

# Pump Farm & Bloor Farm, Lower Rainham, Kent Design And Access Statement

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Prepared by PRC Architecture & Planning on behalf of A C Goatham & Son

Issue A

PREPARED BY:	PRC ARCHITECTURE & PLANNING LIMITED 24 CHURCH STREET WEST, WOKING, SURREY, GU21 6HT T: 01483 494 350 www.prc-group.com
ON BEHALF OF:	Pump Farm & Bloor Farm, Lower Rainham, Kent
PREPARED BY:	Sarah Warbrick, Graphics Technician / Andy Ryley, Senior Associate Director
CHECKED BY:	Gary Symes, Director
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# 1.0 INTRODUCTION

## 1.1 TERMS OF REFERENCE

Application Site: Pump Farm and Bloor Farm, Lower Rainham, Kent  
Local Authority: Medway Council  
Site Area:  
Current Use: Agricultural  
Proposed Use: Mixed residential, retail, education, and extra care.

## 1.2 PURPOSE OF DOCUMENT

This document has been prepared on behalf of the applicant, A C Goatham & Son, in support of the outline planning application for the redevelopment of the site for a residential-led mixed use scheme, including site access (all other matters are reserved).

This document considers the existing site and its influences. It sets out the proposed design approach in terms of access, use, amount, and illustrative layout, scale, appearance and materials.

This application is in Outline only, with the exception of “Means of Access”, all matters are to be reserved. To that end, the application therefore does not include any scaled floor or elevation plans. The drawings and other diagrams within this document are not to scale. Drawings submitted separately with this application are to scale, and should therefore be referred to.

This document incorporates the Design and Access Statement that accords with the national information requirements set out in the National Planning Practice Guidance and the form and content of Design and Access Statements which are prescribed by the Town and Country Planning (Development Management Procedure) (England) Order 2015.



Fig. 1: Aerial Photo of the Site (Google Earth) with site outlined in red



# 1.0 INTRODUCTION

## 1.3 DOCUMENT STRUCTURE

The document introduces the applicant and design team, and sets out the vision for the site. The existing surrounding context of the site is identified with key views of the site established. The site history and heritage along with the current planning design policies are highlighted.

Following this, a detailed site assessment is providing a general overview of the site in terms of existing uses and structures and built form, with the existing levels, landscape, ecology, archaeology, views, water resources, utilities and highway matters discussed. A summary of the existing position is then set out in a site influences plan that demonstrates the existing constraints and opportunities presented by the site.

The context, evaluation and assessment is then brought together to form a series of design principles which have been applied when developing the submitted proposal.

The design development is then set out with the rationale for the use and amount and access design addressed in detail, with the vehicle and pedestrian movement, landscape structure, layout, scale and appearance type of accommodation demonstrated in illustrative form (future reserved matters applications will address the detail of these elements).

The Design Approach document concludes with a discussion on the phasing and implementation of the project and a summary of the proposed development.

## 1.4 DESCRIPTION OF THE APPLICATION

The application is in outline for the use, amount and access. The layout, scale, appearance and landscape are reserved matters.

The proposal comprises a residential-led mixed use development of:

- 1,250 residential dwellings (1,2,3, and 4+ bed units)
- 1,000sqm Local Centre
- 60 bed Extra Care Apartments and facilities
- 80 bed care home
- a 2 form entry Primary School
- Primary Access/ Loop Road with landscape infrastructure

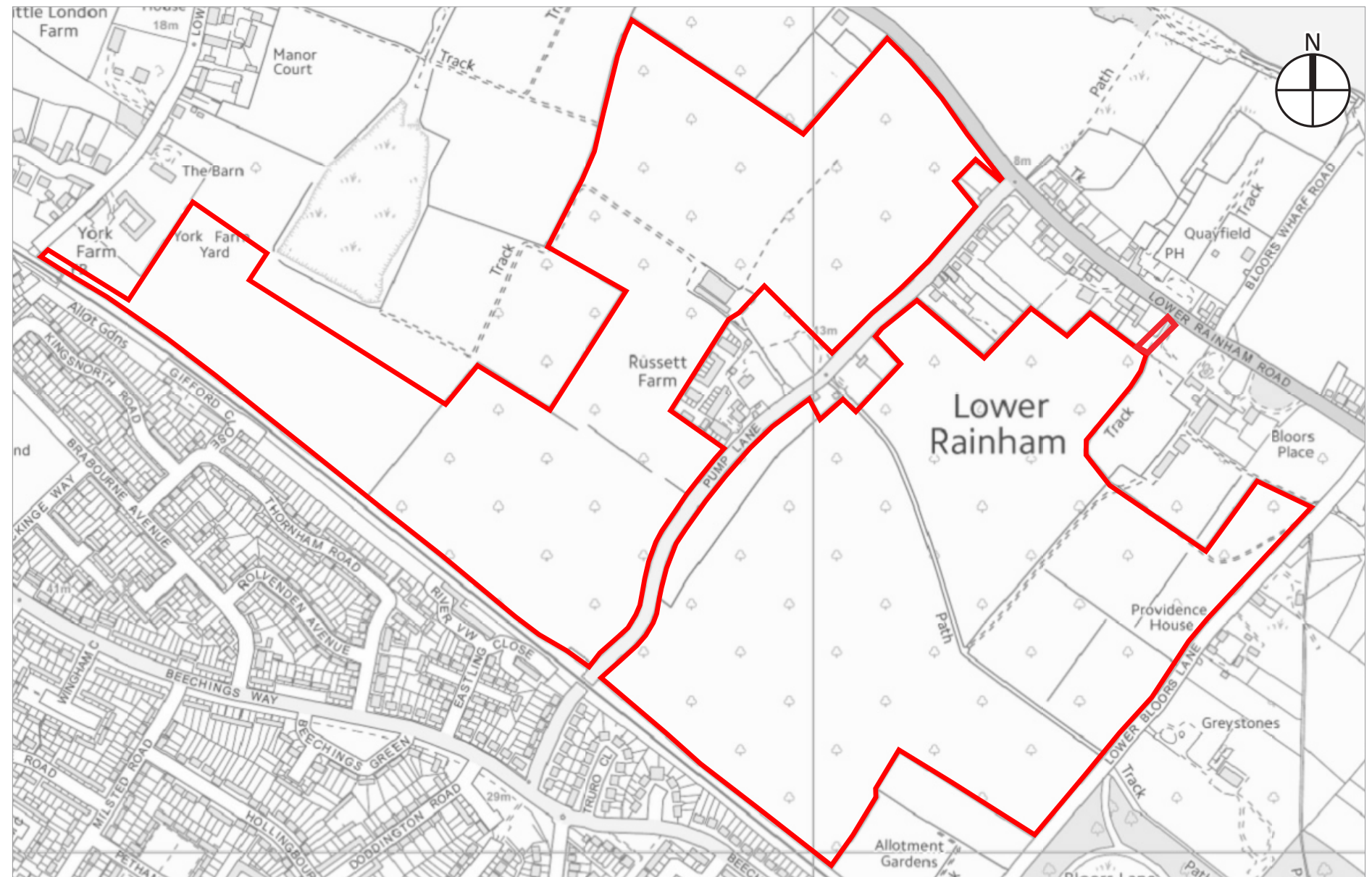


Fig. 2: OS Extract of the Proposal Site



## 2.0 SITE CONTEXT

### 2.1 SITE LOCATION

The site lies to the east of Gillingham and Chatham, and north west of Rainham, immediately south of Lower Rainham Road between the built up area to the south and the Riverside Country Park and River Medway Estuary to the north.

### 2.2 SITE CONTEXT

The site comprises circa 51.2 ha of agricultural land laid to orchard. The site is bounded by Lower Rainham Road (B2004) to the north, Lower Bloors Lane to the south and the London to Margate rail line to the south. To the north west are found open fields leading to Lower Twydall Lane.

The site is bisected north to south by Pump Lane and the eastern half of the site is bisected by a Public Bridleway (ref.no GB6A). Immediately adjacent to the southern point there is an area of allotments. The village of Lower Rainham abuts the site to the north east along Lower Rainham Road. There is sporadic development between the rail lines and Lower Rainham Road.

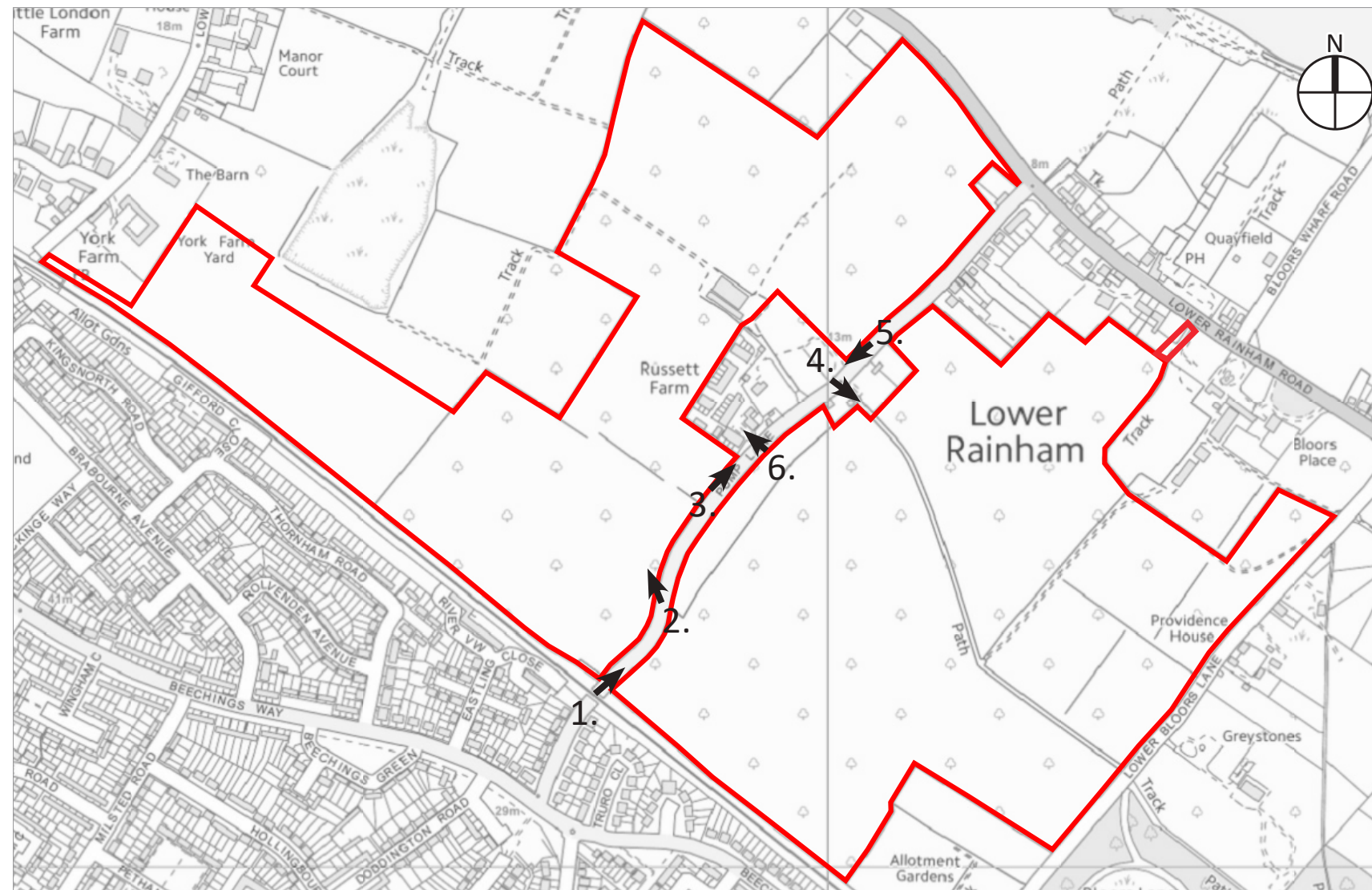


Photo 1 - View north along Pump Lane



Photo 2 - Existing orchard within site



Photo 3 - View north along Pump Lane to Pump Farm



Photo 4 - View east along PROW from Pump Lane



Photo 5 - View south along Pump Lane



Photo 6 - Russett Close from Pump Lane



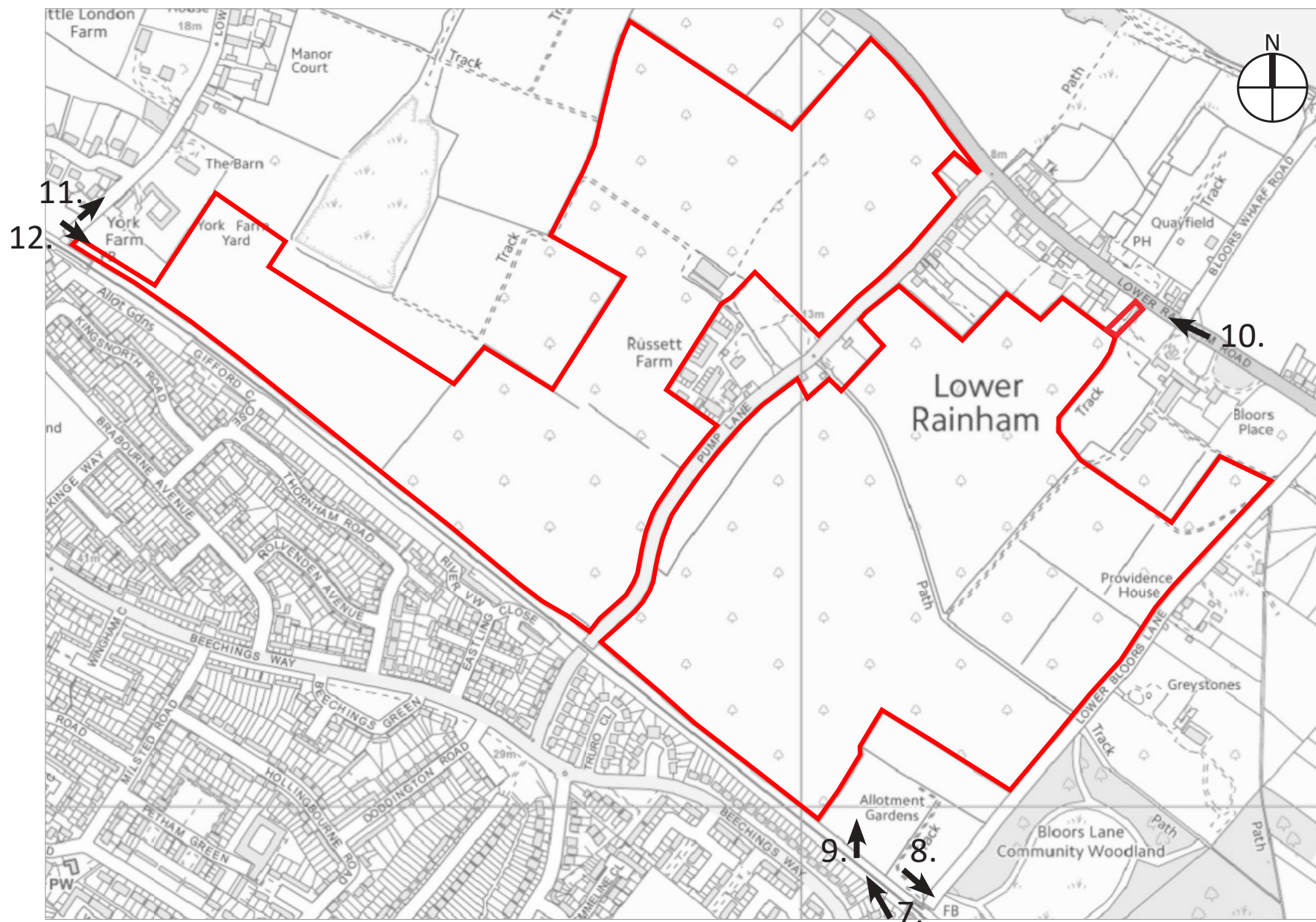


Photo 7 View of footbridge over railway at Bloor's Lane



Photo 8 Rainham Station from Bloor's Lane footbridge



Photo 9 View of the allotments to the southern corner of the site



Photo 10 View of traffic lights in Lower Rainham Road B2004



Photo 11 View north along Lower Tydall Lane



Photo 12 View of footbridge over railway at Lower Tydall Lane



## 2.0 SITE CONTEXT

### 2.3 EXISTING VIEWS

Due to the gently sloping nature of the site towards the River Medway Estuary there are a number of glimpsed long distance views from Pump Lane, Lower Bloors Lane and from within the site itself which should be protected and utilised in the detailed layouts.

### 2.4 SITE HISTORY/ HERITAGE

There are no Scheduled Ancient Monuments, Registered or Historic Parks and Gardens, Protected Military Remains or Cropmarks within a 1000m search radius of the centre of the Site.

There are two Conservation areas bordering the Site – Lower Rainham, which is immediately north of Bloors Farm, and Lower Twydall which is to the west of Pump Farm.

There are three Grade II Statutory Listed Buildings within the immediate vicinity of the site; Chapel House on the corner of Pump Lane and Lower Rainham Road; Pump Farm House on Pump Lane and Bloors Place, Lower Rainham Road.

Historical records indicate the presence of ‘flint implements’ dating from the prehistoric/ palaeolithic period found during the excavation of the Twydall Chalk Pit/landfill in 1989.

The Site lies within an area characterised as Historic Landscape Character Assessment 17 – Northern Horticultural Belt.



Fig. 3: Existing glimpsed long distance views to be retained



Photo 13 - View east across the site from Lower Twydall Lane



Photo 14 - Long distance view from the southern boundary in the eastern half of the site to the estuary



Photo 15 - Long distance view from the highest point on the western half of the site to the estuary



Photo 16 - View across the south west corner of the site



## 2.0 SITE CONTEXT

### 2.5 PLANNING DESIGN POLICY

#### Adopted Local Plan

The Medway Local Plan was adopted in 2003. Policies were saved in September 2007 and the following policies were extended in 2007, Residential Development in rural areas (R11), countryside protection (BNE25) and Area of Local landscape Importance (BNE34).

The adopted Local Plan Proposals Map confirms that the site falls outside the defined settlement area and therefore comprises part of the 'open countryside'. It is also subject to the Area of Local Landscape Value policy.

#### Emerging Local Plan

A Regulation 18 consultation took place in June 2018 – the site was not included as an option for development although representations had been made.

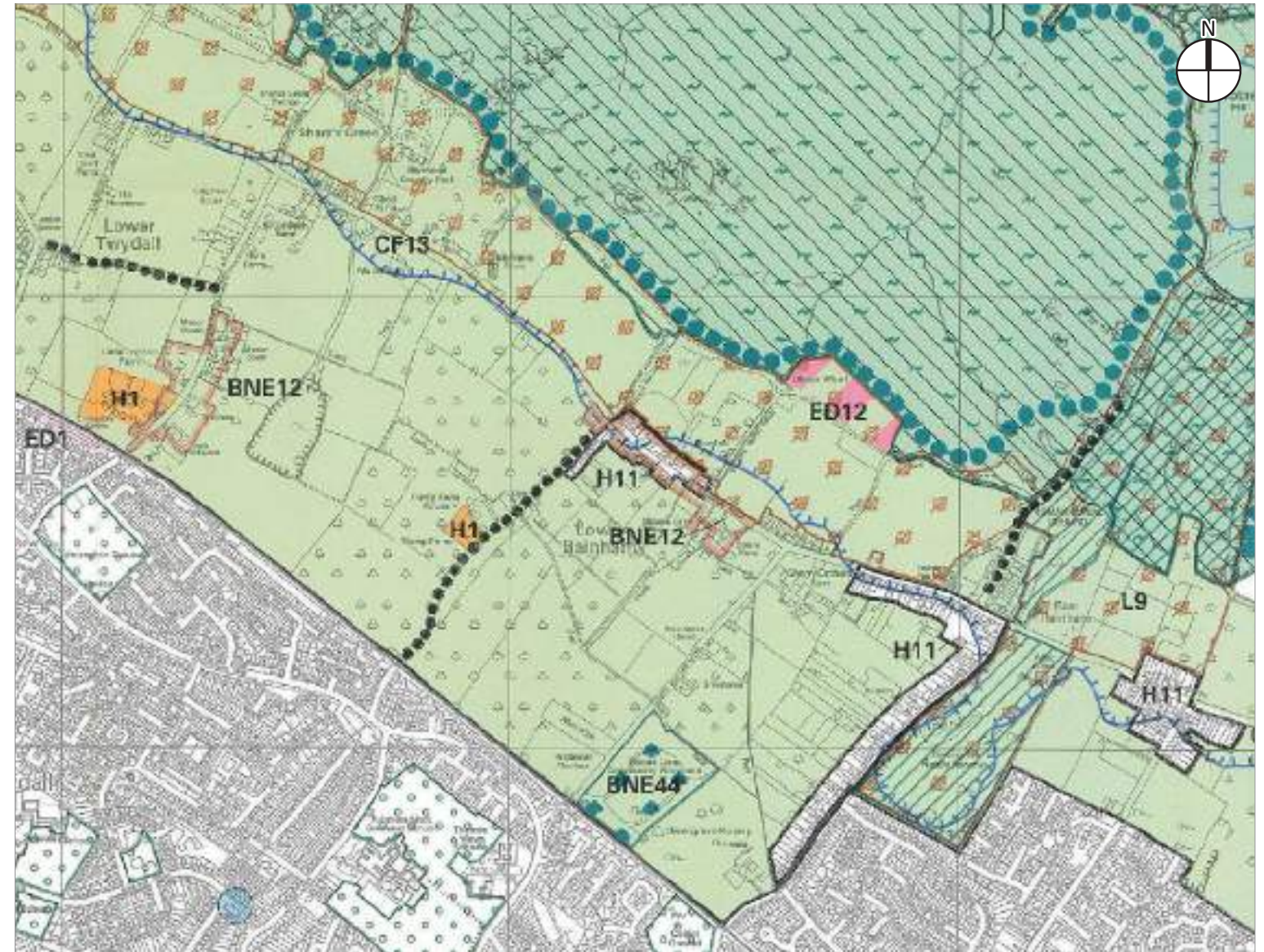


Fig. 4: Extract from the Local Plan Proposals Map





# 3.0 ASSESSMENT

## 3.1 SITE ANALYSIS

### Land Use

The existing use of the site is agricultural farmland used as an orchard, farm buildings.

