



Harras Moor, Whitehaven

Design and Access Statement
May 2022



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Document Verification

Client:	Homes England
Project:	Proposed Development at Harras Moor, Whitehaven
Project number:	A090070-410
Document title:	Design and Access Statement
Status:	Draft
Date:	27/04/22

This document should be viewed as spreads and printed as an A3 (double sided) landscape booklet.



Tetra Tech Manchester
Quay West at MediaCityUK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

01

Introduction

Overview

This Design and Access Statement has been prepared by Tetra Tech on behalf of Homes England, the Government’s housing and regeneration agency, in support of an outline planning application for a residential development at Harras Moor, Whitehaven. The proposed development site comprises approximately 23 hectares of land located on the southern edge of the suburb of Harras Moor, approximately 1km from the centre of Whitehaven.

The purpose of this Design and Access Statement is to examine the character and structure of the development in response to the need to promote better quality and more sustainable design in development; an objective embedded through the national planning policy framework (NPPF).

This document should be considered and read in conjunction with the accompanying reports and plans submitted as part of the application.

The Application Site

The site is located on the southern edge of the residential suburb of Harras Moor, approximately 1km from the centre of Whitehaven.

The site is 23 hectares in size and is currently characterised by grassland and pasture. It lies between Harras Road and Red Lonning to the east, Caldbeck Road to the south and the A595 to the west.

To the immediate east of the site there is a group of industrial buildings. To the north is a modern housing development, accessed from Highlands. To the south are more established housing areas. St Benedict’s Catholic High School, Whitehaven Academy and Jericho Primary School are all easily accessible from the site via Caldbeck Road.

The land falls quite steeply in the western part of the site. On the higher ground the site offers attractive views over Whitehaven to the sea. The land is open in nature but includes significant belts of mature trees. To the south-west and adjacent to the site is Midgey Wood, an area of Ancient Woodland. Site development will need to accommodate a stand-off from this off-site feature.

Description of the Development

The proposal is for a mixture of family homes, including a large proportion of larger, executive homes, which will improve choice locally. Additionally, 15% of the new houses will be affordable homes. The proposals also include protected ecology areas, retained woodland and new public open space. Planning permission is sought for up to 370 homes with all matters reserved except for access.

Purpose of the Document

This document should be considered alongside the full suite of documents which comprise the outline planning application.

This document demonstrates the Applicants’ commitment to delivering a high-quality sustainable community, in accordance with current planning policy and design best practice.

This document tells the story behind the key design themes which have driven the design process and how the final proposals demonstrate the delivery of key design principles of sustainable development and good place making.

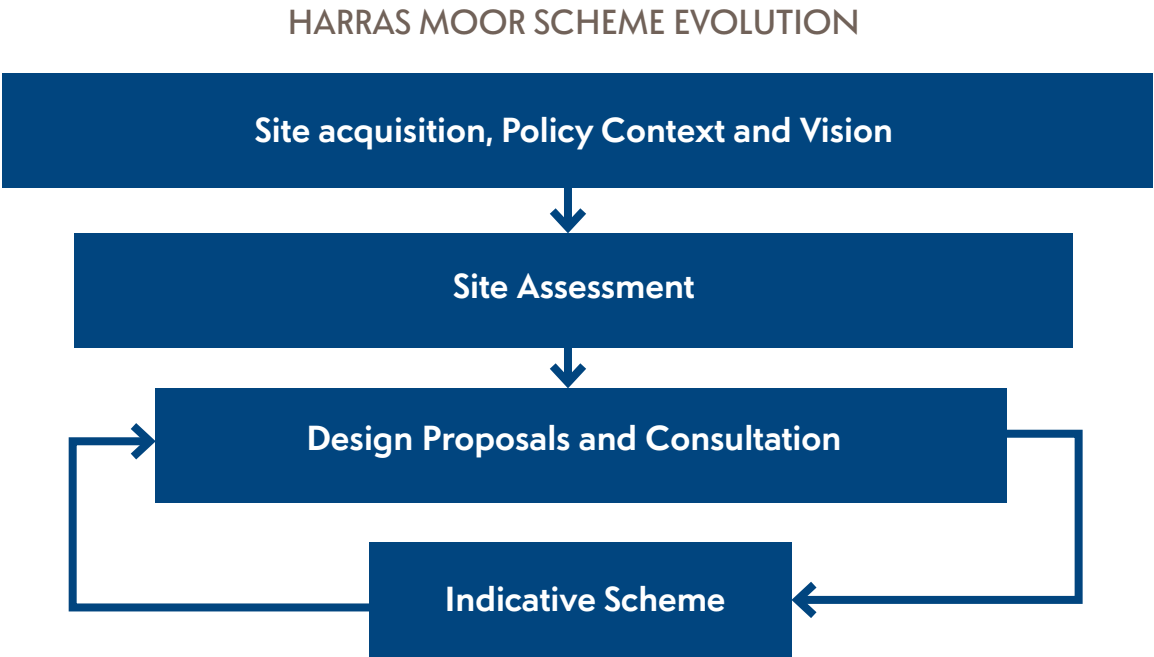
- The Design and Access Statement will:
- Outline the vision for development and design intent;
 - Provide a summary of the key physical characteristics of the site, including an analysis of constraints and opportunities;
 - Explain how the design has been influenced by a fully considered assessment of the local context and site specific characteristics, such as topography and setting;
 - Set out the planning policy context relevant to the site’s proposed development for residential use;
 - Explain how engagement with a range of stakeholders and local communities has influenced the proposals;
 - Set out how the design has progressed from initial concept plans through to the design parameters for which planning approval is sought;
 - Explain the design principles and concepts for the scheme, in terms of the layout, movement hierarchy, landscape strategy, density, scale etc; and
 - Demonstrate the quality which should be achieved through future reserved matters applications.

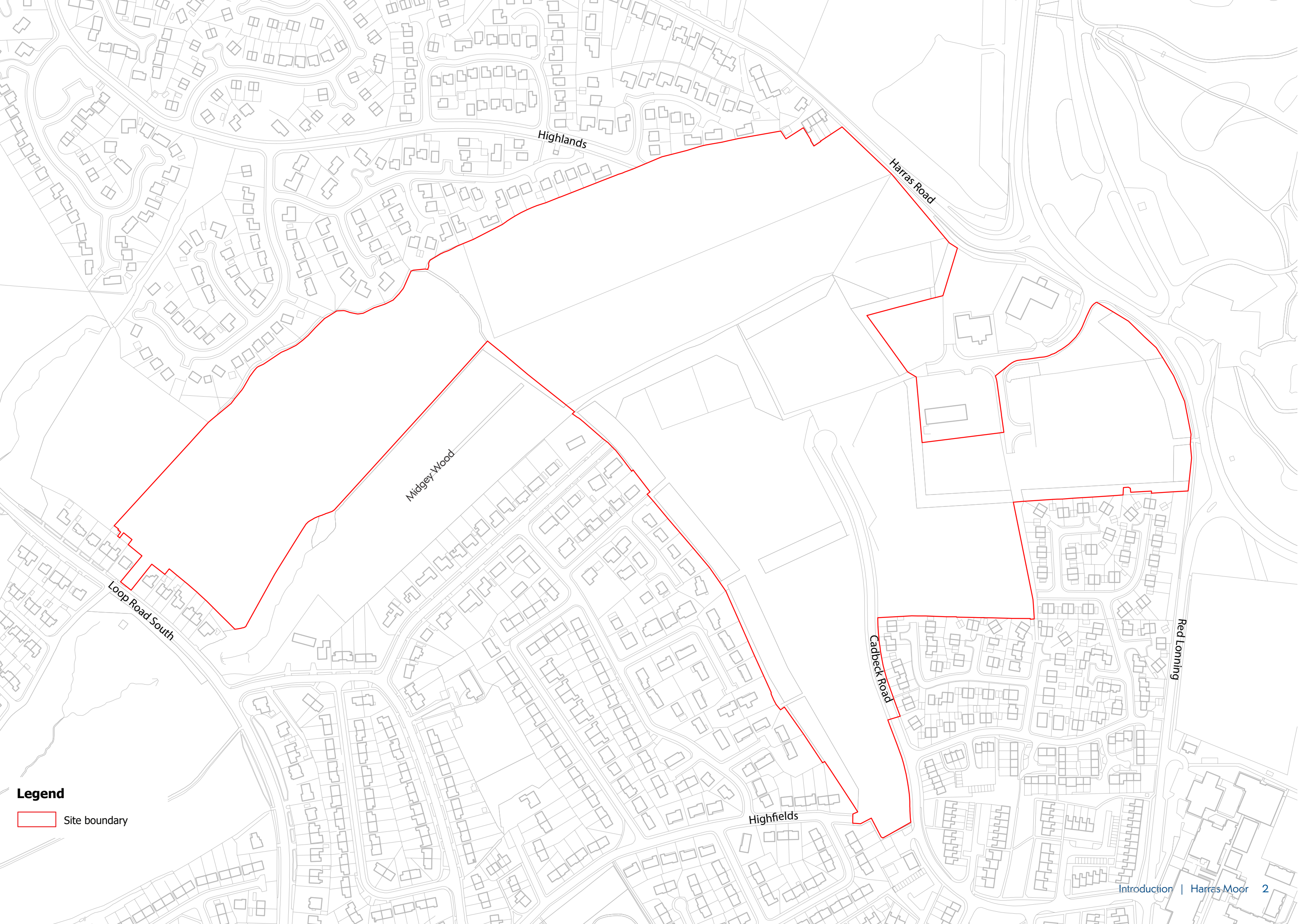
The Team

1. Tetra Tech (Planning, Design, Archaeology and Heritage, Ecology (updated survey, habitat regulations assessment BNG) Drainage, Transport, Landscape and Visual.
2. TEP (Ecology); and
3. Aecom (Geotechnical).

Structure of the Document

The remainder of this report is structured as follows:
Section 1: Introduction (continued), Planning policy and Vision
Section 2: Site Assessment
Section 3: Design Proposals and Conclusion





Legend

 Site boundary

Policy Context

The site is currently partially allocated in Copeland Borough Council's Local Plan. The whole site is proposed for allocation in the Copeland Local Plan Publication Draft, for the delivery of up to 370 dwellings.

Copeland Council does not have a deliverable five year supply of housing based on its current adopted housing target of 230 dwellings per annum (dpa). The delivery of housing in Copeland has been substantially below this adopted target over the past 10 years, averaging only 133 dpa.

The 133 dwelling average is also under the Council's proposed new annual housing need figure of 146 dwellings per year (based on the most up to date housing need assessment).

The current adopted Local Plan and the emerging Local Plan both prioritise Whitehaven as the key settlement for directing the greatest proportion of new housing.

It is clear from the above that the application site has a key role to play in helping Copeland meet their housing need and is located within the settlement boundary of Whitehaven.

The National Planning Policy Framework (NPPF) sets out National planning guidance and has recently been updated. It retains a presumption in favour of sustainable development and now places greater emphasis on ensuring biodiversity net gain (BNG)

This scheme is designed to reflect local and national planning policy.

Development Plan

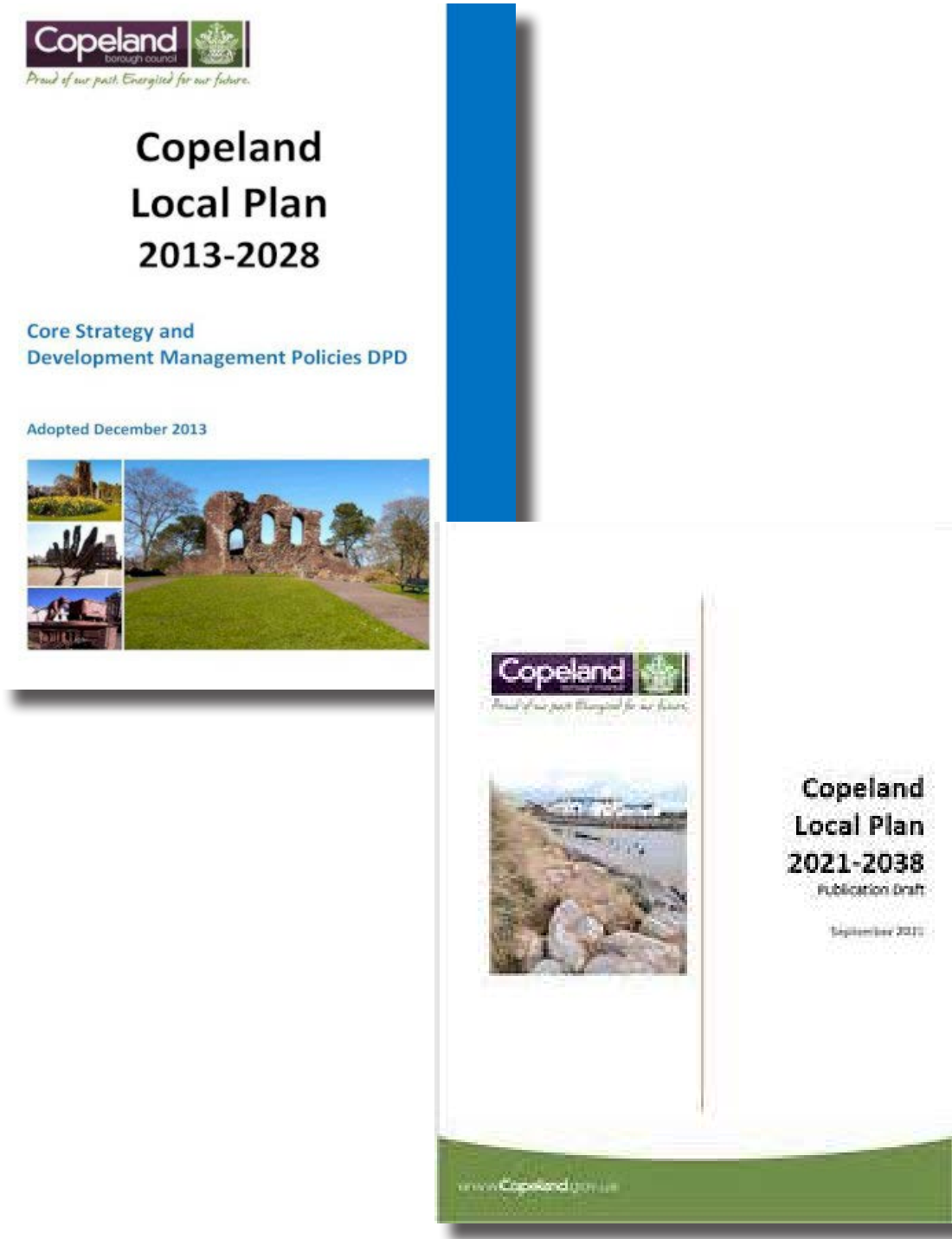
The Development Plan consists of policies within the Copeland Local Plan 2013 – 2028 (CLP), adopted December 2013 and some saved policies from the 2001 - 2016 Local Plan. The adopted Local Plan is currently 'Part 1' only consisting of a 'Core Strategy' (CS) of strategic policies and development management policies.

It is considered that the most relevant policies found within the CS in relation to this proposal are as follows:

- ST1 Strategic Development Principles;
- ST2 Spatial Development Strategy;
- ST4 Providing Infrastructure;
- ER7 Principal Town Centre, Key Service Centres, Local Centres and other service areas: Roles and Functions;
- SS1 Improving the Housing Offer;
- SS2 Sustainable Housing Growth;
- SS3 Housing Need, Mix and Affordability;
- SS5 Provision and Access to Open Space and Green Infrastructure;
- T1 Improve Accessibility and Transport;
- ENV1 Flood Risk and Risk Management;
- ENV3 Biodiversity and Geodiversity;
- ENV5 Protecting and Enhancing the Borough's Landscapes;
- DM10 Achieving Quality of Place;
- DM11 Sustainable Development Standards;
- DM22 Accessible Developments;
- DM24 Development Proposals and Flood Risk.

Copeland Council is currently (at the time of writing the update to this Design and Access Statement) running a consultation on the emerging Copeland Local Plan (2021 - 2038) Publication Draft.

