LANGLEY

SUTTON COLDFIELD

DESIGN & ACCESS STATEMENT

AUG / 2021

PROJECT CONSULTANT TEAM:

Project Co-ordination, Town Planning, EIA, Urban Design, Affordable Housing, Research and Viability Assessment

WSP - Highways, Drainage, Utilities, Acoustics, Sustainability, Geotechnical, Energy, Transportation & Air Quality

EDP - Landscape, Ecology, Arboriculture, & Archaeology

Arcadis - Education, Health, Cost Consultants

Hydrock - Ground Investigations, Geo-technical,

RPS - Unexploded Ordnance

Jeremy Lake - Heritage

Wardell Armstrong - Minerals

BNP Paribas - Viability

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OVERVIEW

Langley Sustainable Urban Extension (Langley SUE) is one of the largest residential growth initiatives within the UK. Birmingham City Council released the land to respond to the demand for new communities and supportive infrastructure improvements. The proposals within will form a key part of Birmingham's ambition to provide over 51,000 new homes by 2031.

1.0 CONSORTIUM FOREWORD

1.1 The proposed Langley Sustainable Urban Extension, located to the east of the Royal Town of Sutton Coldfield, was allocated in the adopted Birmingham Development Plan in January 2017 and is currently recognised as one of the largest residentially-led, mix use development opportunities in the United Kingdom.

1.2 This project, when complete, will provide a significant sustainable contribution to the challenges we all face, to accommodate, appropriately, the projected growth needs of this region of the Country and is led by the Langley Sutton Coldfield Consortium, which comprises a group of landowners, house builders and promoters working together collaboratively to ensure that the vision of a high quality and sustainable scheme at Langley is achieved.

1.3 To fulfil this aspiration the development will need to deliver a significant number of new, quality dwellings. These, as required by the Birmingham Development Plan, will be predominantly for families, offering a range of properties in a variety of sizes, types and tenures. This commitment also includes the provision of a range of affordable housing as well as for those who have retired or are in need of additional support, all of which are a direct response to the needs of the future residents of Langley.

1.4 However, the Consortium's vision for Langley is about much more than just the delivery of new homes.

1.5 The consensus within the Consortium is that the successful creation of this new community must be underpinned by the delivery of supporting primary physical and social infrastructure, all of which must be available when required by the growing community. The proposed infrastructure will include education provision comprising, nurseries, early years provision, a range of schools to provide for children and young people who are able bodied or for those with special educational needs as well as those with disabilities.

1.6 Langley will also provide a range of community and health facilities, as well as retail, commercial and leisure uses. These will be enhanced by the creation of a significant amount of public open space, incorporating sports, play and other recreational experiences, all of which will be accessible to all members of the community, irrespective of their level of mobility.

1.7 The new vehicular access to the A38, as part of the wider highway improvement works, is supported by the creation of a network of walking and cycling routes and most importantly the provision of improvement to the current public transport services. All of which will offer a range of differing types of travel to all residents and visitors.

1.8 The proposals seek to create a new area of the Royal Town of Sutton Coldfield, celebrating its unique character through the delivery of a new, vibrant, integrated, interpretation of the area, which responds to the demands and needs of the future residents at Langley.

1.9 The Consortium has embraced the feedback received as part of its engagement with local residents, community groups, elected representatives and Birmingham City Council Officers, as well as other consultees, when shaping and refining its proposals. As a result, this Design and Access Statement illustrates the vision for Langley as well as clarifying the rationale behind the project.

LANGLEY
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LANGLEY IS...

CIRCA 27 HA OF MIXED USES AND COMMUNITY FACILITIES

CIRCA 93 HA OF PUBLICLY ACCESSIBLE FORMAL AND INFORMAL GREEN SPACES AND SPORTS FACILITIES

PROVISION OF GP AND HEALTH CENTRE FACILITIES

1 X SECONDARY SCHOOL WITH 6TH FORM

5,500 NEW HOMES

CIRCA. 14,000 RESIDENTS, 5,000 UNDER 18'S, 8,000 WORKING AGE ADULTS, 1,000 OVER 65'S

3 X NEW PRIMARY SCHOOLS AND NURSERY PROVISION

2 X NEW A38 HIGHWAY JUNCTIONS

A NETWORK OF STRATEGIC & LEISURE FOOTWAYS, CYCLEWAYS & PUBLIC TRANSPORT ROUTES

1 X DISTRICT HUB AND 2 X LOCAL CENTRES TO SERVE LOCAL NEEDS

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THE LANGLEY CONSORTIUM VISION STATEMENT

- Putting the needs of the community first.
- Delivering the best housing led development in the country over the next 20 years.
- Delivering local facilities needed by the residents of Langley in a timely and efficient way.
- Delivering Langley as a single cohesive, co-ordinated and comprehensive Sustainable Urban Extension.
- Delivering high quality housing set within identifiable and distinct neighbourhoods.
- Designing the neighbourhoods to promote social inclusion, safety and active lifestyles.
- Designing local centres to provide for the day to day needs of the new community.
- Delivering new infrastructure and community infrastructure when it is needed.
- Linking the new neighbourhoods to facilitate movement without the car dominating the development.
- Establishing a highway network that is legible and efficient providing routes for pedestrians, cyclist, public transport and other vehicles.
- Providing homes that meet the needs of the local community, providing a balanced mix of sizes, tenures and types.
- Establishing excellent schools with enough places for all the children living at Langley.
- Providing high quality Public Open Spaces & exciting play spaces throughout the Site for the benefit of the residents of Langley whatever their age.
- Designing and building highway & transport solutions that work based on evidence.
- Ensuring that we plan for the future, providing resilient yet robust future proof engineering solutions.
- Ensuring that public spaces and public parks are maintained to a high standard.
- Ensuring that adoptions are completed quickly.
- Ensuring that environmental standards are met or exceeded throughout the construction of the development.
- Making good use of the existing environmental assets, integrating them into the development where practicable.
- Being open and honest & to engage with the existing and new communities as we move forward through planning and delivery.

Figure 1. Indicative Illustrative Masterplan - Wider Context


A38
M6
CHURCHILL ROAD
REDDICAP HEATH ROAD
FOX HOLLIES ROAD
WALMLEY ASH ROAD
A38
9
9
2
6
8
11
5
2
3
10
4
2
6
7
11
1

2.0 OUR DESIGN VISION - LANGLEY LIVING

2.1 Langley is a place designed around the current and future needs of people and communities.

2.2 The vision for 'Langley Living' captures five essential components that people require to live comfortably, sustainably and resiliently over time, and which assist in building new lasting communities.

CONNECTED & LEGIBLE

Through its design, Langley will hold the ability to facilitate ease of movement and connectivity, both within the scheme and to the surrounding communities. This will support the scheme's ability to be viable, vibrant and ultimately successful. Sustainable movement options, such as walking, cycling and bus travel are integral to the scheme. By providing a well-structured and clearly defined movement network, future residents will enjoy a range of travel options that provide convenient access to facilities, both within and outside Langley.

CIVIC HEART

Langley, through its provision of a new district centre and two local centres will provide focal areas to serve everyday needs. The District Centre will act as the heart of the community, providing convenient access to shops, services and community uses. The District Centre and Local Centres will provide residents and communities opportunities to interact and forge social greater cohesion.

GREEN

Langley will provide an enriched, varied and accessible network of green environments for future residents to use and enjoy, as well as providing bio-diversity enhancement.

HEALTHY, VIBRANT & ACTIVE

The design must recognise the potential influence the built environment can have on our sense of well-being. At Langley, our ambition is to support healthy communities. Activity, leisure and social interaction are encouraged throughout the proposals to enhance the physical and mental well-being of the future population, across all ages.

PRIDE & LEGACY

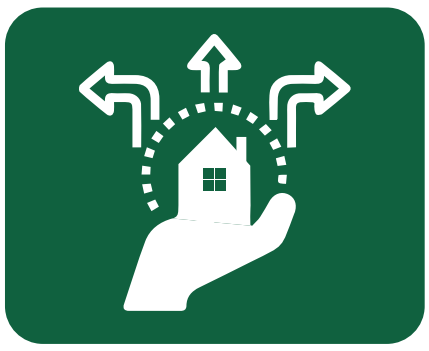
Future proposals must consider the need to form a strong sense of identity and belonging for future residents of Langley. In order to ensure the ongoing success of place, it is important that future communities evolve to care for, maintain and take pride in their neighbourhood and shared environments.


SUITS
DELICATESSEN
COMMUNITY
BAKERY
BOOKS
COFFEE

3.0 OUR OVERARCHING DESIGN PRINCIPLES

3.1 The approach adopted in this DAS is one of analysis, consultation and design, following national best practice and local guidance. The masterplan and outline design proposals that evolved through this process will ensure that Langley will deliver high quality place-making, as set out through Birmingham City Council's 'Places for All' and 'Places for Living' planning guidance. With this in mind, the proposals incorporate five overarching principles. These design principles will act as a framework to deliver high quality place-making throughout the Site; informing future character area guides; infrastructure; neighbourhood codes and reserved matters submissions.

3.2 The following five principles will provide the basis for the approach to more detailed design work:



CHOICE & DIVERSITY

3.3 Future proposals must provide suitable variation, not just in terms of housing tenure and mix, but also in terms of the wider built and natural environment. Variation will present future residents with choices to suit their particular needs and aspirations. Langley will provide a diverse range of living options and experiences, designed to enrich the lives of future communities.

FREEDOM OF MOVEMENT

3.4 Proposals must provide optimum connectivity between streets and spaces, ensuring that safe and convenient movement is possible for the whole community. Particular attention must be attributed towards the creation of 'walkable neighbourhoods'. Alongside a legible and structured movement framework, proposals must facilitate an even distribution of facilities and services to cater for both local and wider community needs. Langley will therefore provide a well-connected street network to help encourage greater use and activity, promote walking & cycling, allow greater traffic dispersement and assist the viability of future commercial and community assets.

SAFE & SECURE

3.5 Future residents at Langley must feel comfortable in their surroundings. Streets and public spaces should feel safe and pleasant, allowing for a variety of functions and experiences. Proposals should clearly distinguish between public and private spaces. Streets and public spaces will be well surveilled through active frontages. Well-designed landscaping, attractive streets and active public spaces will collectively form pleasant environments for communities to protect and be proud off.

Indicative Sketch - Local Centre

BUILT FOR THE FUTURE

3.6 Proposals for Langley must cater for the future needs of residents and communities, as well as their current needs. A key objective will be to encourage greener and healthier lifestyle choices. Buildings and spaces must consider adaptability in order to ensure viability in the long term. Maintenance and management will be key to the future success of Langley. At all design stages, proposals will look towards sustainable solutions to reduce energy consumption and water management. Innovative solutions will be encouraged, however detailed designs must equally consider whether it is 'well suited' and 'tried & tested'.

3.7 Natural features and landscaping will play a significant role in defining Langley's overall appeal. Such provision will enhance Langley's character and provide future residents with accessible amenity areas. Natural features and landscaping will ensure that an ecologically rich and diverse environment in provided, set to endure for future generations to come.

QUALITY & CHARACTER

3.8 Proposals at Langley must safeguard the creation of a high quality and successful new place. As an extension to the urban area of Sutton Coldfield, Langley will build upon the existing local character and provide distinction through high quality modern design. Design approaches and proposed outputs must be based on the understanding that 'character' and 'quality' are fundamentally linked when it comes to place-making. Langley's architecture must therefore be of high build quality and evolved through an understanding of the local context and culture.

3.9 Character differentiation will occur in response to specific contextual areas and functional uses, providing in-turn variation across streets, spaces and neighbourhoods. Detailed design proposals should aim to enhance appeal by providing design interest and variation within character areas.

3.10 The design and treatment of public realm elements, such as streets, key spaces, landscape, boundary treatments and open spaces will have an important role in delivering design quality and character.

3.11 By building upon the quality and richness of Sutton Coldfield's character, proposals at Langley will retain a local identity, whilst providing a distinguishable and appealing, high quality and beautiful modern environment for people to live, work and enjoy.

3.12 The neighbourhoods and character elements will be drawn together through a 'site-wide' approach to infrastructure, landscape and public realm. This approach will provide holistic and consistent design consideration on the following elements:

Public realm

3.13 There will be a holistic approach to public realm through the use of common materials and planting in a palette to be agreed through the infrastructure and public realm code. This will ensure that the site-wide green infrastructure is coherent across the scheme, based on local materials, colours and species selection, providing an overarching character that is 'of Langley'. This strategy will apply across the urban and green elements of public spaces.

Landscape

3.14 As set out above, areas of green infrastructure and landscape will use common features to assist way-finding and provide an overarching character to the development. Detailed landscape designs should help facilitate a stronger connection to the natural environment through consideration of materials and treatments, such as compacted gravel for off-road footpaths and natural materials for areas of play. Landscaping approaches will also respond to the context and function of specific areas, as well as contribute towards the enhancement of neighbourhood character.

Street hierarchy and legibility

3.15 Detailed design approaches must provide clear distinction when it comes to street hierarchy. Design elements such as building setbacks, boundary treatments and building lines will be particularly consistent along primary streets to provide a clear character in aid of way-finding and coherence across the scheme. Similar consistencies will be incorporated in reference to lower order streets, however there will be exceptions in key locations. Elements such as landscaping, street furniture (lighting, litter bins, benches, bollards, railings etc.) and street-tree species will be more varied in response to the defined context and neighbourhood character.

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DESIGN & ACCESS STATEMENT

VOLUME 1

AUG / 2021

VOLUME I

Volume I of this Design & Access Statement provides the background to the Site, the application and the analysis / engagement undertaken to inform the design process.

Design & Access Statement Volume I

INTRODUCTION

INTRODUCTION

This Design and Access Statement (DAS) has been prepared on behalf of the Applicant 'The Langley Sutton Coldfield Consortium' to support the Outline Planning Application for the Langley SUE. This DAS is a 'live' document and will be supplemented by further information and detail as Infrastructure, and Reserved Matters applications or discharge of conditions submissions are made for the Site in the future.

4.0 SCOPE AND PURPOSE OF THE DESIGN AND ACCESS STATEMENT

4.1 This Design and Access Statement (DAS) is part of a comprehensive package of information submitted with the Outline Planning Application for development at Langley SUE. Figure 2 illustrates the boundary for the application area. This DAS should be read in concert with all other information and plans. This includes amongst other reports:

- Environmental Statement, comprised of the following technical chapters (Volume 2):
  - Socio-Economics;
  - Ground Conditions;
  - Archaeology;
  - Water Environment;
  - Traffic and Transport;
  - Noise and Vibration;
  - Air Quality;
  - Ecology;
  - Landscape and Visual Impact;
  - Built Heritage;
  - Climate Change;
  - Agricultural Land
- Environmental Statement: Non-Technical Summary;
- Planning Statement (Savills);
- Affordable Housing Statement (Savills);
- Statement of Community Engagement (Engage);
- Arboricultural Impact Assessment (EDP);
- Tree Survey Report (EDP);
- Green Infrastructure Strategy (EDP);
- Energy Statement prepared by WSP;
- Flood Risk Assessment prepared by WSP;
- Retail Statement (Savills);
- Sustainable Drainage Statement (WSP);
- Foul Drainage Strategy (WSP);
- Site Waste Management Strategy (WSP);
- Sustainability Statement (WSP);
- Transport Assessment (WSP);
- Framework Travel Plan (WSP);
- Utilities Statement (WSP);
- Ground Investigation (Phase II - Main Site) (Hydrock);
- Ground Investigation (Phase II - Landfill) (Hydrock);
- Health Impact Assessment (Arcadis);
- Mineral Deposits Investigation (W.Armstrong).

4.2 This DAS is compliant with the Development Management Procedure (England) 2015 (DMP), and the Planning Practice Guidance (2014) (PPG, Paragraph 034 Reference ID: 26-034-20140306).

4.3 The DAS illustrates the design principles and concepts that underpin the application proposal and address the requirements set out in the PPG website 'Making an Application'.

4.4 Specifically, responding to the DMP and the PPG requirements 'What should be included in a DAS', this DAS explains the following in relation to the outline application:

- The design principles and concepts applied to the proposed development;
- The steps taken to appraise the context of the proposed development and how the design has taken this into account;
- The applicant's approach to access; how Local Plan policies have been taken into account; consultation undertaken in relation to access issues; and how the outcome has informed the proposed development.

4.5 Specific to the outline application the DAS provides details on:

- The proposed uses, and the amount of development proposed for each use; and
- An indication of the areas where access points to the development will be situated, as required under article 5 (3) of the Development Management Procedure Order.

4.6 The need for a Design Framework is an SPD requirement, which is fixed through the parameter plans provided as part of this application.

4.7 Principles for a Design Framework are also provided within this DAS (section 20.0 - 30.0). Other sections as indicated are provided to both underpin and inform detailed submissions. Furhter details on design intent will be provided via design codes.

NOTE ON USING THIS DOCUMENT

All images and plans contained within this Design & Access Statement are illustrative.

Plans for outline approval have been submitted separately from this Design and Access Statement. Whilst some of the plans for outline approval have been referenced within this document, such as Parameter Plans (Figure 8 to Figure 13) and Vehicular Access Plans (section 19.0), observers should only refer to the formally submitted plans for assessment. The Illustrative Masterplan provided (Figure 20) is conceptual, based on the design development carried out at this stage.

The intention is for any future submissions (Infrastructure Application, Reserved Matters Submissions or Discharge of Conditions) to be in general compliance with the plans / design principles formally submitted for approval.

The plans, imagery and principles presented in this Design & Access Statement should therefore be considered in reference; demonstrating ways in which the principles for approval can be applied to support the achievement of a high quality environment.

Figure 2. Application Boundary Plan

5.0 SITE LOCATION AND DESCRIPTION

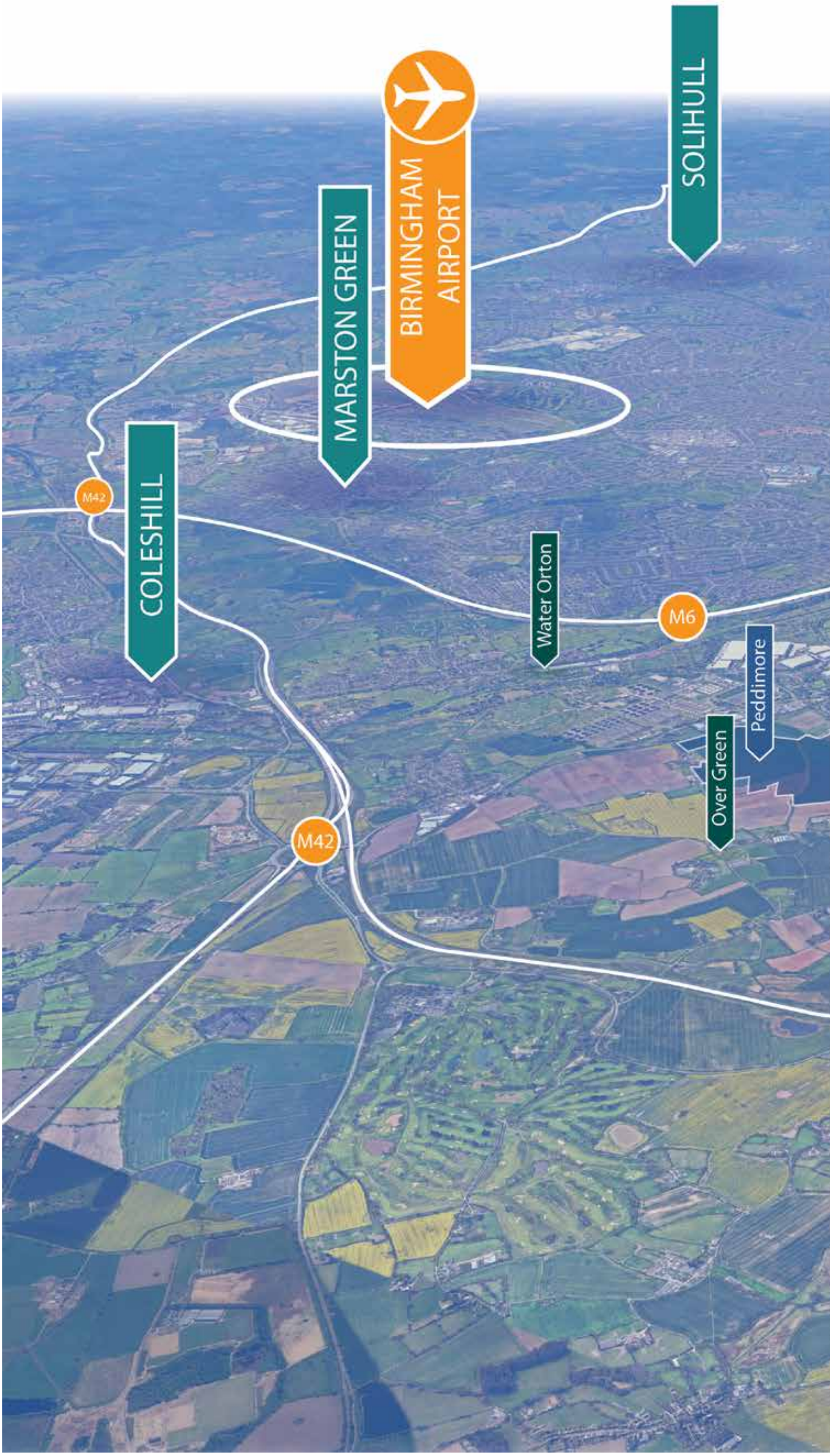
SITE LOCATION

5.1 Figure 2 – Application Boundary Plan confirms the Site boundary, the subject of the Outline Planning Application proposals for Langley SUE.

5.2 The Application Site (hereafter referred to as the Site) is located within north Birmingham, within the Royal Town of Sutton Coldfield. Figure 3 illustrates the broad location within the wider context of Birmingham and demonstrates the proximity of the Site to existing local and regional strategic movement networks, including the A38, M42 and M6 Toll. The Site is also close to the well established residential communities of Walmley, Minworth, Falcon Lodge, Reddicap Heath and Sutton Coldfield.

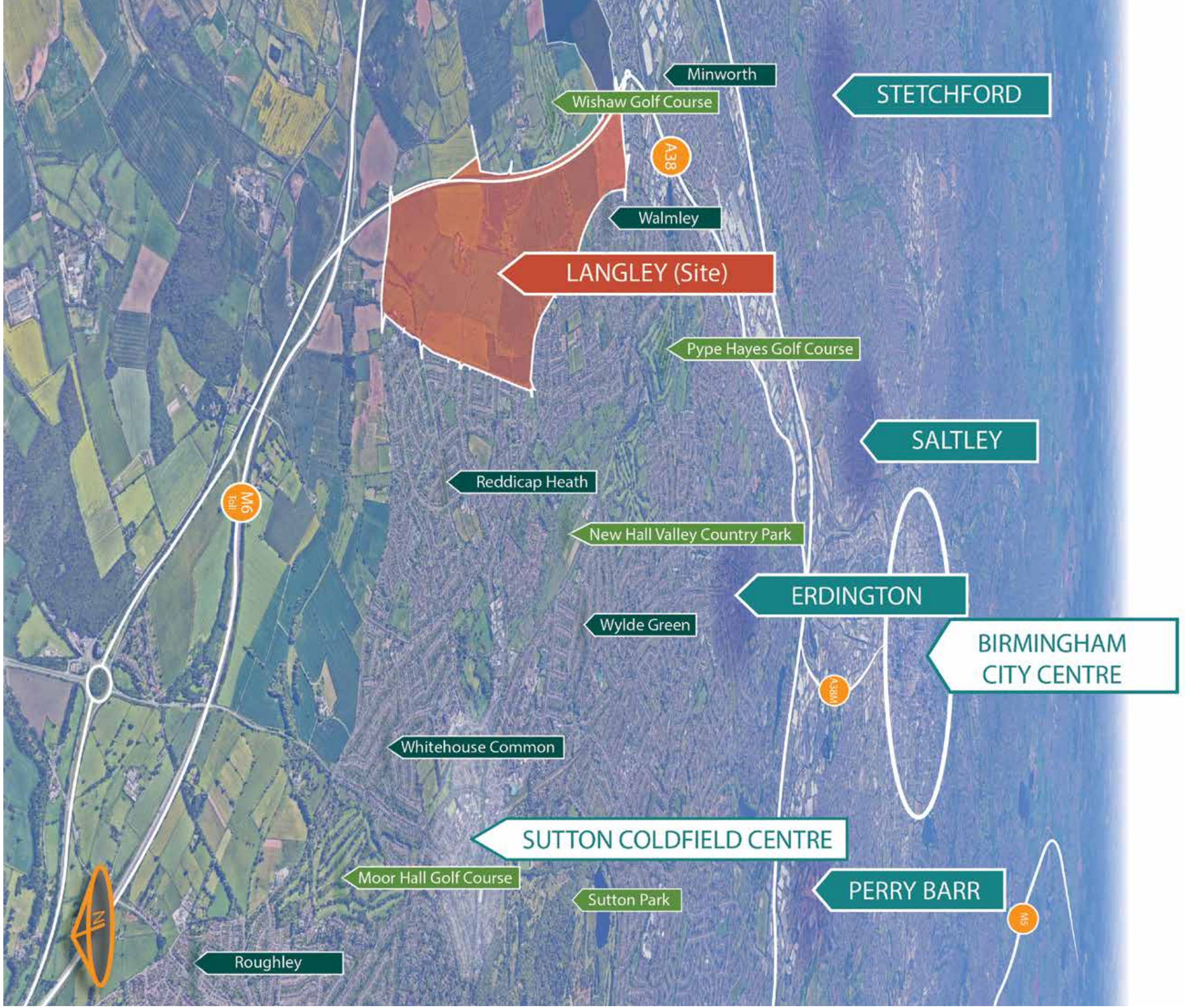
5.3 Furthermore, the Site area is well located in relation to Birmingham City Airport, the existing and expansive New Hall Valley Park to the west and to the future employment site at Peddimore located to the east of the A38 and sharing a new proposed roundabout access from the A38.

5.4 Figure 4 on page 17 locates the Site within the wider West Midlands Region. The Site is particularly well located in relation to the regions major road network.



LEGEND

- Langley (Site)
- Peddimore
- Town Centres
- Birmingham Airport
- Local Suburbs and Villages
- Local Parks and Recreation
- M42 Key Infrastructure


Minworth
Wishaw Golf Course
STETCHFORD
A38
Walmley
LANGLEY (Site)
Pype Hayes Golf Course
SALTLEY
Reddicap Heath
M6
Toll
New Hall Valley Country Park
ERDINGTON
Wylde Green
BIRMINGHAM
CITY CENTRE
A38(M)
Whitehouse Common
SUTTON COLDFIELD CENTRE
Moor Hall Golf Course
Sutton Park
PERRY BARR
M5
M6
Roughley

THE SITE DESCRIPTION

5.5 The Site, the subject of the outline application, covers approximately 302.55ha (747.62ac). This area consists of the total outer red line boundary / EIA boundary (308.20ha / 761.57 Ac), minus land located within but excluded from the application (5.65ha / 13.96 Ac).

5.6 The boundaries to the proposed development area are well defined by Lindridge Road to the north, the A38 dual carriageway to the east, Walmley Ash Lane, and the rear elevations of ASDA and B&M to the south, and a combination of Webster Way, Thimble End Road and Springfield Road to the west.

5.7 The vast majority of the Site comprises large agricultural fields characterised by hedgerow and treed field boundaries. A distinctive woodland belt, approximately central to the Site and to the south east of Fox Hollies Road is also evident.

5.8 The Langley Brook watercourse passes through the Site, with flows entering the Site from Thimble End Road and running from south to north towards Lindridge Road. Langley Brook is not visible for its entire length with parts of the watercourse in culvert. Where the channel is visible the brook is characterised by steep banks and narrow cross sections, created by current agricultural functions either side.

5.9 Passing through the Site are the existing Ox Leys Road (north west to south east alignment); Fox Hollies Road (north east to south west alignment); and a part of Signal Hayes Road, connecting Thimble End Road to Fox Hollies Road.

5.10 A network of Public Rights of Way (PRoW) and Byways exist on the Site. These are referenced in Figure 56 on page 94. Three PRoW enter or cross the Site. Not all of the routes connect to the wider network of routes surrounding the Site. Two of the routes pass through or directly adjacent to private residential properties (Brockhurst Farm PRoW 1122, and Fox Hollies Farm PRoW 1130).

5.11 Three byway routes also remain within the Site, Namely Bulls Lane, Peddimore Lane and the southern end of Fox Hollies Road. These are remnants of road routes which have been severed as a result of new road constructions (A38 and Thimble End Road). Of the three byways, only the Fox Hollies Road route (3105) is in everyday use by pedestrians and cyclists.

5.12 There are a range of individual and clusters of existing uses within the application boundary these are described in further detail in Section 9.0.

5.13 The two more central areas excluded from the application boundary comprise Fox Hollies Farm House, Langley Heath (all in residential) in the middle of the Site and Old Langley Hall (residential) north of Ox Leys Road. To the north of the Site, Brockhurst Farm is excluded and a cluster of residential dwellings accessed from Springfield Road. To the south of the Site, Footsteps Nursery and Pre-School and a small cluster of cottage dwellings accessed from Walmley Ash Lane are also excluded.

5.14 The photographs in Section 11.0 Character of Place - A Precedent Study, also demonstrate the character of the Site and its immediate context.

Figure 4. Site in Wider Local Context

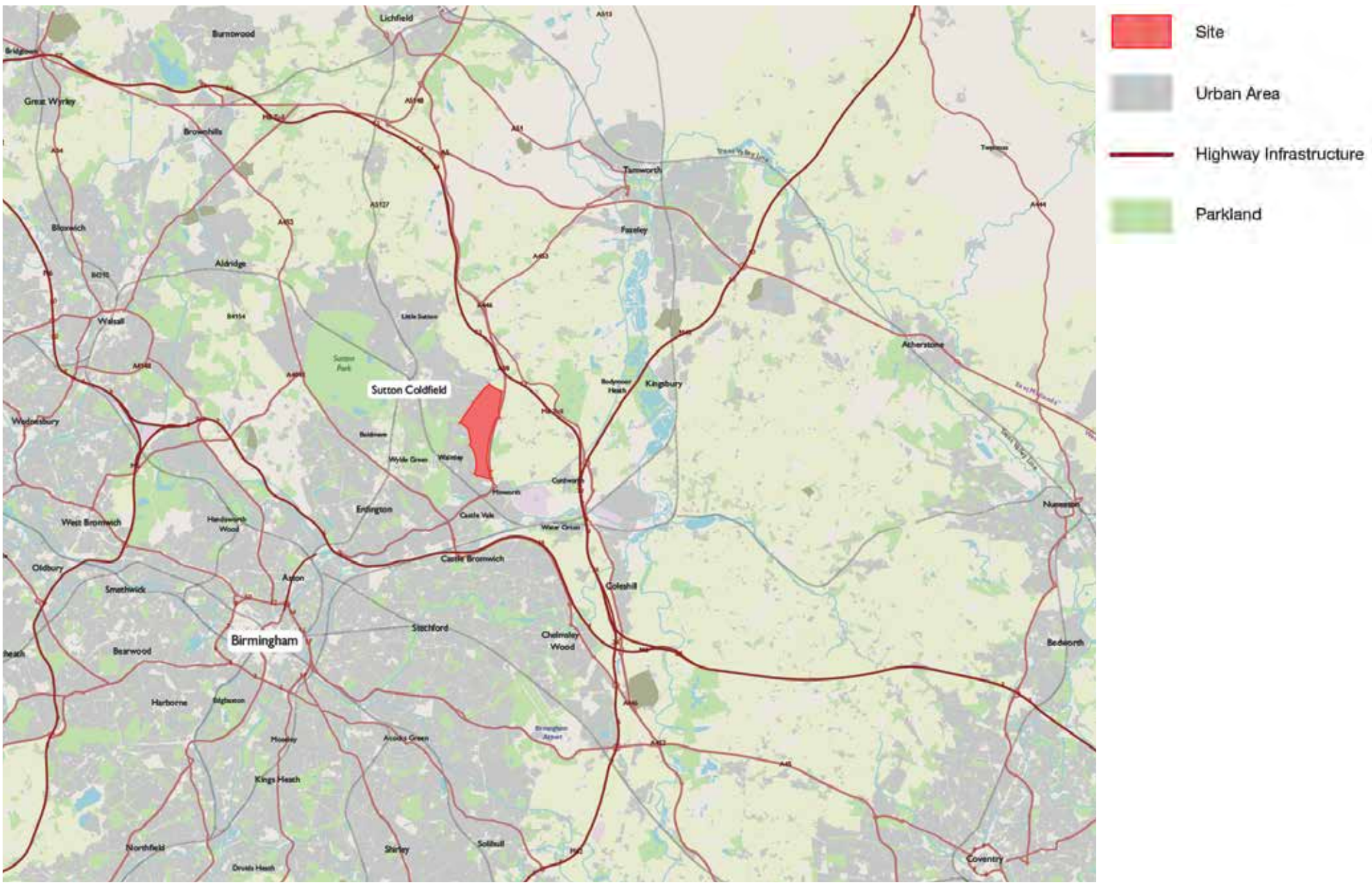


Figure 5. Existing Site Aerial

Figure 6. Site Visual - Photograph Locations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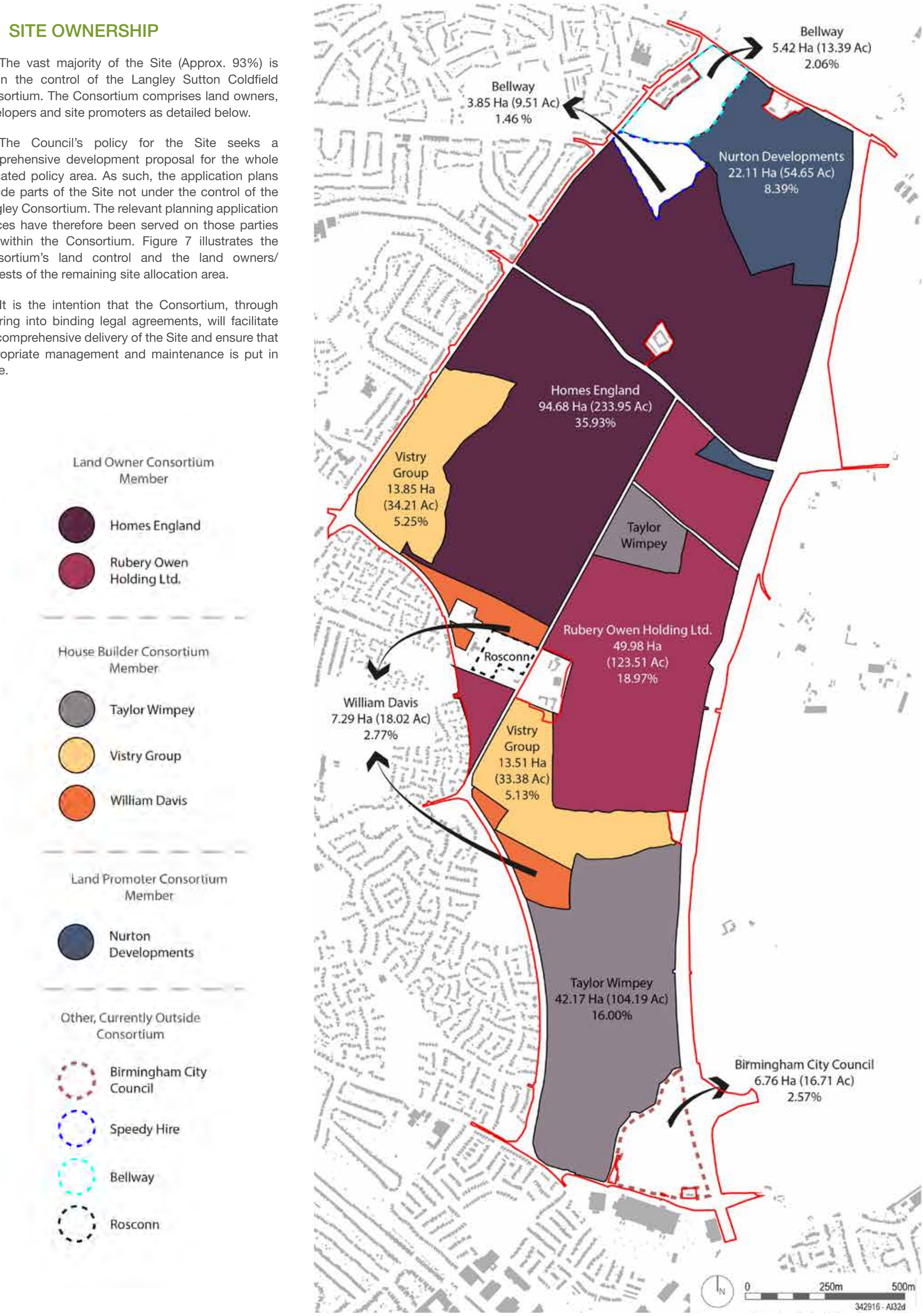
6.0 SITE OWNERSHIP

6.1 The vast majority of the Site (Approx. 93%) is within the control of the Langley Sutton Coldfield Consortium. The Consortium comprises land owners, developers and site promoters as detailed below.

6.2 The Council's policy for the Site seeks a comprehensive development proposal for the whole allocated policy area. As such, the application plans include parts of the Site not under the control of the Langley Consortium. The relevant planning application notices have therefore been served on those parties not within the Consortium. Figure 7 illustrates the Consortium's land control and the land owners/ interests of the remaining site allocation area.

6.3 It is the intention that the Consortium, through entering into binding legal agreements, will facilitate the comprehensive delivery of the Site and ensure that appropriate management and maintenance is put in place.

Figure 7. Land Ownership Plan



7.0 PLANNING APPLICATION DESCRIPTION

7.1 The application proposal is described as follows:

APPLICATION DESCRIPTION

"Outline planning application for the phased development of the allocated Langley Sustainable Urban Extension in Sutton Coldfield. Works to include the demolition of two semi-detached dwellings to the east of Springfield Road, Langley Park House buildings to the east of Langley Hall, Springfield Farm buildings, Langley Gorse Farm buildings, and barn to the south of Fox Hollies House; diversion underground of 132Kv overhead power line, removal of existing pylons and construction of new termination pylons; site clearance / remediation works and engineering works to create a development platform; the construction of dwellings (Use Class C3); the provision of mixed-use floorspace (comprising a mixture of Use Classes E, C1, C2, F.1, F.2 and Sui Generis) to be delivered in 1no. district centre and 2 no. local centres; education facilities comprising a secondary school (with sixth form), up to 3 no. primary schools, or an all-through school (with sixth form) and 2 no. primary schools, together with up to 6 nursery / early years units; the creation of an internal transport network with connections to the surrounding highway, cycle and pedestrian network (including A38 northern and southern junctions); green infrastructure comprising formal, informal open space and amenity space, play areas and the creation of a sports hub with a pavilion building; the stopping up / diversion of the existing public highway and public rights of way, and the creation of new routes; supporting utilities infrastructure including sustainable drainage system; the realignment of the Langley Brook and the creation of a new linear park; and the creation of an acoustic fence and bund along part of the eastern boundary with the A38. Details of strategic access points are submitted for approval. All other matters are reserved for future determination."

7.2 The Environmental Statement (ES) Parameter Plans shown at Figure 8 to Figure 13 (also submitted as stand alone plans), are the plans to be formally considered for approval as part of the Outline Planning Application. Table 1 lists the drawing references for each of the Parameter Plans and their location within the DAS.

7.3 Section 8.0 describes the design rationale and the main design components which underpin the Parameter Plans. A masterplan illustration is also included within the DAS at Figure 20. This is a graphic representation and framework for the Site. While this plan is not part of the formal submission it does provide further illustrative and supporting material to assist in the consideration of the application and supports the illustrative principles provided within the DAS.

7.4 In reference to the SPD terminology, descriptions of 'Langley Centre' and 'Community Hubs' are on occasion equivalently referenced within the DAS as 'District Centre' and 'Local Centre's', respectively.

Table 1. ES Parameter Plans

Parameter Plan Title	Plan Reference	DAS Location
Existing Structures and Ground Levels Parameter Plan	342916 - AI83g	Figure 8
Land Use Parameter Plan	342916 - AI74f	Figure 9
Access & Movement Parameter Plan	342916 - AI79f	Figure 10
Maximum Development Envelope Parameter Plan	342916 - AI77f	Figure 11
Green Infrastructure Parameter Plan	342916 - AI78f	Figure 12
Building Storey Heights Parameter Plan	342916 - AI131	Figure 13

Figure 8. PARAMETER PLAN : Existing Structures and Ground Levels

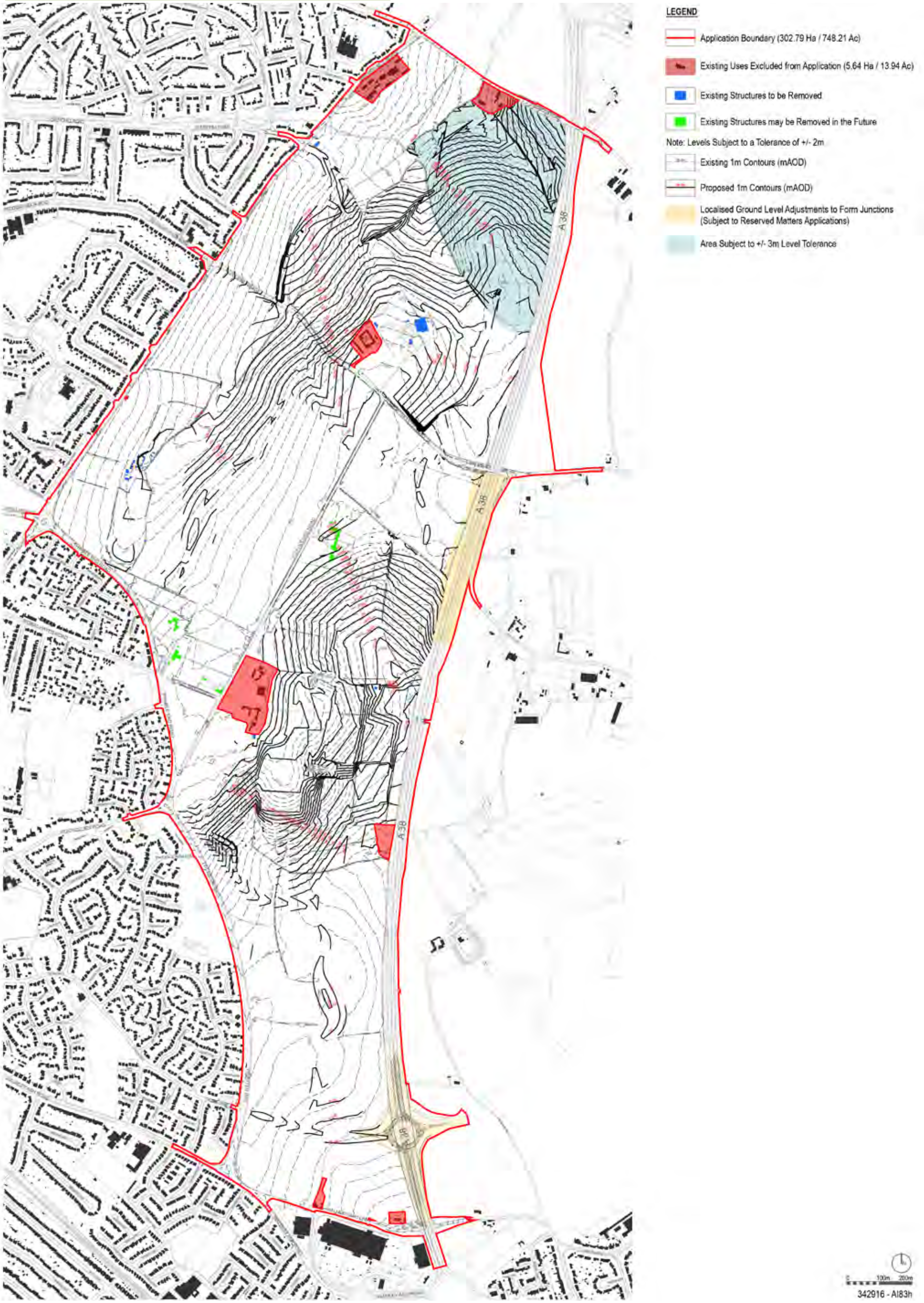


Figure 9. PARAMETER PLAN : Land Use

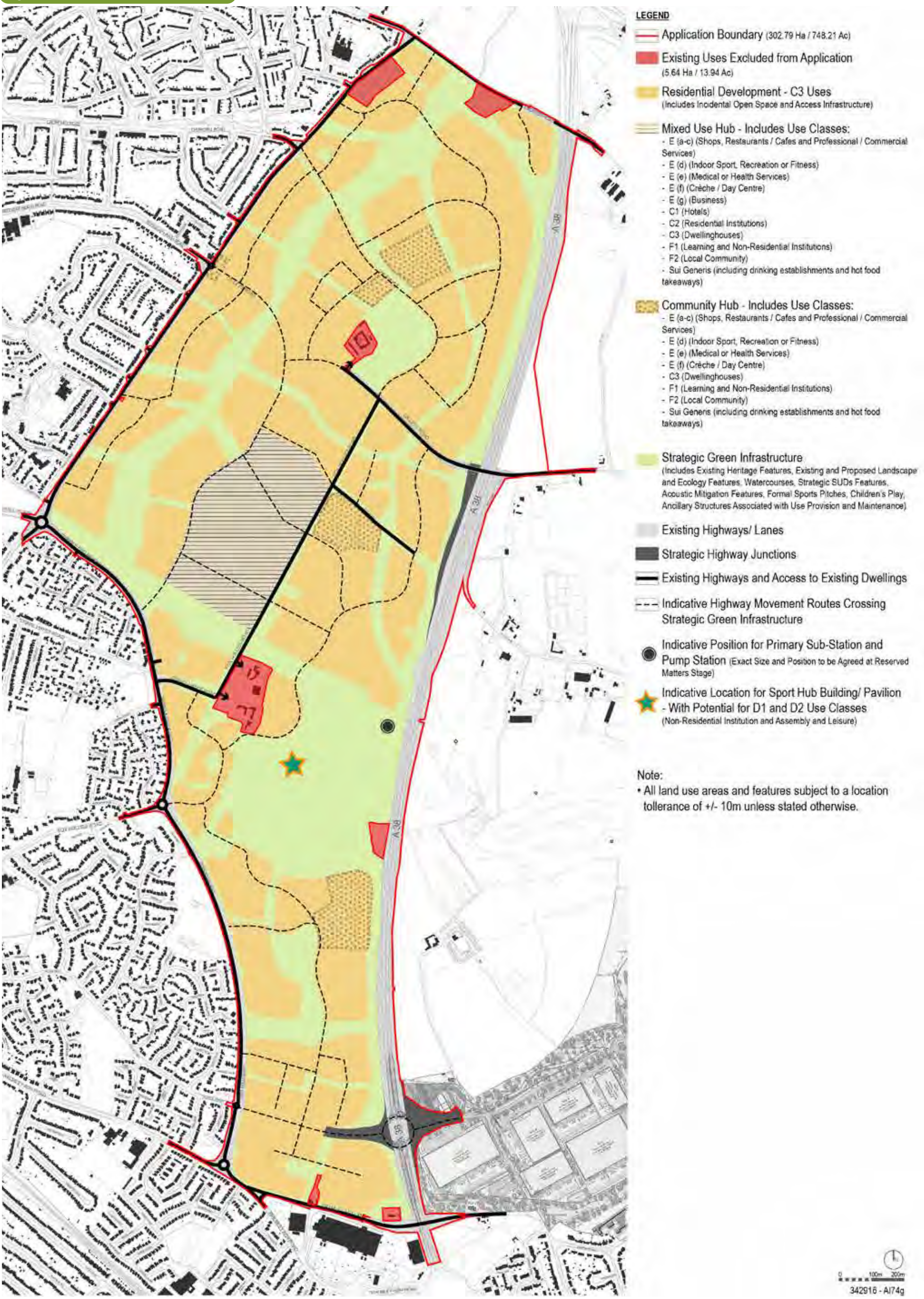
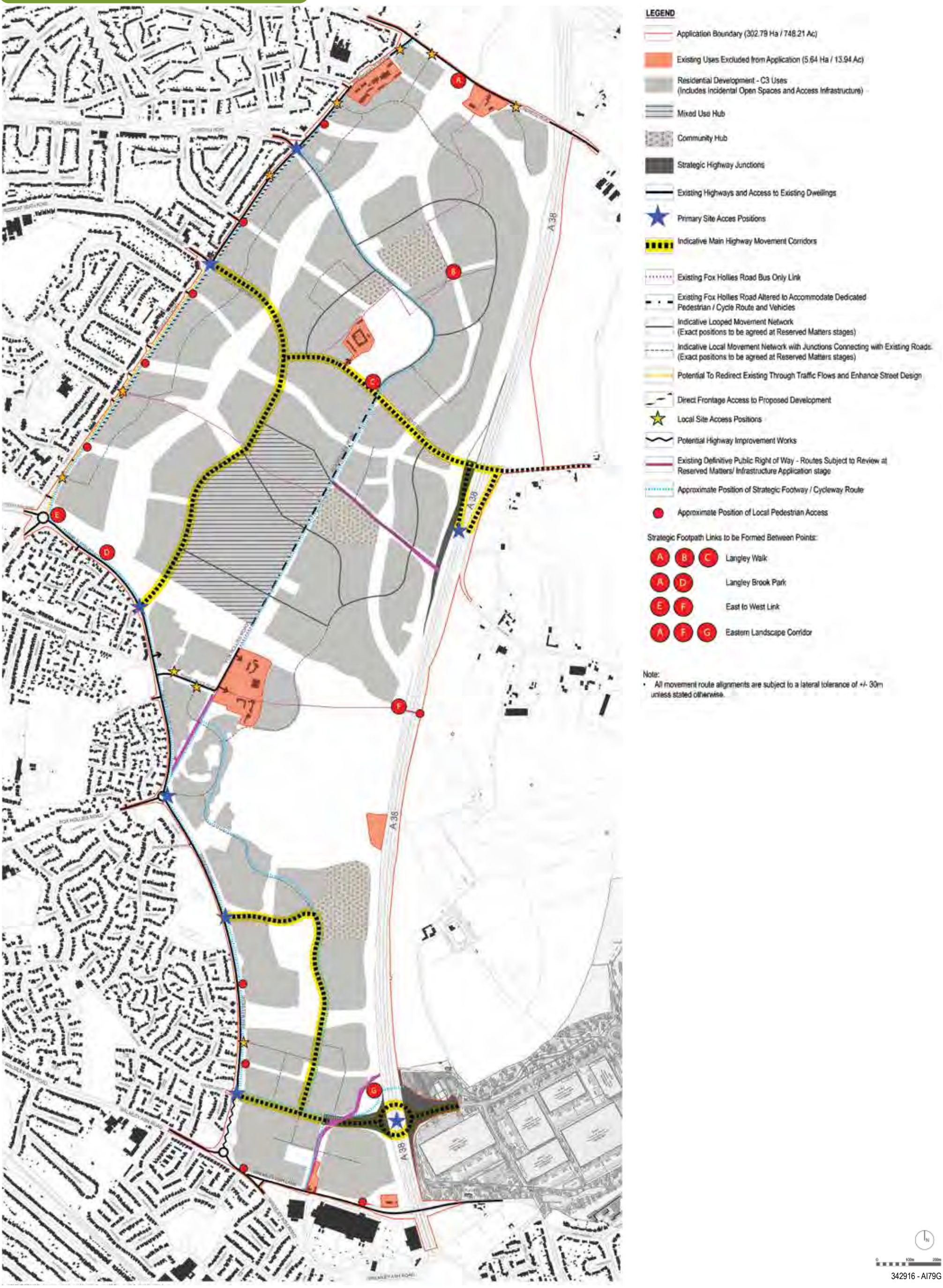


Figure 10. PARAMETER PLAN : Access and Movement



LEGEND

- Application Boundary (302.79 Ha / 748.21 Ac)
- Existing Uses Excluded from Application (5.64 Ha / 13.94 Ac)
- Residential Development - C3 Uses (Includes Incidental Open Spaces and Access Infrastructure)
- Mixed Use Hub
- Community Hub
- Strategic Highway Junctions
- Existing Highways and Access to Existing Dwellings
- Primary Site Acces Positions
- Indicative Main Highway Movement Corridors
- Existing Fox Hollies Road Bus Only Link
- Existing Fox Hollies Road Altered to Accommodate Dedicated Pedestrian / Cycle Route and Vehicles
- Indicative Looped Movement Network (Exact positions to be agreed at Reserved Matters stages)
- Indicative Local Movement Network with Junctions Connecting with Existing Roads (Exact positions to be agreed at Reserved Matters stages)
- Potential To Redirect Existing Through Traffic Flows and Enhance Street Design
- Direct Frontage Access to Proposed Development
- Local Site Access Positions
- Potential Highway Improvement Works
- Existing Definitive Public Right of Way - Routes Subject to Review at Reserved Matters/ Infrastructure Application stage
- Approximate Position of Strategic Footway / Cycleway Route
- Approximate Position of Local Pedestrian Access

Strategic Footpath Links to be Formed Between Points:

- A B C — Langley Walk
- A D — Langley Brook Park
- E F — East to West Link
- A F G — Eastern Landscape Corridor

Note:

- All movement route alignments are subject to a lateral tolerance of +/- 30m unless stated otherwise.

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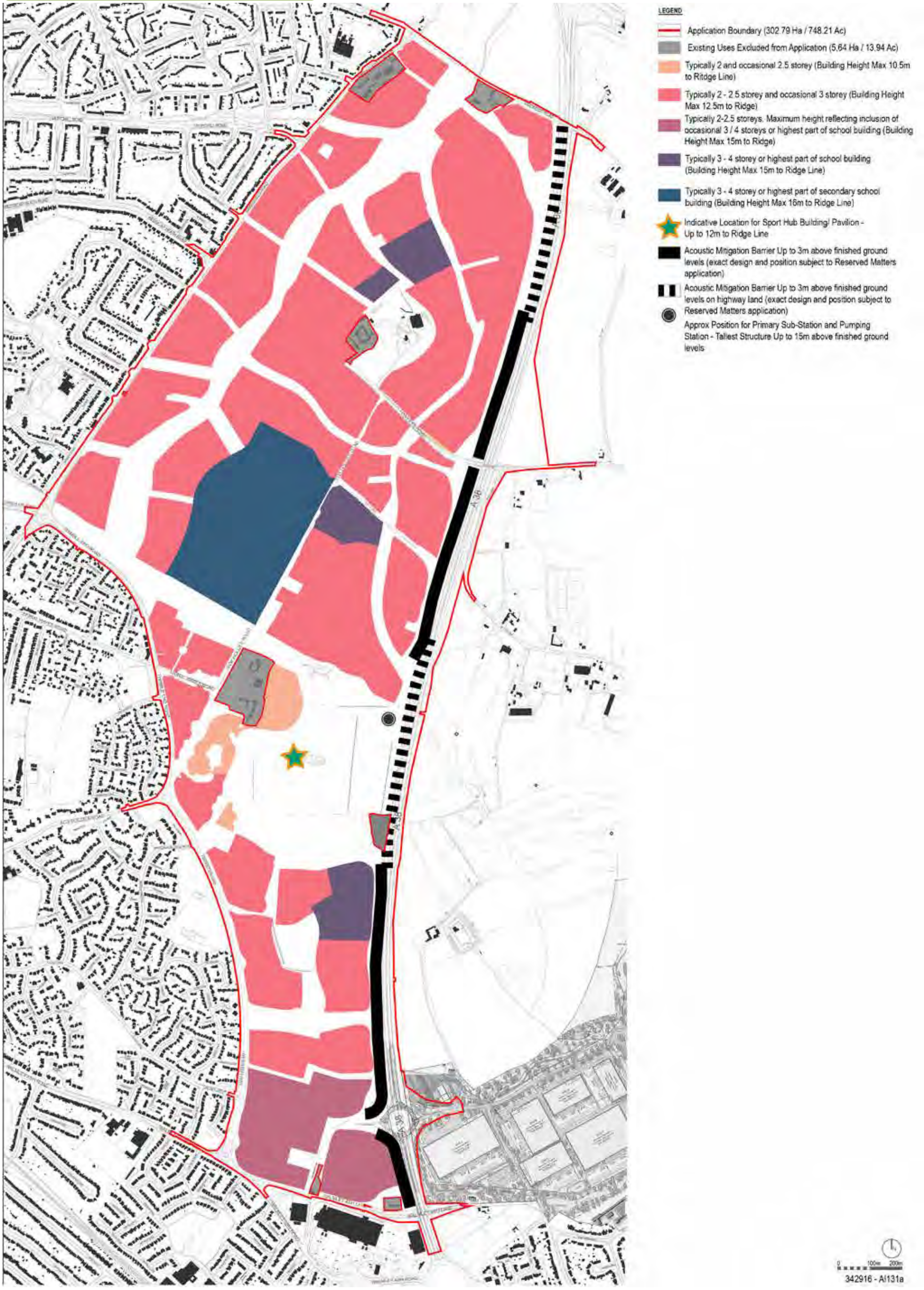
Figure 11. PARAMETER PLAN : Maximum Development Envelope

Figure 12. PARAMETER PLAN : Green Infrastructure

Figure 13. PARAMETER PLAN : Building Storey Heights



8.0 DESIGN RATIONALE

8.1 A design rationale underpins the formally submitted Parameter Plans and the Illustrative Masterplan. The following diagrams illustrate the strategic design layers and considerations (Figure 14 to Figure 19). Each layer shows how the design has been influenced by contextual and site specific influences, including inputs from public and stakeholder consultation where relevant.

RESPONDING TO SITE AND CONTEXTUAL FEATURES AND OPPORTUNITIES

8.2 Technical surveys and assessments undertaken by the consultant team identified a range of development constraints and opportunities (all of which are summarised in greater detail in Section 9.0). These surveys and assessments made the following key recommendations to support the achievement of a design approach which is responsive to existing features of importance on the Site. Figure 14 also illustrates the main features of note.