The quality of the farmland used as an orchard is a mixed grade 1-3 quality, predominantly grade 2 'very good quality'.

### Amount

The Site, circa 51 ha, is located within Lower Rainham, Kent and is made up of two farms (Pump Farm circa 23ha and Bloors Farm circa 25ha) which are separated by Pump Lane.

## 3.2 TOPOGRAPHY

The site is gently undulating with a fall in heights from south west to north east of circa 10m across the whole site.

## 3.3 ECOLOGY

Within the 5km study area of the Site boundary is the Medway Estuary and Marshes SPA, RAMSAR and SSSI some 250m to the north. It has been designated for the complex and mix of coastal and intertidal habitats which support assemblages of winter and breeding birds as well as migratory birds and various plant species.

Of the non-statutory designated sites within 5km, four are considered relevant:

- Riverside Country Park, which at its closest point is 15m from the Site north of Lower Rainham Road;
- Eastcourt Meadows Country Park some 400m to the north-west; Berengave Chalk Pit Local Nature Reserve some 500m south-east, and
- An RSPB Reserve, Nor March and Motney Hill within the estuary some 800m north-east.

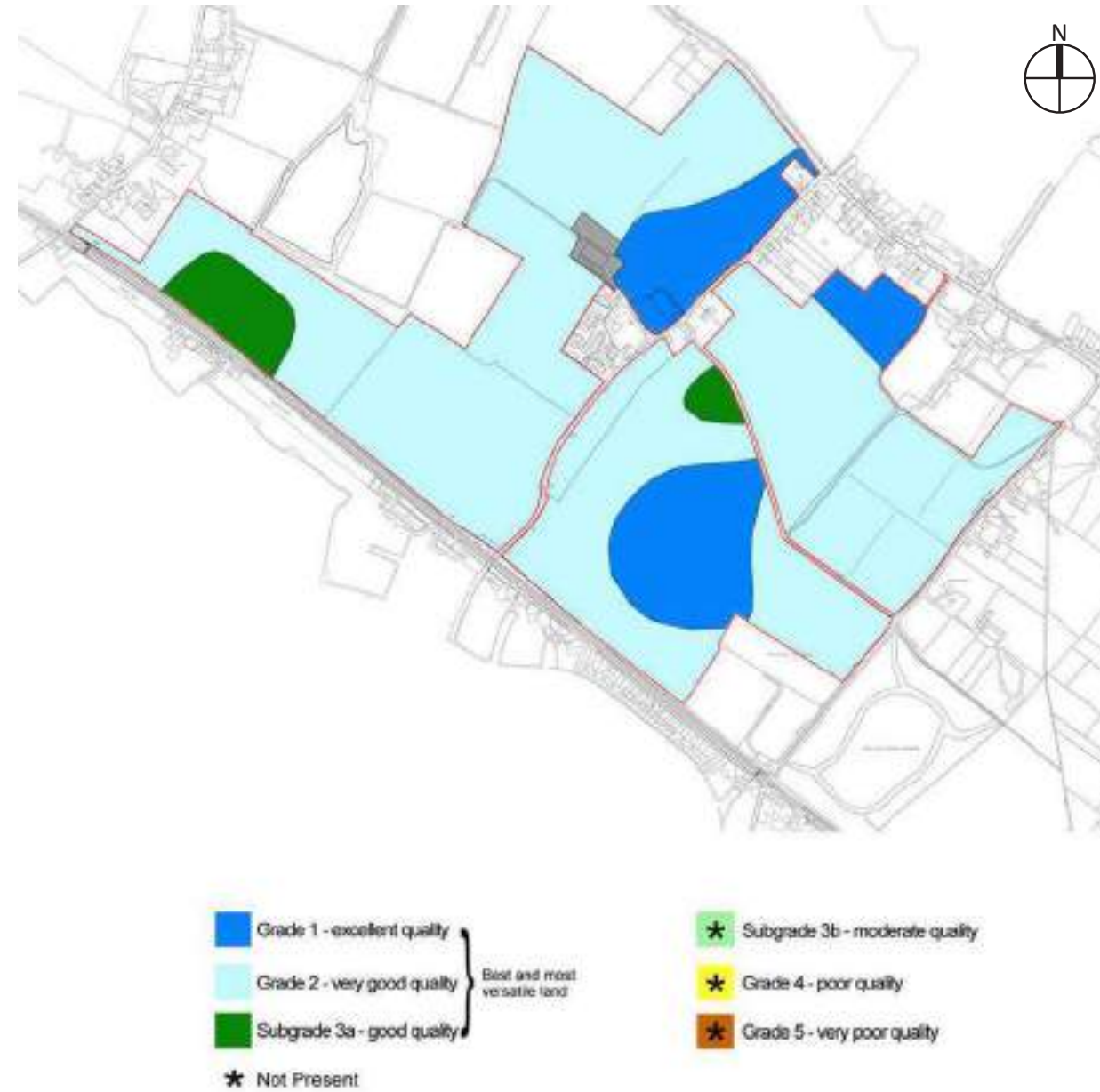


Fig. 5: Diagram showing the agricultural land grades for the site (taken from the Reading Agricultural Consultants Document)





# 3.0 ASSESSMENT

## 3.4 LANDSCAPE

There are no National Parks, Areas of Outstanding Natural Beauty near the Site. There are no Registered Parks and Gardens within the same visual envelope of the Site.

The Site lies within the Medway Landscape Character Area 21 Lower Rainham Farmland (para 7.4) and is described inter alia ‘flat, small to medium scale mixed farmland – orchards, arable, rough grazing; neglected pockets of land and a busy road gives transitional urban fringe character to the area with a gradual trend towards suburbanisation in some localised areas; tranquil in many parts despite enclosure by road and rail; includes small conservation areas/hamlets’.

The Site lies within the Gillingham Riverside Area of Local Landscape Importance and is described as ‘rural landscape of orchards and arable fields with country lanes. It forms an important green buffer separating the built-up areas of Twydall and Rainham from areas of international importance for nature conservation and recreation along the Medway estuary; it enhances the setting of the Medway Towns Northern Relief Road and allows attractive views from the river and railway; provides an attractive setting to the Lower Rainham and Lower Twydall Conservation Areas.’

The condition and sensitivity to change is moderate with the aim to conserve and create.

To the north of the site is Medway Landscape Character Area 5; Riverside Marshes with a character more associated with the estuarine landscape of the Medway. The Riverside Country Park lies within this area.

There is one public right of way within the Site – a bridleway which extends from Pump Lane in the west, crossing Bloors Farm in an easterly direction to Lower Bloors Lane in the east.

The bridleway continues eastwards beyond Lower Bloors Lane. It is bordered by high hedgerows and trees for much of its length. Its northern boundary it is characterised by leylandii trees, whereas its southern boundary is made up of native trees and plants.



Fig. 6: Existing images of the site and surrounding landscape (taken from Lloyd Bore LVIA document)



Fig. 7: Typical photos of the existing site landscape



## 3.0 ASSESSMENT

### 3.5 ARCHAEOLOGY

The area of Lower Rainham is area of important archaeological interest relating to the prehistoric period having been occupied for millennia. Palaeolithic finds have been found all along the north Kent coast and the area of the Proposed Development Area (PDA) is no exception with Palaeolithic and Neolithic finds located around the eastern and western half. Unfortunately for many finds the exact location is not known as they were discovered in antiquity and aside from an evaluation of the Twydall chalk pit, there has been little opportunity for archaeological exploration in the area of the PDA.

In addition to the prehistoric period, it is also known that there was Roman activity in the area with nearby cemeteries east of the PDA at Otterham and a possible Roman cremation in the area of the PDA. Anglo-Saxon evidence has been found below a house on the Lower Rainham Road, attesting to the fact that the area continued to be utilised into the Medieval period. The listed buildings from the Medieval and Post Medieval period along the Lower Rainham Road and Lower Twydall Lane confirm this and as a result the PDA is bordered by two Conservations Areas, one to the north and one to the west.

The PDA encompasses a large area of some 50 hectares, of which the majority has been agricultural land of arable fields or orchards for hundreds of years and the number of surrounding farmsteads confirms this agricultural landscape as well as the PDA being in an area known as the North Kent Fruit belt.

It is known that this area of north Kent has been prevalent with brick earth extraction and chalk quarrying, although it is not clear whether any part of the PDA has been subject to this. The use of the PDA for residential housing will require foundations and as a consequence the proposed development will have a high impact on any potential archaeology. Based on this data the potential for archaeological sites either on or in the near vicinity of the proposed development can be summarized as:

- Prehistoric: high
- Iron Age: low
- Roman: moderate
- Anglo-Saxon: low/moderate
- Medieval: low
- Post-Medieval: high
- Modern: low

This issue is considered further in the archaeology chapter of the Environmental Statement which accompanies the application.



Fig. 8: 1789 Andrew, Drury and Herbert Map



Fig. 9: 1798 Hasted Map



Fig. 10: 1938 OS Map



Fig. 11: 1955-58 OS Map



## 3.0 ASSESSMENT

### 3.6 HIGHWAYS & ACCESS

The site is located in Lower Rainham which is situated approximately 400m south of the Medway River Estuary. The local road network is depicted opposite in Figure 11.

The site straddles Pump Lane which runs north to south between the B2004 Lower Rainham Road and Beechings Way respectively. Pump Lane is a narrow road approximately 4m wide meaning there is limited opportunity for two-way vehicle passage. Pump Lane is subject to a 30mph speed limit with additional vehicle height and width restrictions of 13'6" and 6'6" respectively.

At the northern boundary of the site Pump Lane meets the B2004 Lower Rainham Road where Pump Lane forms a wide bellmouth at a simple priority T-junction. To the west where the B2004 carriageway runs through Lower Twydall the single carriageway has an approximate width of 7.0m and is subject to a 40mph speed limit. Further east as the B2004 enters Lower Rainham the width of the single carriageway becomes more variable as it passes through residential frontage. The speed limit here is reduced to 30mph, inclusive of the junction where Pump Lane meets the B2004. The route is managed by a series of traffic light controls which incorporate shuttle working and speed cushions.

To the west the B2004 provides access to minor local roads including Lower Twydall Lane, Eastcourt Lane and Lower Featherby Road and eventually runs to a 4-arm roundabout where Yokosuka Way can be accessed to the south and the A289 Gads Hill to the north west. To the east the B2004 provides access to minor local roads including Pump Lane, Lower Bloors Lane, Motney Hill, Berengrave Lane and Station Road. Station Road and Ottenham Quay Lane can be followed south for approximately 1.5km where they join the A2 trunk road.

Pump Lane continues south and passes under the rail line where the carriageway narrows (refer to photo opposite) and shuttle working for two-way car passage is exercised. Approximately 150m south of this passage, Pump Lane joins Beechings Way via a simple priority T-junction. Beechings Way is an important local distributor road providing access to a number of residential streets within the local vicinity and connecting the eastern border of Gillingham with the A2 corridor.

Further east Lower Bloors Lane runs parallel with Pump Lane, this carriageway is similarly narrow as Pump Lane and at approximately 400m south Lower Bloors Lane narrows further, transitioning from a vehicle worthy carriageway into a pedestrian only access. Where Lower Bloors Lane meets the rail line there is a footbridge crossing which provides pedestrian access onto the wider road network south of the site and into the centre of Lower Rainham

The site is located on the north eastern border of Gillingham which is well connected to surrounding areas.

The primary road network within the vicinity of the site which has been described above provides many connections with the adjacent wider highway network meaning that the proposed site location is in an accessible setting.

The A2 trunk road which runs approximately 1.5km south of the site centre can be accessed via the local road network which runs south from Beechings Way to Ito Way, located to the west of the site services the A2 via a 4-arm roundabout. The A2 runs west to south east connecting a number of towns and cities. Going south east the carriageway passes through the city of Canterbury and eventually meets the coast at Dover approximately 70km south east of the site. To the west the A2 runs north through Chatham at approximately 7km from the site, Dartford at approximately 40km and into the centre of London at approximately 70km.

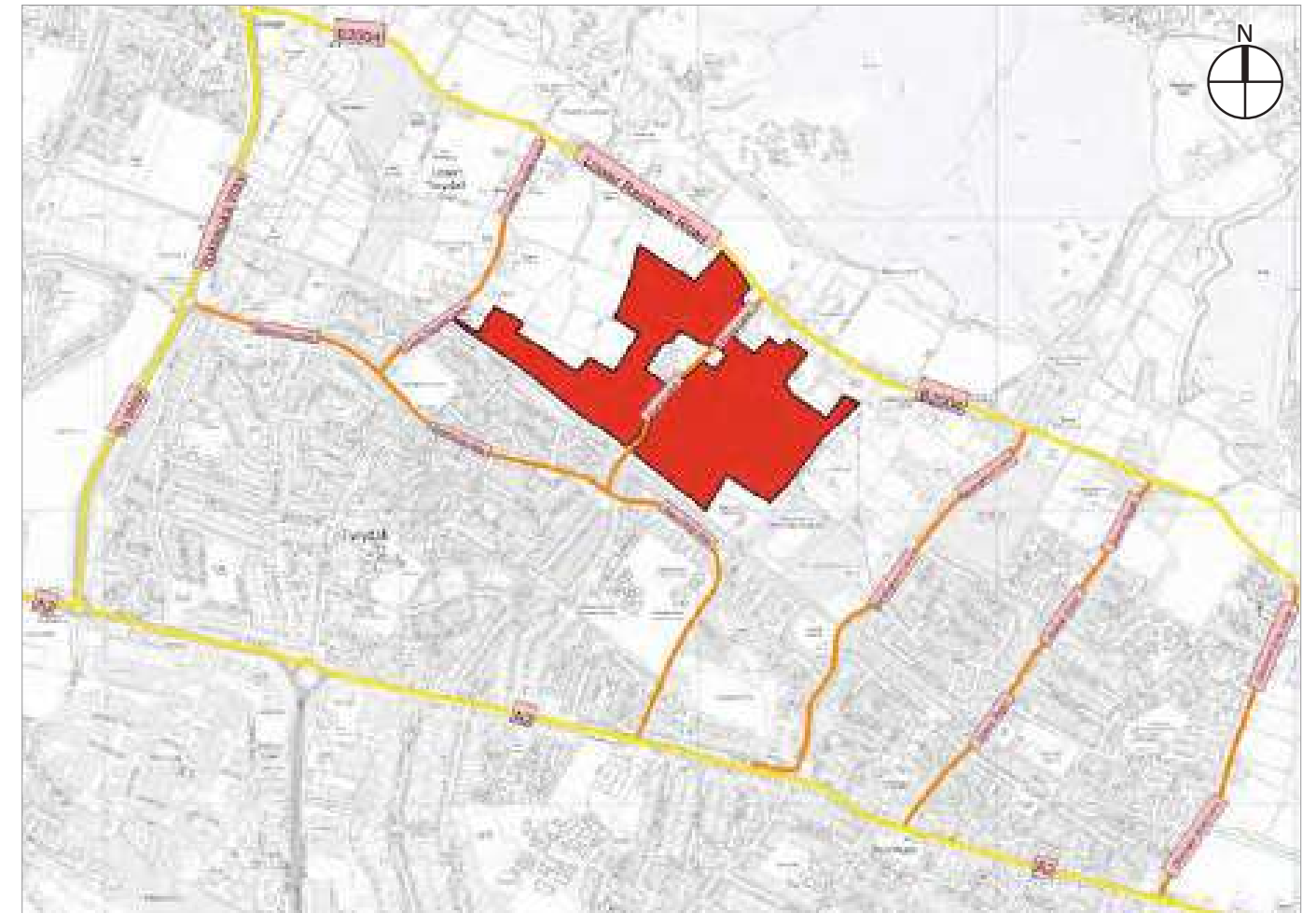


Fig. 12: Local Road Network



Photo 17 - Pump Lane road bridge under the railway as it exists

The A229 and A249 run along the eastern border and western border of Lower Rainham respectively, these A-roads in combination with the A2 form the principle road network within the area and service the M2 and M20. The A249 runs from the coast at Sheerness (north of the site), through Rainham and south to Maidstone. The A229 runs from Chatham through to Maidstone and south from here for approximately 33km to Hurst Green Village. From this location Hastings can be accessed via the A21. The M2 is located south of the site and runs for approximately 40km providing an alternative route to the port at Dover. It provides links to the M25 running east towards Reading. Further south from the M2, the M20 spans north west to south east connecting Folkestone and Aylesford. This carriageway provides links to a number of trunk A-road including the A259 and A21 south and the A28 north.



# 3.0 ASSESSMENT

## Public Transport Network

### Bus Services

There are a number of bus stops located within the vicinity of the site. The closest of which is located on Beechings way approximately 600m south of the centre of the proposed development site, the second of which is located on Lower Rainham Road which runs along the site frontage and can be accessed approximately 600m north of the proposed development site. Regular services run to and from these stops routing through Lower Rainham and providing links to towns and cities further-a-field.

The buses servicing these stops including their route and frequency are summarised in Figures 12 and 13 opposite.

The 130 and 131 services share the same route, the 130 runs from Monday to Saturday and the 131 service runs from Monday to Friday.

Medway Council has adopted the MY school bus service, providing local school students who attend schools within the Medway district with specific bus services to their school destination. In order to use these bus service students are required to have a MY school bus pass.

Each MY bus service provides access to different schools within the Medway district. The MY2 and MY3 services run from Gillingham to Rainham Mark Grammar School and Rainham Girls School. The MY4 service runs to the Rainham Mark Grammar School from Wigmore. The MY5 and MY7 services run to Rainham Mark Grammar School from Wigmore and Hempstead respectively.

Each of the MY school bus services operates a single morning ‘home-to-school’ operation and a single afternoon ‘school-to-home’ operation. In addition to this service the regular bus services such as the 715 or 116 can be used by students who wish to access schools including St John Fisher School and the Holcombe Grammar School which are both over 3 miles away from the proposed development site.

### Rail Services

Rainham train station is located approximately 2.5km south east of the proposed development site which is well within walkable and cyclable distance (29 and 8 minutes respectively). It can be accessed via Pump Lane and lower Rainham Road to the north or Pump Lane and Beechings Way/ Tufton Road to the south. Bus service 783 and 131 stop at the station access.

The station is operated by Southeastern rail and provides a number of facilities to travellers. There are enough bicycle parking stands to store 64 bikes securely, and a car park which has 233 spaces including 4 accessible spaces. The car park is in operation 24 hours a day between Monday and Sunday.

There is a taxi-rank and general drop-off/pick-up area immediately in front of the station entrance. The station provides a ticket office and several ticket machines from which tickets for travel can be purchased or pre-booked tickets can be collected. There are also some amenities including an ATM machine, a pay phone, shops, sheltered waiting room and toilets.

The station lies on the principal south east rail route. Train services are available directly to and from the main regional centres at London and Dover. These destinations provide access to regions further-a-field including north west from London to Birmingham and Manchester for example. Selected towns/cities that are served directly are presented in Figure 14, with a summary of the weekday service level. This shows a good frequency to key employment, higher education, retail and personal service centres. On-board journey times are short relative to car travel.