As stated, the emerging Local Plan supports the continued allocation of the site for residential development for up to 370 dwellings. It is acknowledged that the emerging policies only carry limited weight and this will be set out in more detail in the accompanying Planning Statement.



THE VISION

The site offers the opportunity to create a high quality and distinctive new residential development, in a sustainable location, close to existing services and amenities, with good access by road and public transport.

The development will provide a mixture of housing types, sizes and tenure to cater for local needs. The design reflects and reinforces the existing residential character of Harras Moor and the rich landscape setting. The development will be characterised by attractive streets, generous public open spaces, high quality houses and landscaping.

New housing will be sympathetic to the local area, being of an appropriate scale, density and appearance. The development will be carefully designed to respect privacy and amenity of existing residents. It will also be sensitive to the site's ecology.

Defining features will be an extensive green landscape setting, gently curving streets, attractive views and a strong sense of visual connection with the surrounding landscape, including trees and water.

Whilst this is an outline planning application, with all matters of detailed design reserved for future consideration - other than means of access - the vision for the scheme is strong and ambitious. Design principles and guidance in this document promote a strong placemaking approach and a high quality development.



Illustrative sketch of a street in the development

02

Site Assessment

Local Character

Local Character

The site is located close to the edge of the urban area of Whitehaven, with Whitehaven Golf Club to the east, beyond which is open agricultural land. The built environment to the north, south and west is characterised by residential buildings. The interface with these existing houses will be an important factor in establishing the layout and design of the site.

Built Form

To the west, along Highlands and the surrounding streets, is a large housing development dating from post 2000s which is characterised by larger detached houses up to two storeys in height. Single story bungalows are also common, for example along Spruce Grove, Fern Close and Broom Bank.

In the north-east corner of the site, along the south side of Harras Road, is a small group of late 20th Century terraced cottages (Windsor Terrace, Windsor Green and Windsor House).

Standings Rise to the south-east of the site is characterised by detached two storey houses and smaller bungalows dating from circa 1960s.

To the south, along the A595 Loop Road South, the predominant form of housing is inter-war semi-detached properties. Typically, houses are set well back from the road boundary on higher ground behind large front gardens and private drives.

Surrounding Uses

To the north, south, south-east and south-west the neighbouring land uses are residential, with the boundaries of houses to the north and south-east abutting the site. To the east is a small industrial estate, buffered from the site by woodland and tree belts. Beyond this, to the east, is Whitehaven Golf Club. St Benedict's Catholic High School is located to the south-east of the site. The south-western site boundaries are adjacent to existing woodland - Midgey Wood.



Site boundary at Highlands



Houses at Loop Road South



Houses at Winchester Drive



Existing detached property at Loop Road South



Southern site boundary

Site Context and Local Facilities

The site is located approximately 1km east of Whitehaven town centre in the residential suburb of Harras Moor.

The surrounding area is predominantly residential in character with large housing estates to the north and south. A small employment site is located along the eastern boundary with access off Red Lonning. Midgey Wood ancient woodland borders the site to the south-west and extends across the A595, Loop Road South and along Midgey Gill.

The site has good access to a range of local services and facilities including schools, supermarkets and recreational and community facilities.

There are a number of primary schools nearby, the nearest being St. James Church of England Junior School and St.Begh's Junior school which are both located approximately 1km to east. The nearest secondary school is St. Benedict's Catholic High School located along Red Lonning to the south-east of the site and can be easily accessed from Caldbeck Road.

The nearest large foodstores are located in Whitehaven Town Centre and include a Morrisons, Tesco, Iceland and Asda. More locally to the site, there is a Spar on Richmond Hill Road, approximately 1km to the south-east.

There are plenty of opportunities for outdoor sport, recreation and leisure in the vicinity of the site. Whitehaven Golf Club, community use 3G football pitch at St Benendict's High School, and Cumbria Golf Centre and Driving Range are all less than 500m from the site. Castle Park is located approximately 500m to the west on the edge of the Town Centre.

The community use 3G pitch at Whitehaven Academy is less than a kilometre from the site to the south east, Cumbria Sports Academy is 1.3km to the south east, while Morseby Rugby Club is just 1.5km to the north east of the site.

The site is well served by public transport with the nearest bus stop being located along Loop Road South. Whitehaven Train Station is approximately 1.5km north-west of the site, with Corckickle Train Station being located approximately 0.9km south-west of the sites boundary, both of which can be accessed via Loop Road South.



Legend

- Site boundary
- Schools
- Convenience stores
- Recreation
- Bus Stops
- Train Station

Landscape & Ecology

Landscape

The site is characterised by the neighbouring woodland which cuts through and bounds the site in places. Midgey Wood ancient woodland forms part of the south-western boundary of the site and is a strong landscape feature.

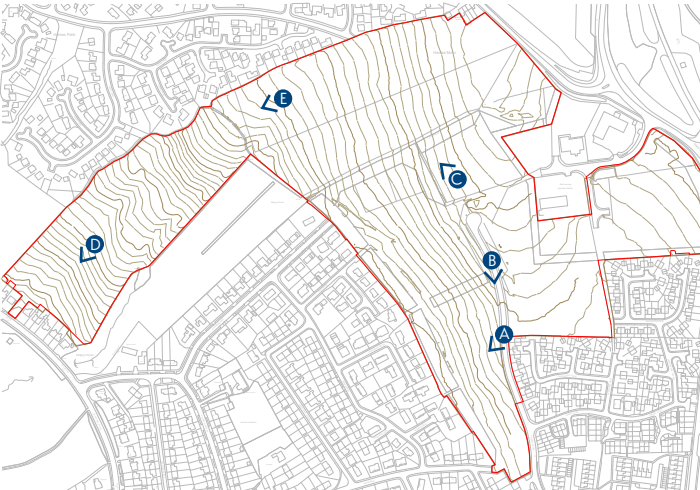
The site is composed of several parcels of pasture land and this creates an open character.

The topography of the site also contributes significantly to its character. Retaining this green character will be important in the design of the masterplan.

Views

The topography of the site lends itself to creating long views east to west across the site, towards the coast and on a clear day on towards the Isle of Man.

A Landscape Visual Assessment has been undertaken to assess key views and has been submitted as part of this application which assessed views into and across the site.



Ecology

The site has a number of important ecology areas. The design team have worked closely with ecologists TEP and Tetra Tech's inhouse ecology team to ensure that important habitat areas are retained and protected.

A biodiversity net gain (BNG) assessment of existing habitats on site has also been undertaken to quantify the most valuable habitats and to identify opportunities for enhancement of existing habitats.

The proposals also include new and enhanced ecology areas. A 20m buffer zone will be provided around the Ancient Woodland, in accordance with the request by the Woodland Trust. These principles are all established within the Parameters Plan.

These ecological considerations present an opportunity to reinforce the green character of the site and will ensure the site provides substantial landscape areas throughout the proposed development.



Legend

- Site boundary
- Grassland - Bracken
- Grassland - Modified grassland
- Grassland - Other neutral grassland
- Heathland and shrub - Mixed scrub
- Sparsely vegetated land - Ruderal/Ephemeral
- Urban - Developed land; sealed surface
- Woodland and forest - Other woodland; broadleaved
- Heathland and shrub - Bramble scrub
- Native Hedgrow
- Urban - Built linear features
- Target note

Constraints & Opportunities

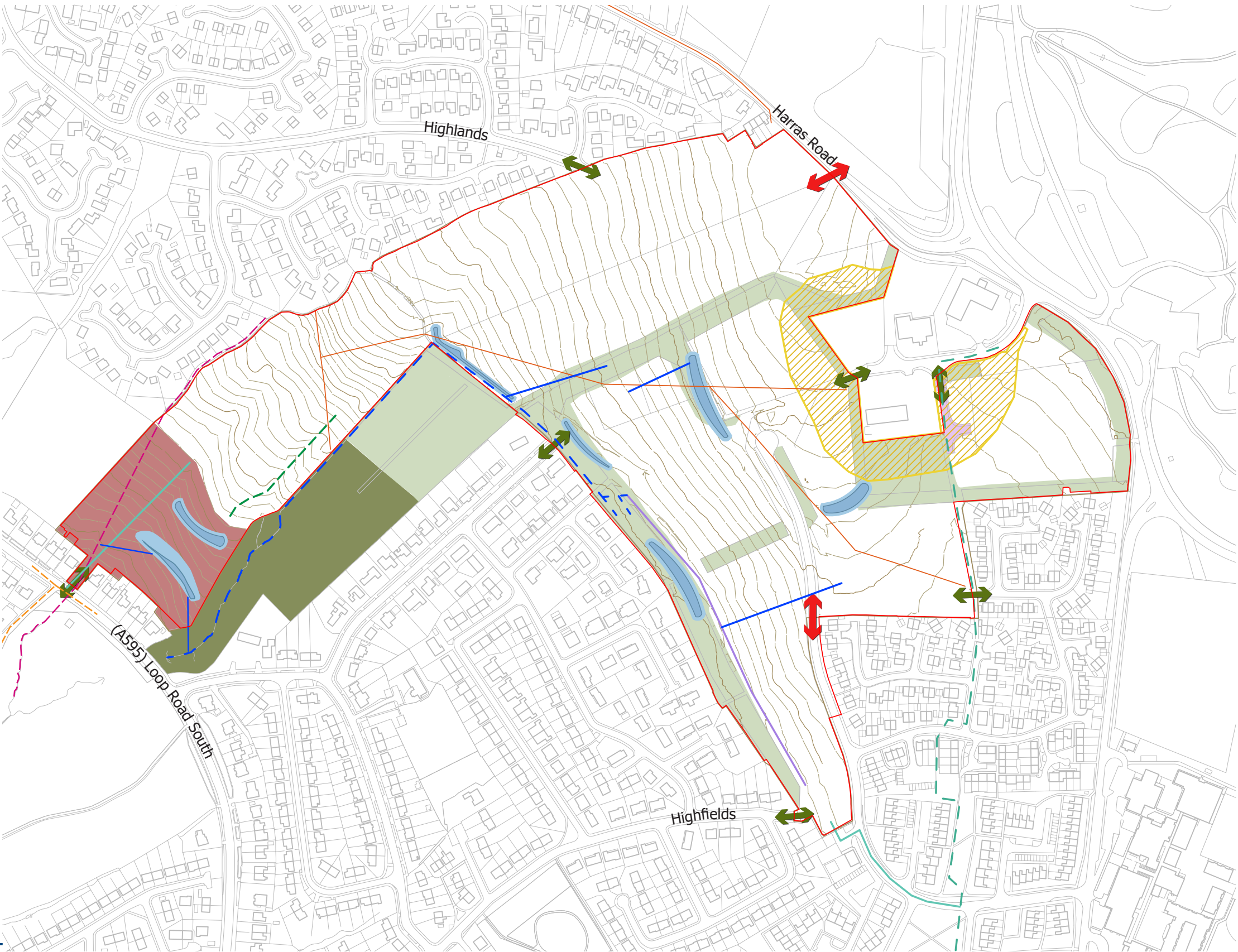
Introduction

The plan opposite illustrates the main physical characteristics of the site and identifies the key development constraints and opportunities. It also examines the site's relationship with its immediate surroundings and adjacent land-uses and draws on the findings of a range of supporting surveys and studies submitted as part of this application and which are summarised below.

This analysis has informed the development of a parameters plan as set out on p27, establishing the underlying urban design principles and structure for the masterplan. The current location of the SUDs ponds are indicative at this current stage, but the scale and number of these are of great importance within the masterplan proposals.

Legend

- Site boundary
- Industrial use noise buffer zone
- Existing trees
- Ancient woodland
- 20m offset from Ancient woodland
- 1m Contours
- Existing watercourse
- Existing culverted water pipe
- Existing foul water utility
- Existing combined water utility
- Indicative SUDs pond location
- Proposed SUDs
- Indicative proposed foul water utility
- Indicative proposed surface water drain
- Indicative proposed extended watercourse
- Existing overhead telecomms utility
- Proposed site access
- Potential pedestrian access
- Proposed Ecology mitigation area (no build zone)
- Opportunity to green existing highway
- Former quarry



Constraints and Opportunities Plan



Drainage on site will need to be improved by a new sustainable drainage system.



The development will aim to maintain pedestrian linkages to surrounding areas.



The Ancient Woodland will be protected by a 20m landscape buffer zone



Recent residential development has occurred to the north at Highlands Road. The scheme must respect the amenity of neighbouring homes.



Caldbeck Road already provides access from the south.



The site has been predominantly used as agricultural land.



The new houses must respect the amenity of existing houses that back onto the site.



The site falls steeply to the west and which in some parts would not be suitable for development due to topography constraints.

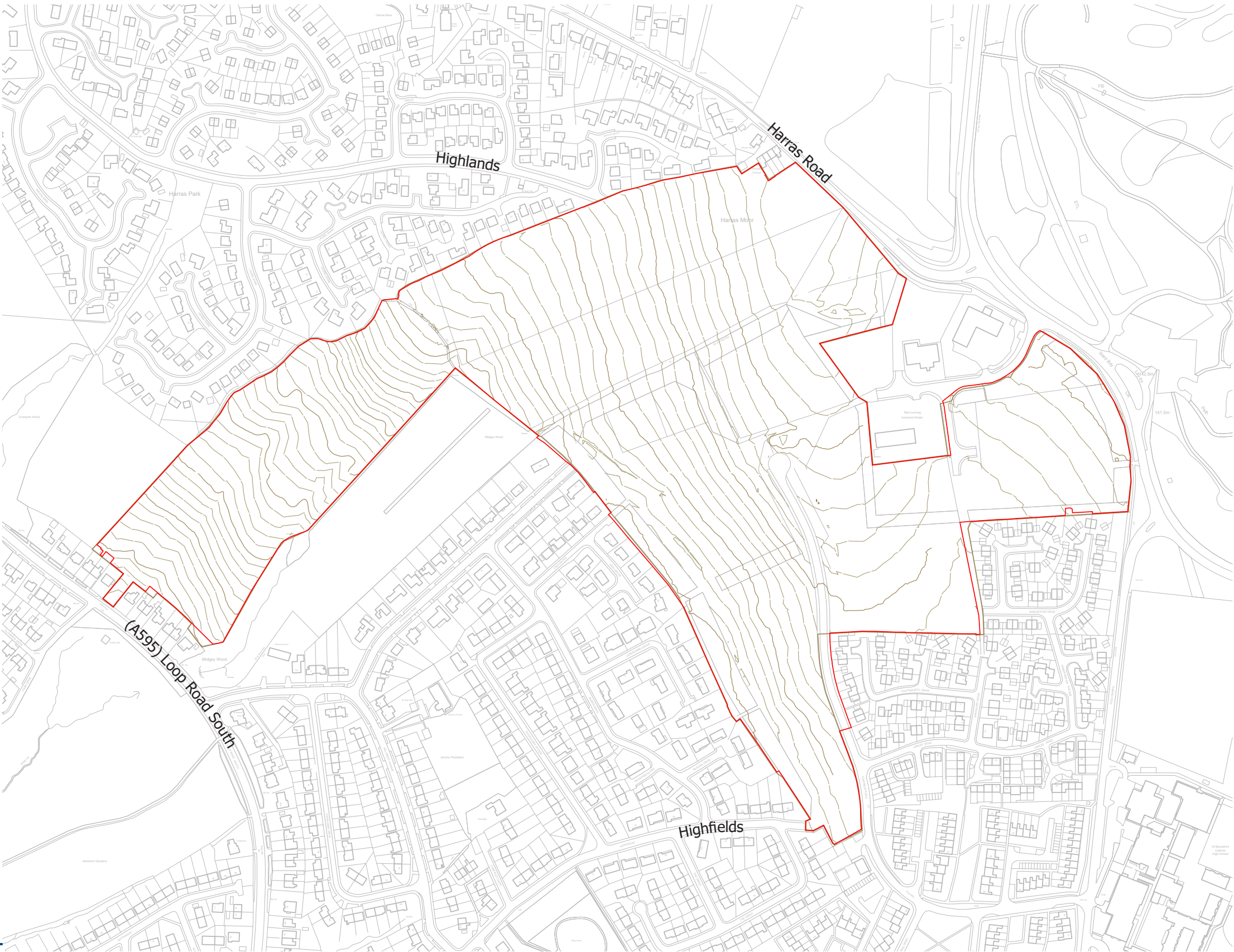


Industrial units immediately neighbour the eastern boundary of the site. The masterplan will need to create an appropriate noise buffer.

