countryside.
- Overhead electricity lines and Pylons are found across the site, which would require development off-setting of around 20 metres and / or replacement lines underground.
- It may be beneficial to create focused views into certain parts of the developable areas of the site from the surrounding countryside, where this would serve a better understanding of the development and the uses contained within it.
- There are also several potential access points available from the surrounding road network / vehicle routes of the industrial estates and from Bury Road, but all are poor.
- Financial constraints - the requirement for the new access roundabout + link road to connect to Shepherds Grove West, places considerable early costs onto the development of the masterplan area.

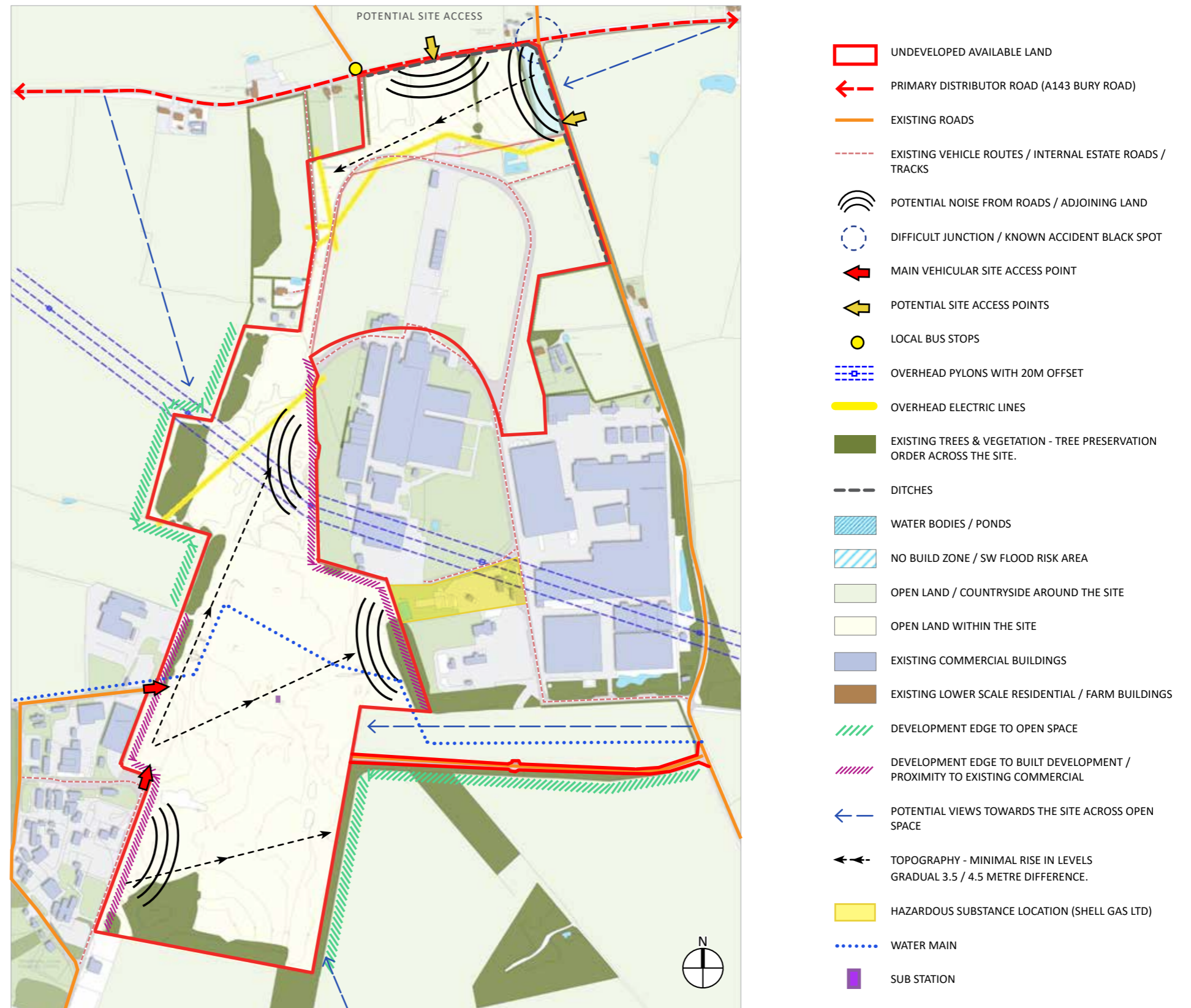


Fig. 17: Diagram illustrating the site constraints

# 4.0 EVALUATION

## 4.3 POTENTIAL LAND USES

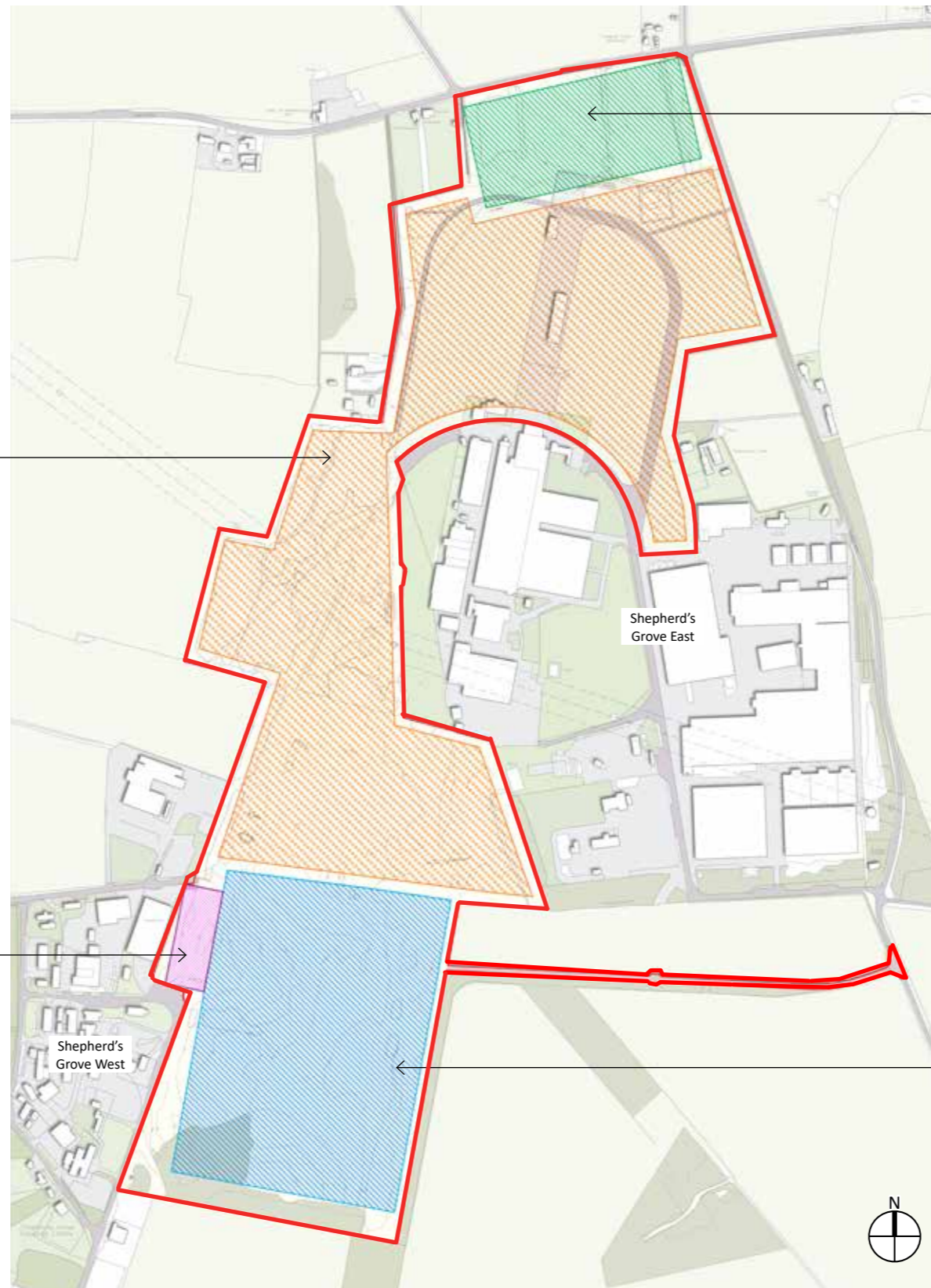
### Rationale For Potential Land Uses

#### Employment Uses (B1, B2 and B8)

- Proximity to existing industrial and warehouse uses (outlook and noise)
- Constraints imposed by electricity pylons and adjacent hazardous storage use
- Area seen against backdrop of existing industrial and warehouse buildings in views from south and west
- Area will be well-served by proposed new access road through to Shepherd's Grove West
- Opportunity to enhance existing landscape features along site boundary

#### Community Uses

- Opportunity to include 'buffer' site for new community uses/building between residential area and Shepherds Grove West
- Well-located to serve new residential area and businesses on Shepherd's Grove West (business support workspace, meeting space, community café etc)
- Good access for service vehicles without going through residential area.



#### Commercial / Roadside Uses

- Good frontage onto primary road at potential 'high-profile' location
- Good access once new roundabout and access road constructed
- Excellent location for 'roadside' uses (e.g. petrol filling station and shop) subject to demand
- Location for 'landmark' building at entrance to site
- Opportunity to screen existing industrial/warehouse buildings to south

#### Residential Uses

- Existing landscape buffer (woodland) to Shepherd's Grove West to be extended to form strong landscaped buffer / noise attenuation feature
- Most attractive part of site adjoining open countryside – will enhance potential property values
- Not directly adjacent to main industrial/warehouse uses – the northern half of Shepherd's Grove West is more 'low-key' and 'light industrial' in nature than Shepherd's Grove East
- Potential for footpath/cycleway links through to Stanton village (along Grove Lane) and the community primary school
- Attractive south and east-facing aspect
- Potential to include extended and new landscaped buffer zones to define area
- Residential is a higher value use which offsets the infrastructure costs needed to make site development possible

Fig. 18: Diagram illustrating the potential land uses

# 4.0 EVALUATION

## 4.4 OPPORTUNITIES

### Land Use

The site offers the opportunity to create a sustainable, mixed-use development comprising employment, commercial, residential and community uses, subject to satisfactory economic viability and the production of a viable masterplan.

The employment uses will complement existing adjacent areas at Shepherd's Grove East and Shepherd's Grove West, and include some higher profile commercial uses along the A143.