- Integrate and naturalise the Langley Brook watercourse within a new and distinctive linear parkland, with capability to support surface water flow mitigation from future development;
- Create a new parkland link between New Hall Valley Country Park and the Public Right of Way (PRoW) footpath network to the east of the A38;
- Maintain and enhance existing landscape, ecology assets, and woodland blocks of significance within a secondary east to west corridors;
- Protect clusters of existing ecology or heritage/ archaeological features within new green open space or landscape settings;
- Divert or underground overhead 132kV power lines and pylon towers to improve visual quality and maximise potential developable area;
- Provide a north to south green network alongside the A38, supporting acoustic attenuation, strategic planting and drainage;
- Promoting healthy lifestyles by encouraging activity and movement within the 'joined-up' multifunctional green network;
- Create a strategic north-south cycling and pedestrian route, utilising parts of Fox Hollies Road;
- Integrate or redirect existing on Site PRoWs and byways to facilitate a better range of connected walking routes;
- Create a linked route (all modes) between Webster Way and the proposed Peddimore Employment Area to the east of the A38;
- Support a northern link route (all modes) to the A38 utilising parts of the existing Ox Leys Road;
- Positively address Springfield Road with new development to make best use of existing infrastructure and aid traffic calming for new and existing residents.

Figure 14. Design Rationale - Responding to Site and Contextual Features and Opportunities

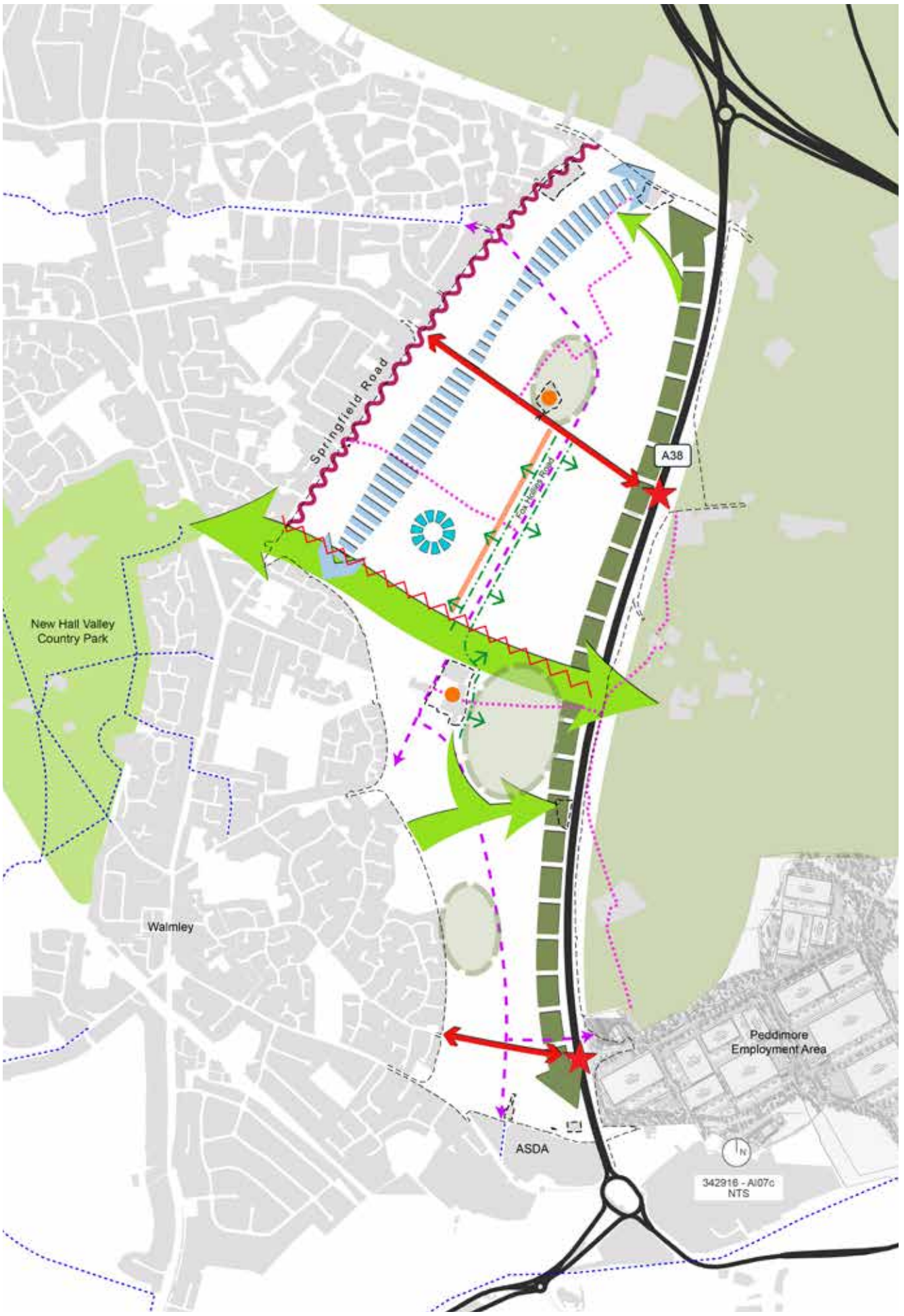


Figure 15. Design Rationale - Identifying Residential Development Potential

IDENTIFYING DEVELOPMENT POTENTIAL

8.3 Understanding the Site's features and the potential design opportunities enabled the identification of areas of the Site with capacity to accommodate development.

8.4 This also started to support the identification of distinctive character areas within the Site influenced by particular site and context specific features. For example, topographical variance, surrounding landscape character, and the formation of open spaces within the Site linked to heritage, landscape and ecological mitigation.

LOCATING COMMUNITY AND MIXED USE DEVELOPMENT POTENTIAL

The Council's policy for the Site (GA5); other Birmingham Development Plan policies; and best practice design approaches for sustainable urban extensions, encourages the accommodation of a range of land uses to support the long term function and vitality of residential communities. The range and positions of the proposed land uses have been influenced by a range of place-making considerations which have included:

- Existing Services and Facilities - Regard has been taken to the proximity of existing services and facilities around the Site in determining the scale and location of proposed new mixed and community uses;

- Langley Central: A Mixed Use Community Hub (District Centre) - Placing all new and some existing residents within a 2km direct line walking radii of the main mixed use community hub. Here secondary and primary education; commercial uses; higher density residential uses; and formal sports facilities are positioned around the east west green link thereby creating a strong walkable community core at the heart of the development at Langley;

- Secondary School – Locating and integrating the secondary school within Langley Central where the interface with key north to south and east to west movement routes are maximised, and particularly where pedestrian and cycle routes connect. This encourages safe routes to school. The size of the school site will balance the Department of Education (DoE) design requirements for Schools linked to pupil numbers, while also looking for land use efficiencies through the sharing of formal sports facilities with the nearby sports hub. The school's sixth form could also function from buildings directly integrated into the mixed use community hub, enabling out of hours use by the wider community (i.e. Adult education);

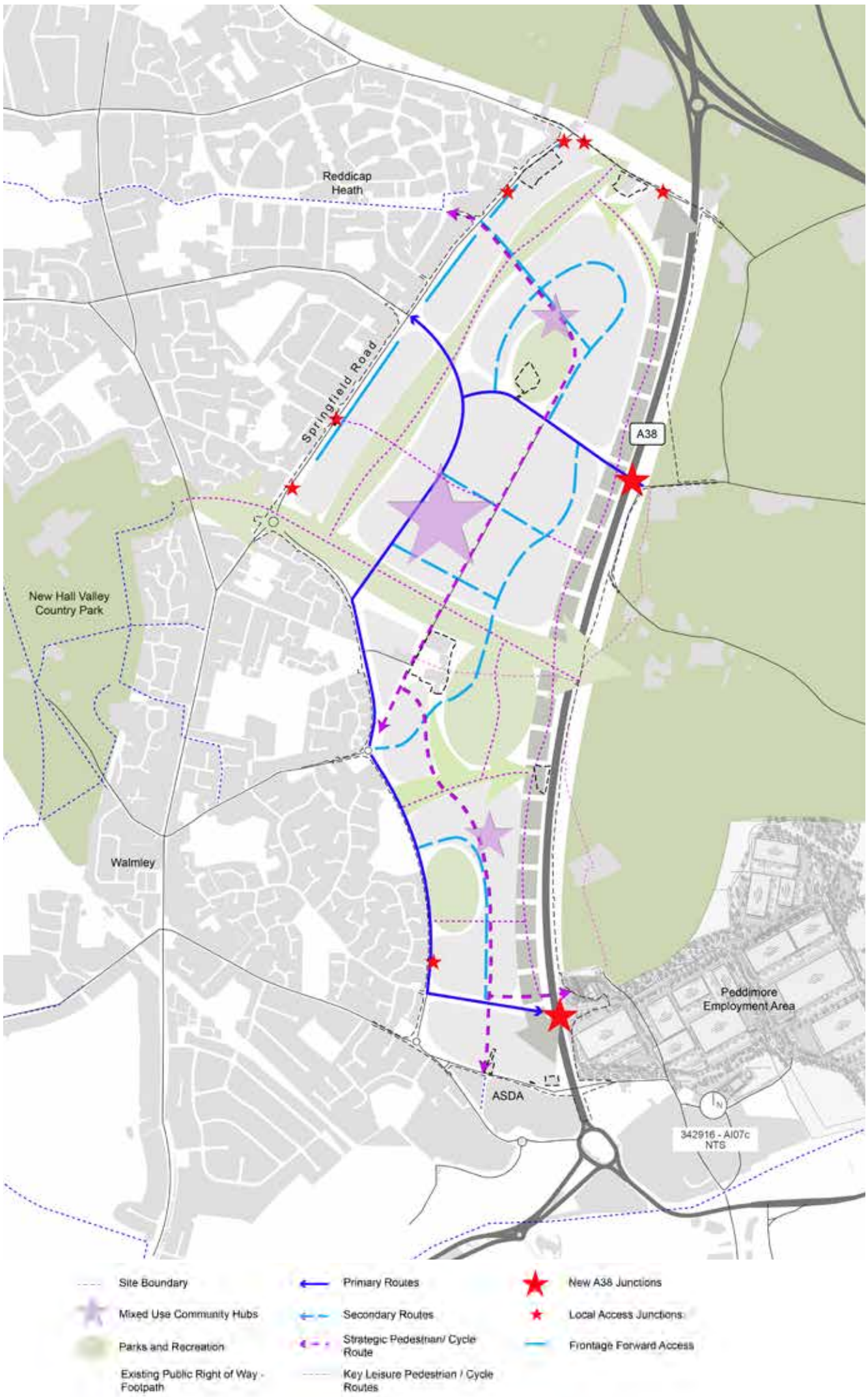
- Sports Hub - Utilising areas of land identified as more constrained for other uses, but also where accessibility is good, and where the landscape and ecological environment is more conducive to open space and recreation uses. The sports hub will be utilised by both the wider community but also students from the secondary school;

- Community Hubs - Two additional mixed use community hub areas (Local Centres) are proposed to the north and south of the Site. These are the locations for two further Primary Schools co-located with mixed use community facilities and public parks . This will help support a sense of destination and vitality to the communities in the north and south of the Site;

- Maximising Critical Mass - A further influence to the location of the Mixed Use Community Hubs has been the achievement of a direct interface and critical mass of residential population to support sustainable access choices, vitality and viability, while seeking to avoid competing with existing mixed use areas outside the Site.

Figure 16. Design Rationale - Locating Community and Mixed Use Development Potential

Figure 17. Design Rationale - Forming Access Connections and Links



FORMING ACCESS CONNECTIONS AND LINKS

8.5 A significant influence for the design has been the desire to create a connected extension to the urban fabric of Sutton Coldfield to promote community integration and cohesion.

8.6 Looking at the pattern, hierarchy and function of the existing street and footpath networks has supported the identification of key connection points both from the east and the west of the Site. From this an internal network of movement routes has been developed. At the outline stage these include:

- A38 Junctions - Two new junctions are proposed from the A38. The southern at grade roundabout forms an integral part of the current Peddimore Planning Application and supports access into the Langley Site. A northern access from the existing Ox Leys Road bridge is also proposed offering more direct access from Reddicap Heath Road and the northern part of the Site on to the A38. This will alleviate some of the existing A38 bound traffic from local road networks;

- Primary Streets - Facilitate east to west connections from the existing urban area to the A38, as well as new through links to Thimble End Road and Webster Way. The character of the route will vary depending on its location; the character area through which it passes; and the anticipated traffic volumes. For instance the southern link to the A38 will have a different design character to other parts of the primary street network within the Site. Notwithstanding the character, these streets will be designed to carry bus services;

- Secondary Streets - Supporting the primary streets, the secondary street network creates a ‘ladder’ of connected streets which distribute movement through and around the Site, and particularly within each of the character areas. These routes will also be designed to carry bus services;

- Local Junctions - To serve discrete parcels of development, particularly on the western edge of the Site, local access junctions are proposed. These will provide access into parcels located to the west of the Langley Brook Park;

- Frontage Access to Springfield Road - Dwellings can be orientated to front out towards and directly accessed from Springfield Road. This mimics the existing character of Springfield Road; and makes more efficient use of existing infrastructure without the need to duplicate hard standing. In addition the delivery of frontage properties towards this street can support traffic calming;

- Strategic Pedestrian and Cycle Route (SPCR) - A sustainable movement spine through the Site is proposed from north to south and connecting to existing cycle routes. Priority along this route is given to the pedestrian and cyclist. The route is located to pass all mixed use facilities to encourage access by sustainable means rather than by private vehicle. Linked to this route are a series of leisure pedestrian and cycle loop routes through the open space network. In places, the SPCR will lie adjacent to active highway features but will be suitably segregated through design features;

- Leisure Pedestrian and Cycle Routes - Providing a series of looped routes through the Site for the enjoyment of the landscape and open space network. At the detailed design stage additional localised routes will also be explored.

FORMING NEW AND ENHANCING BLUE AND GREEN INFRASTRUCTURE NETWORKS

8.7 Supporting sustainable environmental design and healthy lifestyle principles, a significant part of the design strategy has been the positive integration of the green and blue infrastructure network within the design.

8.8 Working with existing water, landscape and ecological features, as well as the Site's undulating topography, a connected and integrated multifunctional network has been developed.

8.9 Not only does this approach offer an efficient land use approach, it also offers significant ecology and landscape benefits. Furthermore, it supports sustainable drainage and climate change robustness.

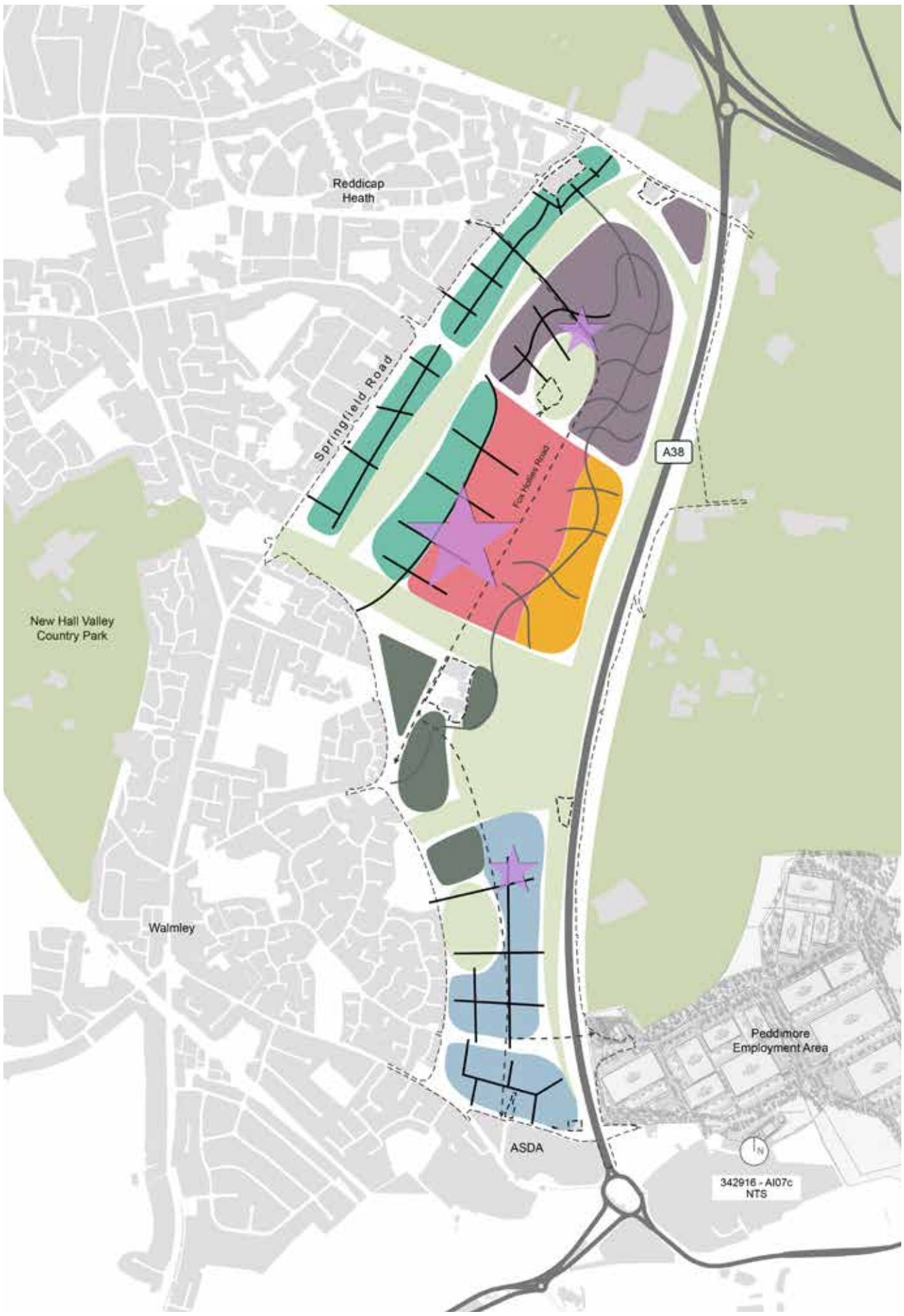
8.10 The Green Infrastructure (GI) network will support a Sustainable Drainage Strategy (SuDS) that provides above-ground water management through the use of attenuation ponds, swales, and ditches. This will manage the quality and quantity of surface water run-off during peak flow events. These features are located and designed as an integral part of the strategic GI creating: new habitats; areas of permanent open water and marsh; accommodating public access; and contributing to visual amenity.

8.11 The GI network supports the retention of the vast majority of the Site's existing mature trees and woodland, and allows for the provision of new tree planting with room to grow and mature. These features will create shade and shelter, enhanced ecological habitats, distinctive landscape character and development assimilation.

8.12 The Strategic GI will be further supplemented at the detailed design stages by domestic and street planting. Adding further diversity to the character and appearance of the development.

Figure 18. Design Rationale - Blue and Green Infrastructure Networks

Figure 19. Design Rationale - Character Areas and Neighbourhoods



CREATING CHARACTER

8.13 The place-making and character creation approach proposed at Langley is intrinsically linked to 'walkability'; clarity and distinction in identity informed by context; and delivery of community focused facilities. For example the early provision of education and healthcare facilities is recognised as fundamental to the success and wider community integration of the early phasing of the Langley development.

8.14 Each mixed use hub forms a core around which three of the new character areas are formed (Langley Hall, Langley Central and Langley Fields).

8.15 Alongside the three mixed use community hubs and their associated character areas, other Site and contextual features and conditions have determined four additional character areas, namely; Langley Paddocks, Langley Brook, Langley Heath and Langley Penns.

8.16 Features such as the underlying topography; the adjacency to existing built environment; existing landscape features; and listed buildings, have all informed the way in which character areas have been identified and whether formal or informal layout and appearance characteristics are appropriate.

8.17 Details of the strategic layout and appearance differences and distinctions emerging for the Site are set out in Section 24.0.

Figure 20. Illustrative Masterplan

- Site Boundary
- Existing Retained Woodland
- Existing Retained Trees
- Existing Retained Hedgerow
- Existing Langley Brook
- Existing Brook Realigned and Improved
- Proposed Mixed Use/ Community Hubs
- Proposed Residential Development Blocks
- Proposed Primary Sub-Station (potential location)
- Proposed Roads
- Proposed Primary and Secondary Roads with Landscape Verges
- Key Public Realm Space
- Proposed Tree Planting
- Langley Sports Hub - Formal Sports
- SUDS Attenuation Feature
- Swale Feature
- Destination Play Areas
- Local Play Areas
- Pedestrian Footbridge
- Pedestrian Footways and / or Cycle Paths

N

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SITE CONTEXT & ANALYSIS

SITE AND CONTEXT ANALYSIS

This section of the DAS provides a summary of the technical assessments and analysis undertaken in relation to the Site's features and development constraints. This section also provides a review of the local context analysis, covering landscape character, built character, local facilities and services, movement, and planning policy.

9.0 EXISTING SITE FEATURES AND DEVELOPMENT CONSTRAINTS

9.1 A comprehensive and robust technical review of the Site has been undertaken to understand the features and potential opportunities and constraints that inform development.

9.2 The following provides a summary of the main environmental and engineering features of the Site and identifies the restrictions and recommendations that have informed the design approach for the Site at this outline application stage. For full technical details reference should be made to the studies and reports submitted under separate cover with the planning application.

ENVIRONMENTAL FEATURES

Previous Land Uses / Ground Conditions

9.3 The Site has predominantly comprised agricultural land assessed as grade 2 /3, woodland and associated agricultural dwellings and structures since at least 1886.

9.4 Ordnance Survey (OS) maps dated 1964 show a 'refuse tip' to the north-east of Langley Park House. Further information is provided on these features in paragraphs 9.33 & 9.34.

Existing Vegetation and Trees

9.5 A full arboricultural assessment has been undertaken and follows the guidelines set out in BS5837:2012 'Trees in Relation to Design, Demolition and Construction'. The full report is submitted with the application. In summary:

- A total of 486 individual trees, 89 groups of trees, 117 hedgerows and two woodlands have been surveyed and recorded;
- Across the Site there are 132 category 'A' items of high quality and value including 20 veteran trees; 281 category 'B' items of moderate quality and value; and 260 category 'C' items of low quality and value. There are also 21 category 'U' items considered unsuitable for retention;
- A total of 25 species are represented throughout the Site with 289 items being semi-mature in age, 219 items early mature and 162 mature items;
- A review of Birmingham City Council's (BCC) online resources confirmed that three Tree Preservation Orders (TPO), numbered 415, 446 and 742, are registered against the Site. The three TPOs protect 117 individual trees, 13 groups and two woodlands across the Site;
- Further to the items identified within the arboricultural survey, advanced landscape planting has been undertaken adjacent to Fox Hollies Road, Langley Heath Farm, Fox Hollies and along the A38. This planting includes both native and naturalised species alongside exotics. The aim was to provide continuous hedgerows, a new woodland area, and an evergreen landscape buffer to surround the curtilages and along the A38;

9.6 To aid with masterplanning and to ensure adequate provision is made for the retention of trees, the recommended Root Protection Areas (RPA) have been calculated in accordance with BS 5837:2012 and are shown on Figure 21.

Ecology

9.7 Baseline investigations were undertaken in 2015, 2016, 2017, 2018 and 2020 and comprised a desk study, Extended Phase 1 Habitat Survey and a suite of additional Phase 2 surveys. This included detailed botanical surveys of the hedgerows, woodland and grasslands, surveys for breeding birds, foraging and roosting bats, great crested newts (GCN), water voles, otter, badger, white clawed crayfish and reptiles. These reports are all submitted under separate cover.

9.8 The surveys identified that the Site itself is predominantly arable land of relatively limited ecological value. However, there are elements of regional, county or local value including:

- Three Sites of Local Importance for Nature Conservation (SLINC): Brockhurst Farm Hedge, Fox Hollies Road Pond, and Bull's Lane Hedges. A review undertaken by ecologists confirmed that, with the exception of Bull's Lane Hedges, these sites conformed with local criteria for identification as SLINCS;
- Three discrete areas of semi-improved grassland of ecological value. The southern most feature is considered to be of regional value, while the middle and northern most features are of county value;
- Six discrete areas of semi-natural woodland that would qualify as Priority Habitat and Local Biodiversity Action Plan (BAP) habitats. Of these the southern most and northern most woodlands would qualify as SLINCs;
- Scattered veteran and mature trees;
- Hedgerows across the Site including Brockhurst Farm Hedge SLINC. Other hedges would not class as 'important' under the botanical criteria of the Hedgerow Regulations but have some intrinsic value, notably the intact species-rich hedges, and provide valuable wildlife corridors;
- Six ponds, including Fox Hollies Road Pond SLINC which are generally in poor condition but provide a good network;
- Langley Brook and tributaries; and the Peddimore Brook tributaries. These are considered to form wildlife dispersal corridors. In addition, the Peddimore Brook tributaries connect to the adjacent on-site ponds and meadow.

DESIGN CONSIDERATIONS...

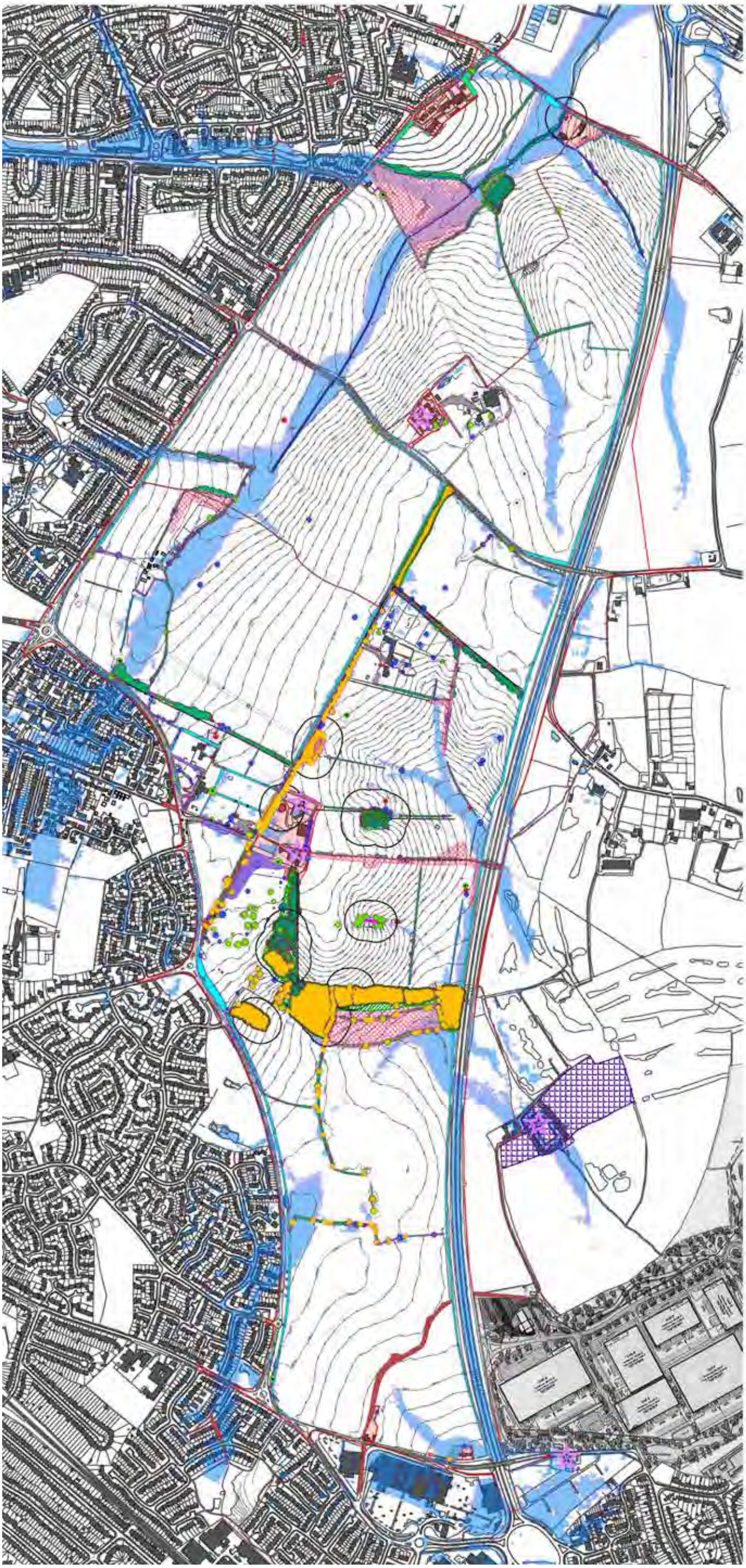
Arboriculture Recommendations / Restrictions to Design:

- Wherever possible it is advantageous to prioritise retention of Category A and B trees within the future development due to their condition, age, longevity and landscape contribution;
- Retain veteran trees, wherever possible, with a root protection area (RPA) which should be allowed to develop into a semi-natural habitat. Developments such as gardens should not be included within the RPA/buffer, as there is limited control over how they may be used or developed in the future;
- Where tree loss is unavoidable, it should be mitigated through the provision of new tree planting. New and replacement planting should explore the use of locally indigenous species;
- Retain hedgerows, wherever possible, with priority given to those of greatest value in terms of structure, time depth, ecological and landscape contribution;

Ecology Recommendations/ Restrictions to Design:

- Fox Hollies Road Pond SLINC is to be retained and buffered from development;
- Ponds are to be retained and linked via green corridors;
- Areas of semi-improved neutral and marshy grassland in the centre of the Site are to be retained and buffered from development;
- Woodland present within the Site is to be retained and buffered from development (including additional habitat creation) and remain ecologically connected to other habitats;
- Open up culverted sections of Langley Brook and re-profile to give a more natural river corridor, alongside habitat creation within the brook corridor;
- All veteran trees are to be retained and buffered from development;
- Primary bat foraging corridors will be retained;
- Create multifunctional sustainable drainage features to accommodate new and enhanced ecological habitats.

Figure 21. Site Features Plan



LEGEND

Application Boundary

Langley Brook
(existing alignment)

Existing Site Contours
(M-EC - 21120_06_170_01d & Bellway Site Topo - S219-630)

Trees and Hedgerow Survey

Category A Tree/ Hedgerow
(EDP dwg no. 2414_d015c)

Category B Tree/ Hedgerow
(EDP dwg no. 2414_d015c)

Category C Tree/ Hedgerow
(EDP dwg no. 2414_d015c)

Category U Tree/ Hedgerow
(EDP dwg no. 2414_d015c)

Route Protection Area (RPA)
(EDP dwg no. 2414_d015c)

Tree Preservation Order (TPO) Trees
(EDP dwg no. 2414_d015c)

Veteran Trees
(EDP dwg no. 2414_d015c)

Trees Recently Removed
(EDP dwg no. 2414_d015c)

Ecology Survey

Seasonally Wet Ponds (with 50m buffer)
(EDP dwg no. 2414_d032)

Great Crested Newt (GCN) Ponds (with 50m buffer)
(EDP dwg no. 2414_d032)

Bat Foraging Routes
(EDP dwg no. 2414_d032)

Badger Setts
(EDP dwg no. 2414_d032)

Sites of Importance for Nature Conservation (SINC) Quality Grassland - Priority Habitat
(EDP dwg no. 2414_d032)

Woodland Priority Habitat
(EDP dwg no. 2414_d032)

Intact Species Rich Hedgerow and Trees
(EDP dwg no. 2414_d032)

Defunct Species Poor Hedgerow
(EDP dwg no. 2414_d032)

Intact Species Poor Hedgerow
(EDP dwg no. 2414_d032)

Defunct Species Rich Hedgerow
(EDP dwg no. 2414_d032)

Intact Species Poor Hedgerow and Trees
(EDP dwg no. 2414_d032)

Historical Features

Grade II Listed Building
(EDP dwg no. 2424_02a_H1)

Scheduled Ancient Monument
(EDP dwg no. 2424_02a_H1)

Estimated Fox Hollies Historic Setting Offset
(Historic Advice - Jeremy Lake)

Flooding Fluvial and Surface Water Survey

1 in 100 Year
(WSP dwg no. 20180629)

1 in 1000 Year
(WSP dwg no. 20180629)

1 in 100 Year +40% Climate Change
(WSP dwg no. 20180629)

Accessibility

Public Rights of Way
(2018 08 16 - BCC public rights of Way from EDP-51dddf)

N

0 250m 500m

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Built Heritage

9.9 A full built heritage assessment has been undertaken for the Site and the surrounding area and is submitted as part of the Environmental Statement. Reference should be made to that report should further detail/ evidence be required.

9.10 For the purposes of the design approach, the main features of particular note and influence within and immediately surrounding the Site are as follows:

9.11 Designated Heritage Assets within the Site:

- Old Langley Hall (Grade II);
- Fox Hollies (Grade II);
- Langley Heath Farmhouse (Grade II);

9.12 Non-Designated Heritage Assets within the Site:

- The Anvil;
- Lindridge Pool Cottage;
- Cart shed at Old Langley Hall;
- A barn and farm buildings at Langley Heath Farm;
- Farm buildings at Fox Hollies;
- Walls of reused furnace crucibles at the boundary of Fox Hollies;
- Langley Gorse;
- The Oaks;

9.13 Designated and non-Designated built heritage assets immediately surrounding the Site:

- Brockhurst Farm (non-designated);
- Peddimore Hall (Grade II);
- Peddimore Hall Moat (Scheduled Monument);

Archaeology

9.14 A desk-based assessment and an archaeological geophysical survey of all suitable areas within the Site has been undertaken and is reported within the Archaeological Chapter of the ES. The following summarises those features of relevance to the design process.

9.15 Features and sites of medieval date have been identified, the most important of which is the Langley Hall moated site and associated fishponds, as well as the potential site of Brockhurst Mill (which could be later). These should be retained in areas of open space.

9.16 Other medieval features within the Site, such as the routes of Ox Leys Lane, Bulls Lane, the enclosure around Springfield Farm, the field boundaries (which are retained and in places enhanced); as well as the 19th century landscape to the south of Fox Hollies; are of interest primarily as historic landscape features. These should be retained as far as possible within the design to reflect the evolution of the historic landscape.

Existing Properties/ Structures within the Site

9.17 Two existing semi-detached dwellings are located within the Site and accessed from Springfield Road. In the long term it is expected that these dwellings will be demolished to facilitate appropriate development layouts in this part of the Site.

9.18 The 1980s residential property and associated contemporary farm sheds to the north east of Langley Hall (Langley Park House) are proposed for demolition to facilitate the creation of a new park area, improving the setting of Old Langley Hall and associated archaeological features.

9.19 Potential features of interest have been identified within the Site by the geophysical survey. This includes possible prehistoric features in discrete areas. Some evidence for the presence of enigmatic activity known as burnt mounds, thought to date to the Bronze Age, has also been identified from scatters of burnt stone; although no surviving burnt mounds have been identified.

9.20 Langley Gorse - currently utilised as a children's day nursery. While it is possible for this feature to be integrated into the future designs, it may also be appropriate for this building to be removed to facilitate the appropriate laying out of the development in this part of the Site. The ES has assessed for removal in the future should this be pursued as an option.

9.21 Further archaeological investigation will be undertaken to establish precise nature, extent, quality and date of archaeological remains within the Site. It has been agreed with BCC that this could appropriately be secured via a condition on planning permission.

Topography

9.22 A topographical survey of the Site (Figure 22) confirms that there is a ridge running through the centre of the Site, approximately along the line of Fox Hollies Road with an approximate elevation of 121m Above Ordnance Datum (AOD). In the north of the Site, land falls west from this ridge north towards the Langley Brook.

9.23 The Langley Brook begins to the south of Ox Leys Road with an approximate bed level of 104.2m AOD, flowing north to a bed level of approximately 94.3m AOD, where it leaves the Site via a culvert under Lindridge Road. Further to this, land falls eastwards away from the ridge along Fox Hollies Road towards the 'Fox Covert Culvert' under the A38, where an un-named watercourse leaves the Site at an approximate bed level of 101.2m AOD.

9.24 In the south of the Site, ground levels predominantly fall in a west-to-east direction. Ground levels fall away from the ridge along Fox Hollies Road towards a small un-named watercourse which flows under the A38 in culvert at a bed level of approximately 95m AOD. Ground levels then rise again further south of this, where there is a much smaller ridge following the field boundaries running through the centre of the south of the Site with approximate ground level of 100m AOD. The south-east of the Site falls away from this ridge to the south-eastern corner of the Site at a level of approximately 90m AOD. Meanwhile the south-west of the Site falls away from this ridge to a low point, where an existing field boundary meets the Site boundary, approximately 420m north of the Webster Way and Walmley Ash Lane Junction. Ground levels in his area are approximately 99m AOD.

9.25 Parts of the Site exhibit large undulating swathes with existing gradients of 1:10 or steeper (Figure 22). Without mitigation, these steep gradient areas do not efficiently support access or movement and have implications on the construction, function and efficiency of future built form.

DESIGN CONSIDERATIONS...

Built Heritage & Archaeological Recommendations / Restrictions to Design:

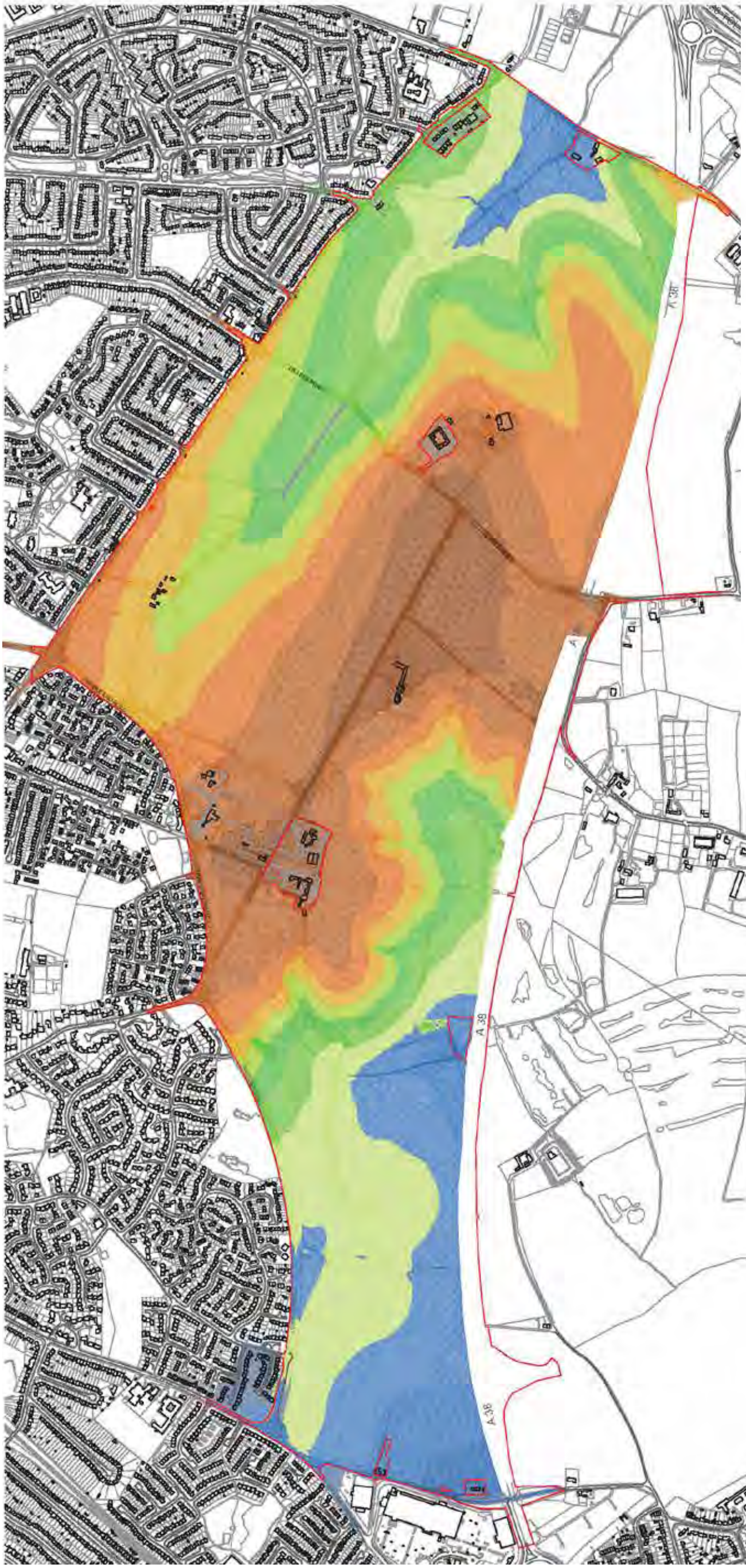
Fixed or embedded mitigation should be considered as an integral part of the design approach for the Site, particularly in relation to the following heritage/ archaeological assets:

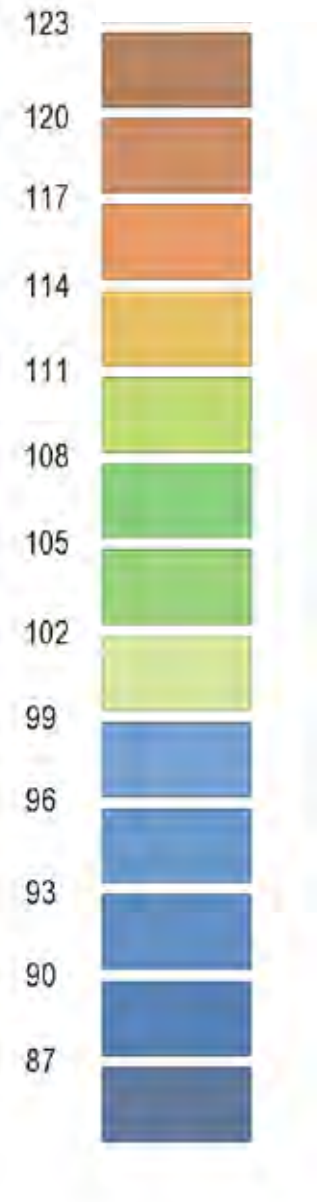
- Old Langley Hall: The siting of proposed development should be subservient in form and scale to Old Langley Hall. Open views should be retained towards the most significant elevation of Old Langley Hall (i.e. the view from Ox Leys Road towards the south eastern elevation). In addition, the relationship between the Hall and the archaeological features of the moat and associated fishpond features should be retained. New green infrastructure should be integrated to restore the historic connection between the Hall and the Site of Brockhurst Mill to the north west, as well as Langley Brook;
- Langley Heath Farmhouse and Fox Hollies: The historic and visual inter-relationship of these two dwellings with their associated gardens, and Fox Hollies Road should be retained. In addition, landscape buffers should be provided to the north of Langley Heath Farmhouse and in the most significant of the viewsheds towards the grade II listed Fox Hollies from the south west. This will support the preservation of the open relationship of the house to the area of pasture extending towards Fox Hollies Road, and its relationship to the non-designated farmstead buildings;
- Development to the south of the former farmstead at Fox Hollies, the present modern stables to the east of the former farmsteads at Fox Hollies and Langley Heath Farm should adopt a subservient form and scale. Appropriate references to influence and inform a new and innovative architectural style could be taken from existing farmsteads in the 'Ancient Arden' character area;
- While the retention of the existing public right of way passing through the Fox Hollies property is being reviewed, it is possible to retain the alignment of the historic route-way as part of the open space network;
- Brockhurst Farm: Mature 18th century or earlier hedgerows already screen this non-designated heritage asset. Additional green infrastructure around the boundary of the Site will further protect and buffer the setting of this feature;
- Peddimore Hall and Moat: Located to the east of the A38, is not considered to be significantly impacted by the proposed development;
- Langley Gorse: A flexible assessment approach has been taken for this building, such that should future removal be required to facilitate appropriate development this has been assessed. However, it is also possible to retain and integrate the building into the development parcels should this be more appropriate.

Topographical Recommendations/ Restrictions for Design:

- Develop a land use specific cut and fill / ground reprofiling strategy to resolve gradients and enable appropriate future development form.

Figure 22. Existing Site Topography Plan





Metres Above
Ordnance Datam

M-EC 21120_06_170_01.24

ENGINEERING FEATURES

Geology

9.26 The BGS published mapping identifies the Site to be underlain by bedrock of Sidmouth Mudstone Formation with overlying superficial deposits of Glaciofluvial Deposits, Devensian Sand and Gravel in the centre of the Site, far south of the Site and north-west of the Site.

9.27 Head – Clay, Silt Sand and Gravel is identified running east to west through the south and crossing the north-western border of the Site. In addition to this, where the Langley Brook crosses the northern Site Boundary Alluvium – Clay, Silt, Sand and Gravel is identified.

Watercourses

The Langley Brook

9.28 The Langley Brook is an ordinary watercourse and starts approximately 300m to the south west of Ox Leys Road. The brook flows in a north-easterly direction within a ditch which is approximately 1-2m deep and 3-5m wide. Within the Site, the watercourse is culverted through a number of structures including Ox Leys Road, an embankment and Lindridge Road.

Churchill Brook

9.29 In the north-west corner of the Site, the Langley Brook is joined by inflows from the Churchill Brook, another ordinary watercourse, which serves the catchment and existing residential area to the west of the Site.

Un-named Watercourses

9.30 The Site's underlying topography creates a number of different unnamed ditches and watercourses which predominantly drain towards the south east through two culverts beneath the A38. A localised area in the south-west of the Site falls in the opposite direction towards Webster Way from the centre of the Site following the line of an existing land drainage ditch.

Flooding & Surface Water Drainage

9.31 In accordance with the Environment Agency Flood Map for Planning, areas of the Site are currently identified to lie within Flood Zones 1, 2 and 3. A Flood Risk Assessment (FRA) has been prepared and is submitted with the application and provides further refined detail on the functional flood areas.

9.32 The Site is crossed by a number of land drainage networks. The Site is located at the head of a number of small, localised catchments, however, the Site may be classified into primary catchments; the Langley Brook Catchment and other catchments of un-named watercourses which form the head of the Peddimore Brook.

Historic Landfill & Refuse Activity

9.33 The British Geological Survey and the Environment Agency report a large area of land in the north of the Site which was historically utilised as Ox Leys Road Landfill, and a significantly smaller area to the west of Fox Hollies Road associated with refuse -tip activity.

9.34 A geophysical survey was completed in the area of the Ox Leys Road Landfill and in the area of the former refuse tip, and confirmed the potential extents and composition of these features. While their existence may have implications in terms of detailed construction methods and the need for some remediation, they do not pose any sizeable constraint to the strategic layouts of the masterplan proposals.

Current A38 Roundabout Planning Application

9.35 The current outline planning application for the strategic employment site at Peddimore (BDP policy GA4), east of Langley and the A38, proposes a new at grade roundabout junction from the A38 and a new segregated pedestrian / cycle bridge crossing over the A38. Alongside access into the Peddimore site, the policy requirement for both Peddimore and Langley is that this roundabout provides a primary access into both strategic sites.

Utilities & Services

Electricity

9.36 Western Power Distribution have the following existing assets within the Site:

- 132kV Overhead Line (OHL) infrastructure crosses the Site on a north east to south west alignment to the north of Langley Heath Farm;
- 11kV OHL infrastructure is noted heading west towards Langley Heath Farm from the A38. Thereafter, the under-grounded 11kV cable runs along the northern verge of Signal Hayes Road servicing local buildings via LV networks. To the north of the Site, 11kV networks are noted coming into the Site from Springfield Road near the junction of Churchill Road serving a transformer at Old Langley Hall (ref: 72/3140 (3334)) and 11kV networks servicing an substation (ref: 72/3654 (6364)) to the rear of Regan Court, off Springfield Road.

Gas

- There are no Medium Pressure (MP) assets located within the Site boundary. The nearest point of connection is indicated to be the 315mm MP main located on the corner of Lindridge Road and Rectory Road, 1,100m from the Site to the north west. This main has sufficient capacity to serve the Site at full build out. From utility record mapping a 125mmØ Polyethylene Low Pressure (LP) gas main is noted in the northern verge of Ox Leys Road from Springfield road, servicing Old Langley Hall. There are no other LP gas mains noted within the Site.

Potable Water

- From records, South Staffordshire Water 6"Ø Cast Iron potable water mains are noted in the southern verge of Ox Leys Road, and 160mmØ mPVC mains are noted running the full length of Fox Hollies Road in the western verge. 125mm MDPE mains are noted along the northern verge of Signal Hayes Road, then running northwards in the eastern verge/footway of Fox hollies Road to the junction with Ox Leys Road. 160mmØ mPVC mains and 4"Ø Cast Iron mains are noted in the track off Fox Hollies Road, heading east under the A38 and along Bull's Lane past the Wishaw Golf Club. No other potable water mains are noted within the Site.

Telecommunications

- From records Openreach assets are noted in ducts in Peddimore Lane (track) adjacent to the Footsteps Nursery and Pre-School on Walmley Ash Lane, heading northwards; and ducts and chambers along the full length of Fox Hollies Road (including the footpath to the south) in the eastern verge. Virgin Media assets are noted on Signal Hayes Road; up Fox Hollies Road and east along Ox Leys Road over the A38. No other Virgin Media assets are noted within the Site.

DESIGN CONSIDERATIONS...

Geology Recommendations/ Restrictions for Design:

- Surface water disposal cannot rely on infiltration techniques. Alternative sustainable drainage features will need to be considered and designs adjusted to take account of this.

Landfill and Refuse Tip Recommendations/ Restrictions to Design:

- No specific restriction to future development in principle on or around these areas, but some localised enhanced detailed design specifications may be required and a Construction Environmental Management Plan (CEMP) prepared and submitted prior to works in or immediately associated with these areas.

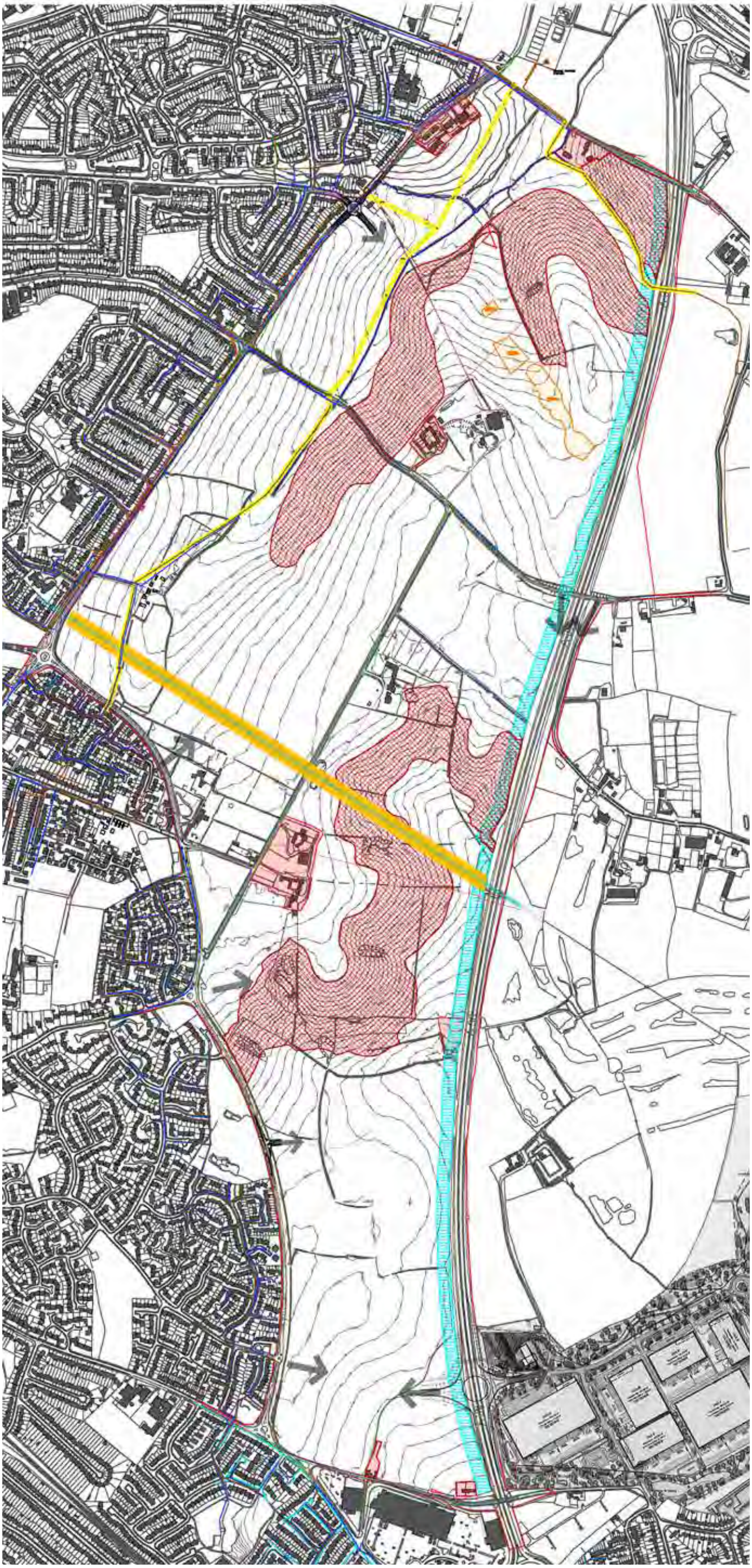
A38 Southern Roundabout Planning Application Recommendations/ Restrictions to Design:

- Due to level changes between the A38 and both strategic sites, earth embankments and land grading will need to be accommodated around the proposed roundabout junction within the Site. At this time the land take for this cannot be fully confirmed as levels information was has not been submitted with the roundabout design. This is also the case for the pedestrian / cycle over bridge which is likely to require embankments or structures that have not been detailed by the Peddimore application.

Utilities & Services Recommendations/ Restrictions for Design:

- 132kV Overhead Line - if retained in situ, then offsets and 'swing & sag' buffers are required to the lines precluding development area. However, opportunities to underground and reroute the feature are being explored to maximise developable area;
- A 132/ 11kV Primary Substation will be required to supply the Site with the quantum of power required. The actual location of the Primary will be subject to detailed design work but will need to be in relative proximity to the existing pylon towers;
- For gas supply, a connection will need to be taken from Lindridge Road/ Rectory Road and routed across the Site within main infrastructure corridors;
- To support early development phases with potable water there is a requirement for substantial reinforcement mains. Delivery of this new infrastructure will need to be carefully phased with the development;
- Future potable water reinforcements to support the total build out are also recommended and include: 355mm mains plus district meter / pressure reducing valve (PRV) laid in Whitehouse Common Road, from the junction of Tamworth Road, along Lindridge Road to the junction with Springfield Road; Existing 6" and 9" mains to be upgraded to 355mm (400m) between Bedford Road and Weeford Road Junction; 355mm mains to be laid in Thimble end Road from Walmey Road to Springfield Road (310m) for connection to the Site; and 300mm main to be laid through the Site from north to south.

Figure 23. Engineering Features Plan



LEGEND

Application Boundary

Langley Brook
(existing alignment)

Existing Site Contours
(M-EC - 21120_06_170_01d & Bellway Site Topo - S219-630)

Utilities Survey

132KV Overhead Cables With Easement 15m Either Side of Cables and Pylons
(MEC dwg no. 21120_00_010revb)

HV Underground Cables 11kV
(MEC dwg no. 21120_00_010revb)

LV Underground Cables
(MEC dwg no. 21120_00_010revb)

Overhead Plant
(MEC dwg no. 21120_00_010revb)

LP Gas Mains (National Grid)
(MEC dwg no. 21120_00_010revb)

Existing Water Main
(MEC dwg no. 21120_00_010revb)

Existing Severn Trent Surface Water Pipe
(xUtilities Severn Trent Water)

Existing Foul Water Pipe with 5m Easement Either Side
(xUtilities Severn Trent Water)

Decommissioned Sewer
(MEC dwg no. 21120_00_010revb)

Virgin Media Apparatus
(MEC dwg no. 21120_00_010revb)

Underground BT Cables
(MEC dwg no. 21120_00_010revb)

Strategic Access and Ground Contour Analysis

Main Vehicular Access Points
(Indicative Locations - Savills UD)

Ground Levels Generally Steeper than 1-20
(Savills Urban Design)

Acoustics Analysis

Assumed Zone to Accommodate Acoustic Barrier & Drainage Features
(SAV_Estimated 30m Offset to Boundary)

Historic Landfill Areas

Geophysical Survey Summary Results
(Landscape DWG. 3196 0 1000)

N

0 250m 500m

342916-01P

Existing Vehicular Access to Site

9.37 Vehicular access into the Site is currently possible from Ox Leys Road and Signal Hayes Road. Fox Hollies Road connects between these two roads and provides a vehicular 'spine' route along the northern ridge-line of the Site.

Definitive Public Rights of Way across the Site

9.38 The Site accommodates the following Public Rights of Way (PRoW).

- PRoW 1122 (footpath) this route passes from Lindridge Road through private grounds of Brockhurst Farm, and then traverses agricultural fields before passing along the western boundary of Old Langley Hall. From Ox Leys Road heading south there is no onward PRoW connection;
- PRoW 1123 (footpath) connects between Springfield Road at the western Site boundary, adjacent to the substation, and heads east to Fox Hollies Road to the north of Langley Gorse. No onward PRoW route connects;
- PRoW 3109 (byway open to all traffic) connects between Fox Hollies Road, north of Langley Gorse, to the eastern boundary where it is truncated by the A38;
- PRoW 1130 (footpath) connects between Fox Hollies Road, along Fox Hollies Drive, to the eastern boundary where it passes through an underpass under the A38 to Wishaw Golf Course. This connects to the wider PRoW network east of the A38;
- PRoW 3105 (restricted byway) connects between Fox Hollies Road, at its junction with Signal Hayes Road, and Thimble End Road at the western Site boundary;
- PRoW 3107 (restricted byway) connects from ASDA car park to the A38, crossing Walmley Ash Lane, at the southern Site boundary, and follows Peddimore Lane to the west of Footsteps Nursery. There is no access across the bypass at this point.

Unmitigated Acoustic Impacts

9.39 The baseline noise environment at the Site is characterised by and has been assessed in relation to the following noise sources:

- Major roads, motorways and local routes: the A38 immediately east of the Site; the M6 Toll Road and junction with the A38; Walmley Ash Lane & Walmley Ash Road (south of the Site), Webster Way, Thimble End Road & Springfield Road (west of Site), Lindridge Road (north of Site); and Ox Leys Road / Fox Hollies Road, which pass through the centre of the Site;
- Aircraft departing from Birmingham Airport on heading 328° / arriving on heading 148°, with some of the departures passing directly over the southern part of the Site;
- Fixed plant, deliveries by HGV and other activities associated with ASDA, B&M and Wickes stores to the south of the Site at the Walmley Ash Road Retail Park, Minworth.

9.40 The primary source of noise for the majority of the Site is linked to road traffic. Noise sources such as fixed plant and delivery vehicles associated with the Retail Park were observed. However, the dominant noise source at this part of the Site was also road traffic.