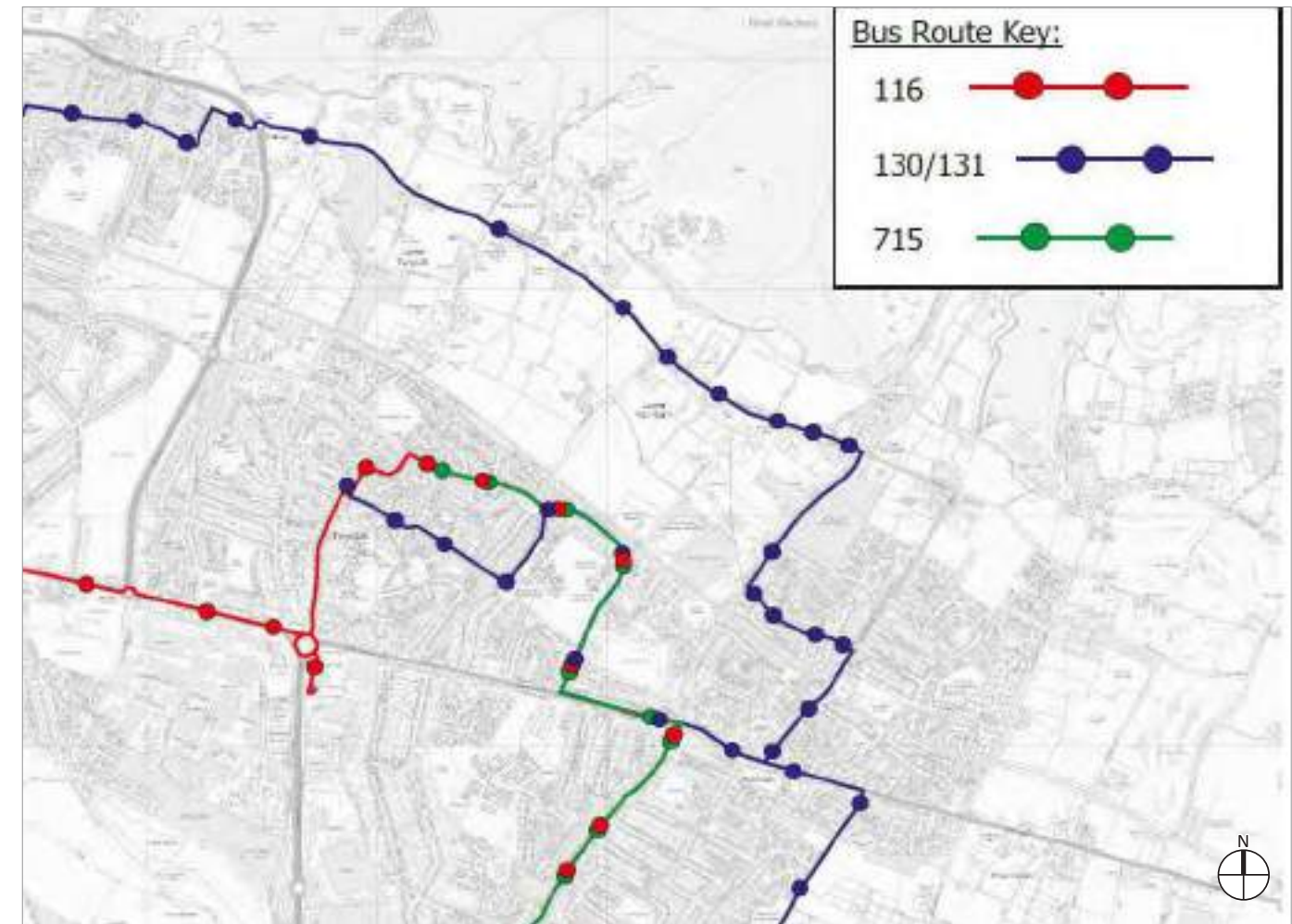


Fig. 13: Summary of bus routes in the vicinity

Service	Operator	Stop	Route	Frequency		
				Mon-Fri	Sat	Sun
130/131	NU-Venture	Truro Close	Medway Maritime Hospital - Twydall - Hempstead valley - Herenden Heath - Maidstone	Every 1-2 hours 06:27 - 17:45	Every 2 hours (07:53 - 16:48)	N/A
715	The Kings Ferry	Truro Close	Twydall - Rainham - Hempstead Valley - Wigmore - London	06:18 (Out) 19:19 (Out)	N/A	N/A
116	Arriva Kent & Surrey	Truro Close	Chatham - Universities - Gillingham - Twydall - Parkwood - Hempstead Valley	Every 20 mins (08:23 - 19:14)	Every 20 mins (08:25 - 18:55)	N/A

Fig. 14: Summary of bus routes in the vicinity

Destination	Frequency [1], trains/hour			Typical Journey Time minutes
	To	From	Inter-Peak	
London (stations)	5	3	3	1hr 3mins
Dover Priory	3	2	2.5	46mins - 1hr 32mins
Ramsgate	2	2	2	56mins - 1hr
Faversham	4	5	2	16mins

Notes:  
 1. Includes both direct trains and departures with a change of train.  
 2. To-destination based on AM; From-destination based on PM

Fig. 15: Train Services from Selected Towns/ Cities



# 3.0 ASSESSMENT

## Walking and Cycling Facilities

Existing walking and cycling facilities within the immediate vicinity of the site are limited especially regarding Pump Lane which runs through the centre of the site. Pump Lane is a narrow single lane which does not currently have the capacity to accommodate for cyclists or any footway provision.

The walking and cycling provisions existing along Lower Rainham Road are variable. There are no designated cycle lanes along the carriageway meaning that cyclists are required to share the carriageway with motor vehicles. From approximately 1.1km west of the proposed sites north western boundary the speed limit of Lower Rainham Road changes to 40mph which compromises cyclist safety especially under shared use. Where Pump Lane meets Lower Rainham Road the carriageway narrows to a single lane where passage of vehicles is controlled by filter lights, this continues for approximately 200m and is not appropriate for cyclist use.

Pedestrian provision existing along Lower Rainham Road is variable. West of the site there is a smooth tarmac footway provided on one side of the carriageway (either southside or northside) at any one point. Where Pump Lane meets Lower Rainham Road this footway provision increases to existing on both sides of the carriageway. These footways are approximately 2.0m wide in compliance with NPPF (2018) guidelines. The footway ceases and pedestrian access is lost for '480 yards' where the carriageway narrows to a single lane after Pump Farm Lane.

To the south of the site where Pump Lane meets Beechings Way and the local road network which services the wider town can be accessed pedestrian and cyclist provision is more adequate. Upon passage under the rail line footways are established on both sides of the carriageway as Pump Lane widens and becomes a two-way carriageway. The footway provisions existing throughout Lower Rainham are more than adequate, footways are wide commonly with large grass verges between the roadside and footway. Signalised crossings are implemented regularly throughout the local highway network and dropped tactile paving where pedestrians have to cross roads in order to ensure safe crossing.

There are no designated cycle lanes on-road throughout the town and this is something which could be improved in the long term. Despite this the National Cycle Route (NR) 1 runs into Lower Rainham from the east, routing north along Berengrave Lane where it meets the Medway River path. This NR 1 is located approximately 1km east from the sites northern boundary allowing easy access to this off-road traffic free National Route.

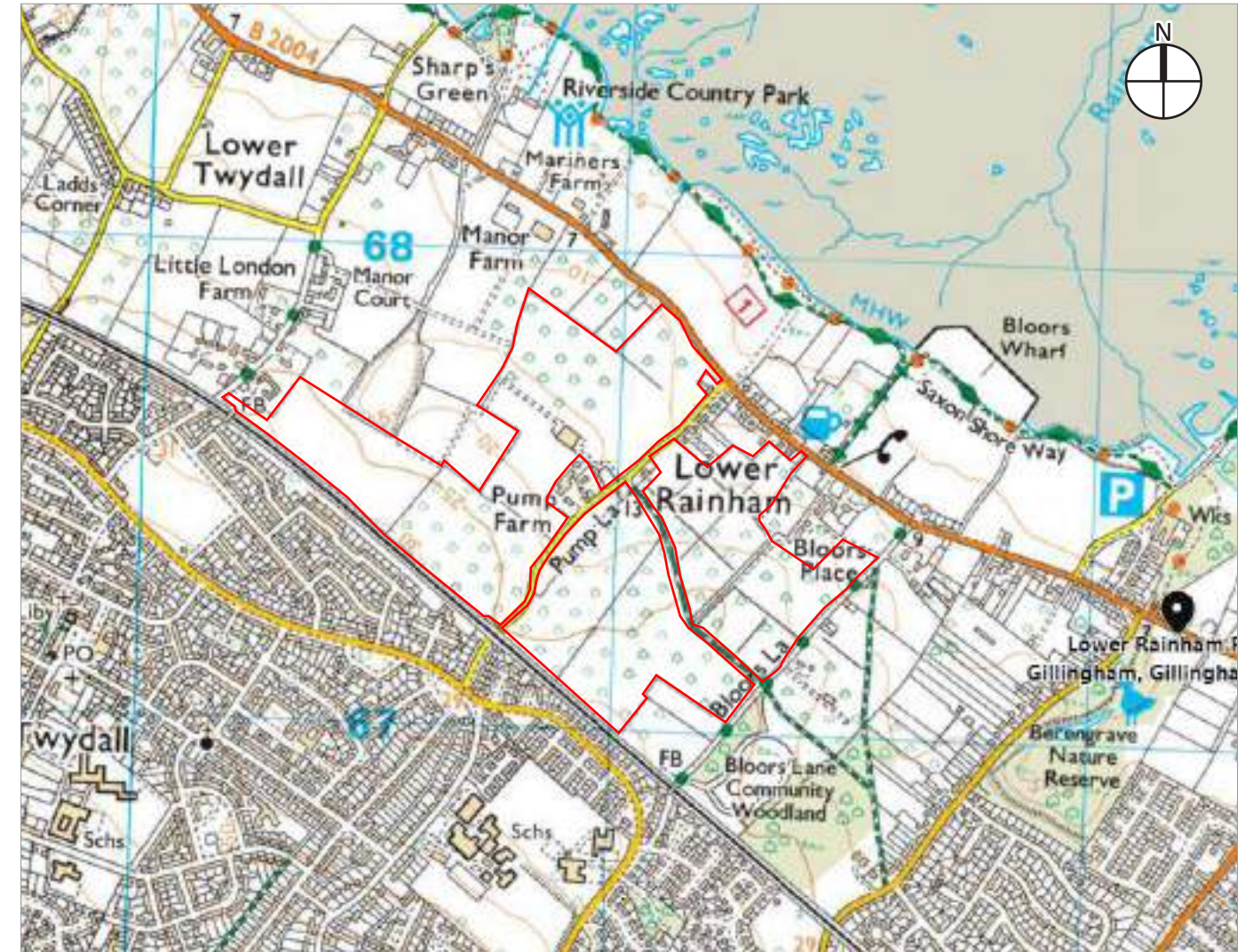


Fig. 16: OS Extract showing public rights of way



Photo 18 - Images of the Public Bridleway cutting across the eastern half of the site

**PUBLIC RIGHTS OF WAY** Not shown on maps of Scotland

- Footpath
- Bridleway
- Byway open to all traffic
- Road used as a public path

The representation on this map of any other road, track or path is no evidence of the existence of a right of way

**OTHER PUBLIC ACCESS**

- Other routes with public access
- National Trail / Long Distance Route; Recreational route
- Permitted footpath
- Permitted bridleway

Footpaths and bridleways along which landowners have permitted public use but which are not rights of way. The agreement may be withdrawn.

- Off road cycle routes



## 3.0 ASSESSMENT

### 3.7 HYDROLOGY/ FLOOD RISK

The site is located within Flood Risk Zone 1 (lowest risk) and is generally at low risk of surface water flooding. It is therefore appropriate for more vulnerable development such as residential housing.

The site is situated over the Seaford Chalk Formations, suggesting favourable conditions for infiltration drainage.

### 3.8 UTILITIES

A Utilities Assessment has been undertaken for the site which concludes that there is existing electricity, gas and telecom infrastructure within the vicinity of the site, which currently has sufficient capacity within the existing networks to provide new supplies to the development without the need for off-site reinforcement.

In terms of water, surface water and foul drainage, there may be need for off-site reinforcements to the capacity. This will be confirmed in due course.



Fig. 17: Environment Agency Flood Risk Map 2016

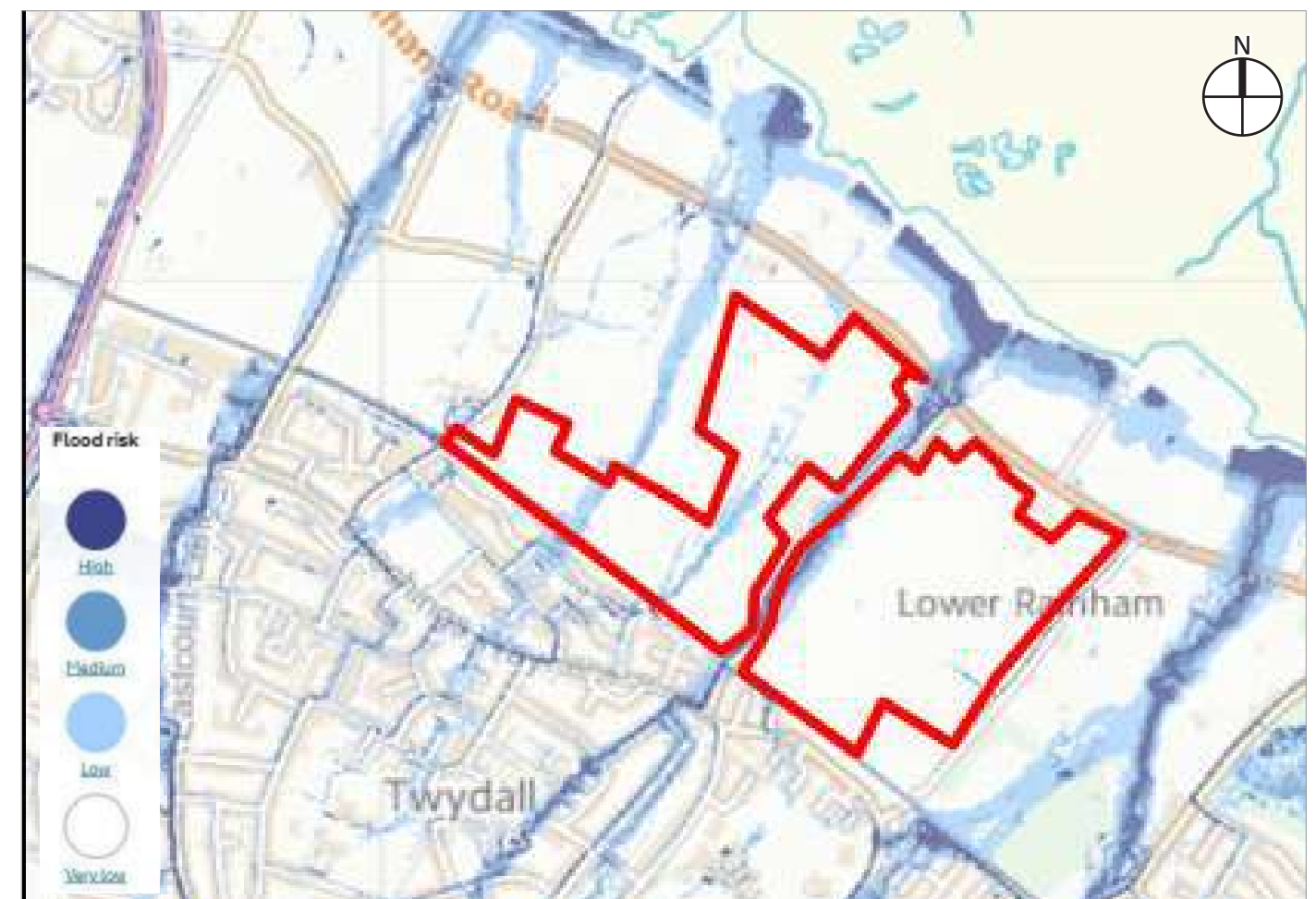


Fig. 18: Environment Agency Surface Water Flood Map 2016



# 4.0 EVALUATION

## 4.1 SITE INFLUENCES

### Constraints

- Green Field Site
- Nearby Ramsar, SSSI/SPA (Terrestrial and Marine) in Medway Estuary to the north
- Adjacent Conservation Area
- Foul Sewer Easement
- Public Bridleway
- 3 Grade II Statutory Listed Buildings
- Site Access
- Limited Access under or over railway
- Noise and vibration from rail lines
- Access lanes provide means of short-circuiting the traffic lights in Lower Rainham

### Opportunities

- Provision of much needed housing (including affordable, elderly and care provision)
- Provision of new primary school
- Provision of new local centre
- Additional landscape infrastructure
- Improved public pedestrian, cycle and equestrian access
- Insertion of a comprehensive SUDs/ drainage system
- Prevention of the misuse of the access lanes as a 'rat-run'

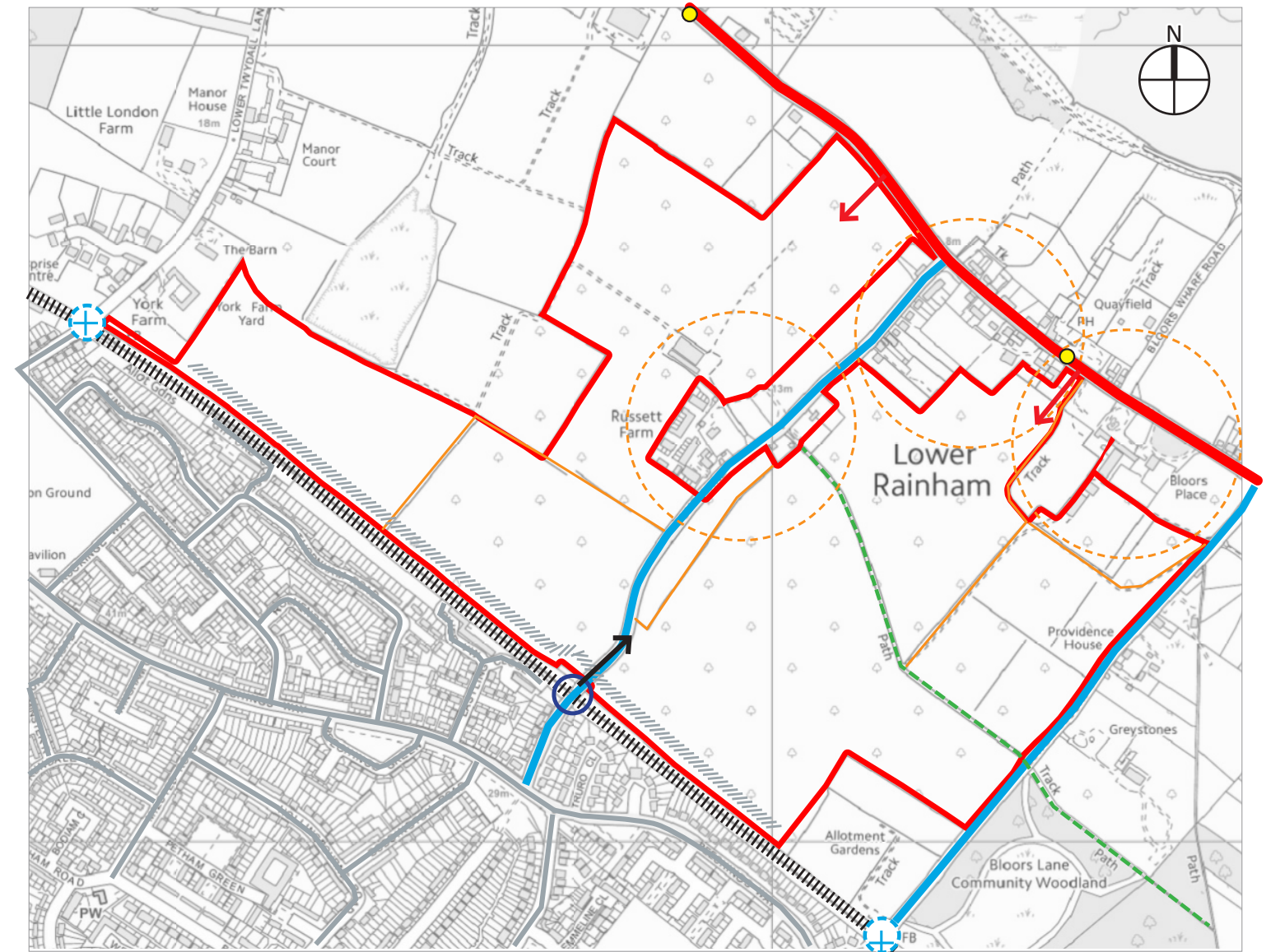
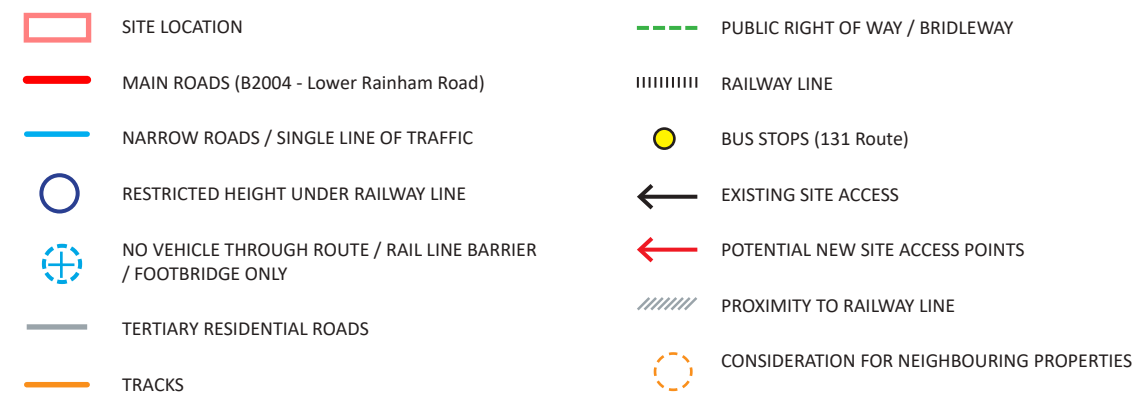