The location also offers the opportunity for the creation of an attractive residential development with connections to the services and facilities available in Stanton (to the west) and Walsham-le-Willows (to the south).

This 'higher value' use is justified in planning policy terms and will fund the infrastructure required to serve the whole of the 'undeveloped land' within the masterplan area, as well as Shepherd's Grove West.

### Access

The new road would also provide access to the potential new employment uses.

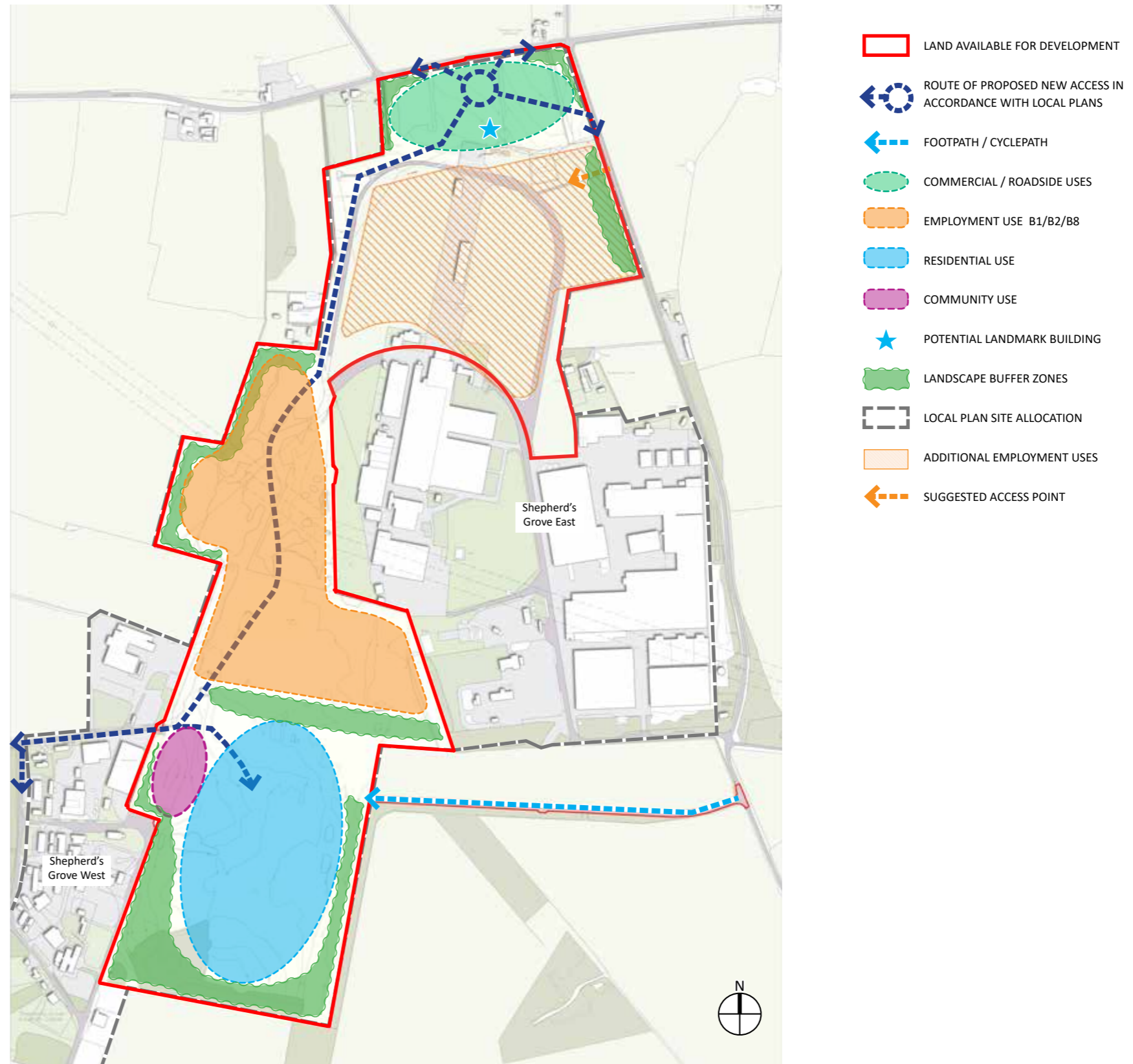


Fig. 19: Diagram illustrating the opportunities

# 4.0 EVALUATION

## 4.5 DESIGN PRINCIPLES

The Masterplan process has been guided by a series of Design Principles to establish a coherent and deliverable solution.

### Landscape

Establish a strong landscape & ecological framework across the site with buildings located in an attractive natural setting, recognising the semi-rural location.

- Create a green envelope to sensitive site boundaries to mitigate both views into and out of the site
- Establish a variety of character areas across the site, responding to the variety of uses and aiding legibility.
- Provide adequate buffer zones between uses on the site and substantial landscape buffer to Shepherd's Grove West to safeguard residential amenity.
- Promote attractive public realm and public open space across the site for the benefit of employees, residents and visitors.

### Character & Layout

- Create a series of character areas reflecting the differing employment and residential zones within the site.
- Optimise the site layout to determine appropriate building coverage whilst maintaining an attractively landscaped site.

### Building Design

- High quality design of buildings and spaces will be maintained across the various different elements of the site.
- A variety of employment buildings will be developed adopting contemporary building specifications, adding to the current offer and supply.
- A series of high quality road-side uses will be established on and around the new junction on to the A143.
- An attractive residential settlement will be established to the south of the site encompassing a range of dwelling types and tenures.

### Access & Movement

- A new roundabout junction will be created onto the A143 forming a principal new access road into the site running north-south.
- A new site access will create safer movement along the A143 and divert commercial vehicle movements away from Stanton village.
- The residential settlement to the south of the site will benefit from an additional footpath & cyclepath access to the east off Sumner Road, routes to Stanton in the west.
- A safe and legible network of streets will be established within the body of the site serving both the employment and residential elements of the site.

### Sustainability

- The creation of a new, mixed use development containing business, residential and community uses will enhance the sustainability of the Masterplan area

### Energy

- All buildings will be designed to the highest standards to maintain minimal energy use and carbon footprint.

### Water

- A sustainable drainage system will be utilised and initiatives such as grey water harvesting will be promoted.

### Transport

- Improved footpath / cycle routes and public transport connections will encourage less car borne movements.

### Waste

- Waste production will be minimised in both construction and operational phases of the site development.

### Biodiversity

- Strong landscaping and the establishment of a green grid will enhance natural habitats and wildlife corridors.



Fig. 20: Indicative images of the design principles



## 4.0 EVALUATION

### 4.6 STAKEHOLDER ENGAGEMENT

Presentations were given to each of the three local Parish Councils – Stanton, Hepworth and Walsham Le Willows – earlier this year, to outline the work that has been carried to date on the preparation of the Masterplan. This local engagement will continue and once the content of the draft Masterplan has been agreed with St Edmundsbury Borough Council (SEBC), further local consultation will be carried out. This will involve a public exhibition on the draft Masterplan, which will seek the views of local residents, businesses, Ward Councillors, Parish Councillors and other stakeholders.

St Edmundsbury Borough Council has adopted a 'protocol' for the preparation of Masterplans (September 2006), which sets out the procedure and consultation requirements. Normally, a 'Concept Statement' would be the first stage in this process, however, it has been agreed with SEBC that the early work carried out on Shepherd's Grove, which also included local consultation, was sufficient to enable a draft Masterplan to be prepared.

In addition, early consultation has also been carried out with statutory stakeholders, such as the County Council as local highway authority and lead local flood authority, the Borough Council as local planning authority, and utility companies (electricity, water, gas, telecoms, and sewerage). Field surveys have also been undertaken to assess the ecological value of the site and the potential impact of development on the nature conservation value of the surrounding area, as well as landscape setting. Desk top studies have also been completed for archaeology, sustainability, biodiversity, and economic viability.

**A public exhibition of the proposals was held on 21st February 2019, which was followed by a six-week consultation period on the draft masterplan. This included a dedicated website [www.shepherdsgrovestanton-masterplan.co.uk](http://www.shepherdsgrovestanton-masterplan.co.uk) where all the public exhibition material could be examined in detail. Comments could be submitted online or via email. A Statement of Community Engagement (SCE) has since been prepared which summarises all the consultation undertaken and the responses that were received. The SCE also identifies a number of revisions to the draft materplan, which have now been incorporated into this final draft version of the masterplan.**

~~Upon completion of the next stage of consultation (public exhibition), an analysis of all the consultation responses received will be undertaken, and an assessment will be made about the need for any revisions to the Masterplan. If significant revisions are proposed, then there could be a need for further consultation prior to the approval of the final Masterplan. The final Masterplan is likely to be adopted as Supplementary Planning Guidance by SEBC and will be used to inform the decision making process on any planning applications for new development that may be submitted.~~

The wording of the adopted Local Plan policy for the Masterplan area requires the amount, location and nature of any higher-value development specified in the Masterplan, to be subject to regular review, having regard to market conditions and development viability.

# 5.0 MASTERPLAN

## 5.1 KEY DESIGN FEATURES

The Masterplan focuses on those available/undeveloped parts of the Masterplan area (outlined in red on the figure opposite), and has been devised to create three distinct zones, each with their own identity and uses, but linked as a single sustainable, mixed use development.

### Northern Zone

Adopted planning policy requires the construction of a new access into Shepherd's Grove from the A143, which will comprise a roundabout and road realignment between Sumner Road and the A143. This will create several roadside development plots which will offer the opportunity for a wide variety of uses that would benefit from such an accessible location. Planning policy would exclude pure retail uses (shops - A1 Use), however, an ancillary retail element as part of a petrol filling station, for example, could be acceptable.

## 5.2 LAND USES

A wide range of business and service uses is envisaged, as set out above, together with residential development, which will create a sustainable living and working community.

### Northern Zone

- |    |                                 |             |                             |
|----|---------------------------------|-------------|-----------------------------|
| B1 | office / R&D / light industrial | C1          | hotel                       |
| A1 | shops                           | D1          | non-residential institution |
| A2 | professional services           | D2          | assembly and leisure        |
| A3 | restaurants / cafes             | Sui Generis | Petrol filling station      |
| A4 | drinking establishments         |             |                             |



### Central Zone

The central zone would be primarily for employment purposes, to tie in with and consolidate the existing employment areas of Shepherd's Grove East and Shepherd's Grove West. This zone would provide a new business park with flexible spaces for B1c uses (light industrial), B2 uses (general industrial), and B8 uses (storage and distribution), in an attractive, well-landscaped environment. The new access road into the area from the A143 would pass through this zone and connect directly with the existing uses at Shepherd's Grove West.