9.41 As illustrated in Figure 24, the existing baseline noise position for parts of the Site adjacent to roads is generally in excess of 55dB (maximum recommended noise level for external rear amenity areas in residential developments). Without intervention and mitigation the existing noise levels would impact on the availability of land suitable for noise sensitive development (i.e. residential).

Air Quality

9.42 The Site and surroundings are located within the Birmingham Air Quality Management Area (AQMA).

9.43 The results of air quality monitoring survey demonstrated no monitored exceedances of the annual mean Objective for NO_2 throughout the study area.

9.44 Atmospheric dispersion modelling of baseline conditions within the study area was undertaken for a base year (2018). The results predict that the baseline NO_2, PM_{10} and $PM_{2.5}$ concentrations in 2018 were below the respective air quality objective.

DESIGN CONSIDERATIONS...

Public Rights of Way Recommendations/ Restrictions for Design:

- Opportunities to explore the re-routing of parts of the existing PRoW network, particularly those parts which pass through private properties or do not connect to onward routes;
- PRoW / footpath and cycle network can be significantly enhanced throughout the Site offering new looped recreation and leisure routes and providing better connections to the wider network encouraging walking, cycling and general fitness.

Acoustic Recommendations/ Restrictions to Design:

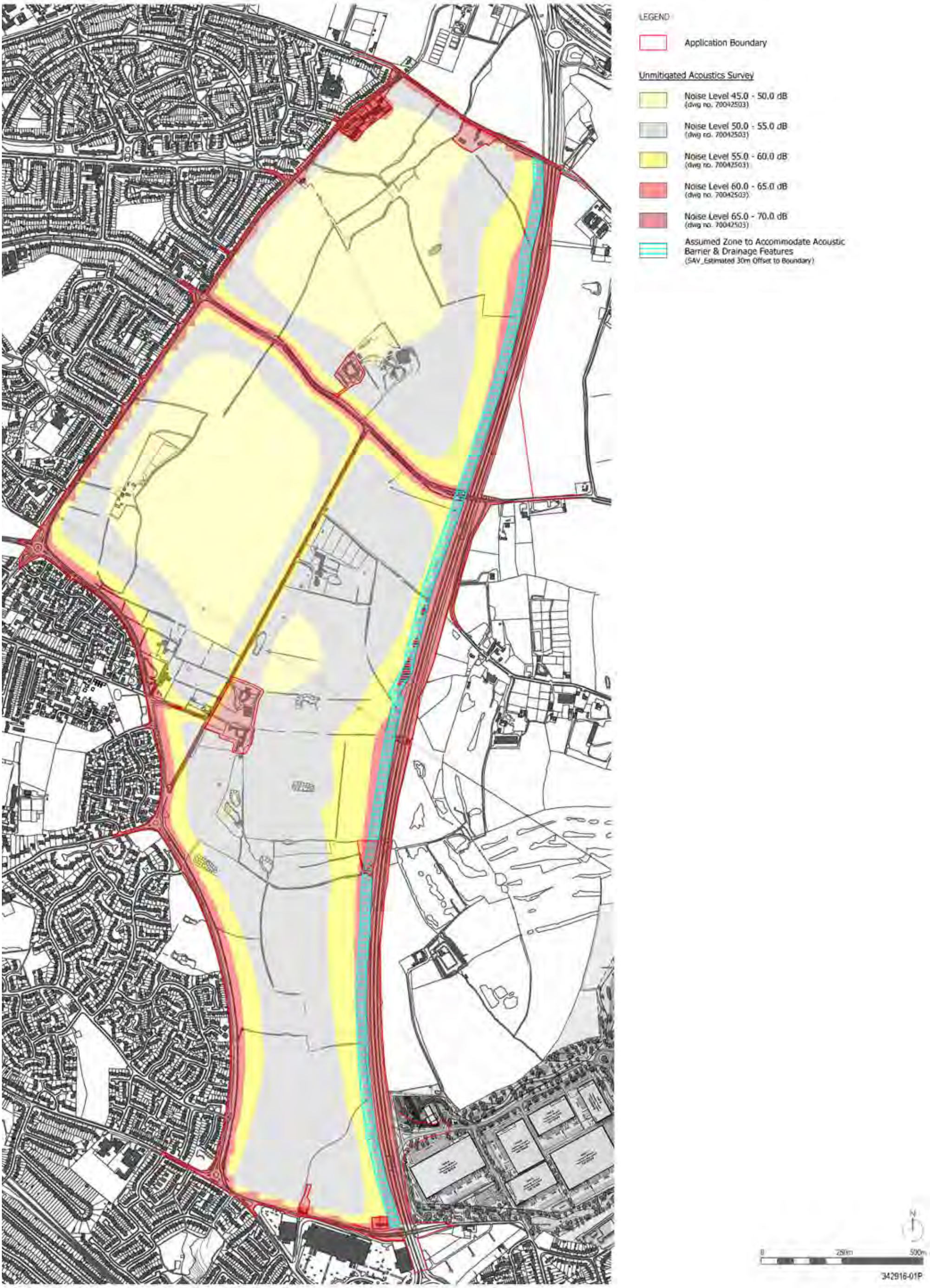
In order to increase available developable area, and to mitigate the existing noise levels to meet acceptable internally and externally residential standards, the following measures should be considered and included in the design:

- A noise barrier of up to 3m in height (subject to location) along the eastern edge of the Site or on the A38 highway;
- As agreed with Birmingham City Council Highways, a reduction in speed from 70mph to 50mph on sections of the A38 between Minworth Roundabout and the proposed northern site access;
- Localised orientation of residential dwellings towards noise sources to provide additional shielding of the rear private amenity spaces;
- At the detailed design stage and in localised locations the use of enhanced acoustic fenestration and trickle vents to achieve acceptable internal acoustic levels.

Air Quality Recommendations/ Restrictions for Design:

- No specific urban design interventions at the outline application stage are required. However, it is recommended that specific construction management measures are implemented at the implementation stages to minimise and mitigate any air quality impacts.

Figure 24. Existing Acoustic Analysis Plan



10.0 LANDSCAPE CHARACTER

NATIONAL LANDSCAPE CHARACTER

10.1 The landscape of England has been subject to a nationwide Landscape Character Assessment. According to The Character of England: Landscape, Wildlife and Natural Features (Natural England), the Site straddles two National Character Areas (NCA): NCA 67 'Cannock Chase and Cank Wood', to the north, and NCA 97 'Arden', to the south (Figure 25).

10.2 While the descriptions of the NCA are useful in providing a context for the Site, and a broad framework for more detailed landscape character assessments, they are too generic to provide specific site level characterisation. For the scale of the development proposed, it is considered that the description of landscape character undertaken at the sub-regional level is more relevant in establishing the landscape resource baseline.

LOCAL LANDSCAPE CHARACTER

10.3 The published landscape character assessments relevant to the Site are the Warwickshire Landscape Guidelines (November 1993) and the BDP Landscape Character Assessment ARUP (March 2013).

Warwickshire Landscape Guidelines (November 1993)

10.4 The Site falls at the western extent of the area covered by this assessment which extends into the Birmingham City Council (BCC) area. This assessment places the Site within the 'Arden' regional character area (RCA) and predominantly within the 'Arden Parklands' character area (CA), with the north-western corner in the 'Wooded Estatelands' CA. These CAs extend to the east and north of the Site respectively, while a short section of the eastern boundary abuts the 'Ancient Arden' CA and the western boundary abuts 'urban land'.

10.5 Arden RCA is described as: "An historic region of former wood pasture and heath characterised by a dispersed settlement pattern, ancient woodlands and mature hedgerow oaks."

BDP Landscape Character Assessment ARUP (March 2013)

10.6 A landscape character and sensitivity assessment of BCC green belt option areas, including the Site, was undertaken by ARUP in 2013. The primary purpose of the ARUP assessment was to determine the relative sensitivity of the different future land allocation option areas.

10.7 The assessment identifies 19 Landscape Character Areas (LCA) of which the Site comprises LCAs 9 to 13, and the western quarter of LCA 14. For each LCA the assessment provides a description, key characteristics, key views, relative sensitivity to development, and enhancement/mitigation options.

10.8 With respect to housing development, the assessment considers the relative sensitivity of the LCAs pertinent to the Site to be low or medium. With respect to employment development, the assessment judges the relative sensitivity of all of the pertinent LCAs to be high, with the exception of LCA 14 which is judged to have a low sensitivity in this regard.

EDP Landscape Assessment

10.9 Baseline studies found that the Site shares few key characteristics with the larger scale studies due, primarily, to the intensive agricultural management across the Site which has lead to a deterioration of many landscape elements. However, it does retain its gently undulating topography and remnants of woodland, belts of mature trees, and thick roadside hedgerows.

10.10 Furthermore, the proximity of the existing urban edge of Birmingham, the surrounding road network, overhead electricity lines and associated pylon towers, and the deterioration or vegetation, all detract from the intactness of the rural landscape across the Site.

10.11 The ARUP assessment provides a finer grain study that provides a more accurate picture of various sites along the urban fringe. EDP has taken this study to a smaller grain and, by layering the various dimensions of landscape including heritage influences, has identified local character areas at the Site level as illustrated and described at Figure 26.

Visual Matters

10.12 The visual envelope of the Site is contained by the existing urban edge to the west and south. To the east it is contained by vegetation lining the A38 and the low ridge, marked by Wiggins Hill Road, beyond. To the north, the land falls away along the valley with elevated slopes beyond. However, views from these elevated locations are limited by distance and intervening vegetation.

10.13 The areas of the Site with greatest inter-visibility with the surrounding agricultural landscape are the north-facing slopes, to the north of Old Langley Hall, and the south-easterly slopes, to the east and south of Fox Hollies. These slopes are considered to have some visual sensitivity due to their visibility within the wider agricultural landscape.

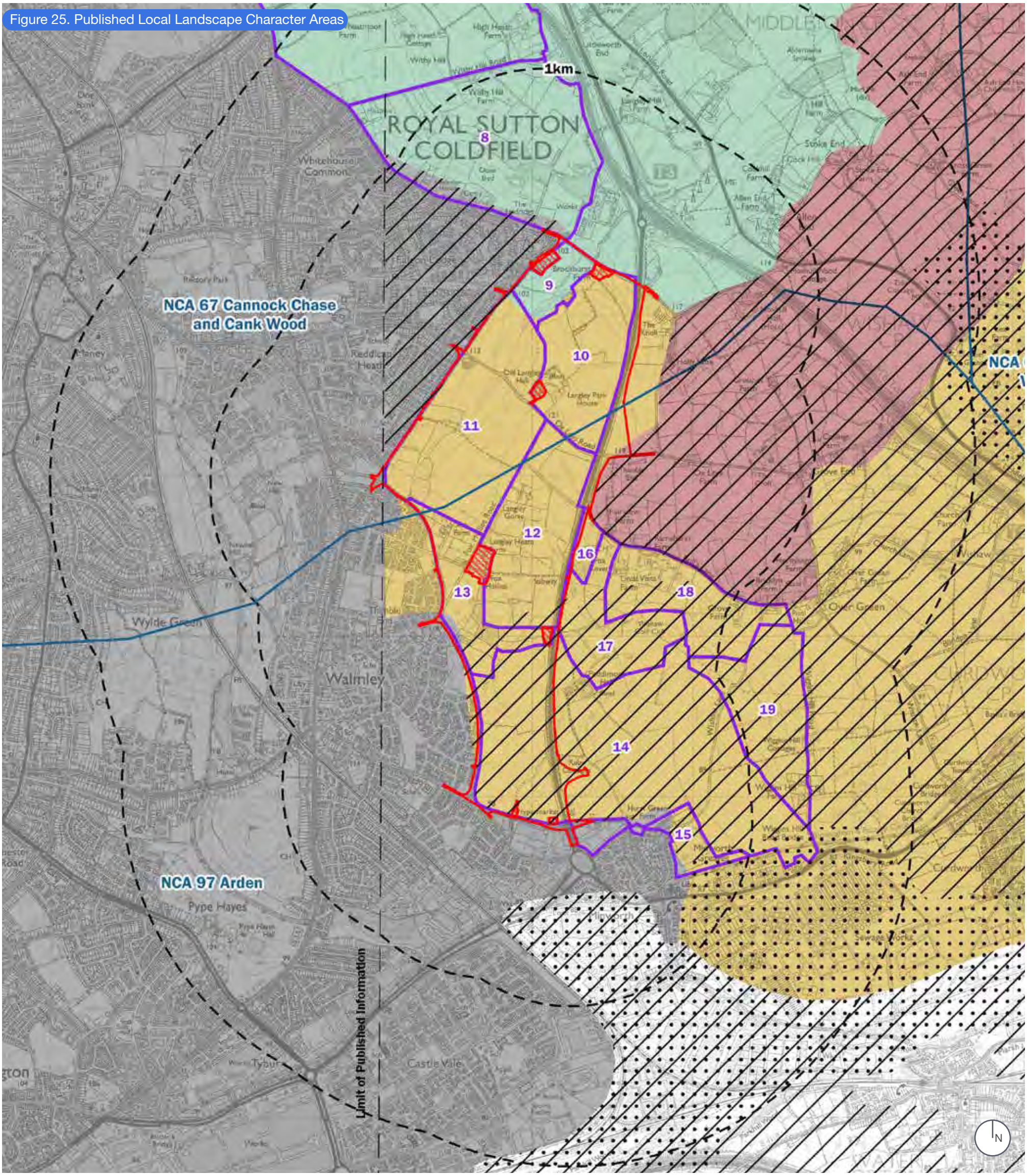
10.14 The north-western part of the Site, along the Langley Brook, has the greatest inter-visibility with the existing residential settlement and is considered to have some visual sensitivity in relation to residential visual amenity.

10.15 To the south and south-east, the Site abuts existing and proposed commercial development while to the east it abuts the A38. These elements are visual detractors and the visual consideration here is with regard to views from the Site to the adjacent land uses.

Table 2. Arden Parklands CA and Wooded Estatelands CA general description, characteristic features, and management strategy

Areas (within Arden RCA)	Overall Character and Qualities	Characteristic Features	Management Strategy
Arden Parklands CA	An enclosed, gently rolling landscape defined by woodland edges, parkland and belts of trees.	• Middle distance views enclosed by woodland edge; • Belts of mature trees associated with estatelands; • Many ancient woodlands, often with irregular outlines; • Large country houses set in mature parkland; • Remnant deerparks with ancient pollarded oaks; • Thick roadside hedgerows, often with bracken.	Retain and enhance the effects of woodland enclosure.
Wooded Estatelands CA	A well wooded estate landscape characterised by a large scale rolling topography and prominent hilltop woodlands.	• A large-scale rolling topography with occasional steep scarp slopes; • Large woodlands, often associated with rising ground; • Mature hedgerow and roadside oaks; • A semi-regular pattern of medium to large sized fields; • A varied settlement pattern of small villages and scattered farmsteads.	Conserve and enhance the overall structure and well wooded character of the landscape

Figure 25. Published Local Landscape Character Areas



Site Boundary

Land Excluded from Site

Range Rings (at 1km intervals)

National Character Areas (NCA)

National Character Areas as Labelled

Warwickshire Landscape Guidelines (November 1993) (Partial Coverage Only)

Character Areas

- Ancient Arden
- Arden Parklands
- Wooded Estatelands
- Urban Land

Other

- Enhancement Zones
- Industrial Land
- Other Non-agricultural Land

Birmingham Development Plan 2031 Landscape Character Assessment (June 2013)

Landscape Character Areas

7. Wheatmoor Plateau Farmland and Valleys
8. Lindridge Valley Farmland
9. Langley Brook Lowlands
10. Langley Hall Farm Lowlands
11. Springfield Agricultural Lowlands
12. Langley Heath Agricultural Lowlands
13. Fox Hollies Woodland Ridge
14. Peddimore Hall Lowland Basin
15. Minworth Lowland Urban Fringe
16. Fox Covert Hillside Woodland
17. Wishaw Golf Course
18. Bull's Lane Ridgeline Farmland
19. Wiggins Hill Lowland Farmland

LANDSCAPE AND HERITAGE CHARACTER AREAS

10.16 The following section identifies the existing landscape and heritage areas and attributes that will inform the layout for the future development of each area:

1. Langley Meadowlands

10.17 Visually contained valley side with small, enclosed fields used for grazing. Low intensity agricultural influences dominate with intermittent urban fringe influences. Contains site of historic Brockhurst Mill and associated dams.

2. Brockhurst Farmlands

10.18 Local enclosed valley directing views to the wider agricultural landscape to the north-west. Intensive agricultural influences dominate. Brockhurst Farm 16th-18th century heathland edge farmhouse located at the lower end of the valley.

3. Langley Hall

10.19 High ground with large open fields. Open views across the urban landscape, to the west, and agricultural landscape, to the north. Urban fringe and intensive agricultural influences. Contains site of 13th century moated hall and park and associated archaeology including extant fishponds and sections of moat. Late 17th century stables - Old Langley Hall (grade II listed) survive.

4. Langley Brook and Plateau Farmlands

10.20 Valley landscape with generally large open fields. Broad views across, but contained within, the valley. Urban fringe and intensive agricultural influences with pylon towers and overhead lines crossing southern end of valley. Floodplain of Langley Brook with historic meadows. Historic heathland with little enclosure before the 17th century, extensive removal of boundaries post-1950.

5. Signal Hayes Smallholdings

10.21 High ground flanking Signal Hayes Road. Small enclosed fields used for grazing and encompassing well screened urban edge businesses, Gardeners World, caravan storage at Ash Farm and The Oaks. Low intensity agricultural influences dominate with intermittent urban fringe influences. Area of smallholdings located along Signal Hayes 1820s enclosure road, generally enclosed from Langley Heath in the 1820s-1850s. Routeway and enclosures related to much altered smallholdings.

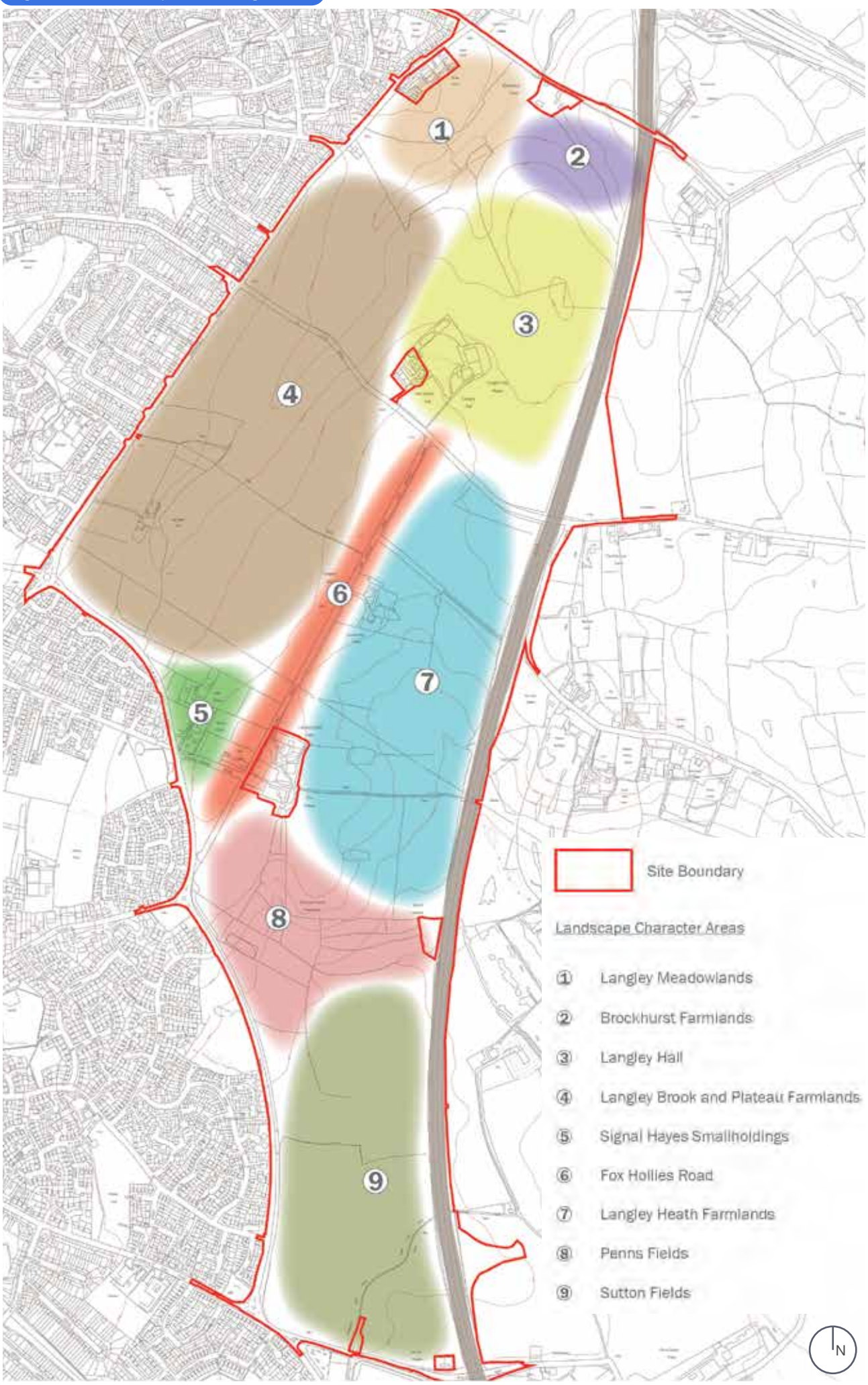
6. Fox Hollies Road

10.22 Straight road running along the local ridge and lined by hedges with trees along the south-eastern side. Treed ridge provides a local feature in the landscape. Elevation provides opportunities for open views west to settlement edge and east to the agricultural landscape where lining vegetation allows. Predominantly 1820s enclosure road, but the southern section shown on 1816 map. Bank and ditch with trees legible to south-east side, evidence that the north-western side affected by tree removal.

7. Langley Heath Farmlands

10.23 South easterly facing indented slopes with Langley Heath and Fox Hollies (Grade II listed) and Langley Gorse, (non-designated heritage asset), at the western extent. Medium sized rectilinear fields enclosed by hedges with hedgerow trees and containing tree groups around marl pits/ponds. Broad views, from more elevated ground, to the agricultural and employment landscapes to the south-east. Primarily agricultural influences tempered by the visually prominent pylon towers and awareness of the A38. Development influences will increase as Peddimore Allocated Core Employment Area comes forward. Area of 16th-18th farmsteads (Langley Heath and Fox Hollies) and related farmland enclosed from Langley Heath. Area also includes Langley Gorse built in 1860s within large grounds.

Figure 26. Landscape & Heritage Areas



8. Penns Hall Estatelands

10.24 Area of high ground and east facing slopes enclosed by mature hedgerows and woodland. Western medium scale enclosures containing large mature trees in pasture, eastern area comprising smaller linear enclosures containing meadow and woodland. Vegetation generally contains views within the area which retains a low intensity agricultural character. Land mostly enclosed from Langley Heath after 16th century and then transformed to facilitate rural sports on eastern outpost of the Penns estate from 1860s. Apparent features include: traces of medieval sinuous boundaries (bank and ditch) to the east; 19th century ponds and 18th century marl pit used for rearing duck for shooting; and plantations for rearing pheasant.

9. Sutton Fields

10.25 Low-lying, level landscape with large, open fields. Urban fringe, commercial, and intensive agricultural influences. Land mostly enclosed from Langley Heath after 16th century with 16th -18th century dog-leg boundaries legible in northern half of the area.

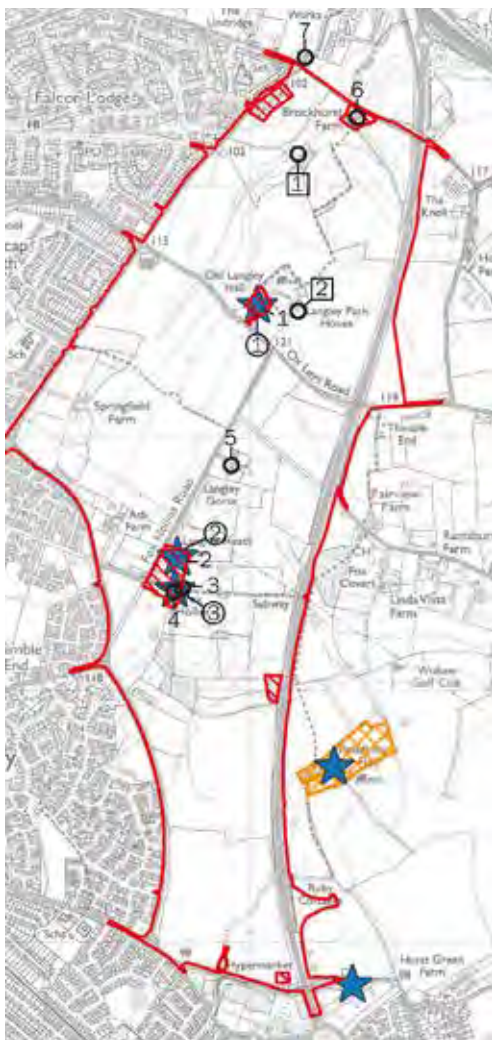
LANDSCAPE OBJECTIVES FOR THE SITE...

- Create a sympathetic interface with the rural landscape to the north and east of the Site by softening and layering views to the built development, notably along its boundaries and across its elevated northern and south-eastern slopes;
- Create a sympathetic interface with the adjacent residential development to the west, with the ambition of integrating with the existing urban fabric and addressing the facing development, to the north, and the backing development and area of open space, further south;
- Create a sympathetic interface with the adjacent existing and proposed commercial development to the south and south-east, with the ambition of providing some planted visual and physical enclosure and separation between these land uses and the proposed residential development;
- Retain important landscape feature elements and incorporate them appropriately and positively into the new land use, notably: the treed ridge along Fox Hollies Road; the area of woodland, trees, hedgerow, species-rich grassland to the south of Fox Hollies; woodland, trees and hedgerows identified within the woodland trees and hedgerow and ecology objectives; and heritage assets identified within the heritage objectives;
- Create a strategic GI network across the Site and linking to the Site context;
- Use the identified landscape character areas as the basis for development character areas within the Site thus contributing to distinctiveness and legibility;
- Create vantage points with views to existing features, notably to the frontage of Langley Hall Stables (Grade II) and views from elevated land to the east of Fox Hollies across the wider landscape to the east;
- Create community orchards and 'edible hedges' to reflect the agricultural heritage of the Site and create the opportunity for people to gather food from the landscape;
- New planting to be characteristic of the 'Arden Parklands' and 'Wooded Estatelands' CAs;
- Create a green route connection to New Hall Country Park where it abuts the western site boundary.

Figure 27. Landscape Character Dimensions

Topography

Trees, Woodlands and Hedgerows



Heritage

Public Rights of Way

11.0 CHARACTER OF PLACE – A PRECEDENT STUDY

11.1 Achieving character and quality of place is fundamental to the success of place making, and particularly in supporting the growth of a sense of community; a sense of place and identity; desirability; and ultimately long term pride.

11.2 As the largest singular residential development within the Birmingham City boundary, Langley has the potential to deliver a development of character and quality which is both sensitive and responsive to its existing and surrounding context, while also taking opportunities to deliver areas of distinctive character specific to Langley itself.

11.3 This section of the DAS provides a summary of the built character and precedent research that has been undertaken and the key learning outcomes which can be used to inform and influence the approach to character and quality at Langley.

METHODOLOGY

11.4 The character approach at Langley will not simply impose superficial 'anywhere' character. Rather detailed design proposals must consider the physical context, future function and best practice precedence, before applying significant architectural variation. As such the methodology of this precedent study contains two parts of analysis:

- **Part 1:** Character analysis study of the immediate context surrounding the Langley site. Part 1 has included a review of the historic growth of Sutton Coldfield; identification of key pockets of distinct development across Sutton Coldfield; and then a more detailed exploration of the characteristics of the built form and public realm spaces where appropriate and relevant and particularly bounding the Site.
- **Part 2:** Has considered the future functions to be accommodated on the Site, and has identified a series of best practice precedents from across the UK and where appropriate internationally. The precedents have been selected where they have appropriately responded to a similar set of conditions or functions to achieve a high quality and characterful outcome appropriate to the 21st Century.

11.5 The conclusion of this section is a set of influences which have been used to support the rationale for the emerging masterplan structure; to inform illustrative layouts and appearance principles at the outline application stage.

Distinguishable Chimneys & Rooftops, Sutton Coldfield.

PART 1: BUILT CHARACTER IMMEDIATELY SURROUNDING THE LANGLEY SITE

Settlement Growth and Evolution of Sutton Coldfield

11.6 Studying the origins and growth of a settlement enables an understanding of the dominant structure and key characteristics underpinning the sense of place. The structure and the associated buildings inform its character and identity.

11.7 Figure 28, over page, illustrates and summarises four distinct periods during which significant growth and evolution of Sutton Coldfield and its immediate neighbourhoods occurred.

11.8 A transect line from the historic core of Sutton Coldfield to the western edge of the Langley Site passes through all the main growth periods. Key parts of each period of development are explored further to identify and summarise the main features influencing a particular or distinct character area.

11.9 The periods of development and specific locations studied in more detail are:

- Up to 1880s (Civic) - Sutton Coldfield Historic Centre;
- Up to 1880s (Residential) - Lyndon Road;
- 1880s - 1930s - Station Road;
- 1930s - 1960s - Reddicap Heath Road;
- 1970s - Present - Moat Croft.

11.10 For each period of the town's development a series of diagrams, plans and images have been captured to best describe the general characteristics of interest and principles that may influence development at Langley SUE.

War Memorial - Sutton Coldfield

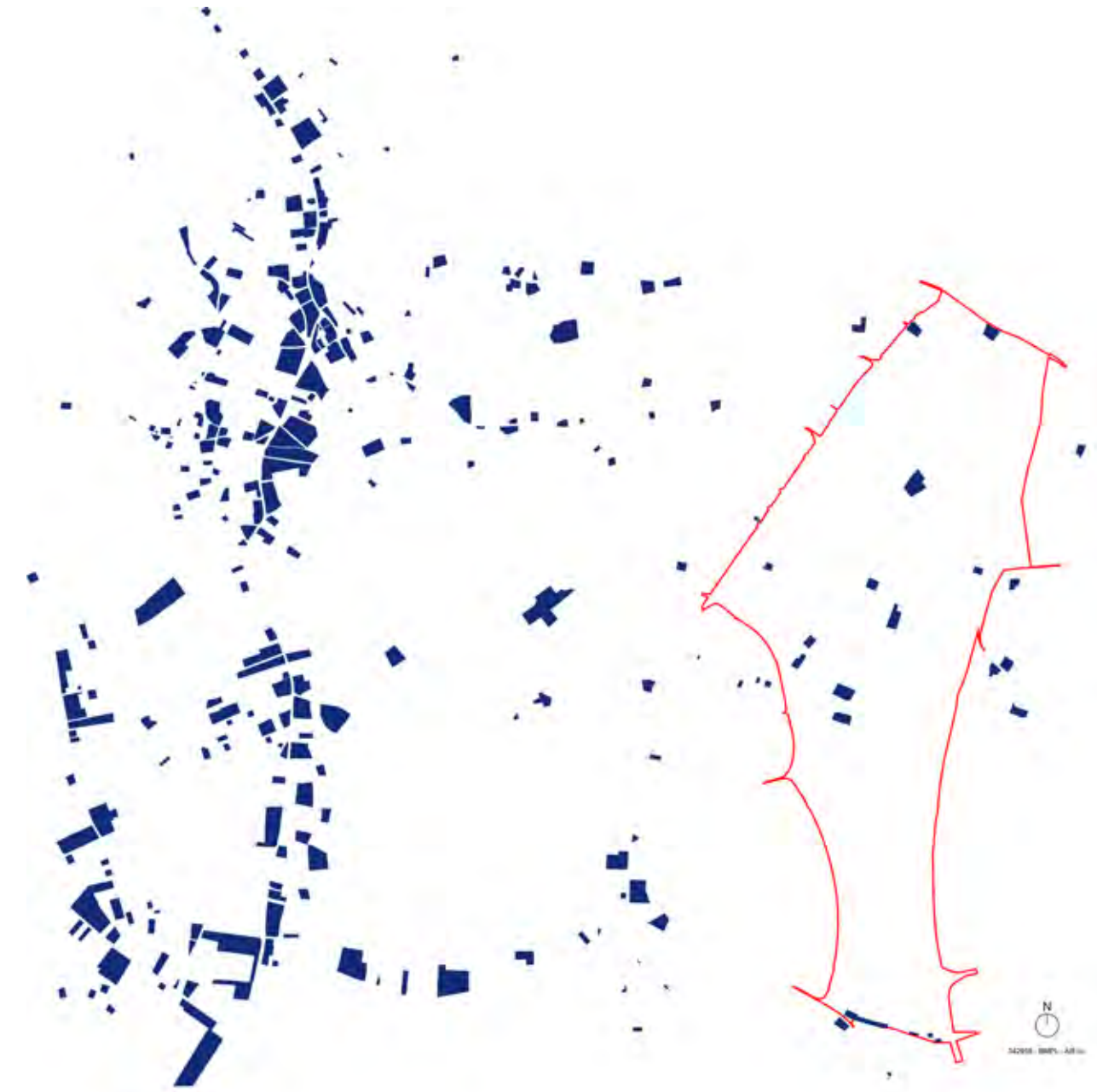
Figure 28. Settlement Evolution Analysis

UP TO 1880s

11.13 The historic core of Sutton Coldfield is linear in its structure and formed around the Birmingham to Lichfield Road, with the Holy Trinity Parish Church and the High Street being the focus of increased development density when compared to its surroundings.

11.14 Sporadic and small clusters of dwellings (predominantly farmstead in nature) are evident in the wider surroundings during that time.

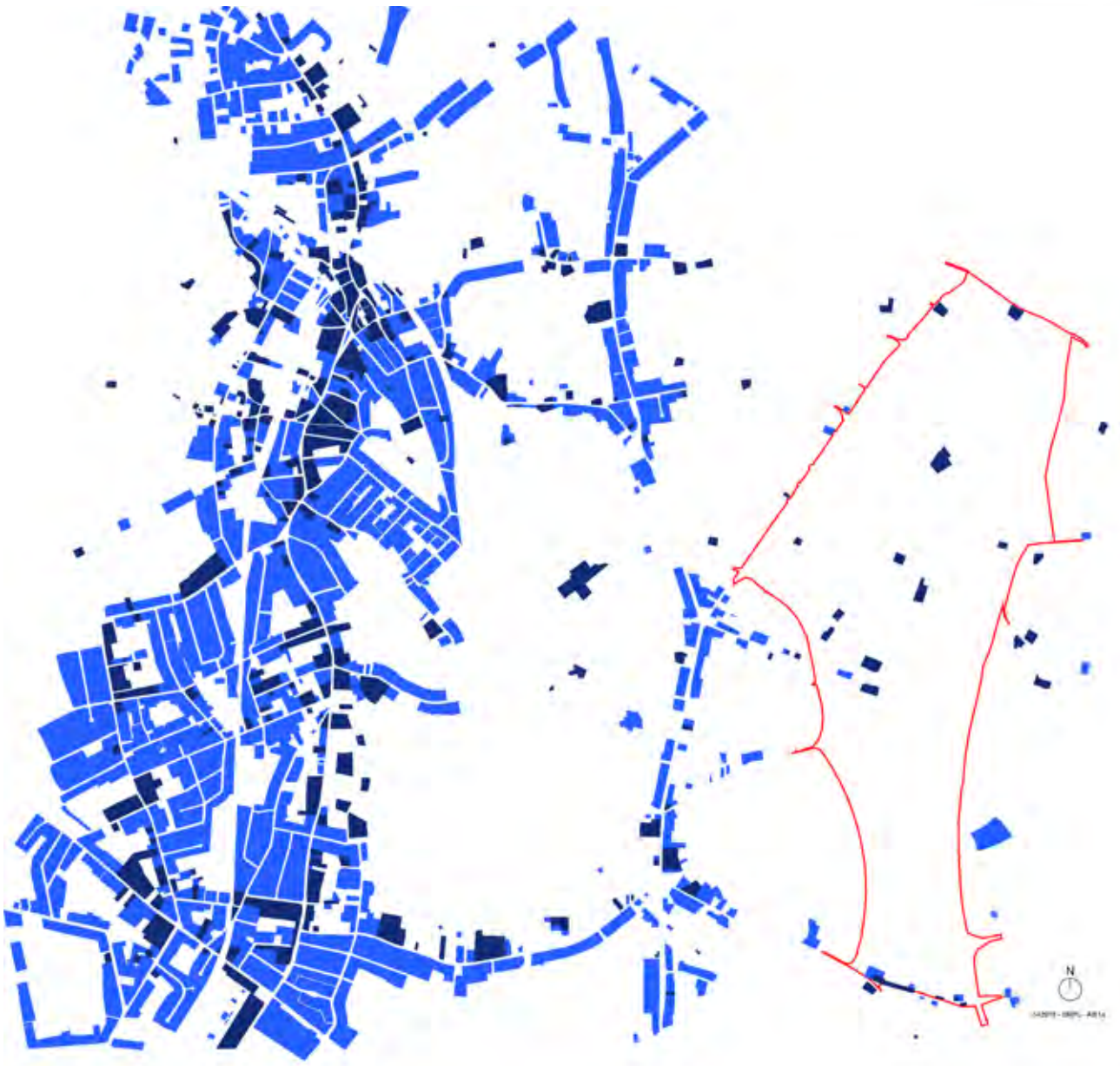
11.15 There was little development of substance between Sutton Coldfield and the Site.



1880s – 1930s

11.11 The period between the 1880s and the 1930s saw a substantial expansion of development around Sutton Coldfield to the north and south. The pattern of expansion continued to follow the Birmingham/ Lichfield Roads joining Sutton to Wylde Green, but also expanded in depth behind this main route as well as around the emerging railway line.

11.12 This period of development also saw the establishment of a linear route to the east around Whitehouse Common Road/ Walmley Road and a series of east to west connecting roads supporting the formation of a permeable street and movement network.



1930s – 1960s

11.16 Development continued to expand Sutton Coldfield, with a clear focus emerging to the east at White House Common during the 1950s and Reddicap Heath Estate during the 1960s. Reddicap Heath Estate forms a neighbour and the context to the immediate west of the Langley SUE development area.

11.17 Development and railway lines clearly defined the public park and open spaces of Sutton around this time, albeit that later encroachment is evident in the later frame below.

1960s TO PRESENT

11.18 The majority of development during this period has occurred around the neighbourhoods of Walmley and Reddicap Heath. This has strengthened the linear route along Hollyfield Road/ Walmley Road, and expanded the urban environs of Sutton Coldfield up to the boundary of the Langley Site.

11.19 During the early 1970s Sutton Coldfield developed a large purpose built shopping centre - Gracechurch. The development of the centre cleared and redeveloped a part of the original town structure, and saw the diversion of the Birmingham Road. This change reduced the original legibility of the linear settlement form, and also effected the function of the High Street in the historic core of Sutton Coldfield as retailers relocated into the new purpose built centre.

11.20 Development during this period also bought changes to the highway network in proximity to the Site. Of particular note is the introduction of Webster Way and A38, and associated alterations to Thimble End Road, Fox Hollies Road, Signal Hayes Road, Walmley Ash Lane and Ox Leys Road.

UP TO 1880s CHARACTER - SUTTON COLDFIELD CIVIC CORE

11.21 Figure 29 and Figure 30 illustrate the main urban form and public realm elements that define and distinguish the structure and character of the High Street and key spaces at the heart of the historic core of Sutton Coldfield.

11.22 Key characteristics of the core include a significant variety in: ground levels - the Town Hall sitting at one of the most elevated positions; building plot widths and depths; building scale, height and massing; complex and varied roof pitches and forms; and architectural detailing of elevations, at all scales. The core also displays a range of specialist architectural features such as mid-roof dormer windows, bay windows, carriageway arches, clock towers and weather vanes all adding to the richness and complexity of the historic character.

11.23 Sections of High Street have a strong sense of enclosure created by buildings of up to 3 storeys located at the back edge of the pavement and combined with narrowing in the street width. By contrast, key public realm spaces open up and offer the community places for memorial gardens, monuments, statues, formally planted green spaces and views towards key or focal buildings such as Holy Trinity Parish Church. These views and spaces also support way finding and legibility of place. Change in topography also enhance the viewing perspective.

11.24 Large surface parking areas and highway junctions are more recent additions to the town centre. These tend to detract from the overall quality of some parts of the public realm experience.

11.25 The Sutton Coldfield Town Hall, set behind the High Street, is a prominent local landmark, particularly with its distinct clock tower. The building elevations have significant levels of detail befitting its civic importance. Detailing includes brick course details, use of stone window mullions / headers and stone brackets at the eaves line.

11.26 The colour palette illustrated at Figure 30 indicates the typical tones found in the historic core. This unified and complimentary colour and material palette (dark red brick with occasional painted brick or rendered elevations) combined with contrasting and decorative window headers, cills and door surrounds are a common detail in Sutton Coldfield. The use of contrasting brick patterns within some of the higher order buildings in the core is also a distinctive detail adding quality to the architectural character and indicating the importance or status of these buildings.

Figure 29. Sutton Coldfield Historic Core

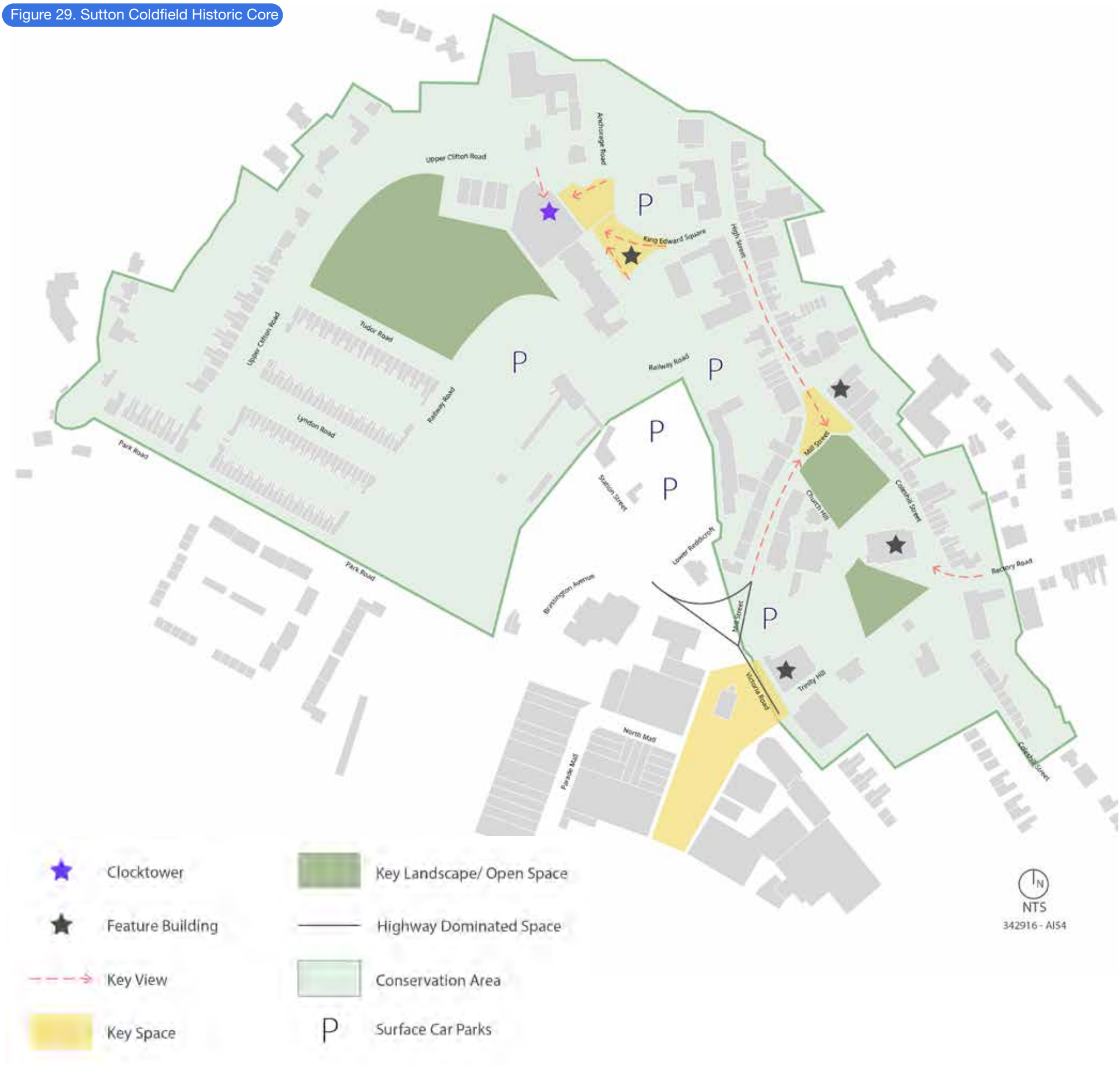
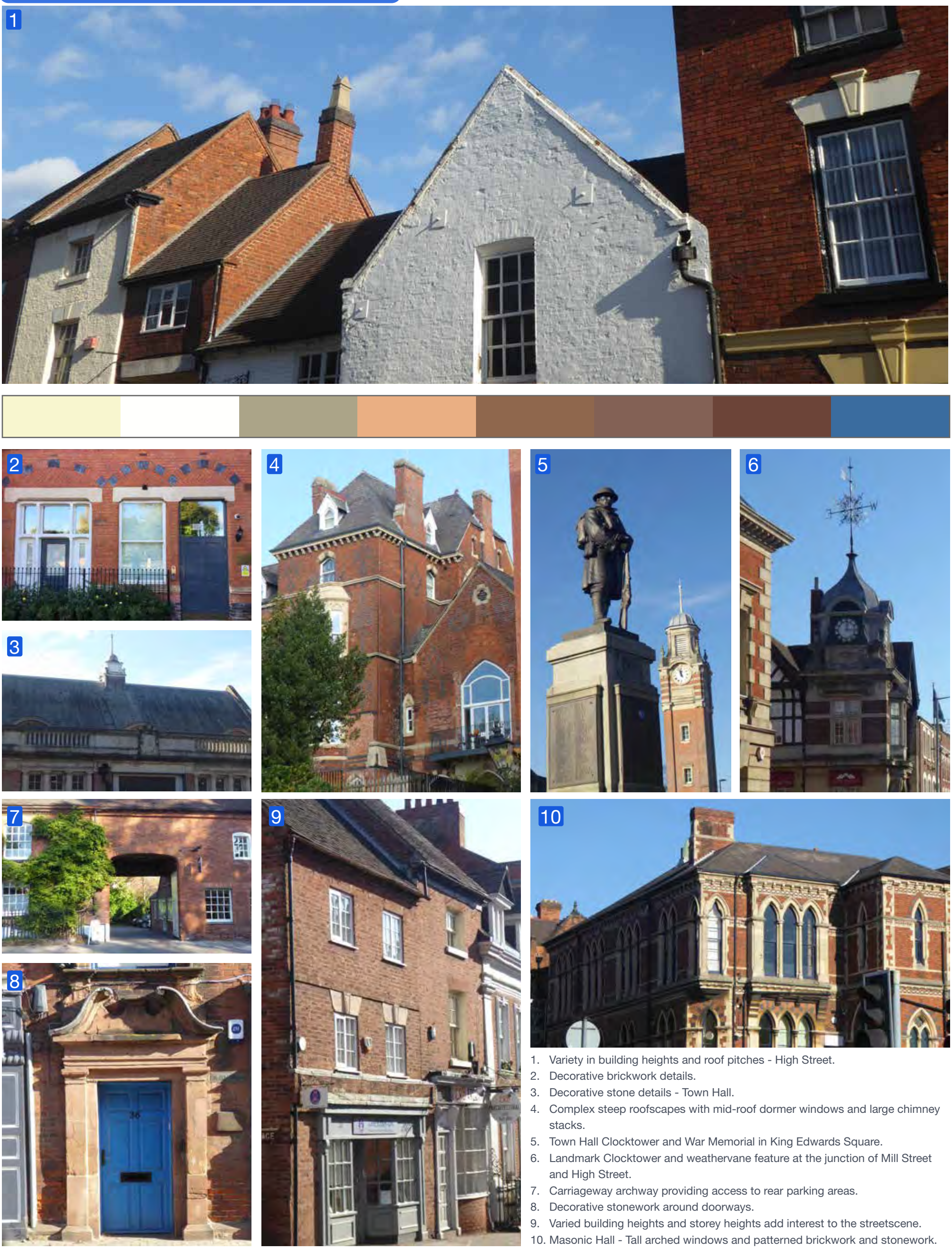


Figure 30. Typical Architectural Features, Colour and Materials Palette



1. Variety in building heights and roof pitches - High Street.
2. Decorative brickwork details.
3. Decorative stone details - Town Hall.
4. Complex steep roofscapes with mid-roof dormer windows and large chimney stacks.
5. Town Hall Clocktower and War Memorial in King Edwards Square.
6. Landmark Clocktower and weathervane feature at the junction of Mill Street and High Street.
7. Carriageway archway providing access to rear parking areas.
8. Decorative stonework around doorways.
9. Varied building heights and storey heights add interest to the streetscene.
10. Masonic Hall - Tall arched windows and patterned brickwork and stonework.

UP TO 1880s CHARACTER - RESIDENTIAL

11.27 Within the Sutton Coldfield Conservation Area are a series of residential streets which exhibit distinctive and high quality character references. Lyndon Road is one such street. It is characterised by continuous and uniform two storey terraced dwellings, with mature street trees and on-street parking.

11.28 Figure 31 and Figure 33 illustrate the main characteristics of the public and private realm. Of particular note are the walled front gardens which provide a clear distinction between the public and private realm, while the front garden areas make a positive landscape contribution to the street and offer a sense of privacy for occupiers.

11.29 A slightly wider pavement enables street trees to grow within the pavement zone without detriment to pedestrian movement. The mature street trees are a significant and attractive feature of this street environment.

11.30 The on-street parking is visually countered (in part) by the scale and maturity of the trees as well as the verdant front gardens. The parking offers some separation between pedestrian footpaths and traffic movement. This arrangement also provides a traffic / speed calming effect. Unlike other residential areas in Sutton Coldfield the preservation of the front gardens as gardens rather than car parking spaces positive attribute to the continuity and character of the street.

11.31 Whilst variation in building type and scale is reduced in the residential streets when compared with the civic core, the material and details palette remains quite similar. A repetitive and uniform house typology reinforces the character of the street. Houses exhibit contrasting and decorative window headers, cills and door surrounds. Each home has a decorative ground floor bay window, with the upper portions of the bay displaying stained glass panes. The proportion of fenestration to solid elevation is high giving a strong sense of natural surveillance over the street.

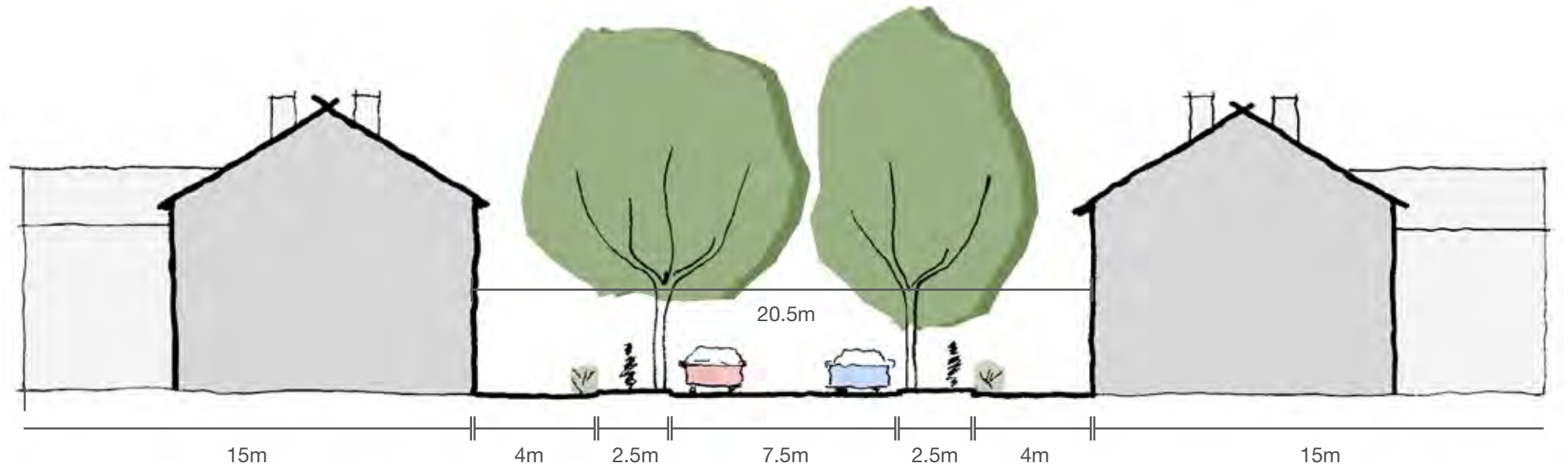
11.32 Further decoration runs along the eaves line of the terraced houses through dentil brick courses. The adjacent architectural features and materials palette (Figure 32) further describes the character of Lyndon Road and other residential dwellings within this part of Sutton Coldfield.

Figure 31. Lyndon Road Street Analysis

Figure 32. Typical Architectural Features, Colour and Materials Palette

1. Uniformity in the streetscene; 2. Street trees provide enhanced enclosure and character; 3. Symmetry in the front doors and windows; 4. Elevation details provide rhythm and detail; 5. Bay window glazing bars vary along the street although pairs are evident; 6. Decorative contrasting window headers; 7. Decorative brickwork lining the roofs; 8. Rhythm created by the elevations.

Figure 33. Lyndon Road - Typical Street Cross Section



1880s - 1930s CHARACTER

11.33 The later stages of the 1920s into the early 1930s was a time of more rapid development alongside continued design and craftsmanship and this is clearly seen in Sutton Coldfield's expansion during that time. The emphasis was very much on the delivery of new higher status family style homes set in verdant plots.

11.34 Station Road, around Wylde Green Station is one such area of note. Variety in style of property is found during this period, albeit more uniformity in the overall dimensions of the building plots is evident. Dwelling typologies were focused towards grand detached and semi-detached villas between 2, 2.5 and 3 storeys in height as well as some occasional terraces.

11.35 The influence of the 'Arts and Crafts' movement has inspired many of the dwellings built in this period, perhaps linked to the status of the residents moving into the Sutton Coldfield area.

11.36 These properties exhibit significantly more architectural detail and craftsmanship and therefore variety. Roof-scapes are more complex on these dwellings introducing half hipped, gable bay, cat-slide, eyebrow, turrets and gable features.

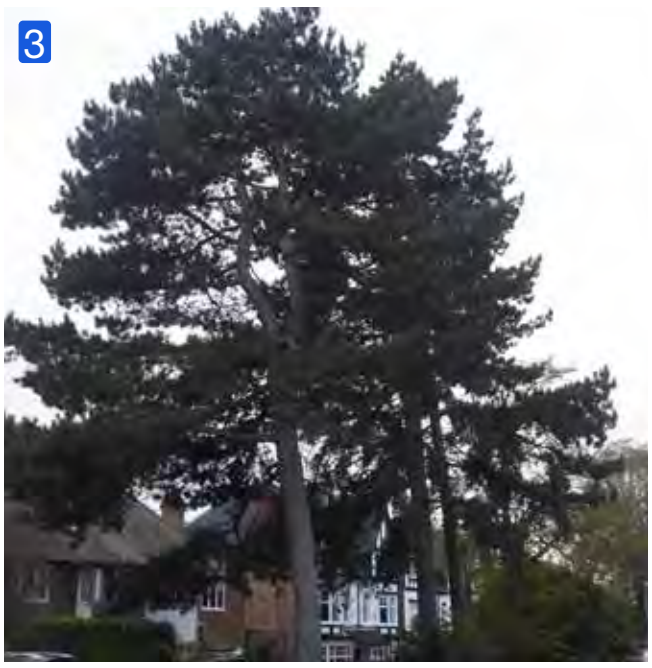
11.37 A dark red brick continues to dominate during this time. However, a lighter red brick was also introduced around this time, perhaps being brought in from slightly further afield to meet building demand.

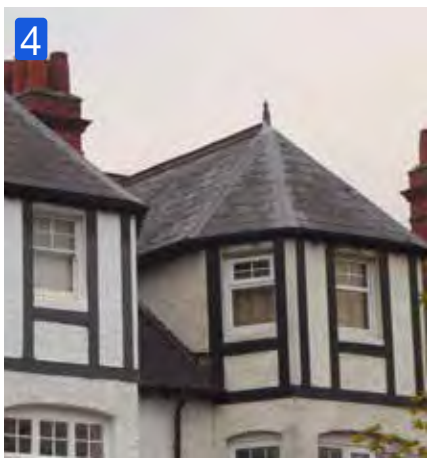
11.38 Elevation details and features include bay windows (either single or double storey), contrasting brick or stone bands. Door and window frames are painted white strongly contrasting the red brick.

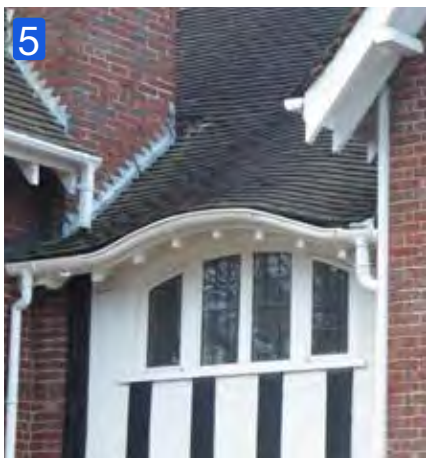
11.39 Dwellings are generally set back from the footpath behind generous private gardens. These gardens positively contribute to the character and quality of the street scene, while also enabling off street parking to be accommodated and screened from the streetscene. However, the proximity to the station has perhaps encouraged in-commuting to the area and ad-hoc pavement mounted car parking is evident. This visually clutters the street scene and perhaps causes issues for pedestrian and ease of vehicle movement in the area.