Key Considerations

Topography

- The site falls from east to west, with the highest part of the site being located in the north-east corner.
- Levels are particularly steep towards the western end of the site, where existing gradient is 1 in 10.
- Site topography affords long distance views to the west towards the coast.
- Lower density detached houses will be located on the steepest parts of the site and roads will need to traverse contours to achieve maximum gradients of 1 in 12 for roads. More typically gradients will be 1 in 16.
- Streets will be designed to follow the natural contours of the site so as to reflect the character of the site and minimise cut and fill, and retaining walls.
- The natural slope of the site will assist in creating a sustainable drainage system, through an interconnected network of attenuation basins / ponds.



Legend

Site boundary

1m Contours

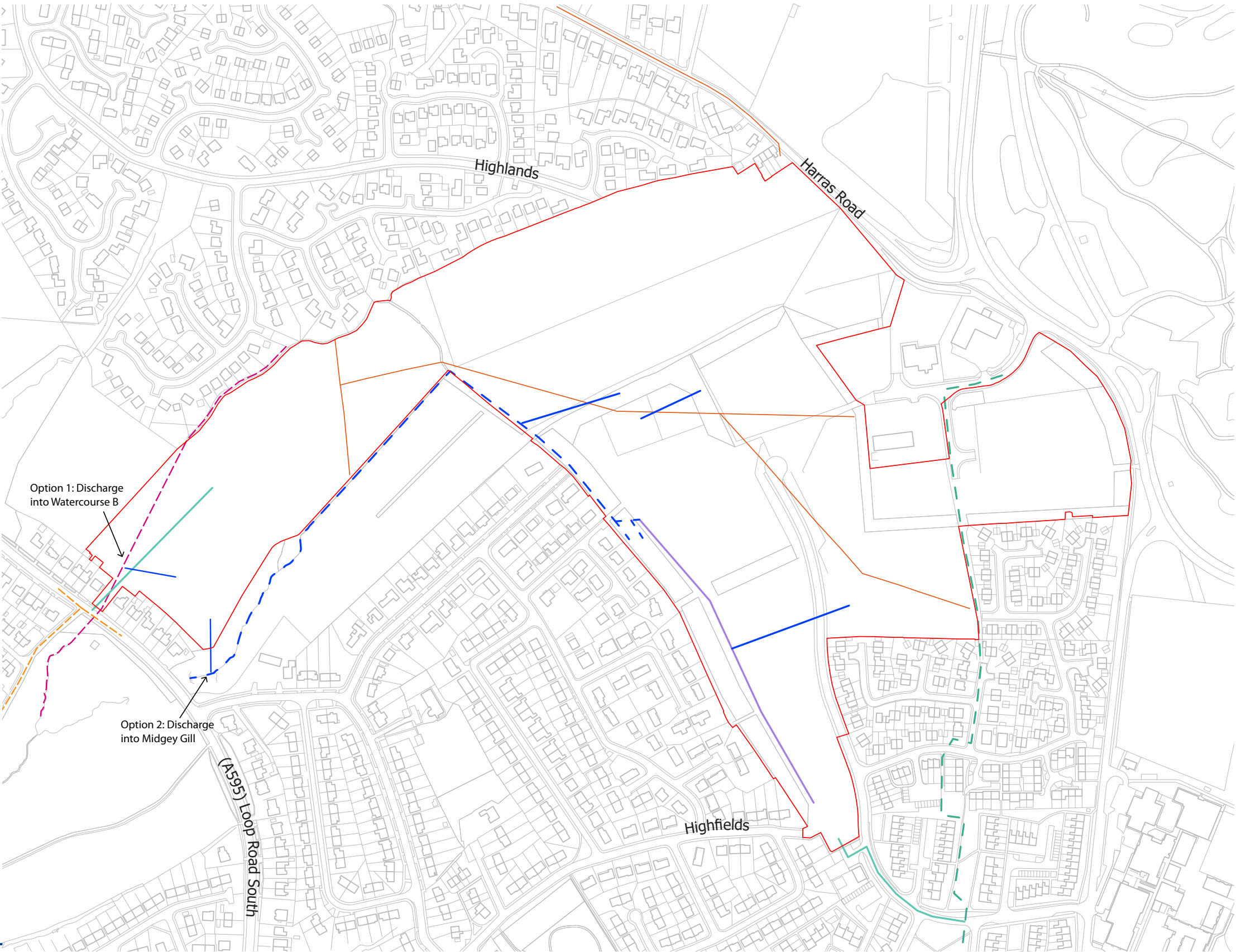
Topography Plan

Utilities and Ground Conditions

- A foul water drain cuts across the eastern part of the site and will require an easement to be kept free of development.
- Overhead telephone lines currently cross the site, and will be diverted accordingly
- Local services have sufficient capacity to serve the site, although a new electricity substation is likely to be required.
- There is a proposed 'no-build zone' along the eastern boundary associated with former quarry works.
- The history of mine workings is not assessed as presenting an obstacle to development.
- There is a culverted water pipe which conveys water from Highlands Road entering the site to the south of the existing estate. This pipe will be left in-situ within public open space.

Legend

-  Site boundary
-  Existing watercourse
-  Existing foul water utility
-  Existing combined water utility
-  Existing culverted water pipe
-  Existing overhead telecomms utility
-  Indicative proposed foul water utility
-  Indicative proposed surface water drain
-  Indicative proposed extended watercourse

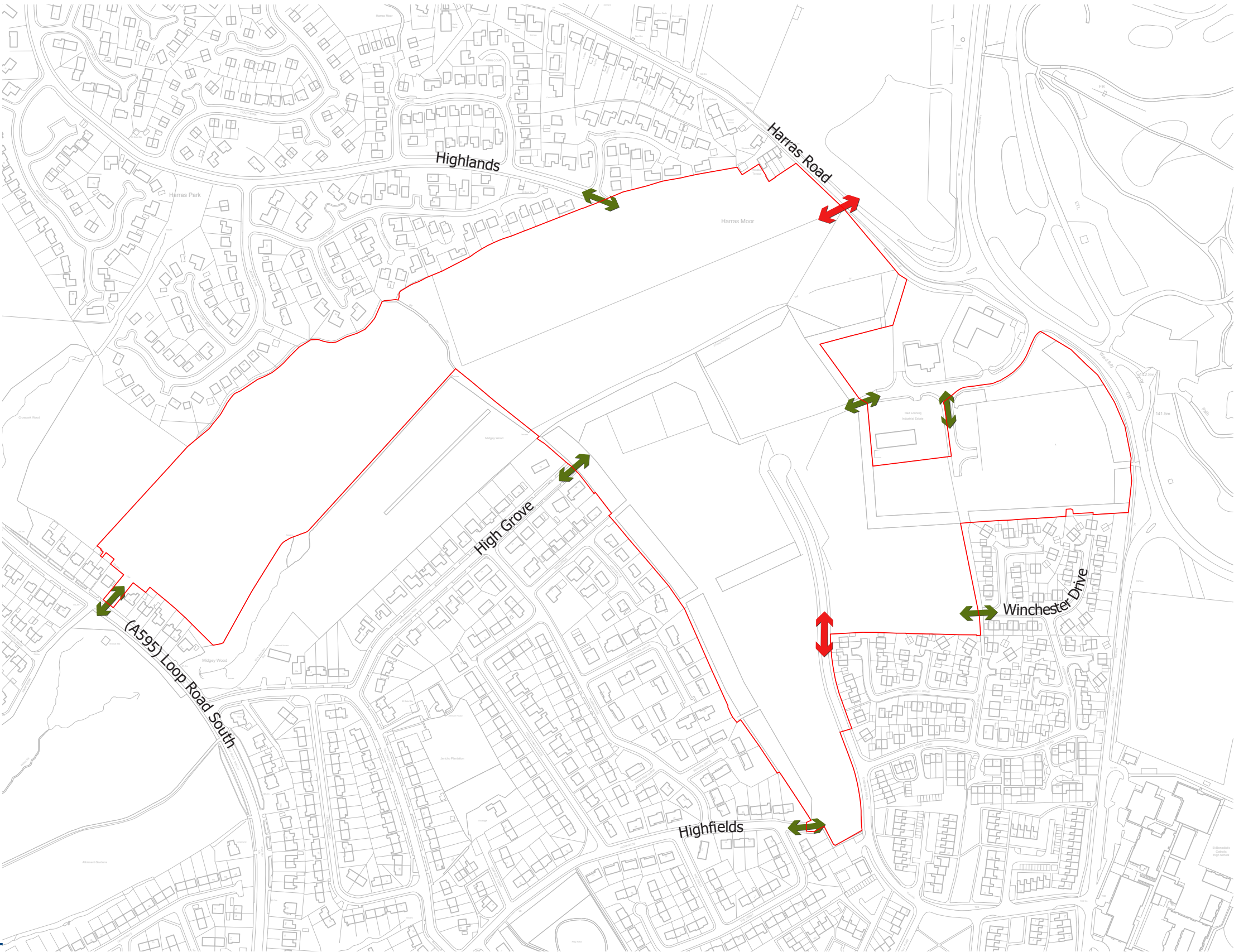


Utilities Plan

Key Considerations

Access

- The site is served by two existing access points: Caldbeck Road extends into the site from the south east and to the north, an existing access road enters the site from Red Lonning Industrial Estate. The latter is not an adopted road and therefore not considered as an suitable access point.
- The primary vehicle access for the new development will be via Harras Road. The existing access from Caldbeck Road will provide a secondary access into the site.
- Potential exists to create new pedestrian access points into the site from Winchester Drive, Highfields, High Grove and Highlands and Loop Road South.
- There are no formal public footpaths or bridleways that cross the site area.



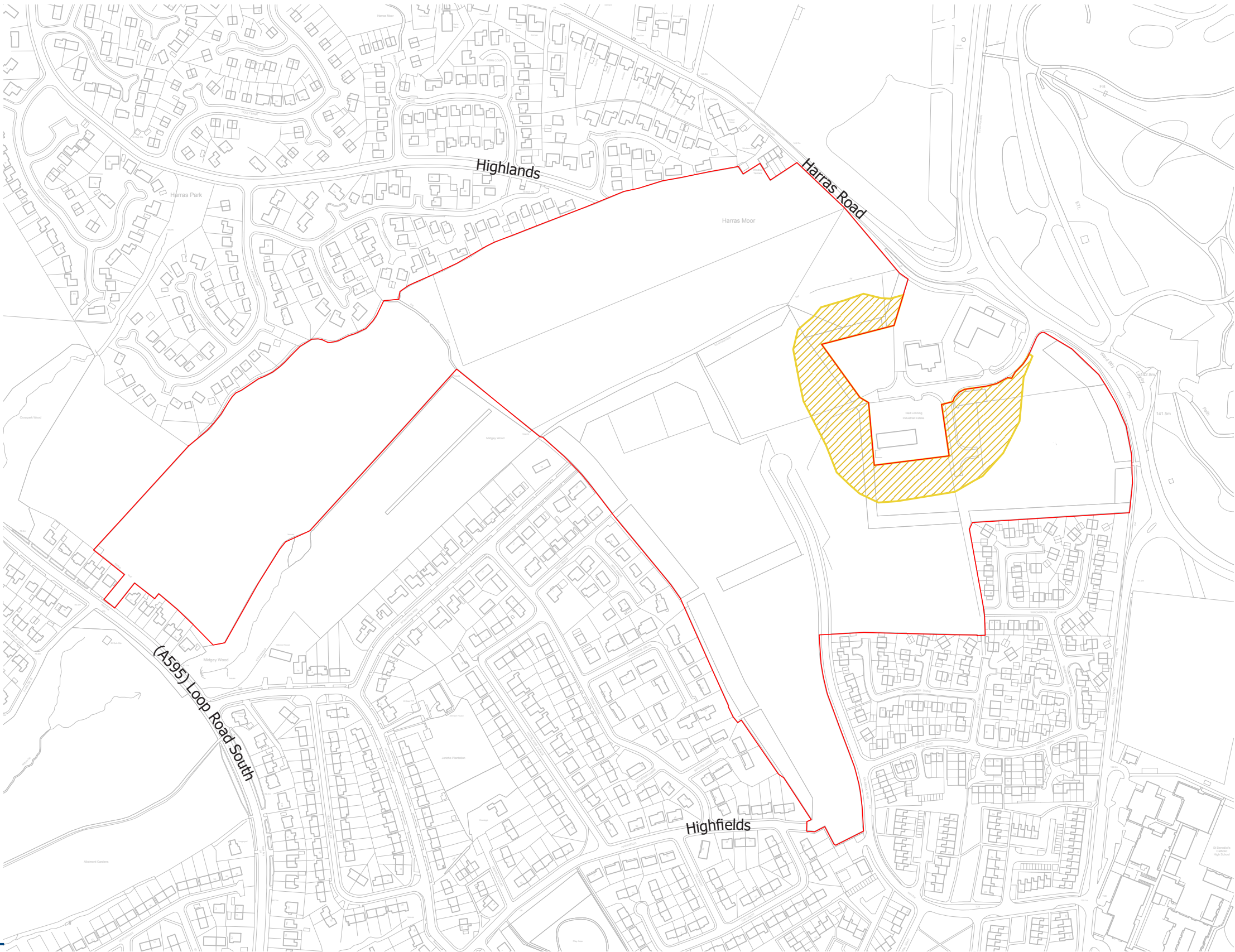
Legend

- Site boundary
- Proposed site access
- Potential pedestrian access

Access and Connectivity Plan

Noise

- A noise buffer zone will be required to the industrial uses on the eastern part of the site.
- This will require an acoustic fence or bund and a stand-off area to the new houses.
- Existing trees around the edges of the industrial estate will be retained and supplemented with new buffer planting to help mitigate potential noise impacts.