### Central Zone

- |     |                              |
|-----|------------------------------|
| B1c | light industrial             |
| B2  | general industrial           |
| B8  | warehousing and distribution |



### Southern Zone

The southern zone is perhaps the most attractive and well-aspected zone within the Masterplan area, which benefits from open land to the east and south and existing landscape features of value. This zone is proposed for residential development in the form of an attractive and vibrant new housing area, supported by enhanced community facilities. The total number of dwellings would be determined by the viability assessment and would be the minimum amount necessary to achieve a viable B1/B2/B8 development within the proposed employment areas, together with the provision of the new access road.

### Southern Zone

- |    |                             |
|----|-----------------------------|
| C2 | residential institution     |
| C3 | residential                 |
| D1 | non-residential institution |
| D2 | assembly and leisure        |

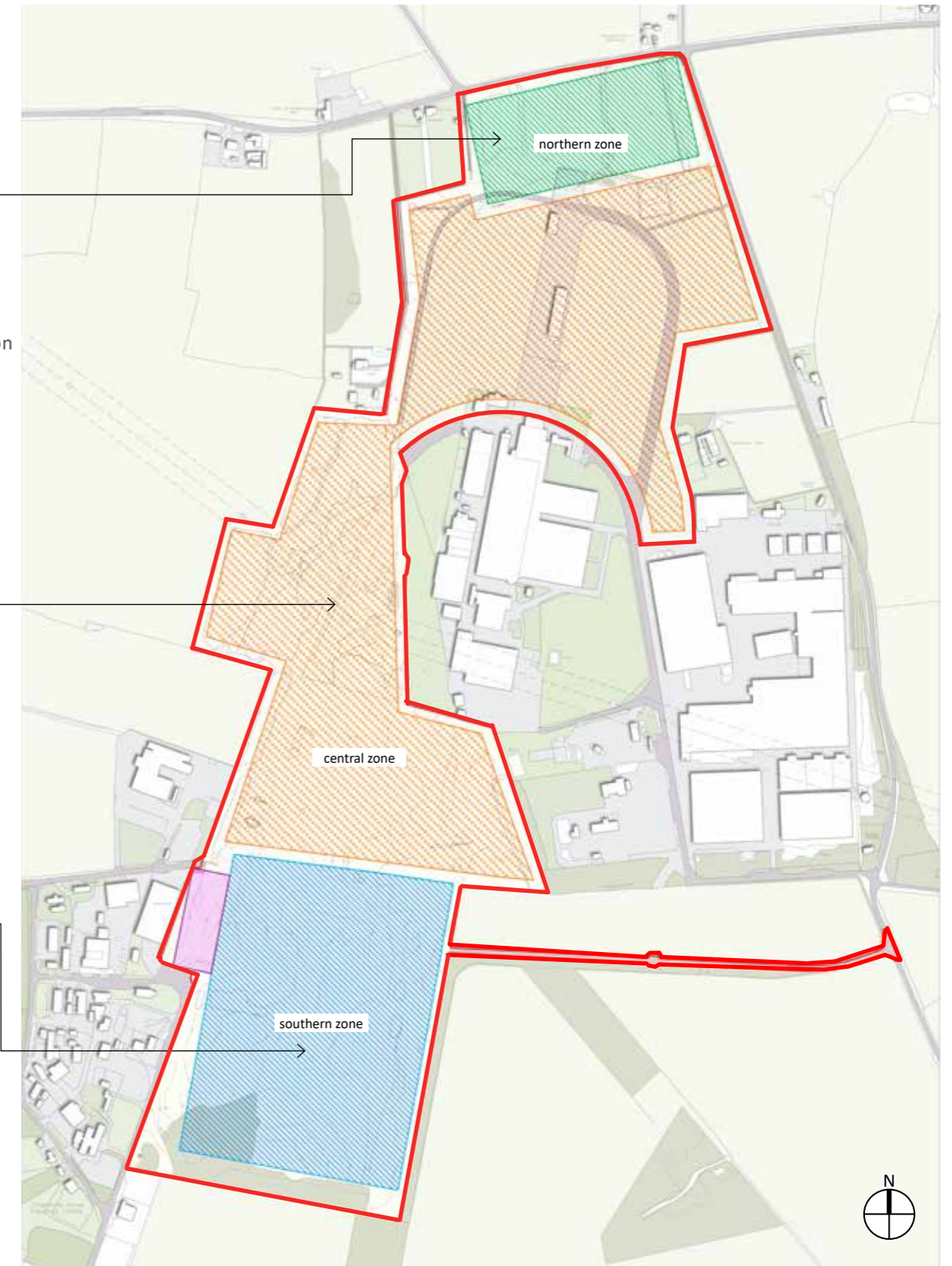


Fig. 21: Diagram illustrating the masterplan zones

# 5.0 MASTERPLAN

## 5.3 ACCESS, STREET HIERARCHY AND PUBLIC TRANSPORT

The main access to the undeveloped/available sites within the Masterplan area will be from a new roundabout junction just south of the A143, and will form the main entrance to the Masterplan area flanked by new 'gateway' buildings of high architectural quality. The new access will benefit the wider community, and particularly residents of Stanton, by removing the need for commercial vehicles to go through the village to reach Shepherd's Grove West.

N.B. Further references to "the site" in this section of the Masterplan relate to the undeveloped/available parts of the Masterplan area, as shown on Fig.22

To the south of the site the residential quarter will additionally be served by a footpath / cyclepath access onto Sumner Road to the east and Grove Lane to the west. This will be width restricted on the connection to Grove Lane past the existing Shepherd's Grove West industrial site, to restrict HGVs from going through the Village of Stanton.

A new estate road will serve the northern and central employment zones with serviced Plots off this new access corridor.

Within the Southern Zone a main loop road will provide circulation to the residential properties, with a series of secondary roads feeding off the main loop road.

Whilst there are 3 bus routes that within 0.5 - 1km of the site, discussions are underway to improve the public transport provision to the site, given the enhanced site uses and greater accessibility of the site.

**Consultation carried out on the draft masterplan revealed that highways and traffic issues were a major concern in the local area. While many of these concerns are outside the scope of the masterplan, as they are pre-existing problems and highway matters, detailed discussions will take place with the local highway authority (Suffolk County Council) during the outline planning stage of the project to identify where improvements in the local highway network might be achieved (in addition to the proposals contained in the masterplan). This may include traffic management measures (e.g. width/weight restrictions), new road signs and speed restrictions.**

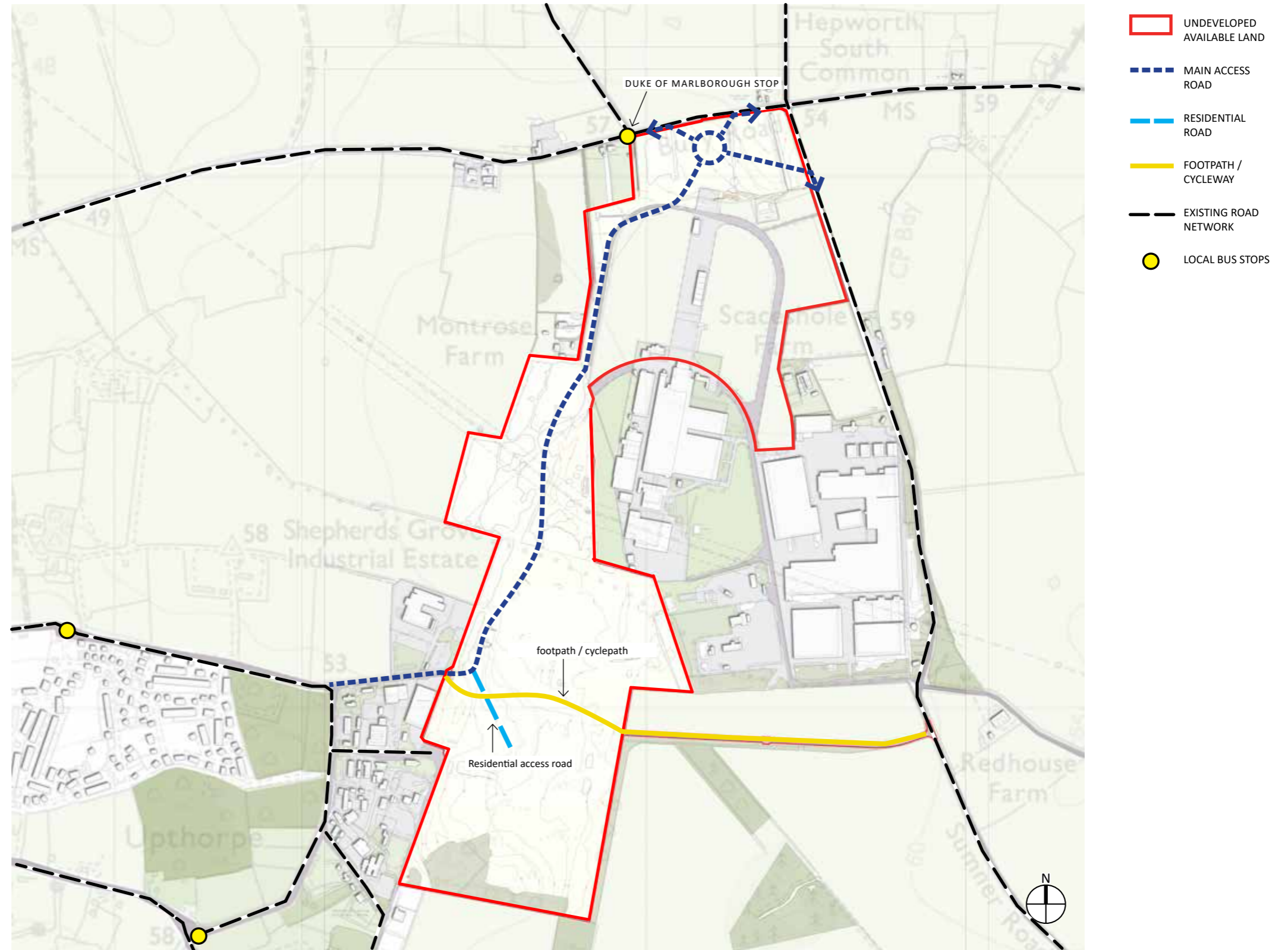


Fig. 22: Movement Diagram

# 5.0 MASTERPLAN

## 5.4 PEDESTRIAN AND CYCLE LINKS

At present the site has no public right of way through it, but the new development offers the opportunity to help improve and connect the local footpath and cyclepath network. The connection to Grove Lane past Shepherd's Grove West industrial site, will be improved and upgraded to provide safe and attractive pedestrian and cycle movements as illustrated on Fig. 23 to Fig. 27 on the following pages. **The precise location and detailed design of the new footway/cycleway along Grove Lane will be determined at the outline planning application stage.**