Fig. 19: Site Influences Diagram



# 4.0 EVALUATION

## 4.1 SITE INFLUENCES

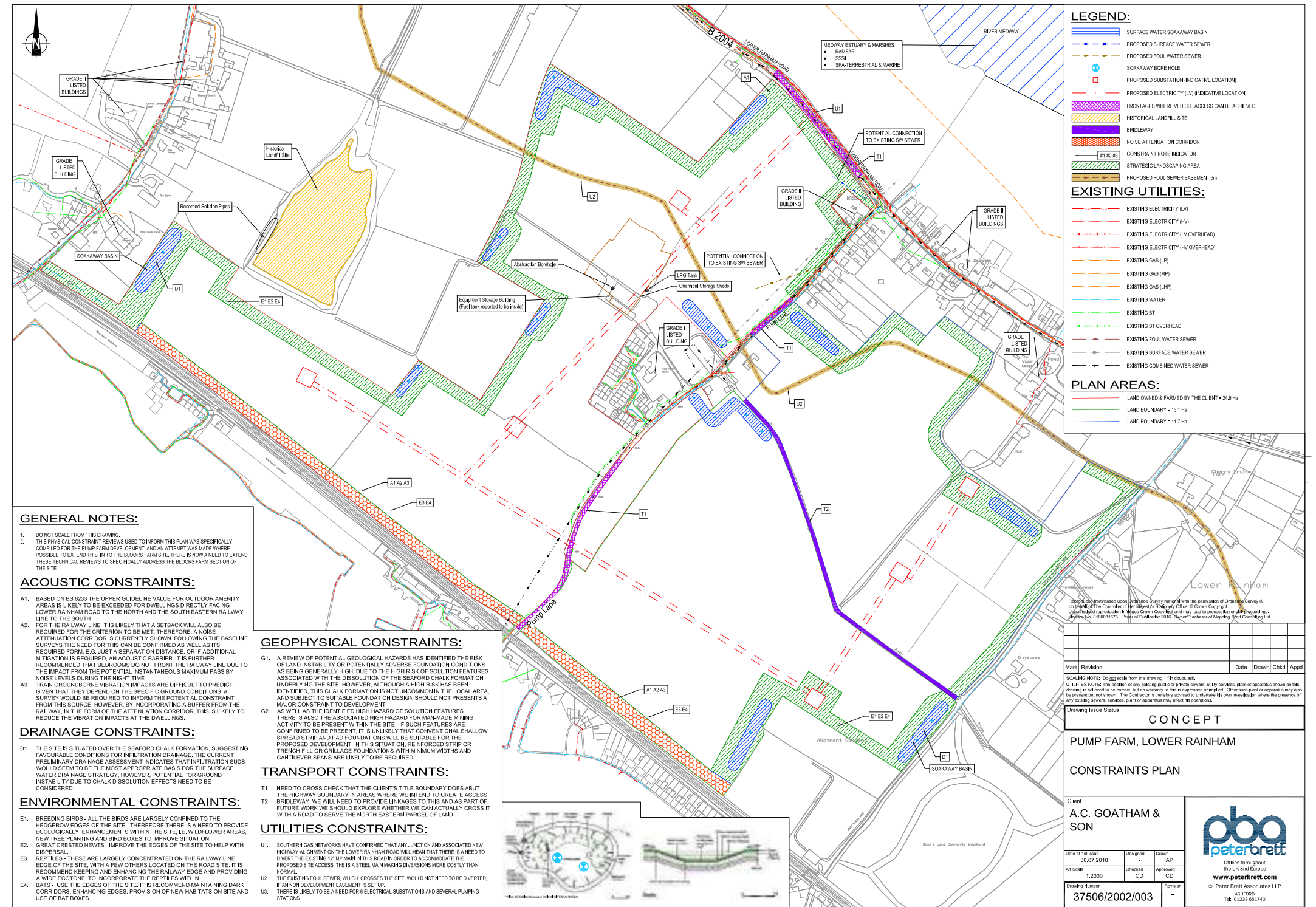


Fig. 20: Diagram illustrating the Constraints and Opportunities of the Masterplan site



## 5.0 DESIGN PRINCIPLES

The design development for the Lower Rainham proposal is based upon both recognised and established design principles, together with principles that are unique to this site. These principles promote sustainable design and underpin the creation of a successful and robust place.

This includes the essential ingredients of key routes and spaces and the establishment of areas with distinctive characters. This will give the place a framework for development and provide a diverse range of functions in the application area.

In general the key design principles unique to this site for creating the framework for development are:

- Character
- Integration and Connection
- Continuity & Enclosure
- Quality of Public Realm
- Ease of Movement
- Legibility
- Diversity



### 5.1 CHARACTER

The proposed development at Lower Rainham will:

- be a place that creates its own identity set within its surrounding context of Lower Rainham, sporadic residential properties, and the Kent countryside;
- providing a unique and innovative development that acknowledges the previous orchard landscape setting and rural character;
- create a development with distinct character areas that improve and aid the ease of movement, navigation and orientation within and through the locality

### 5.2 STREET HIERARCHY & PARKING

The proposed development at Lower Rainham will be a place:

- where there will be a clear distinction between public access roads and private access;
- where parking will be sensitively designed to ensure the visual landscaped and natural appearance is retained;
- where car parking provision will comply with the required standards.



### 5.3 INTEGRATION & CONNECTION

The proposed development at Lower Rainham will:

- be a place that retains and enhances the existing public bridleway to ensure its continued and greater use;
- create additional and exciting pedestrian routes and links to, from and through the site that connect with the existing pedestrian routes at the outer edges of the site;
- improve the existing highway network of Pump Lane and Lower Bloors Lane with realignment and landscape planting;
- create new vehicle access routes to the new development that will be legible and will allow for enjoyable driving experience within a landscape setting;
- provide a development that integrates with the surrounding open countryside and sporadic development that exists at the edges of the site and with Lower Rainham to the north





## 5.0 DESIGN PRINCIPLES

### 5.4 PUBLIC & PRIVATE SPACE

The proposed development at Lower Rainham will be a place with public and private open space that:

- is inspiring, attractive, robust and successful;
- is of a very high quality and easily distinguishable;
- is obviously linked for ease of movement and orientation for the public;
- has defensible private space;
- has well-designed pedestrian access routes designed to maximise the view opportunities of the natural elements while ensuring separation from the identified sensitive ecological areas;
- is designed to connect well with the established Links in the locality;
- has excellent natural surveillance with windows and entrances onto the streets;
- has secure and controlled private areas;
- forms spaces of different landscape treatment where the natural feel of the site is the primary concern, where the public and private areas complement the natural environment within which the development sits.



### 5.5 EASE OF MOVEMENT - PERMEABILITY

The proposed development at Lower Rainham will be a place that:

- is easy for pedestrians to get to and move through, both in the public and private spaces;
- provides an excellent choice of publicly accessible safe routes for the user;
- has a clear delineation of public spaces and private access routes that link the enabling development with the site and the surrounding area;

### 5.6 NAVIGATION & ORIENTATION - LEGIBILITY

The proposed development at Lower Rainham will be a place that:

- is easily navigated with an excellent sense of location and orientation;
- provides an identifiable loop road off which pedestrians and vehicles will be able to access the various development areas of the site;
- provides landmarks and focal points to enable the public user to clearly understand their location, history and nature of the site and provide clear direction throughout the site;

### 5.7 ENERGY & SUSTAINABILITY



The proposed development at Lower Rainham will:

- ensure the orientation of buildings to maximise solar gain for photovoltaic;
- ensure the creation of spaces between the structures to achieve maximum daylight and sunlight levels;
- ensure the use of the other natural resources to maximum affect;

### 5.8 ACCESSIBILITY

The proposed development at Lower Rainham will be a place:

- that provides public access for all to the countryside perimeter walk
- that provides open space for the enjoyment of the public
- that allows for a clear distinction between public and private spaces
- that allows vehicle users who are disabled to have easy access;

### 5.9 LANDSCAPE & OPEN SPACE





The proposed development at Lower Rainham will:

- 'bleed' into the open fields and countryside at the edges of the development site
- maintain and enhance the existing landscape structure at the edges of the site along the bisecting lanes:
- create a substantial landscape structure at the edges of the main loop road through the site that will allow glimpses through to the built form beyond
- creation of significant areas of open space around the perimeter of the site;
- incorporate the historic orchard use in the area within parts of the structural landscaping;
- create a village green serving both the existing residential properties and the new development;

## 5.9 QUALITY OF BUILT FORM & MASSING



The proposed development at Lower Rainham will incorporate the highest standards of 21st Century building design. The proposal will:

- create a strong sense of scale and massing that reflects the unique topography and setting of the site and its proximity to the surrounding communities;
- provide gaps between the buildings and along the streets to retain views of the Medway Estuary and the natural environment and to provide incidental vistas within the site;
- ensure quality defensible and landscaped boundary treatments;
- have an architectural finish and style that complements the natural surroundings and surrounding communities;
- have an elevation treatment that will provide visual richness that reflects the natural surroundings, that are well articulated with interesting details to doorways, porches, balconies, fenestration and material finishes;

## 5.11 CRIME PREVENTION



The proposed development at Lower Rainham will be a place that:

- is safe for both residents and the public using the site;
- provides excellent natural surveillance of the spaces within the development of the public spaces within the site in general;
- provides a safe and secure publicly accessible route through and around the edge of the site.

## 5.12 UTILITIES

The proposed development at Lower Rainham will ensure that:

- new supplies within the site will generally be routed along proposed road corridors.
- requirements for easement agreements for supplies located outside of the proposed highway will be agreed with the relevant statutory undertaker as part of the design process.





## 5.0 DESIGN PRINCIPLES

### 5.12 INITIAL DEVELOPMENT CONCEPT

The key design features considered at the early stages included:

- Downgrading of Pump lane - making this a less attractive route for short-circuiting but to allow the few sporadic residences continued ease of access.
- Need to provide a primary vehicle access route within the site by way of a full loop road. This would pass the primary school, loop across Pump Lane and return, allowing existing residents continued north-south access.
- Create 'off shoot' roads from the main loop road serving the local centre and residential areas
- Create a 'village feel' to the development with a village green in the middle of the site adjacent to the existing development and creation of 'character areas' within each 'village area' allowing a sense of identity and community to develop.
- Allow the existing properties to retain their current identity by keeping the new development at a sufficient distance.
- Retain the existing bridleway in its current location without any diversions, but extended the bridleway across the site to the loop road and linking to the permeability across the site to corners of the plot where it connects with existing footpaths.
- Enhancing the connectivity further by creating
  - » a pedestrian only link to Lower Twydall Lane, and
  - » a footpath/ cycleway connecting the loop road near the school to east of the traffic lights in Lower Rainham Road.
  - » Providing a public access countryside walk around the perimeter of the site linking to the pavements on the roads and crossing the roads at certain locations.
- Create a Local Centre comprising retail and leisure areas, at the interface of the main highways with a main public route passing through it to help attract the most footfall.
- Provide an extra care facility close and care home to the Local Centre to allow close and easy access for the occupants of the elderly care development.

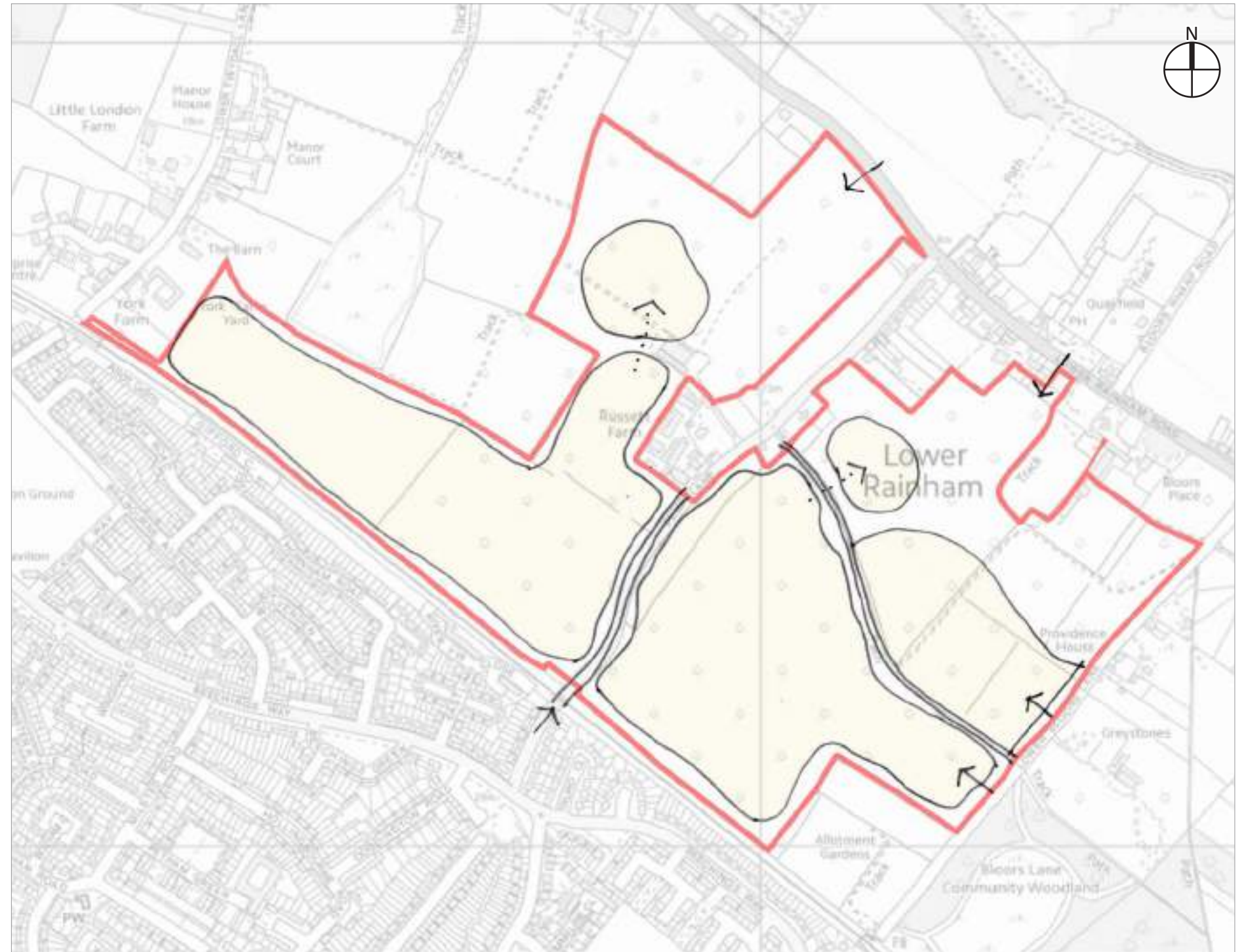


Fig. 21: Initial Design Concept Plan 1



## 5.0 DESIGN PRINCIPLES

- Provision of two equipped play areas along the bridleway and main pedestrian connecting routes close to the residential areas created.
- Provision of a further pedestrian linking access at the north east corner of the site to Lower Rainham Road, also allowing it to be used for emergency vehicle access if required.
- Creation of swales around the perimeter of the site along the perimeter walkway route, with two permanently wet swales in the centre of the proposed development creating a village pond on the village green and an educational pond at the edge of the school playing fields. These form a key part of the site wide drainage strategy.
- Creation of outward facing development facing the perimeter open space and public walking areas allowing a development to bleed into the countryside and openness beyond the site boundaries. - giving a distinct rural edge fee with a loose ranch rail type site boundary.
- Allow buildings and walls to be glimpsed through structural planting along the loop road edge but avoiding buildings up to the road edge, with de-engineered roads off this loop road.
- a vertical variety to the scale of development with some 2.5/ 3 storey buildings in selective areas at node points, junctions and vista ends.
- consideration of a small hamlet close to the Pump Lane entrance to the site at the southern end with an off-set crossroads.



Fig. 22: Initial Design Concept Plan 1



# 6.0 DESIGN DEVELOPMENT

## 6.1 DEVELOPMENT PLOTS

### Development Plots

With the village green at the core of the new development, and the formation of a new loop road, the design is able to create a series of useable development plots set within heavily landscaped edges. The size and shape of these plots will be determined by the central loop road and the Bridleway crossing through the site.

With the introduction of the loop road and the landscape infrastructure a series of specific areas will be formed where unique design criteria will be applied.

### Village Heart

The design thought behind the submission is to create a vibrant hub to the proposal based around a new village green at its heart. The location of the green is to the east of Pump Lane opposite Russett Farm hamlet. The green will be enclosed to the south east and east with new residential development and to the north by the new local centre. To the north east the green will 'bleed' across the loop road and link with the school playing fields.

This village green that is created will provide for the core of the development and help create a sense of place for the new surrounding residential development. The village green will be 1.125ha in size.