Legend

-  Site boundary
-  Industrial use noise buffer zone

Key Considerations

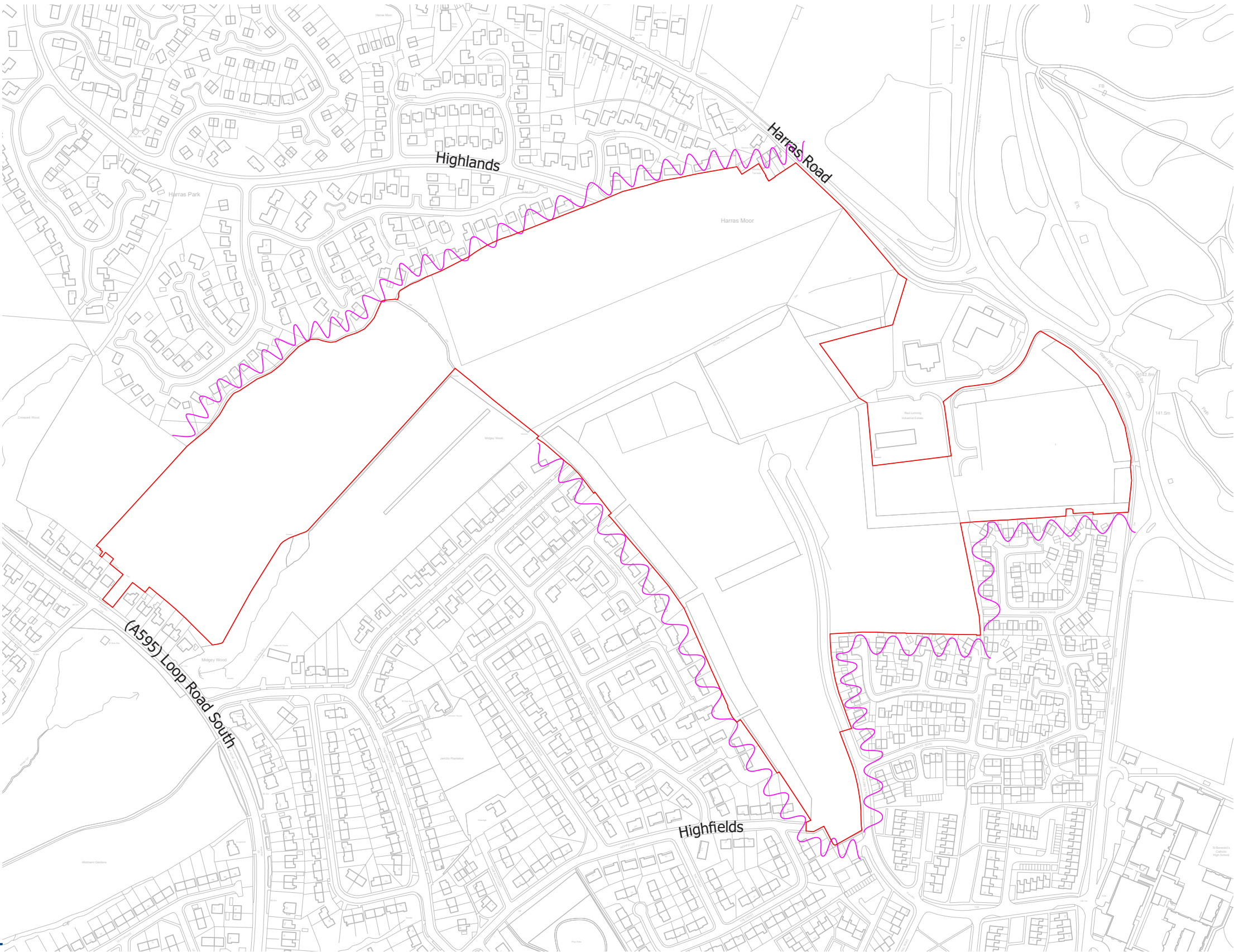
Consideration to Adjacent Dwellings

- The scheme must respect the amenity and privacy of existing houses which back-onto the site. Industry standard and planning policy compliant interface distances will be necessary.
- The development layout will need to ensure that secure boundaries are created between new houses and existing properties.
- In some cases, where existing dwellings have very small gardens, supplementary 'buffer' landscape and planting is proposed to conserve amenity and privacy.
- New development should respond to the scale and appearance of existing houses on adjoining sites so as to create a comfortable and coherent relationship.
- Plot dimensions are also a consideration in terms of the number of new dwellings (and gardens) abutting any existing single dwelling.
- Where existing dwellings are very close to the boundary of the site, it may be appropriate to locate bungalows adjacent to ensure amenity and privacy or to increase interface distances.

Legend

-  Site boundary
-  Consideration to adjacent dwellings

Residential Amenity Plan



Ecology & Green Infrastructure

- The Ancient Woodland - Midgey Wood - adjacent to the site will be respected and protected by a 20m no-build landscape buffer zone, which will be fenced-off (timber post and rail fence) and given over to landscape and nature conservation.
- The other mature tree belt on site will be retained where possible to provide an attractive landscape setting to the development. Only limited tree removal is needed to provide access.
- Important habitats on the site will be retained and protected, in line with ecologists' advice. New ecological mitigation areas will also be created to compensate for the loss of any potential habitat areas.



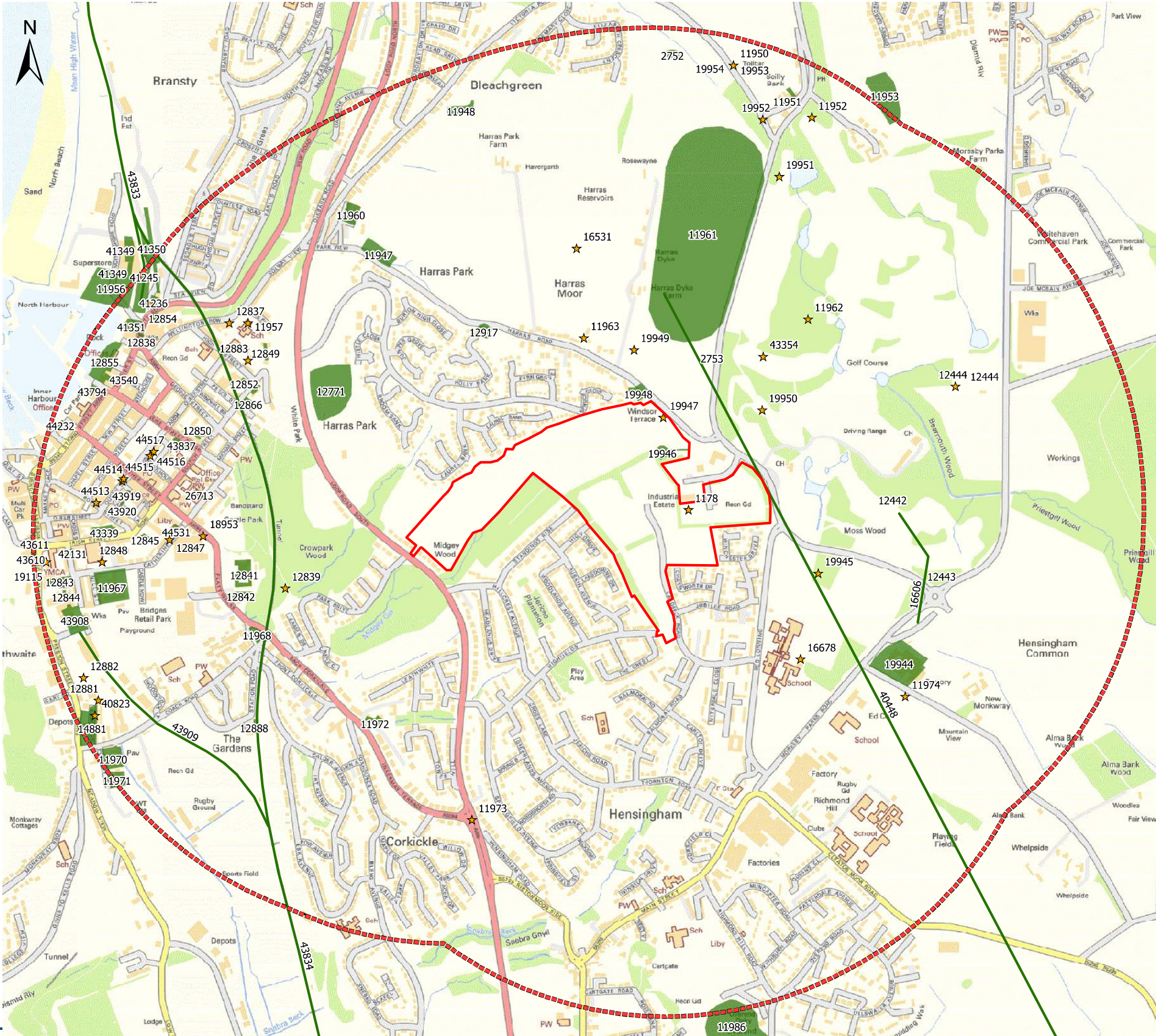
Legend

- Site boundary
- Ancient woodland
- Existing trees
- 20m offset from Ancient woodland

Woodland Plan

Archaeology

- A desk-based assessment of archaeological and built heritage assets has identified no designated assets within the proposed development area.
- The site has been utilised as agricultural land and was moorland prior to that. The potential for previously unrecorded archaeological features or deposits to be present within the site is considered low.
- Three undesigned assets were recorded within the proposed development area, including two former quarries and the possible location of a Bronze Age stone circle.
- It is not anticipated that there will be any setting impacts on any designated heritage assets.



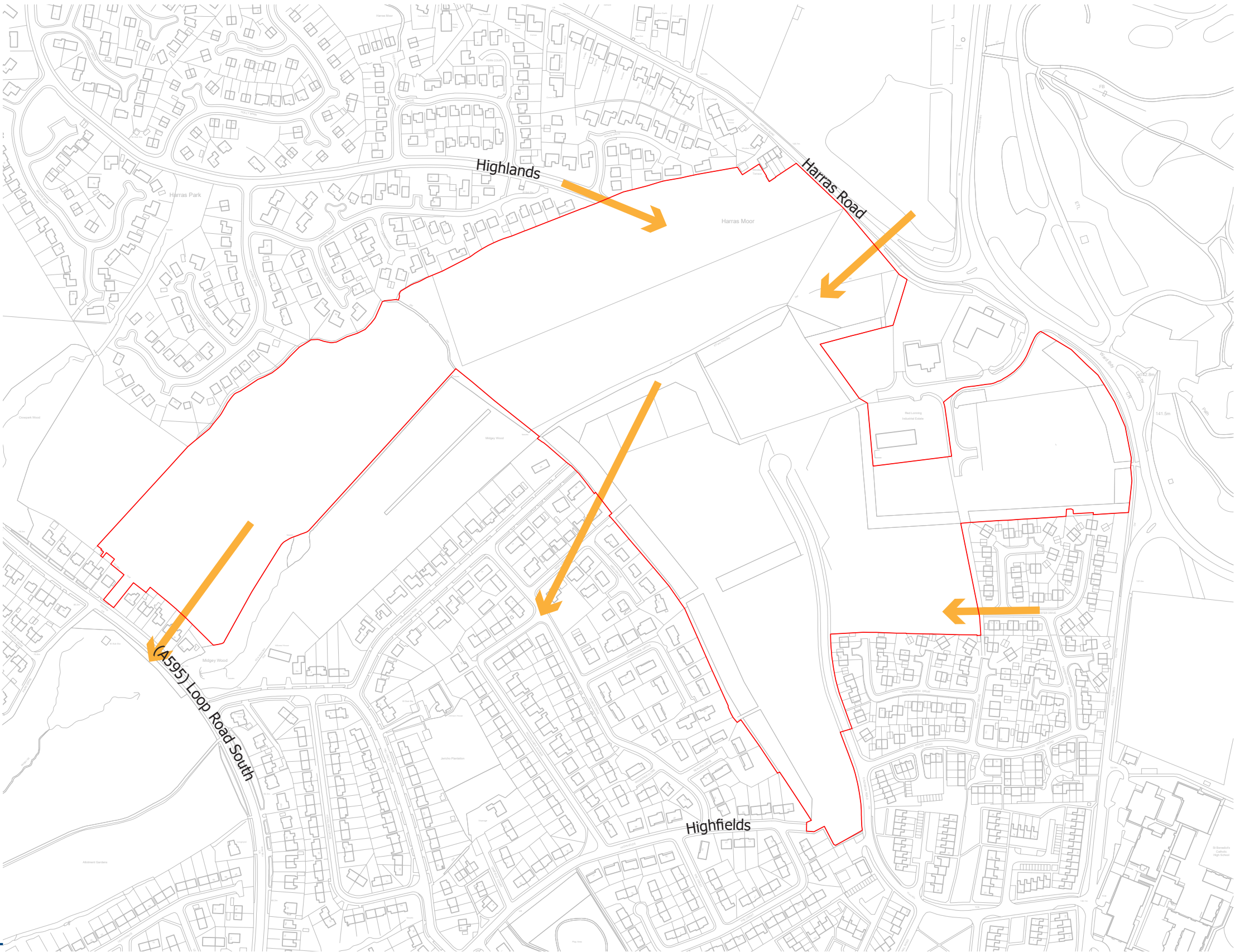
Legend

- Study Area
- Site Boundary
- Recorded Heritage Assets
- Recorded Heritage Assets
- Recorded Heritage Assets

Archaeological Assessment plan

Views

- Views into the site are possible from a number of adjacent streets including Highlands, Harras Road and Winchester Drive.
- From within the site, there are attractive long distance views looking west towards Whitehaven.
- The site is largely enclosed by surrounding built form which restricts views into and out of the site in many directions.
- There are attractive short range views towards the ancient woodland and existing tree belts within and around the edges of the site. These have shaped the layout / streetscape to create attractive set-pieces and improve legibility.
- The visual impact of existing employment buildings (uses) to the eastern boundary is minimised by landscaping around the edges of the site.



Plan showing prominent views



03

Design Proposals

Design Process

Pre-Application Meetings

Pre-Application consultation has been undertaken with Copeland Borough Council who have confirmed that the principle of the development is acceptable. Pre-Application was undertaken with Cumbria County Council Highways Authority, Lead Local Flood Authority and County Archaeologist and the proposals are acceptable in principle.

Design Process

The proposals have been shaped by an in depth technical and creative design process. This has ensured all technical considerations are mapped and that creativity and design evolution has led to the final proposals. Public consultation was also undertaken to shape the proposals.

Public Consultation

A public consultation exercise was undertaken on Thursday 15th March 2018, where the views of the local community were sought and fed into the preparation of the planning application. A Statement of Community Involvement (SCI) accompanies this application. The consultation event was very well-attended and the design team received extensive and detailed feedback on the proposals. Key feedback (and associated changes to the design) are summarised as follows, in no particular order.

- The detailed 1:500 'Illustrative layout' was drawn-up for the northern part of the site to demonstrate how the masterplan parameters could be interpreted through a full housing layout. This level of detail was requested for the whole site and this involved drawing-up the outstanding southern part of the site. This has been included in the submitted scheme.
- Following feedback from existing residents the illustrative layout was amended in two locations along the site boundary with Highlands. This involved moving two dwellings which were considered to be too close to existing dwellings. More detailed regulating design guidance has since been prepared to inform the relationship - new to existing - along this and other site boundaries.
- The intention is to ensure all residents are protected in terms of their privacy and amenity. This is not the same as the people's views out from their gardens which will inevitable change through the development.
- The boundary from the site to the existing housing at Winchester Drive has required further consideration.



1. Dwelling set back further from boundary



2. Dwelling removed close to boundary and relocated

At consultation, residents reminded the design team of the very shallow back gardens here. Various options were considered but the design solution has been based on new 5m deep supplementary planting buffers. This should protect amenity and privacy. Appropriate stand-off distances have also been provided here.

- Residents from this estate also questioned the need for a pedestrian connection into the scheme from Winchester Drive. This proposed link has been retained based on urban design considerations and an aspiration to link-up new and existing residential areas and to create a choice of safe routes to school.
- The location of the pond to the west of the site and close to existing dwellings on Loop Road South has been adjusted. This located the attenuation pond further into the site and away from existing dwellings as requested by local residents.



Final / Revised Drawing



Final / Revised Drawing

- Residents in this location also questioned the need for a pedestrian link from Loop Road South. This is needed to ensure good urban design and connectivity.
- The planting design in this location is important and the combination of new habitat areas and also defensive planting close to the backs of dwellings will ensure safety, privacy and amenity. The defensive planting and boundaries to habitat areas will minimise the ability of people to casually walk close to existing rear boundaries. A formal new boundary will be constructed along the site boundary including planting through a timber post and rail fence. The outlook of existing residents will need to be considered at the reserved matters design stage.
- The location of a proposed new footpath link into the scheme from the top of Standings Rise has been omitted and connectivity from this part of the existing estate will be from the top of High Grove, with improvements made to an existing link.

- Residents living on the Highlands estate broadly welcomed the pedestrian only link into the scheme from the top of Highlands.

Further public consultation shall be undertaken at the detailed / reserved matters stage to consider and determine the detailed treatment of all boundaries from the site to existing dwellings. The costs of all new boundaries will be met through the detailed scheme.





Photographs taken at the drop-in public consultation events at Whitehaven Golf Club in March 2018

Outline Application Consultation

During the two rounds of public consultation a number of material issues were raised on the pending application. Homes England has taken these comments on board and given detailed consideration to them. The design proposals, whilst only indicative at this stage, have been updated where appropriate. The main layout related matters addressed are outlined below.