Fig. 23: Diagram illustrating the new / improved footpaths

# 5.0 MASTERPLAN

## 5.4 PEDESTRIAN AND CYCLE LINKS

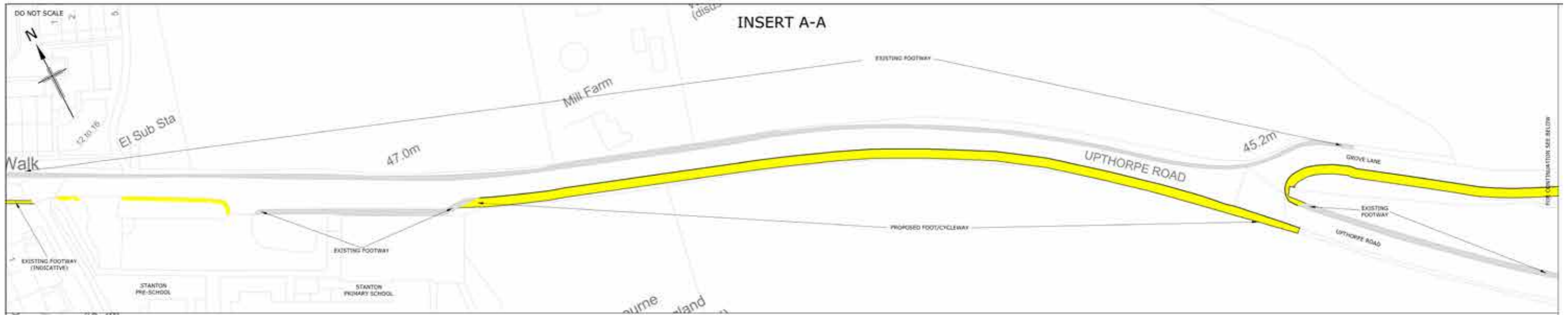


Fig. 24: Diagram illustrating the new / improved footpaths -Insert AA

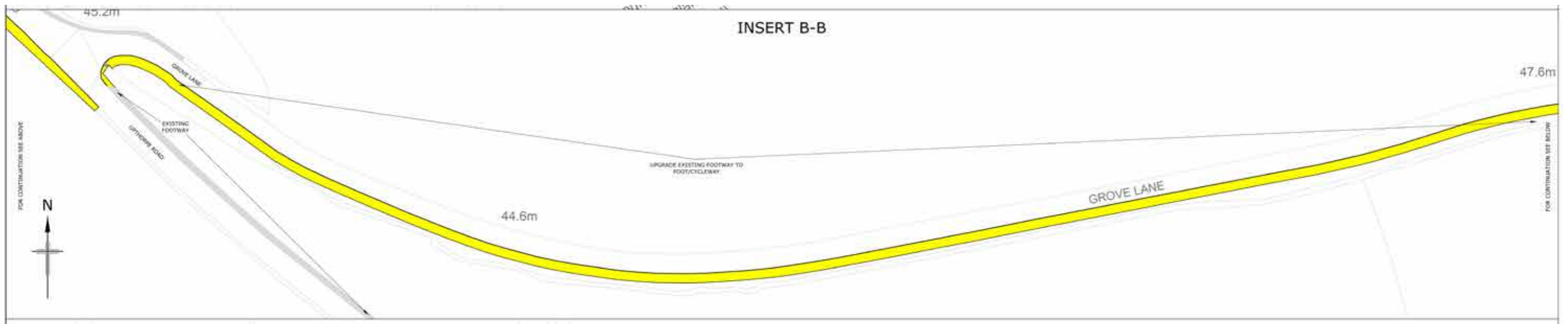


Fig. 25: Diagram illustrating the new / improved footpaths -Insert BB

- KEY:**
- PROPOSED/UPGRADED FOOTWAYS & FOOT/CYCLEWAY
  - OTHER EXISTING FOOTWAYS

# 5.0 MASTERPLAN

## 5.4 PEDESTRIAN AND CYCLE LINKS

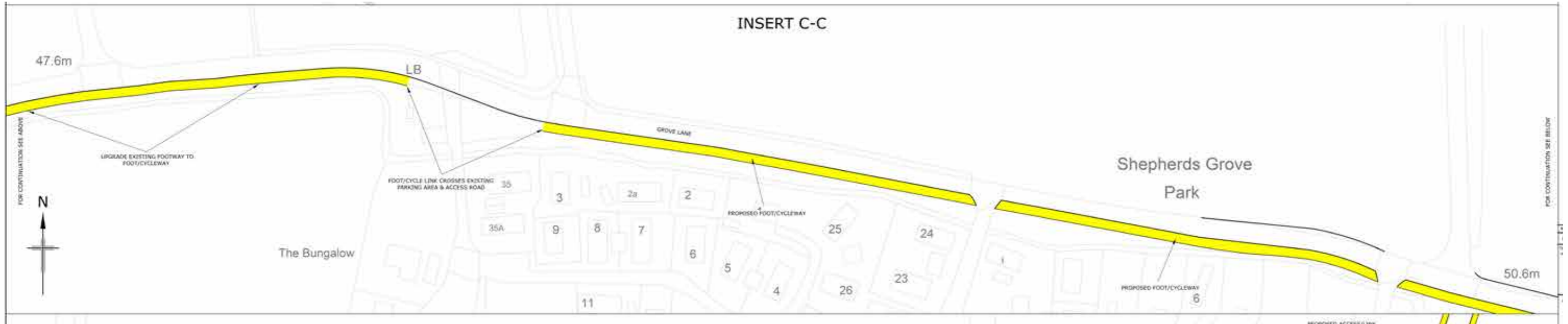


Fig. 26: Diagram illustrating the new / improved footpaths -Insert CC

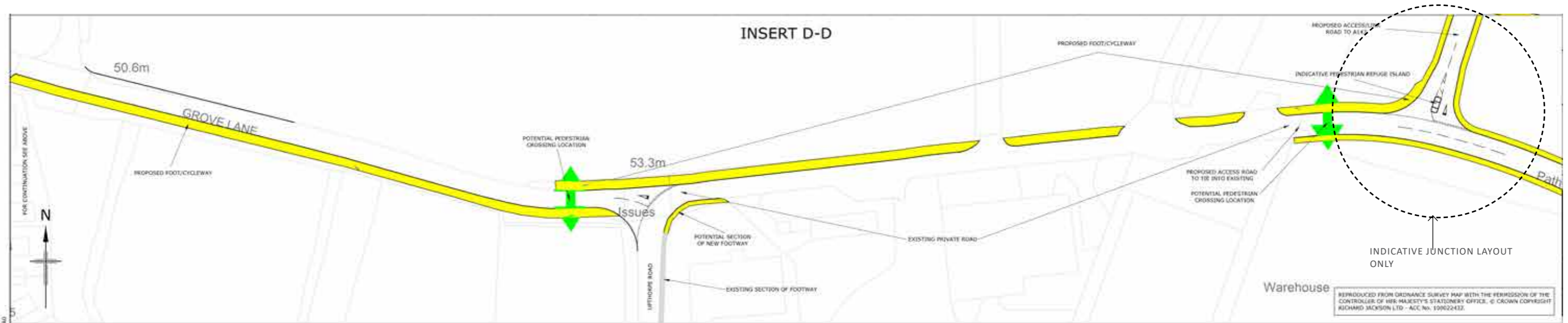


Fig. 27: Diagram illustrating the new / improved footpaths -Insert DD

- KEY:**
- PROPOSED/UPGRADED FOOTWAYS & FOOT/CYCLEWAY
  - OTHER EXISTING FOOTWAYS

# 5.0 MASTERPLAN

## 5.4 PEDESTRIAN AND CYCLE LINKS

New footpaths and cycleways will be installed running north / south through the site linking the employment and residential elements and providing easier connections to Walsham Le Willows to the south and Hepworth to the north. Additional connection to existing PROWs will be sought but these are some distance from the site and this aspiration requires access over third party land.