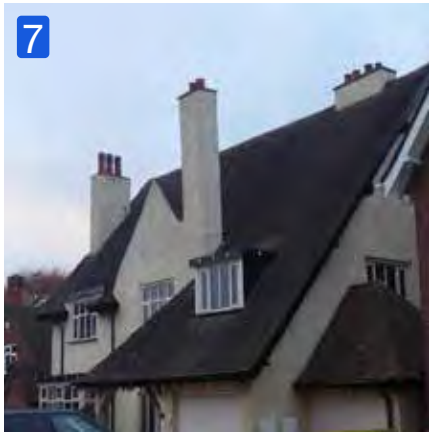
Figure 34. Station Road Street Analysis

Figure 35. Typical Architectural Features, Colour and Materials Palette



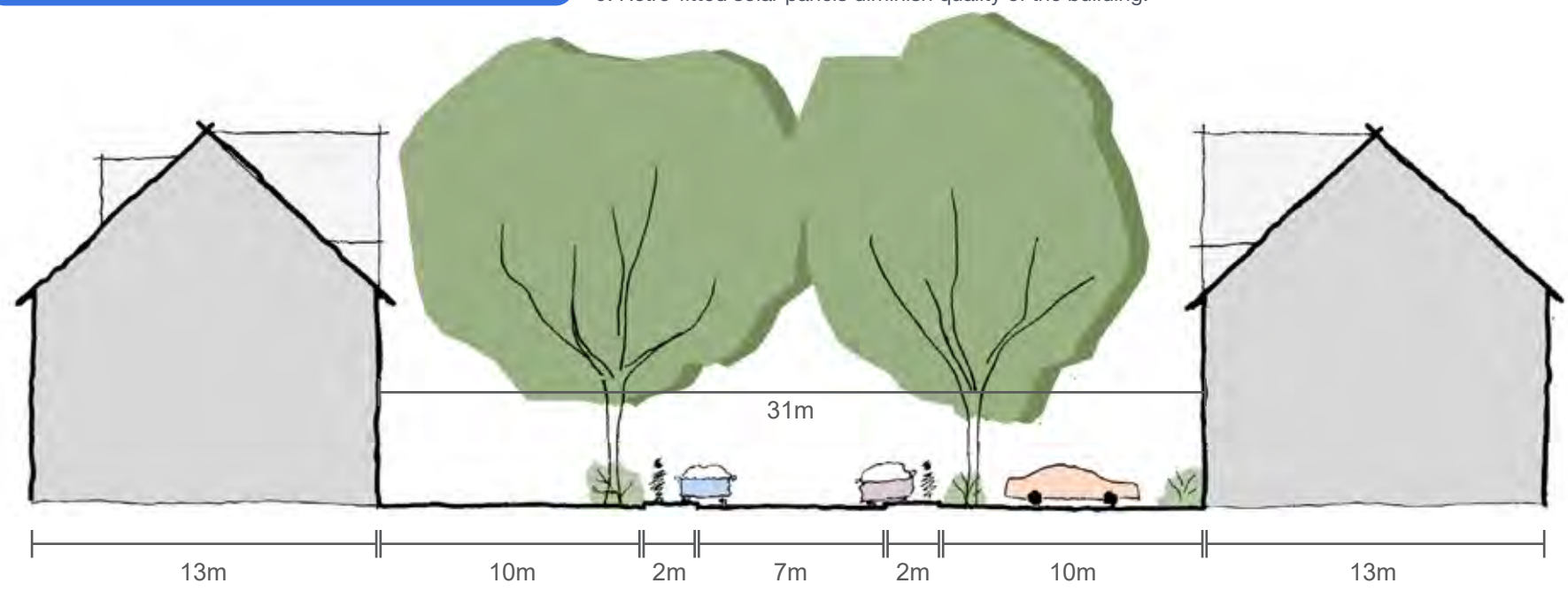






1. Mature planting in long front gardens supports sense of enclosure; 2. Decorative ridge tiles and brick course details; 3. Space around dwellings allows for trees to mature; 4. Gable bay emphasised by roof form; 5. Eyebrow roof detail over window; 6. Distinct cantilevered third storey; 7. cat-slide roof with imposing chimney stacks; 8. Decorative window header; 9. Retro-fitted solar panels diminish quality of the building.

Figure 36. Station Road - Typical Street Cross Section



1930s - 1960s CHARACTER

11.40 The 1930s to 1960s saw a marked change in housing style, layout and appearance when compared with the earlier development phases of Sutton Coldfield.

11.41 A palette of standardised housing types of two storey semi-detached and short terraces (of around four) dwellings were employed and delivered in quantity.

11.42 At the same time, the dimensions of the street blocks increased in size and depth providing much longer and seemingly straighter streets. Longer front and rear gardens for each dwelling were also provided. Wide predominantly grassed verges were introduced as a feature of the street scene generally on one side of the street creating very wide and unenclosed streets, perhaps a reaction to the tighter streets within the historic core.

11.43 Reddicap Heath Road (west of Ox Leys Road and east of Sutton Coldfield town centre) exhibits many of these typical dwelling types. Figure 37 illustrates the main structuring components.

11.44 Dwellings are parallel to the street scene and are generally set back by 5 - 10m from the street. In the past a proportion of all the front garden areas would have contributed to the character and quality of the street scene. Today however, large numbers of the front garden areas have been turned over to hard-standing to accommodate on-plot parking, which now has a detrimental impact on the street scene.

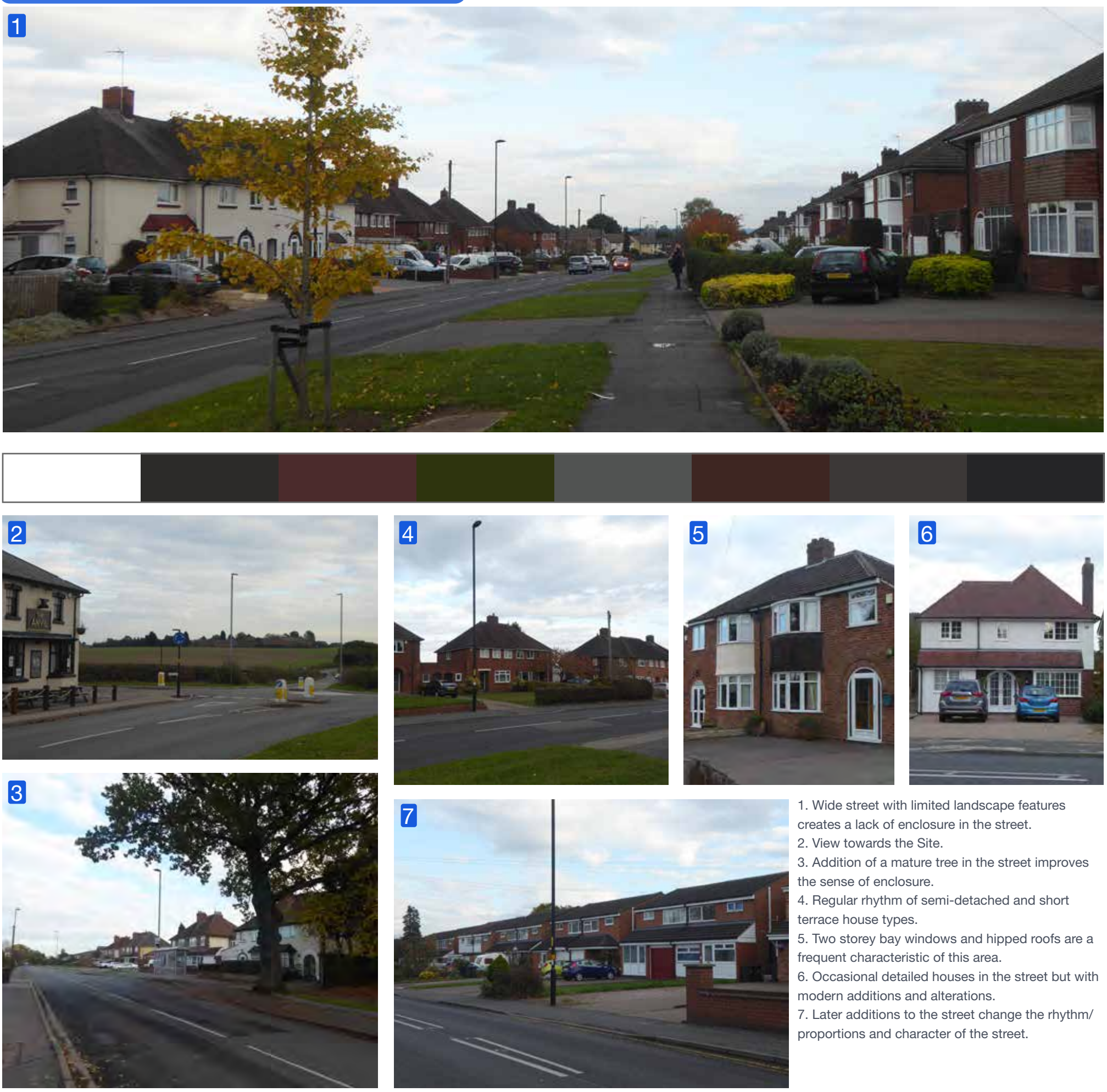
11.45 Boundary treatments delineating public and private realm to the front of properties are evident. However, these boundaries are not always as clear as those in the previous historic periods.

11.46 The two storey dwellings coupled with the significant distance between dwelling fronts and the limited landscape contributions between the dwellings negatively impacts on the sense of human scale and enclosure.

11.47 A key elevation detail of this development period is the double or single height bay window and the steep hipped roof form. The red brick continues to be the dominant elevation material used although lighter in colour than the original historic core red brick. Lighter coloured renders are also used for the whole elevation or as a contrast detail on the bay window detail.

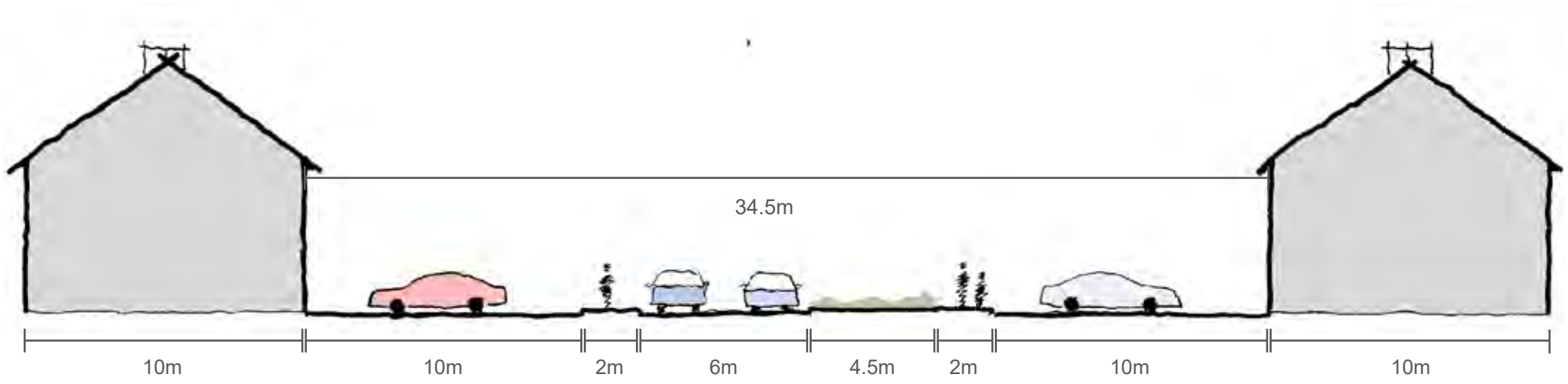
Figure 37. Reddicap Heath Road Street Analysis

Figure 38. Typical Architectural Features, Colour and Materials Palette



1. Wide street with limited landscape features creates a lack of enclosure in the street.
2. View towards the Site.
3. Addition of a mature tree in the street improves the sense of enclosure.
4. Regular rhythm of semi-detached and short terrace house types.
5. Two storey bay windows and hipped roofs are a frequent characteristic of this area.
6. Occasional detailed houses in the street but with modern additions and alterations.
7. Later additions to the street change the rhythm/ proportions and character of the street.

Figure 39. Reddicap Heath Road - Typical Street Cross Section



1970s - ONWARDS

11.48 The 1970s to present has continued to introduce more modern yet nationally standardised house typologies to the area and particularly in areas neighbouring the Langley SUE Site. These also bring a very different character and sense of identity to the wider settlement. Indeed many of the newer areas have a distinct neighbourhood name and bares little if any visual relationship to the original core of Sutton Coldfield.

11.49 Notably, street blocks have reduced down in size, particularly when compared with the 1930s - 1960s development patterns. This period of development also introduced predominantly detached dwellings set in cul-de-sac clusters. This layout approach has significantly reduced ease of movement, permeability and connectivity through these housing areas and encouraged the use of the private motor car to travel short distances.

11.50 It is also of note that the cul-de-sac approach has resulted in main movement routes, such as Webster Way, having little to no active frontage. Instead it is dominated by rear garden fences or walls and creates a public realm environment that has limited natural surveillance, dominated by fast vehicle movement and is not inviting for pedestrians.

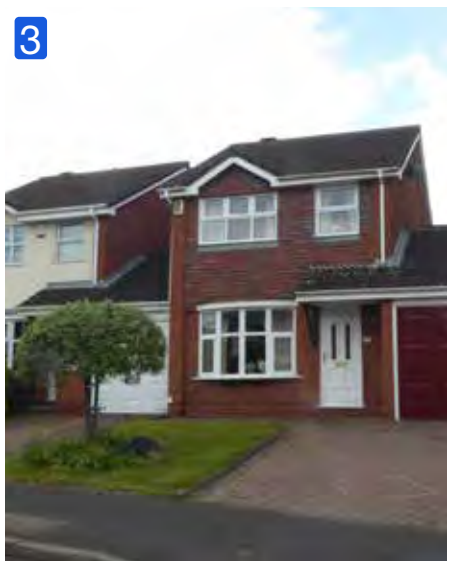
11.51 Moat Croft located west of Webster Way is a typical example of this period of development. As illustrated by Figure 40 there is some limited variation in the setback of each dwelling. However, generally buildings are set back between 3m and 10m from the street edge. This is tends to be a response to accommodating car parking rather than a response to the street character.

11.52 Since the 1970s the provision of boundary treatments at the front of properties has largely decreased. However, in more recent times and in response to context some boundary treatments have been reintroduced.

11.53 Red brick has been used occasionally, although it is not a good match to the local red brick found in the core of Sutton Coldfield. However, the period has also seen the introduction of yellow/ buff stock bricks. Roofs have adopted a simple gable form with a much reduced pitch creating a disproportion in the design of the dwellings. More recent developments have seen an improvement in the height and proportion of the roof form.

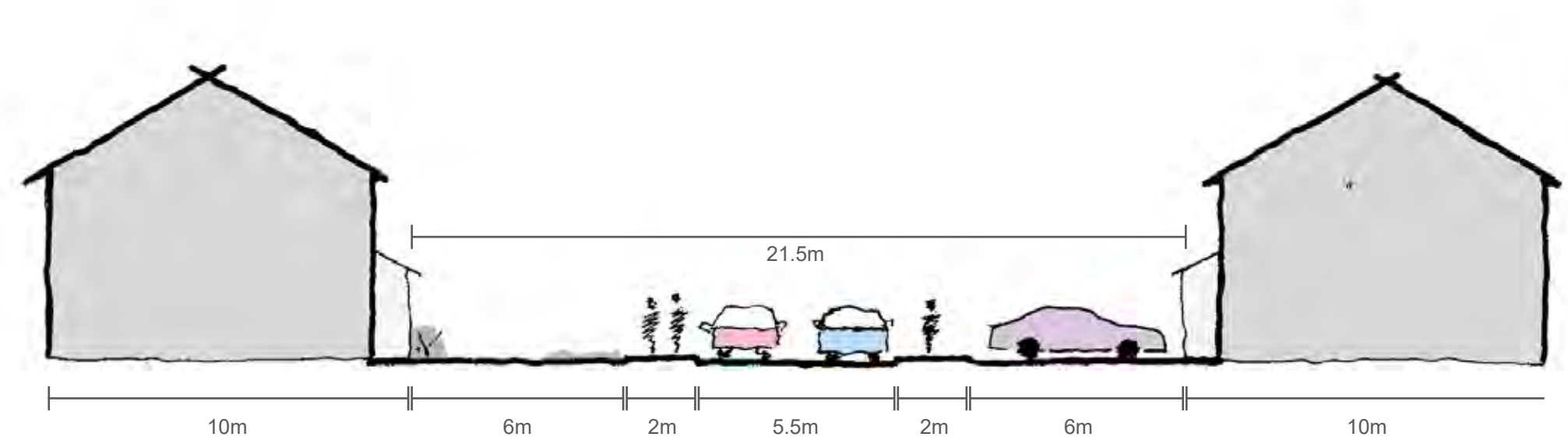
Figure 40. Moat Croft Street Analysis

Figure 41. Typical Architectural Features, Colour and Materials Palette



1. Near parallel building line to the street and strong uniformity in dwelling typologies, frontages characterised by parked cars. Level changes between road and house accommodated in sloped parking areas;
2. Highway dominates the entrance space;
3. Narrow fronted linked detached houses mixed with wider frontage dwellings;
4. ‘Gablet’ window details;
5. Mix of white render, timber and tile cladding on the gables;
6. Render detail added to the garage and same roof pitches;
7. Bay window, front door and garage visually tied through the use of a tiled canopy.

Figure 42. Moat Croft - Typical Street Cross Section



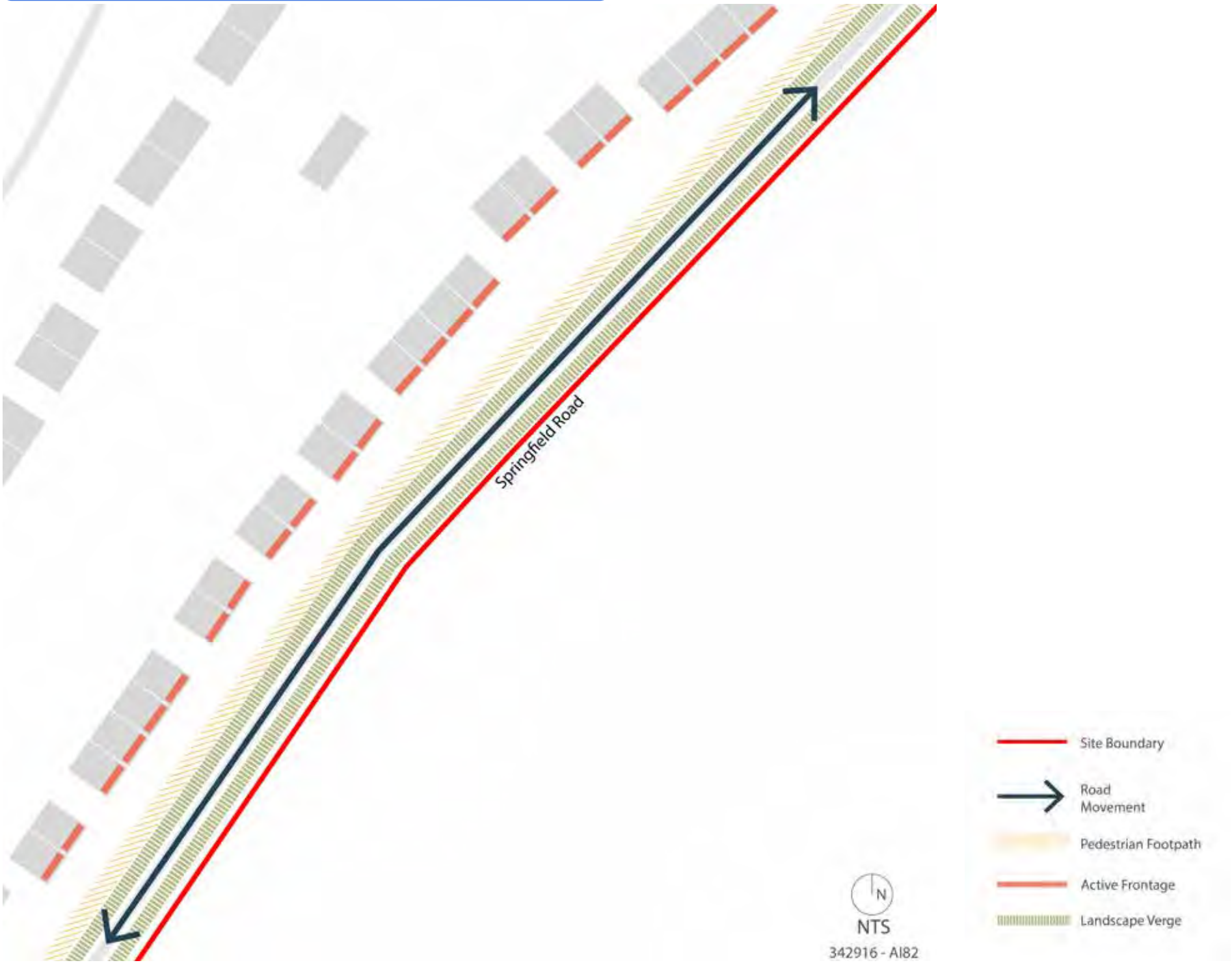
IMMEDIATE SITE CONTEXT CHARACTER

11.54 The following pages and Figure 43 - Figure 45, describe the main characteristics of the streets that immediately bound and form the immediate context to the Site, namely; Springfield Road, Thimble End Road / Webster Way and, Walmley Ash Lane. Each road is distinct in its own character and new development fronting or interacting with these streets will need to adopt particular design responses to sensitively integrate or in some cases resolve existing short comings of previous design approaches.

Springfield Road

1. Typical semi-detached typologies within the street.
2. Existing wide landscape verge along parts of Springfield providing areas for tree planting.
3. Small cluster of much earlier cottages provide variation to the build types on the street.
4. More recent development introducing 3 storeys and enhanced density to the mix of dwellings in the street.
5. Existing street is wide with dwellings set well back from the road edge. Traffic has dominance in this current arrangement.

Figure 43. Springfield Road - Main Characteristics and Design Considerations



Springfield Road

- Predominantly semi-detached and detached 2 storey dwellings, parallel to the street and set back from the pavement edge;
- Mix of 1930s, 1970s and 1980s dwellings with occasional historic farmworkers terrace cottages and clusters of more recent apartments and town-houses of up to 3 storeys in height;
- Roofscape predominantly comprises steep hipped and hipped gable bays. With occasional cat-slide elements and mid roof dormers;
- Parking is predominantly accommodated to the front or side of detached and semi-detached dwellings. Many houses have converted front gardens to parking;
- Grass verges between the road and the pavement are wide with some young tree planting.

DESIGN CONSIDERATIONS TO ADDRESS AT RESERVED MATTERS DESIGN STAGES...

- New development should front out towards existing dwellings and complement the scale and general residential rhythm;
- Development should introduce enhanced pedestrian routes along Springfield Road;
- Parking should be accommodate sensitively within the new development and should not dominate the street scene;
- New architectural appearance should reference and interpret the existing where appropriate;
- Designs should appropriately response to existing local facilities at the junction of Springfield Road / Ox Leys Road.

Thimble End Road/ Webster Way

1. Side boundary fences and blank gable elevations typical of Thimble End Road character. This gives very limited surveillance to the street making it an unpleasant road to walk along.
2. Entrance to Webster Way south open space. A relatively informal open space at the entrance to the estate.
3. View along Webster Way. A large boundary wall separates the street and therefore, residents from accessing Webster Way, limiting permeability, increasing walking distances for existing residents and reducing the sense of surveillance and therefore safety over Webster Way.

Figure 44. Thimble End Road/ Webster Way - Main Characteristics and Design Considerations

Thimble End Road / Webster Way

- There is little relationship between the adjoining dwellings which back or side onto the street, and garden boundary treatments block direct connectivity to the street;
- A pedestrian footpath runs along the rear and side property boundaries adjacent to the main road and has a poor sense of natural surveillance from dwellings, but is dominated by faster moving traffic within the road;
- Dwellings that are visible from the street are 2 storey detached or semi-detached and generally have shallow roof pitches typical of their 1980s design and delivery and front onto internalised cul-de-sacs;
- Wide grass verge to the east of the highway are remnants of the Webster Way highway construction.

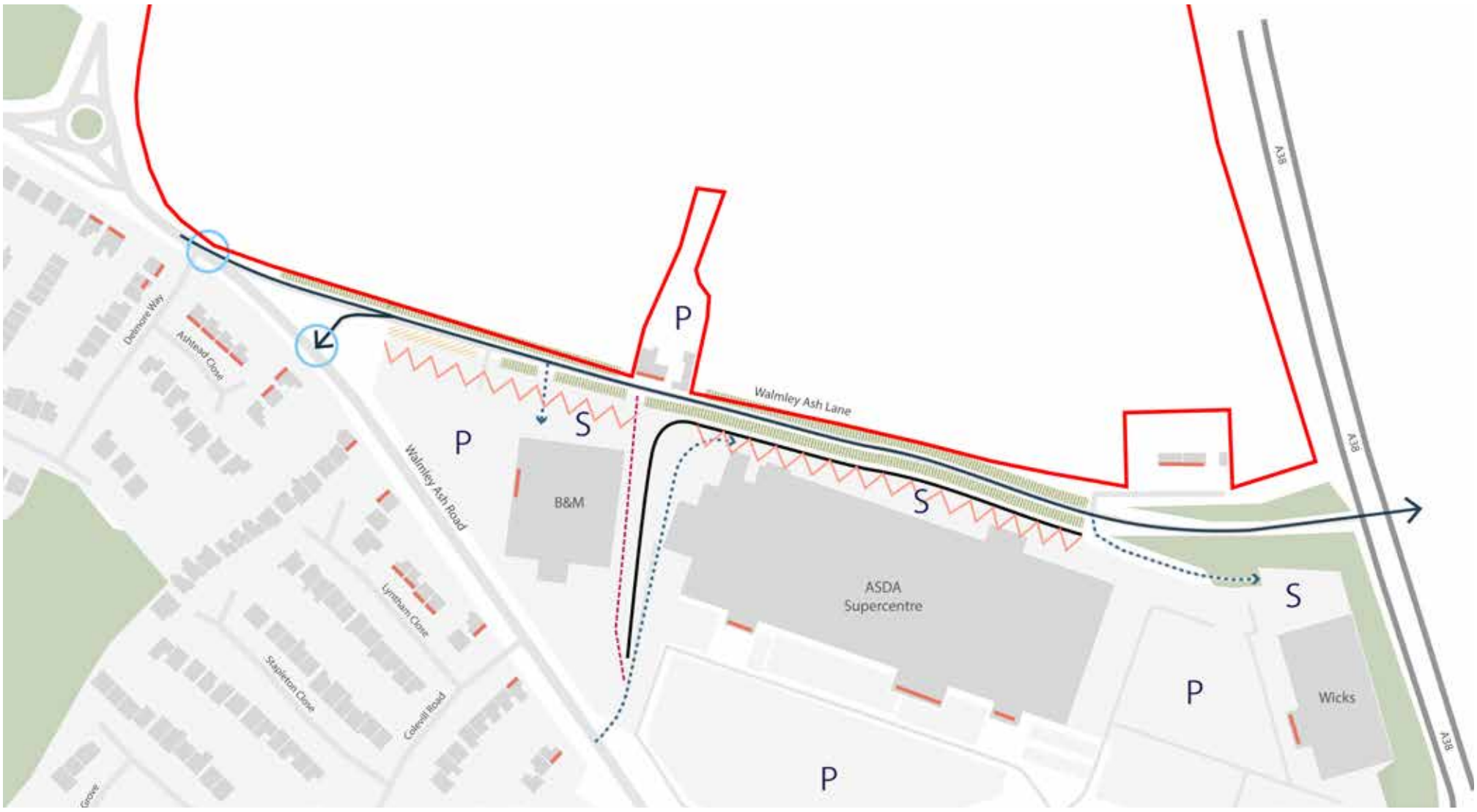
DESIGN CONSIDERATIONS TO ADDRESS AT RESERVED MATTERS DESIGN STAGES...

- Designs and layouts should seek to positively address the street to resolve the existing negative impacts of rear and side property boundaries to the west of Webster Way;
- Seek to introduce new pedestrian crossing points to improve linkages between existing and new facilities;
- Existing and new landscape planting can be integrated into any new designs is appropriate however, the principle approach should be to improve the design quality of Webster Way.

Walmley Ash Lane

1. Footsteps Nursery on Walmley Ash Lane.
2. View looking west along Walmley Ash Lane to the rear of ASDA service yard. Road is lined by a wide grass verge. A broken hedgerow set back from the road edge borders the Langley Site.
3. Cluster of cottages at the eastern end of Walmley Ash Lane before the A38 overbridge and access from a side lane.
4. The lane providing access to the cottages. This area of Walmley Ash is characterised by mature trees and hedgerows, but is also impacted by noise from the A38.

Figure 45. Walmley Ash Lane - Main Characteristics and Design Considerations



Walmley Ash Lane

- Characterised along its northern edge by open fields, a small clusters of existing 2 storey dwellings and a children's day nursery (Footsteps) within an altered 19th century farmhouse. To the south, the route is characterised by a grassed verge, hedge planting, existing large retail sheds with associated service yards and security fencing;
- In addition to traffic accessing the day nursery and the existing residential cottages, traffic often tends to cut along Walmley Ash Lane, utilising the bridge over the A38. The lane also provides customer and service yard access to B&M and service yard access to Wicks;
- A pedestrian route cuts up from Walmley Ash Road alongside the service yard entrance to ASDA supercentre and along the rear boundary of the B&M unit. There is little to no natural surveillance along this route at present.

DESIGN CONSIDERATIONS TO ADDRESS AT RESERVED MATTERS DESIGN STAGES...

- Explore appropriate design response for southern edge of the Site in terms of relationship to service yard areas and adjacent large retail sheds to the south or Walmley Ash Lane. Possibly some localised frontage access in discreet locations;
- Explore potential for increase in built height and mass due to scale and proximity to ASDA and the future Peddimore employment site;
- Explore appropriate scale, massing and buffering between new development and the existing children's day nursery and residential cottages to maintain amenity and safety of existing uses;
- Explore pedestrian route enhancements to existing routes and also new links onto the route.

Internal view across the Site looking towards Springfield Road

PART 2: NATIONAL AND INTERNATIONAL BEST PRACTICE PRECEDENTS

11.55 This part of the character analysis has considered the future functions to be accommodated on the Site, and has identified a series of best practice precedents from across the UK and where appropriate internationally. The precedents have been selected where they have appropriately responded to a similar set of conditions or functions to those that are, or will be, present on Site, and which achieve a high quality and richly characterful outcome appropriate to development in the 21st Century.

11.56 The conditions and functions reviewed in this part are:

- Topographical Variation and Character Creation;
- Mixed Use Centres;
- Local Centres;
- Eduction (Primary and Secondary);
- Community Hubs;
- Greenways.

TOPOGRAPHICAL VARIATION AND CHARACTER CREATION

11.57 As set out in Section 9.0 parts of the Site are relatively flat while other parts of the Site have significant topographical variation. While it is proposed that some re-profiling will be implemented (see section 22.0), development precedents which positively deal with contour variation and support character creation have been identified and analysed.

Case Study - Cane Hill, Coulston, London

11.58 Cane Hill is a multi-award winning residential development that celebrates the natural and historic character of its site and context (Barratts and David Wilson Homes).

11.59 Alongside its established landscape and woodland, the Site is characterised by areas of quite dramatic topography.

11.60 The masterplan scheme has proposed a number of distinct character areas, distinguished through tailored responses to particular features and or constraints found on each part of the Site.

11.61 Character variation therefore, occurs in direct response to site topography. For instance, the central ridge is characterised by formal gable fronted houses, while hillside areas contain predominantly detached houses, arranged in gentle sweeps to follow the natural hillside contours and reduce visual impacts.

11.62 The character of the existing topography, long views onto the Site, and the existing trees have been a strong influence to the resulting design response, and has created a well integrated and responsive housing scheme.



Level changes between plots and public routes, helps to retain an element of privacy for residents but also surveillance for public open spaces.



Lanes and private drives are better suited to accommodating short stretches of steeper level change. Through the use of detached or semi-detached dwellings alongside some plinth use, dwellings can step down with the gradient change and create a characterful development edge positively addressing open spaces.


Level changes can be innovatively accommodated in corner dwellings where more dwelling height may also be advantageous.


Alterations to building lines and set backs may be required to better accommodate topographical differences between plots.


Larger, high value plots can accommodate level differences in privately controlled land, utilising both front and rear garden space.


Narrow, regularly spaced detached plots can provide an alternative method of stepping down steeper gradients without the need for significant cut and fill or retaining structures.


Areas of incidental space do occur on topographically challenged sites, particular at corners. These instances should consider landscape treatments carefully to enhance character and improve the setting of built-form.


Larger / wider plots can be easier accommodated in parts of the Site where the slope inclines are more gradual.


Potential to integrate SuDS into incidental spaces resulting from level changes, providing an attractive and varied on site character.

Landscaping and green boundary treatments can work much better in disguising the visual impact of level differences between plots

Example of level differences accommodated and resolved through retaining structures in the back gardens. Care is required with this approach if back gardens are small.

Primary streets provide a more gradual incline (1:20m) to make walking & cycling accessible to the majority.

... As a result, some side streets and lanes contain slopes greater than 1:20m.

Level changes accommodated by back gardens, using retaining walls and steps.

Parking and space between semi-detached units can effectively assist in accommodating level changes, and how narrow fronted semi-detached units can also step down the slope.

DESIGN CONSIDERATIONS...

- The choice of dwelling types should be carefully aligned to the underlying topographical condition;
- Where steeper slopes are evident it is expected that a higher proportion of detached and semi-detached properties with larger plots will be used, with parking accommodated on plot to the sides;
- Landscape verges and banks will be utilised to accommodate level changes;
- The use of retaining structures should be limited within the public realm and only used in the private realm where all other options have been explored.

MIXED USE CENTRES

11.63 The development at Langley is required to deliver a mixed use central hub and a range of mixed use local community hubs. The following images and annotations are examples of mixed use areas from developments across the country. While they range in scale and function, there are urban form elements in each which provide useful influences for the future design at Langley.

11.64 In addition to this precedent study summary, a detailed analysis of four West Midlands mixed use areas has been undertaken. The findings of the study are set out in Appendix 1 of this DAS and have strongly influenced the resulting appearance and layout Section 24.0 in relation to the design principles proposed for Langley Central.

Poundbury, Dorset

Abingdon, Berkshire

Highly distinguishable pavilion style buildings (referencing the traditional market hall) and located in prominent civic spaces can enhance the centres distinctiveness and provide a sense of civic importance and hierarchy. Such buildings or modern interpretations of these buildings can provide an attractive premises for a range of uses including commercial and community uses.

Spitalfields, East London

Leamington Spa, Warwickshire

Incorporation of public art / monuments can help encourage interaction, community ownership, and instil a sense of identity and civic pride within a centre.

Altrincham, Manchester

Quality of public realm and ability to cater for multiple modes of travel provides an important contribution to the success of a centre.

Altrincham, Manchester

Longbridge, Birmingham

The inclusion of street trees within the public realm is important as they play a key role in enhancing the quality and character and human scale of the space. Trees also provide the practical function of shade and shelter, making the district centre a more attractive and comfortable environment for all users. Centres without trees, e.g. Longbridge, Birmingham can feel stark and unwelcoming for more casual visitors and particularly pedestrians.

Shopfront, London

Typical British shop front design, with clearly defined fascia, doorway, stall risers and abundant glazing, designed to encourage entry and invite custom. This also helps to set a rhythm and interest.

Lawley Village, Telford

Even with modern interpretations, it is important to provide a clear distinction between ground floor and upper floor uses. Distinction should be provided through greater ceiling heights at ground floor level, and reinforced through architectural detailing and materials.

Replacement Corner Building, Utrecht, Netherlands

Corner buildings should take on a more dominant form within the street scene through mass or height. Corner buildings also provide the opportunity for greater distinction through architectural style, detailing and materials.

Important to allow space for outside activity, seating, A-board advertising and planting. Such provision has the ability to greatly enhance the urban experience and increase the vitality of the street.

Poundbury, Dorset

Mixed use areas should contain regular variation in building types. Buildings can be similar in size and style. However, variation in facade detail, materials and colours can provide sufficient variation to enhance the street scene.

Alleyway, Warren Mews London

Dickens Heath, Solihull

Longbridge, Birmingham

Supermarkets should be integrated into the wider architectural character of the centre rather than universal or standardised architecture, and active frontages rather than blank façades should be sought wherever possible.

Alleyway, Dickens Heath, Solihull

Alleyways / lanes can provide a key function within the district centre, providing access to rear courtyard parking, removing large unslightly areas of cars from the active public realm. The design and sense of security for alleyways should therefore be carefully considered. Alleyways, leading to rear parking areas should be inviting, in order to entice visitors to use the facilities. Simple methods such as naming the alley, alternative surface materials, planting and interesting architectural features / details can improve the appeal of alleyways.

The ability of landscaping and planting to enhance the setting of the built environment within the district centre can not be underestimated. As well as providing intentional landscape elements, features and space should be provided to allow independent planting to individual premises. Building design within the district centre should consider the ability to provide plants and flower boxes to upper floor windows and balconies. Ground floor planting can also be provided by box planting. Such independent planting can be encouraged by providing an alternative surface material, water drains and the ability to lock plants and boards securely to the ground.

DESIGN CONSIDERATIONS...

- Successful centres contain a network of streets serving a hierarchy of purposes;
- High Streets function best where shoppers can parade the street in a legible and safe manner. Shoppers can easily observe and easily access outlets either-side of the street;
- The typical British High Street tends to contain a rich variation in built form that can be difficult to replicate using modern methods. However insight into typical features can help ensure a familiar high street environment is provided;
- Side streets off High Streets accommodate independent businesses and mixed residential in smaller more flexible unit types.

LOCAL COMMUNITY HUB

11.65 The local community hubs (Local Centres) at Langley will provide additional focal points for the new communities.

11.66 The range of precedence images identify design elements that will help to deliver successful and thriving community hubs, and can help to inform more detailed design stages for these uses at Langley.

Small retail outlets can be accommodated within the residential proportions of built form. Corner buildings can be particularly adaptable where out-door seating and duel aspects at ground-floor level can be provided.

London Mews

Detailed building designs should consider the modern interpretation of retail/ business unit design at residential scale.

Altrincham, Manchester

Small pockets of public realm can improve the setting of the local hub and encourage community interaction.

London Mews

London Mews

Detailed proposals should consider the adaptability of new homes near local and district centres, in particular the ability to serve as live/work units.

Poundbury, Dorset

Poundbury, Dorset

Local centres should aim to provide convenient and well-defined parking. However detailed proposals should consider the treatment and landscaping of parking areas, in order to not detract from the setting and appeal of the local hub.

Proposals should clearly distinguish the local community hub environment though built form, style and scale. However, despite being different, the architecture applied should still sit comfortably within the established character of the surrounding residential neighbourhood.

Local centres can gain benefit by being located near areas of open space. Residents will be encouraged to use both the local centre and communal open space should both be located in close proximity. Therefore, as well as enhancing the setting of the local centre, open space can bring about greater vibrancy and vitality.

Case Study - Houlton, Rugby

The site at Houlton is on the former Rugby Radio Station site and will provide up to 6,200 new family homes, alongside other district and local centre provision. Early phases of the development are complete or nearing completion.

Of relevance to local centres is the early delivery of an incubator mixed use area at Houlton. Comprising the site office and visitor centre, a flexible community building (already offering yoga and children's day time activities) and a thriving cafe/ restaurant this area is considered to be an extremely high quality example of how early interventions and community uses can support community pride in the place.

The integration of a contemporary purpose built modern timber framed barn for the 'Tuning Fork' restaurant / cafe with outdoor seating further enhances the vibrancy of this part of the site. Its success has acted as an attractor not only to the new community but also for visitors from further afield. Such use has proved invaluable in planting the early seeds for a thriving community and selling the scheme to potential residents.

A new dwelling at the entrance to the site adopted traditional village design features (traditional village shop elements) and is temporarily utilised as a marketing suite. This will be returned to a home at the relevant time but could equally remain as a flexible unit. The built form setting is also enhanced by provision of high quality public realm and landscape, convenient parking and easy access by foot via a linked footpath network.

Existing buildings adapted to accommodate a range of new community uses.

Local centres should be distinguished through the quality of the public realm. Detailed proposals should consider the combined quality of certain elements, such as surface treatments, tree planting, raised planting beds and quality street furniture. A higher quality, easily maintained public realm will encourage patronage and civic respect for the services and shared environment on offer.

Consider the orientation and arrangement of buildings and building groups, paying particular considerations to the creation of shared spaces where people can gather, sit and enjoy.

Proposals could consider the provision of shelter and shade and micro-climate to support the creation of varied outdoor spaces available for use throughout the year.

Distinctive contemporary architectural design can contrast and complement traditional styles.

Need to provide convenient parking for vehicles, however cycle parking should be made even more convenient to encourage cycling.

DESIGN INFLUENCES...

- Early incubator community uses delivered on-site can set the tone for the rest of the site and support existing and future community integration at the earliest stages of development;
- Utilising and converting existing site features and complementing them with contemporary building additions can add a sense of maturity and established identity early on in the development;
- High quality but simple public realm material and landscape planting choices further support the establishment of character and place.

PRIMARY & SECONDARY EDUCATION

11.67 Langley will provide primary and secondary education facilities. It is recognised that these facilities can provide an important focus for existing and future communities to integrate through the provision of shared education and community facilities. This approach also offers opportunities to explore the maximisation of community assets while efficiently using land.

11.68 To support the strategy for appropriate location, site size, and achieving positive community integration, a study of education building projects across the UK has been undertaken, alongside supporting guidance in the Department for Educations Building Bulletin 103 'Area guidelines for mainstream schools' (2014). The Building Bulletin provides calculators to estimate the approximate area needed for new schools per pupil. There is some flexibility built in to the guidance based on the demonstration of strategies to cover education needs on a case by case basis.

11.69 The following pages and Figure 46 to Figure 49 illustrate and summarise high quality design influences and thoughts that can inform the approach at Langley. It is important to note that the two secondary school examples are on significantly smaller site areas (around 2ha) than would normally be proposed (8 - 10ha). They have been chosen to illustrate some design principles and operational challenges that will need to be addressed if any reduction in secondary school area is progressed at Langley.

Case Study -St Gabriel's Church of England Academy, Houlton, Rugby

St Gabriel's Church of England Academy is part of the first phases of community infrastructure provision on the wider 473ha (6,200 home) urban extension site. The school will ultimately provide 3 forms of entry and has potential to accommodate a day nursery. It opened its doors to the first pupil intake in September 2018.

The surrounding area is primarily residential and, when finished, will be located in relatively close proximity to the district centre. The school is located in a prominent position within the first phase of the development and is located at the junction of the main route circulating around the site. This makes it highly accessible and legible in the emerging environment.

Wide pavements and an entrance plaza area have been located at the entrance to the school creating a place to congregate at key times of the day. The public realm to the front of the school includes an undulating landscape area.

The design of the building has taken a contemporary approach uniting buff bricks around the lower storey with upper storey elements of the building being clad with a profiled metal system. The height and design make for a striking and legible landmark within the site.

The remainder of the school site is characterised by areas of soft landscaping and sports fields. There is a strong connection between the school building and the outdoor space, with every classroom given direct access.

The position of the Site could be considered quite isolated, particulary in relation to the Local Centre and other community focused facilities.

Figure 46. St Gabriel's Church of England Academy Site Plan - van Heyringen and Haward Architects

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Location	Total Pupils	Estimated Area	Building Storeys	Building Footprint
HOULTON, RUGBY	TBC	APPROX 2.5HA	1-2 STOREYS	APPROX 0.3HA

St Gabriel's Church of England Academy, high quality distinctive landscape treatment forms the public realm and frontage to the school.

Figure 47. Grange Primary School Site Plan (www.maccreanorlavington.com/website/en/project_3000.html) copyright - Maccreanor Lavington

© www.planningportal.rugby.gov.

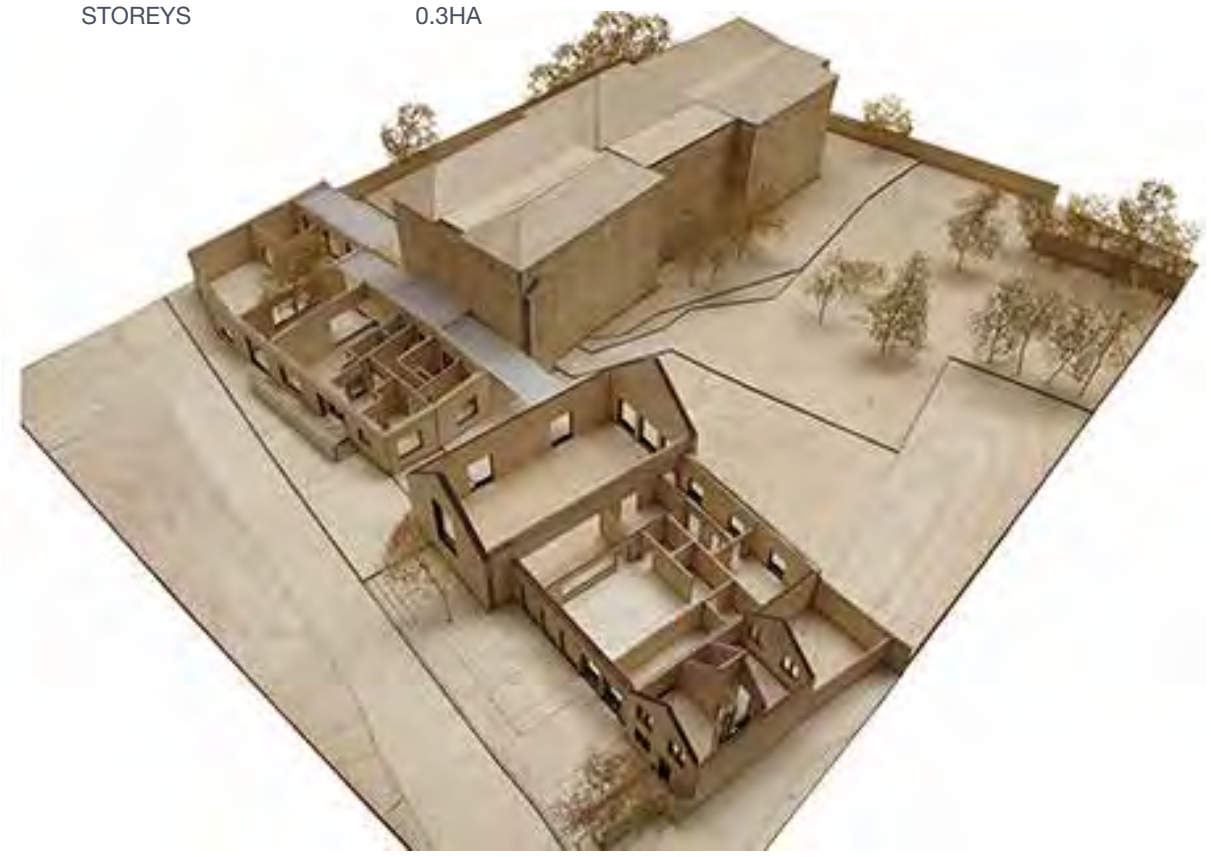
Case Study - Grange Primary School, Southwark London

The Grange primary school was designed by Maccreanor Lavington Architects and won a RIBA London Award in 2018.

The school provides 2 forms of student entry per year catering for 370 pupils on a highly constrained urban site of around 0.5 ha. This demonstrates how design approaches can deliver efficiency in land take whilst also achieving educational objectives and requirements.

While the scheme retains an existing Victorian 3 storey building at its core, one and two storey new build elements wrap the original building and provide purpose built modern facilities. The urban and constrained nature of the site does not enable playing fields to be provided, however, a multi-use play area and play ground provide options for sports on site. Other spaces around the school are also utilised for play. Partnership arrangements with other local sports clubs and schools enables the school to offer its students access to a full range of sports facilities, another example of innovative and efficient responses to education provision.

Location	Total Pupils	Estimated Area	Building Storeys	Building Footprint
SOUTHWARK, LONDON	370	APPROX 0.5HA	1-3 STOREYS	APPROX 0.3HA



Maccreanor Lavington - Site Model.

DESIGN CONSIDERATIONS...

- Locate school buildings on prominent routes and ideally at a key junction to assist with accessibility, legibility and permeability. Integrate primary schools close to District / Local Centres, where possible;
- Additional height of the building can also support legibility;
- In combination with operational strategies, scope exists to explore reduced total site area of a primary school without impacting on the educational objectives, function and quality of the education experience for the children.

Case Study - Djanogly City Academy, Nottingham

Opened in 2003, the Djanogly City Academy, designed by Foster and Partners, provides 11 - 18 year secondary school education.

The school and some of its formal sports pitch requirements are accommodated within a 2ha site area. This is a comparatively small site area for a secondary school. Additional facilities traditionally provided within the secure boundary of a secondary school site (i.e. sports hall and grass playing pitches) are provided on neighbouring sites and are available for use by the wider community rather than being for the sole use of the school.

The entrance to the school is demarcated by an area of hard landscape offering a gathering/ congregation area for students at peak access times.

The mature street tree planting along Gregory Boulevard complements the setting of the building.

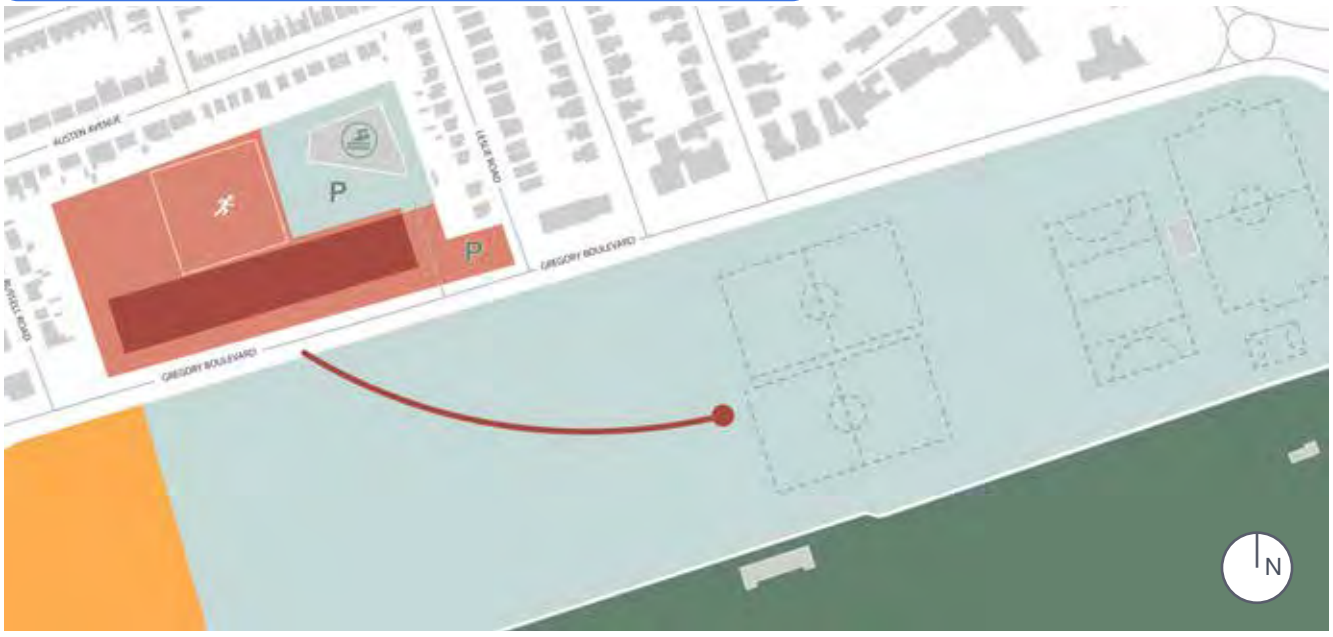
The Djanogly Community Leisure Centre located to the rear of the school shares an access and provides facilities for use by both the local community and the students. This includes indoor facilities and access is granted to use the school's formal outdoor sports pitches outside school hours. In this sense, the school's facilities are a recreational resource to the wider community, creating a relationship between the two.

There is approximately 10ha of public sports fields located immediately south of the school, which includes a children's play park, and the Forest Sports Zone and Recreation Ground which offers additional sports field facilities.

A large park and ride, associated with The Forest Tram stop, also offers additional overflow parking for staff and pupils if required without the need to accommodate large parking areas on the school site.

This is a good example of an integrated and community focused secondary school which efficiently utilises land and facilities.

Figure 48. Djanogly City Academy, Nottingham - Site Analysis Plan



SCHOOL BUILDING
SCHOOL LAND (Including Formal 3G Sports Pitches)
ADDITIONAL LAND / FACILITIES FOR USE
GREEN SPACE
THE FOREST TRAM STOP (Includes Park & Ride)
SPORT AREA
P PARKING

Location	Total Pupils	Estimated Area	Building Storeys	Building Footprint
NOTTINGHAM	740	APPROX 2HA	2 STOREYS	APPROX 1.3HA

Djanogly - School Building Front Elevation

Case Study - Broadway Academy

The Broadway Academy (formerly Broadway School) was rebuilt in 2010 as part of the 'Building Schools for the Future Programme'. The project involved reuse and upgrades to some existing buildings as well as provision of new buildings on site. Architects' Cottrell & Vermeulen, Education Architect of the Year at the Building Design Awards, worked closely with Birmingham City Council to transform the school grounds.

The school is accommodated within a small site area of around 2ha and provides core education facilities on-site including some outside sports facilities (1 multi-sport area accommodating a full sized 3g football pitch with running track and long jump, and a secondary small hard court pitch area). However, it also utilises a range of off-site facilities to cover all of the academic requirements (i.e. outdoor sport).

External areas for student congregation are more limited within this school site.

Although located on a small site area, this has not affected its performance with a 'good' Ofsted rating in recent assessment.

The school site itself is well integrated into the development block with the school building providing a positive street presence to The Broadway while residential properties enclose the school grounds on the other three sides.

To accommodate a reduced size secondary school site within the block has required a parcel approximately 3 times larger than the standard residential block pattern around it. This can interrupt the permeability of the urban structure if it is not carefully positioned.

The impact of peak time pick-up and drop-off at the school can also have a detrimental impact on the neighbouring residential uses if not carefully considered at the outset of the design process.

Multiple access positions into the school supports ease of access for students and staff and can distribute peak time impacts rather than focusing them on just one access location. This approach can also enable public access outside school hours to certain facilities such as the 3G pitch, while preserving the security of the rest of the school.

Figure 49. Broadway Academy, Birmingham - Site Plan

Location	Total Pupils	Estimated Area	Building Storeys	Building Footprint
BIRMINGHAM	1172	APPROX 2HA	1-3 STOREYS	APPROX 1.2HA

The Broadway Academy - School Building Front Elevation to The Broadway

DESIGN CONSIDERATIONS:

- Carefully locate the secondary school to support rather than block the permeability of the urban structure. Size the school site to work with the urban structure rather than rigidly apply a fixed site size;
- In combination with operational strategies, scope exists to explore reduced operational site area without impacting on the educational objectives, function and quality of the education experience for the students;
- Position the school building to provide positive integrated frontage to the street scene. Enhanced public realm at the school entrance alongside adequate areas to safely congregate;
- Where possible 'wrap' the school boundaries to enhance security but also to activate the surrounding streets;
- Additional height and enhanced design of the building can support legibility and provide a local landmark;
- Close links to sports facilities is extremely beneficial to the function of the school and health of the student population;
- Community access to, and use of areas of the school facilities is positive and supports enhanced community integration and function.

COMMUNITY FACILITY

11.70 Langley will provide a range of community spaces in a variety of locations and forms across the Site. It is also envisaged that a community hub building will be provided within the district centre (Langley Central).

11.71 The following pages provide examples of new high quality community facilities emerging across the UK.

Case Study - Nunhead Community Centre (The Green), Nunhead Green, London

AOC Architects were appointed by Southwark Council to design a community centre as part of larger masterplanning work in the area. The building was built by Southwark Council and is maintained and run by Nunhead Voice, a local residents group.

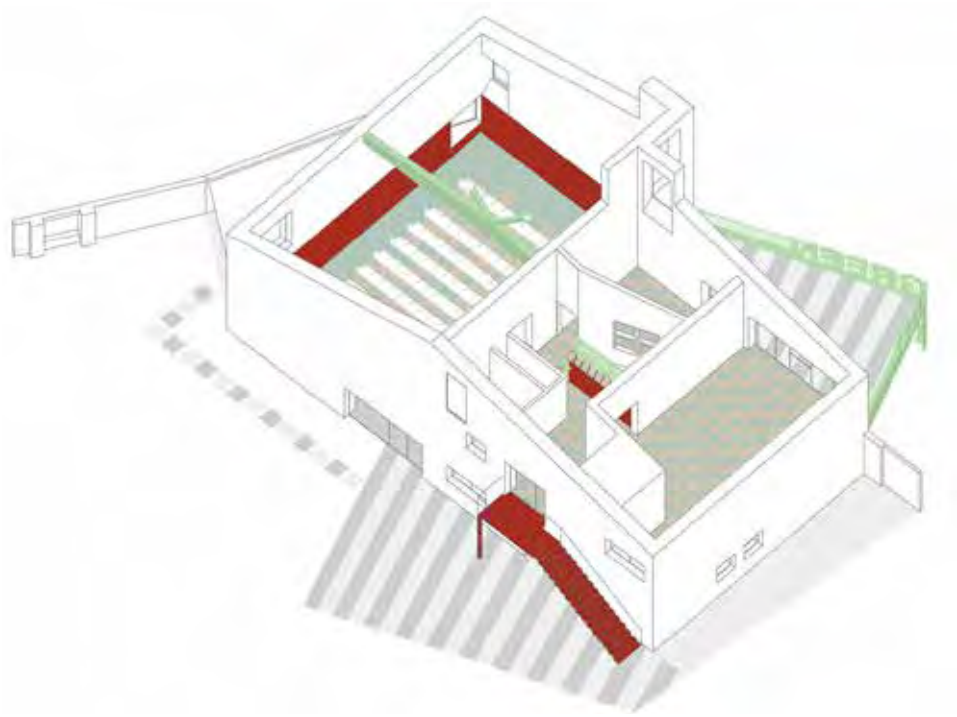
A shared ambition for the centre was to create a space in which 'different people do different activities in the same place at the same time' (AOC Architects).

The Green is a two storey detached building with multiple rooms for community use. The domestic scale and form of the building complements the surrounding context whilst the colours, textures and detailing create a contemporary and playful feel for a community scale project. Local architectural elements are reflected in the new architecture such as the red brick to match the nearby Victorian terraced housing. The herringbone brickwork of the adjacent pub is also interpreted within the brick detailing to the front facade of the building.

The building is set back from its boundary with a new public realm area to encourage community gathering. Its position in Nunhead's local centre adjacent to a popular pub and convenience stores makes it easily accessible to the public.