## 6.2 CHARACTER AREAS

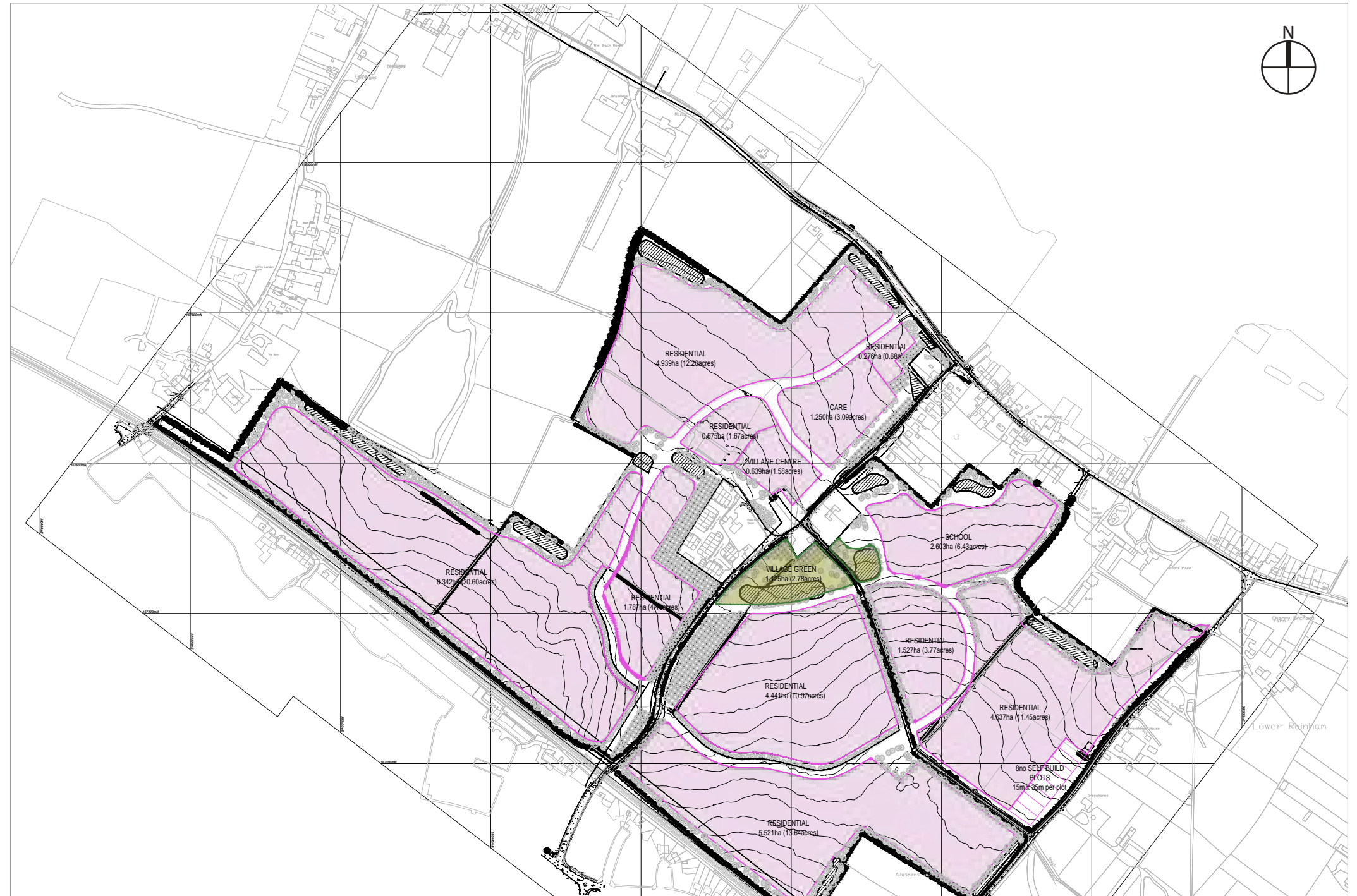


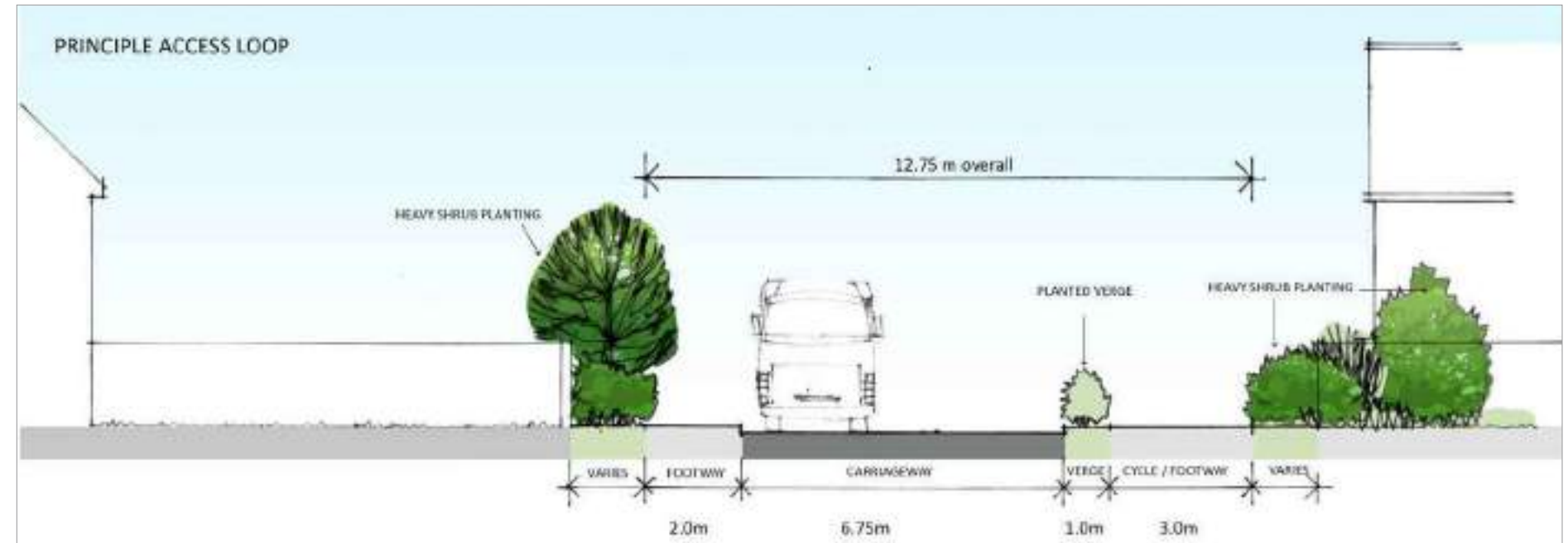
Fig. 23: Proposed Masterplan Development Plots



## 6.0 DESIGN DEVELOPMENT

### Loop Road and Landscape Belt

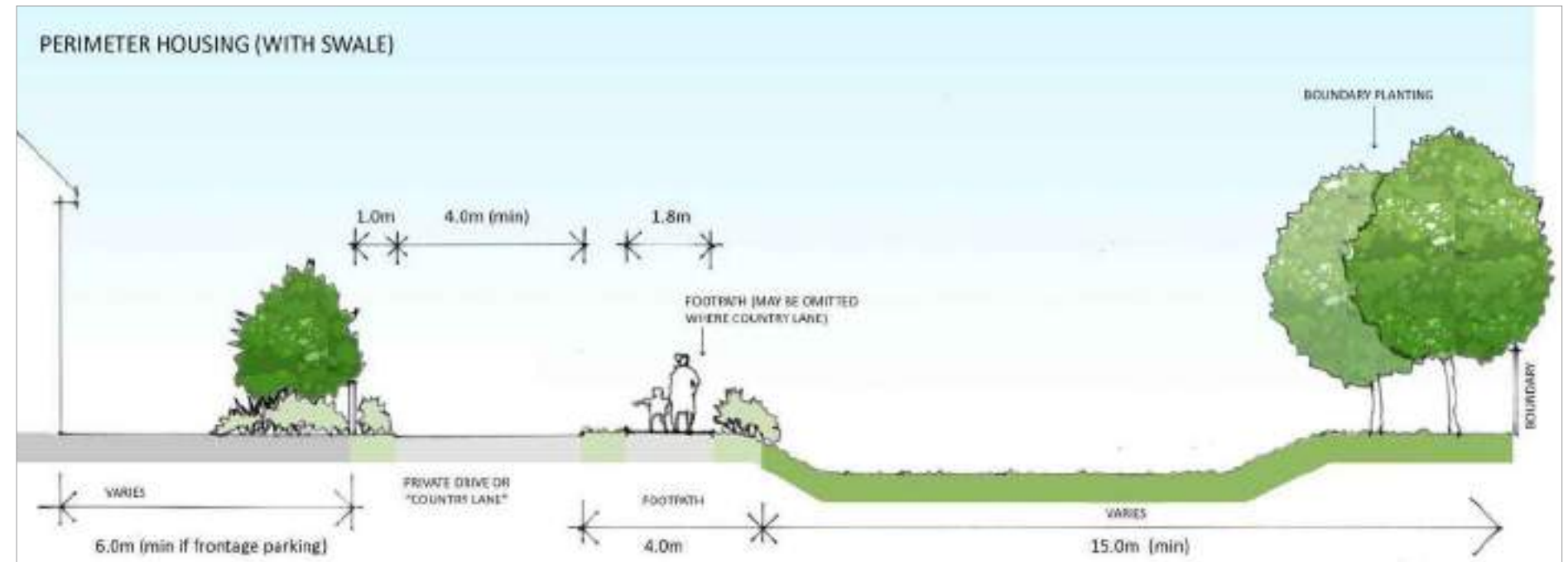
There will be little or no direct frontage onto the loop road, but rather glimpses through to the built form beyond. The overall width of this loop road will be 12.75m. This will allow for a 6.75m carriageway, with a 1m verge and 3m footway/cycleway on one side and a 2m footway on the opposite side. Beyond the footways there will be a varied distance allowing for additional landscape planting before the plot boundaries (refer to Section A)



Section A

### Interface Between Countryside and Plots

Between the edge of the site boundary and the plots and buildings there will be an interface comprising of 15m overall distance to allow for boundary planting, swale, and a footpath with verges. Beyond this there will be a 4m private drive or 'country lane' with a 1m verge, with a further 6m minimum frontage to the properties where frontage parking is proposed (refer to Section B).



Section B

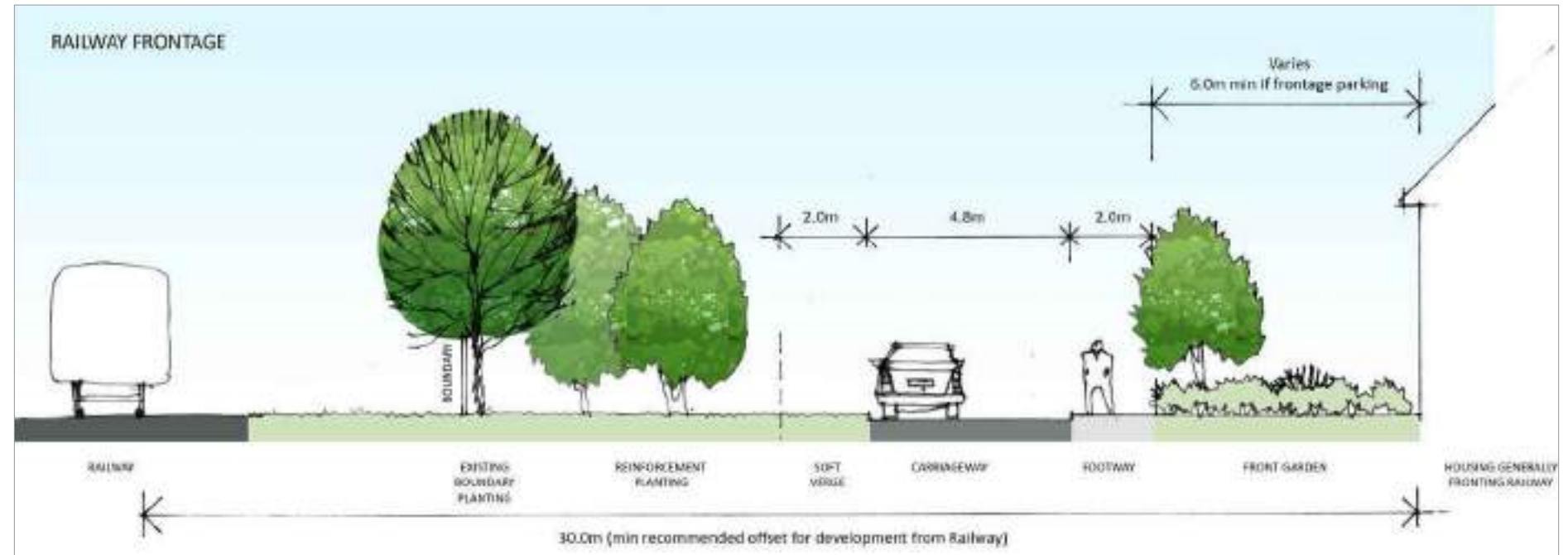


# 6.0 DESIGN DEVELOPMENT

## 6.2 CHARACTER AREAS

### Rail Edge

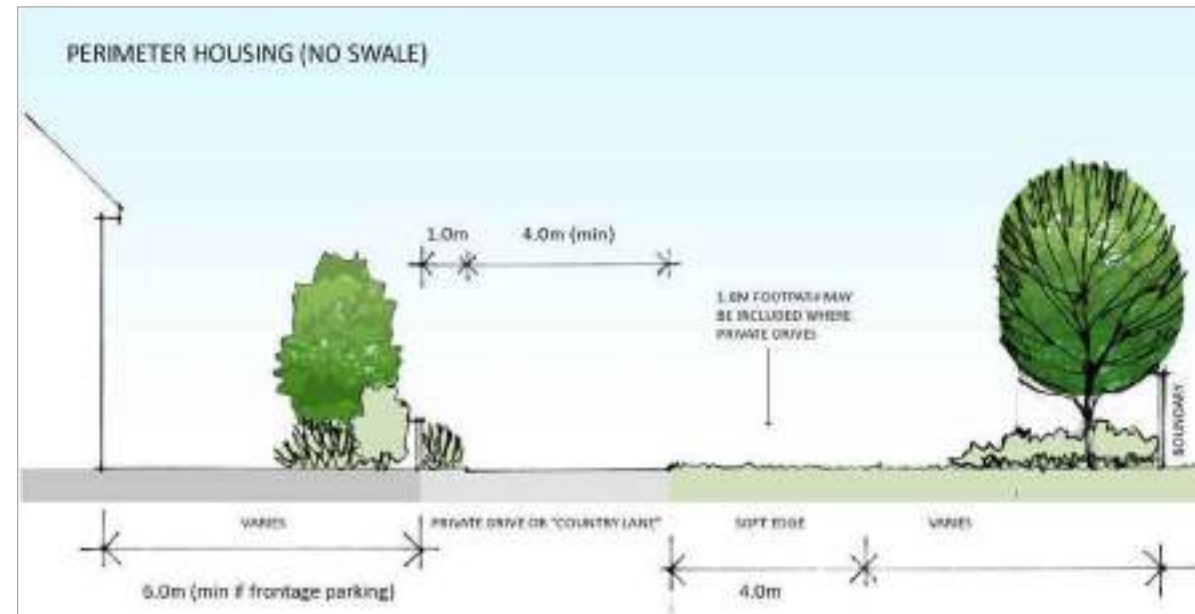
A further specific area is the edge of the site along the rail line to the south (refer to Section C). There is to be a 30m off set from the rail lines to the property frontage/ edge including for a 4.8m carriageway with 2m verge on one side and a 2m pavement on the opposite side closes to the properties. A further 6m minimum will be required in front of the properties where there is frontage parking. Beyond the soft verge there will be significant reinforced and augmented soft planting.



Section C

### Perimeter Housing with No Swale

In areas around the site boundary where no Swales are required or proposed the design intent will be different. In these locations there will be a minimum of a 4m private drive or 'country lane' with a 1m verge, and a further 4m soft edge, beyond which there will be varied distances of landscape planting, and varied distance in front of the properties depending on the final layout design (refer to Section D).



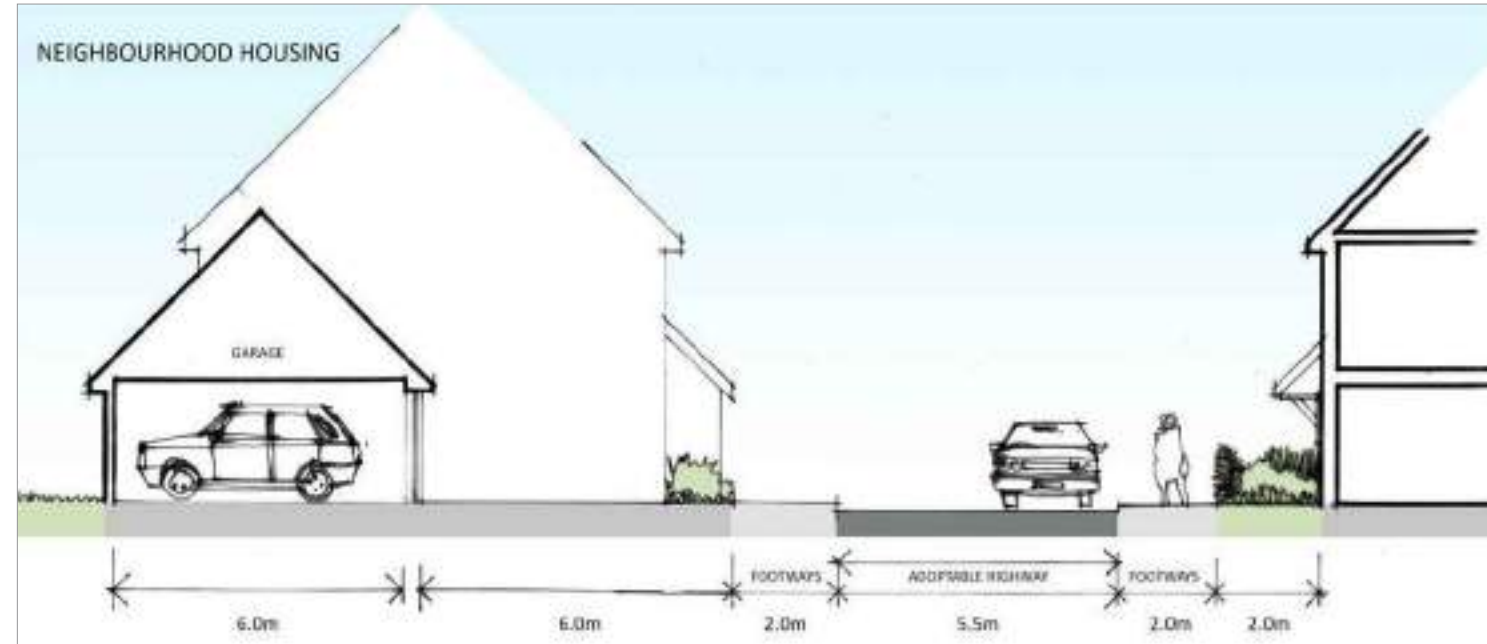
Section D



## 6.0 DESIGN DEVELOPMENT

### Neighbourhood Housing

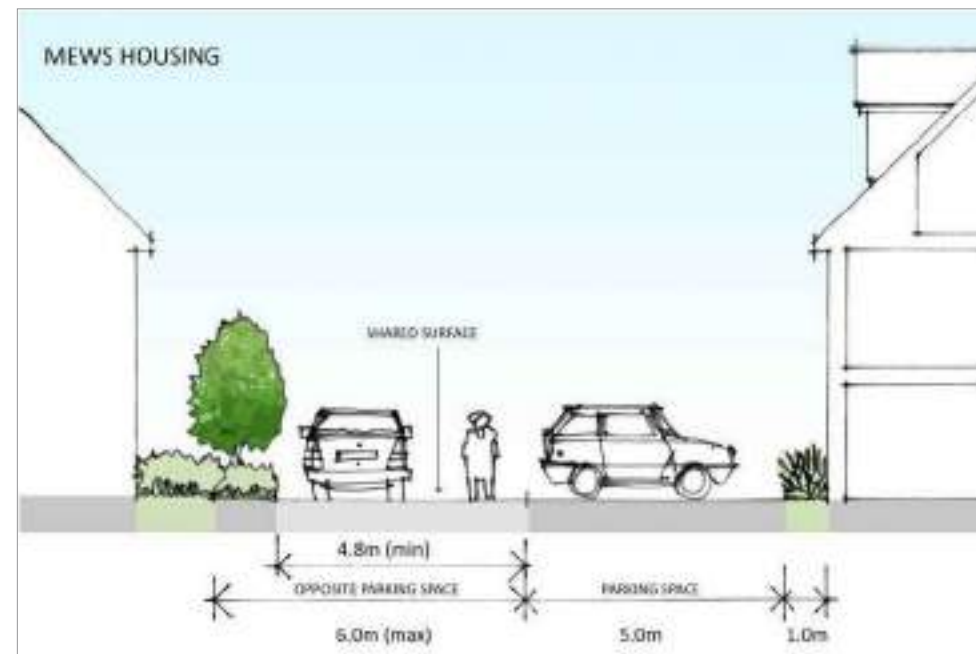
It is envisaged that there will be two main types of housing areas - the first being Neighbourhood Housing. There will be a 5.5m adoptable highway with 2m footways either side, and 2m frontages to the properties to act as defensible space. Where there is a garage proposed at the side of the dwelling, a 6m distance to the back edge of the footway and a 6m internal dimension to the garage (refer to Section E).



Section E

### Mews Housing

The second type of housing will be Mew Housing where there will be a minimum of 4.8m shared surface access road increasing to 6m where opposite a parking space. Parking spaces will be 5m in length with a 1m distance to the built form (refer to Section F).



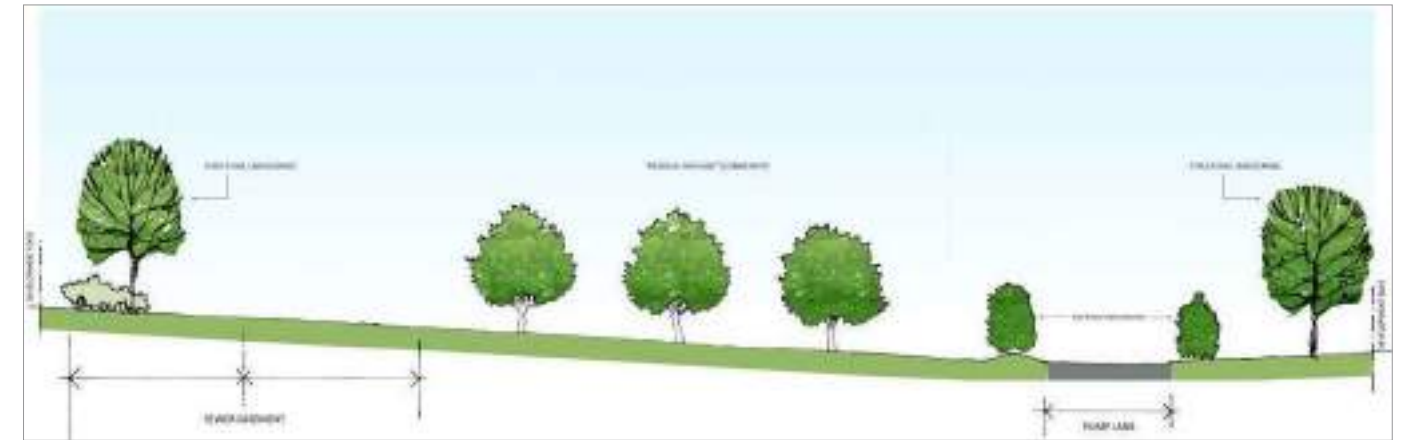
Section F



# 6.0 DESIGN DEVELOPMENT

## Orchard Approach

From the rail bridge to the village green Pump Lane has been designed to reflect the sites heritage as an orchard with fruit trees lining both sides of the lane with the alignment adjusted to maintain the long distance views towards the estuary (refer to Section G opposite).