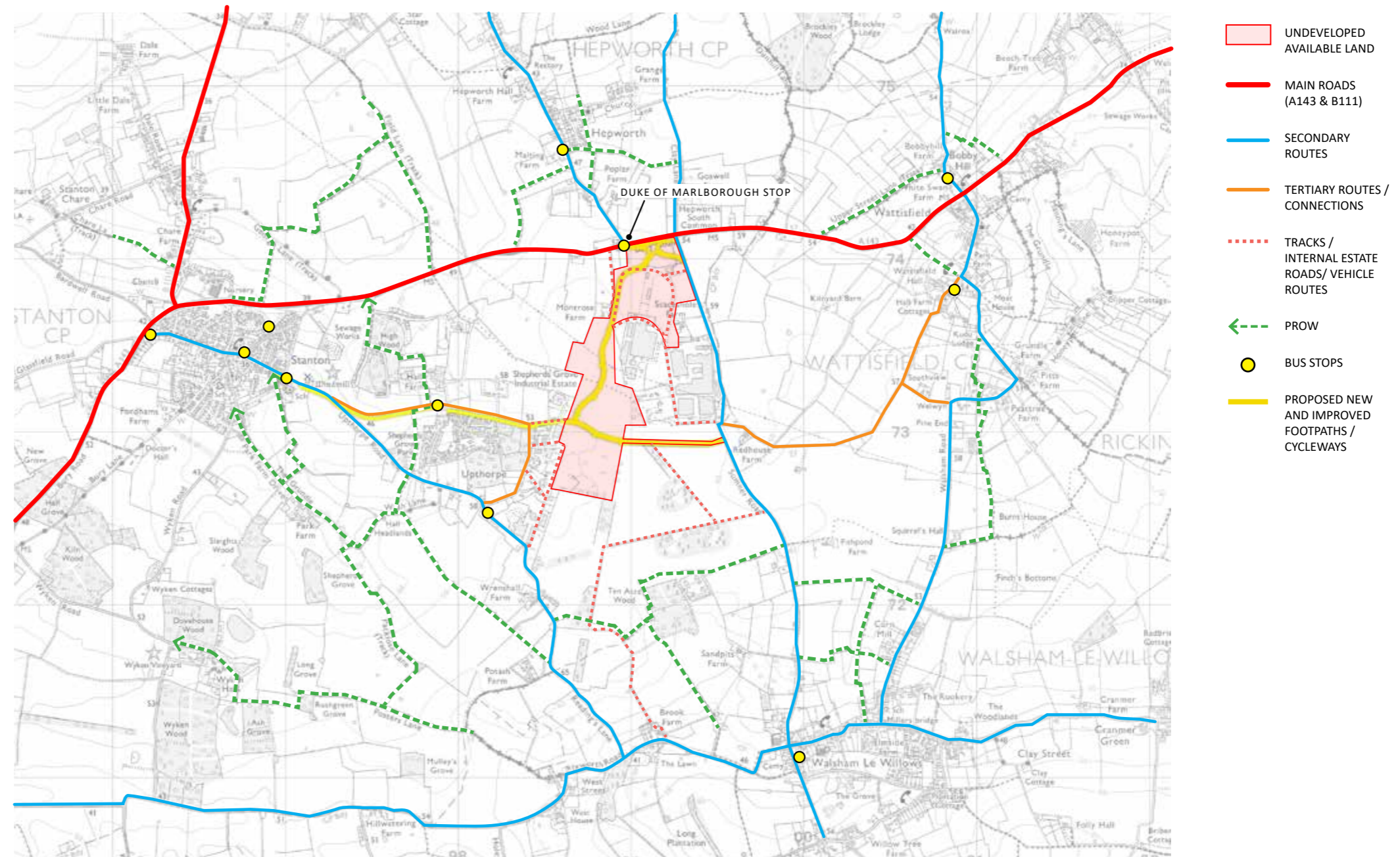


Fig. 28: Diagram illustrating proposed footpaths and the existing routes & connections

## 5.0 MASTERPLAN

### 5.5 BUILT FORM & PLACE-MAKING

The site is arranged in 3 distinct Zones which will each exhibit their own identity whilst creating a cohesive mixed use community. The Northern Zone forms the new site entrance and will be more open in character with attractive landscape frontages to the main A143 Bury Road. The uses will largely be commercial and roadside uses which of their nature require good visibility and offer the opportunity for high quality gateway buildings.

The Central Zone is a contained and more concealed part of the site and will provide clean, contemporary uses, complementary with the existing uses on the adjacent Shepherd's Grove East & West site.

The Southern Zone will form a new residential settlement and will derive its own identity through a series of character areas.

The northern and west boundaries to adjacent employment sites will largely be screened with existing landscaping in the south providing a sense of containment. The eastern boundary will be more open in nature with views to the south and east.

This Southern (residential) Zone will be accessed along an Entrance Boulevard which connects north to the new roundabout junction onto the A143 and connects west from this Entrance Boulevard connecting onto Grove Lane towards Stanton.

The new Entrance Boulevard will feature large grass verges with specimen trees planted along an avenue to create a generous and attractive sense of arrival to the site. Houses will be set back from this, but facing the Boulevard with no direct access off this frontage.



Fig. 29: Images illustrating the urban form



# 5.0 MASTERPLAN

## 5.5 BUILT FORM & PLACE-MAKING

A variety of housing type and tenure is sought to create a sustainable community. This will be supported by stronger access routes and connections for motor vehicles, cycles and pedestrians, together with some community use and an area of Village Green.

The northern part of the site will provide access along a new boulevard entrance road, with wide grass verges and a tree-lined avenue approach.

There will be a mixture of generally terraced and semi-detached houses with the area benefitting from the village green creating a focus.

The site will be fed off of a road, creating a variety of plots of differing size and orientation. The houses to the south of the site will generally be larger semi-detached and detached properties benefitting from the existing landscape buffer to the southern boundary.

The western boundary bordering Shepherd's Grove West will be landscaped with a significant buffer zone to provide separation and amenity to the new residential properties.

### Residential Neighbourhoods

#### Design Principles

The type of residential properties, their scale, disposition and density will ultimately be determined by any future planning application, but will be informed by:

- The aspiration to create a high quality, attractively designed, residential community.
- The desire to provide a wide range of dwellings types and tenures.
- The creation of different character areas, defined by variance of density and style of building forms.
- The requirement for optimum use of a brownfield site, allowing for both affordable housing targets whilst providing revenue to offset site infrastructure provision.
- The recognition of the contrast between the boundary to Shepherd's Grove West, the boundaries that adjoin open countryside, and the northern boundary of the residential area, and the need to develop suitable, functional and natural landscaped areas in these locations.

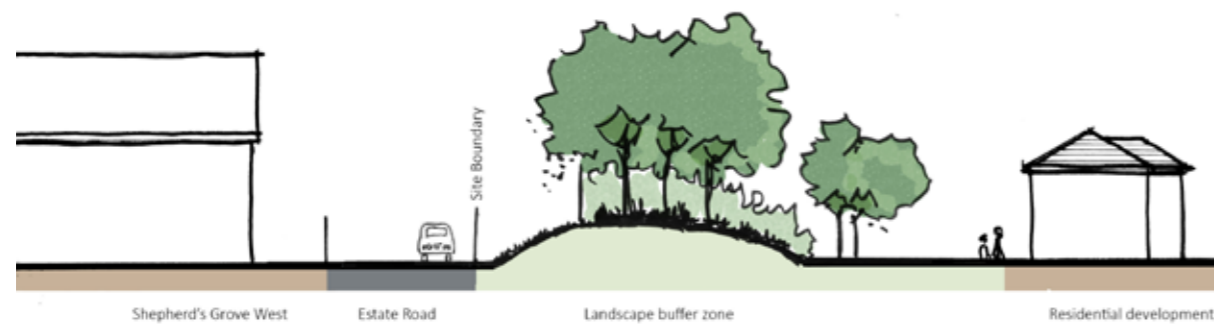


Fig. 30: Indicative example of a section through the landscape buffer zone to the residential area



Fig. 31: Residential Area Diagram

# 5.0 MASTERPLAN

## 5.6 ARCHITECTURAL QUALITY

The vision of the site is to establish a high quality contemporary, semi-rural residential settlement echoing the best traditions of Suffolk vernacular architecture.

Dwellings will address roads, courtyards and open spaces with differing character areas providing subtle variety in architectural language.

Dwelling densities will vary across the site with terraced, semi-detached and detached housing creating a variety of character areas. Indicative layouts will be provided once the Masterplan is adopted identifying the number of dwellings.

The Community Hub provides a more open environment focused around a 'Village Green'.

A consistent palette of materials and architectural detailing will be maintained across the neighbourhoods, whilst the differing building forms, density and landscape character will provide variety, identity and legibility.



Fig. 32: Indicative architectural quality

# 5.0 MASTERPLAN

## 5.7 LANDSCAPE STRUCTURE, VIEWS AND OPEN SPACE

The overall site is fairly self-contained with landscape screening to most boundaries. There are some more open views primarily to the northern part of the site and to the south east and south west.

The layout, design and extent of new landscaping along all boundaries of the developable areas will vary according to the use and character of each zone, and the nature of any existing adjoining uses. This will broadly be achieved as follows:

### Northern Zone

- Commercial and roadside uses
- Open views with limited landscaped screening
- Attractive landscaped setting to create a high quality 'gateway' development.

### Central Zone

- Employment Uses
- Well screened from external views and boundaries will be enhanced.
- New woodland structural planting along the southern boundary to create a natural bund to the proposed housing area to the south. The centre of the site will contain limited estate planting to allow flexible employment uses.

### Southern Zone

- Residential uses
- Contains a screen of woodland planting to the south, whilst a similar screen will be planted to the north and western boundaries of the site, the eastern boundary will remain semi-open to the countryside beyond.
- Within the site a network of landscaped boulevards, avenues, streets and drives with generous landscaped margins will create a framework for residential development.

### Community Hub

- Community uses
- Will contain a 'Village Green'; a large area of public open space. This will link with a number of small green spaces and pocket parks throughout the site.

The overall intention is to provide a thriving new working and living community whilst recognising and enhancing the semi-rural nature of the location.