Sports Pitch

There is a disused football pitch on the site. The use of this pitch ceased well in advance of Homes England buying the site, which was in 2017. The use of the pitch has been abandoned and the pitch is now completely overgrown as shown in the image below. The pitch does not form part of the Council's Playing Pitch Strategy and there is an over-provision for football playing fields in the local area.



Sport England objected to the loss of the pitch, as their policy state that even if a pitch is no longer in use it should either be retained or the loss be mitigated. Extensive discussions have

been held with Sport England subsequently. This included retaining the pitch in situ as shown in final design. Sport England and CBC concur that the retention of the pitch in situ is the least preferred option given that it:

- would have no natural surveillance;
- would have insufficient space available for a full sized football pitch;
- lacks ancillary facilities, and;
- lacks long term viability prospects as an isolated site.

Accordingly, the Applicant is proposing to include this area as part of the developable land in the application and will instead make a financial contribution to off-site sport facilities.

Ecology and Trees

Feedback from Natural England and recent changes in National policy and legislation has prompted the Applicant to give greater consideration to biodiversity net gain (BNG) at outline application stage.

The NPPF also introduced the requirement for planning policies and decisions to ensure that new streets are tree-lined and opportunities are taken to incorporate trees elsewhere in developments.

The Woodland Trust objected to the previous iteration of the indicative plan, insisting on a 20m stand-off from the ancient woodland.

The indicative layout and design parameters have been updated to inform subsequent detailed applications. This includes:

- retention of higher quality grassland areas (where possible); See image 1a and 1b
- increase buffer to ancient woodland to 20m;
- retention of an additional existing woodland (image 2a and 2b) area to provide enhanced green connectivity through



Noise Mitigation

The illustrative layout has been updated to reflect the recommendations as set out in the noise assessment report. Properties in the vicinity of the industrial estate are orientated to have provide gardens screened by dwellings and we have introduced a 3m high noise bund buffer that can be planted up by woodland on the top to further assist BNG.



Biodiversity Net Gain

Extensive work has been carried out by the Applicant to mitigate the impact on biodiversity as far as possible following the Natural England response to the application and the Environment Act 2021 (the 'Act') coming into law in November 2021.

The Act will require all applications to demonstrate how a development will enhance biodiversity and protect habitats. This requirement will only come into force in 2023 when the required secondary legislation (regulations) are in place. Nonetheless the NPPF also now places greater emphasis on BNG.

To demonstrate what measures have been taken to reduce the impact on existing habitats and biodiversity the applicant undertook as BNG assessment of the proposals prior to the scheme being updated. The results are summarised below.

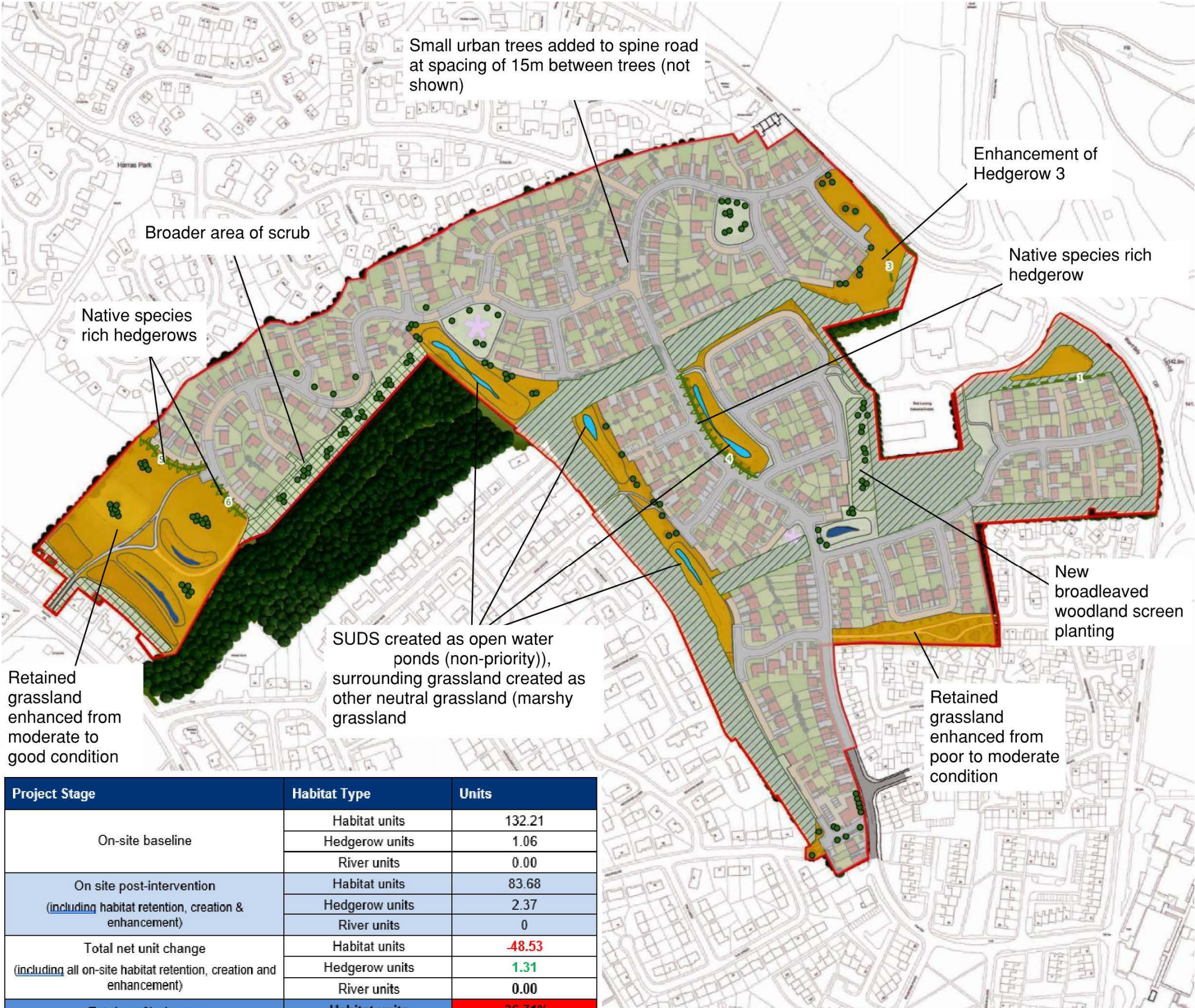
Project Stage	Habitat Type	Units
On-site baseline	Habitat units	132.02
	Hedgerow units	1.06
	River units	0
On site post-intervention (including habitat retention, creation & enhancement)	Habitat units	40.79
	Hedgerow units	1.14
	River units	0
Total net unit change (including all on-site habitat retention, creation and enhancement)	Habitat units	-91.23
	Hedgerow units	+0.07
	River units	0
Total net % change (including all on-site habitat retention, creation and enhancement)	Habitat units	-69.10%
	Hedgerow units	+7.05%
	River units	0%

The revised proposals, including the changes to the illustrative layout as already referenced, and the proposed Habitat Management Plan has resulted in a very significant betterment. Whilst the proposals will still result in an overall loss in biodiversity, the overall impact will be reduced by a 1/3 with over 80 habitat units remaining on the site and the hedgerow provision more than doubling.

Legend

- Site boundary
- Grassland - Modified grassland
- Grassland - Other neutral grassland
- Heathland and shrub - Mixed scrub
- Urban - Developed land; sealed surface
- Woodland and forest - Other woodland; broadleaved
- Urban – Sustainable urban drainage feature
- Lakes - Ponds (non-priority habitat)
- Intact hedge - native species-rich
- Defunct hedge - native species-poor
- Scattered Trees

Habitat and Biodiversity Management Plan



Project Stage	Habitat Type	Units
On-site baseline	Habitat units	132.21
	Hedgerow units	1.06
	River units	0.00
On site post-intervention (including habitat retention, creation & enhancement)	Habitat units	83.68
	Hedgerow units	2.37
	River units	0
Total net unit change (including all on-site habitat retention, creation and enhancement)	Habitat units	-48.53
	Hedgerow units	1.31
	River units	0.00
Total net % change (including all on-site habitat retention, creation and enhancement)	Habitat units	-36.71%
	Hedgerow units	123.83%
	River units	0.00%

Design Parameters

The plan opposite defines the key planning and design parameters for the site. The parameters plan sets out the overarching urban design framework for the site. The key design principles have been developed from these base parameters.

The overall site area is 23 Hectares. Of this, some 14.8 hectares is developable. Up to 370 dwellings proposed at a density of 25 dwellings per hectare. The housing mix is not within the scope of this outline application but the illustrative layout is based on a mix that includes 1, 2, 3, 4 and 5 bedroom dwellings. A policy compliant level of affordable homes will be provided in accordance with Policy SS3 of the Copeland Local Plan, which sets this at 15-25%. This application is based on a realistic view of how a quality scheme could be delivered as shown in the illustrative plan.

More than 7 hectares of green space is proposed on site. This quantum of landscape / open space far exceeds the Councils required 0.74 hectares of open space (policy DM12 for 370 dwellings). Site infrastructure accounts for the balance of land with 1.2 hectares which includes the spine road.

The parameters plan illustrates the proposed access arrangements for the site and the pattern of primary circulation. This includes pedestrian and vehicular access. The detail of individual streets is not shown here but the primary street is identified indicatively.

The parameters plan shows areas of retained woodland and ecological areas and buffer zones, along with indicative locations for areas of public open space. The linkages and relationships are apparent. Two areas of local equipped play will be provided on site and locations for these are suggested on p28 (Illustrative Masterplan). The green space includes 5.2 hectares of ecology area and 1.8 hectare of usable public open space.

Edge conditions around the site are defined in respect of residential amenity and privacy for new to existing properties. Principles governing off-set distance new to existing are defined on page 25 and the parameters plan highlights these key interfaces. A number of existing dwellings are located close to the site boundary and where this is the case further design guidance assists in ensuring an acceptable interface new to existing.

Additional buffer planting will be required on part of the site boundary as shown and this is on the basis of existing dwellings having very small back gardens. Further defensive planting is required as part of the design of the open space to the west to enhance the security and privacy of existing dwellings and back gardens off Loop Road South.



- Legend**
 - Site boundary
 - Proposed residential development up to 370 dwellings
 - Primary street (indicative)
 - Public open space (indicative)
 - Retained Ancient Woodland (outside application boundary)
 - Ecological areas
 - Proposed vehicular access
 - Potential pedestrian access
 - 20m buffer to Ancient Woodland
 - Interface new to existing offset dwellings
 - Proposed buffer planting 5m depth
 - Defensive screen planting
 - Dwellings close to site boundary or with significant change in level require careful design consideration

Parameters Plan

KEY DESIGN FEATURES

- 1 Strong gateways and arrival points to the scheme, from the wider setting through buildings and landscape design.
- 2 Distinctive sweeping streets and lanes, working with the terrain across the site, and with changes in direction to add interest and slow traffic.
- 3 Strong green corridors and edges to the development overlooked by good quality development frontages. All green spaces will be overlooked.
- 4 Strong views through and across the scheme, maximising the distinctive views towards the sea from the higher ground.
- 5 Sustainable Drainage Features through a series of interconnected water attenuation basins / ponds.
- 6 20 metre buffer zone to ancient woodland helps soften this edge and create a green collar to woodland.
- 7 New green space incorporating habitat creation, defensive planting to adjacent dwellings and sustainable drainage.
- 8 Sensitive relationship - new to existing dwellings, respecting amenity and privacy reflecting necessary interface distances.
- 9 New 5m buffer planting in combination with necessary interface distances.



Legend

Site boundary	Primary street	Proposed pedestrian linkages	Proposed attenuation basins	Existing Trees and Woodland
Proposed frontage	Secondary street	Proposed vehicular access	Ancient woodland	Proposed Planting
Proposed residential block	Private drive	Potential pedestrian access	Public open space	Local Equipped Area of Play

Illustrative Masterplan

Design Principles

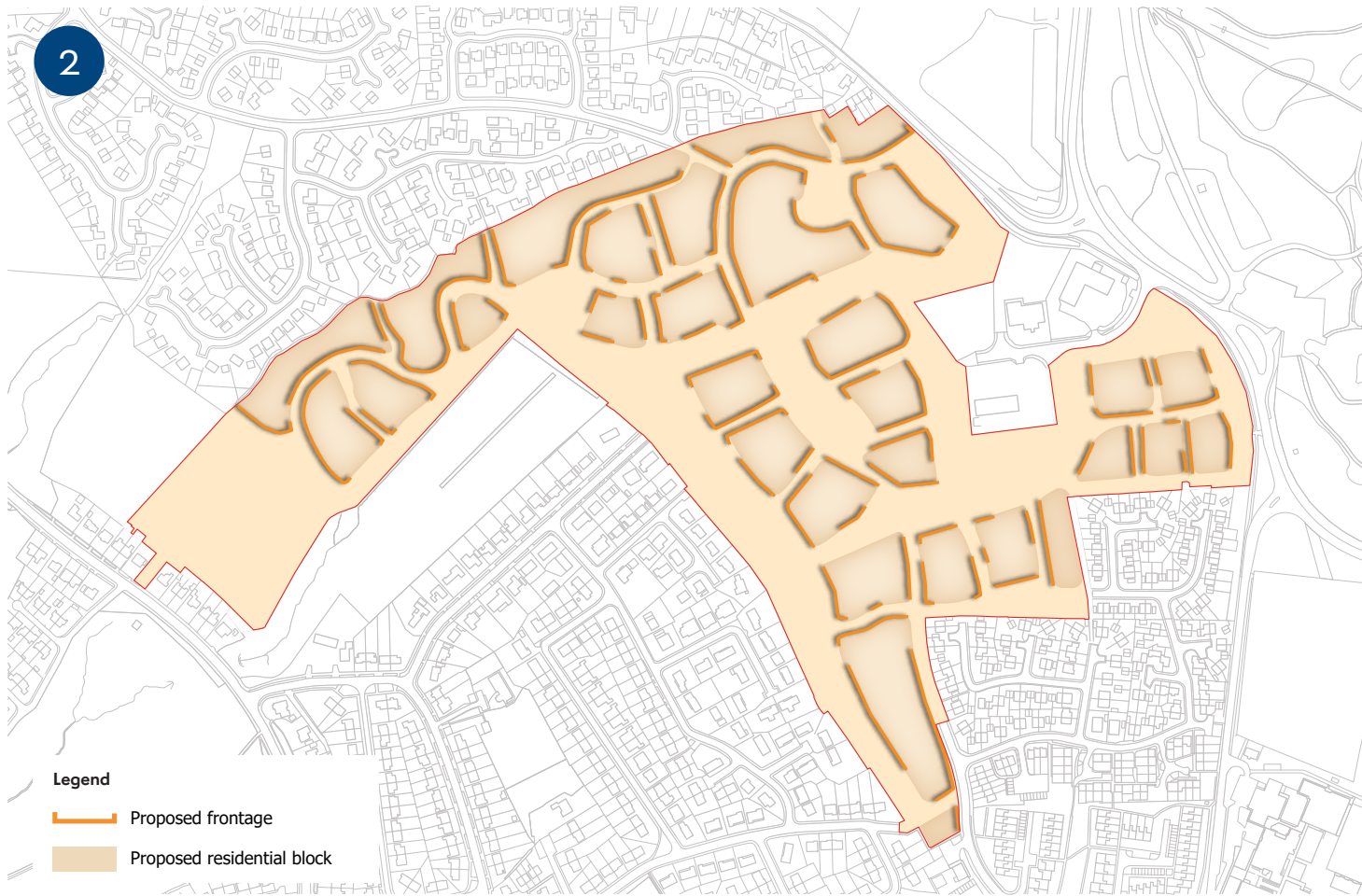


Blue Infrastructure

- Sustainable drainage is proposed for this development with surface water run-off from rainfall managed on site through a series of interlinked water attenuation ponds.
- The plan above highlights the indicative location of linked water attenuation basins / ponds. These will be confirmed with detailed design.
- The ponds are proposed to outfall at greenfield run-off levels into the adjacent watercourse and the discharge from the site will be controlled by measures such as hydro-brakes or similar. The banks of basins will be shallow and not steeper than 1 in 3 slopes. Given the terrain of the site some earthworks will be required to form basins.
- When not in use as surface water storage areas basins like the one above may contribute to open space.