Section G

## Interface between Roads and Existing Bridleway

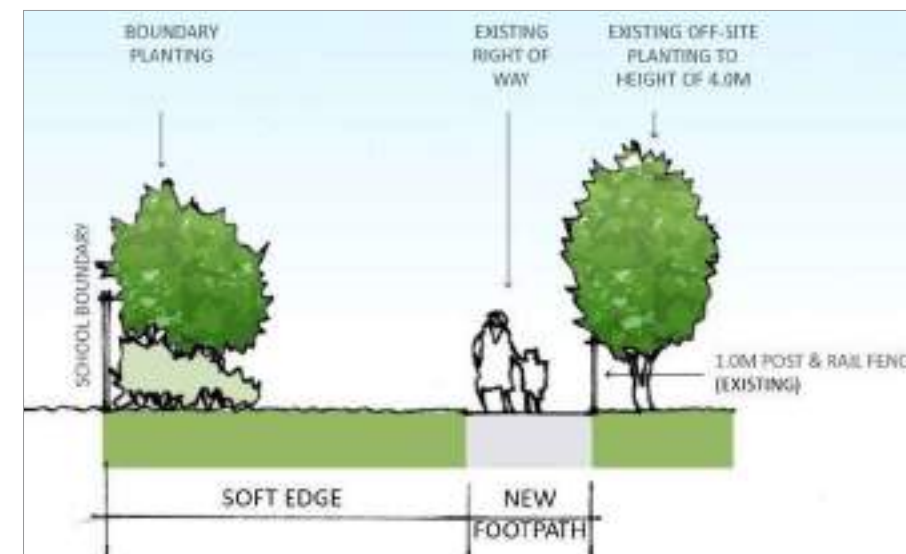
A key element of the design will be to significantly raise the awareness of pedestrian and equestrian crossing points over the loop road. The emphasis will be to ensure vehicle drivers slow down prior to the crossing point. To this end a combination of a raised table and narrowing of the road at the crossing points should be considered as illustrated in the diagram opposite.



Diagram showing proposed crossing point of Public Bridleway over Loop Road

## Public Right of Way Past School to Lower Rainham

The design of this route should include a minimum of 3m cycle/ footway with grass verges, with a low hedge and rail on the school side (with secure school fence beyond) and a high hedge on the opposite side (refer to Section H).



Section H



## 6.0 DESIGN DEVELOPMENT

### 6.3 ACCESS & MOVEMENT

In establishing the framework for the site one of the key considerations has been the desire to create a low speed road network that allows ease of movement without creating a highway dominated environment. This will be achieved by varying the horizontal alignment of the roads and creating a series of clearly defined spaces which the highway passes through. Complementing the highway network is a series of footpaths and cycleways which thread their way through the development, linking the various uses of the site.

The integrated approach to transportation will reduce the need to travel, encourage walking and cycling and the use of public transport in preference to the private car. This will be achieved through:

- the location and mix of uses to minimise travel and to encourage shared trips, such as the siting of the school close to the village heart, local centre and existing village of Lower Rainham;
- providing employment opportunities within and close to the local centre;
- allowing for new bus stops around the loop road close to the access roads to the development plots ensuring ease of access for pedestrians;
- a network of footpaths and cycle ways linking the different uses and neighbourhoods within the area; and
- safe, attractive and legible access and movement.

#### Vehicles

The vehicle access and movement infrastructure is based primarily on the creation of a loop road which links to Lower Rainham Road via a ghost island right turn lane. This has been designed to allow for ease of vehicle (and pedestrian) movement through the development site along a meandering route aiding the creation of different character areas. The details of this junction access and loop road form part of the application requiring permission and are set out in detail in the following section.

In summary, the loop road will head south west from Lower Rainham Road rising gently towards the western edge of the plot, then turns south and follows the contours of the land as much as possible before turning east down the slope.

Here it will cross over a re-aligned Pump Lane at an off-set crossroads before continuing east close to the southern boundary of the site to the southern corner.

At this point it will turn north down the slope across the public bridleway before curving north and north west past the school site crossing over Pump Lane again and completing the loop just short of the Lower Rainham Road access junction.

Pump Lane will be re-aligned at the southern end in order to avoid use of Pump Lane as a short cut.

From the loop road there will be a series of access roads serving the development plots created. The internal layout has been designed to allow bus penetration through the development with potential bus stop locations near the local centre and school as well as other stops around the loop road.

#### Pedestrians and Cyclists

The scheme will accommodate a network of pedestrian and cycle routes to facilitate sustainable forms of movement. These internal routes will connect to the existing local network to ensure permeability throughout the site.

The possible pedestrian and cycle access developments which have been proposed are as follows:

- Eastcourt Lane which is a quiet narrow country lane that connects Grange Road and Lower Twydall Lane is suitable for both pedestrians and cyclists;
- A network of quiet streets and greenways which permeate through the site and connect to the Riverside Park in the north”.

The principal cycle route will follow the alignment of the loop road and link up with the Lower Rainham Road and pass adjacent to the school site.

The only current pedestrian route through the site is the established public bridleway forming an attractive and pleasant walkway east to west across the site. The intention is to enhance this bridleway by extending it from Pump Lane through the new local centre and residential areas to the western boundary where it will link with perimeter walkway culminating in a link to Lower Twydall Lane to the far west corner of the site. This would ensure a continuous pedestrian link from east to west across the whole site.

A further pedestrian only route will be created linking the loop road past the new school site to the north and joining with Lower Rainham Road near the traffic lights. This will enable easy connections (for school users and others) between the existing residential areas and the new school and village green area.

A pedestrian access route (also utilised as an emergency vehicle access point) will be created to the north east of the plot linking with Lower Bloors Lane.

A perimeter walkway will be introduced around the entire site allowing pedestrians to enjoy the countryside and small natural swales to be created as part of the site drainage strategy. The loop road will also include a pavement for its length allowing pedestrians to do a circular route within the site itself.

The loop road will include a cycle route allowing easy access for cyclists within the proposed development site.

## 6.0 DESIGN DEVELOPMENT

### 6.4 LANDSCAPE STRATEGY

The intent behind the indicative landscape structure is threefold:

- provide additional landscape screening and separation for the existing residential properties in addition to the high hedgerows and trees; and
- provide a structural landscape around the perimeter of the development plots and along the loop road that will allow the development to blend within a natural landscape setting whilst having glimpses of the built form through the greenery; and
- provide significant areas of open space for recreation for existing and new residents, which incorporate swales and the water drainage forms.

#### Principal characteristics

- Create development parcels which respect the existing pattern of orchards and shelter belts, by retaining and reinforcing these features where appropriate, to form:
  - » Landscape buffer zones and strong vegetated edges within the development and along its boundaries which are also designed integrally as part of the drainage for the site.
  - » Green Infrastructure (GI) within the development and links to other surrounding GI locally.
  - » Healthy, vibrant spaces which provide recreation and access opportunities to new and existing populations locally.
  - » Green routes through the development (east/west, north/south), assisting in framing views out and softening views in to the proposed built development areas.
- Respond to the existing mosaic of orchard landscapes mixed with pockets of arable, pasture and small blocks of woodland by integrating elements of these characteristic features into the fabric of the development as a design narrative.
  - » For example, areas of native wildflower meadow or wildflower edges to open spaces to respond to the more open land use character of arable / pasture. Small blocks of woodland could be retained and enhanced where possible as part of creating new GI and an attractive landscape setting to the proposed development.
- Site new development, highways and Green Infrastructure to respond to the natural topography of the site, allowing this to enhance the availability of strategic views out over the estuary to the north.
- Create a new distinctive architectural style and landscape character, including micro character zones within the development, using the underlying valued characteristics of the site and the locality to provide a rationale for creating a new sense of place and key character spaces within the new development.

#### Principal issues – Design Response

Responding to the pressures affecting local distinctiveness and rural character in urban fringe areas:

Retain where possible existing hedgerows of good condition and value, restoring neglected fields and hedgerows where appropriate. New structural hedgerow planting and wider structural landscape treatment with the use of primarily native species, avoiding the use of non-native conifer planting and boundary treatments which are suburban in character and can prevent views and be of lower landscape and ecological value.

Provide strategic landscape buffer zones and public open spaces to avoiding ‘creeping suburbanisation along roads and at edges of settlements’ and compensate for the change in site landscape character as a result of the loss of orchards and shelter belts, allowing new built development to be accommodated as sympathetically as possible within the surrounding local landscape.

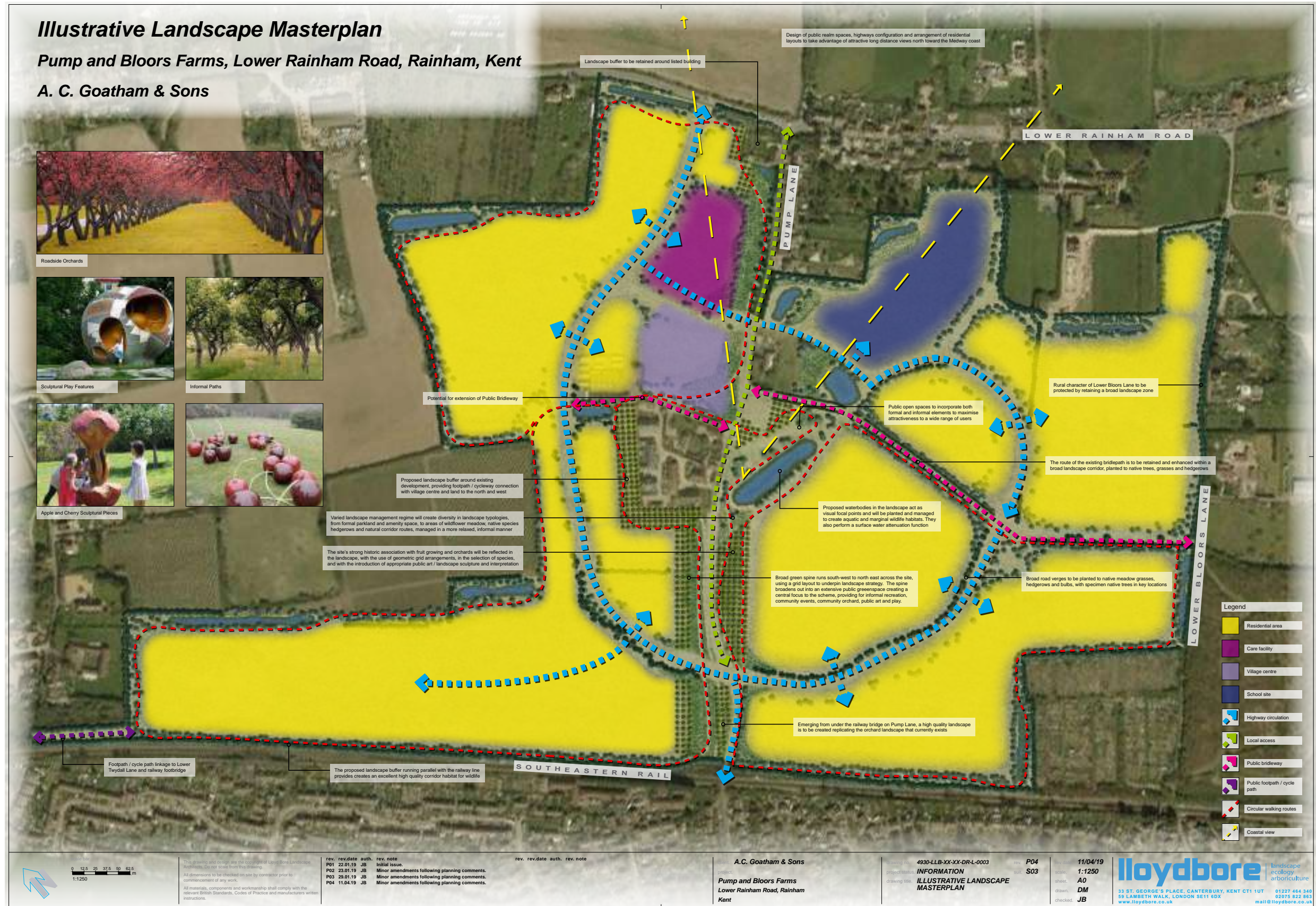
Develop a robust design response to areas which are of a sensitive conservation character, for example, development adjoining Lower Rainham Conversation Area (CA) and close to Lower Twydall CA and fronting immediately onto Lower Rainham Road, thereby responding to the need to address trends towards urban fringe fragmentation by taking an integrated approach towards strengthening coherence of rural character.

Develop a strong and distinctive palette of external materials and of soft landscape plants to respond to the underlying rural character of the area and its aspect, thereby responding to landscape diversity and local distinctiveness and where possible, improving landscape quality and condition in the context of the new development of the site.



# 6.0 DESIGN DEVELOPMENT

## 6.4 LANDSCAPE STRATEGY





## 6.0 DESIGN DEVELOPMENT

### 6.5 SCALE & APPEARANCE

The scale and appearance of the dwellings is to mainly reflect the size and type of the dwellings in the immediate vicinity. The primary influence for this will come from the housing to the south side of the railway, largely consisting of two storey, post-war semi-detached and terraced housing. Some smaller detached dwellings will also be acceptable.

The following typical height parameters are based on more conventional pitched roof designs. The design of the units is not meant to be prescriptive therefore allowing future developers to either bring their 'stock' design or a more 'adventurous' approach to the design of the units. These more enterprising designs should not be restricted by the imposition of maximums but rather should allow for the scale to be explored by section and modelling in long views.

The proposed development will have a typical build height limited to two storeys, yielding a typical overall ridge height of up to 9m. The final heights will be wholly dependent on design, roof pitch and span which should provide variety to the roofscape.

The overall scale would also benefit from and require some vertical articulation. Therefore the inclusion of the occasional two and a half or three storey elements should be provided to create individual 'feature' or 'focal' buildings and should be scattered throughout the development. In these cases ridge heights would be able to increase to up to 11m, but localised to individual dwellings.

The units in the village centre should be a maximum of two storeys with a single floor of residential apartments over retail ground floors. The elderly apartments could be up to 3 storeys. A ridge height of up to 11m would be acceptable to account for the greater heights required for the retail at ground floor.

The Care Home element should be two storeys in the main, minimised where possible with lowered eaves. To keep footprint to a minimum the back of house accommodation should be located within the roof volume. Ridge heights would therefore be kept primarily to up to 8m with some elements rising to up to 10m.

A small element of three storey development would be acceptable, attributed to the assisted living element of the proposed development. Height should be minimised where possible but ridge heights could achieve a maximum of up to 12m and located on the south side of the care plot opposite the village centre.

The school will be primarily single storey of up to 7m in height.



Indicative elevations of the street types and appearance that could be achieved



## 6.0 DESIGN DEVELOPMENT

### 6.6 BUILDING ACCOMMODATION

Whilst the minimum Nationally Described Space Standards should generally be followed, the Council's own minimum 'essential GIA' must be applied. For two storey dwellings, and depending in each case on occupancy, a combination of these standards are as follows:

- 2 beds 77-79sqm
- 3 beds 87-102sqm
- 4 beds 100-124sqm

The current Local Plan has no specific policy for housing mix, save for policy H10, which calls for a greater 'range of sizes' on new build developments. The conclusion of the Medway SMHA points towards a greater focus on three bedroom property at about 50%, with a slightly higher emphasis toward the lower, two bedroom end than four bedroomed units. This aspiration should be followed in this development.

The total site area for the various residential plots identified amounts to 32.12 ha. The target number of residential units to be delivered for the site is 1,250 dwellings including 8 self build units, and 10 apartments in the village centre. The residential plots identified in the masterplan will therefore need to achieve a density of 38.35 dwellings /hectare.

### 6.7 ECOLOGY

The submitted ecology statement identifies that on-site open space is proposed, along with footpaths around the site for use by the public to help reduce the impact on other designated sites that may see an increase in recreational pressure of minor significance. It is expected that long term management plans will be sufficient in ensuring the maintenance of the suitability and functionality of these open spaces.

The proposed scheme will see a small area of community orchard replanted, along with areas of grassland, SUDs, ponds and internal hedgerows and street trees created within the scheme. This will see significant improvements in the biodiversity value of the site, through a varied planting structure, increased species diversity and different management scheme. The proposals must include green corridors around and through the site (linked to street tree planting, swales and ponds) and ensure 'dark' corridors are developed as part of the scheme.

All necessary ecological surveys have been undertaken but are likely to need updating for the detailed proposals of the site.



Frant Court, Nr Tunbridge Wells, Kent

## 7.0 DETAILED DESIGN

### 7.1 DETAILED DESIGN

The master plan provides a framework for an attractive and sustainable new neighbourhood and the character areas convey the varied nature of the development. However, the creation of a high quality, sustainable residential environment is as reliant on the detailed design and form of the buildings and open spaces as the structure of the development.

In the following section a number of key design considerations have been identified which are to be read in conjunction with the descriptions of the character areas.

### 7.2 KEY NOTE BUILDINGS

These buildings will be strategically located throughout the development and will act as visual 'markers' performing a range of functions depending on their location. They will aid navigation through the development by becoming reference points and may be sited to act as 'gateway' features, vista stops or to identify the entrance to a mews or other environmental space.

They are buildings that by virtue of being different in height or form, material finish or colour or because of some unusual or striking architectural feature, stand out amongst other buildings around them. For example, these will include the school, extra care and local centre buildings.

### 7.3 PARKING

Parking will be provided in accordance with the local standards.

One of the aims of sustainable development is to reduce car use and encourage other modes. The use of courtyard parking will make it less convenient to simply jump into the car, so that residents will be more likely to walk or use a bicycle to move around the development. The parking courts are to be places in themselves and wherever possible will be incorporated within mews, to allow through movement and natural surveillance.

Garage parking should be sited with sufficient space to park a car in front of the doors.

### 7.4 BOUNDARIES

Front boundaries - These may be treated differently depending on the location and dwelling type. More often they will be open with planting or hard landscaped when close to the back edge of the footpath or highway. the front gardens will be enclosed with low walls, railings or fencing to create defensible boundaries.

Side boundaries - When against the highway they are to be 1.8m high brick walls enclosing the rear gardens. Close boarded fencing will be acceptable when not fronting onto the public realm or where they adjoin woodland/ landscape areas. Rear boundaries - These will generally be timber fencing at 1.8m high to maintain privacy and amenity value of private gardens.

### 7.5 UTILITIES

Accommodating meters within a residential environment can have a significant impact on the built environment. Wherever possible, utility boxes should be sited on buildings where they will be least visible from the public realm. Integration within the house entrances or behind gates or gable walls should be considered.

### 7.6 MATERIALS & DETAILING

Traditionally, buildings in the locality were built from a limited palette of materials. It is expected that the architectural character of the development will embody a Kent contemporary; however, to reflect the local tradition, both old and new, there will be variations in the characteristics of each local area within the development.

To be consistent with the tradition of the area, materials are likely to be selected from:

- Brickwork
- Render
- Weatherboarding
- Plain tile hanging
- Plain Roof tiles (red or grey)



Photo 19 - white timber boarding at the rear of Russetts Close with grey roof tiles.



Photo 20 - light coloured render on Pump Farmhouse with red clay roof tiles and chimney



Photo 21 - white timber boarding on red brick with red clay roof tiles on Pump Lane



Photo 22 - black stained timber boarding of Russetts Close with red clay roof tiles.