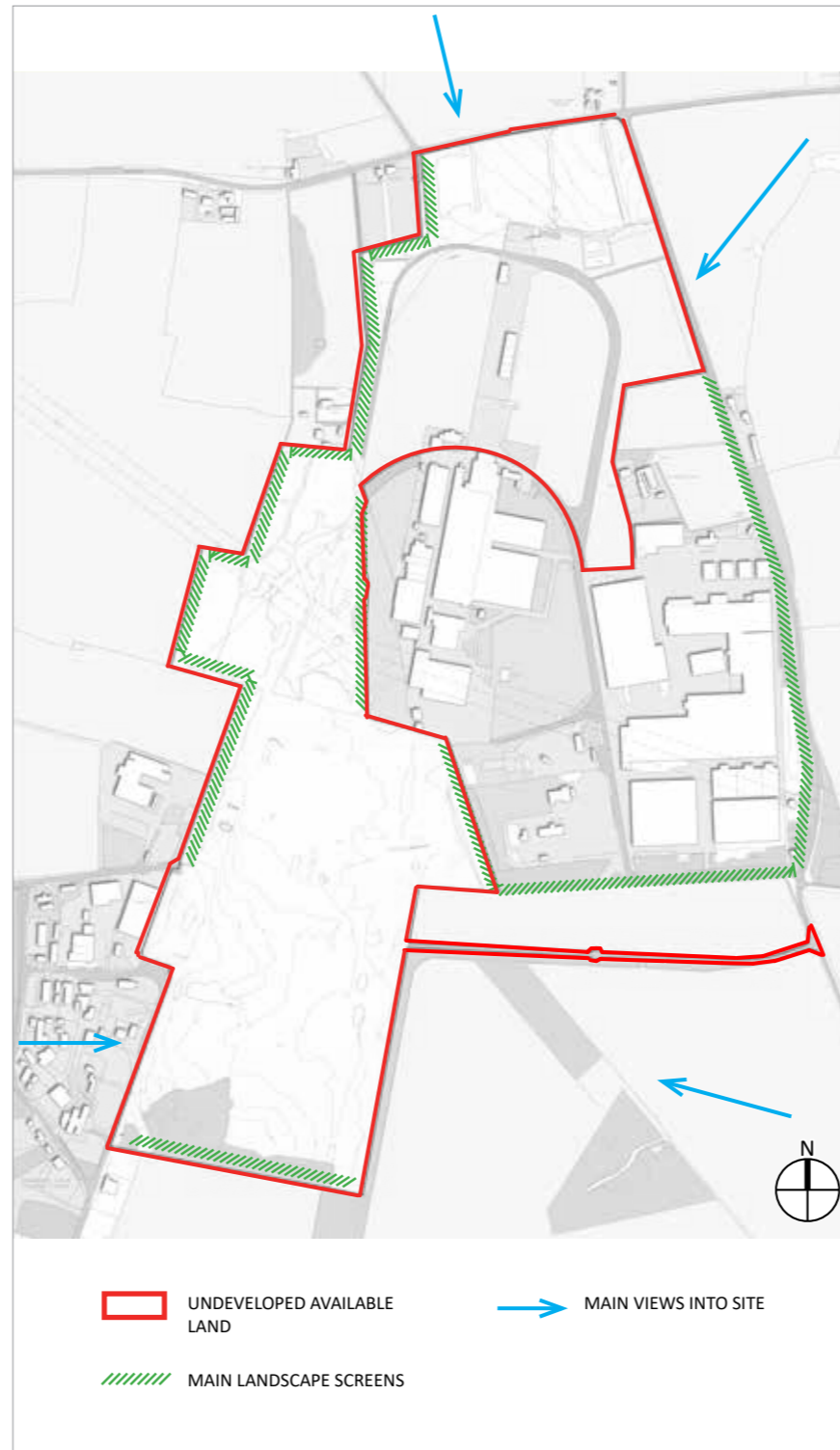


Fig. 33: Diagram illustrating the main views and existing boundary screens

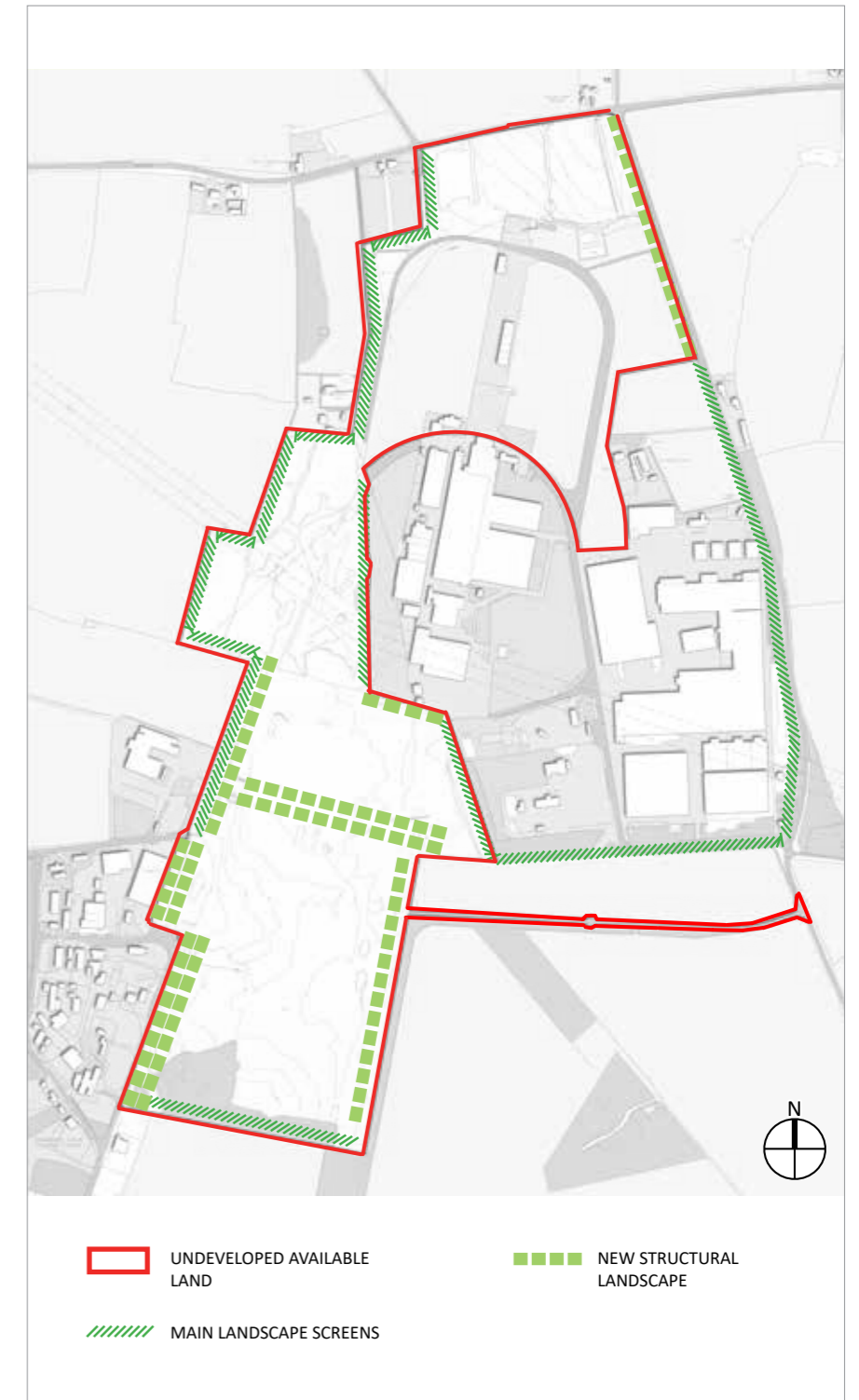


Fig. 34: Diagram illustrating augmented and new landscape

# 5.0 MASTERPLAN

## 5.8 BIODIVERSITY NETWORK

The site is currently open, offering limited ecological interest, however the majority of the boundary conditions feature tree and shrub planting. These hedgerows will be augmented to create enhanced habitats and wildlife corridors.

Additional structural woodland planting will be added within the site to compartmentalise each Zone with additional on Plot planting to each area. Such new planting will be focused to provide new habitats to maintain and encourage greater biodiversity across the site.

## 5.9 DRAINAGE / SUDS

### Surface Water Management

This site is currently undeveloped and although is a brownfield site by virtue of its previous use as an airfield it drains at greenfield flow rates to local water courses to the west and north of the site. To the west there are 2 watercourse systems which receive water from this site. The more southerly lies close to Grove Lane and flows through Stanton. The more northerly flows in a north easterly direction and flows below the A143 Bury Road some distance to the west of the development site.

In the north of the site there is a watercourse which flows through the development area parallel to Sumner Road and then to the north under Bury Road. This receives flows from the former airfield which has been recently redeveloped for commercial use. All of these watercourses eventually flow into the Little Ouse system.

The ground conditions at the site are not suited to infiltration drainage and hence these existing watercourse systems will continue to receive water flows from the development site. To accord with National and Local drainage policy these flows will be attenuated to 1 in 1-year greenfield flow rates for each catchment system.

**The Grove Lane and Bury Road catchments have existing watercourses which receive flows. The Central catchment appears to be drained overland to a watercourse offsite. If this arrangement cannot be replicated for the development, it is possible to outfall the site to the Bury Road catchment. Should this solution be taken forward it will be necessary to reduce the flows from both catchments to the green**

**field runoff rate for the Bury Road catchment only to ensure that flood risk in the receiving water course is not increased.**

A study of each of the above catchments has been undertaken. Drawing number 49083/PP/004 (see opposite) shows the extent of the development site that flows to each of the watercourse systems noted above.

Table 1 shows the size of these catchments, their greenfield runoff rate for a 1 in 1 year event and the potential volume of storage that will be required to the site.

comply with the Lead Local Flood Authority policy.

Catchment	Area (Ha)	Greenfield Runoff rate (l/s)	Storage Volume (m3)
Grove Lane	23.7	48.5	10000
Central catchment	7	14.3	4275
Bury Road	5.2	10.7	1760

Table 1: Catchment Summary

A system of Sustainable Urban Drainage features will be used in each catchment to attenuate flow rates and improve water quality before it is outfallen to the receiving systems. These Suds trains will include permeable paving, swales and detention basins in combination to convey and store water. Each development parcel will be designed to contribute to the Suds system with Source Control features such as rain gardens and permeable paving within residential plots.

The commercial areas will include permeable paving in car parking areas augmented by below ground tanks if required. These will outfall to road side swales, pipes and detention basins. These features in combination will provide sufficient water storage to hold a 1 in 30 year rainfall event. In larger scale rainfall events up to and including 1 in 100 year event with climate change the system will ensure that no water enters buildings or other flood sensitive infrastructure. Some limited above ground storage in car parking will be permitted with maximum water depths below 300mm in line with Lead local Flood Authority and Environment Agency policy.

Extreme rainfall flow paths will be identified to direct ant water flowing over the land surface away from buildings.