- Some basins may be designed as ponds to hold water and create habitat and then to accommodate a free board of water at times of extensive rainfall.
- Drainage system will be designed to adoptable standards through detailed design in consultation with local lead flood authority (LLFA).



Blocks and Grain

- New houses will back-onto existing back gardens of properties so that the back of new houses adjoin the rear of existing properties, creating secure boundaries and protecting residential amenity.
- The development will respect best practice in privacy distances between new and existing houses. Back to back distances of 21 metres will be required between habitable room windows. Back to side / gable distances of 13m will be required.
- New bungalows could be used where site levels present particular issues and / or where existing buildings are located close to the site boundary. Where single storey buildings are proposed interface distances may be reduced back to back to 14m.
- Where substantial changes in level occur between existing plots which are close to the site edge and proposed development further design consideration will be required in line with guidance.



- New development will all be domestic in scale up to two and with some two-and-a-half storey development at prominent locations. The height of development to gable will be confirmed at the detailed level, but 2 storey development will be in the order of 8-10m and 2.5 storey up to 12m.

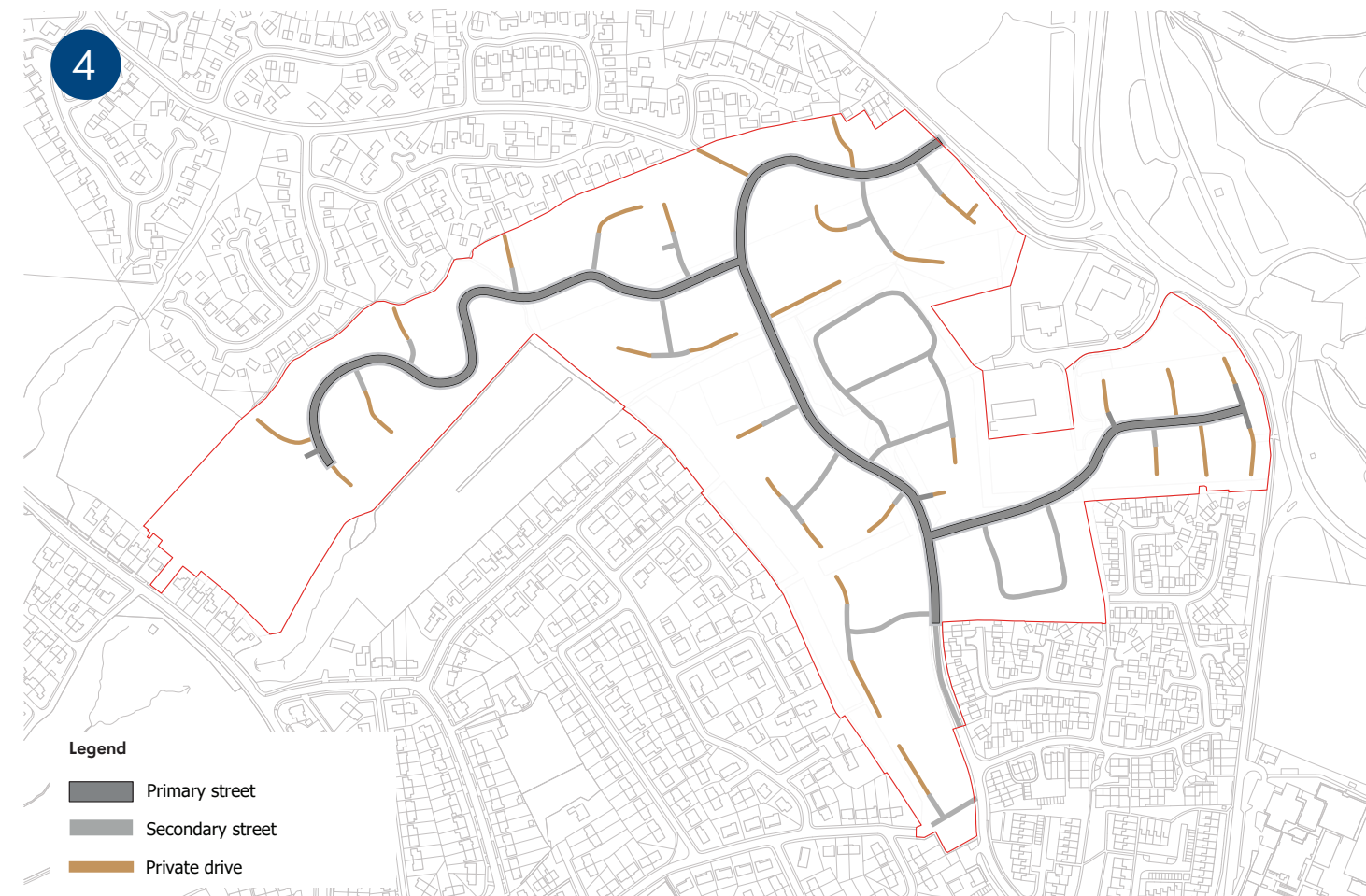


Green Infrastructure

- A series of new green spaces and linking green routes are proposed, creating a 'green spine' through the site. This links with ecological areas. Overall there are 7 hectares of green space.
- Substantial ecological areas are integrated into the landscape design and these extend to 5.2 hectares.
- Midgey Wood will be protected by a 15m buffer zone where possible and the buffer around the area designated as ancient woodland has increased to 20m. Other mature tree belts will also be retained.
- Strong green edges are proposed to provide a buffer to the development. These will be overlooked by good quality development frontages.
- Spaces will be designed with levels in mind, to ensure public open spaces are usable to residents of the scheme.



- Two areas of local equipped play will be provided on site and locations for these are suggested on p28 (Illustrative Masterplan) in line with planning policy requirements.
- The green space includes 1.8 hectares of usable public open space, including the 2 play spaces.



Access and Connectivity

- The primary vehicle route between Harras Road and Caldbeck Road provides access to and through the site.
- Pedestrian connection is provided to Loop Road South. Potential pedestrian connectivity is proposed to other existing streets where possible, including High Grove, Higfields, Highlands and Winchester Drive.
- A clear street hierarchy comprising principal streets through to local single-sided private drives fronting green spaces and greenways.
- The indicative street pattern is a clear response to the site terrain and reflects the need to create streets of an acceptable gradient for adoption by the highway authority. The design also reduces the need for extensive retaining walls.

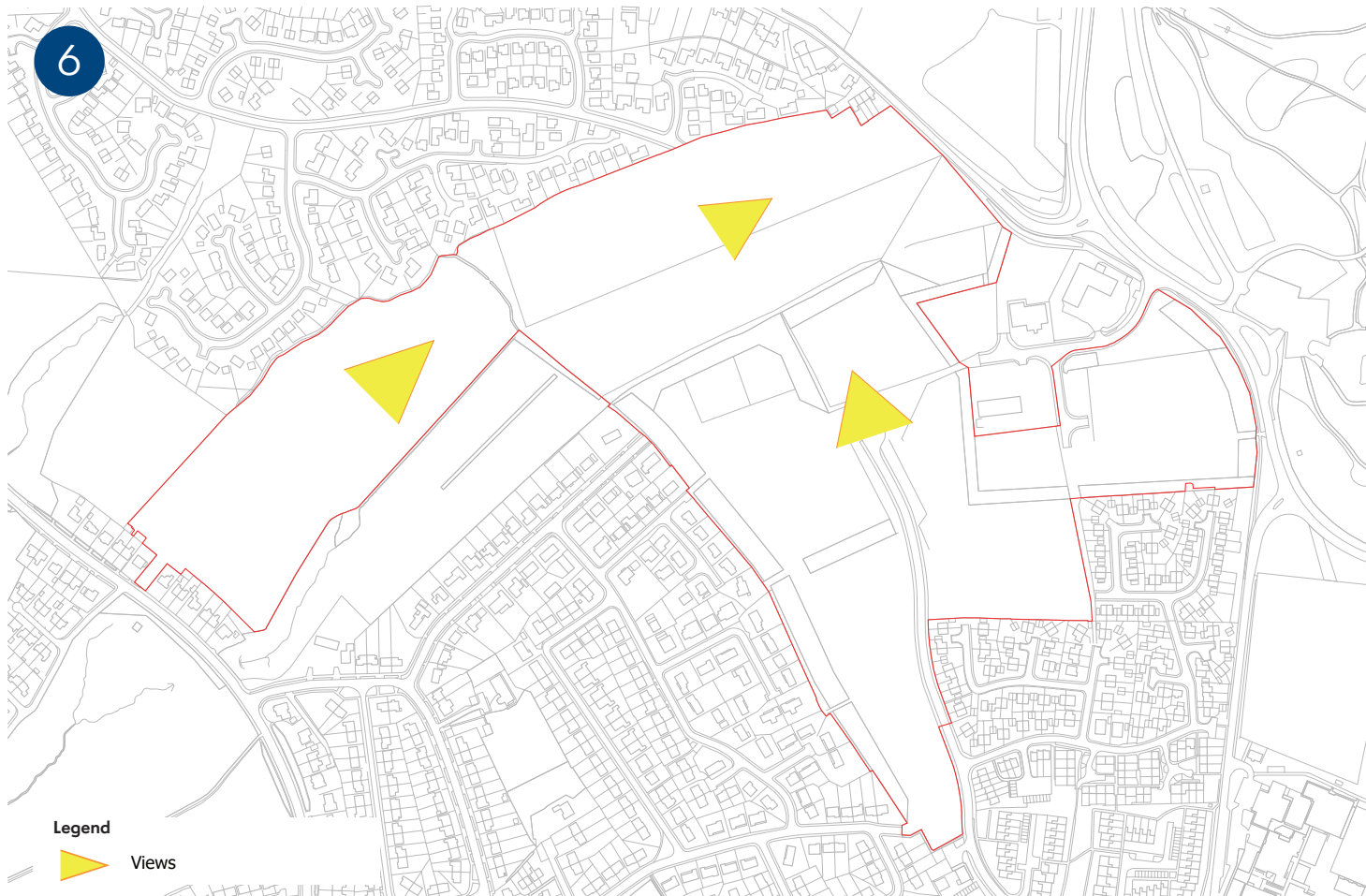


Design Principles



Frontages & Corners

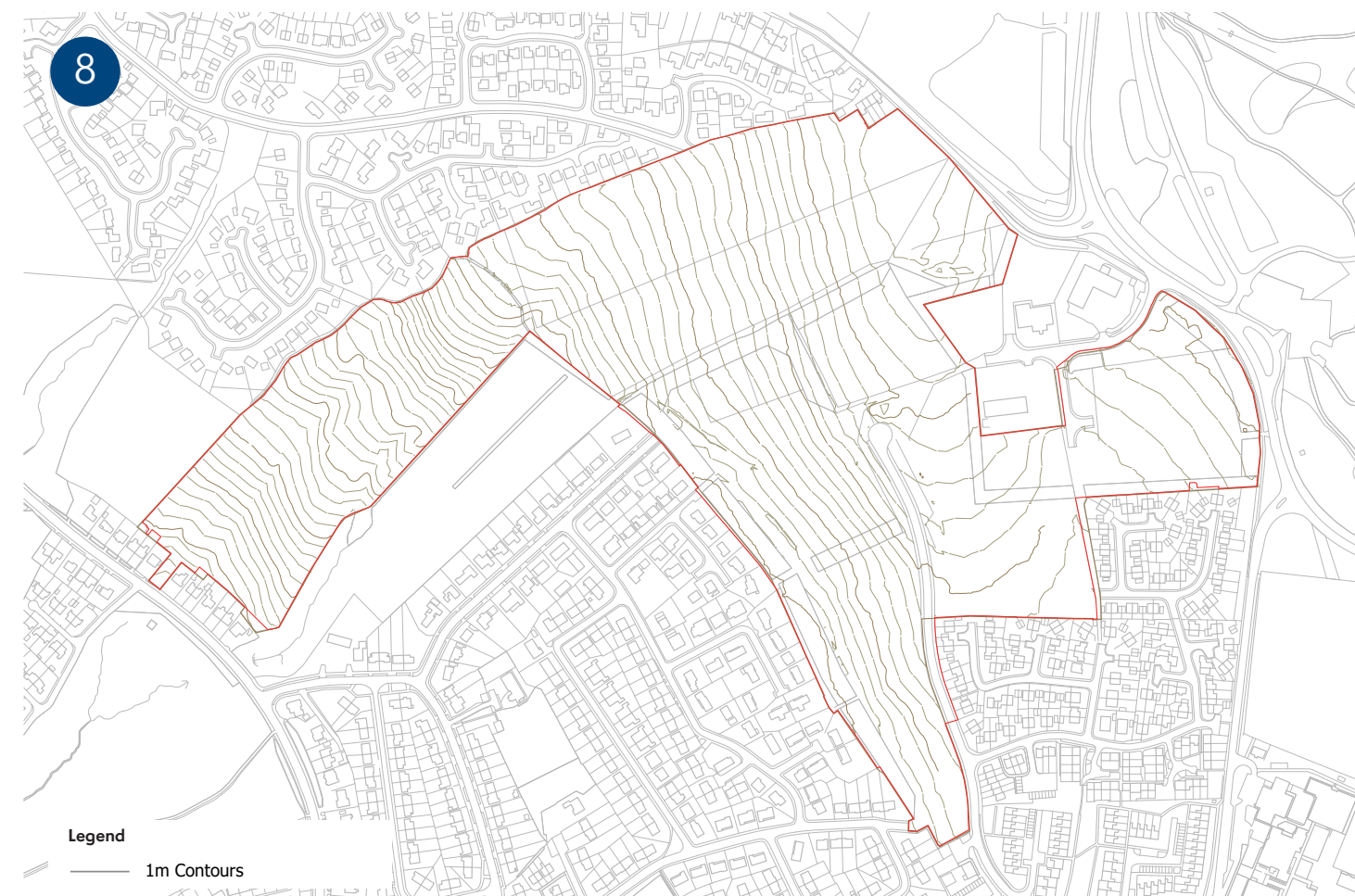
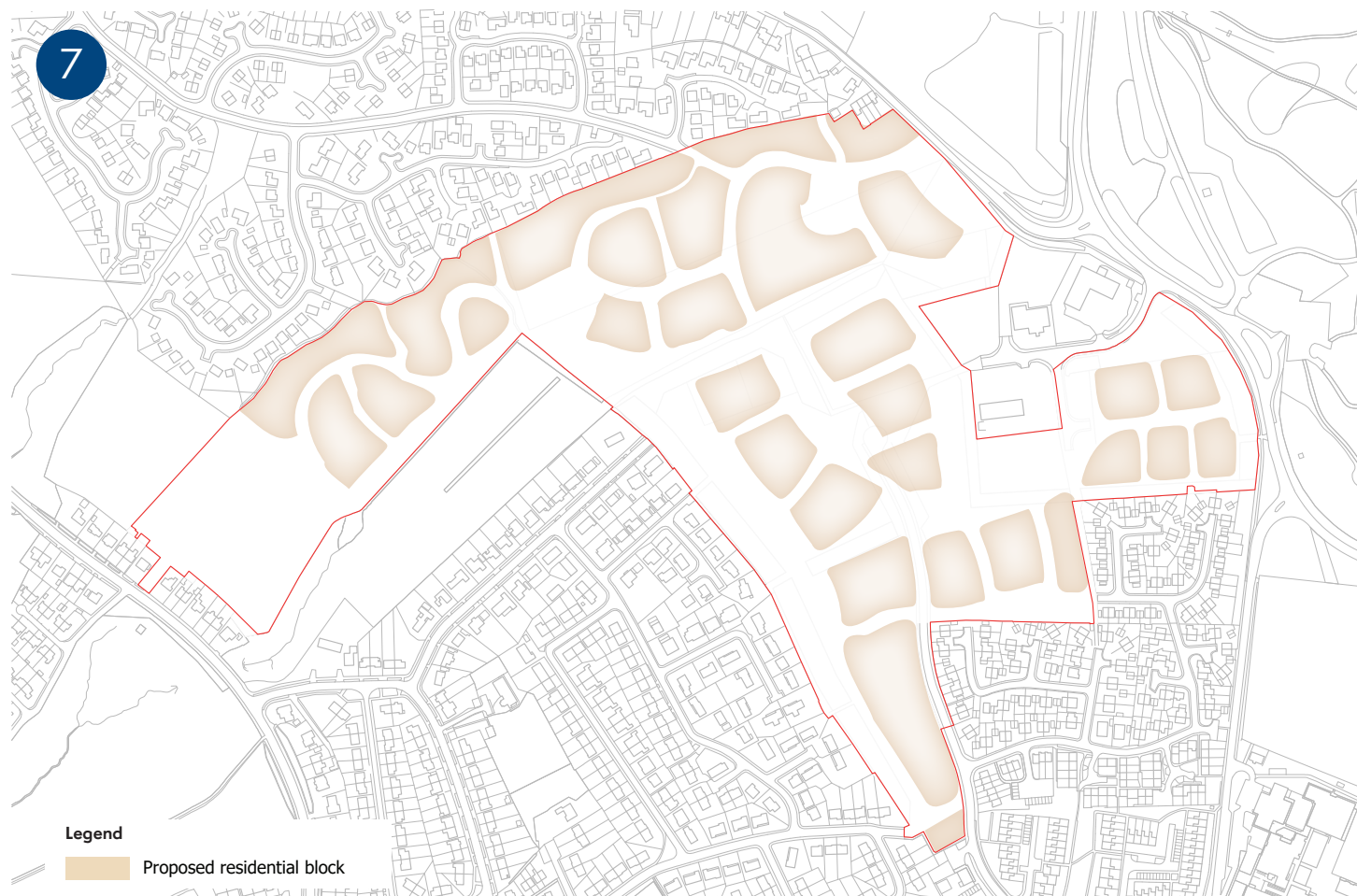
- Corner-turning house types will be located at key junctions. These house types are special as they will elevate to both frontages they address around the corner.
- Feature/header buildings will terminate vistas along key routes and create local landmarks. These buildings may have changes in design, materials or landscaping.
- Streets will be well-defined by houses with built form defining streets and lanes and creating consistent building lines across the development.
- Positive frontages are required onto areas of public open space providing surveillance and enclosure. This includes the formal green / play space and also the habitat areas. No open spaces should be backed-onto by development.
- Striking buildings should define the gateways into the development and create a strong first impression.