Photo 23 - Chapel House timber framed with red clay roof tiles and chimney



Photo 24 - red brick with clay roof tiles on Lower Twydall Lane and chimneys



Photo 25 - mixed render and brick in Lower Twydall Lane



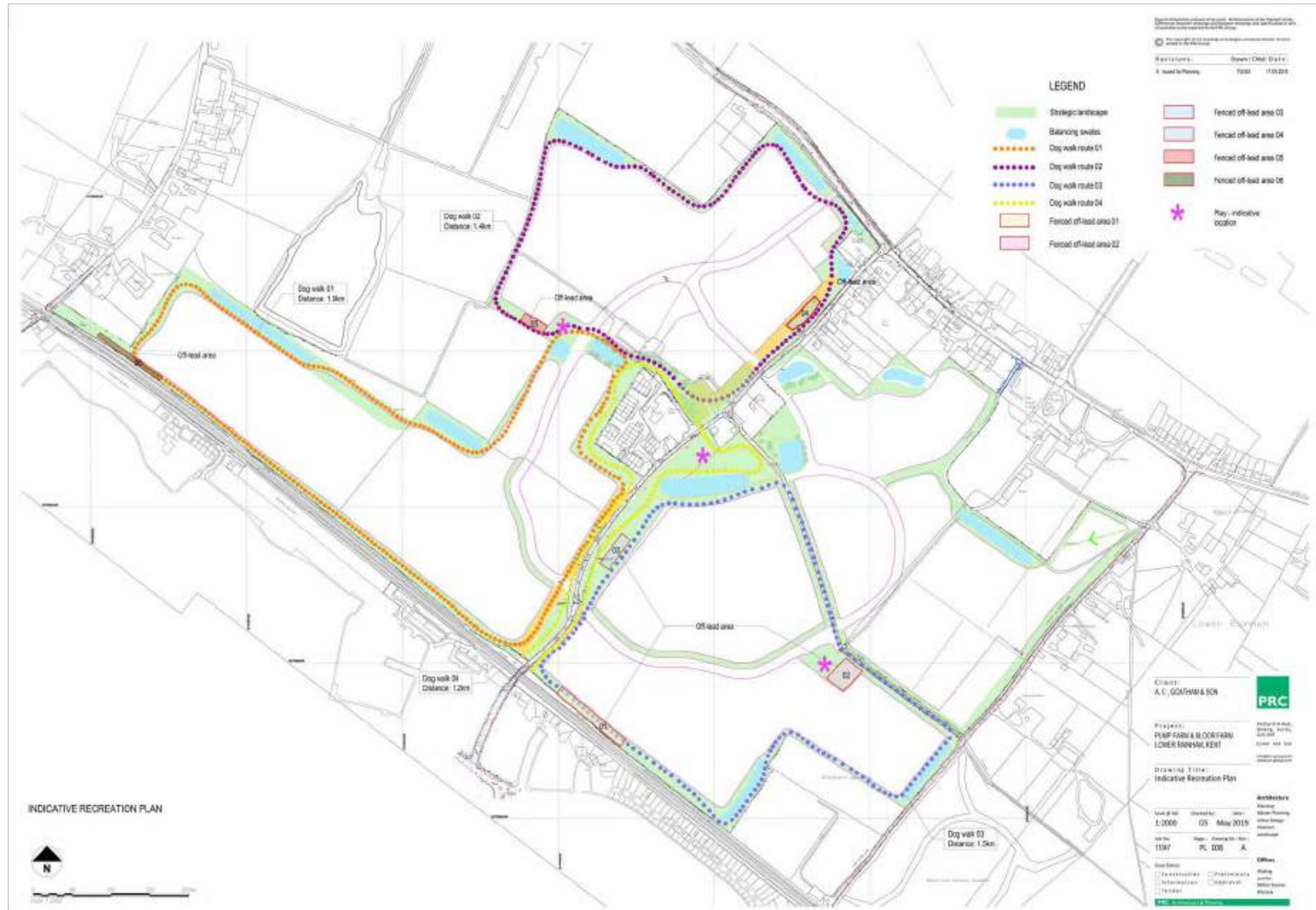
Photo 26 - modern brick and clay roof tiles south of the railway



Photo 27 - mixed styles south of the railway

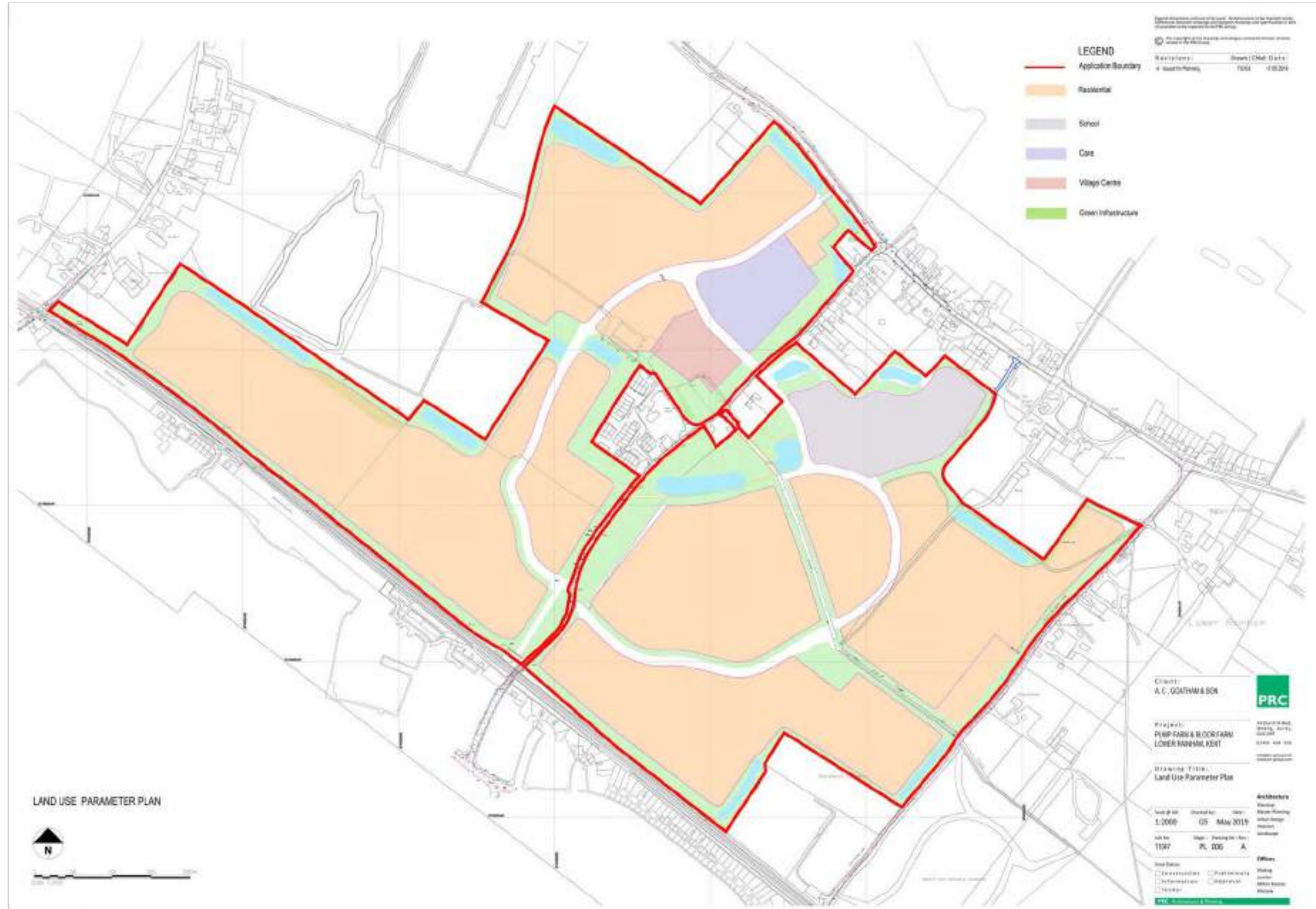


# 7.0 DETAILED DESIGN



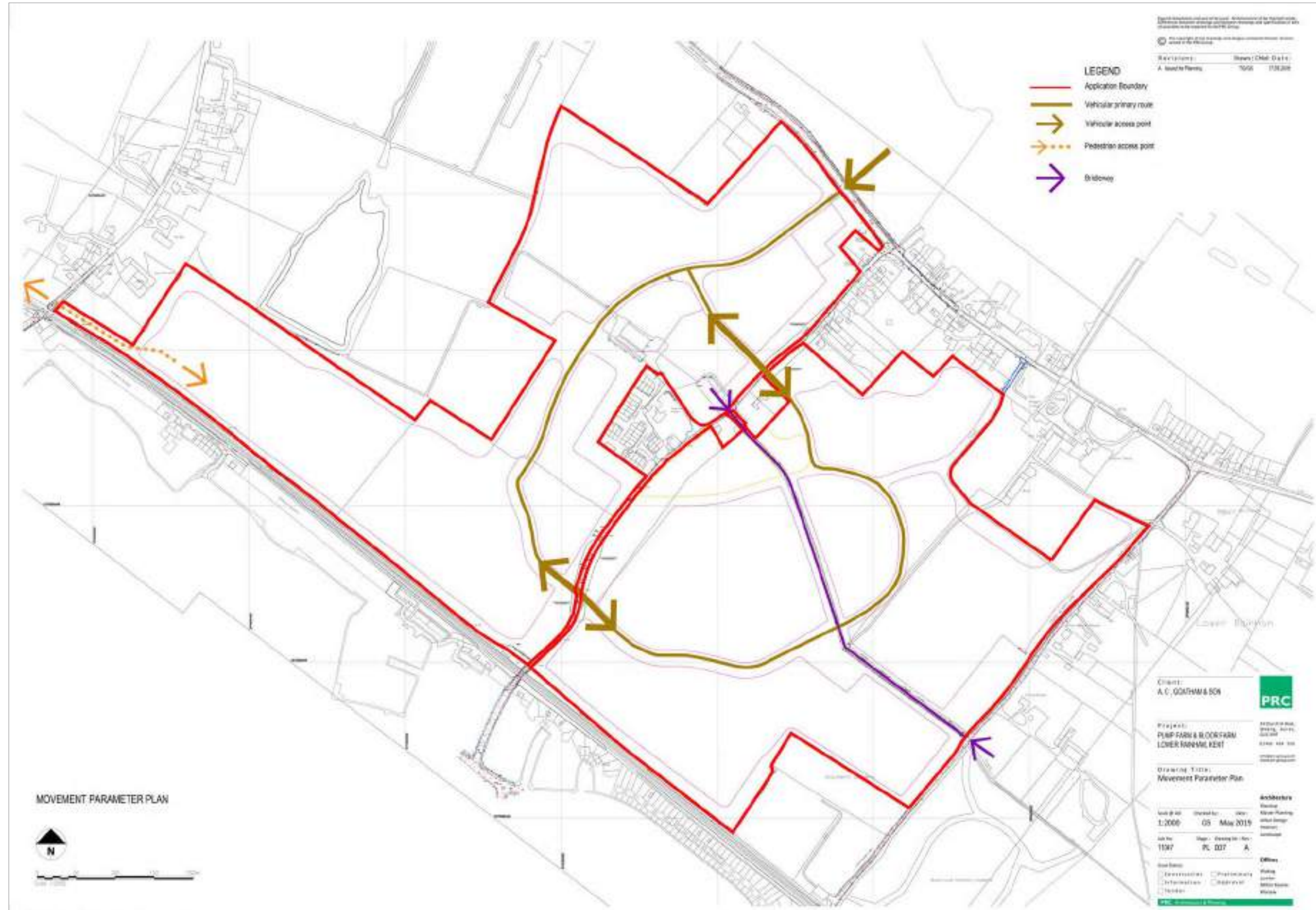


# 7.0 DETAILED DESIGN



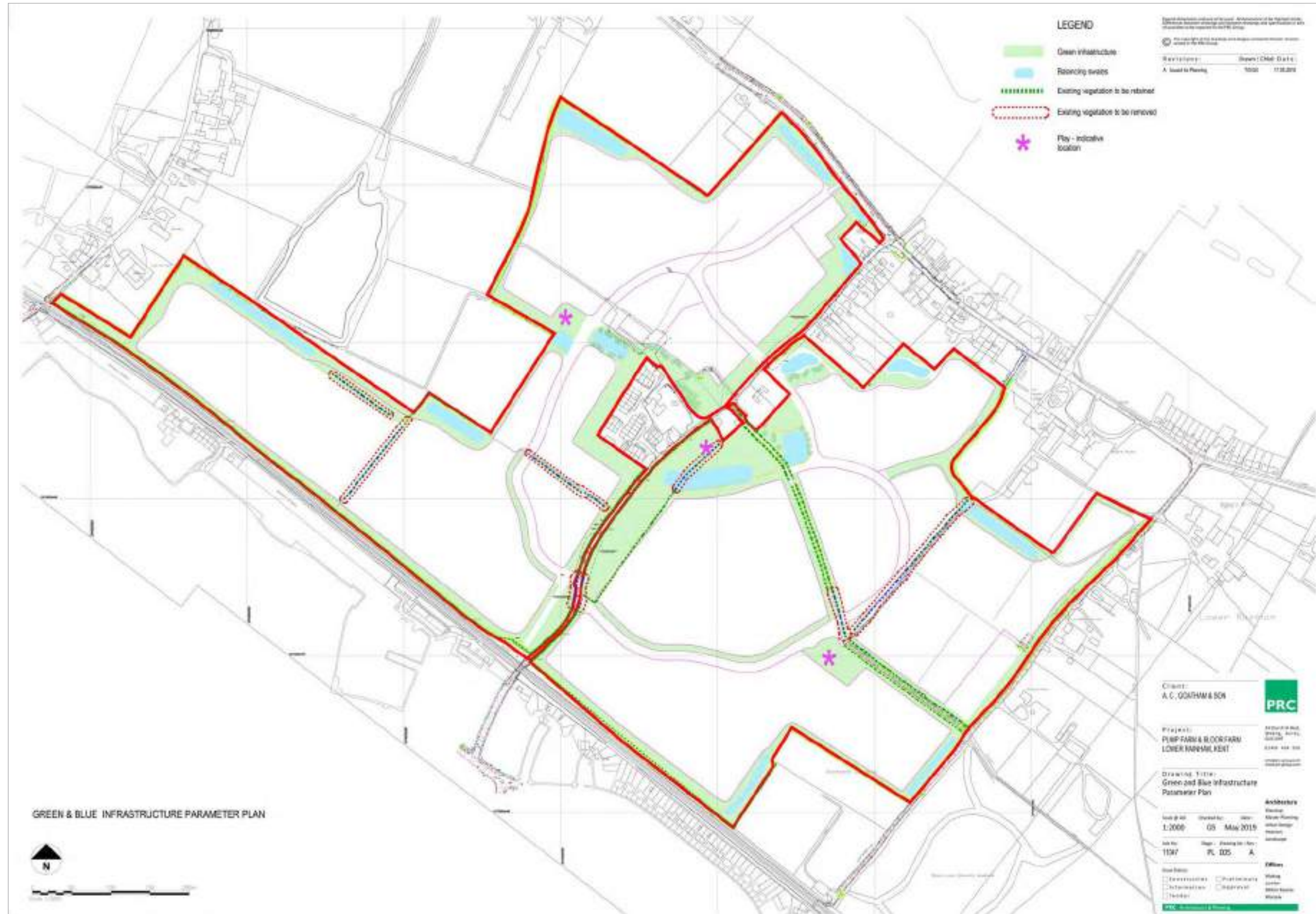


# 7.0 DETAILED DESIGN



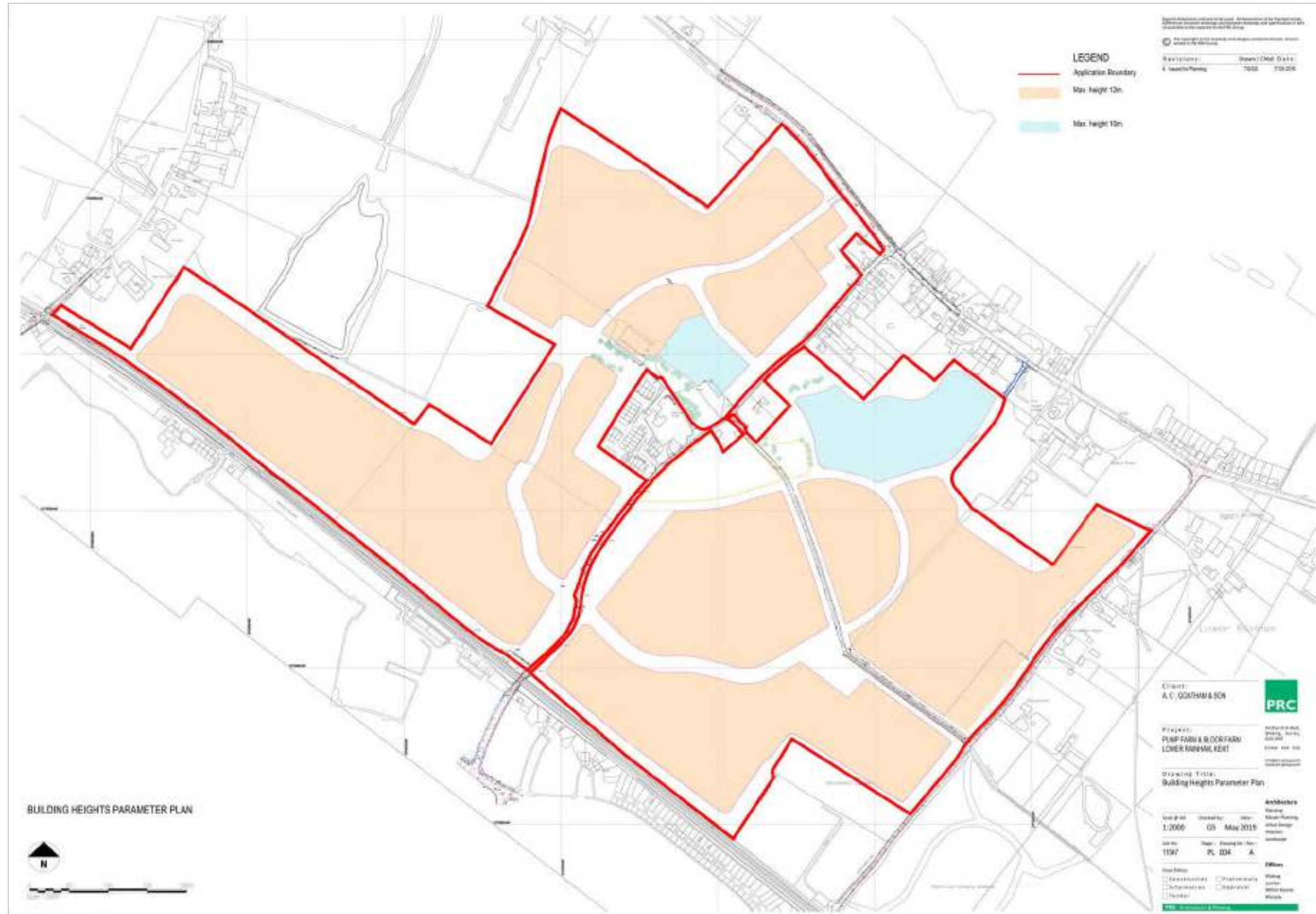


# 7.0 DETAILED DESIGN





# 7.0 DETAILED DESIGN



# 8.0 THE PROPOSED DEVELOPMENT

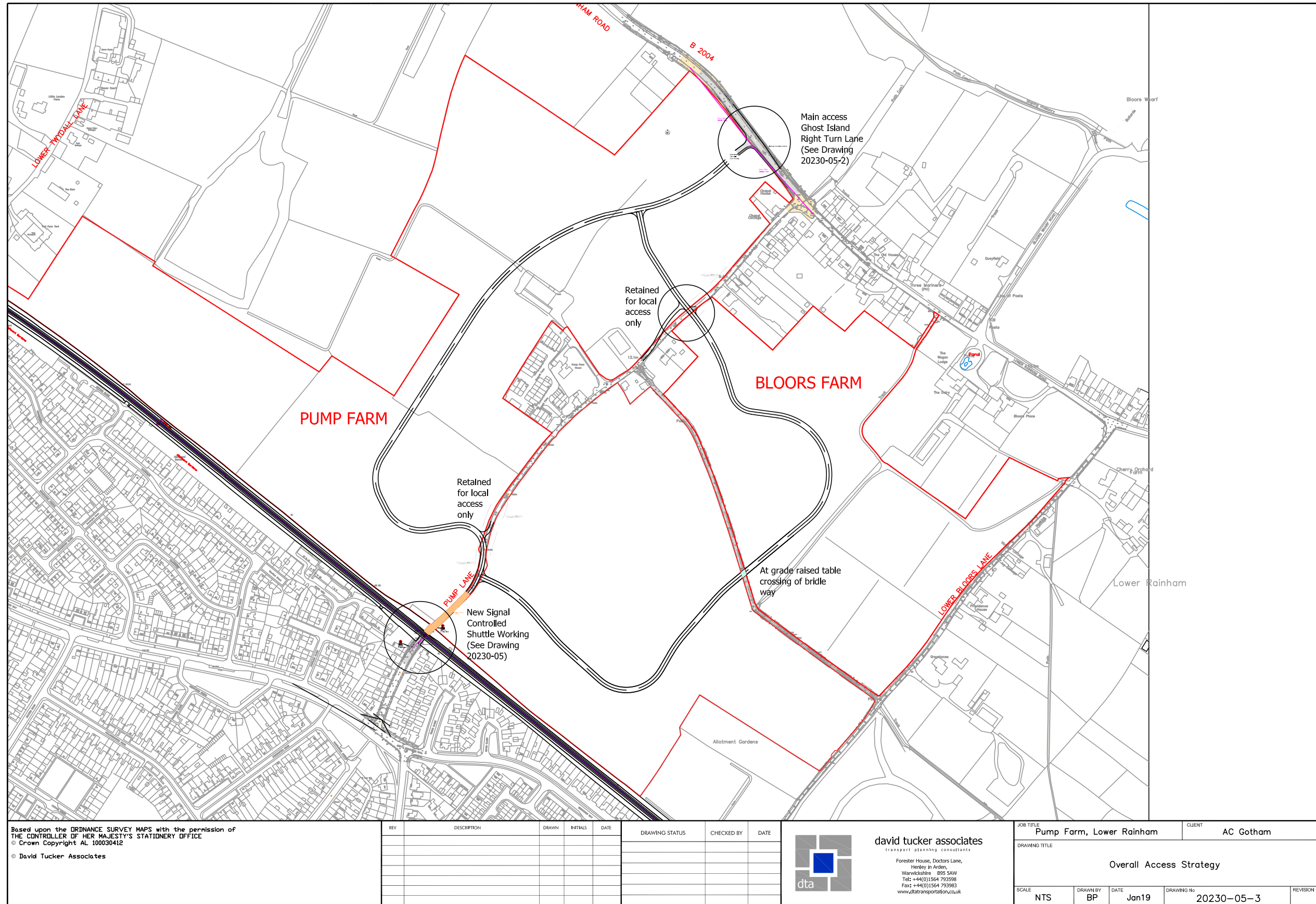
## 8.1 ILLUSTRATIVE MASTER PLAN





# 8.0 THE PROPOSED DEVELOPMENT

## 8.2 DETAILED ACCESS DRAWINGS



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REV	DESCRIPTION	DRAWN	INITIALS	DATE	DRAWING STATUS	CHECKED BY	DATE

**david tucker associates**  
 transport planning consultants  
 Forester House, Doctors Lane,  
 Henley in Arden,  
 Warwickshire B49 5AW  
 Tel: +44(0)1564 793598  
 Fax: +44(0)1564 793983  
 www.dta-transportation.co.uk