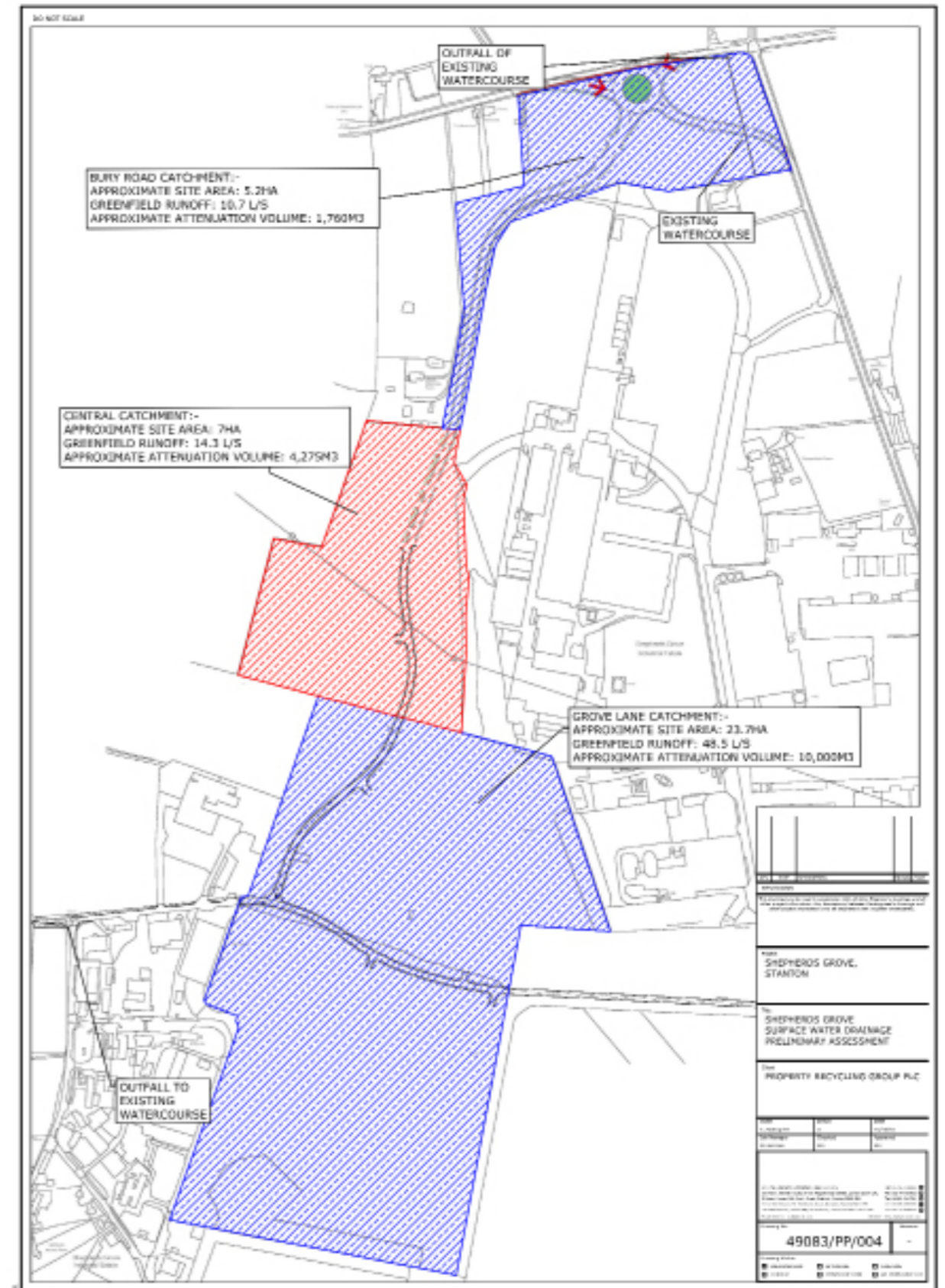


Fig. 35: Diagram illustrating the surface water drainage extents

## 5.0 MASTERPLAN

The SuDS initiatives for each development use will also improve water quality as required by the Lead local Flood Authority policies.

### Foul Water Management

This area is currently served by adopted Anglian Water sewers. Which are located in the south west of the development area. Anglian Water has been contacted and have confirmed that subject to some offsite reinforcement works that their existing sewer network can accommodate the development flows. Anglian Water has also confirmed that their water recycling centre has capacity to treat the flows from the site.

The existing sewers are located at the highest part of the site and therefor a number of pump stations will be required to lift flows to the outfall sewer system. It is anticipated that these pump stations and the on site sewer network will be offered to Anglian water for adoption in due course

### 5.10 ARCHAEOLOGY / HERITAGE

In view of the site's limited archaeological potential (see para. 3.8), and extent of previous development, the proposals contained in this Masterplan are unlikely to have a widespread or substantial negative impact on below-ground archaeological deposits.

Those below-ground features associated with the mid-20th century airfield that still survive can be considered as non-designated heritage assets of local significance.

Due to the known potential for a Late Medieval parish boundary of local to regional significance, and modest potential for below-ground remains associated with the Late Prehistoric, Roman, and Post-Medieval periods of local significance, the County Council's archaeological advisor is expected to require further archaeological mitigation measures to be carried out prior to any development of the site. Such mitigation is likely to initially consist of a programme of geophysical survey supported by targeted trial trenching and evaluation.



# 5.0 MASTERPLAN

## 5.11 SUSTAINABILITY & RENEWABLE ENERGY

The broad principles of sustainable design and construction will be implemented throughout the development. Our approach to compliance with Policies DM7 and DM8 demonstrate these considerations will be implemented from the outset of design to ensure the best efficiencies and outcomes are achieved.

### Policy DM7: Sustainable Design and Construction

#### Energy Efficiency

All dwellings and occupied non-residential development will meet, or exceed, the requirements of Building Regulations Approved Document L: Conservation of fuel and power.

The energy hierarchy will be implemented to ensure that passive measures are implemented to reduce energy use prior to consideration of how that energy will be delivered. This means that design, layout, orientation and materials (including insulation) and construction techniques will be of utmost importance from the outset. Considerations of daylighting, solar gains, air permeability and building form will all provide reductions in energy consumption. Once energy reduction has been maximised, efficient services will be selected which is described further under Policy DM8.



Source: Greater London Authority

Fig. 36: Energy Hierarchy

### Water Conservation

The conservation and quality of water resources has been identified as a particular challenge by the authorities. To address these challenges all water fittings within the development will be installed to meet, or exceed, the National Base Level set out in the table below. Residential developments will employ water efficiency measures to ensure that water consumption is no more than 110 litres per person per day.

Water Fitting	National Base Level
WC	6/4 litres dual flush or 4.5 litres single flush
Shower	10 l/min
Bath	185 Litres
Basin Taps	6 l/min
Sinks	8 l/min
Dishwasher	1.25 l/place setting
Washing Machine	8.17 l/kilogram

Water efficiency targets will be achieved through the use of restricted flow fittings, push or automated taps, waterless fittings and water efficient equipment. Additional reductions will be achieved through careful planting schemes that don't rely on mains fed irrigation systems. Species will be selected that thrive in drier environments and the use of rainwater will also be explored.

### Sustainability Standards

Appropriate Sustainability Assessments will be carried out to demonstrate wide ranging implementation of sustainability considerations in design, procurement and construction. BREEAM certification in larger non-residential buildings will demonstrate the implementation of sustainable measures in the following areas:

- Management
- Health & Wellbeing
- Land use & Ecology
- Transport
- Water
- Materials
- Waste
- Energy
- Pollution
- Innovation

Achievement in some of these areas will be inherent to the site location, surroundings and existing land use. The focus of achievement will be around sustainable design, procurement and construction. The certification of the buildings will be carried out by a third party to independently verify the implementation of social, economic and environmental benefits being delivered.

### Policy DM8: Low and Zero Carbon Energy Generation

Energy efficiency and reduced carbon emissions within the proposed development will be achieved by a passive design methodology in line with the energy hierarchy referred to in DM7, utilising the latest Building Physics techniques will we utilise passive solar gain, natural ventilation and natural daylight to reduce the heating demand, cooling and ventilation demand and reliance on artificial lighting by optimising the fabric insulation and air tightness, considering size and orientation of windows and rooflights and the opening free areas to maximise natural ventilation. Energy will be benchmarked against the building regulations and current applicable to best standards.

In order to ensure end users make the most of their energy efficient buildings, user guides will be provided to the occupants to ensure they are fully aware of how to operate the buildings properly, such as natural ventilation strategies and daylight dimming controls. Operation and maintenance manuals will provide detail on how to keep these buildings running at their optimum and details of any potential further improvements that could be incorporated will be provided.

A full and detailed feasibility study for the incorporation of low and zero carbon energy sources will be undertaken to explore the most technically feasible and economically viable solutions available for the development