Multiple rooms of varying dimensions within the centre offer space for a range of different activities held by the local community. The ability of the building to be flexible to a range of demands supports its long term function in the community.

3D Diagram of The Green



Images and photographs copyright AOC Architects

Front Entrance to The Green

View from The Green Balcony to the Old Nuns Head Pub

Ground Floor Space within The Green

The Main Performance Hall at Stoney's Field Centre

Courtyard and Playspace uniting Stoney's Field Centre and Eddington Nursery

Decorative Porthole Windows

Case Study - Storey's Field Centre, Cambridge

As part of the North West Cambridge Development, MUMA LLP Architects have designed the Storey's Field Centre in Cambridge. The centre has won a number of awards including the RIBA East Award 2018, RIBA East Sustainability 2018, RIBA East Building of the Year and RIBA National Award 2018.

Public consultation with the local community determined that the focus of the space would be for the performing arts, but that flexibility would be built in for other uses as well. Spaces in the centre are used for a range of activities and classes. The Main Hall serves as an important performance space.

The main hall is designed to enhance the acoustics of performances and has the capacity for 180 people. Meeting rooms, offices, kitchen facilities and storage space, are also provided.

The centre has a number of landscaped spaces including a walled garden, external gardens bounding the centre and a landscaped courtyard which connects the building with the Eddington Nursery.

Storey's Field Centre, Eddington Nursery, UCPS and the developments' local centre are all located within close proximity to one another. This helps to create a convenient, social and well- connected community space. Hosting a consultation to determine what facilities best suit the local residents is a useful exercise in the process of creating a space which is not only a requirement to the masterplan, but a benefit to the community.

View of Stoney's Field Centre

Case Study - Harvest Fields Centre, Sutton Coldfield

Harvest Fields Centre is a community and conference centre located to the north east of Sutton Coldfield on the Harvest Fields residential development.

The centre is a large multi-functional building offering a range of rooms, including a 300 people theatre / sports hall, a variety of meeting and conference room sizes, a multi-faith room, children's nursery, support offices and catering/ cafe provision. The centre also provides sports courts available for community hire located to the rear of the building.

The centre is located at the heart of the Harvest Fields development alongside a large central open space area containing children's play equipment. The open space provides opportunities for informal sports, fitness groups and general play.

Open space and children's play in front of the Harvest Fields Centre

DESIGN CONSIDERATIONS:

- Community facilities built within district/ local centres can benefit from shared parking facilities. Stand alone community facilities must make appropriate and adequate provision for parking;
- The scale of the facility must be carefully considered in relation to the surrounding built character;
- A variety of room sizes and facilities must be considered if its to act as a multi-functioning facility;
- The management structure and the ability to flex to changing community requirements is critical to the long term success of the facility;
- Public realm spaces around the community building support the sense of activity but also provide congregation space or space for planned activity.

Fitness group informally utilising the open space.

Dwellings fronting the open space and the Harvest Fields Centre

FOOTWAY/ CYCLEWAY GREENWAY

11.72 Integrating longer distance footway and cycleway routes into large development projects provides the option to utilise alternative modes of transport both within the Site but also to surrounding services and facilities.

11.73 The following images provide some potential reference points to inform the approach at Langley.

Dedicated cycle routes within urban settings can be defined by colour, material or horizontal variations. In pedestrian areas a level surface can be used providing it is defined visually and by tactile paving. Cycle stands should be carefully integrated and provided where a activities / destinations are clustered.

In urban settings variation in surface treatments and materials can be utilised to clearly define pedestrian priority and crossings.

Sustrans Cycleway Vision, Inverness

In urban settings where heavier traffic is expected, a planted strip between the road and cycleway can aid the perception of separation and therefore safety, increasing the route's appeal for families and less confident cyclists.

Magdalen Road, Swindon

Crossing design and treatments should aim to ensure safe travel, ease of movement for cyclists.

Fietspad, Netherlands

Sydney

In suburban environments, dedicated cycle routes should not restrict convenient access to homes, however they should also balance the desire for conveniently access to the route for local residents. Landscape elements can be incorporated to create definition between road, footpaths and cycleway and reinforce the character change in the area.

Houlton, Rugby

Houlton, Rugby

Landscape variation, mounding and areas of natural planting can create interest to suburban and rural sections of the cycleway, further separating the cyclist from vehicles. However, care should be given to the extents of the route where no or limited surveillance is available.

MetaEfficient

Houlton, Rugby

Variations in features, such as lighting bollards and opportunities for rest, can enhance the setting and function of the footway / cycleway.

Houlton, Rugby

Houlton, Rugby

Potential to enhance the setting and appeal of the cycle/ footway by navigating it through/near areas of activity and interest. Examples include pond/ swale areas and areas of children's play.

12.0 CONTEXT ANALYSIS

12.1 The allocation of the Site for the delivery of a significant new residential led development within the Birmingham Development Plan (BA5) confirms that the principle of development on the Site is considered sustainable and appropriate.

12.2 Notwithstanding the policy support, the following analysis of local facilities provides the context in which new development will emerge and helps to identify how the Site can integrate with, and provide new services and facilities to support the function of the new and existing communities.

12.3 This analysis summarises the key services and facilities which support the function and success of residential communities, these include: Retail & Professional Services, Health Care Services, Community Facilities, Education, Sports & Recreation, Employment and Transport / Movement. From this, a set of design influences is provided to inform the approach at Langley.

12.4 The following summarises the range of services and facilities located within approximately 2km of the Langley Site, with Figure 50, Figure 51, and Figure 52, illustrating the general locations in the area.

Walmley Local Shopping Parade.

Sutton Coldfield - Pedestrianised Town Centre Shopping Area

RETAIL AND PROFESSIONAL SERVICES

12.5 The nearest cluster of local retail and professional services are provided in the parade of shops within Walmley (approximately 1.5km direct line distance from the Site). A wider range of services and facilities are available in Sutton Coldfield Town Centre to the west (approximately 3km direct line distance from the Site) while Birmingham City Centre (approximately 10km direct line distance from the Site) offers the full range of services and facilities and is approximately a 20 minute train ride from Sutton Coldfield station.

12.6 Walmley local centre is located south west of the Langley Site. The parade primarily serves the local population and provides: local food shops, a pharmacy, a health centre and local pub. Walmley also contains the nearest post office to the Site; Walmley Sub Post Office.

12.7 The ASDA Superstore, Minworth is a large free-standing 'out of town' superstore. It is located immediately to the south of the Site. Its average annual turnover significantly exceeds that of the local centres (Birmingham City Council, Retail Needs Assessment Update 2013), demonstrating its catchment and significance in the local area. Alongside Groceries, the superstore offers a Pharmacy, Petrol Station, Opticians, Money Bureau, clothing and home-ware.

12.8 The town centre of Sutton Coldfield is just over 2km north west of the Langley Site. A wider range of retail and professional services (including a number of national chains) are available in the town.

12.9 Birmingham City Centre offers the widest range of services, facilities and cultural activities.

12.10 In addition to the above areas, the Site is also in close proximity to a range of local conveniences including a 'One Stop' food and convenience shop at the junction of Springfield Road and Reddicap Heath Road; and a small local parade of shops on Churchill Road to the north-west of the Site which includes a Costcutters convenience shop and post office.

HEALTH CARE SERVICES

12.11 A number of health care practices and services are located near the Site. These include:

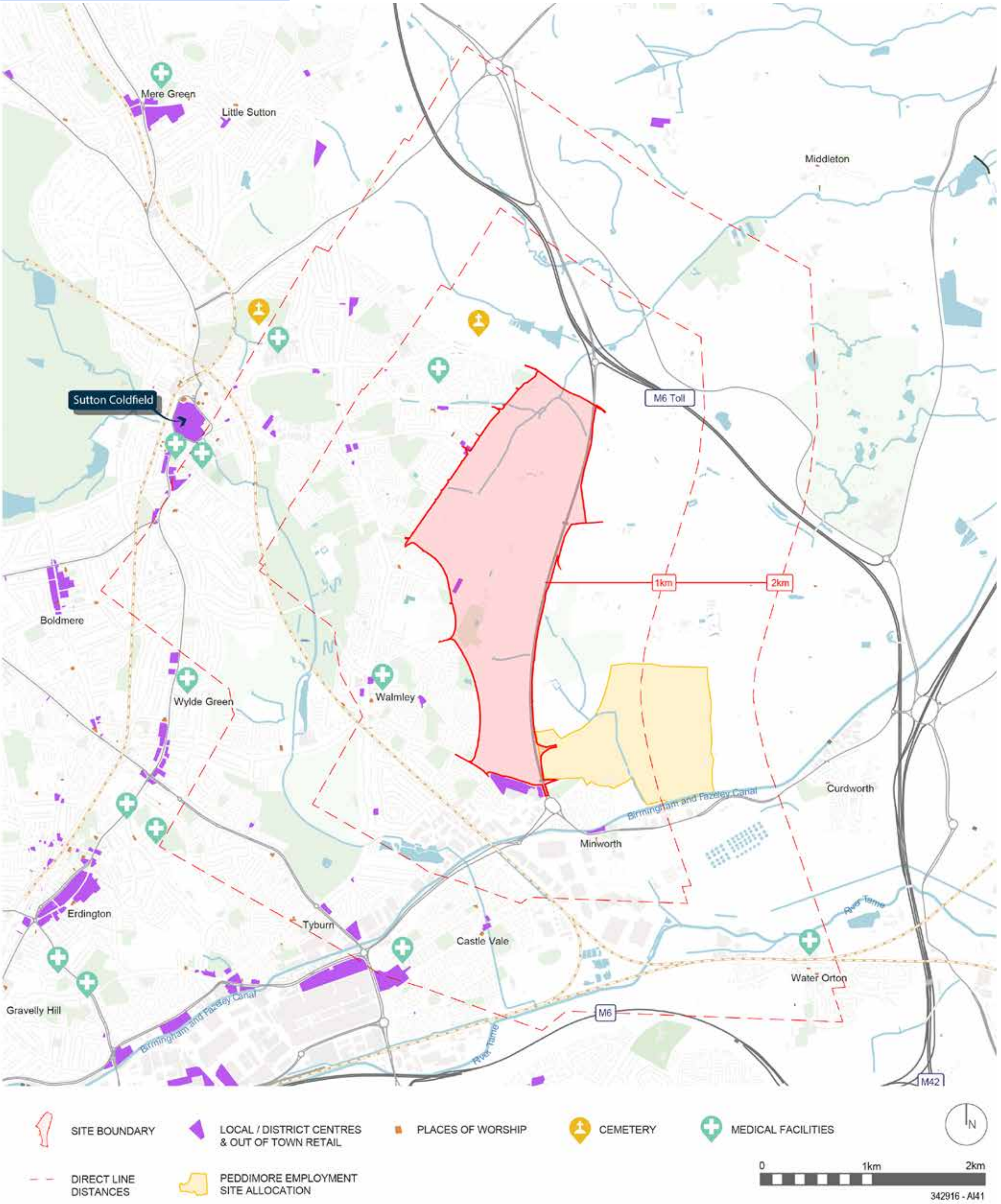
- Hospitals: Good Hope Hospital and Sutton Cottage Hospital (just over 2km north west of the Site). Birmingham is a short journey and offers many more hospital services including those at the Queen Elizabeth Hospital;
- Health Practices: Ashfield Surgery and Eden Court Medical Practice to the south west of the Site, Falcon Medical Centre to the north, Manor Practice to north west and Satis House Medical Practice to the south east;
- Dentist Practices: The Whitehouse Dental Practice to the north west and Castle Dental Care to the south west;
- Pharmacies: ASDA Minworth Superstore Instore Pharmacy, Lloyds Pharmacy in Walmley and Peak Pharmacy in Reddicap Heath. Sutton Coldfield Centre also contains multiple pharmacies.

COMMUNITY FACILITIES

12.12 The Site is located in close proximity to a range of local community facilities including:

- Churches: St John's Church, St George's Church, St Cuthbert of Lindisfarne C of E Church and, St Gerard's Catholic Church, to the south of the Site, the Holy Cross and Saint Francis Church Hall to the west and, Falcon Lodge Chapel, to the north. Many of these churches offer space for local community and social events. St Chad's Church, located north west of the Site hosts regular gatherings for dance groups, Scouts and Beavers, and local clubs;
- Community Halls including: Walmley Community Hall to the south west of the Site, Falcon Lodge Community Hub to the north, Our Place Community Hub and Clifton Road Youth Centre in Sutton Coldfield. These all offer designated spaces for community hire and use;
- Libraries: Walmley Library, Sutton Coldfield Library and Castle Vale Library.

Figure 50. Retail, Health and Community Facilities



EDUCATION

12.13 The 1996 Education Act sets the acceptable walking distances for young people, to and from school. The distances were set at 3.22km (approx. 2 miles) each way for children of 8 years old and younger and 4.82km (approx. 3 miles) for children over the age of 8 years. These distances are measured along the shortest route which a child could walk with reasonable safety.

12.14 With this in mind, the Site is located within close proximity to a wide range of existing education facilities (Figure 51), including:

- Nurseries and Pre-Schools: Langley Gorse Day Nursery and Footsteps Nursery (both located on Site), New Hall Primary and Children's Centre, The Paint Pot Nursery, All Seasons Childcare Nursery, Little Ripley Day Nursery and Tiggy Winkles Nursery. The nurseries listed offer childcare between the ages of around 1 to aged 5;

- Primary Schools: Holy Cross Catholic Primary School, Maney Hill Primary School, Town Junior School, Hollyfield Primary School, Penns Primary School, Topcliffe Primary School, St Gerard's RC Junior and Infant School, Chivenor Primary School, Pegasus Primary School, The Shrubbery School, The Deanery Church of England Primary School, Walmley Junior School, Walmley Infant School. The schools listed offer education to children between the ages of around 4.5 to aged 11. Some offer pre-school facilities;

- Secondary Schools: Plantsbook School, John Willmott School, Fairfax School, Bishop Walsh Catholic School, Greenwood Academy, Highclare School, Bishop Vesey's Grammar School and Sutton Coldfield Grammar School for Girls. All schools offer secondary education with sixth forms;

12.15 Post 16 and adult education facilities include: Sutton Coldfield College, Birmingham Metropolitan College, Hodge Hill College, Oscott College, and Trinity Specialist College.

12.16 Nearby, Birmingham provides many opportunities for further education and has a number of popular and well established centres for higher education, including University of Birmingham; Birmingham City University and Aston University.

12.17 While there is good provision in close proximity, capacity for new student population is limited for all ages. As such, new education provision, particularly for pre-school, primary and secondary age education will be required on-site.

SPORT AND RECREATION

12.18 The Site is located within good proximity to a range of local open space, sport and recreation facilities (Figure 51), including:

- Children's play areas: including those on Thimble End Road and Langley Heath Drive;

- Local green space: including; Pype Hayes Park, Wild Flower Meadow and Lancaster Park to the south of the Site and, Candleford Park and New Hall Valley Country Park to the north. Plantsbrook Local Nature Reserve is south west of the Site. Sutton Park is located over 2km north west and provides around 1,000 ha/ 2,400 ac of National Nature Reserve including open heathland, woodlands, seven lakes, wetlands and marshes;

- Allotments: including; Walmley Ash Allotments, Forge Farm Allotments, Berwood Farm Allotments, and Yenton Grove Allotments; all are located south of the Site. There is also Boulevard Allotments to the north and Newhall Allotments to the north west;

- Sports Pitches and Facilities, include: Sutton Coldfield Town Football Club, Sutton Coldfield Cricket and Hockey Club and Sutton United Football Club to the north west, Walmley Cricket and Sports Club and Penns Lane Sports Ground to the west, Spartans Rugby Football Club and Aston Unity Cricket Club to the north, Wishaw Horse Riding Centre to the east and Castle Vale Stadium to the south. There are also several unnamed informal sports pitches within the 2km area.

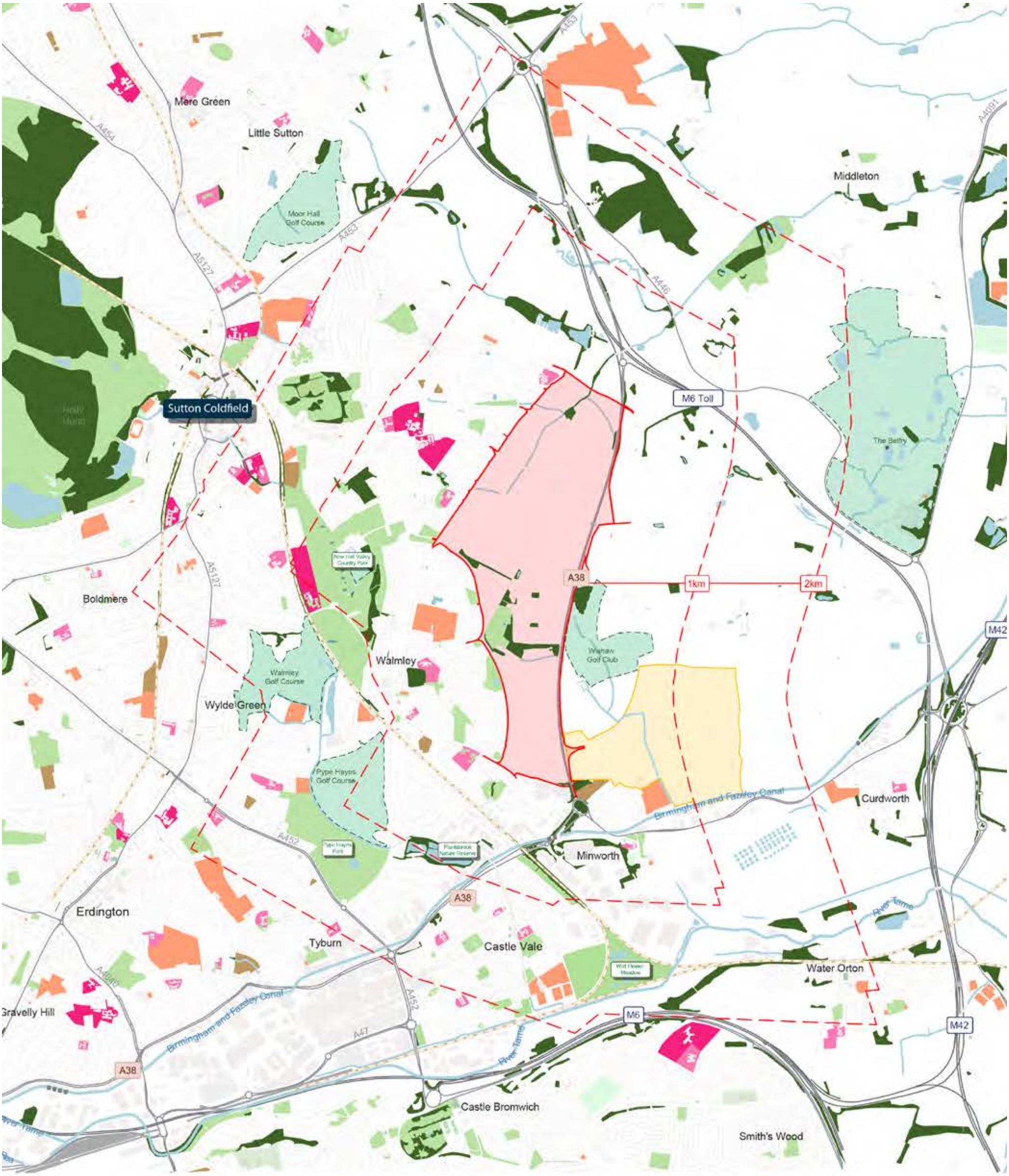
- Lakeside Active Health Club, to the south of the Site, offers fitness facilities and swimming pools. Wyndley Leisure Centre and Wyndley Swimming Baths are located just over 2km west of the Site. To the south west is Erdington Leisure Centre, just under 4km;

- A number of private members gym's including: Unique Health and Fitness and The Gym Sutton Coldfield to the north of the Site, Body Blitz Gym, Pype Hayes Gym, B-active Fitness, The Gym Castle Vale and CrossFit B76 to the south;

- Wishaw Golf Club is located across the A38, and Walmley Golf Club and Pype Hayes Golf Course to the south west.

Wishaw Golf Club - East of the Site

Figure 51. Education, Sport and Recreation

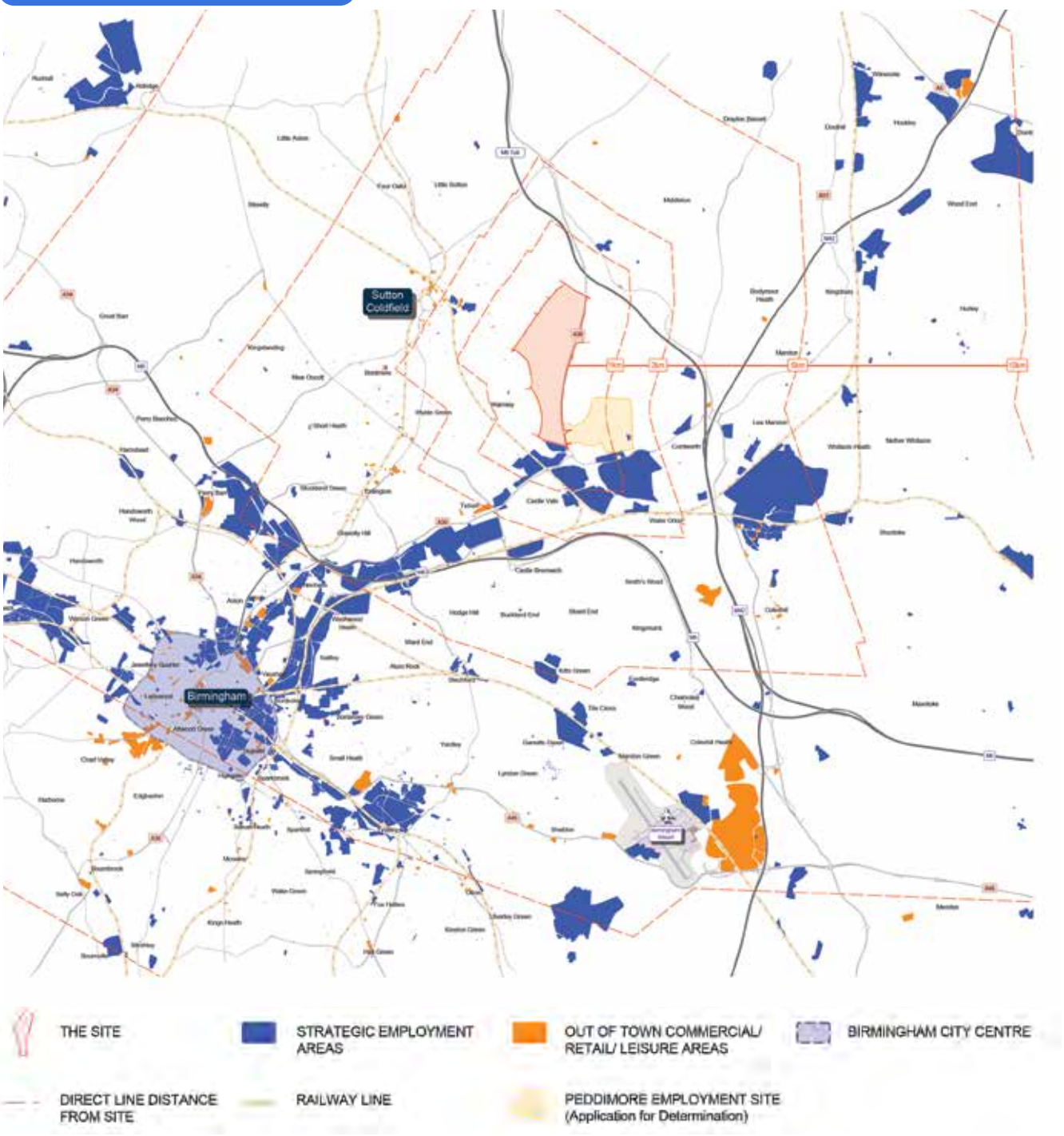


EMPLOYMENT AREAS

12.19 The Site is located in good proximity to a wide range of existing and future employment opportunities (Figure 52):

- The M6, A38, Chester Road and Wylde Green train stations provide access into Birmingham centre which also offers a greater range of potential employment opportunities on a city scale. These transport links will be connected to the Site. Policy TP21 of the Birmingham Development Plan states the focus for significant employment growth will be Birmingham City Centre and Sutton Coldfield;
- Potential employment opportunities are available within Sutton Coldfield town centre in a variety of retail and professional service industries;
- Other employment opportunities include local education facilities, local healthcare facilities and within the Maybrook Business Park at Minworth to the south of the Site;
- Peddimore is a site allocated in the Birmingham Development Plan as a designated growth area. The site is located to the south east of Langley across the A38, providing further local employment opportunities. (See below).

Figure 52. Major Employment Areas



PEDDIMORE PLANNING APPLICATION

12.20 The proposed Peddimore employment site to the immediate east of the Langley Site is proposed to deliver 71ha of new employment land for B1(b) Research and Development, B1(c) Light Industrial and B8 Warehousing and Distribution uses, plus supporting office uses. Another 40ha of site is to be safeguarded for additional B1(c) or B2 uses.

12.21 As well as employment opportunities, the site will provide improved accessibility through new transport networks.

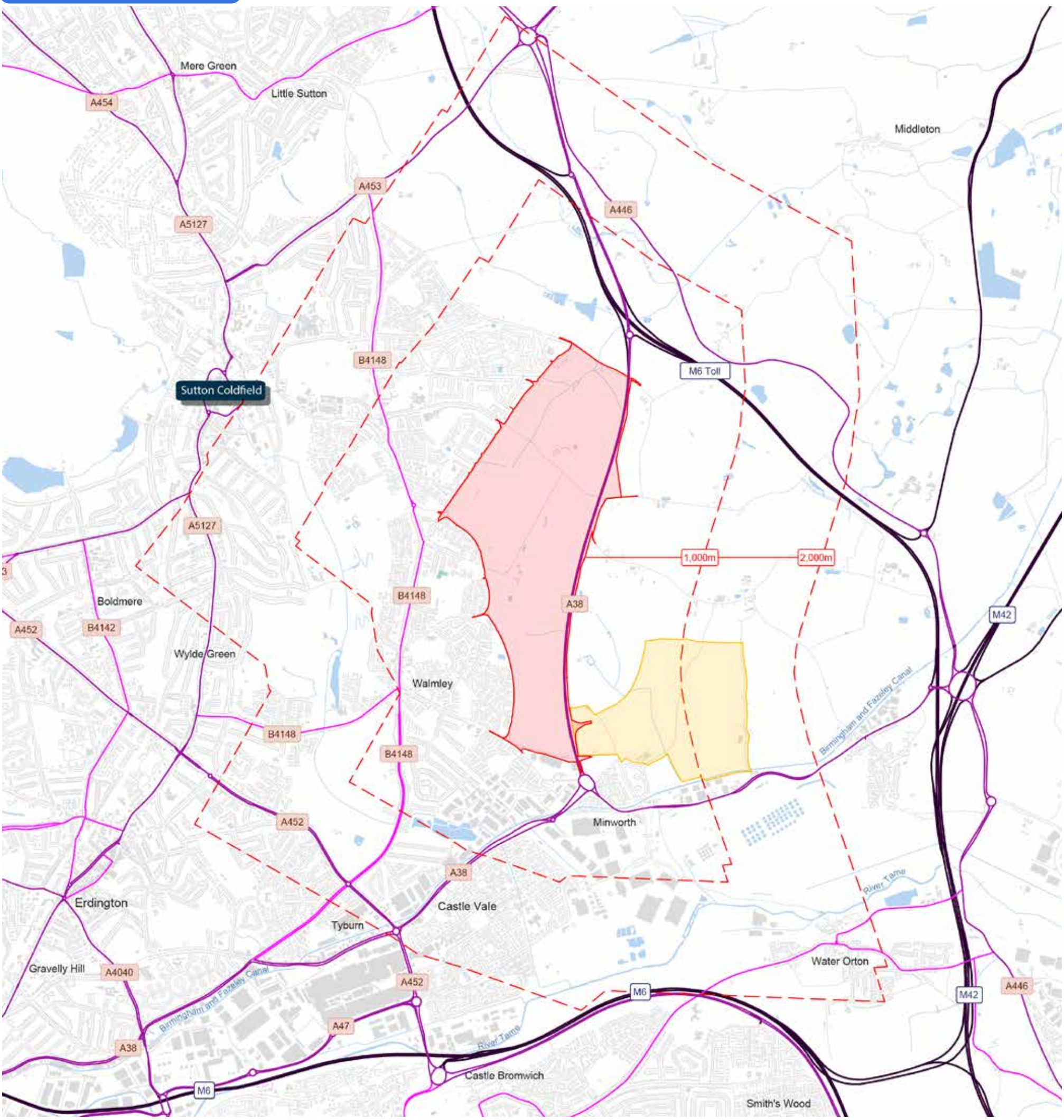
12.22 An outline planning application was submitted and approved by by Birmingham City Council, submitted under reference 2019/00108/PA, issued on 02/09/2019 after the Section 106 legal agreement was signed.

Figure 53. Peddimore Application - Illustrative Masterplan

EXISTING VEHICULAR ACCESS AND CIRCULATION

12.23 The M6 motorway and M6 Toll Motorway runs to the north east of the Langley Site and provides access into the A38 which directly borders the eastern edge of the Site. The A38 is a key route into Birmingham city centre from Sutton Coldfield. The A5127 to the west of the Site also links Sutton Coldfield centre to the Birmingham A4540 ring road providing access into the city.

Figure 54. Existing Highway Network



EXISTING BUS AND RAIL NETWORK

12.24 Figure 55 highlights the existing bus routes and rail stations surrounding the Langley Site. The nearest bus stops to the Site are located along Springfield Road, Webster Way and Walmley Ash Road. There are several other bus stops located further west and south of the Site.

Bus Services

12.25 The north of the Site is served by frequent bus services to Sutton Coldfield and Birmingham City Centre (X14 and X4 Platinum) which operate every 20 minutes during the day, seven days a week. The X14 routes also provide access to the employment sites at Tyburn and Minworth.

12.26 Bus stops on Walmley Ash Road are served by less frequent services with the bus services 108 and 167 operating hourly services to Sutton Coldfield, Birmingham and Erdington in the peak hours.

12.27 Bus service 71 and 75 can be accessed from bus stops on both Springfield Road and Walmley Ash Road. The 71 provides frequent services (every 20 minutes during the day on weekdays) to Sutton Coldfield, Castle Vale and Chelmsley Wood. The 75 provides services to Sutton Coldfield and Birmingham International Station every 15 minutes during peak hours Monday to Friday and hourly during the day, albeit services on Saturdays are twice hourly and non-operational on Sunday's.

Rail Services

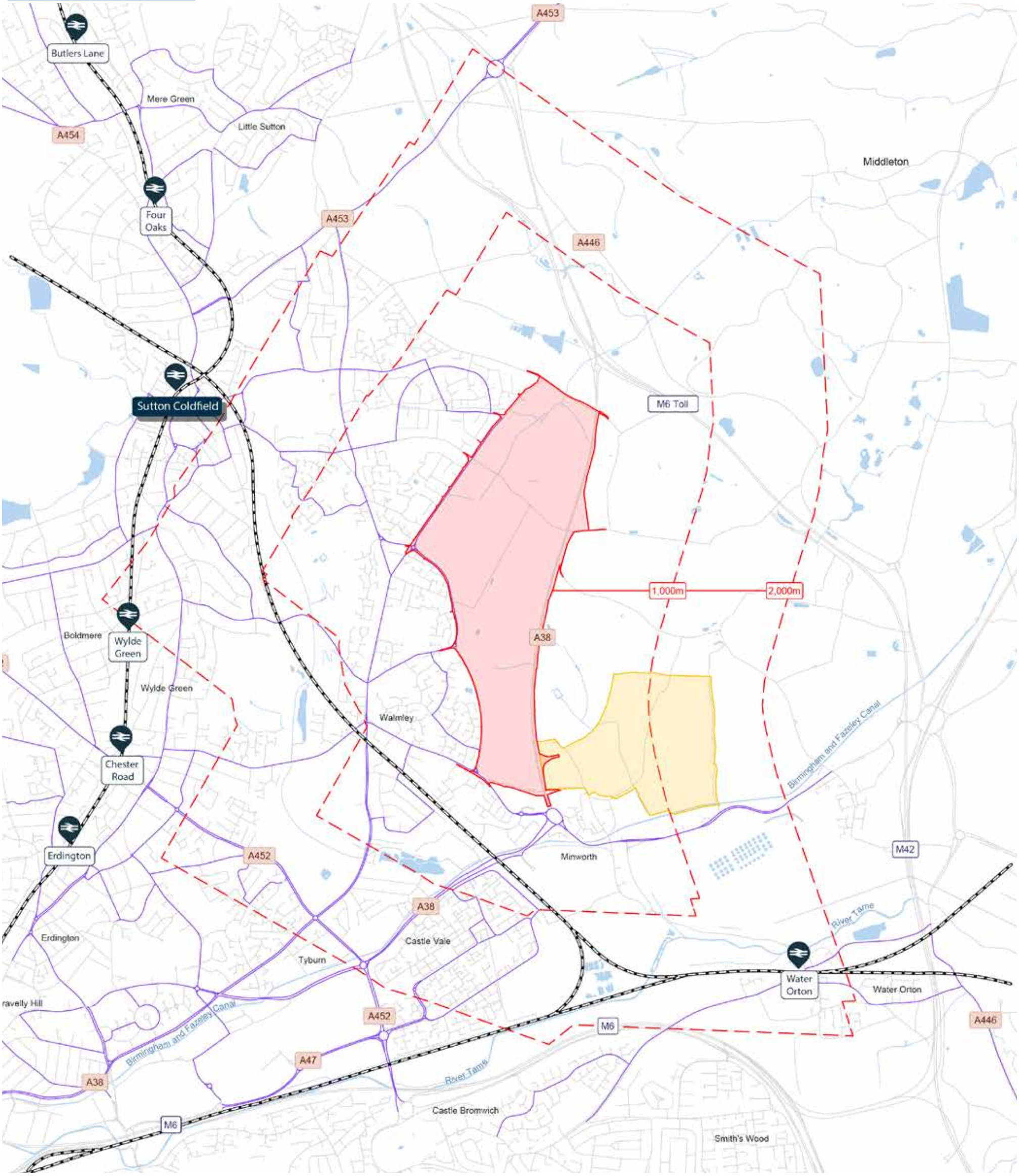
12.28 The closest railway stations are Sutton Coldfield, located approximately 3.5km north-west of the centre of the Site, Wylde Green approximately 3.5km to the west and Chester Road approximately 4.5km to the south-west of the Site. Whilst these stations are outside general walking distance of the Site, Sutton Coldfield is connected by bus services X4, X14, 108 and 167 and Chester Road is connected by the X4, 108 and 167.

12.29 It should be noted that Water Orton Railway Station is located approximately 2km to the south-east of the Site. The station operates on the Birmingham to Peterborough Line on Cross-Country services only.

12.30 Long term ambitions of Transport for West Midlands/ Birmingham City Council, are for enhancements to the local rail network to include the potential reopening of railway stations such as the station at Walmley. Should these schemes be achieved, proposed movement networks from the Site, such as the bus and cycle routes, will look to positively link to these facilities.

Sutton Coldfield - Train Station

Figure 55. Bus and Rail Network



EXISTING PEDESTRIAN / CYCLE ROUTE PROVISION

12.31 The surrounding context has a fragmented network of Public Rights of Way (PRoW) footpaths and cycleways (Figure 56). To the north and east of the Site there is a network of local PRoW connecting between settlements and farmsteads.

12.32 PRoW ref 1121 connects to Lindridge Road, at the northern Site boundary, while PRoW ref 1124 and 1131 connect to the Site via the A38 underpass in the east.

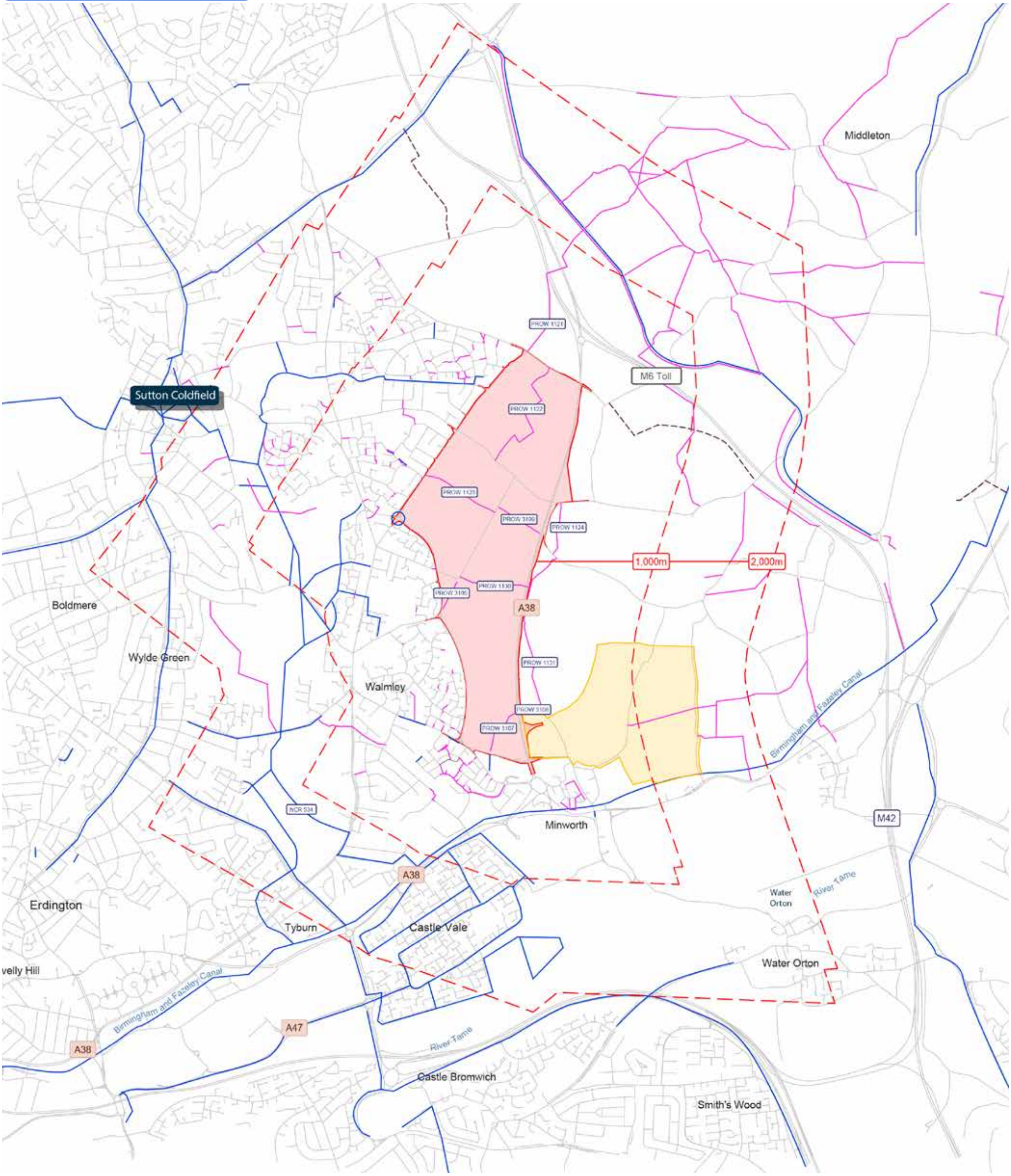
12.33 The Site is connected to Sutton Coldfield Town Centre via Sustrans National Cycle Network (NCN) Route NCR 534 (National Cycle Route). The route penetrates the local estates to the west of the Site along Churchill Road.

12.34 Beyond Sutton Coldfield, the NCR runs into Sutton Park, where the route becomes NCR 535 before travelling south towards Birmingham City Centre. There is a break in the route in the vicinity of the M6 Junction 6 (Spaghetti Junction).

12.35 As well as NCN routes, there is also the option, for more ambitious cyclists, to use the Birmingham and Fazeley canal towpath (circa 7miles) to the City. It is not currently lit throughout its length. The western extent of the towpath forms NCR 535.

On Site Public Right of Way - Footpath from Springfield Road to Fox Hollies Road

Figure 56. Pedestrian and Cycle Network



CONTEXT ANALYSIS SUMMARY

12.36 Sutton Coldfield Town Centre provides convenient access to a wide range of facilities for those in the local area, including retail uses, food stores and transport connections. Similarly, Walmley local centre supplies amenities for everyday needs. The ASDA Minworth Superstore trades equivalent to other District Centres in Birmingham. Its location directly to the south of the Site has an impact on the potential types of new provision that can be accommodated on the Langley Site, particularly within the southern parts of the Site. Any new mixed uses provided on the Site should seek to complement rather than compete with the existing local provisions in the area.

12.37 The wider area has a range of existing employment opportunities which will be supplemented by those emerging on the adjacent Peddimore development. The introduction of new schools, mixed uses and community facilities on the Langley Site will also support job creation in the longer term. In the shorter term construction activity will provide a range of employment opportunities at Langley. Opportunities to provide some new floorspace which could accommodate employment activities within the mixed use area or in terms of flexible dwelling typologies i.e. supporting live/ work, could be explored on Langley.

12.38 The local area has many churches which offer rooms and spaces for local community groups, clubs and gatherings. There are a limited number of designated community centres in the surrounding area. Consultation has highlighted that existing facilities are in high demand, and that new community spaces would be beneficial for both existing and future communities. Langley offers the potential to provide a range of new and flexible community facilities available for groups, clubs and gatherings.

12.39 New Hall Valley Country Park and Sutton Park are the two largest areas of public open space in the locality. Both provide a range of functions, including: leisure foot and cycle routes; nature conservation areas; and children's play facilities. Sutton Park also accommodates several lakes, a golf course, a range of restaurants, a donkey sanctuary and a visitors centre. These recreational resources are a significant benefit to the locality. The extents of New Hall Valley Country Park reach to the western boundary of Langley, via a green corridor. Opportunities will be taken to link the country park with the Site.

12.40 In terms of formal sports provision, public pitches and courts are more limited in the area and where they are available are generally linked to a private club or school. Wyndley Leisure Centre has a number of courts for public hire but is located over 2km from the Site. The provision of new publicly accessible sports pitches and courts will be explored as part of the provision at Langley. These will form part of a robust community led strategy.

12.41 Opportunities to supplement existing bus services surrounding, and also provision of new services within the Site will be explored particularly in relation to wider City Council aspirations.

12.42 A range of new cycle and footpath routes will be provided which extend existing provision and link to a range of new destinations within and surrounding the Site.

DESIGN CONSIDERATION INFORMED BY FACILITIES ANALYSIS:

- Deliver a full range of new education establishments to meet the needs of the on-site population and to include pre-school, nursery, primary and secondary school provision;
- Create a multifunctional green network across the Site, providing existing and new communities with a range of outdoor experiences including formal and informal open spaces, children's play, nature trails, trim trails, woodland, walks, ecology corridors, and community sports facilities;
- Explore the provision of new community meeting facilities such as multi-purpose community halls;
- Deliver a central mixed use area and two smaller local hubs to supply the local community with complementary facilities and services to reduce the need to travel outside the Site for day to day needs. Care will be needed to avoid provision of services and facilities which compete with existing local provisions, particularly in Walmley and Sutton Coldfield;
- Explore potential to deliver incidental employment floorspace within mixed use areas or in the form of flexible dwelling typologies within the development;
- Explore the provision of land area to accommodate future healthcare providers;
- Delivery of a network of new footpath and cycle links to the proposed employment land at Peddimore as well as to existing and proposed services and facilities both within and surrounding the Site.

13.0 DESIGN POLICY CONTEXT

13.1 This section of the DAS summarises the relevant local planning policies of the strategic development plan, as well as local and national planning guidance that have directly influenced the approach to design. For a full review of the Langley proposals against each of the relevant national and local policies, reference should be made to the Planning Statement submitted with the application.

13.2 Figure 57 illustrates how the relevant national and local design policy and guidance themes inform the overall 'Langley Living' design vision.

BIRMINGHAM DEVELOPMENT PLAN

13.3 The Birmingham Development Plan (BDP) was adopted in January 2017. The document sets a framework for the spatial vision and growth of the city for the period 2011 to 2031.

13.4 Policy PG1 sets out the overall levels of growth over the plan period. Details are given with regards to housing, employment land, retail and office floorspace and waste.

13.5 The BDP also sets out the spatial delivery of the city's growth in the coming years, and states how the city traditionally sees new development in terms of the regeneration and extension of its existing urban areas. Therefore, growth will focus itself in locations which currently play an important role in providing homes, employment and local services. Growth is also focused on opportunity sites with good transport links and will reflect historic patterns of development.

13.6 The Langley Sustainable Urban Extension (the Site), is one of the ten key growth locations to meet the requirements of Policy PG1.

13.7 Policy GA5: Langley Sustainable Urban Extension (SUE) is the relevant BDP policy against which the proposals will be considered.

SUMMARY / INTERPRETATION OF POLICY GA5: LANGLEY SUSTAINABLE URBAN EXTENSION (SUE):

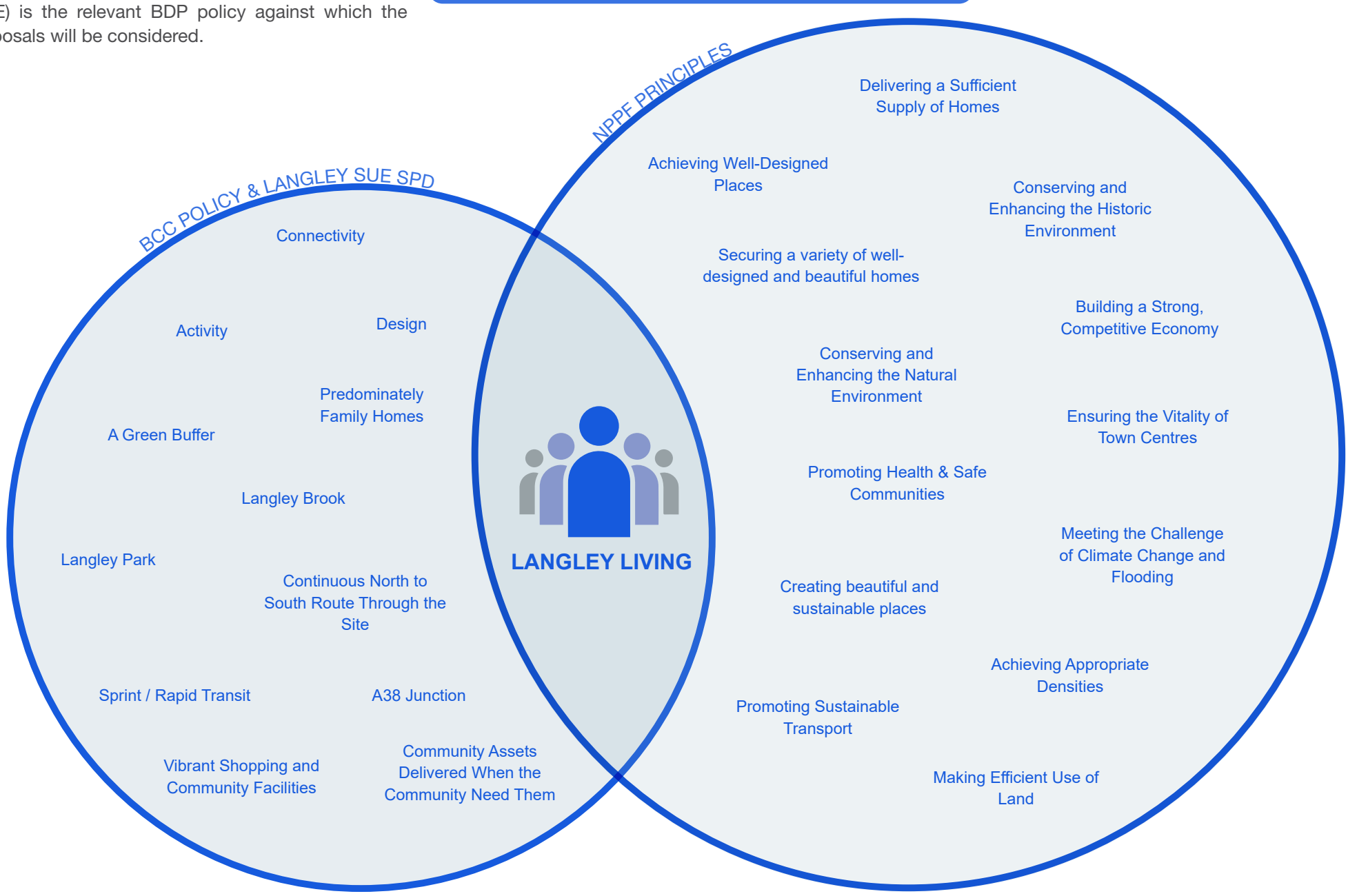
The emphasis of the main policy text is on:

- An exemplar sustainable development of approximately 6,000 new homes;
- A destination of choice for families wishing to live in Birmingham;
- Achieving the highest standards of sustainability and design;
- Providing a range of supporting facilities to help foster a strong sense of community;
- The creation of well connected, integrated and sustainable transport links;
- Protection and enhancement of existing heritage assets in the area;
- Providing a network of connected green spaces;
- Provision of a mix of housing sizes, types and tenures, including affordable housing in line with the requirements in Policy TP31, with a primary focus on the provision of family housing;
- Residential densities averaging around 35dph-40dph;
- The policy goes on to direct the reader to the Masterplan and SPD process for key design principles to be applied at Langley in the next design stages;

The policy further elaborates on particular requirements for the Site on topics of sustainability and design; connectivity; green space and ecology; and heritage assets and identifies features, services and facilities that should be integrated into any proposals on the Site. This DAS read in full provides details and responses to each of the GA5 policy topic areas, where appropriate to an outline planning application.

It should be noted that the policy boundary of the SUE, as explained in Section 6.0 of this DAS, is different from the Consortium ownership/ control. However, a comprehensive masterplan strategy is required by the policy and as such the proposals in this DAS cover the whole SUE boundary.

Figure 57. Policy Influences Supporting the Langley Living Vision



ADDITIONAL BDP PLANNING POLICIES AND SUPPLEMENTARY PLANNING GUIDANCE

13.8 Table 3 sets out the additional policies within the BDP which have been referenced and responded to within the DAS. The table also confirms that full reference has been taken of the Council's Supplementary Planning Guidance relevant to this Site.

13.9 The recent (2021) Draft Birmingham Design Guide will establish further design principles once adopted by the Council. The applicants have made comments on the draft design guide to ensure that there is consistency in the Langley-specific SPD policies and the more general Design Guide.

13.10 Of particular importance is the Site specific SPD. Table 4 sets out in more detail strategy requirements set out in the SPD and where they have been responded to in the DAS or in other documentation submitted with the application.

Table 3. Birmingham City Council Policy Review

Policy / Guidance	Summary	Location of Response to Policy in DAS
Policy PG3 - Place Making	The policy encourages development which contributes to a strong sense of place and provides criteria to support the achievement of this.	Section 20.0 to Section 28.0
Policy TP2 - Adapting to Climate Change	This policy addresses the need for climate change adaptation and provides a number of measures to help manage the impacts. This policy also cross refers to policy TP6, TP7, and TP8.	Section 23.0 and Section 29.0
Policy TP6 - Management of Flood Risk and Water Resources	The policy provides guidance on the management of flood risk and water resources. The policy covers Flood Risk Assessments, Sustainable Drainage Assessment and Maintenance Plans, SuDS, Rivers and Streams, the Enhancement of Water Resources and advises on the benefits of Trees and Woodland.	Section 23.0
Policy TP7 - Green Infrastructure Network	The policy seeks to maintain and expand a green infrastructure network throughout Birmingham. The integrity of the green infrastructure network will be protected from development and where possible opportunities will be taken to extend and enhance the network and to improve links between areas of open space.	Section 25.0
Policy TP8 - Biodiveristy and Geodiversity	The policy seeks the maintenance, enhancement and restoration of sites of national and local importance for biodiversity and geology. These include Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Local Nature Reserves (LNRs), Sites of Importance for Nature Conservation (SINCs) and Sites of Local Importance for Nature Conservation (SLINCs).	Section 25.0
Policy TP9 - Open Space, Playing Fields and Allotments	This policy provides a series of criteria and requirements in relation to the provision and development of public open space, playing fields and allotments. Specifically, it specifies walking distances to varying typologies of open space including open spaces, children's play, recreational open spaces, parks of more than 2ha in size with a range of facilities provided. The policy also confirms that open space provision in new developments will be required broadly in line with the standard of 2 ha per 1000 population.	Section 18.0 to Section 25.0
Policy TP11 - Sports Facilities	The policy encourages the provision of facilities for people to take part in formal and informal activity, that contributes to a healthier lifestyle and can provide a 'stepping stone' into more formal sport will be supported and promoted.	Section 18.0 to Section 25.0
Policy TP12 - Historic Environment	The policy outlines what elements constitute the historic environment and confirms that these features will be valued, protected, enhanced and managed for their contribution to character, local distinctiveness and sustainability. It also confirms that the Council will seek to manage new development in ways which will make a positive contribution to its character.	Section 9.0, Section 24.0 and Section 25.0
Policy TP27 - Sustainable Neighbourhoods	The policy emphasises that new housing in Birmingham is expected to contribute to making sustainable places, whether it is a small infill site or the creation of a new residential neighbourhood. All new residential development will need to demonstrate that they meet the requirements of creating sustainable neighbourhoods.	Section 8.0, Section 18.0 to Section 29.0
Policy TP30 - The Type, Size and Density of New Housing	A list of factors are given for Policy T30, which are important to consider in creating development which meets local housing needs and helps to create sustainable neighbourhoods. The policy also states that new housing in areas well served by public transport should have a target density of 50 dwellings per ha and elsewhere housing delivery should target around 40 dph. It does recognise that in certain instances lower densities may be justified.	Section 18.0 and Section 24.0
Policy TP31 - Affordable Housing	The City Council will seek 35% affordable homes as a developer contribution on residential developments of 15 dwellings or more.	Section 18.0
Policy TP36 - Education	The policy provides design criteria for new education facilities such that they should have: safe access by cycle and walking as well as by car and incorporate a school travel plan; safe drop-off and pick-up provision; provide outdoor facilities for sport and recreation; and avoid conflict with adjoining uses.	Section 8.0 and Section 24.0
Policy TP37 - Health	The policy seeks to address health inequalities, increase life expectancy and improve quality of life via satisfaction of a range of criteria including; encouraging physical activity; improving air quality and reducing noise; good quality, well designed housing; health care facility provision; safe residential environments; improving road safety; addressing climate change and making provision for open space and allotments.	Whole DAS
Policy TP38 - TP41 - Connectivity policies	This set of policies deal with the provision of a sustainable transport network and provide objectives around the delivery of walking, cycling and public transport.	Section 19.0
Policy TP45 - Accessibility Standards for New Development	This policy sets the accessibility standards for new developments which are likely to generate, either solely or in combination with other related developments, more than 500 person trips per day. The policy specifies the accessibility features expected within the development in terms of public transport, cycling and pedestrian provisions, and the relationship to local services and facilities.	Section 19.0

ADDITIONAL NATIONAL BEST PRACTICE GUIDANCE

13.11 In addition to the Council's policies the following relevant nationally recognised design guidance has been considered in the development of design principles for the Outline Application scheme:

- Building for Life 12 (Design Council, January 2015)
- Manual for Streets 1 & 2 (DCLG March 2007 and September 2010)
- Secured by Design: New Homes 2014 (ACPO, 2014)
- Fields in Trust - Guidance for Outdoor Sport and Play Beyond the Six Acre Standard, England (October 2015)

Supplementary Planning Guidance	
Langley Sustainable Urban Extension SPD (April 2019)	This document provides a summary of the Council's aspirations for Langley alongside guidance on the strategic moves that any proposals should aim to achieve. Table 4 provides a review of the strategies required by the SPD and where they are responded to either in this DAS or within other documents submitted with the Application. Figure 56 - Figure 60 also demonstrate how the proposed scheme concepts comply with the objectives of the SPD diagrams.
Access for People with Disabilities SPD (2006)	The document provides guidance on the principles of inclusive design within new developments
Car Parking Guidelines SPD (2012)	The document sets out the car parking standards for development in Birmingham. These standards include parking for people with disabilities and for cycle and motorcycle parking.
Places for All SPD (2001)	This document was produced as a response to the lack of general design guidance relating to all types of development throughout Birmingham City. It is a document that should be read in concert with the Places for Living SPD.
Places for Living SPD (2001)	This document is aimed to be both inspiring and positive in encouraging quality residential proposals and provides a series of design standards that are still referenced by development control officers today.
Public Open Space in New Residential Development SPD (2007)	The aim of this SPD is to give guidance on the city's requirements for public open space. Types of open space include: general public open space, equipped children's play and youth facilities.
Draft Birmingham Design Guide	The draft Birmingham Design Guide comprises a set of principles and supporting 'City Manuals' providing guidance on city identity, streets and spaces, landscape and green infrastructure, healthy living and working, efficient design and future proofing.