JOB TITLE		Pump Farm, Lower Rainham		CLIENT	AC Gotham
DRAWING TITLE					
Overall Access Strategy					
SCALE	DRAWN BY	DATE	DRAWING No	REVISION	
NTS	BP	Jan19	20230-05-3		

# 8.0 THE PROPOSED DEVELOPMENT

## 8.2 DETAILED ACCESS DRAWINGS



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REV	DESCRIPTION	DRAWN	INITIALS	DATE	DRAWING STATUS	CHECKED BY	DATE



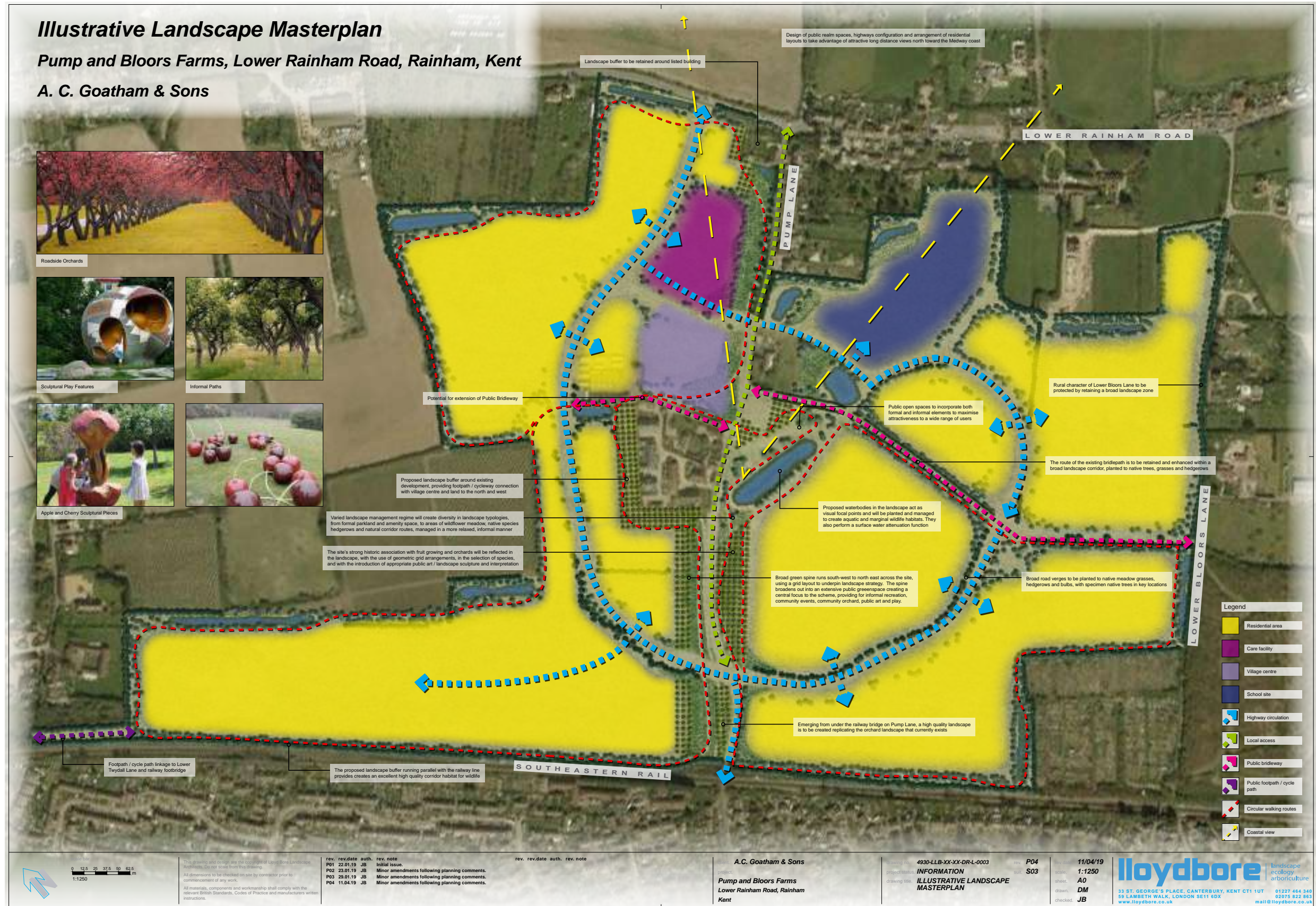
**david tucker associates**  
transport planning consultants  
 Forester House, Doctors Lane,  
 Henley in Arden,  
 Warwickshire B95 5AW  
 Tel: +44(0)1564 793598  
 Fax: +44(0)1564 793963  
 www.dta-transportation.co.uk

JOB TITLE Pump Farm, Lower Rainham		CLIENT Goatham
DRAWING TITLE Proposed Pump Lane Railway Bridge Improvements		
SCALE 1/500@A3	DRAWN BY BP	DATE Oct18
DRAWING No 20230-05		REVISION A



# 8.0 THE PROPOSED DEVELOPMENT

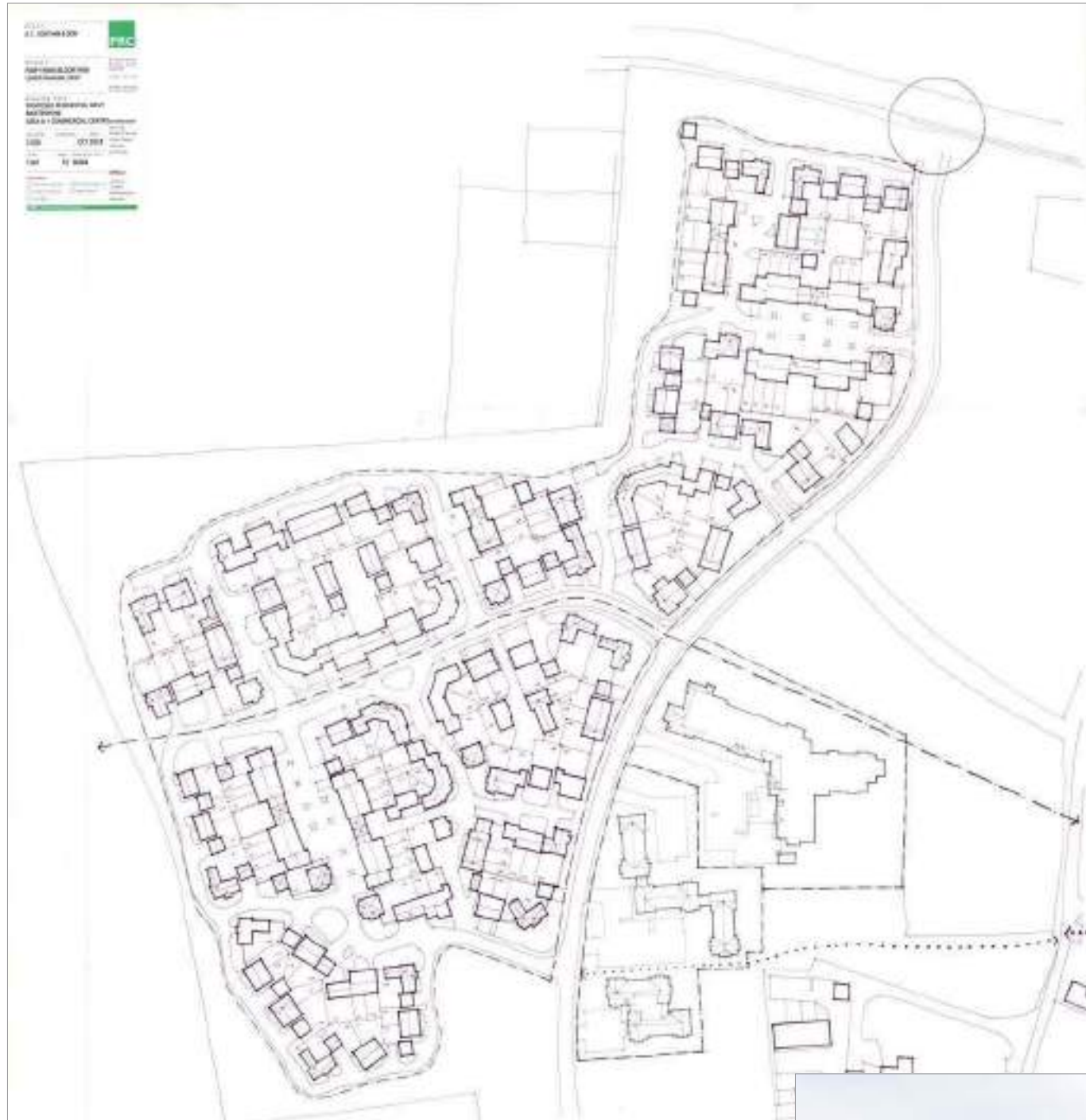
## 8.3 PARAMETER PLANS FOR LANDSCAPE STRUCTURE AND SCALE





# 8.0 THE PROPOSED DEVELOPMENT

## 8.4 ILLUSTRATIVE LAYOUT AND ELEVATION DRAWINGS





# 8.0 THE PROPOSED DEVELOPMENT

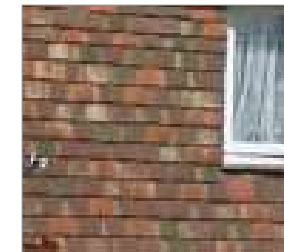
## 8.5 INDICATIVE MATERIALS PALETTE

Roofs



red clay or grey slate (or similar)

Walls



stained timber, render, brick. timber frame and tile hanging

Brick Colour



Variant red hue



## 8.0 THE PROPOSED DEVELOPMENT

### 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE





# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



Field Maple  
*Acer campestre*



Hornbeam  
*Carpinus betulus*



Dogwood  
*Cornus sanguinea*



Hazel  
*Corylus avellana*



Hawthorn  
*Crataegus monogyna*



Holly  
*Ilex aquifolium*



Privet  
*Ligustrum vulgare*



Blackthorn  
*Prunus spinosa*



Oak  
*Quercus robur*



Dog Rose  
*Rosa canina*



Sweet Briar  
*Rosa rubiginosa*



Elder  
*Sambucus nigra*



Yew  
*Taxus baccata*



Guelder Rose  
*Viburnum opulus*

NATIVE SPECIES  
HEDGEROW MIX

# PLANTING PALETTE



# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



Field Maple  
*Acer campestre*



Norway Maple  
*Acer platanoides*



Alder  
*Alnus glutinosa*



Silver Birch  
*Betula pendula*



Hornbeam  
*Carpinus betulus*



Sweet Chestnut  
*Castanea sativa*



Black Walnut  
*Juglans regia*



London Plane  
*Platanus x hispanica*



Wild Cherry  
*Prunus avium*



Oak  
*Quercus robur*



Red Oak  
*Quercus rubra*



Small Leaf Lime  
*Tilia cordata*

NB – FOR WETTER AREAS WITHIN THE SCHEME IT MAY BE POSSIBLE TO INTRODUCE WILLOW AND POPLAR, BUT THESE ARE NOT RECOMMENDED FOR AREAS CLOSE TO STRUCTURES AND SERVICES, DUE TO THEIR HIGH WATER-DEMANDING NATURE.

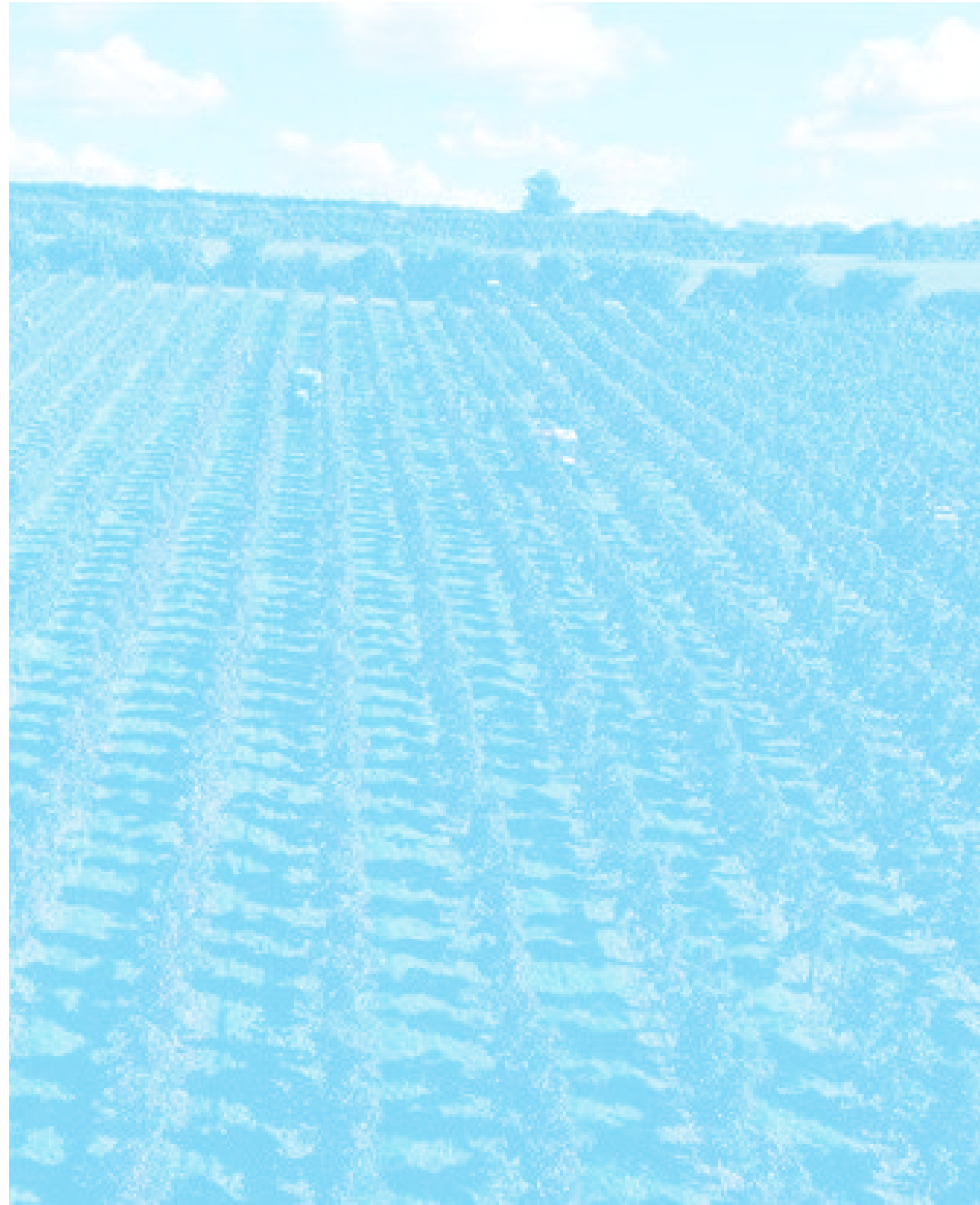
LARGER NATIVE & NON-NATIVE TREES FOR OPEN SPACES

# PLANTING PALETTE



# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



Snowy Mespilus  
*Amelanchier lamarckii*



White-Bark Birch Varieties  
*Betula utilis / ermanii*



Indian Bean Tree  
*Catalpa bignonioides*



Hawthorn - Red Flower Varieties  
*Crataegus monogyna*



Chinese Privet  
*Ligustrum lucidum*



Sweet Gum  
*Liquidambar styraciflua*



Crab Apple  
*Malus sylvestris*



Christmas Berry  
*Photinia x fraseri 'Red Robin'*



Bird Cherry  
*Prunus padus*



Flowering Cherry Varieties  
*Prunus spp.*



Callery Pear  
*Pyrus calleryana 'Chanticleer'*



Rowan  
*Sorbus aucuparia*



Whitebeam  
*Sorbus aria*



Lilac  
*Syringa vulgaris*

NATIVE AND NON-NATIVE TREES  
FOR SMALL SPACES AND STREETS
















# PLANTING PALETTE



# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



 Lavendar <i>Lavandula</i> spp.	 Daisy Bush <i>Olearia x haastii</i>	 Californian Lilac <i>Ceanothus 'Puget Blue'</i>
 Sage - Variegated Varieties <i>Salvia officinalis</i>	 Smokewood - Purple or Green <i>Cotinus coggygia</i>	 Escallonia Escallonia
 Christmas Berry <i>Photinia x fraseri 'Red Robin'</i>	 Shrubby Cinquefoil <i>Potentilla fruticosa</i>	 Hedging Varieties of Rose <i>Rosa rugosa</i>
 Black Elder <i>Sambucus 'Black Lace'</i>	 Rosemary <i>Rosmarinus</i>	 Rock Rose <i>Cistus</i> spp.
 Variegated Holly <i>Ilex aquifolium</i>	 Hebe 'Mrs Winder'	 Skimmia <i>Skimmia japonica</i>

ORNAMENTAL SHRUBS FOR  
HEDGING OR MASS PLANTING

# PLANTING PALETTE



# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



False Castor Oil Plant  
*Fatsia japonica*



Oregon Grape  
*Mahonia aquifolium*



Snowy Mespilus  
*Amelanchier lamarckii*



Forsythia  
*Forsythia x intermedia*



Mexican Orange Blossom  
*Choisya ternata*



Butcher's Broom  
*Ruscus aculeatus*



Mock Orange  
*Philadelphus*



Barberry - Many Varieties  
*Berberis*



Yellow and Red Stem Dogwoods  
*Cornus alba*



*Viburnum davidii*



Firethorns  
*Pyracantha*



Laurustinus  
*Viburnum tinus*



Broadleaf  
*Gridelinia littoralis*



Pittosporum  
*Pittosporum tenuifolium*



Shabby Honeysuckle  
*Lonicera nitida 'Maygreen'*

ORNAMENTAL SHRUBS FOR  
HEDGING OR MASS PLANTING

# PLANTING PALETTE



# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



Irish ivy  
*Hedera helix 'Hibernica'*



Periwinkle  
*Vinca minor*



Cotoneaster  
*Cotoneaster dammeri*



Fishbone Cotoneaster  
*Cotoneaster horizontalis*



Japanese Spurge  
*Pachysandra 'Green Carpet'*



Sweet Box  
*Sarcococca confusa*



Californian Lilac  
*Ceanothus t. 'repens'*



Ground Cover Roses  
*Rosa spp.*



Bittersweet  
*Euonymus f. 'Emerald Gaiety'*



Elephant Ears  
*Bergenia cordifolia 'Silberlicht'*



St. John's Wort  
*Hypericum x m. 'Tricolor'*



Ornamental Cranesbill  
*Geranium 'Rosanne'*



Big Blue Lilyturf  
*Liriope muscari*



Wood Spurge  
*Euphorbia robbiae*



Golden Thyme  
*Thymus pulegioides 'Aureus'*

LOW GROUND COVER FOR HIGH DENSITY MASS PLANTING

# PLANTING PALETTE



# 8.0 THE PROPOSED DEVELOPMENT

## 8.6 INDICATIVE LANDSCAPE PLANTING PALETTE



Clematis - Many Varieties  
Clematis



Variegated Ivy  
Hedera helix 'Glacier'



Variegated Ivy  
Hedera a. 'Gloire de Marengo'



Common Jasmine  
Jasminum officinale



Winter Jasmine  
Jasminum nudiflorum



Honeysuckle  
Lonicera periclymenum



Virginia Creeper  
Parthenocissus henryana



Firethorn  
Pyracantha 'Orange Glow'



Climbing and Rambling Varieties  
Rosa



Star Jasmine  
Trachelospermum jasminoides



Climbing Hydrangea  
Hydrangea petiolaris



Vine - In Variety  
Vitis

CLIMBING PLANTS FOR WALLS,  
FENCES AND ELEVATIONS

# PLANTING PALETTE