Vistas & Landmarks

- Interplay of organic street pattern and topography provide unfolding views as one moves through the development.
- Potential for areas of distinct character within the development as a whole, with design cues taken from the intrinsic qualities of the site itself as well as the surrounding context.
- Areas of public open space will provide focal points and distinct 'moments' along primary routes through the development.
- Views retained towards ancient woodland and existing tree belts.
- Landscape design to support the creation of gateways into the scheme.
- Strong and attractive green edges to the scheme throughout.





Density

- This is a challenging, sloping site where high density development would be both inappropriate and difficult to deliver.
- Overall the proposals demonstrate 25 dwellings per hectare is deliverable for the site as a whole, based on a net developable area of 14.78 hectares and 370 dwellings.
- Density will be guided by levels and will reduce significantly where levels are steeper. The northern parcel, above the woodland strip will be lower density than the southern parcel.
- Density will reflect surrounding residential areas so that existing residents in the area will see development of similar density to their own homes nearby.



Topography

- The topography of the site is particularly challenging in the northern and north-western sections of the site and the design will address this key challenge.
- Where the gradient is steepest there will need to be more space around buildings and accordingly a lower density to address the change in levels.
- The alignment and design of roads will achieve acceptable gradients of not more than 1 in 12 (short sections) and more typically not more than 1 in 16.
- It is envisaged that development will require retaining walls, but that these will be minimised. Walls or other features shall be low between plots along the streets.
- Back gardens should not be steeper than 1 in 10 to remain use-able and retaining walls may be needed between back gardens to address levels on site.



- Where existing dwellings are located close to the site boundary, local ground levels become an important consideration in achieving an acceptable relationship between new and existing dwellings. Where houses would be set substantially below or above one another greater off-set distances may be necessary to achieve a comfortable and appropriate interface.

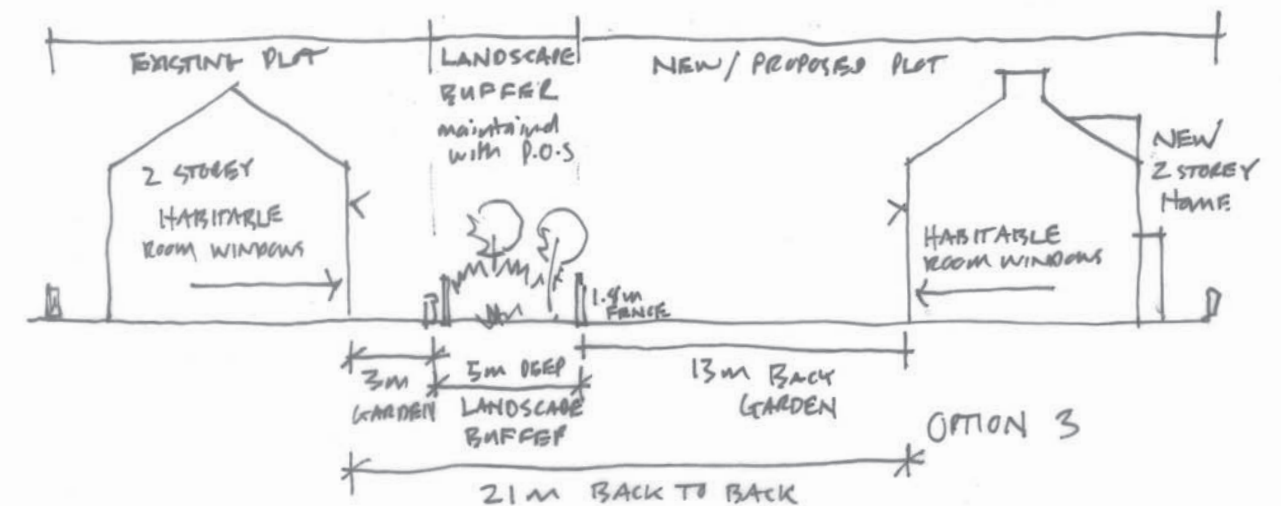
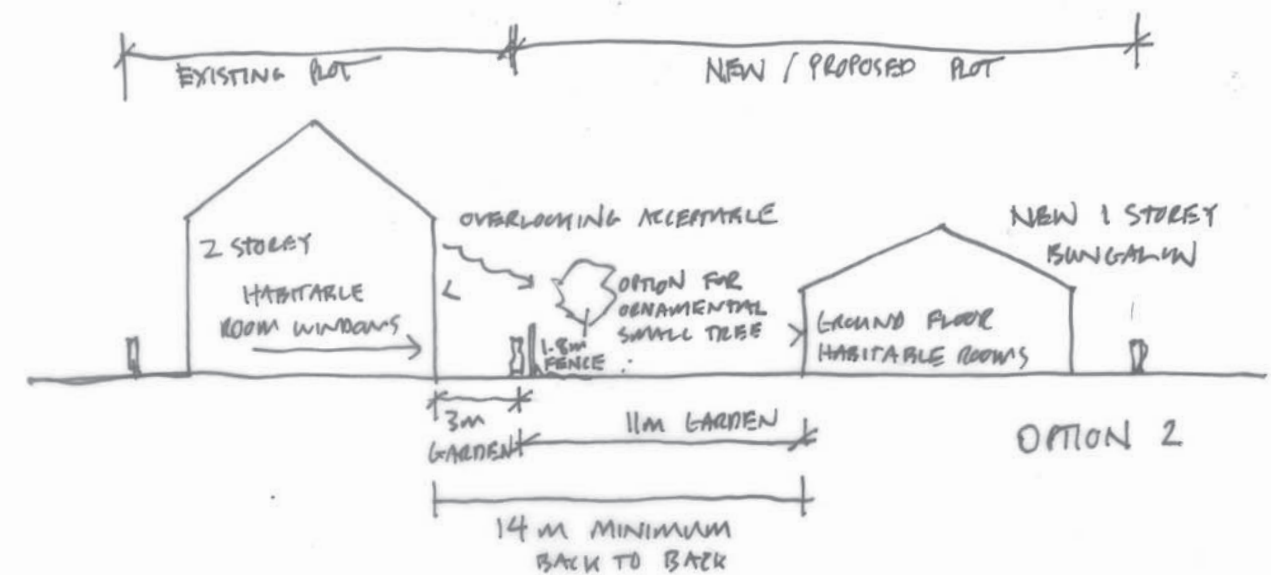
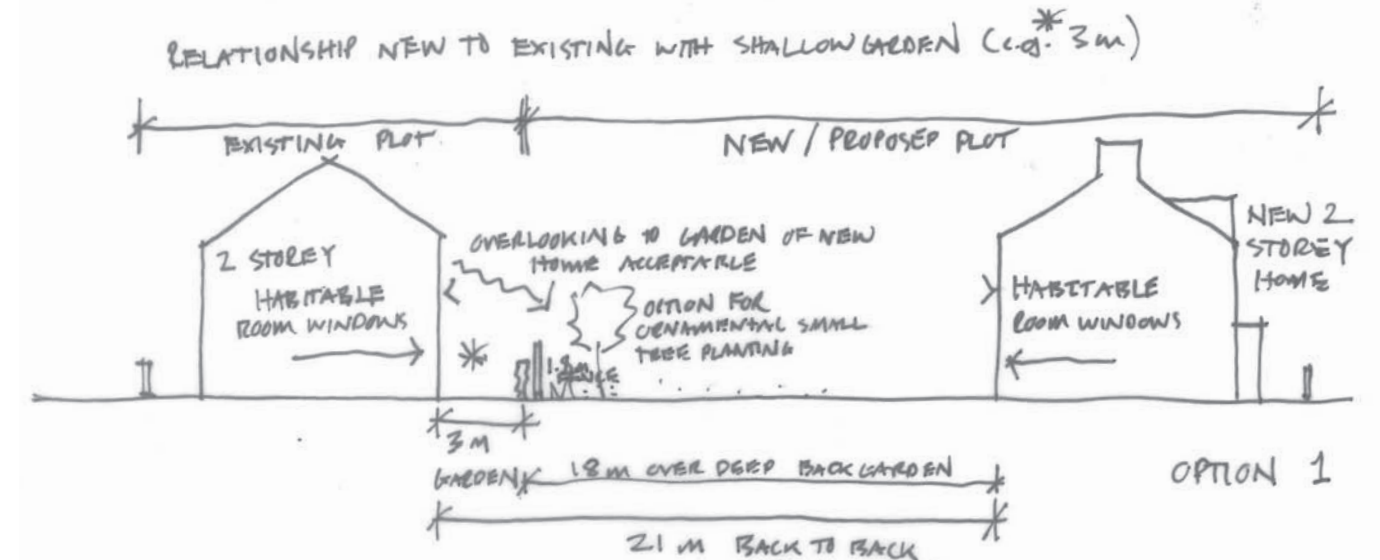
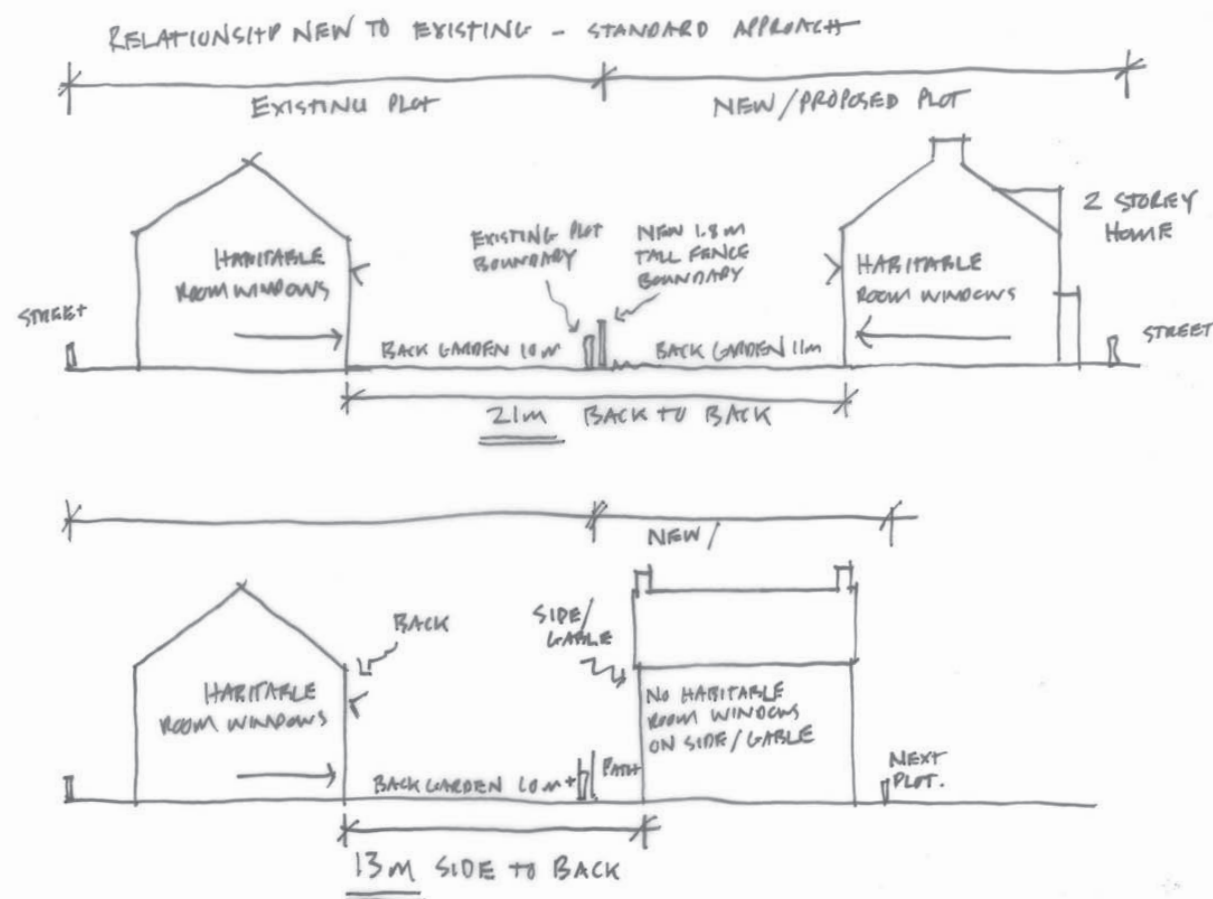
Plot Sections - Relationships New to Existing