Policy / Guidance (Draft Development Management in Birmingham DPD (Oct 2019)	Summary	Location of Response to Policy in DAS
Policy DM1 Air quality	The policy encourages development to contribute to the management of air quality and provide mitigation measures to help to reduce and/or manage air quality impacts.	Section 9.0 and Section 29.1
Policy DM2 Amenity	The policy sets out that all development will need to be appropriate to its location and not result in unacceptable adverse impacts on the amenity of occupiers and neighbours.	Section 10.0, Section 24.0 and Section 25.0
Policy DM4 Landscaping and trees	The policy seeks to provide high quality landscapes and townscapes that enhance existing landscape character and the green infrastructure network, contributing to the creation of high quality places and a coherent and resilient ecological network. Development proposals must also seek to avoid the loss of, and minimise the risk of harm to, existing trees, woodland, and/or hedgerows of visual or nature conservation value.	Section 25.0
Policy DM5 Light pollution	Development incorporating external lighting should make a positive contribution to the environment of the city and must seek to avoid or mitigate any potential adverse impacts from such lighting on amenity and public safety.	Section 24.0
Policy DM6 Noise and vibration	The policy sets out requirements in relation to new development, to reduce exposure to noise and vibration. Noise sensitive development such as residential and schools must be accompanies by an assessment of impact and details of necessary mitigation.	Section 21.0
Policy DM10 Standards for residential development	The specific standards sets out in the policy relate to the size of dwellings, the provision of homes in accordance with Building Regulation Part M4 (2), separation distances, the provision of outdoor amenity space, and provision of adequate outlook and daylight for new dwellings.	Section 18.0 and Section 24.0
Policy DM14 Highway safety and access	The policy requires development to ensure that the safety of highway users is properly taken into consideration and that any new development would not have an adverse impact on highway safety.	Section 19.0
Policy DM15 Parking and servicing	The policy encourages parking and servicing that contributes to the delivery of an efficient, comprehensive and sustainable transport system. Parking should be designed to be secure and fully accessible to all users and adhere to the principles of relevant Supplementary Planning Documents.	Section 19.0 and Section 24.0

Table 4. Langley Sustainable Urban Extension SPD - Requirements Summary

SPD Requirement	Scope Of Requirement	Location Of Response
Langley Design Framework / Design Codes	To set out the design principles that will guide future development, including residential density, blocks (including edges), parking, built form and appearance of the Neighbourhoods, access and movement, and key public spaces. It should also include the approach to public art. Images should be included to illustrate these principles and how they relate to the overall masterplan (including 3D models, building elevations, street scenes, precedent images, and others as necessary). Design codes for specific sites may be used as an alternative or to support the Framework approach where details are not yet available.	Average density range is provided in Section 18.0 and individual net density ranges per character area are provided in Section 24.0 Principles around blocks, parking, built form and appearance of each character area, site wide access and movement and the main public open space strategies are also provided within the Masterplan Framework Section 24.0 of this DAS. 3D illustrations across various neighbourhood character areas, including the District Centre are also provided within Section 24.0. The intention to provide design codes post outline planning permission, is confirmed in Section 24.0 and Section 15.0.
Community Development and Governance Strategy	This will set out how local people and councillors, the Town Council and businesses will be involved in the development and creation of the new community. Stakeholders will be encouraged to have a meaningful stake supported by a community development and culture programme (developer funded) to support residents to meaningfully deliver well-being, social networks, groups and activities during all stages of development. This will need to have regard to existing communities in the area, and should be co-ordinated through key representatives. A Community Liaison Officer could be an effective way to deliver this. Future ownership and management of community assets will also provide opportunities to help build a sustainable new community. The approach will need to be phased and reflect the growth of communities on the Site, including a clear approach for keeping people up to date on progress of the development and impacts in the local area during construction. The approach should provide a structure to ensure a successful community on the Site in the long term.	The detailed designs for the new development proposals, which include the community facilities such as schools, open spaces, and other social infrastructure, will be the subject of community engagement during the planning process to assist with informing the design and functionality of these spaces and assets. There will be opportunities for community groups and organisations to meet and participate in informal and formal social and sporting activities within the community buildings and open spaces to be provided within the development. There may be opportunities for residents, businesses and Councillors to get involved in informing the decision-making in relation to the operation, management and maintenance of the community facilities as part of any Management Company operation on the site. It is also proposed that there will be a community liaison contact, which could be through the Management Company or as part of a separate function, who will act as the day to day point of contact for residents and businesses and will be able to organise social events for residents to participate in. These concepts are captured within the S106 Heads of Terms and the strategy will be developed in more detail as the proposals progress. Further info is located in Section 28.0 of the DAS.
Social Infrastructure Strategy	This strategy will need to maximise the coordination, co-location and delivery of schools, health care and other community facilities serving the Site. The approach will need to consider the likely community who will live on the development to ensure appropriate provision is made. It will need to have regard to impacts on existing facilities in the area, and demonstrate how the proposals will complement this provision. Clear trigger points to provide this infrastructure, linked to the delivery of new housing, will need to be made to ensure that essential services are provided at the right time.	The size and distribution and phasing of the education, health and community facilities has been informed by demographic profiling work and other technical input including assessment of existing provision. This is being carried forward into the S106 heads of teams (submitted under separate cover with the application), the content of which has been discussed with BCC Officers during the pre-application process. This approach to delivery is reflected in the proposed phasing summary at Section 30.0 of this DAS. The new social infrastructure being provided will create the additional capacity required to mitigate the impact of the development proposals at the time that it is required to avoid detriment to the capacity of existing services.
Langley Centre and Community Hubs	This should primarily focus on how the role and function of Langley Centre and the Community Hubs on the Site will be coordinated in a comprehensive manner. It will need to address the scale and type of shops and facilities that will be provided, which places them into the network of Centres within Birmingham.	Reference should be made to the Retail Planning Statement (submitted under separate cover with the outline planning application). Section 18.0 of the DAS outlines the range of uses which could be accommodated within Langley Central and the Community Hubs, this provides a level of flexibility to support response to market requirements at the time of delivery. The primary function of the local community hubs is the provision of community uses, but there is potential to also accommodate a small element of retail (Use Class A1 - A5) to meet local day to day needs. Within Langley Central the suggested range and potential quantum of uses has been categorised within the Retail Statement as equivalent to a District Centre within the Birmingham Retail Hierarchy. Design codes will also be prepared post outline planning permission for Langley Central mixed use community hub and each of the Community Hub areas. Section 30.0 details the intended content of the briefs and also engagement opportunities.
Housing Strategy	This strategy should set out how the mix, tenure and typologies of high quality homes will support the successful creation of healthy and inclusive communities. It will support the effective and coordinated delivery and management of affordable housing in a comprehensive manner throughout the Site, and set out how it will contribute towards the overall housing mix in each Neighbourhood.	Reference should be made to the Affordable Housing Statement (submitted under separate cover) which identifies the proposed number and tenure split of the affordable housing dwellings to be on a site wide basis following discussions with BCC Officers. The proposed delivery mechanism for the affordable dwellings has been set out within the S106 Heads of Terms. Section 18.0 of this DAS also provides an illustrative market mix and reiterates the affordable housing mix. These mixes will be refined as each reserved matters application comes forward and will be responsive to Design Code requirements for each character area/ neighbourhood.

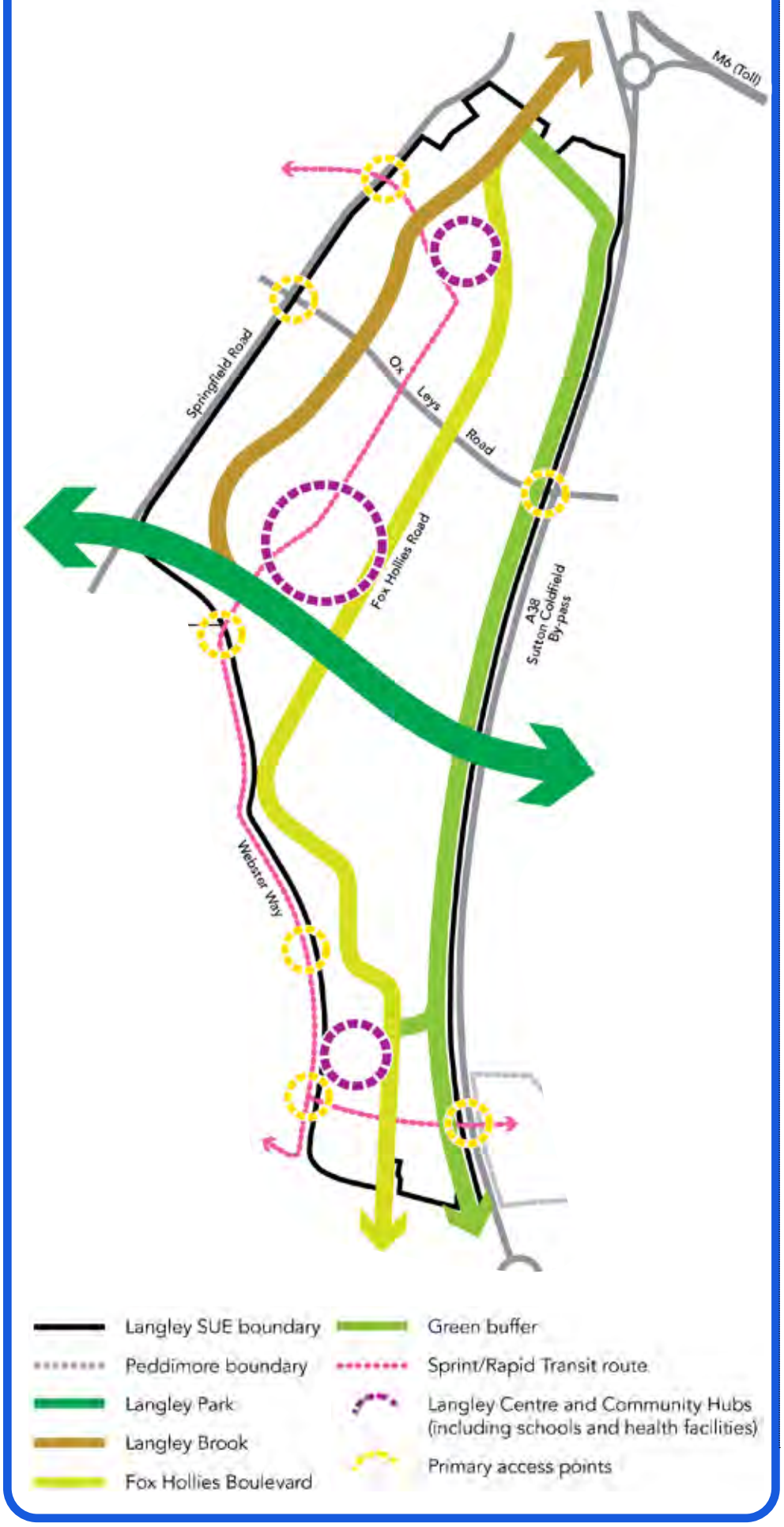
SPD Requirement	Scope Of Requirement	Location Of Response
Sustainable Transport and Movement Strategy	As a key requirement of the development, this strategy will cover all movements (including walking and cycling) from the development, both on and off-site, including links to shops, schools, green space, other facilities and the wider area. It will need to be underpinned by a detailed Transport Assessment, informed by the Sutton Coldfield transport model, and consider mobility options such as autonomous vehicles. A Travel Plan will be a key part of the strategy to promote the use of sustainable modes of travel, including the need to provide high quality routes during construction phases. It will also need to set out a suitable strategy for construction traffic movements linked to phased delivery of the development.	The outline application is underpinned by detailed Transport Assessment which is based on the SATURN Model; a Travel Plan and a Public Transport Strategy all submitted under separate cover. The design approach to sustainable transport and movement and the interconnectivity between the formal assessments and strategies are set out in Section 19.0 of the DAS.
Green Infrastructure and Heritage Assets Strategy	This will need to address all green infrastructure, including open space, landscape, the Sports Hub and other pitches, nature conservation sites and heritage assets. The strategy should set the role of each part of the network, from the major green infrastructure corridors to more localised areas, and how they will be delivered as part of a natural capital planning led network approach. It will need to set out the approach to existing assets and how they will be accommodated (including any mitigation).	Reference should be made to the Green Infrastructure Strategy submitted under separate cover. Further reference should be made to Chapters 13, 14 and 15 of the Environmental Statement and associated appendices which cover Landscape, Ecology and Heritage assessments. In addition Section 25.0 of the DAS provides a summary of the GI strategy which has been influenced by heritage inputs, and the Langley Design Framework section provides a details on how the opportunities and constraints relating to the existing assets have been positively accommodated and mitigated within the design.
Sustainable Drainage and Flood Risk	This needs to offer a long term sustainable solution which contributes towards the overall character of the Site, including the green infrastructure and movement networks. It will need to include flood risk assessment and potential opportunities to enhance the watercourses and reduce flood risk. This will need to comply with requirements for local water bodies under the Humber River Basin Management Plan. The strategy will need to demonstrate no additional spill to the water environment, including any cumulative impact.	Reference should be made to the Flood Risk Assessment, and the surface water drainage strategy submitted under separate cover. The assessment of impact is contained within Chapter 9 of the Environmental Statement. Section 23.0 of the DAS provides a summary of the mitigation requirements, which include significant use of Sustainable Drainage features, and how these have been positively woven into the GI strategy to mutually benefit and positively enhance environmental and engineering function both on and off Site.
Energy and Utilities Strategy	Developers will need to liaise closely with relevant agencies and service providers to ensure that sustainable power, water, waste and communications services are delivered when required and maintained. This should also be explored with the requirements and proposals associated with Peddimore. There should be a focus on incorporating a long term low/zero carbon strategy, underpinned by a Fabric First approach to high quality healthy buildings. Current and emerging technologies should be considered for future needs, and provided for wherever possible (e.g. electric vehicle charging) at construction or through cost effective retrofit.	Reference should be made to the Energy and Utilities Statements submitted under separate cover, however a brief summary is provided under section 29.0. Conversations with the utilities providers have identified the existing network capacity and additional infrastructure required to service the Site demand. This has informed the approach to site phasing and will inform the future Infrastructure Delivery Strategy.
Digital Infrastructure Strategy	This will to need to accommodate wired and wireless infrastructure that contributes to overall place-making and the quality of life of residents. It should provide high speed ubiquitous internet access that is suitably integrated into the design and management of the development. It will need to demonstrate a long term view which can accommodate ongoing best practice and innovation in the industry.	The Site will comply with the industry standard for delivery of digital wired and wireless infrastructure. Details will follow at Infrastructure Delivery Application Stage. The design will accommodate an ability to future proof the network.
Waste Management Strategy	This should set out a site management plan for how waste will be managed during construction, and once homes and other space are occupied. Consideration should be given to the most efficient and effective way for waste to be collected, including the use of central collection points.	Strategies submitted with the outline planning application set out overarching waste management process to achieve legislative and good practice in the separation, storage and collection of waste arisings during the construction and operational stages of development. New homes will each be equipped with segregated waste bins to enable the separation of recycling from refuse; suitable external hard surfaces to accommodate storage containers; and wheeled bins provided for refuse, recycling and garden waste. The distance from the curtilage of residential properties to refuse collection points will not exceed 25m. Similar provisions will be made for flats. The waste from non-residential uses will be stored in dedicated containers for refuse, recycling and where appropriate, organic/food waste and hazardous waste streams. Provision will be made for waste to be stored in larger, four wheeled Eurobins in common practice with commercial developments, or suitable containers for the waste generated. The submission of detailed site waste management plans, building on the principles outlined in the strategies, can be secured via suitably worded planning conditions.

SPD Requirement	Scope Of Requirement	Location Of Response
Local Employment Strategy	Through the construction phase and the operation of social and commercial facilities on the development, there is the opportunity to develop skills and promote jobs, work experience and apprenticeships for local people (BDP policy TP26). The optimum way to deliver the right pathways into training and employment as part of an inclusive strategy will be explored with developers, contractors and their supply chains, local training providers and the City Council. The approach should consider an on-site jobs and skills training hub within Langley Centre or Community Hubs, with the potential for this to become a learning hub once the development is complete. These arrangements should be coordinated with those at Peddimore.	The Consortium is committed to ensuring that the benefits of the Langley SUE development cascade to local people and that opportunities for the local workforce are maximised. The Consortium is seeking to agree appropriate initiatives with the City Council and others, and a suitable way for these to be secured through the outline planning application.
Development Phasing and Infrastructure Delivery	A comprehensive site-wide delivery and infrastructure phasing plan will need to accompany the development. As the Site is in multiple ownerships, the strategy will need to put in place an approach which shows how the development will be funded and delivered across all of the allocation. It will need to address how these costs (including ongoing maintenance and off-site requirements) and land required for social and physical infrastructure (including schools and public open spaces) will be split proportionally to ensure they are equitable between all landowners and developers bringing development forward on the Site. Importantly the plan will also need to demonstrate how infrastructure will be brought forward to support the creation and growth of the residential communities, particularly in the early phases of the development. This includes long term low/ zero carbon energy solutions that benefit from and drive forward the ongoing national energy system transformation. The strategy could include expansion of existing facilities in the local area, such as school provision, or the combined use of facilities on-site as an interim measure. This site-wide strategy will be developed with key partners, including all landowners and taking into account other matters to secure and coordinate delivery. This will include consideration of relevant standards and innovative long term ways to provide sustainable infrastructure, and agreement on trigger points for its provision. This will be agreed through the planning application process, and coordinated with Peddimore in appropriate ways.	A phasing strategy summary indicating the intended sequence of development and relationship to the delivery of infrastructure and facilities is provided in Section 30.0.
Management and Maintenance	Through the Site-wide strategies, developers will need to demonstrate that a long-term strategy and business plan is in place for the governance, funding, management and upgrade of infrastructure and assets. Infrastructure to be adopted by the City Council must be built to appropriate standards, with funding provided by the developer to cover maintenance and other appropriate costs (such as the management, implementation and monitoring of Travel Plans), with the period of payments to be agreed with developers. The City Council will adopt the highway infrastructure.	The Consortium is still in discussion with Birmingham City Council regarding the adoption of infrastructure. Social and community infrastructure that will not ultimately be managed by Birmingham City Council will be transferred to a Management Company or other appropriate organisation, such as a Community Development Trust, which will receive seed funding at the outset to support the set up and initial operation of the organisation during the start of the development process. The aspiration is to have a single organisation to manage the social infrastructure on a site-wide basis. This concept is captured within the S106 Heads of Terms and the strategy will be developed in more detail as the proposals progress.

Figure 58. Proposed Design Compliance Against Langley SPD Diagrams - Big Moves

LANGLEY SPD - BIG MOVES PLAN

13.12 The SPD Big Moves Plan set out seven elements that the Council considered to be fundamental to the structure of the Site in order to support an exemplar sustainable development.



CONSORTIUM CONCEPT RESPONSE

13.13 The Consortium's plan illustrates, in a similar diagrammatic format, how the masterplan concepts and the resulting parameter plans deliver on each of the seven 'big moves' elements.

13.14 The only real point of difference between the SPD plan and the Consortium's response has been the location of the southern most community hub. The rationale for this adjusted approach is described in Section 8.0 of this DAS.

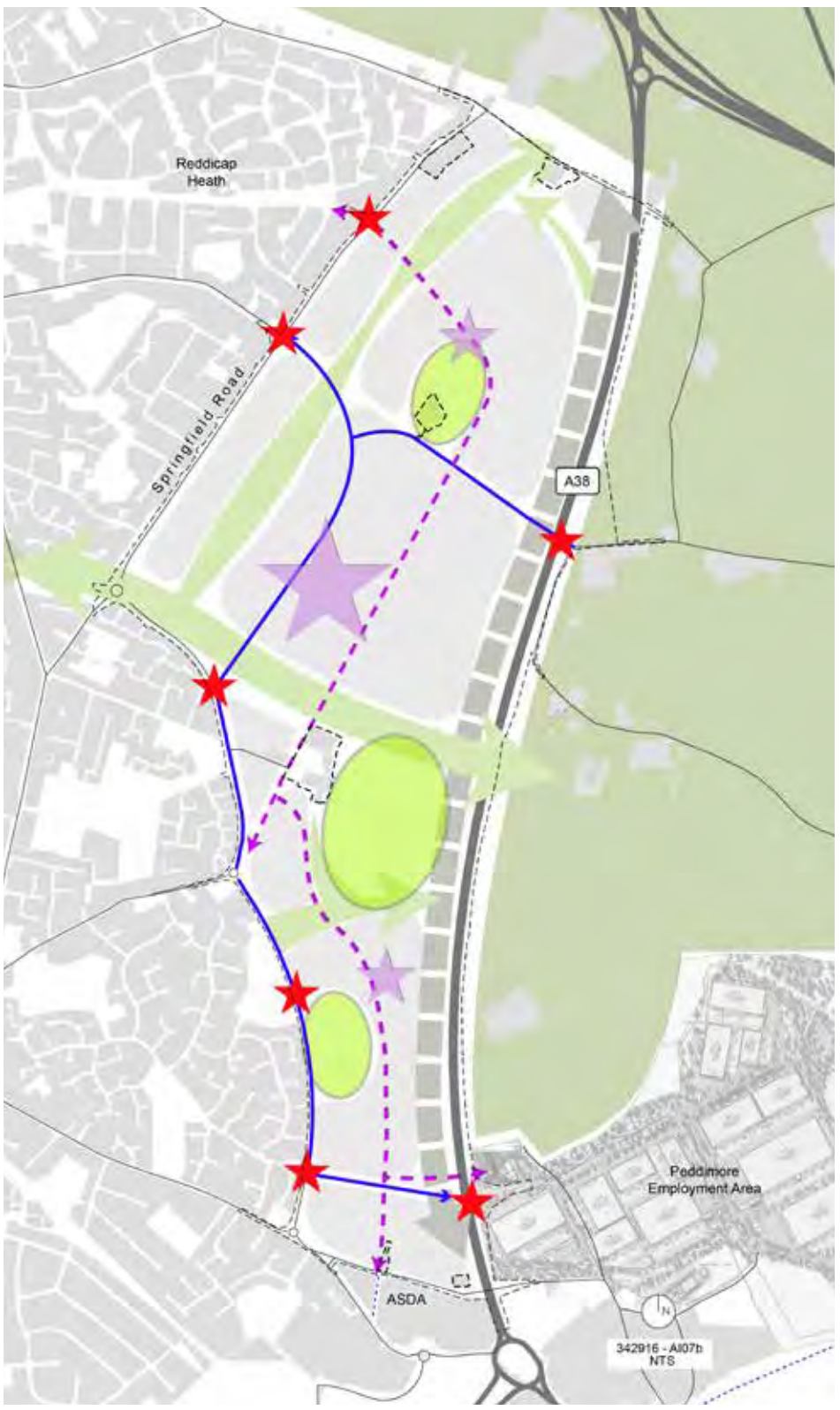
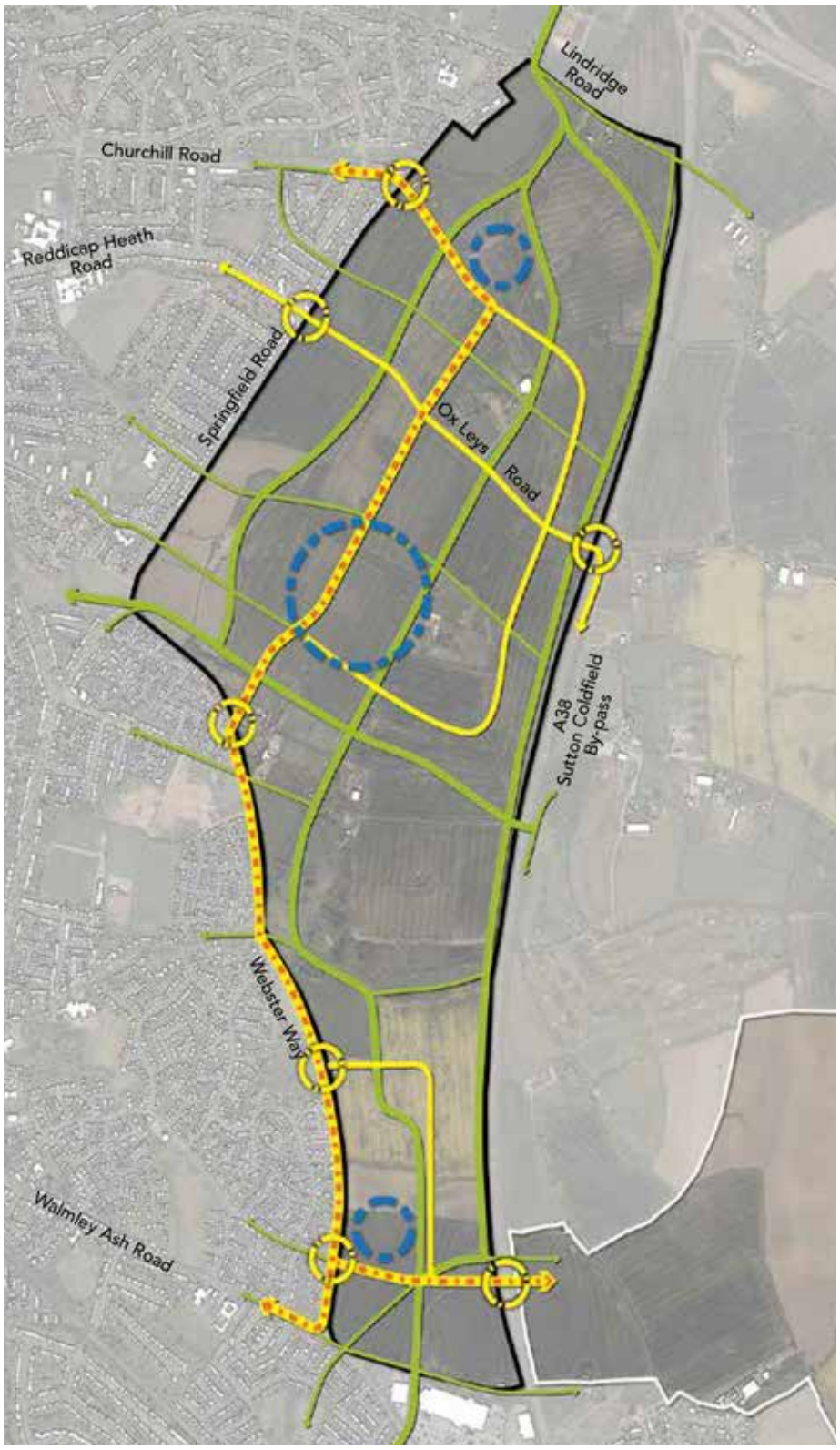


Figure 59. Proposed Design Compliance Against Langley SPD Diagrams - Connectivity

LANGLEY SPD PLAN - CONNECTIVITY

13.15 The SPD Connectivity Plan seeks to establish a movement framework and hierarchy around the Site which connects the existing and new communities to Langley Central and the Community Hub by a range of movement modes but predominantly sustainable options.



CONSORTIUM CONCEPT RESPONSE

13.16 The Consortium's plan confirms a very similar vehicular and pedestrian movement network utilising the same junction positions. By contrast to the SPD drawing the Consortium have refined the approach adding additional road hierarchy information. However, the principle of the network is comparable. It is also expected that both primary and secondary routes will have the ability to facilitate a range of bus services including Sprint, should it be delivered in the future.

13.17 Some points of difference do exist between the Council's SPD plan and the Consortium's concept plan in terms of the pedestrian network. However within the illustrative design proposals in this DAS additional leisure routes and street connections are proposed which support the achievement of the SPDs design intention.

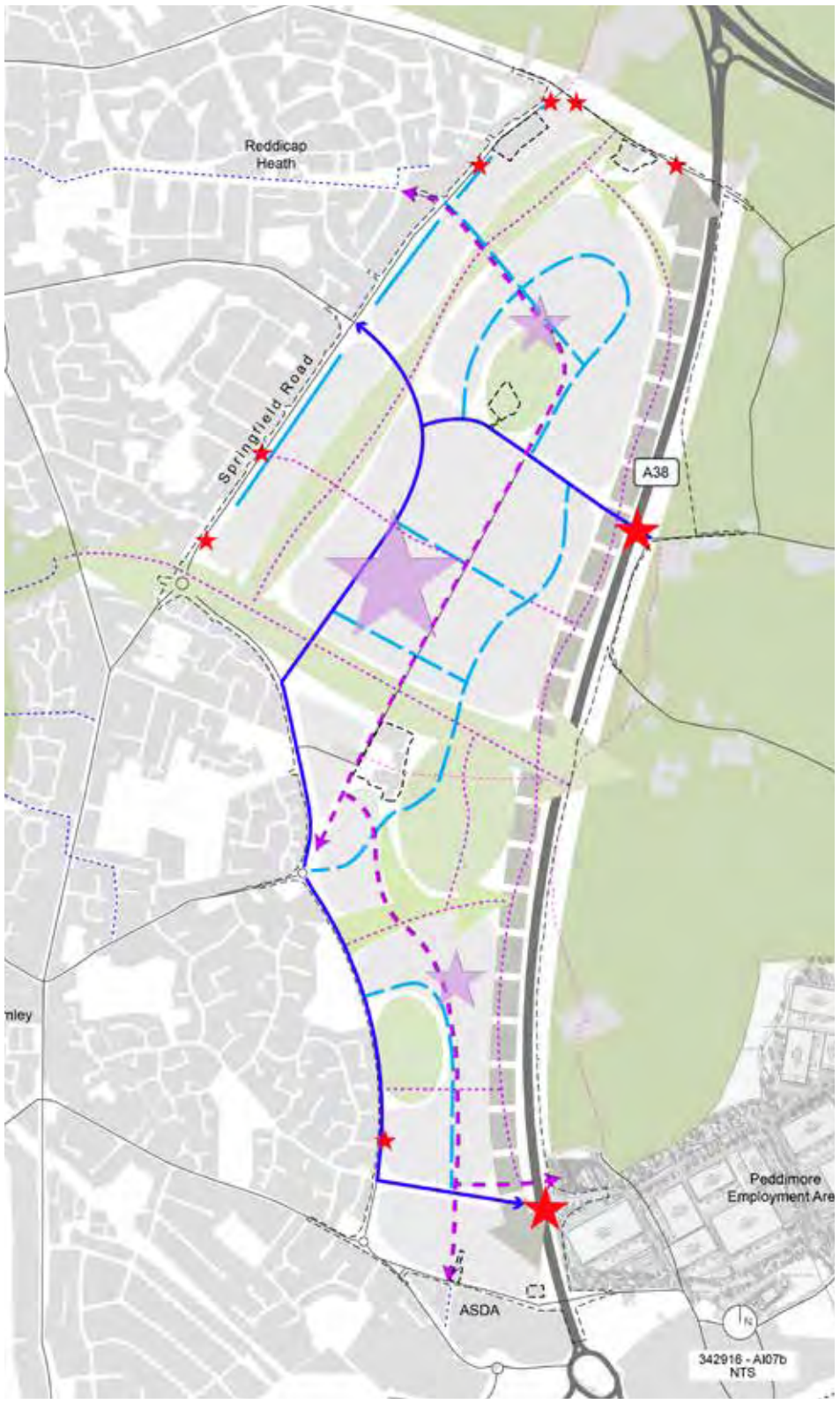
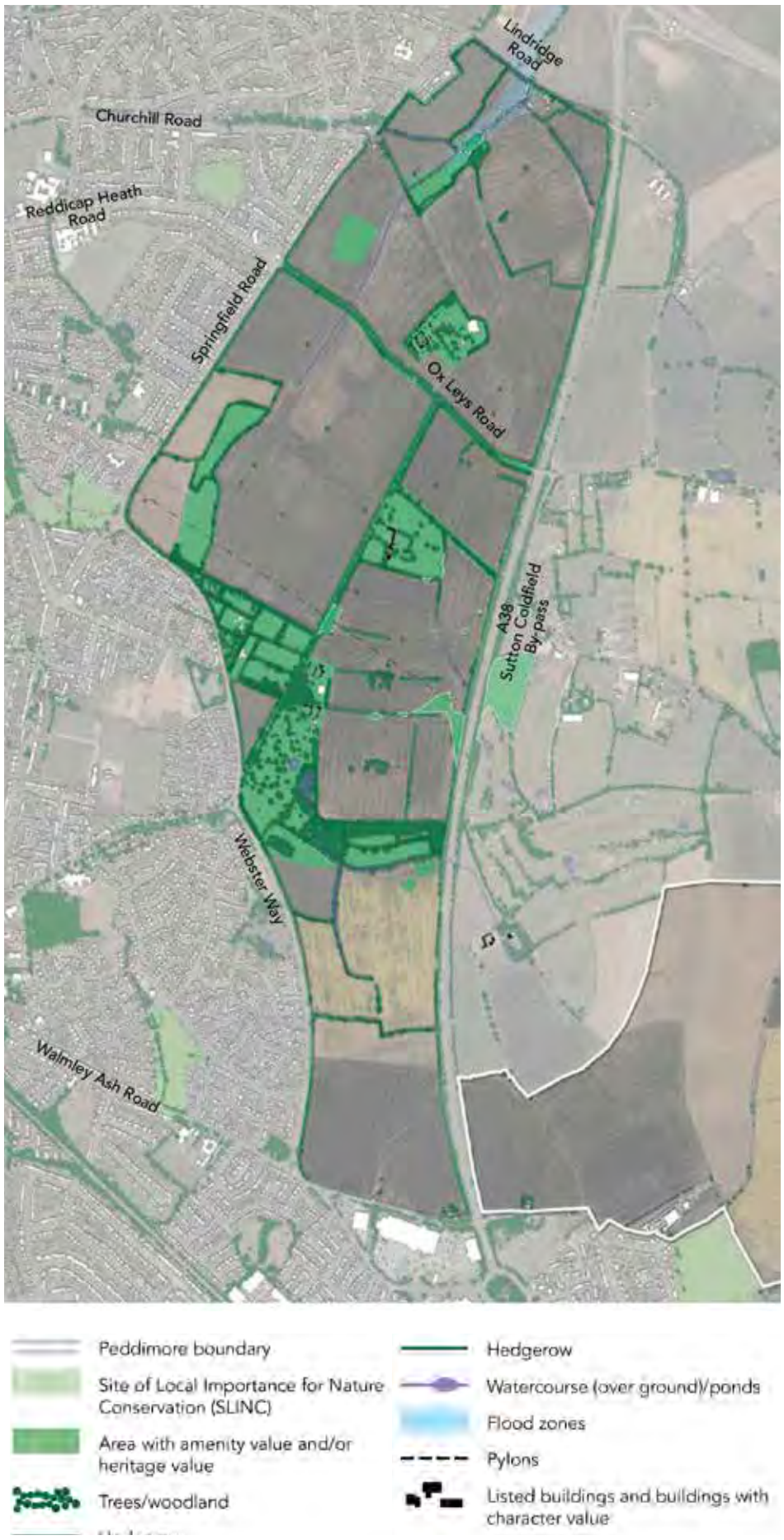


Figure 60. Proposed Design Compliance Against Langley SPD Diagrams - Green Infrastructure and Features

LANGLEY SPD - GREEN INFRASTRUCTURE AND FEATURES

13.18 The SPD Green Infrastructure and Features Plan identifies a series of features and assets on the Site gathered from desk based studies. The accompanying SPD text encourages development to be shaped by existing topography, watercourses and ponds, trees, hedgerows and wildlife habitats [SPD Plan 5}, making a positive contribution to the detailed design of the urban extension. These green assets should be retained and enhanced unless there are overarching reasons why this is not possible, and impacts should be minimised and fully mitigated to ensure there is a measurable net gain overall on the development.



CONSORTIUM CONCEPT ELEMENTS COMPLIANCE

13.19 The Consortium's concept plan illustrates the strategic blue and green infrastructure network for the Site which has a level of additional detail informed by technical survey work and strategies.

13.20 Two areas of departure from the SPD plan relate to proposals around Langley Gorse and also the area of land to the south of Fox Hollies House. Both areas have been the subject of detailed heritage research and analysis; desktop archaeological research & analysis and landscape analysis. The findings of each have confirmed that these areas have capacity to support sensitively designed development, the principles of which are set out in this DAS at Section 24.0.

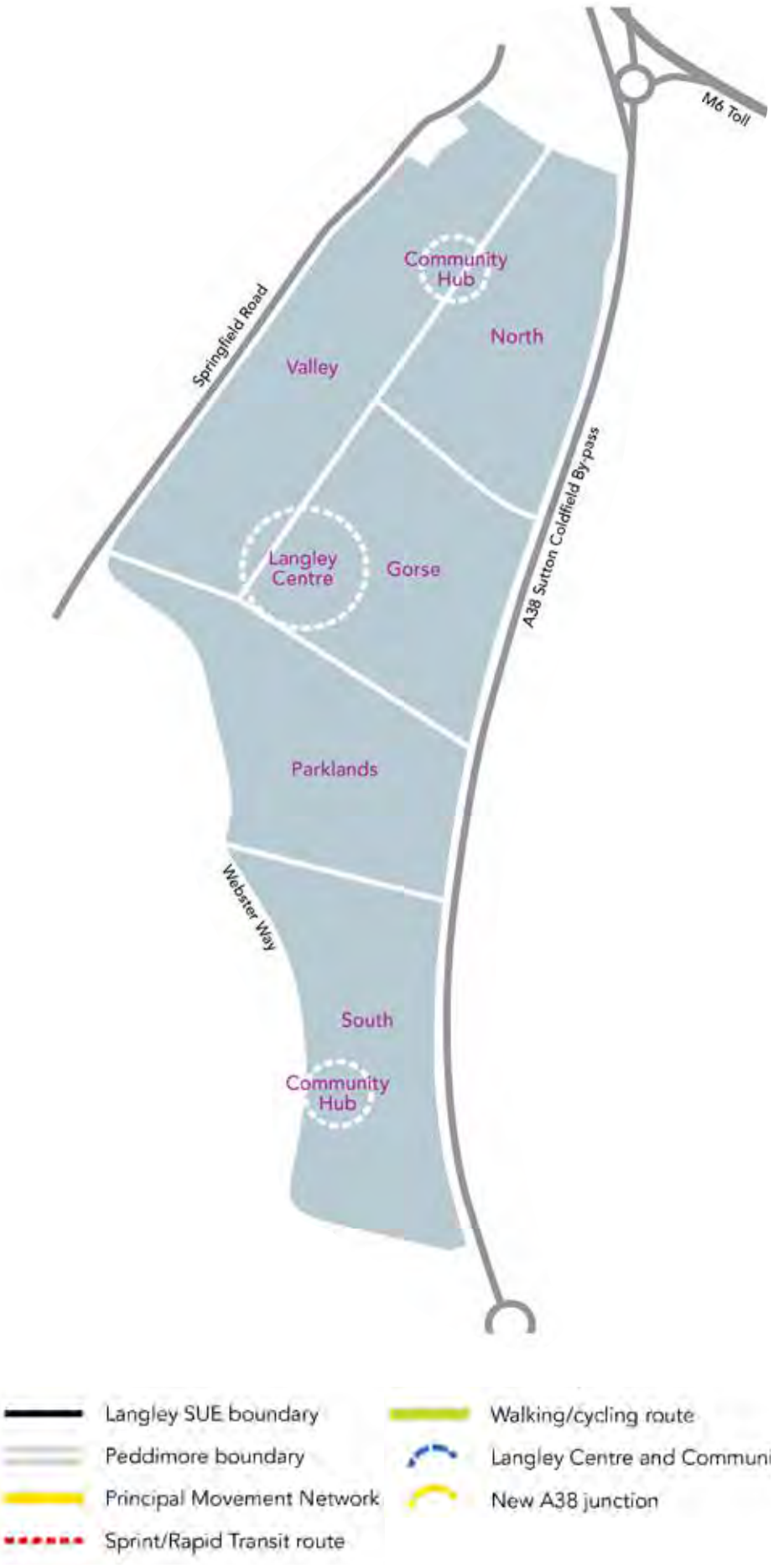
Figure 61. Proposed Design Compliance Against Langley SPD Diagrams - Distinctive Neighbourhoods

LANGLEY SPD PLAN - DISTINCTIVE NEIGHBOURHOODS

13.21 The SPD identified a very high level strategy for creating distinctive differences between parts of the Site. The intention of the approach is to:

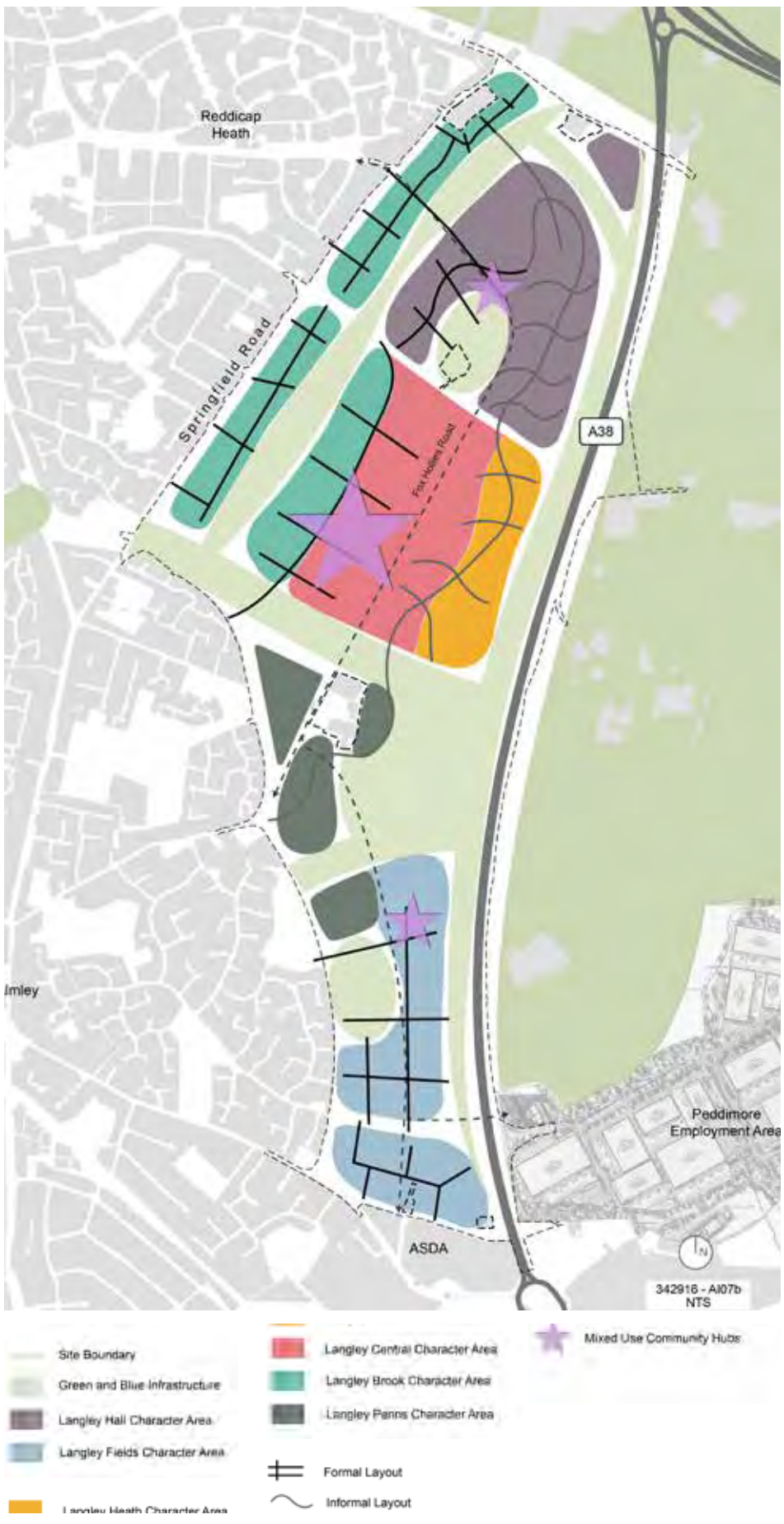
- support successful place making; and
- help support how people live and interact within their local area, fostering community cohesion.

13.22 The SPD recognises that character will arise from the local context, including topography, landscape and heritage assets; and from new carefully considered design of buildings and public spaces.



CONSORTIUM CONCEPT ELEMENTS COMPLIANCE

13.23 The Consortium's approach has been the creation of seven character areas/ neighbourhoods each of which respond to their own contextual and site specific features, and in particular topography, landscape, heritage and future land use features. These areas will create high quality distinctive neighbourhoods for the new community.



DESIGN EVOLUTION, CONSULTATION & ENGAGEMENT

DESIGN EVOLUTION, CONSULTATION & ENGAGEMENT

The preparation of the submitted outline application has been underpinned by significant inputs from a range of on and off site technical constraints, inputs from specialist consultants, and also extensive stakeholder and community engagement and consultation. This section of the DAS provides a summary of the main stages of design evolution, the influences for the changes and how these have been articulated in the design approach advanced in the Outline Application submission.

14.0 DESIGN EVOLUTION

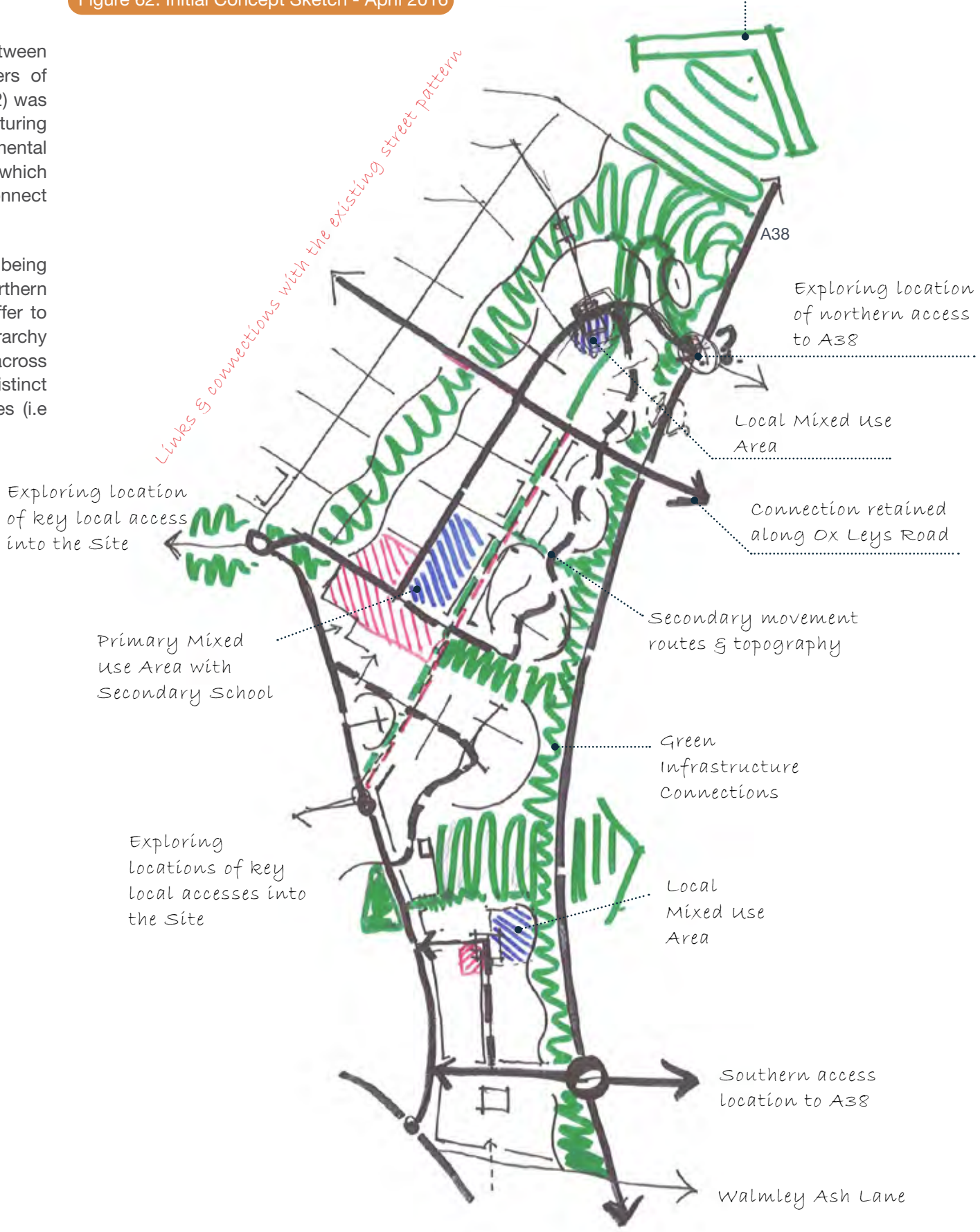
APRIL 2016

14.1 At the design inception of the project in April 2016, a series of early site investigations had been commissioned by the Consortium; the findings of which were collated to inform an initial more detailed site constraints plan. This plan highlighted a number of areas which challenged the City's commissioned Masterplan by David Lock Associates (DLA) and these findings were reported back to the City.

14.2 Notwithstanding the correspondence between the City and the Consortium regarding matters of principle, a very early concept sketch (Figure 62) was prepared. This explored some high level structuring principles to respond to the identified environmental assets; create a hierarchy of movement which complemented the assets; and sought to connect potential development areas.

14.3 At this time a series of aspirations were also being discussed including the potential to form a northern access onto the A38; creating a landscape buffer to respond to A38 noise levels; and creating a hierarchy of three mixed use areas spaced equidistant across the Site to support the formation of three distinct neighbourhoods with strong community focuses (i.e schools).

Figure 62. Initial Concept Sketch - April 2016



SKETCH MASTERPLAN - APRIL 2016

14.4 From the concept a very early sketch masterplan (Figure 63) was prepared which translated the main structuring thoughts around the constraints and opportunities and started to size up some of the main development features such as schools and mixed use areas.

14.5 This exercise began to highlight a variety of matters, as annotated on the figure, which required further technical advise and consideration. As such, the consultant team started to test some assumptions and requirements. For instance:

- The potential to reroute the overhead 132kV line and the pylon towers;
- Identification of surface water drainage requirements; and
- Ability to form appropriate accesses from the existing street network to the west into the Site.

Figure 63. Early Sketch Masterplan - April 2016

SKETCH MASTERPLAN - JUNE 2016

14.6 As further information and early strategies started to feed in, the masterplan sketch was updated. Again it raised additional comments and queries for the project team, as annotated on Figure 64.

14.7 At this time the 132kV line was retained in situ awaiting feedback from consultation with Western Power Distribution. This placed particular constraints around the location of certain features and also indicated that some parcels would not be deliverable.

14.8 Further reference to the DLA Masterplan (March 2016) was also made, and where possible ideas such as the formal open space beneath the power line, and preserving the potential to connect to the A38 north were tested.

Figure 64. Evolving Sketch Masterplan - June 2016

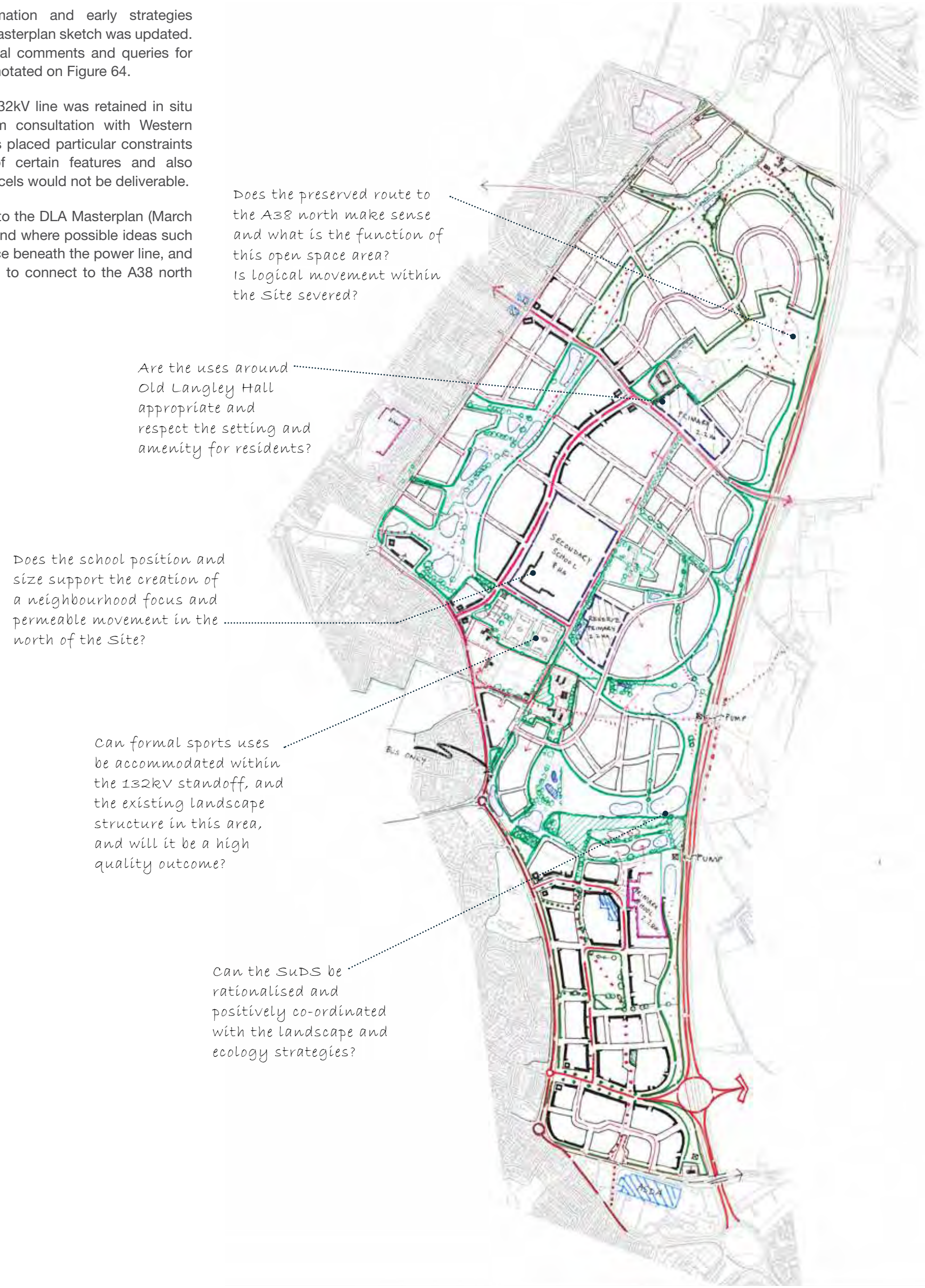


Figure 65. Evolving Sketch Masterplan - July - October 2016

SKETCH MASTERPLAN - JULY - OCTOBER 2016

14.9 Following a range of technical sessions and some further design refinement the evolution was paused while the capacity of the Site was tested.

14.10 The timing of the capacity test was closely aligned with conversations between the Consortium and the City Council around actual Site capacity and also the design principles being promoted in their emerging drafts of the Supplementary Planning Document (SPD) for Langley.

14.11 The production of this sketch alongside a summary document illustrating the Consortium's Emerging Design Principles (October 2016) demonstrated that the guiding principles in the resulting SPD would need to be clearly set out and that sufficiently flexibility included to support innovation and changing circumstances over the life time of the development.

14.12 Elements of the plan remained under review based on emerging design strategies from the technical team, particularity in terms of surface water drainage and highways.

Figure 66. Land Use and Key Movement Diagram - October 2016

OCTOBER 2016 - FEBRUARY 2017

14.13 During a Consortium and LPA meeting on the 25th January 2017, Officers of the Council stated that the City's Urban Design Team maintained their view that the Principal Infrastructure Route position shown in the DLA Langley Prospectus remained their preferred solution for movement within the Site.

14.14 This followed a guided Site visit on the 16th January 2017 and a contrary view expressed by the Consortium.

14.15 The Consortium remained extremely concerned about the impact of the Council's view particularly in terms of the impact on the function and success of Langley as a place. As such, a paper was prepared and submitted demonstrating the issues of concern. The plans Illustrated and described in Figure 67, Figure 68 and Figure 69, were produced by David Lock Associates (DLA) on the Council's behalf.

Figure 67. Langley Masterplan Key Diagram Extract - DLA

KEY DIAGRAM INDICATES (FIGURE 67):

1 The principal infrastructure link centrally positioned and cutting through the east to west tree and woodland/ tree belts and across meadow land.

2 A more centrally positioned road alignment within the residential development area to the north, providing a relatively even split of residential development either side of the road.

3 The principal infrastructure route spurring to the west, along the top of the woodland belt and then through the north to south woodland belt in order to connect to the roundabout junction at Thimble End Road, Fox Hollies Road and Webster Way.

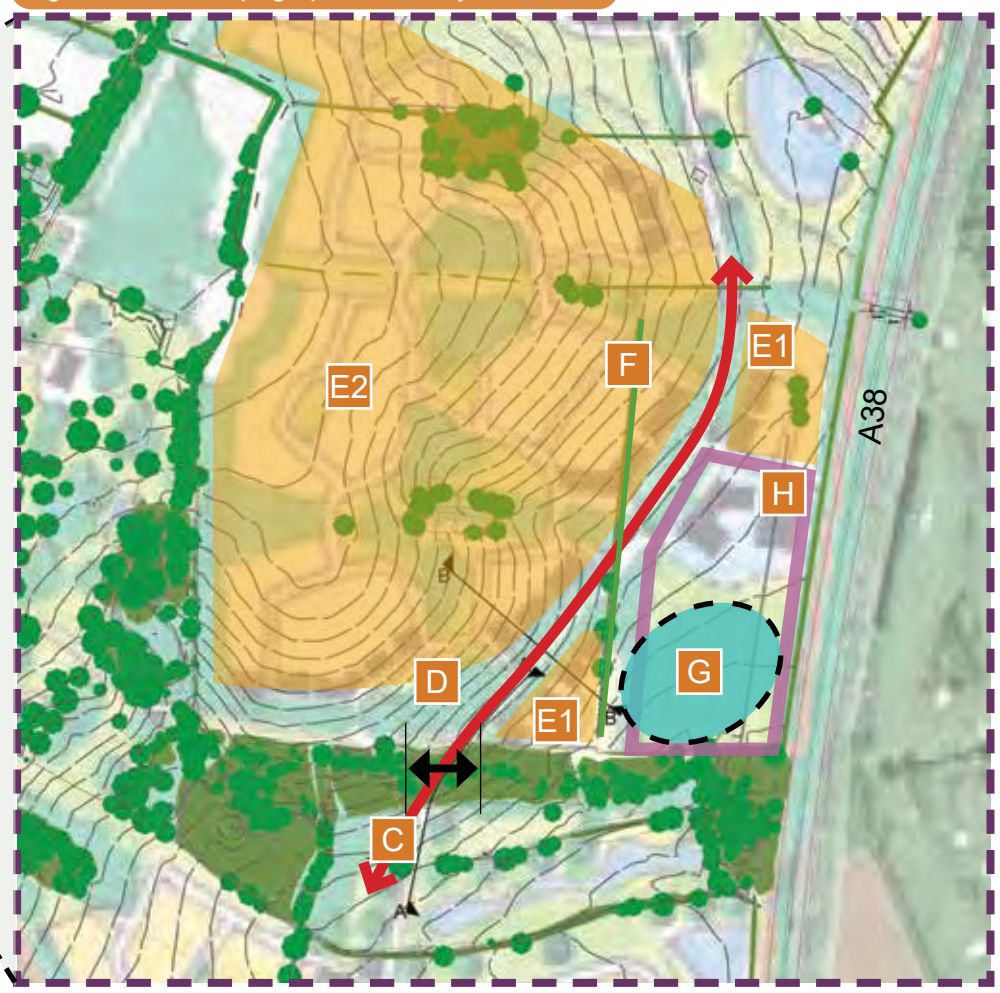
ISSUES THAT ARISE FROM THIS KEY DIAGRAM:

A Cut through TPO tree belts - loss of trees and impact to the character and a diminution of the contribution of this tree belt to the wider landscape setting.