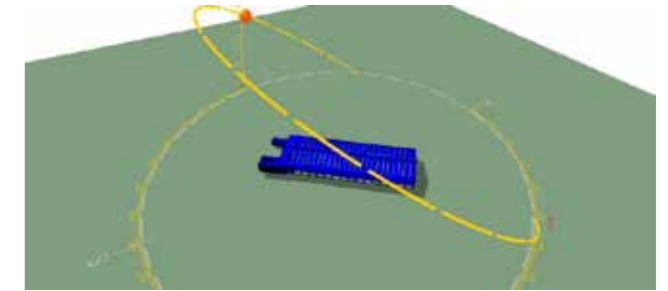


Fig. 37: Dynamic simulation model

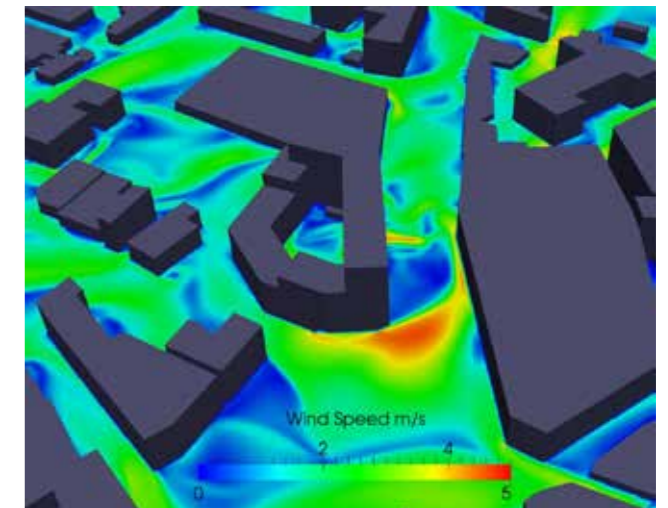


Fig. 38: Analysis of increased wind speed due to climate change



Fig. 39: Photo voltaic panels located on roof

# 5.0 MASTERPLAN

## 5.12 INDICATIVE MASTERPLAN

### Masterplan Concept

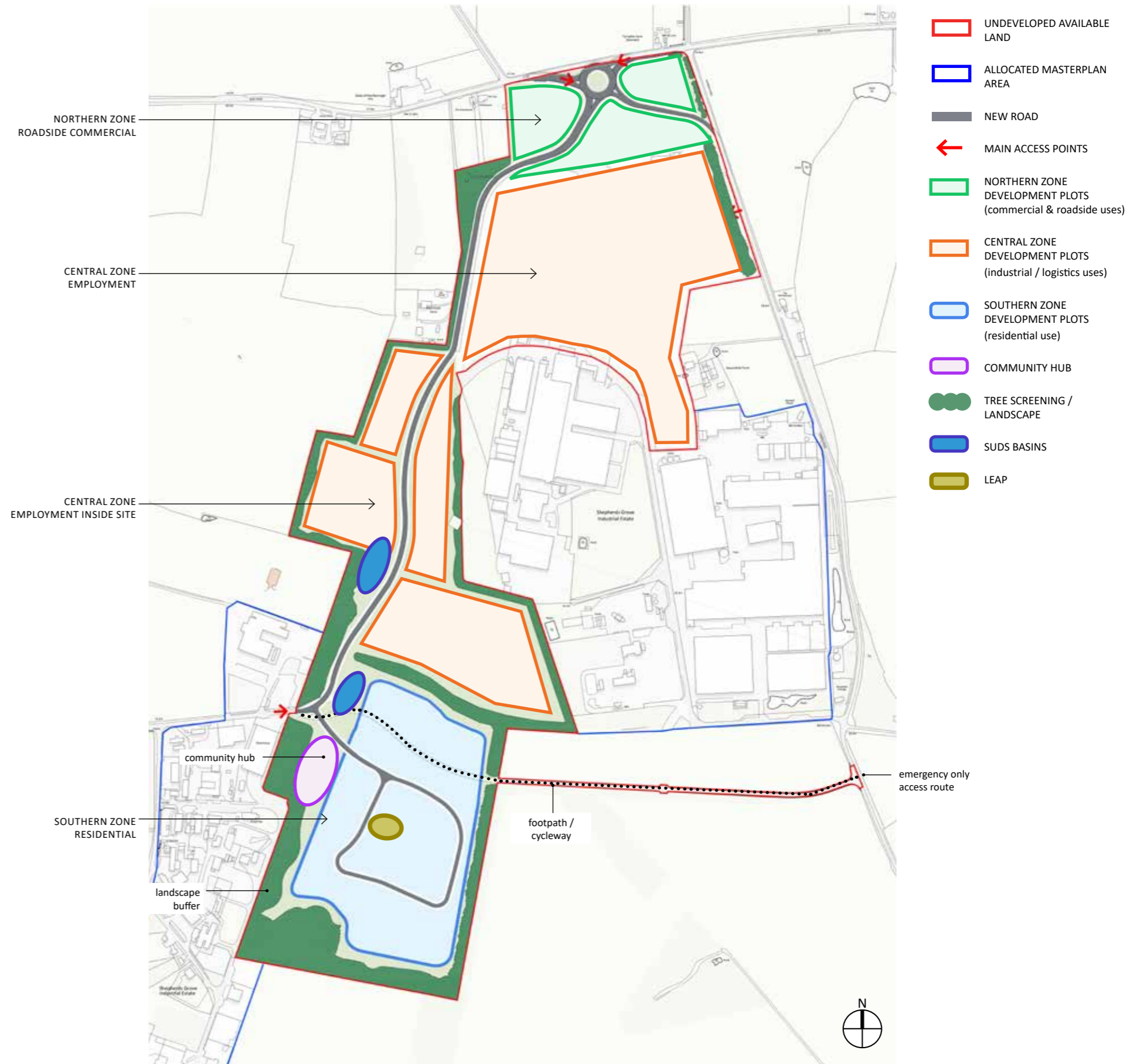


Fig. 40: Diagram illustrating the masterplan

# 5.0 MASTERPLAN

## 5.13 INDICATIVE MASTERPLAN

Masterplan Inset within St Edmundsbury Borough Council Local Plan Policies Map 2015 Insert Map 48

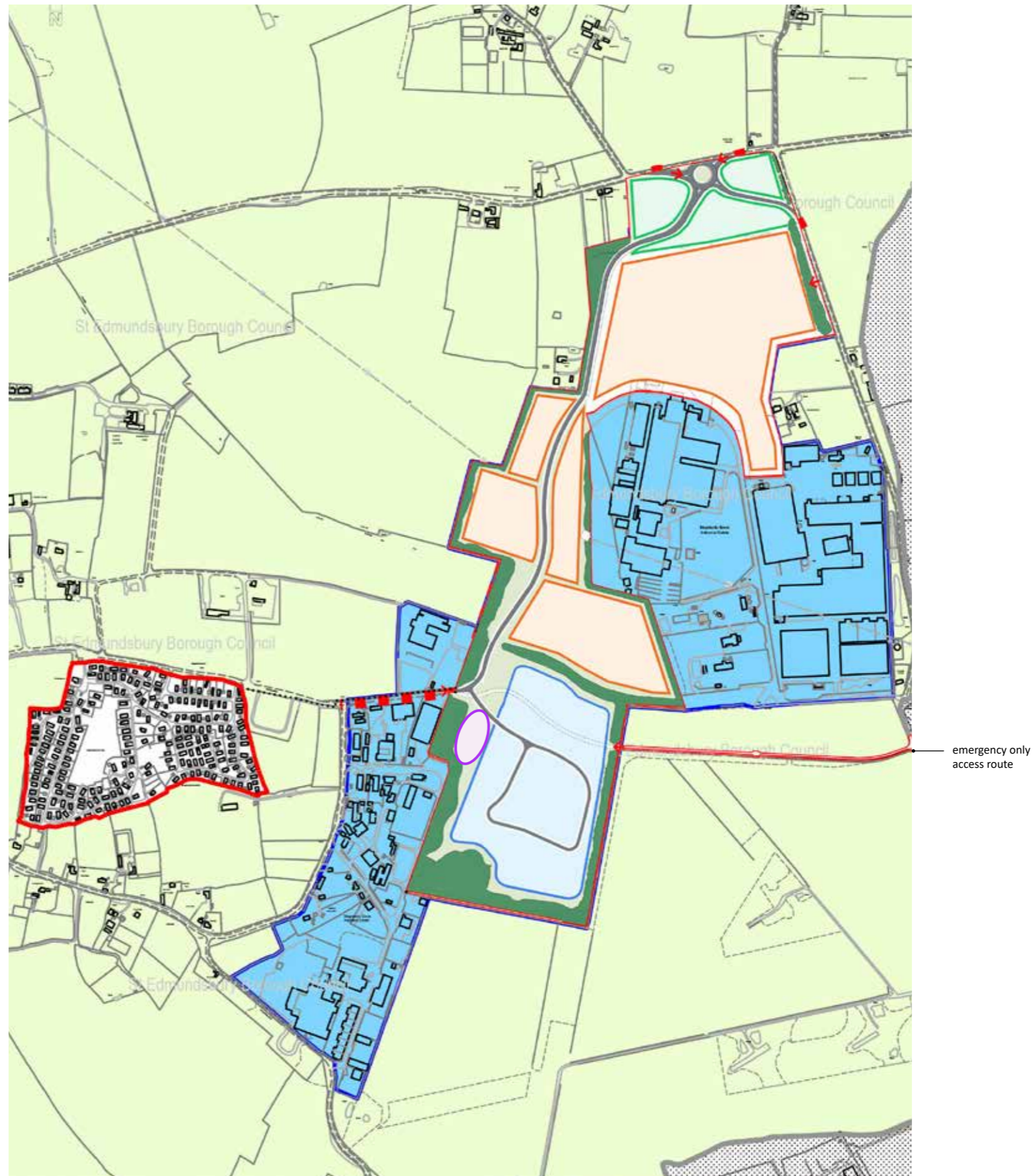


Fig. 41: Masterplan Inset within St Edmundsbury Borough Council Local Plan Policies Map 2015 Insert Map 48



# 6.0 PHASING & IMPLEMENTATION

## 6.1 TIMETABLE TO SUBMISSION OF OUTLINE PLANNING APPLICATION

Timetable for approval of Masterplan and preparation and submission of outline planning application:

- Draft Masterplan – January 2019
- 6 week Consultation period – from February 2019
- Final revisions to Shepherd’s Grove Masterplan – Mid-March 2019 to End of April 2019
- Final Masterplan Preparation - June 2019
- Report to SEBC Cabinet – September 2019
- Screening/Scoping Request to Council for EIA – September 2019
- Adoption of Masterplan as Supplementary Planning Guidance – October 2019
- Preparation of outline planning application and supporting documents – Autumn 2019
- Submission of outline planning application – Spring 2020
- Approval of outline planning application – Summer 2020
- Approval of ‘reserved matters’ – Early 2021.
- Start on site – Summer 2021.

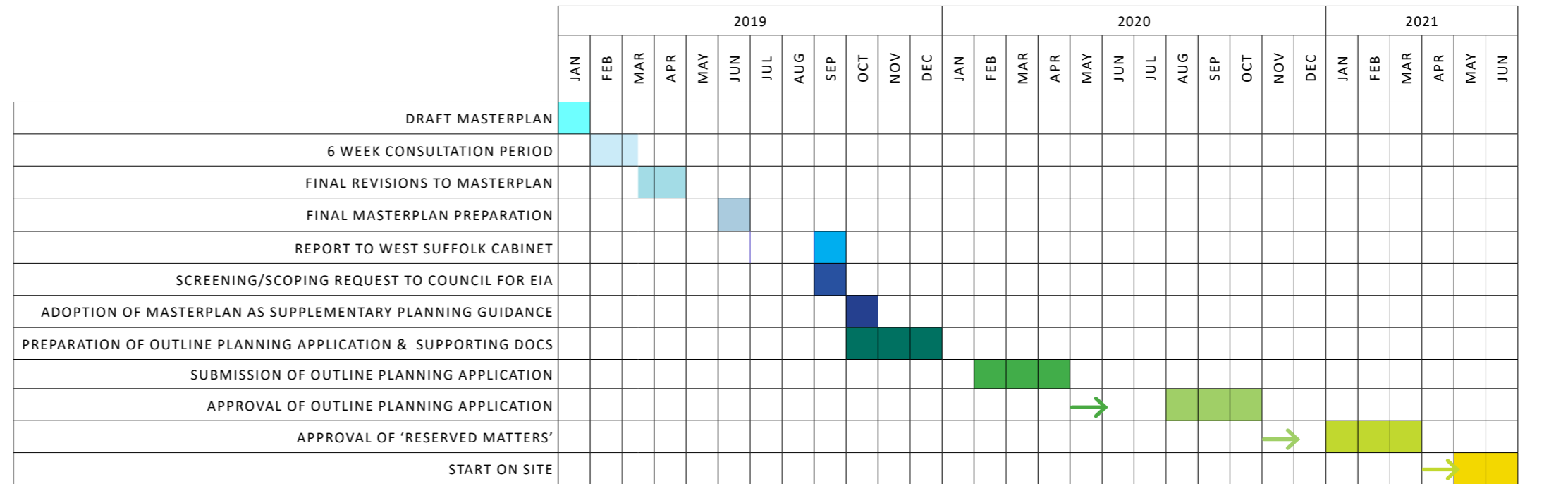


Fig. 42: Indicative timetable