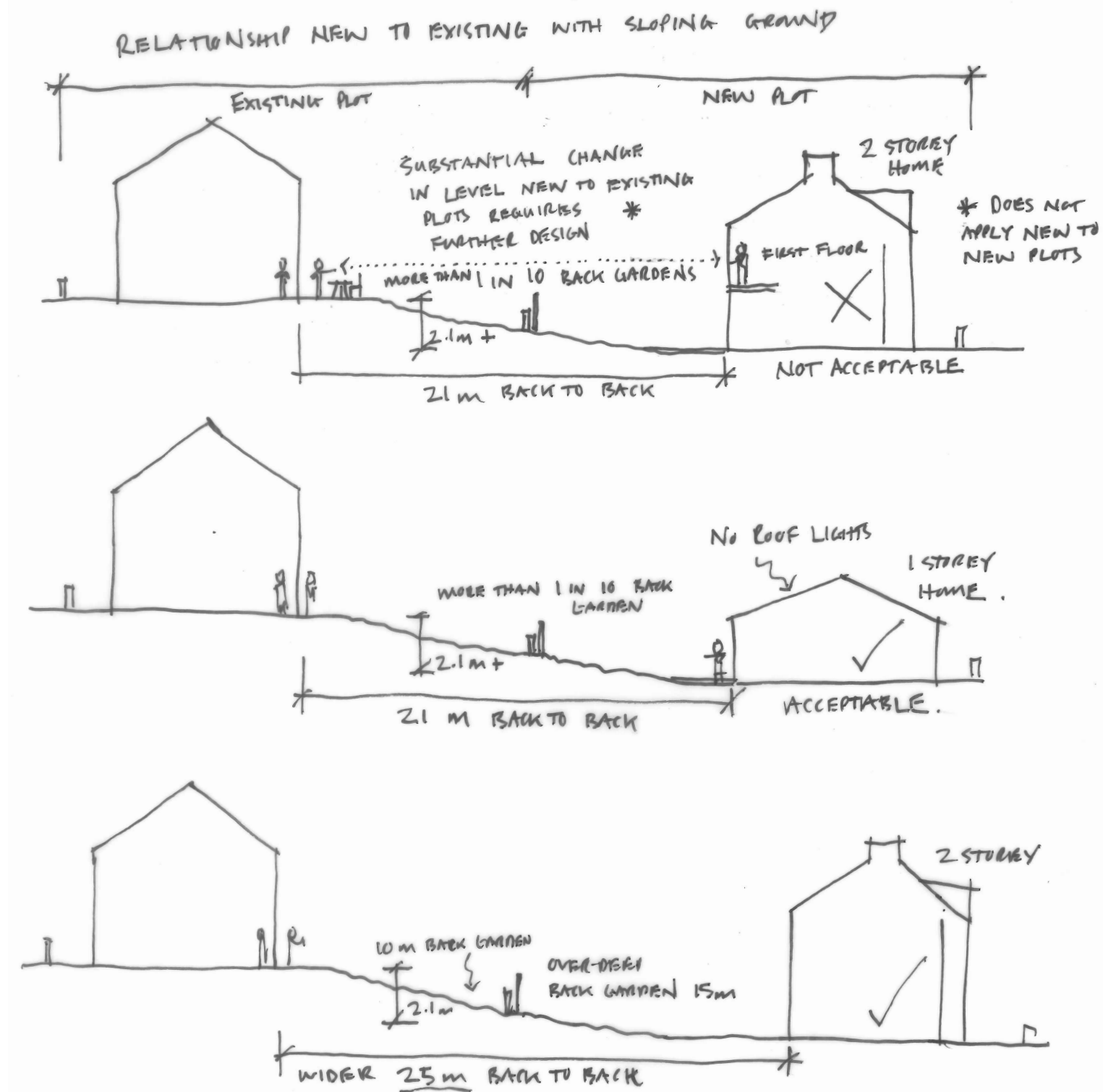
The drawings below illustrate the 'standard' approach of new development built alongside existing housing and the relationship of the two dwellings in section. Typically back to back distances between habitable room windows shall be 21 metres. The relationship between the backs of existing dwellings and the gables (side elevations) of proposed houses can be tighter but not less than 13 metres.

At Harras Moor there are several locations where the back gardens of existing dwellings are much shallower than typically expected (say 10-11m). In places these back gardens are only 3-4m deep. In these circumstances there are a number of options as to how new development can be successfully set-out. With two storey development the standard 21m will be required so deep back gardens may be appropriate. Alternatively a landscape buffer could be introduced to create added privacy for existing residents. This is the preferred approach close to Winchester Drive. Another approach could be to locate single storey development (bungalows) in these locations and in this case development can step closer but not less than 14m. The sketches opposite illustrate these 3 options.

Another consideration is site levels and the relationship new to existing where land falls away down-slope from existing plot levels. The three sketches on the opposite page illustrate the issues and potential solutions. The key concern is inter-visibility between ground floors and gardens of the higher property and the bedrooms of the lower property, which will typically be the new / proposed dwellings. The indicative sections highlight back gardens at 1 in 10 slopes. Assuming 2 storey development the stand-off distance should be 25m. Stand-off distances of 21 metres would only typically be successful with the dwelling located to the lower level being a bungalow.

These relationships are focused on new to existing dwellings and do not apply new to new.





Example of houses built on site with steep gradient. The private drive to the front of these 4 dwellings is constructed at 1 in 16.

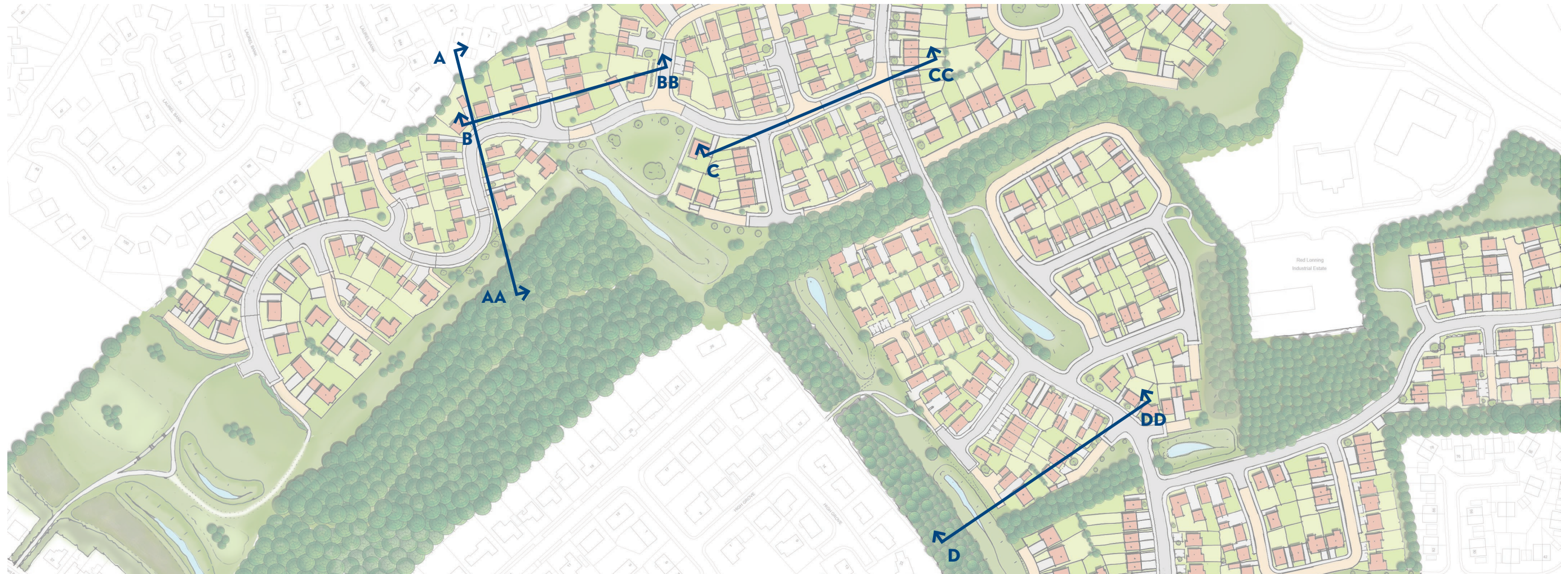


Example of retaining walls between gardens within the plot. These are located at the bottom of back gardens.

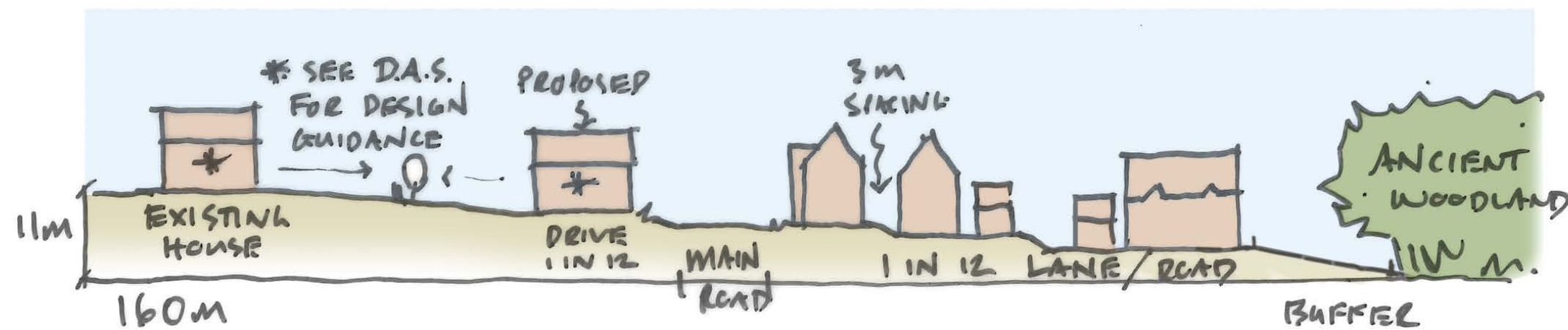


Designed carefully the steep gradients on this site do not compromise quality. The density is affected however and reduced from a flat site.

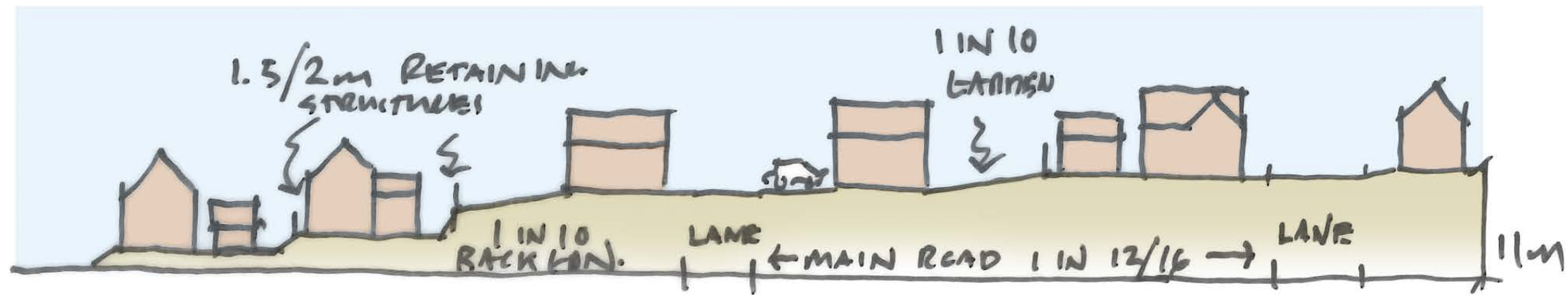
Cross Sections - Challenging New Streets



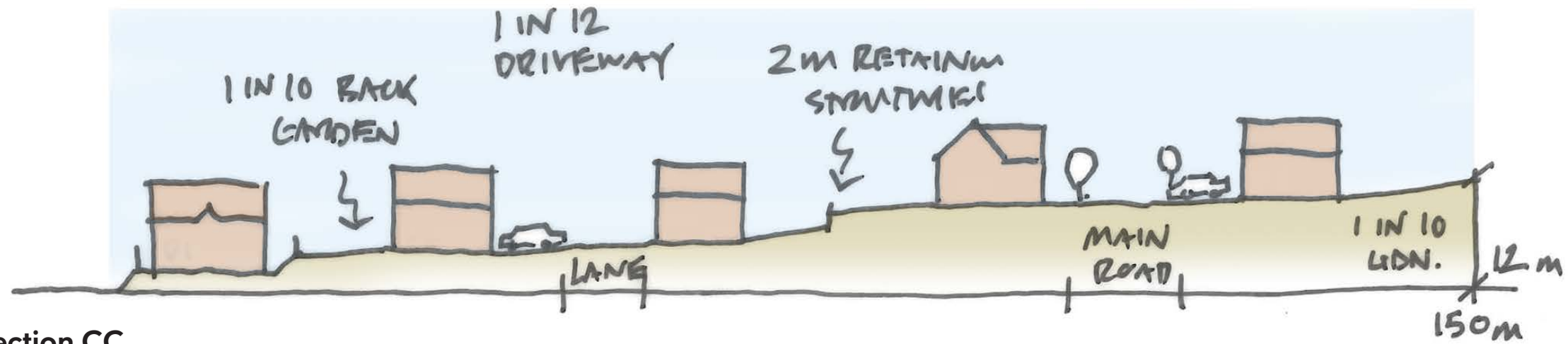
Illustrative Layout Plan



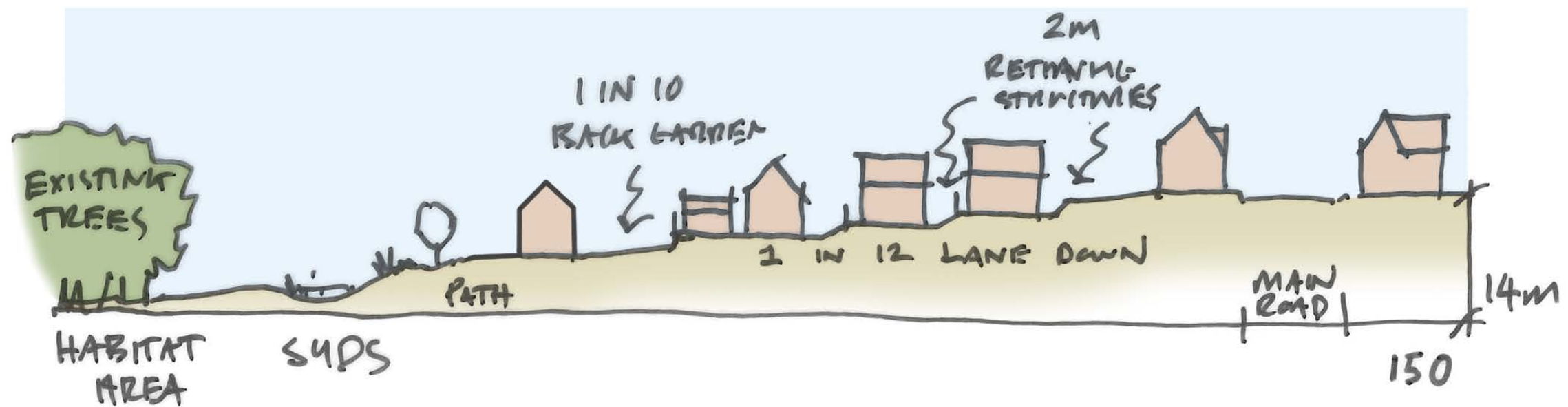
Section AA



Section BB



Section CC



Section DD

Illustrative Layout

Due to the constrained nature of the site, particularly with regard to topography, an Illustrative Layout Plan has been produced to show how the scheme could potentially work. This is an example of how the design principles and planning parameters could be carried forward into a scheme which house builders would want to deliver. The layout reflects a commercially based mix and levels of affordable housing that accord with planning requirements. All constraints are reflected in this plan. Nevertheless, it is important to stress that the planning application is not seeking permission for any of this detail at this stage. The application seeks agreement for principles and parameters.

Conclusion

On behalf of Homes England this Design and Access Statement is submitted in support of an outline planning application for the site at Harras Moor, Whitehaven.

The site is greenfield in nature. The proposal includes the development of up to 370 residential units and associated infrastructure including roads, open space and SUDS.

The applicant has taken positive steps to identify and avoid the most valuable habitats where possible and to create opportunities for habitat enhancements as part of the proposed green and blue infrastructure for the site.

The Illustrative Layout provides further detail to the proposed Illustrative Masterplan, and demonstrates that a ‘market-facing’ mix of dwellings can be delivered on this site, in the context of the various key site constraints and opportunities.

This development positively addresses its boundaries and interfaces, with units facing towards the existing streets and sensitive boundary treatments used at interfaces with existing residential dwellings.

Overall, the proposals for residential development present a comprehensive and thoughtful approach to respond to the site context, as well as integrate with the adjacent existing residential communities.



Artist impression of the landscaping and views in the development



- Legend**
- Indicative dwellings
 - Indicative primary streets
 - Indicative shared surface / private drives
 - Open space
 - Indicative back gardens
 - Retained trees / woodland
 - Proposed trees
 - Acoustic bund
 - Attenuation areas
 - Local Equipped Area of Play (LEAP)