B Existing site contours require sections of the principal infrastructure route to be at gradients of 1:14 and 1:16 with other sections to the west being as steep as 1:9. Birmingham Highways Officers indicated a preference for road gradients of 1:20 for the principal infrastructure route. While road gradients could be resolved through cut and fill this would require larger sections of the tree belt to be removed to support embankment formation, and will have implications for how adjacent development to the north of the tree belt will relate to the route. This approach is also considered to add significant and unnecessary economic & environmental costs to the development.

Figure 68. Langley Illustrative Masterplan Extract - DLA

Figure 69. With Topographical Survey Over - DLA



HOW THE DLA ILLUSTRATIVE MASTERPLAN HAS RESPONDED (FIGURE 68):

DLA Illustrative Masterplan appears to recognise some of the issues that arise from the Key Diagram and have responded in the illustrative layout as follows:

4 Moved the road alignment away from central position and swept the road alignment through the tree belt from west to east to try and run with shallower site contours where road gradients may be more acceptable. The need to move the road alignment highlights that the practical engineering requirements of the road are dictating the resulting development layout rather than other place-making principles referred to within the SPD.

5 A preferred requirement for school sites is for them to be placed on flatter site contours. The DLA Illustrative Masterplan appears to recognise this requirement by positioning the school east of the proposed road alignment where lower gradient site contours exist. As a consequence, the school placement is no longer the central focus of this future community.

ISSUES THAT THE DLA ILLUSTRATIVE MASTERPLAN CONFIRMS (FIGURE 69):

C The north to south road contours through the tree belt indicate sections of the road at inclines of 1:16 to 1:19 (see illustrative cross sections Figure 71).

D The splayed road alignment is likely to require a wider loss of trees from the TPO tree belt than the original straight line design principle indicated in the key diagram. The positive landscape function of the tree belt could be left largely intact should an alternative design approach to access & movement be adopted.

E1 & E2 The DLA suggested road alignment is no longer a centrally located feature of the development area to the north of the tree belt. The position creates a layout with limited and segregated development numbers to the east (E1) and the balance of residential development to the west (E2). To accommodate the road on the lower site contours, it is inevitable that the alignment will push eastwards away from the balance of the population, and ultimately adopt a distributor route character disconnected from place-making.

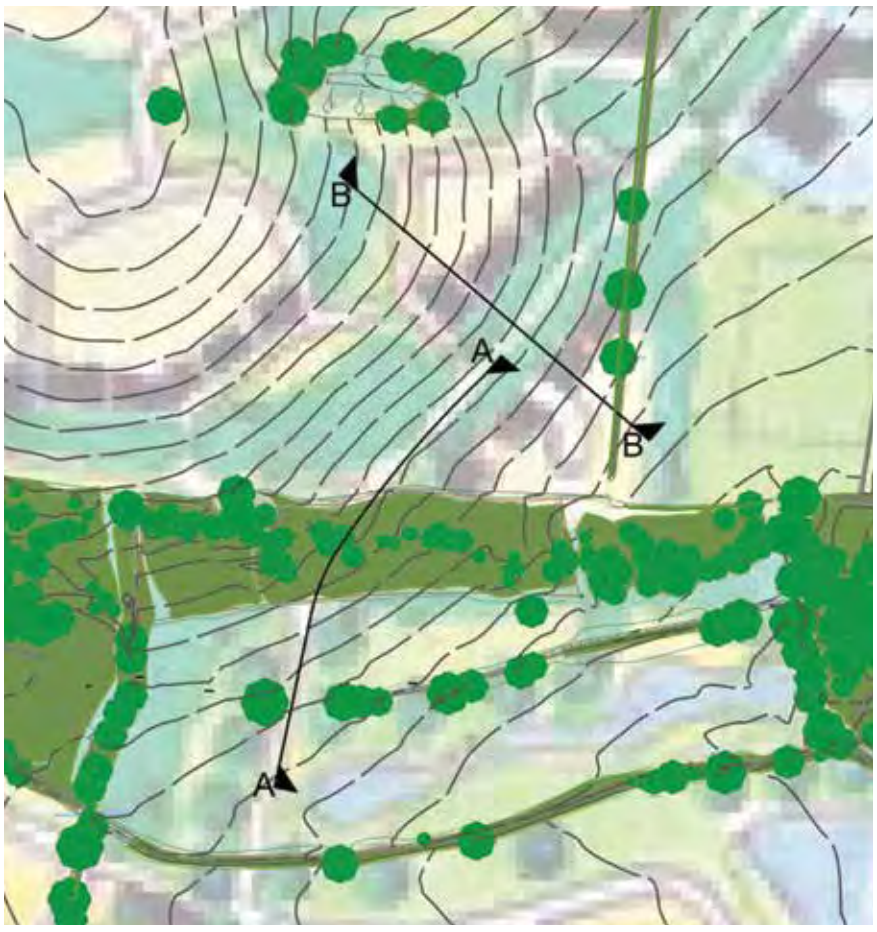
F The proposed road alignment and proposed development footprints to the north of the TPO belt necessitate the removal of the existing north to south hedgerow feature. A feature that could be retained as a positive landscape feature within an alternative layout approach.

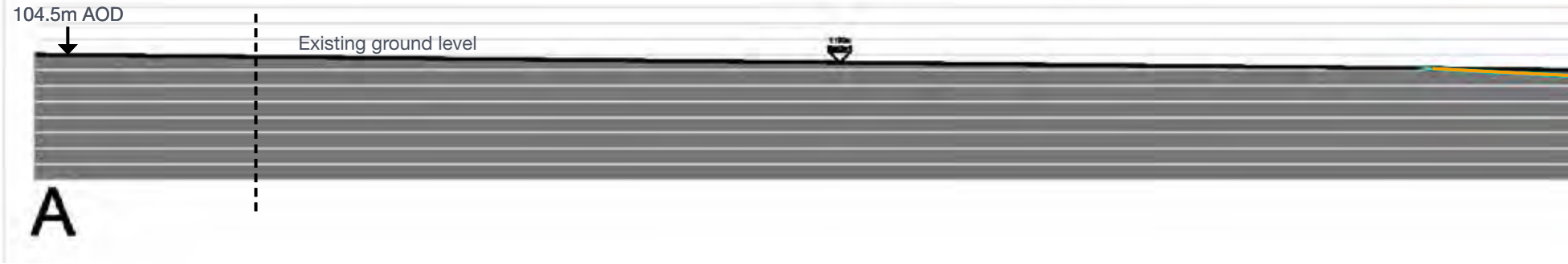
G The Consortium's technical survey work has confirmed the need for a large attenuation feature at the lowest point of the development area in order to attenuate surface water flows. This will not enable the location of the primary school in this area, moving it away from the spine road and contradicting other place making & walkability objectives promoted by the DLA prospectus document and latterly within the Council's Draft SPD.

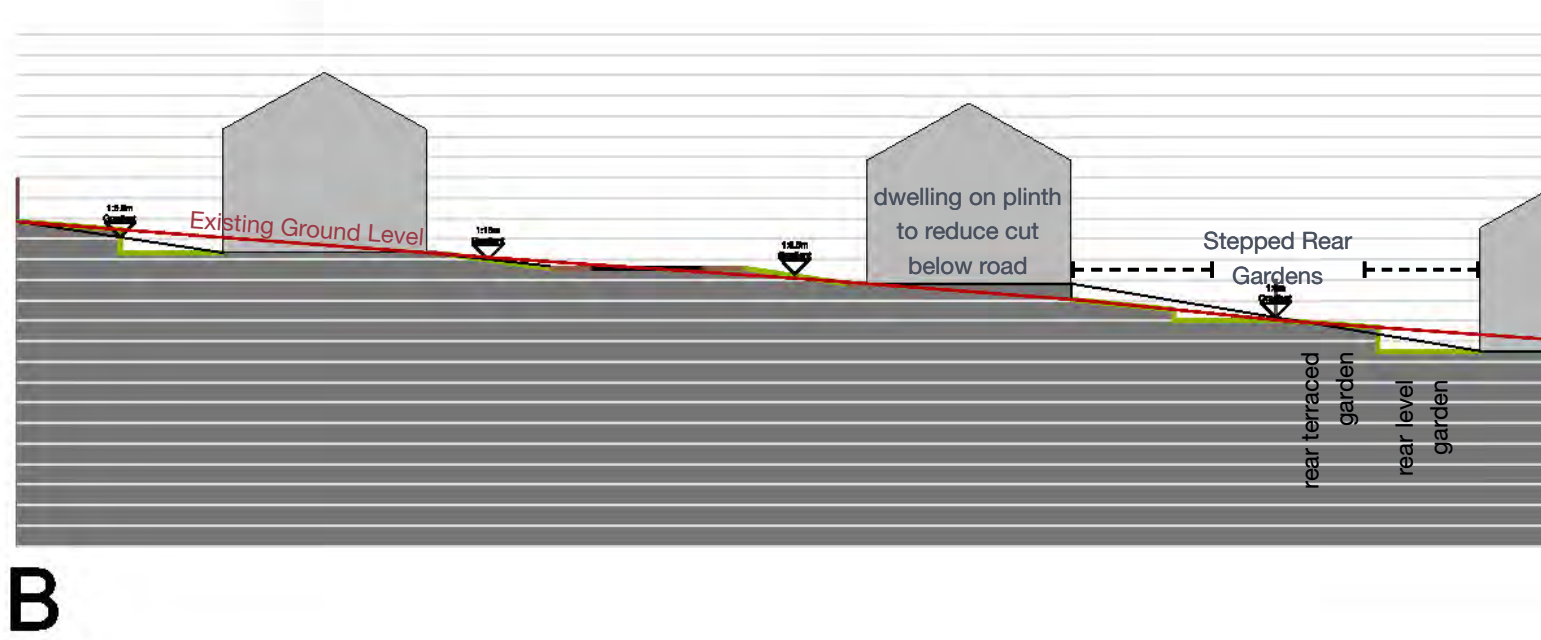
H Notwithstanding the drainage requirements, locating the primary school to the east of the principal traffic route through the SUE, and away from the balance of the population it is intended to serve, reduces the place-making focus that the school would otherwise have if it were more centrally positioned within the community it is intended to serve.

I The site contours and the position of the road requires areas of significant cut and fill in relation to adjacent development parcels (See Figure 72 cross sections. These have interpreted the illustrative DLA master plan and attempted to minimise cut and fill requirements where possible). Even with the best case cut and fill scenario, in the Consortium's view, this will have a negative impact on street character, enclosure, natural surveillance over the spine road, as well as the potential efficiency of the developable area.

Figure 70. Cross Section Analysis of DLA Illustrative Masterplan







Existing East to West Central Tree Belt

Figure 71. Cross Section A- A Through TPO Tree Belt Tree Belt

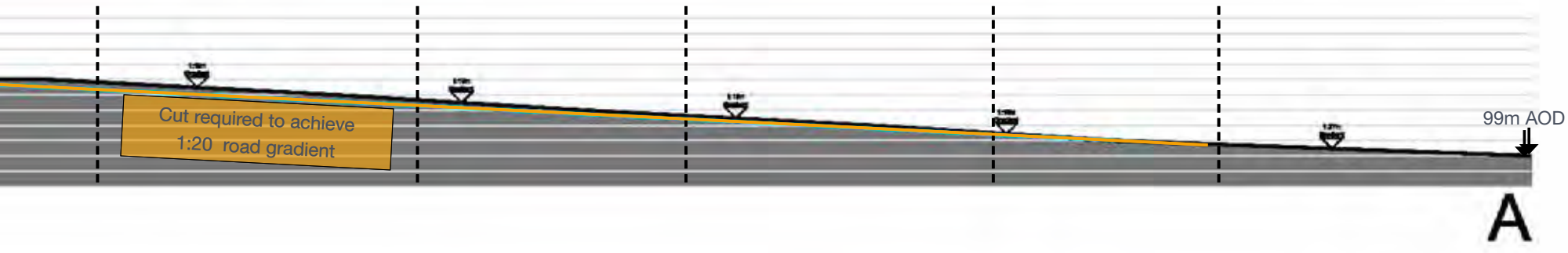
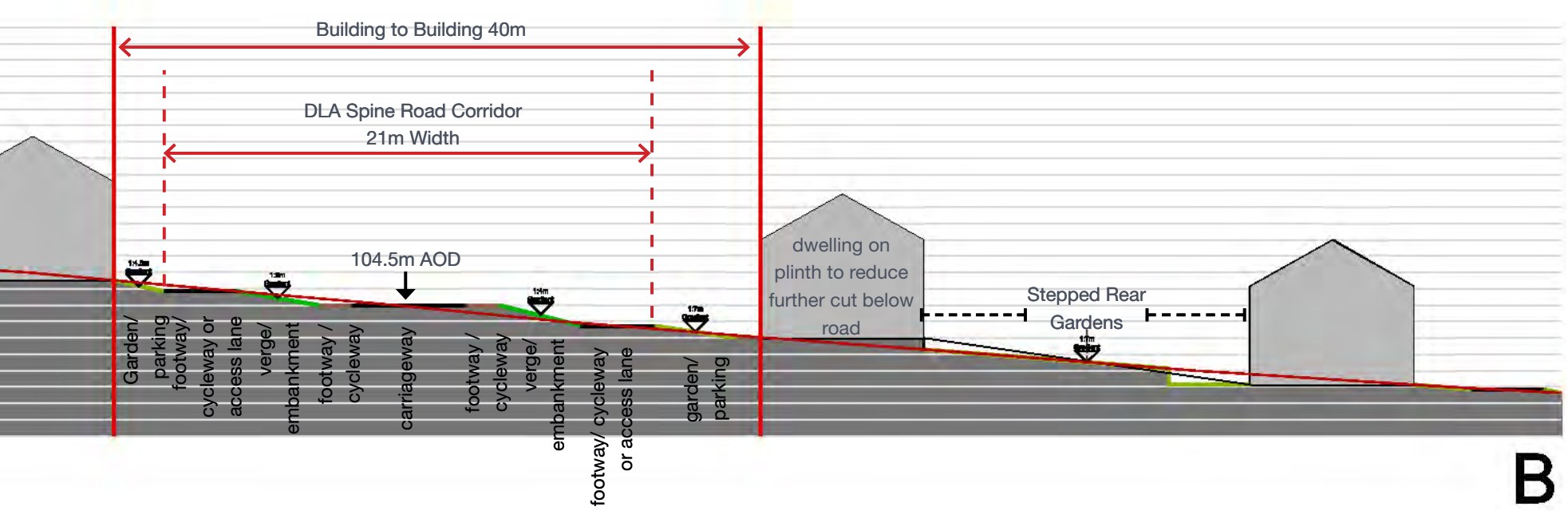


Figure 72. Cross Section B- B Through Spine Road to Dwellings Either Side



MARCH 2017 - AUGUST 2017 - DESIGN TESTING KEY AREAS OF THE SITE TO EVOLVE THE SKETCH MASTERPLAN

14.16 A period of sketch testing of various parts of the Site was undertaken (Figure 75) to support adjustments and refinements to the Sketch Masterplan. The site testing was critical to internal design evolution, separate from Council engagements. The culmination was the creation of a revised masterplan in August 2017 (Figure 76).

14.17 During this design stage it was agreed by the Consortium and through discussions with various stakeholders that:

- Subject to detailed engineering testing, the formation of a northern access onto the A38 should be explored from the reconfiguration of the existing Ox Leys Road bridge.
- A clear hierarchy of primary and secondary movement routes through the Site would be established along which bus movements could be accommodated.
- The surface water drainage strategy would still need further refinement.
- The playing pitches strategy would require further refinement in discussions with the Council.

Figure 75. Design Testing Key Areas of the Masterplan

Exploration of a Langley Local Hub Around a Key Node Point

Exploration of Mixed Uses Located along Primary Internal Route, Accessed from Thimble End Road.

Exploration of character creation on topographically constrained land

Exploration of character creation on topographically and heritage constrained land

Exploration of character creation on topographically, landscape and ecologically constrained land

Exploration of layout/ capacity on land heavily constrained by landscape, highways and Public Rights of Way

Figure 76. Sketch Masterplan, August 2017

AUGUST 2017 - OCTOBER 2018

14.18 During this extended period, the Consortium engaged in extensive and detailed discussions with Officers with regard to the emerging and evolving design principles within the Langley SPD.

14.19 At the same time, and in anticipation of preparing an outline planning application for the Site, conversations were also commenced with a range of stakeholders in relation to:

- Recreation and leisure facilities;
- SPRINT/ bus service provision;
- Public health and NHS strategies;
- Adult services;
- Education and education providers;
- Homes England funding opportunities:
- Future plans at ASDA;
- Land owned by Birmingham City Council's property services;
- Land owned/ controlled by Bellway Homes.

14.20 In March 2018 a series of public engagement events were held, and then in late October an independent Design Review was undertaken with MADE, further details of each are set out in Section 16.0. In addition, design workshops were held with the City Council Officers to bring them up to speed with the design evolution. Engagement with Officers is set out in Section 15.0.

14.21 Parallel to the above activities more detailed engineering testing including: detailed Langley Brook modelling; surface water modelling; noise modelling; transport assessments; ground modelling work; and utilities requirements were commissioned for the Site which used the August 2017 masterplan as the baseline but sought to challenge and evolve previous assumptions and strategies. Exploration into the undergrounding of the overhead power lines was also commenced and the masterplan adjusted to provide development in place of the pylon towers and lines to maximise the potential of the Site to deliver residential development. As such, the masterplan is progressing on the basis that the overhead lines are diverted/ under-grounded.

14.22 Furthermore, the City Council's Sports Pitch and Children's Play Policy implications were tested on the masterplan and a strategy devised which sought to balance provision of quality facilities in an effective and efficient way rather than a pure quantity approach (See Section 18.0 for explanation of strategy approach proposed).

14.23 The output at the end of this period of testing and refinement was the masterplan illustrated at Figure 78.

Figure 77. Walking Radii to Support Formal Sport Distribution and Accessibility

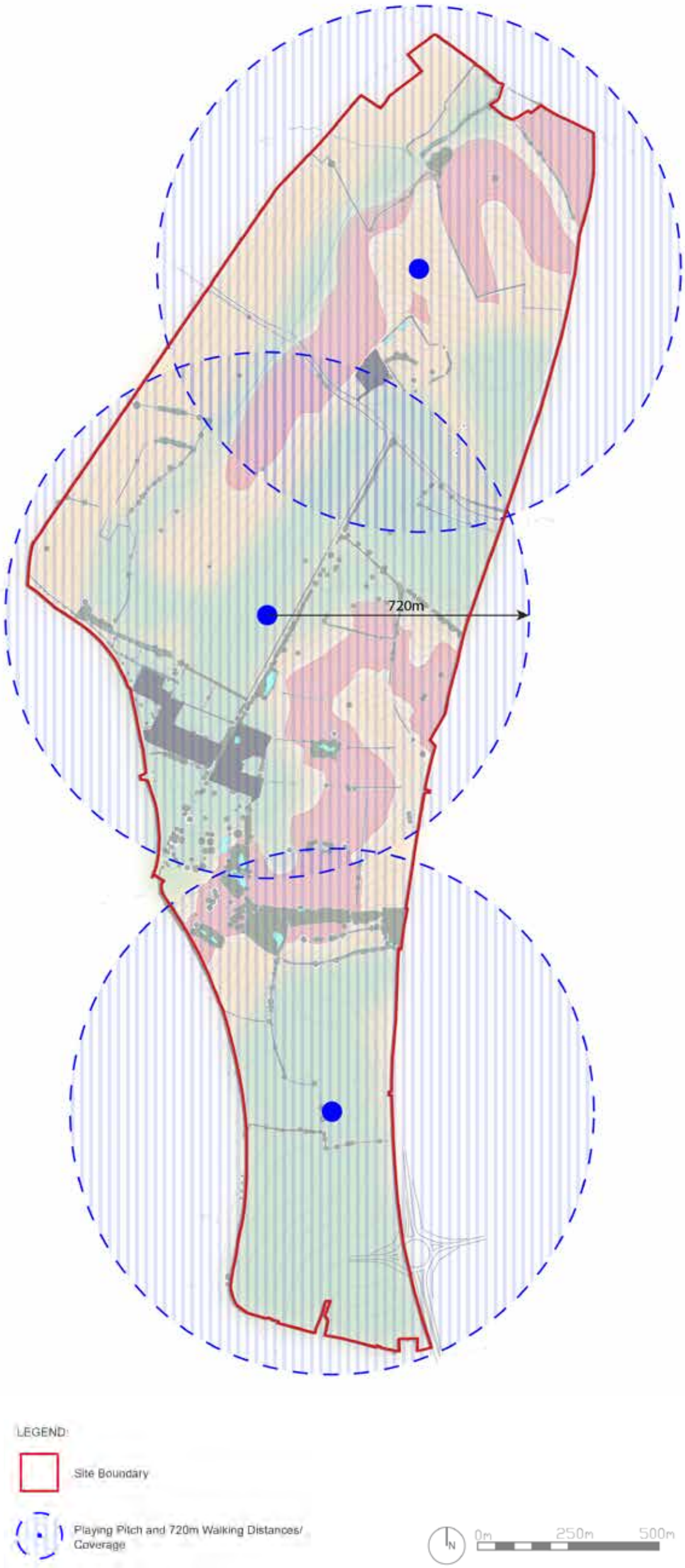


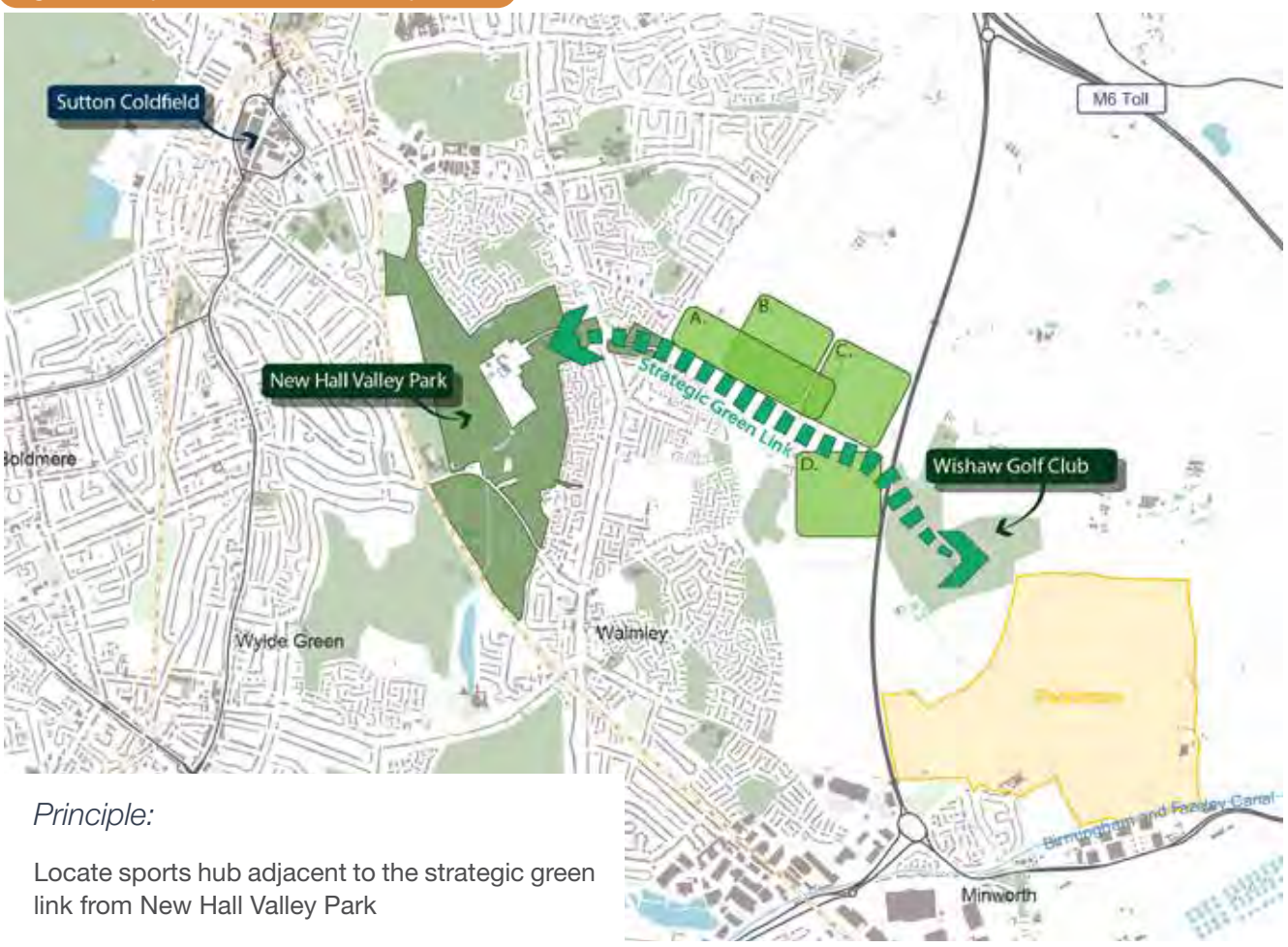
Figure 78. Sketch Masterplan, October 2018

NOVEMBER 2018 - JUNE 2019

14.24 While the October 2018 masterplan had indicated a location for the formal sports hub, an exercise to test the location was undertaken. The drawings below illustrate the positives and negatives of each potential location around the central section of the Site.

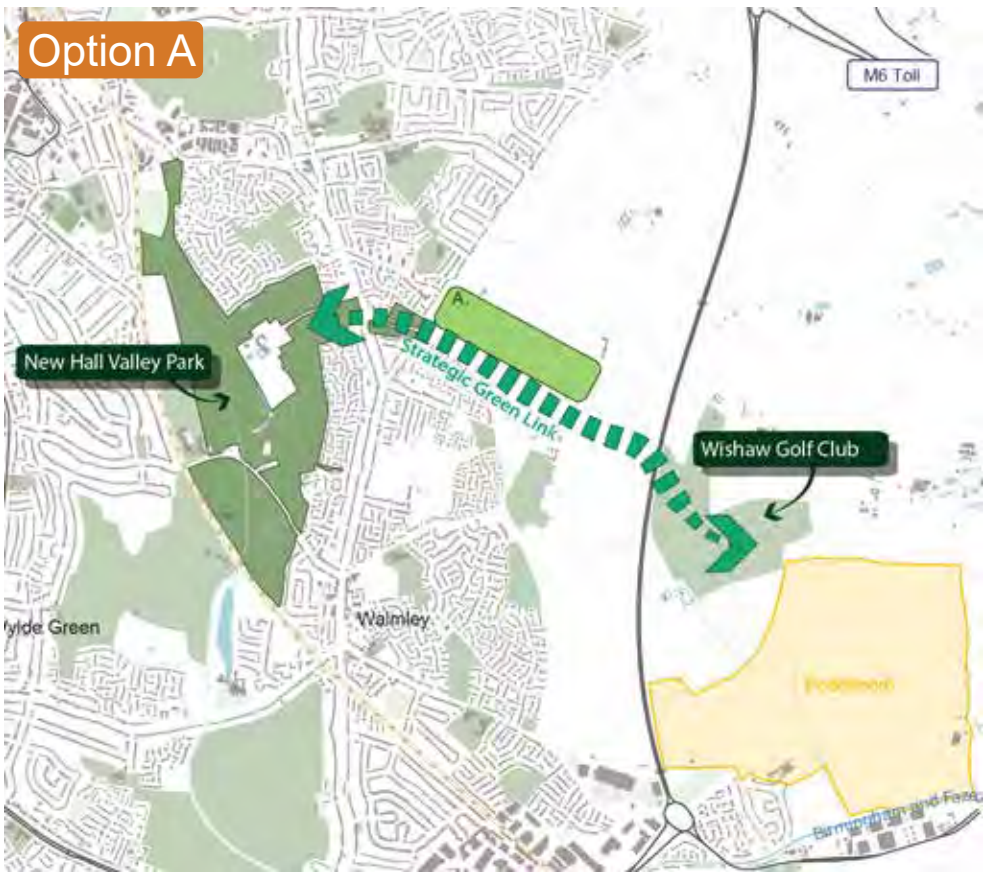
14.25 Location D was concluded as being the most appropriate location for the sports pitches based on the ability to support environmental and ecological benefits as well as reinforcing connections to the wider countryside to the east of the A38.

Figure 79. Sports Hub Location Exploration



Principle:

Locate sports hub adjacent to the strategic green link from New Hall Valley Park

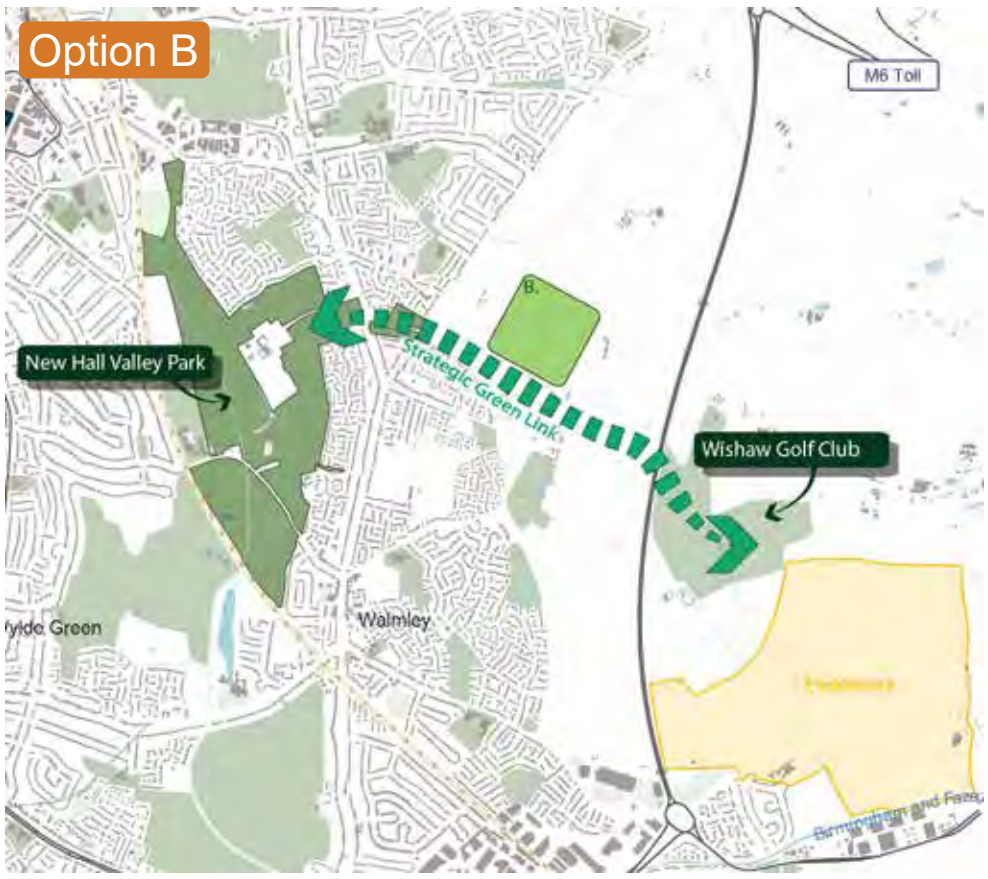


Positives

- Visible location
- Easy access from surrounding neighbourhoods
- Option to place sports hub building near existing road network.

Negatives

- Existing physical site constraints - powerline, flooding, Langley Brook, utilities, contours.
- Viability case for powerline removal/ under-grounding undermined.
- Cut by Langley Brook existing landscape features; off site surface water drainage route; and Fox Hollies Road.
- Elongated space - difficult to create a central focus for the sports hub building, also accentuates pylon impact.
- If astroturf, fencing and flood lighting required, may have negative impact on character of this part of the Site.
- Primary link road route would have to exit onto Springfield Road causing pressure on existing roundabout junction.
- Secondary School, District Centre would have to move north reducing proximity for residents from the south, reduce residential numbers.
- Sports uses could sterilise possibility of a range of alternative open space characters along green link for other users (i.e. formal park, ecology area etc.).
- Will require some earth works to form pitches on upper contours.



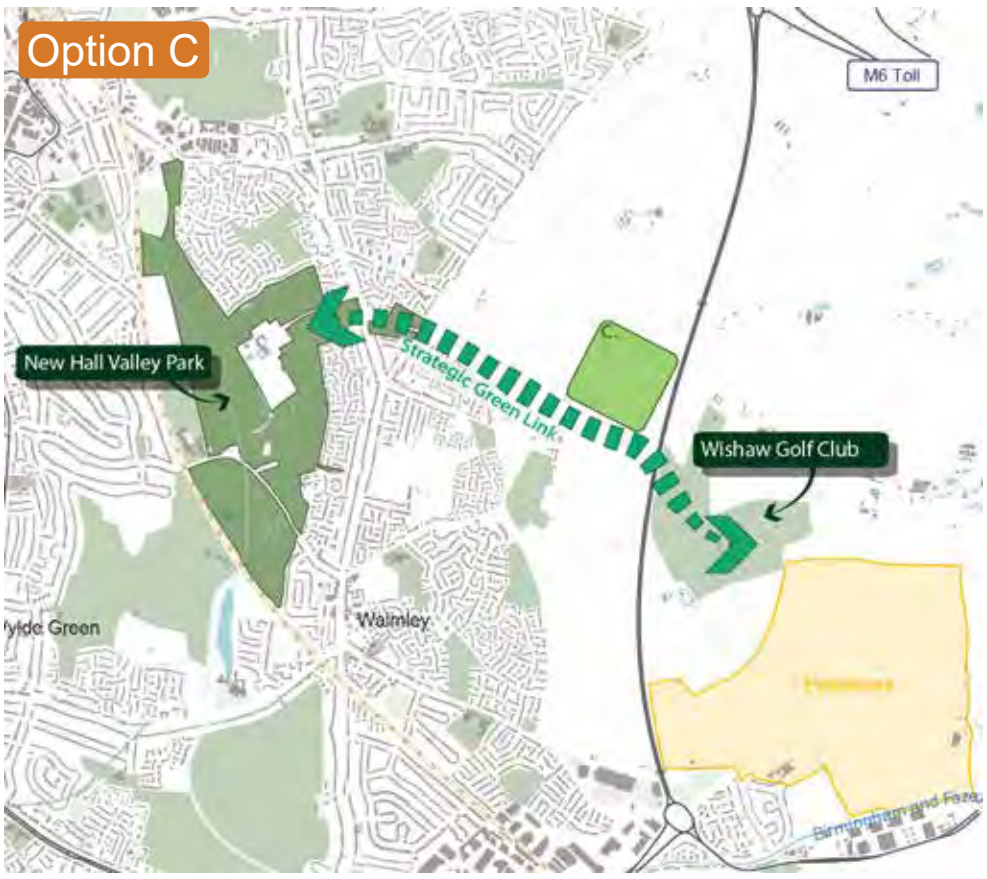
Positives

- Visible location
- Access from surrounding neighbourhoods
- Option to place sports hub building near existing roads
- Can be served from Fox Hollies or future internal road network

Negatives

- Existing physical site constraints - powerline, contours.
- Viability case for powerline removal/ under-grounding undermined.
- Sterilises a significant central section of the Site where critical residential mass and mixed uses would be more desirable to achieve a focus and supporting the function of new and existing community.
- District centre, secondary school and residential could not be accommodated in area to the north of option B and would lose significant dwelling numbers. Would also place excessive pressure on the function of Ox Leys Road.
- Disrupts movement permeability options through the Site. Focus for movement would be on Fox Hollies.
- Elevated location from westerly views, flood lighting/ astroturf potentially an issue in wider contextual views.

Option C



Positives

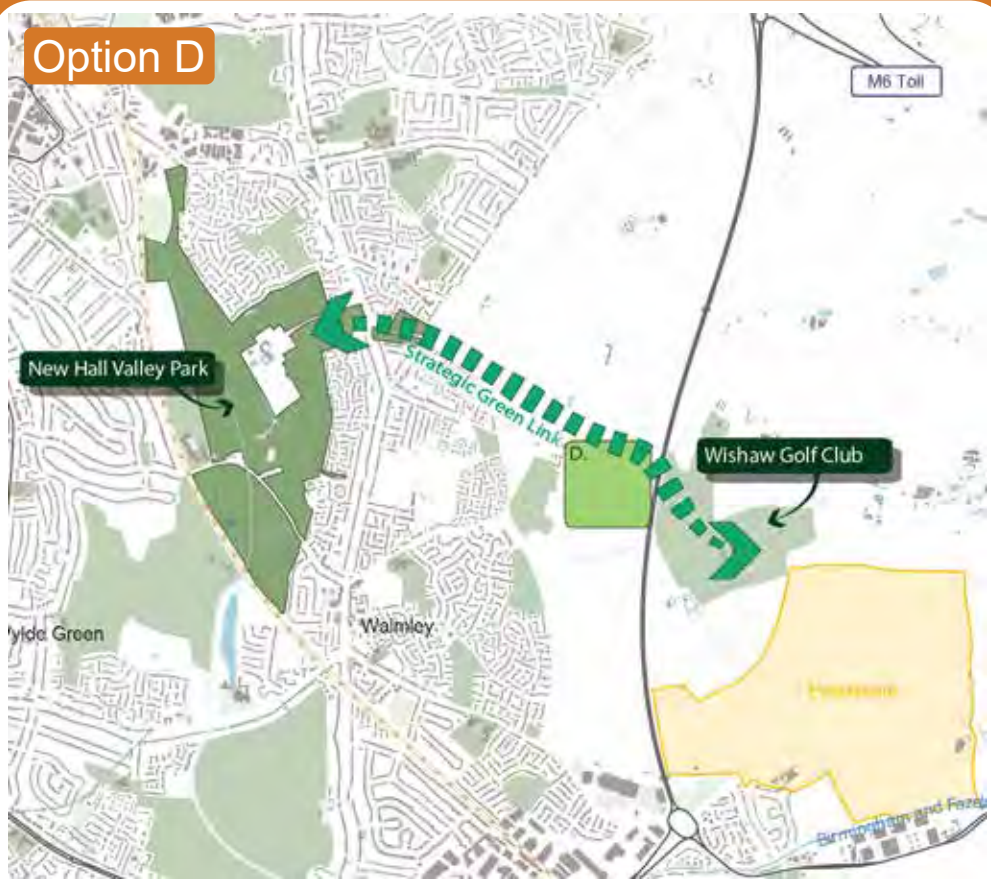
- Immediately east of the District Centre.
- Supports retention of existing landscape features.
- Access available from Fox Hollies for early delivery?
- Sports hub building can form the focus to the sports pitch area and double up as a community resource.

Negatives

- Existing physical site constraints - significant contours, significant landscape/ drainage features
- Viability case for powerline removal/ under-grounding undermined.
- Sterilises a significant central section of the Site where critical mass of new residential could be delivered to support function and vitality and viability of the district centre.
- Relocation of residential to south impeded by other more significant landscape, heritage and access challenges, reducing development numbers.
- Disrupts movement permeability options through eastern part of the Site.
- Focus for movement and potentially access would be from Fox Hollies.
- Severed from the retained mature landscape structure to the south.

PREFERRED OPTION

Option D



Positives

- Immediately adjacent and contained by existing mature landscape features.
- Supports retention of multiple ecology and landscape features within and around open space and enables betterment of the margins.
- Supports wider landscape views out to the east
- Access from Fox Hollies but importantly from new north to south movement route through the Site.
- Some separation from residential uses avoids noise and match day conflicts arising.
- Sports hub building can form the focus to the sports pitch area and double up as a community resource.
- New landscape structure can contribute to wider landscape objectives and provide shelter to sports uses/ lighting/ fencing.

Negatives

- Existing physical site constraints - powerline, significant contours
- Slightly offset from the District Centre and Secondary School, but still accessible and connected via green links.

15.0 LPA ENGAGEMENT/ WORKSHOPS

15.1 Notwithstanding the significant engagement with Officers and key stakeholders during the evolution of the Langley SPD; specific design focused workshops were undertaken in preparation for the outline planning application. The following summarises the main activities:

- December 2016 - BCC Urban Design and Officers Meeting;
- August 2017 - BCC Strategic Sport and Consortium Members Meeting;
- June 2018 - Masterplan Workshop;
- August 2018 - Guided Site Visit for Officers;
- November 2018 - Officer's Design Briefing;
- Design Workshop Series.

DESIGN WORKSHOP SERIES - 18TH, 22ND, 29TH JANUARY, 12TH, 28TH FEBRUARY AND 7TH MARCH 2019

15.2 Between January and March 2019 a series of six design workshops were held between BCC Urban Design, Transport, Landscape and Heritage Officers, and Design, Landscape and Heritage consultants from the Consortium's team. The purpose of the sessions were to openly and constructively discuss the design approach emerging for the Site, identify areas of agreement and any areas where additional design work or amendments may be appropriate.

15.3 At each of the workshops specific parts of the masterplan were discussed and ideas shared and iterated in terms of the potential design approach.

15.4 It was reiterated at each workshop that the application was an outline application and many of the items discussed were for subsequent consideration at reserved matters or in design codes. Notwithstanding this, the Consortium engaged positively and constructively with the discussions.

15.5 Table 5 summarises the key themes of discussion and agreement from the six sessions and where amendments have been made to the application proposals. The table also highlights matters of detail that officers highlighted. However, it was confirmed that these matters were not for consideration at the outline application stage but would follow in subsequent design codes or reserved matters applications. Figure 80 - Figure 82 illustrate design suggestions from Officers and also material tabled by the Consortium representatives to aid idea sharing and discussion on each topic area.

Figure 80. Workshop Topic - Langley Central Discussion

During the discussion around the layout of Langley Central, Officers presented their design thoughts (1), exploring the repositioning and reduced size of the secondary school site and the repositioning of the mixed use elements of the district centre to the south of the school with the inclusion of an additional internal road network. The Consortium presented their design thoughts around the potential layout principles of Langley Central (2).

The Consortium highlighted the need for a larger school site area than the Council Officers had indicated in order to accommodate a secondary school of the scale necessary to serve a development of circa 5,500 dwellings. It was confirmed that research into other school examples and Department of Education guidance had enabled some reduction in the size of the school site proposed but not to the level indicated by the Council's sketch. Moreover the strategy of co-location and sharing of other facilities was also being explored to maximise the efficiency of the school site (i.e. shared car park use, sixth form elements located within the mixed use area rather than in the defined school boundary).

The Consortium team also explained the importance of the relationship with the east to west and north to south routes for pedestrians and cyclists, and that the underlying topography benefits, and proximity to the sports hub area had been key drivers in the locational choice. The Consortium also explained that early education provision for the Site is a high priority action and that the location in close proximity to Thimble End Road means early access and delivery can be achieved. Locating the school deeper into the Site reduced these locational and delivery benefits considerably.

District Centre Variations

Independent of the workshop sessions, district centre variations were considered by the Consultant team and the principles of the council's sketch (1) tested further. Plan (3) provides a illustration of the Birmingham City Council's (BCC) design team approach while also trying to retain some of the other design objectives around constraints and delivery sought by the Consortium.

A number of positives and negatives of this concept approach have been identified. As such, the approach originally proposed by the Consortium has remained as the illustrative approach in the DAS at this application stage.

Notwithstanding this, it should be noted that the development parameters put forward with this outline application allow for design flexibility, should it be deemed necessary / favourable at more detailed application stage and particularly during the design code creation stage.

3

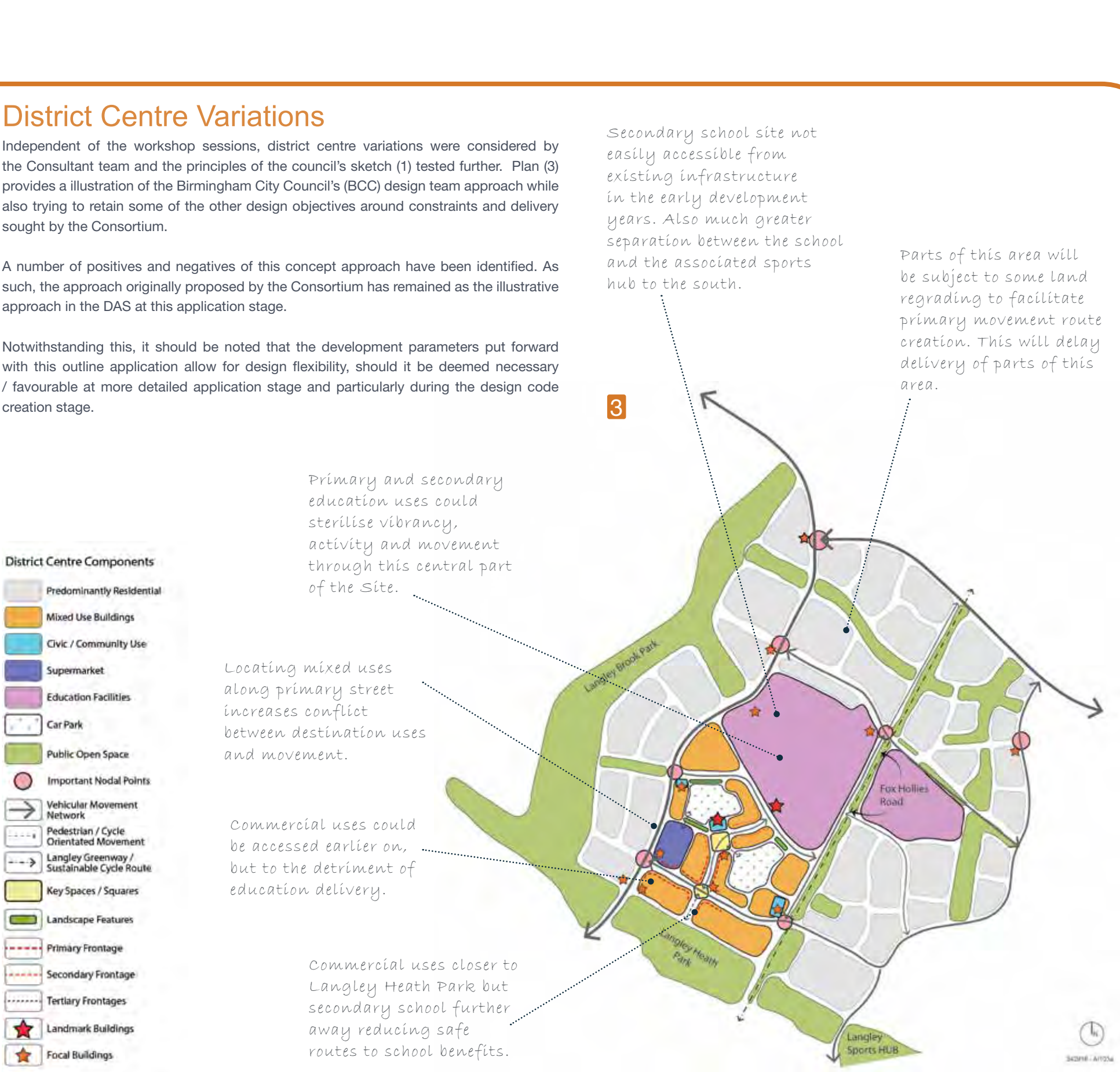


Table 5. Summary of Discussions/ Outputs of the Design Workshop Series

Savills Masterplan Location	Key Issues/ Queries Raised by the LPA Officers	Outline Application Principles Agreed through discussion in workshops	Any design principles to be discussed further and include within the DAS	Matters of detail outside Outline application scope – subject to future reserved matters discussions with BCC Officers	Revisions to outline application framework as a result of workshop discussions
Langley Penns	Consideration of Environmental, Historic, and Ecological assets and whether development in principle would be acceptable in this area. Historic interpretation – parkland or not (re collective value). The requirement for all modes of transport.	• A level of well-considered development will be acceptable in this part of the Site; • Built form in this zone supports the delivery of a connected urban extension and avoids the creation of two separate development areas for Langley (i.e. north and south) of this central area; • Designs should balance the appearance and extents of built form with the evidenced technical analysis on environmental, heritage and ecological assets in this area; • Mature trees should be retained with appropriate root protection areas; • Where possible east to west green links should be achieved; • Development should aim to provide frontage, or positive surveillance on to woodland/ open spaces and mature tree features wherever possible; • Lower density, development layout and form of development i.e. Farmstead layouts/ housing in woodland; • Streets through this area should be designed to country lane, country estate style; • A landscape transition zone should be accommodated adjacent to the existing woodland/ pond cluster to the east of this area; • A fourth arm access from the Thimble End Road/ Webster Way roundabout may be acceptable/ advantageous providing the road into this part of the Site is not standard highway design, but adopts a country estate/ London Parks style character; • Strategic north to south footpath/ cycle way through this part of the Site. Can lie adjacent to the road or as an independent route.	Acceptability of parcels of development to the south of this area considered by the Consortium to be appropriate and offering improved surveillance over the strategic north to south footpath/ cycle route.	Actual dwelling orientation and forms of house type and mix (indicatively inferred from the sketch layout illustration tabled at the meeting). These will be for future conversation once more detailed proposals are put forward. Relationship of future property boundaries and the existing advanced planting/ property boundaries outside the application site.	Land Use Parameter in this zone has been reduced in size to show increased landscape transition area between the existing wooded area and any proposed development area. Building Heights in this zone have also been reduced to provide a positive transition between the existing buildings and the proposed.
Sports Hub	Overall layout; topography; levels; and connections to the district centre/ secondary school.	• Sports pitches can be accommodated on a series of terraces through this area; • Should hedgerows and trees require removal to facilitate appropriate design this will be acceptable subject to appropriate landscape mitigation strategy; • Public open space and SuDS can connect though this part of the Site; • New ecology routes alongside leisure footpath routes can be established within this space connecting ponds and existing landscape features; • A sports hub pavilion with associated car park provision within the fields is acceptable.		Final layout of pitches (Sport England compliant); Position and final design of pavilion; Management of shared use with new school(s); Safe access (details of slopes etc.)	

Savills Masterplan Location	Key Issues/ Queries Raised by the LPA Officers	Outline Application Principles Agreed through discussion in workshops	Any design principles to be discussed further and include within the DAS	Matters of detail outside Outline application scope – subject to future reserved matters discussions with BCC Officers	Revisions to outline application framework as a result of workshop discussions
Langley Central	Overall layout, juxtaposition of uses and key principles	• The principle of the position of the Langley centre is acceptable; • Need for a range of uses and higher density forms of development; • Commercial/retail centre will be scaled to meet local, day to day needs of the new community as well as some of the existing community but must not compete with existing retail areas; • Secondary school and sixth form uses to be 'knitted' in to the centre so that there is multi-functional use by widest sections of the community; • A design code (post outline consent) will be produced for this area which will capture more detail in terms of delivery and function etc; • A delivery strategy will be prepared to demonstrate how this area will be brought forward.	Confirm mix of uses anticipated within the district centre. Explore link/ connectivity between park spaces and the district centre. Precedent studies to be shared to establish best design principles for centres of this type.	Alternative layout of uses (indicative) with retail/ commercial/community uses primarily located within southern parcel, adjacent to Langley Park as part of the design code process. Concepts for secondary/ through school (and relationship with sixth form/ post 16; Sports Hub etc..	Indicate the Langley Centre as one area on the parameter plan with no spatial indication of school site or other uses so that alternative layouts can be explored within this zone at the reserved matters stages.
Fox Hollies Road	Primary movement corridor for walking/cycling; Requires specific treatment/rules re: movement hierarchy Requires specific response re: built form relationship;	• A defined route/corridor for walking and cycling (i.e. not just kerb separation from any highway) but clear delineation required through future detailed design response; • Parts of the route may be designed to be shared surface (particularly at the interface with the district centre), while other parts of the route should be segregated by landscape treatments i.e. hedgerows; • Vehicle movements will be acceptable along the length of Fox Hollies Road providing pedestrians and cyclist routes retain priority or are separated from the highway; • Max 20mph design speed vehicle route and should be designed to reduce/ restrict desirability of through traffic movements/ rat running; • Retain significant/veteran/ TPO trees wherever possible; • Minimal number of intersections/cross streets (x 3 max).	Refine/agree example cross sections for this route; Establish whether there is likely to be a PT requirement along this route; Discuss content re: DAS	Extent of any vehicular access to frontage/ adjacent properties/ uses; Hard and soft materials palette	
Primary Movement Network	Importance of street hierarchy; Primary streets; Sustainable movement	• Site wide walking/cycling route (in accordance with SPD); • Primary Streets - SPD.	Street hierarchy principles plan to be shared	Public transport route(s)	Movement through central part of Langley Penns Revised to country estate road. Fox Hollies Road – additional details tabled.
Strategic Green Infrastructure	Strategic links Importance of landscape quality Sports/leisure	• East west link, connecting strategic GI including Sports Hub; • Minimum width of strategic east to west GI corridor (c.50m).			
Neighbourhood Character	SPD requirements; Response to site characteristics; assets	• Character areas are underpinned by the landscape/ historic time depth analysis; • Underlying ground contours and localised landscape features influence the character approaches; • Design Codes to be prepared for character areas at appropriate phases of development.	Layout and appearance performance criteria to be discussed and agreed as they become available	All defined areas of character across site;	
Other	Net ecological/ biodiversity value	• Need to provide no net loss.		Site wide strategy (in process)	

Figure 81. Workshop Topic - Langley Penns Discussion

1

The Consortium team presented the known constraints and features in this part of the Site, alongside the heritage, landscape and ecology narrative.

The emerging design principles and opportunities for this area (1) were tabled alongside a high level illustration of the potential form, layout and character typology that could emerge through the implementation of these principles (2 & 3).

At the same workshop the Council's design officers presented their view of how the area should come forward but with limited evidence to support their approach (4).

Notwithstanding the illustrative nature of the sketch, the Consortium team highlighted how the Council's approach failed to respond to the important heritage setting matters around Fox Hollies House and associated trees, as well as the arboricultural constraints and opportunities in this area, particularly along Fox Hollies Road. Moreover, the approach did not support the achievement of a resolved or characterful layout, relying heavily on the use of unconnected cul-de-sac, and properties backing on to priority pedestrian and cycle routes. It was also the Consortium's view that the Council's approach would result in the loss of the existing east to west tree belt and the opportunity to reinforce this feature through design.

2

3 Farmstead Typology Examples


Clifton-Upon-Temes, Worcestershire


Foxbury Farm, Sevenoaks


Homestead Farm, Hampshire


Norfolk Design Guide

4

Important view and relationship between historic trees and the key frontage of Fox Hollies House impacted by this layout approach.

Private side and rear garden boundary to Fox Hollies House is exposed and open to wide public view.

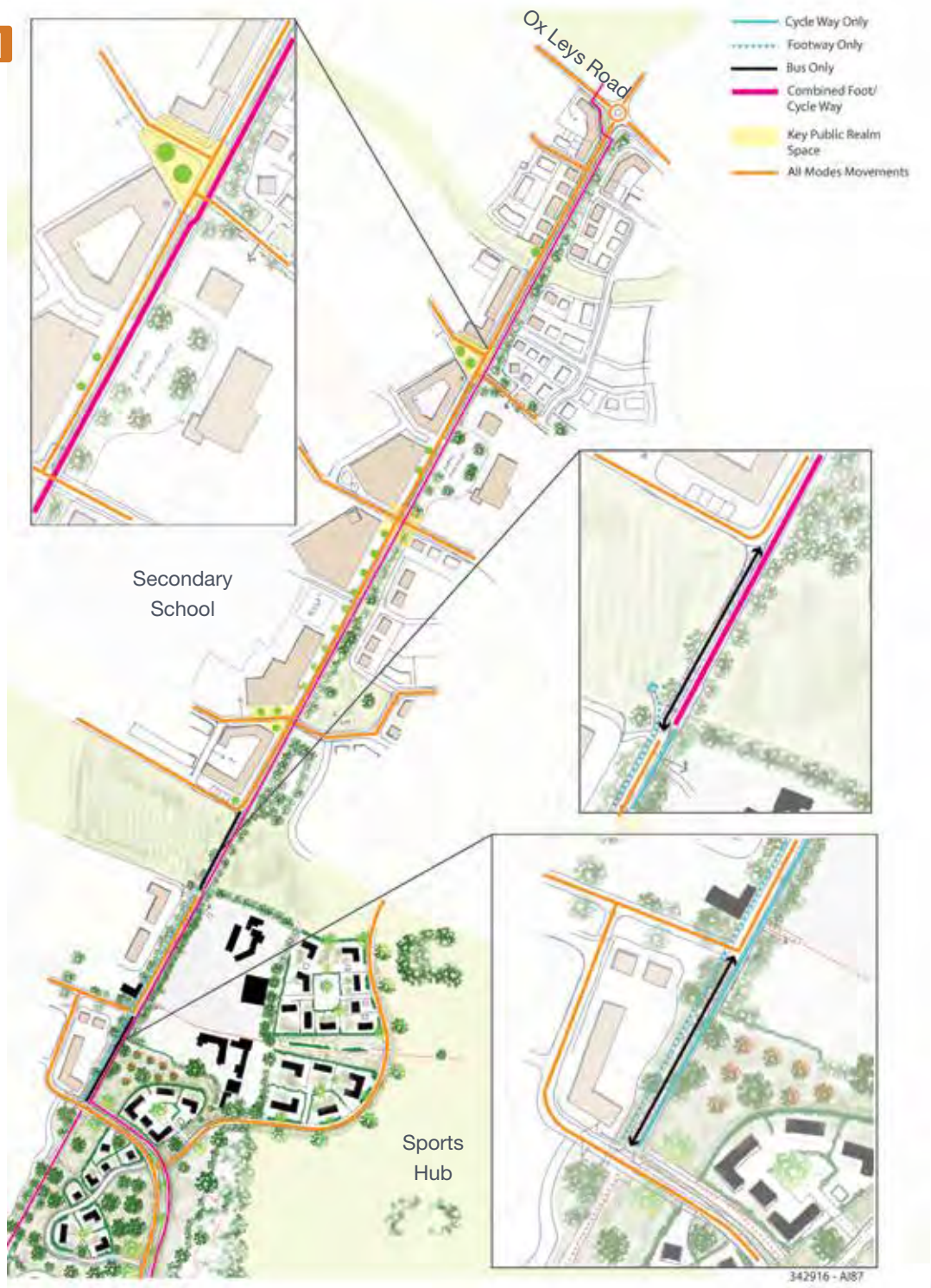
Rear boundaries to existing pedestrian and cycle route along Fox Hollies Road not supporting surveillance.

Existing east to west tree belt lost (see above layout).

Function of this additional open space in the context of the whole development v's making efficient use of land for development.

Figure 82. Workshop Topic - Fox Hollies Discussion

1



During discussions it became clear that more information and clarity was sought by the Council design team on how the proposed Langley Central; Secondary School; Sports Hub area; and Fox Hollies Road connected together.

In particular the focus of conversation fell to the design of Fox Hollies Road in terms of priority for pedestrians and cyclists v's vehicle movement.

Plan (1) was drawn up and tabled to assist in the discussion, and indicative working cross sections of Fox Hollies Road (2). The plan confirmed those sections of Fox Hollies Road which are intended to be Pedestrian and Cycle only, those parts where bus only/ emergency access may be possible, and those parts where all modes can be accommodated alongside a dedicated pedestrian/ cycle route.

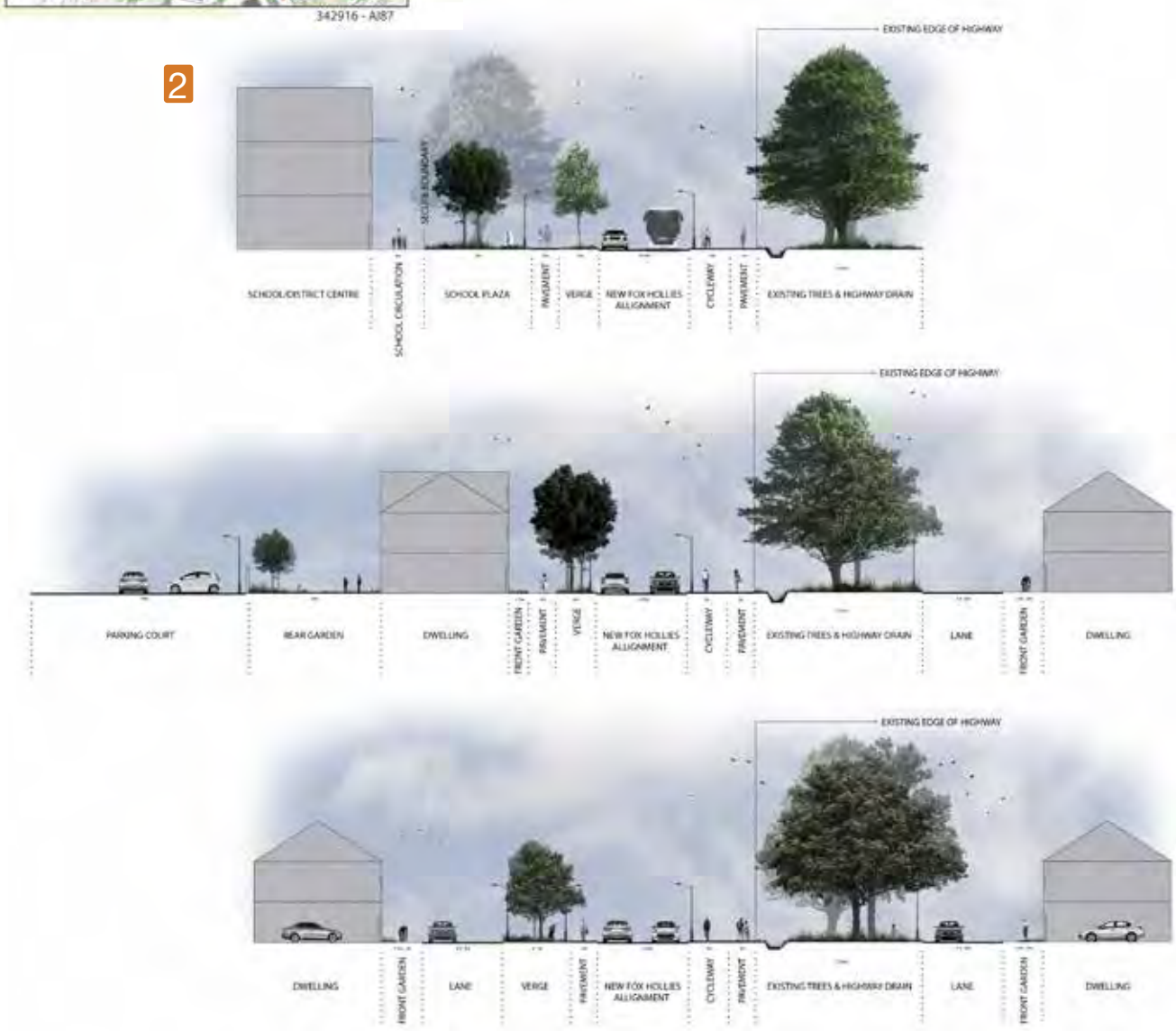
It was further confirmed in discussions that the actual design of Fox Hollies was a matter for future design consideration. However, it was agreed that the key design principle to be applied was one of pedestrian and cycle priority along the route.

This approach does not prohibit vehicle movement within the same corridor but necessitates a care in the design approach and implementation of particular landscape interventions. The Consortium were strongly of the view that the option for vehicles to move through this space should not be prohibited at this stage particularly as it is currently a crucial part of the local movement network and will need to continue to be so for quite some duration.

While a roundabout was illustrated in the tabled image at the junction of Fox Hollies Road and Ox Leys Road, this is not part of the application and was purely an illustration. At the detailed design stages the actual junction requirements will be reviewed.

Further plans and illustrations about the design principles of the strategic pedestrian and cycle route are included in Section 24.0, including suggestions for the treatment of Fox Hollies Road.

2



16.0 MADE DESIGN REVIEW

OCTOBER 2018

16.1 Following extensive dialogue with Officer's of the Council, an independent design review was undertaken with MADE: Design West Midlands.

16.2 The panel comprises experienced professionals from a range of built environment backgrounds including architects, urban designers, engineers, transport planners, sustainability experts and landscape architects. The panel offers independent, objective and expert feedback and peer review on the design of proposed developments.

16.3 The Consortium had around an hour to present the key aspects of the emerging development. The content of the presentation included:

- The Site and its Features;
- The Project Objectives;
- The Design Vision;
- Emerging Illustrative Masterplan and SPD Principles Compliance.

16.4 At the end of the presentation the floor was opened to the panel for question and discussion.

16.5 The output of the review panel was a written response from MADE (Figure 84) confirming their observations; their in principle support for the strategic approach; and additional questions and queries to help guide the Consortium in their design evolution up to and post outline application.

Figure 83. Consortium's MADE Presentation Slides - An Extract

Figure 84. MADE Written Response Letter

MADE
design west midlands

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Langley sustainable urban extension

A MADE panel reviewed the draft proposal for the development at the office of Glenn Howells Architects on Thursday 25th October 2018.

The panel was: Joe Holyoak (chair), Rosemary Coyne, Charles Crawford.

The development is being promoted by a consortium of two landowners (Gilmour family and Rubery Owen) four housebuilders (Taylor Wimpey, Miller, William Davis and Bovis), and one land promoter (Nurton Developments). There are some small pieces of land not controlled by the consortium, which is in discussion with the owners, seeking to bring them into the consortium.

David Lock Associates undertook a masterplan study for the Langley residential development for the City Council in 2014-15. The Council has subsequently written a Supplementary Planning Document, which as of September 2018 is in draft form. Consultation on it finished in October, and the Council is aiming to adopt it in 2019.

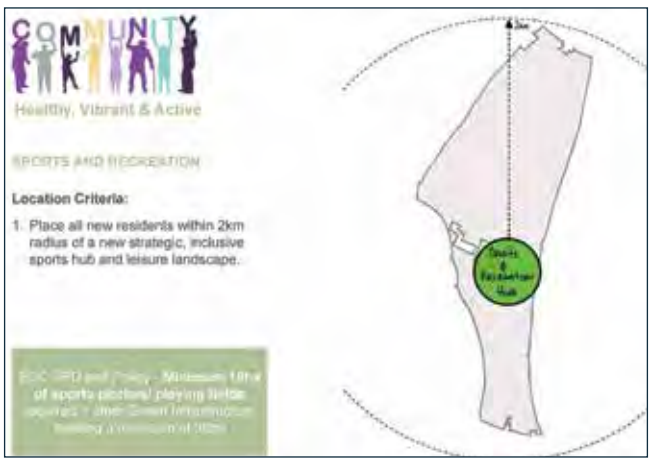
The development consortium team headed by Savills presented the proposal to the panel, which was followed by questions and discussion. A summary report of the MADE panel's conclusions follows.

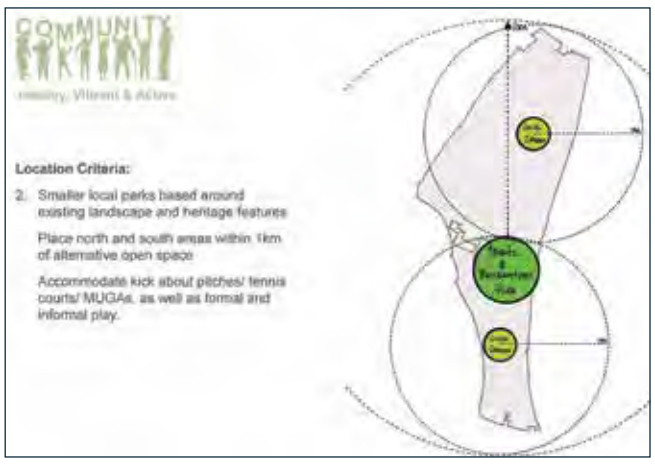
The proposal is based on sound and extensive analysis, and is generally in accordance with Birmingham City Council's draft Supplementary Planning Document. The panel is broadly in support of the proposal, and considers that the rationale for location of the various parts and the relationships between them is sound.

There are however a number of places where the panel considers that further work is required to develop certain parts, or to clarify or reduce uncertainty.

- Because most of the Langley plans are drawn with no or limited context, the panel was not entirely convinced of the development's integration and connectivity, particularly to the existing adjacent Sutton Coldfield settlement. This should be more clearly demonstrated. The development will not be entirely autonomous; for instance, the catchment areas of the new schools will presumably extend into the existing adjacent residential area, and new residents will presumably travel to and from Sutton Coldfield town centre.

- The panel noted the intention to sell parcels of land to other developers to increase the diversity of product. This should assist the cashflow for the consortium and increase the overall rate of housing delivery. However, it places more importance on the role of the design code in maintaining consistency of quality.





- The panel was not entirely convinced by the proposal for the subdivision of the development into character areas. It considered that the proposal is rather formulaic, and that the allocation of different parts of the site to individual developers, and commissions to various architects, will by itself generate difference.

- Notwithstanding that, the panel considered that the design code (yet to be written), will need to address further the issues of response to topography and to landscape, and of area character, and specify how that character is to be achieved. The panel posed the question of whether there was a Sutton Coldfield character, or characters, which could be identified; and if so, how that could be translated into design guidance.

- The panel felt that the forthcoming design code is a critically important document. It needs to state the development rules which it is essential to follow, and not to contain unnecessary detail. The panel noted that the code was due to be submitted with the outline planning application in March 2019, but had some uncertainty about whether this could be adequately achieved. It proposed the possible phasing of the design code in two stages if it could not; a high-level document with the OPA, to be followed later by more detail (but not *unnecessary* detail).

- The panel noted the consortium's view that the design code was for their own implementation, enabling it to ensure that a consistent quality is maintained. Housebuilders will have to obtain approval of reserved matters applications from the consortium. The panel hoped that the design code could be brought back to MADE for a further review.

- The panel noted the requirement in the SDP for "Innovation,,,,, (to) ensure a truly exemplar development delivering the highest quality of place". It encouraged the consortium to aim high and match the achievements of places such as Vauban and Hammarby Sjostad. However, it detected signs of conservatism in the consortium which would make it difficult for high aspirations to be achieved, and urged that this tendency be overcome.

- The panel noted the elements in the proposal aimed at achieving the high standard of sustainability which the SDP requires. It endorsed these, but considered that the development's energy strategy requires further emphasis. It would have been useful for the panel to have had previous sight of the energy strategy documents. There was some resistance from the consortium to the panel's suggestions on sustainable energy policies, citing reluctance by house-buyers to accept non-standard solutions.

- The panel urged the consortium to be more ambitious in its energy policies. It encouraged consideration of an alternative business model in which income from community-based energy systems could subsidise enhanced building performance standards. It cited the Energiesprong movement in the Netherlands as an exemplar, and also the SHAP Smart and Sustainable Procurement model. The panel also proposed that it is necessary for all sustainability elements to be future-proofed.

- The panel noted that the consortium was developing a sustainable water strategy, looking not just at disposal of surface water but its retention. Surface water should be seen as an asset not a liability.

- The panel welcomed the proposal for a management company which would retain responsibility for significant elements of the infrastructure, possibly including open space, SUDS, and affordable housing. A shareholding system for residents was a possibility, which the panel supported.

- The panel noted the clear spatial separation between the Langley residential development and the Peddimore employment development that is proposed by the City Council, with separate SDPs for each. However, the panel proposed that there would be benefit in the introduction of small-scale workspaces into the residential development, which could achieve some economic and social diversity.

- The panel endorsed the use of comparative plans to generate an appropriate form for the proposed district centre. However, the panel considered that it is necessary to select examples of a similar size to the proposed centre, in order to ensure that relevant comparisons can be made.

- The panel had some concerns over how Fox Hollies Road, currently a country road with mature trees, could serve the functions both of a pedestrian- and cycle-friendly "green" route and of a general traffic route, as is apparently intended, without losing its attractive qualities.

Meredith Evans

Meredith Evans
Chief Executive
MADE

17.0 PUBLIC ENGAGEMENT EVENTS

17.1 The Consortium have been, and continue to be committed to local community and stakeholder engagement. The following summarises the public engagement events held to date. For a full review reference should be made to the Statement of Community Engagement submitted with the application.

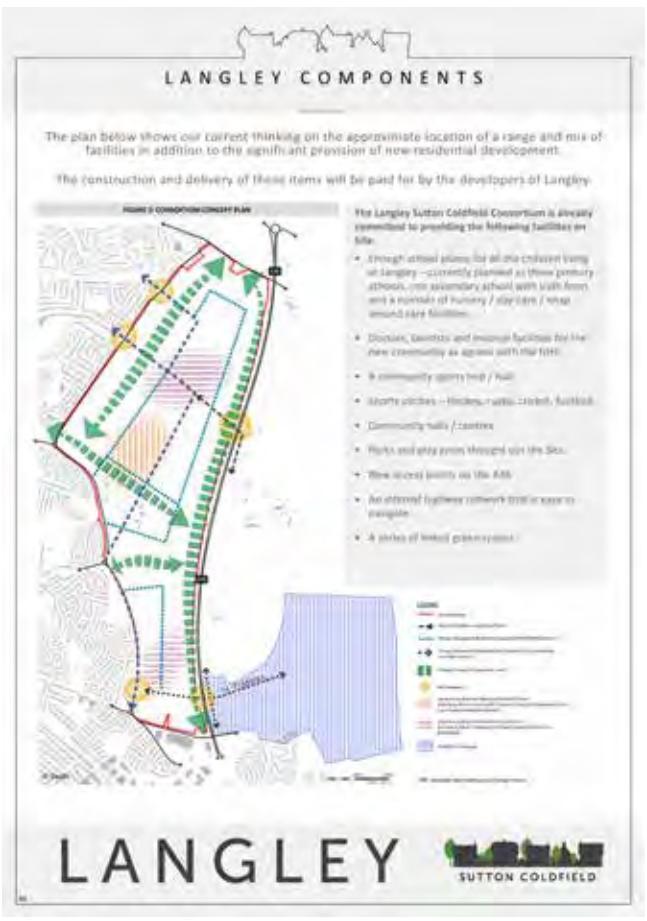
MARCH 2018 - INFORMATION SHARING EXHIBITION

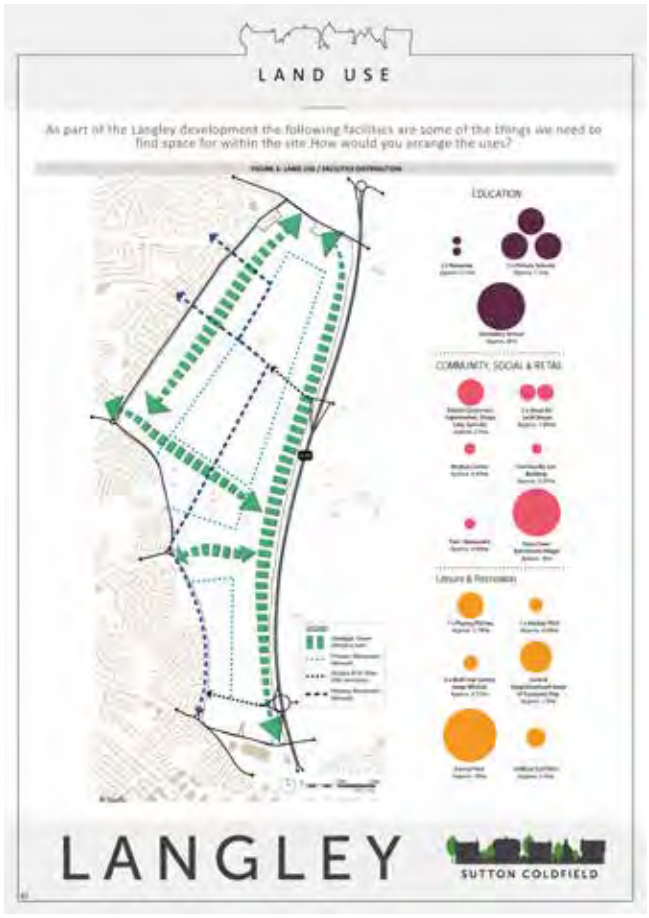
17.2 In March the Consortium undertook four engagement events to share the emerging concepts and principles underpinning proposals for development at Langley. Two events were held at the Harvest Fields Centre (19/03/18 - 2pm to 8pm and 21/03/18 - 5pm to 9pm), and two were held at St Johns Church (26/03/18 and 27/03/18). Consultants and / or Consortium members were on hand to answer questions or queries raised by the public. The information and feedback forms were also available on the project website (www.langleysuttoncoldfield.co.uk)

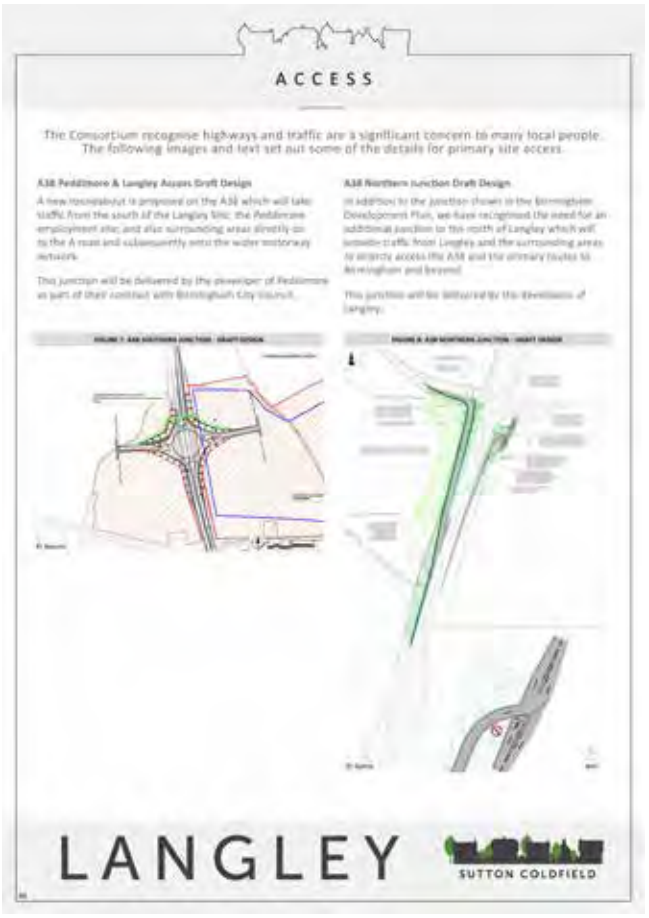
17.3 All four events were well attended by members of the public. Local councillors and the press were also in attendance.

17.4 Subsequent to the public events the Consortium also met with residents of Old Langley Hall to talk them through the proposals, listen to their views, and respond to their questions and queries..

Figure 85. March 2018 Public Exhibition Display







Photos from March 2018 Consultation Event (Harvest Fields)

WHO ARE THE LANGLEY SUTTON COLDFIELD CONSORTIUM?

The Langley Sutton Coldfield Consortium is currently made up of 7 parties who between them own or control about 94% of the land allocated for development at Langley and have agreed to work together to deliver a well-planned new community where people are proud to live.

We hope that the owners of the remaining 6% will in time join with the Consortium.

The Langley Sutton Coldfield Consortium are planning that Langley Sutton Coldfield will be:

- A well-planned thriving new community that is positively integrated and in keeping with existing Sutton Coldfield communities.
- A place that provides a balanced mix of well designed high quality housing.
- A place where local needs are met locally.
- A place that is built around vibrant neighbourhood centres that provide a mix of uses including community, health and shopping facilities.
- A place that is planned in a sustainable manner enhancing the local environment.
- A place that meets high environmental standards.
- A place that is well connected with safe and attractive routes for pedestrians, cyclists and vehicles.
- A place that promotes social inclusion, safety and active lifestyles.
- A place where all the residents are proud to live.

LANGLEY SUTTON COLDFIELD

LANGLEY SUTTON COLDFIELD: A LEGACY WE CAN ALL BE PROUD OF

The Langley Sutton Coldfield Consortium recognise that the development of Langley is a long term project that requires long term and innovative thinking.

With this in mind we are working to build a Vision for the scheme as a whole which will guide the development and inform the choices we and others make about Langley in the coming years.

The Vision, once agreed will be one of a number of documents that will shape the community at Langley and help deliver the lasting legacy the consortium want to achieve.

We would welcome your feedback and comments on the draft vision statement below.

Draft Vision

We want to build a distinctive, sustainable, resilient and thriving new community that integrates well with Sutton Coldfield's existing communities by...

1. Putting the needs of the new community first.
2. Delivering the land housing led development in the country over the next 20 years.
3. Delivering local facilities needed by the residents of Langley in a timely and efficient way.
4. Delivering Langley as a single cohesive, co-ordinated and comprehensive Sustainable Urban Extension.
5. Delivering high quality housing set within identifiable and distinct neighbourhoods.
6. Designing the neighbourhoods to promote social inclusion, safety and active lifestyles.
7. Designing local centres to provide for the day to day needs of the new community.
8. Delivering new infrastructure and community infrastructure when it is needed.
9. Linking the new neighbourhoods to facilitate movement without the car dominating the development.
10. Establishing a highway network that is legible and efficient providing routes for pedestrians, cyclist, public transport and other vehicles.
11. Providing homes that meet the needs of the total community, providing a balanced mix of sizes, tenures and types.
12. Establishing excellent schools with enough places for all the children living at Langley.
13. Providing high quality Public Open Spaces & exciting play spaces throughout the site for the benefit of the residents of Langley wherever they are.
14. Designing and building highway & transport solutions that work based on evidence.
15. Ensuring that we plan for the future, providing resilient yet robust future proof engineering solutions.
16. Ensuring that public spaces and public parks are maintained to a high standard.
17. Ensuring that allotments are completed quickly.
18. Ensuring that environmental standards are met or exceeded throughout the construction of the development.
19. Making good use of the existing environmental assets, integrating them into the development where practicable.
20. Being open and honest & to engage with the existing and new communities as we move forward through planning and delivery.

LANGLEY SUTTON COLDFIELD

SITE FEATURES: WHAT THE SITE LOOKS LIKE TODAY

Whilst most of the 273 hectares/ 675 acres is currently either arable farm land or paddocks there are a number of features and constraints that must be addressed or positively integrated through the design process.

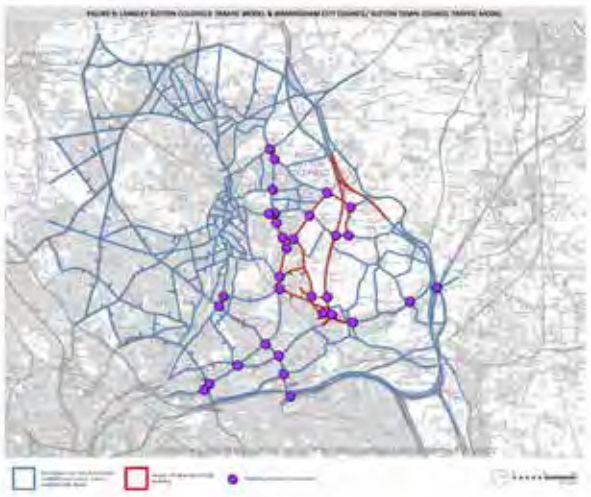
It is our plan to make good use of the existing environmental and built assets integrating them into the development where practicable.

LANGLEY SUTTON COLDFIELD

ACCOMMODATING TRAFFIC FROM LANGLEY

Two traffic modelling exercises are underway. The Consortium's traffic modelling exercise (areas in purple below) will, when finished, identify areas where the development of Langley impacts the existing traffic patterns so that we can make changes where necessary. This could include junction improvements and/or other measures.

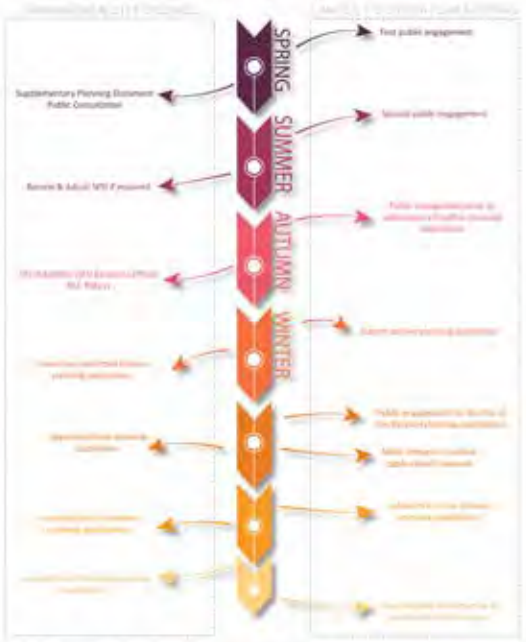
In addition to the work being undertaken by the Consortium, Birmingham City Council and Sutton Coldfield Town Council are preparing a traffic model for the whole of Sutton Coldfield (shown below in blue). This work will identify junctions and areas of the town which already need improvement and that will need improvement in the future.



LANGLEY SUTTON COLDFIELD

WHAT HAPPENS NEXT? WHEN DO THE HOUSES GET BUILT?

The consortium still have a lot of work to do before we are ready to submit a planning application for the scheme. However, we have a programme of consultation and engagement to keep you up to date with our progress at key stages of the project.



LANGLEY SUTTON COLDFIELD

CONSULTATIVE GROUP

A Langley & Peddimore Consultative Group consisting of representatives from local organisations has been established and hold regular meetings with officers from Birmingham City Council regarding the progress of Langley & Peddimore.

This group is currently chaired by City Councillors Ken Wood & David Barrie.

David having particular responsibility for Peddimore, and Ken having particular responsibility for Langley.

This group is currently made up of representatives from:

- City Councillors from Trinity Ward
- City Councillors from Minworth Ward
- Sutton Coldfield Town Council
- Wylcomy Residents Association
- Project Leads
- St Johns Church
- Holy Cross Church
- Friends of Langley Valley
- Friends of Joans Wood
- Minworth Residents Group

If you would like further information on the group please email either Councillor Wood or Barrie:

LANGLEY SUTTON COLDFIELD

MAY 2019 - PRE-APPLICATION EXHIBITION

17.5 A series of four follow up and pre-application public exhibition events were held in May 2019. The exhibitions focused on the high-level development parameters that will be formally submitted to the Outline Planning Application. In addition, an Illustrative Masterplan was provided which gives an impression of how development could come forward on the Site within the context of the development parameters.

17.6 Four events were held on Wednesday 15 May (2pm to 7.30pm) and Thursday 16 May (4.00pm to 8.30pm) at Harvest Fields Centre, Tuesday 21 May (5.30pm to 7.30pm) at Falcon Lodge Community Hub and Thursday 23 May (5.30pm to 7.30pm) at Walmley Club.

17.7 10,504 local homes and businesses were sent an invitation letter. Invitations were also sent to Birmingham City Councillors and officers, Sutton Coldfield Town Council, Curdworth Parish Council, Middleton Parish Council, Wishaw and Moxhull Parish Council, local MPs and key councillors from North Warwickshire District Council and Warwickshire County Council. The SoS for Housing, Communities and Local Government, representatives from the West Midlands Combined Authority, TfWM and Homes England were also invited, along with local interest groups.

17.8 Representatives from the Consortium and the project team were in attendance to talk through the proposals and answer questions. An earlier preview session was held on Wednesday 15 May from 1.00pm to 2.00pm for elected representatives.

17.9 Over the four events some 639 people attended including local Councillors. To date some 130 feedback forms have been returned.

17.10 The Langley project's website, (www.langleysuttoncoldfield.co.uk) enabled residents who were unable to attend the exhibition to view the proposals. It has also enabled residents to review the information they saw at the exhibition, before submitting their comments.

17.11 The majority of comments received related to the need for housing, traffic concerns, development scale, residential amenity and general loss of the green belt. A more detailed description of the feedback received is provided within the 'Statement of Community Engagement' that will accompany this application.

Figure 86. May 2019 Pre-Application Public Exhibition Display Boards 1 - 2

Photos from May 2019 Consultation Event (Harvest Fields & Walmley Club)

Figure 87. May 2019 Pre-Application Public Exhibition Display Boards 2 - 8

Figure 88. May 2019 Pre-Application Public Exhibition Display Boards 8 - 15

LANGLEY
SUTTON COLDFIELD

INDICATIVE MASTER PLAN

This Indicative Master Plan shows an impression of what the Langley development could look like.
The development blocks will be made up of individual houses but this is not visible at this scale.

1. **Peddimore Employment Site:** The application for this area is the subject of a separate existing planning application submitted by IM properties (not part of the Langley Consortium). The application is expected to be determined by Birmingham City Council at the end of May 2019.
2. **3 Form Entry Primary School with Early Years Provision:** Located in or adjacent to local community hubs and proposed parkland areas forming three community focal points for new communities.
3. **Secondary School with Community Sports Hall:** Integrated into and with Langley Central forming part of the civic heart for the new Langley Community. Located on key pedestrian and cycle routes through the Site to encourage safe routes to school.
4. **Community Sports Hub and Public Parkland:** Supporting the retention of existing ecological and landscape features as well as responding to landscape visual analysis, the new sports hub and parkland will create a dynamic new sports and recreation area for use by existing and future communities. The area has the potential to accommodate a range of grass and artificial pitches.
5. **Langley Central:** Potential to accommodate a mix of uses including; Multi-functional Community Buildings; Education and Post 16 Education Facilities; Medical Practice; Retail and Service Facilities; alongside higher density residential living and new civic public spaces.
6. **Local Community Hubs:** Local mixed use areas located around primary schools and parks and forming focal points for the communities to the north and south of the Site. Opportunities to accommodate localised retail/ service element(s) and community facilities such as a village/ community hall, alongside some upper storey apartments.
7. **Langley Fields Park:** An area supporting retention of existing landscape features and mature trees and accommodating new leisure, informal recreation, kick about and multi-age children's play facilities.
8. **Langley Hall Park:** An area supporting retention of archaeological features, maintaining the setting of the important elevation of Old Langley Hall and offering the existing and future community an area for informal recreation, kick about and multi-age children's play facilities.
9. **Langley Brook Park:** A new multifunctional parkland accommodating the realigned and naturalised Langley Brook. The park accommodates areas of existing mature landscape planting and ecology, while also creating opportunities for new ecological and strategic landscape, planting and sustainable surface water attenuation features. A network of footpaths, children's play, and trim trail features can also be accommodated within the length of the park.
10. **East to West Park Link:** Connecting New Hall Valley Park to the west to the Public Right of Way footpath network to the east of the A38, the new east to west park link accommodates many existing landscape features as well as contributing new recreation and leisure features including multi-age play areas.
11. **A38 Access Locations:** New northern and southern junctions are proposed on to the A38. The southern A38 access forms part of the Peddimore Application (noted at point 1 above).

WWW.LANGLEYSUTTONCOLDFIELD.CO.UK

LANGLEY

SUTTON COLDFIELD

DESIGN & ACCESS STATEMENT

VOLUME I

AUG / 2021

LANGLEY

SUTTON COLDFIELD

DESIGN & ACCESS STATEMENT

VOLUME II

AUG / 2021

VOLUME II

Volume II of this Design and Access Statement provides a description of the proposals and design principles established, resulting from the design process.

MASTERPLAN DESIGN PRINCIPLES

MASTERPLAN DESIGN PRINCIPLES

The following section provides the Masterplan Principles required to support an outline planning application with all matters reserved, except for access. As such, matters of land use and amount and the detailed access arrangements are provided in this section. Later sections of the DAS provide illustrative materials to support understanding on Scale, Topography, Landscape, Movement, Layout and Appearance Principles.

18.0 LAND USE & AMOUNT

18.1 Table 6 provides a breakdown of the proposed strategic land uses and their indicative (up to) amounts. The mix of uses proposed complies with the strategic requirements of the Birmingham Development Plan Policy GA5 and the guidance within the Langley SUE SPD, as discussed and agreed with Officers of the Council.

18.2 It should be noted that a tolerance of plus or minus 10m on all land uses is indicated at Figure 89. This enables localised adjustments at the reserved matters stages to facilitate the best possible design solutions. Where these adjustments are made these should be discussed and agreed with BCC prior to submission of reserved matters proposals.

Table 6. Indicative Land Use Schedule

Type of Use	Ha	Ac	Approx. Dwelling / units (up to)
Residential Development (C3 Use)	136.46	337.19	5,000
Mixed Use Hub	12.57	31.07	500
Community Hubs	8.97	22.16	50
Existing and Proposed Highways/Lanes, Pumping Station and Land East of A38.	54.82	135.45	-
Strategic Green Infrastructure - comprising: Open Space, Parkland, Informal Buffers, SuDS, Formal Park, Sports	89.97	222.33	-
TOTAL	302.79	748.20	5,500
Existing uses excluded from Application	5.64	13.94	-

RESIDENTIAL

18.3 The majority of the Site comprises residential land use with the potential to accommodating up to 5,500 dwellings. This includes a proportion of dwellings provided within the mixed use (district centre) and community hub (local centre) areas.

18.4 At this outline stage the development has an average 'near net' density of around 36dph (dwellings per hectare). Near net includes local roads within parcels, and incidental green spaces. This calculation is based on approx. 5,000 dwellings on 137.17ha of residential development area (Circa. 500 dwellings in the mixed use / community areas are not included in this calculation).

18.5 The distribution and refinement of residential density bands will be prepared at the reserved matters design stage. It is envisaged that a range of net densities between 25 dph to 60+ dph will be used across the Site to support the creation of a beautiful and sustainable place throughout the development and in combination with the suggested character areas in Section 24.0 - Layout and Appearance. (N.B. Net density is the pure developers net which includes 1/2 the road serving the plot, and excludes incidental open space in the calculation).

Dwelling Mix

18.6 The development will provide a mix of dwellings in both size and tenure, but, as required by Policy GA5, the focus and priority of provision will be towards family housing. The precise mix will vary across the Site and will respond to a variety of influences that include market demand; location; and character. However, the overall indicative market mix at this outline application stage is suggested as follows. Part of the housing provision will also respond to the 55+ demographic:

- 1 & 2 bed dwellings - Approx 17%
- 3 bed dwellings - Approx 46%
- 4+ bed dwellings – 37%

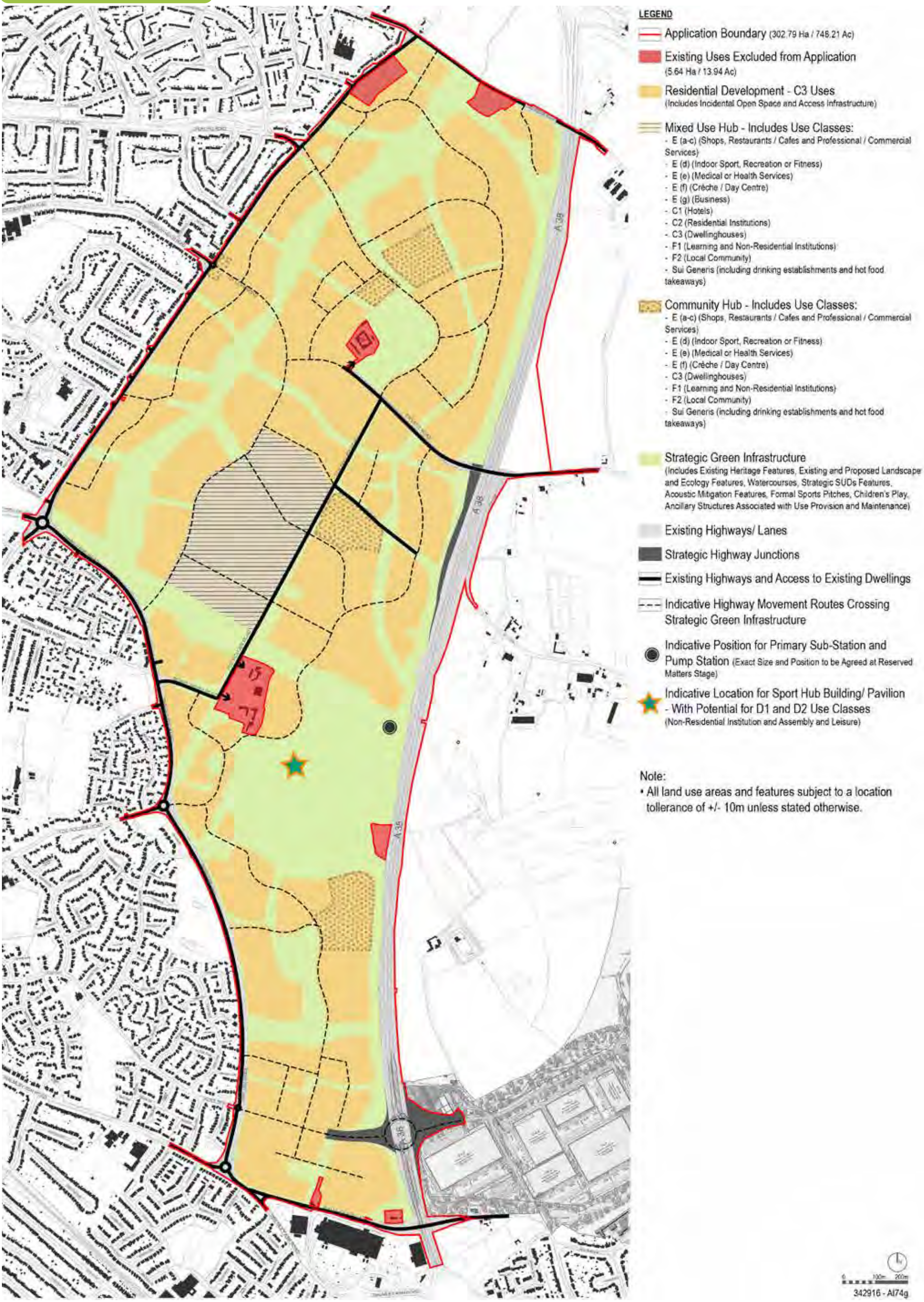
Affordable Housing

18.7 BCC Policy TP31 requires 35% affordable housing provision. The affordable mix and typology will be fixed through discussion with the LPA at the reserved matters stage in order to respond to need at the time of each development stage. However, it is anticipated that affordable housing is 'pepper potted' throughout the development with a proportion within each parcel. Each Consortium land holder will be required to provide its proportion of each tenure type. The following broad tenure split has been agreed with BCC 10% social / affordable rented, and 25% affordable home ownership options.

Extra Care

18.8 While not a formally identified land use it is anticipated that within Langley Central (District Centre) or the community hub (Local Centre) areas, some provision could be made for an extra care facility (C2 Use Class) of around 200 beds. The actual location will be determined as part of the Langley Central and community hub design codes at the reserved matters stage.

Figure 89. Land Use Parameter Plan



MIXED USES

18.9 21.54ha have been identified (Figure 89) for mixed and community uses. A small area adjacent to the Anvil Pub on Reddicap Heath Road has also been identified with capacity for mixed uses to provide an appropriate transition between existing mixed uses and the Site. These main mixed use zones can comprise:

Langley Central

18.10 A key community, education, retail and professional service hub at the core of the development. This area has the potential to accommodate a mix of uses as set out in Table 6. An area for parking provision and local centre public realm has also been included within the mixed use area. Additional illustrative character, layout and appearance principles for this area are provided in Section 24.0. A proportion of the residential uses within Langley Central (District Centre) will be located above the mixed use components.

Community Hubs & Sports Hub

18.11 Two community hubs (north and south) are proposed. These have the potential to accommodate additional education, retail and community building uses and are intended to form activity focuses for the neighbourhoods to the north and south. These hubs (Local Centres) are co-located with the proposed open spaces offering the opportunity for linked trips.

18.12 A sports hub building is proposed alongside the formal sports pitch area. This building will provide changing facilities as well as club training and social rooms and will also have the potential for wider community, assembly and leisure uses ancillary to the primary use.

Table 7. Indicative Use Class Schedule

Type of Use	Up to		Approx Dwellings (Up to)	Gross Floor Space (up to)	
	Ha	Ac		Sqm	SqFt
Residential (C3 Use)	137.17	338.95	5000	-	-
Mixed Uses comprising:	12.57	31.07	500	-	-
E (a-c) Uses - (Shops, Restaurants / Cafes and Professional / Commercial Services) and Sui Generis (p-r) Uses (Public Houses, Drinking Establishments and Takeaways)	-	-	-	7,153	77,000
E(e) Uses – (Healthcare / Dentists) and F1/F2 Uses (Community Building)	-	-	-	3,902	42,000
F1(a) Uses - (Secondary School / All Through School)	(6.00)	(14.83)	-	13,006	140,000
F1(a) & E(f) Uses- (Sixth Form Use and Day Nurseries)	-	-	-	3,437	37,000
E(g) Uses – (Business)	-	-	-	1,858	20,000
C1 Uses - (Hotel)	-	-	-	4,181	45,000
C2 Uses - (Residential Institutions)	-	-	-	4,645	50,000
C3 Uses - (Dwelling Houses)	-	-	(500)	-	-
E (d) & F1 Uses (Indoor Sport, Recreation or Fitness Uses / Learning & Non-residential Institution Uses)	-	-	-	5,110	55,000
Community Hubs and Sports Hub - comprising:	9.01	22.24	50	-	-
E (a-c) Uses - (Shops, Restaurants / Cafes and Professional / Commercial Services) and Sui Generis (p-r) Uses (Public Houses, Drinking Establishments and Takeaways)	-	-	-	2,415	26,000
E(e) Uses – (Healthcare / Dentists) and F1/F2 (Community Building)	-	-	-	465	5,000
C3 Uses - (Dwelling Houses)	-	-	50	-	-
F1(a) & E(f) Uses- (3x Primary School and Day Nurseries)	(7.50)	(18.53)	-	19,091	205,500
E (d) & F1 Uses (Indoor Sport, Recreation or Fitness Uses / Learning & Non-residential Institution Uses)	-	-	-	2,230	24,000
Strategic Green Infrastructure - comprising:	92.99	229.78	-	-	-
Kiosk Buildings x 4	-	-	-	300	3,230
Site Store x 1	-	-	-	186	2,000
TOTAL	250.32	618.54	5,500	67,979	731,730

Sutton Coldfield - Town Centre

STRATEGIC OPEN SPACE, PUBLIC REALM & LANDSCAPE

18.13 The Land Use Parameter Plan (Figure 89) provides for approximately 89.96ha of Strategic Open Space across the Site. A small percentage of this area accommodates access infrastructure, but this generally contributes towards the function of the open space and public realm network.

18.14 Birmingham City Council's Policy TP9 and SPD guidance - 'Public open space provision in new residential developments', provides a framework to inform the provision of open space and play on new developments, and proposes a minimum standard of 2.0ha of open space provision per 1,000 population.

18.15 In developing the strategy at Langley, the quantum and distribution of the strategic open space has been discussed with a range of Officers at the Council including key officers in the Leisure and Cultural Services team. A robust qualitative approach is advanced as agreed with the Council.

18.16 Much of the strategic open space performs many functions including: retention of ecology and landscape features; enhancement to support creation of natural and semi-natural greenspace; amenity greenspace; and children's active play. As such, some aspects/ typologies of provision cannot be easily quantified.

18.17 It is anticipated that the development of 5,500 dwellings at Langley will generate a population of circa 14,000 residents. This generates an approximate open space policy requirement of around 28ha in total. The overall open space provision is considerably in excess of the 28ha requirement as a result of a range of environmental and engineering requirements. However, this extensive multifunctional network places all residents within easy walking distance of a wide variety of open space typologies and sets development within a high quality landscape led environment supporting health and activity.

18.18 In terms of the anticipated range of open space typologies to be provided on Site, Figure 90 and Table 8 provide a general break-down and distribution across the Site. Figure 91 and Figure 92 illustrate the potential distribution of children's play and trim trail routes supporting the overall approach.

18.19 Section 25.0 of the DAS provides further guiding design principles for a range of the main open spaces at this stage. The refinement of the open space strategy and details of typologies will come at the reserved matters stages post outline consent.

Public Parks

18.20 In line with the wider objective of supplementing leisure and recreation facilities for the City and to meet the needs of the future on-site population, areas totalling around 26.85ha (excluding the sports hub park) have been identified for specific public park functions.

18.21 The locations have been identified in response to either an on-site environmental or engineering constraint or in response to a Langley SPD or GA5 policy aspiration (i.e. Green link between New Hall Valley Park and the Public Right of Way footpath network to the east of the A38; creation of a Langley Brook Park; and delivery of open spaces to support/ complement the north and south community hubs).

18.22 The rationale for the locations of the new park areas is provided in Section 8.0. These parks will be multi-functional spaces accommodating areas of natural and semi-natural greenspace; ecology habitats; amenity greenspace; informal and formal play and recreation; heritage and archaeology; and in the case of the Langley Brook Park, a functional surface water flood corridor. Each of these functions positively contribute towards the overall quality and distinctiveness of the parks and the wider development.

18.23 It is envisaged that at reserved matters design stages further pocket parks and gardens may emerge at the development plot level. The illustrative masterplan has indicated how some of these may emerge in certain character areas, but does not fix these as part of the formal outline application.

Natural & Semi-Natural Greenspace

18.24 While much of the open space network has elements that will contribute towards natural and semi-natural greenspace, for the purposes of this DAS the retained central woodland belt / proposed nature reserve area, the eastern acoustic buffer corridor and some of the swale corridors will have a more natural and semi-natural quality. Within these areas foraging routes will be supported. Trim trail and walking routes will also pass through these open spaces.

Amenity Greenspace

18.25 Approximately 20.17ha of the Site will contribute to multifunctional amenity greenspace. As with other types there is cross over in function. However, it is expected that amenity greenspaces can accommodate:

- A series of new connected pedestrian and cycle routes;
- Trim trail (fitness and running loop route) with incidental exercise features along the trail;
- A natural play trail for children (comprising natural play features along a series of corridors);
- Sustainable drainage features (principles set out in Section 23.0) which deal with the surface water drainage of the Site while also contributing to the quality, diversity and amenity of the open space provision;
- New strategic landscape planting (principles set out in Section 25.0) to support the character of the amenity greenspace network.

18.26 At the reserved matters stage potential to deliver a series of smaller amenity greenspace within the development block structure will also be explored. This will supplement the character and sequence of spaces throughout the Site.

Allotments

18.27 BCC Policy TP9 confirms that allotments should only be provided where there is demand in an area. A more holistic and dynamic food production approach is proposed for Langley, which includes an Edible Landscape and Community Orchard Strategy detailed in Section 25.0. This includes provision of linear foraging routes and community orchards which support historic, landscape or character area objectives for the Site.

Outdoor Sports Provision Inc. Community Pitches

18.28 A key community asset to be provided by the Langley development is the Community Sports Hub. Located centrally within the Site, an area of approximately 18.32ha has been identified. Alongside public park uses, landscape and ecology functions, this area has the potential to also accommodate:

- A sports hub pavilion building (including changing facilities, and club/ community rooms), with associated parking;
- Up to 2 community grass pitches;
- Up to four all weather pitches, two combined with cricket provision; and
- A cricket pitch.

18.29 The actual typology of the pitches has yet to be fixed (i.e. hockey, rugby, football) but it is possible to accommodate a combination of pitch categories including 4G pitch types if required. Figure 161 in Section 25.0 illustrates how the pitches could be laid out in the space available. These illustrations are not for determination now. The final layout will be subject to the preference of the final operators, to be determined in the future.

18.30 It is the intention that the sports hub area will also provide sports pitch facilities available for term time use by the Secondary School instead of duplicating the use on the secondary school site. This approach supports the achievement of best use of land, while also supporting the longer term management and maintenance of the sports hub facility. The final management regime for the sports hub will be subject to discussions at the appropriate time in the phasing of the development.

18.31 Within the north and south park areas additional sports provision areas have been identified totalling 1.59ha. These could provide informal kick about areas or additional community pitches/ courts should the demand be identified by the new community.

Table 8. Open Space Typology Schedule

	Open Space Typologies					TOTAL
	Parks (Ha)	Natural & Semi Natural Open Space (Ha)	Amenity Green Space (Ha)	Allotments (Ha)	Outdoor Sports (Ha)	Ha
On Site Provision	26.85	24.61	20.17	* see above description	18.32	Approx. 89.96

Figure 90. Strategic Open Space Typology Plan

Children's Play

18.32 The focus of the strategy for children's play has been about providing a hierarchy of high quality, exciting and challenging play experiences around the Site.

18.33 At the top level of play, three multi-age play clusters ('destination play') have been identified within the three parks, (Langley Hall Park, Langley Sports Hub and Langley Fields). These play areas are all located in parks that are over 4ha. By virtue of their location, the play areas accommodate the vast majority of the new population within a direct line catchment of 600m, satisfying the Council's accessibility standards within policy TP9. The destination play will be the equivalent of combining a NEAP, LEAP and MUGA together, but will be based around themed and challenging play. These parks will also accommodate paths, seating, bins, tree and landscape features and spaces for informal kick about. These parks can also accommodate kiosk structures providing W.C.s and cafe facilities if desirable in the future.

18.34 The second level of play is formed through the provision of a natural children's play and trim trail strategy, predominantly located within the amenity greenspace and semi-natural / natural green spaces. These trails are intended to loop throughout the Site and connect with the new footpath network. Along the trails and within the greenspace network natural play features (equivalent to the provision of a LEAP) will be located.

18.35 This approach will place all residents and the wider existing community within a short walk of a new play areas, providing appropriate coverage for the new and existing community towards a variety of adventurous play opportunities.

18.36 It is not possible to attribute a specific area to this type of play provision. However, it is expected that a condition of the planning permission will require the submission of a natural children's play strategy. At that stage the number and type of features can be discussed and agreed with the LPA.

18.37 As demonstrated by Figure 91 the strategy places the whole development within easy accessibility of a range of children's play features.

Figure 91. Indicative Children's Play Distribution Strategy

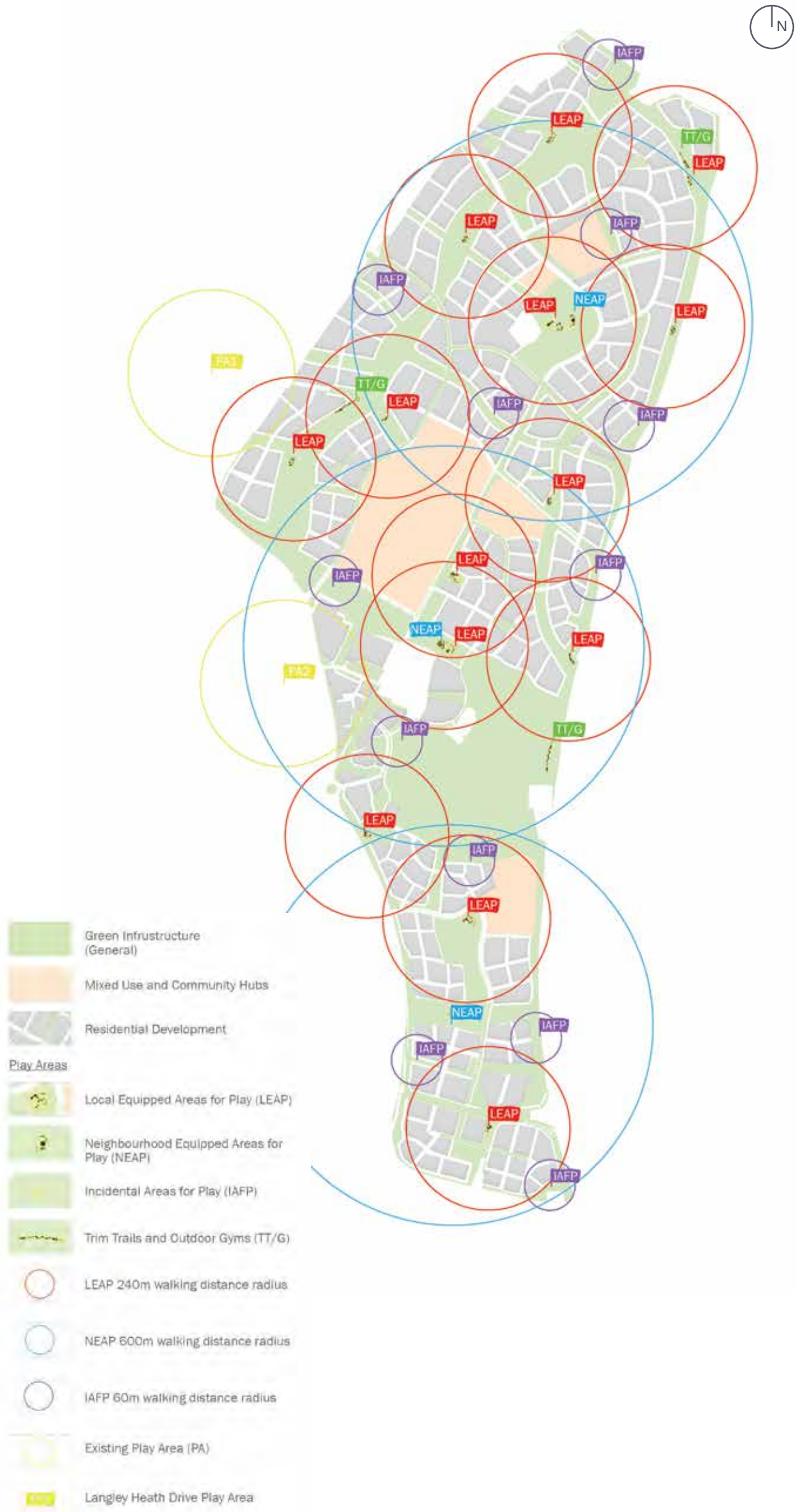


Figure 92. Indicative Recreational Trim Trail Routes

Trim Trail / Leisure Loop Routes

18.38 Linked to the healthy, vibrant and active design vision for the Site, a series of trim trail / leisure loop routes are proposed.

18.39 In association with the new open space network and also the children's play locations, a series of looped routes are provided within the Site.

18.40 Two 5km looped routes can be provided through the open space network along which keep-fit equipment or informal exercise stations can be positioned.

18.41 A further six 2.5km routes can also be provided within the Site all of which loop along the open space or strategic pedestrian / cycle route network.

18.42 The details of these routes will follow at the reserved matters stage.

19.0 SITE ACCESS & STRATEGIC MOVEMENT

19.1 The Site access and strategic movement strategy has been developed in close consultation with key stakeholders, including BCC as Highways Authority. The strategy is consistent with BCC policies and current best practice guidance.

19.2 For full details of all survey work and access and movement modelling, reference should be made to the Transport Assessment and Traffic and Transport ES chapter submitted under separate cover with the application.

19.3 The following provides a high level summary of the main access and movement principles influencing the masterplan design approach.

19.4 The strategy encourages movement by sustainable modes and access for all sections of the community whether able-bodied or disabled (Health and Wellbeing - Planning Practice Guidance 2014) and promotes the following objectives both at the outline and also through to the reserved matters design stages:

- Provide for the retention and/ or enhancement / diversion of existing public rights of way (PRoW) and byways within the Site (where required and subject to reserved matters detailed designs);
- Create a new network of safe, direct, attractive and convenient cycle and pedestrian connections through the Site. To include a strategic pedestrian and cycle route connecting from north to south via Fox Hollies Road linking key destinations both in and surrounding the Site;
- Provide safe and convenient access to bus services within and adjacent to the Site, including options for localised bus only sections;
- Support the provision of a cycle hub in proximity to Langley Central and the main bus stops to encourage multi-modal shift;
- Provide a legible and permeable layout for all modes of movement within the Site;
- Provide safe strategic vehicular access into the Site from the A38, Webster Way, Thimble End Road and Springfield Road via the creation of new, or enhancements to, existing junctions;
- Create additional access points / direct access into development parcels from Webster Way, Springfield Road and/or Lindridge Road. Further details relating to these accesses will be provided as part of the future reserved matters / hybrid planning application;
- Create a hierarchy of movement routes within the Site responding to anticipated movement levels;
- Resolve safety and design issues with the existing Ox Leys Road through vertical and horizontal realignments and provision of footways;
- Deliver level access to buildings where practical;
- Provide streets with a typical gradient no steeper than 1 in 20 (5%) and limiting steeper sections to short lengths in accordance with Manual for Streets principles;
- Ensure the majority of the proposed development is within 400 metres of a bus stop/ location for a bus stop;
- Create public realm spaces that are capable of being used and enjoyed by all sections of the community;
- Provide comprehensive signage for cyclists (wayfinding in addition to mandatory signs) to encourage cycling as a viable transport choice;
- Make provision for electric car changing facilities to support the use of electric vehicles within the Site, to help reduce vehicle emissions and noise as well as providing for future transport requirements;
- Parking provision for car club vehicles to support reduced car ownership and therefore parking demand on Site;
- Shared surface streets (where appropriate) to reduce the dominance of cars and create a pleasant environment for people to walk and cycle.

19.5 In addition to the above, the internal road layout and proposed Site access junctions have also been designed to accommodate sustainable travel where possible which exceeds current highway design standards. These include:

- All vehicular access points will be designed to accommodate pedestrians with 2m wide footways on either side of the internal carriageway, equipped with tactile paving and dropped kerbs;
- Leisure pedestrian routes will be located within parks and open spaces and will be 1.5m - 2m wide. Planting and other landscape features around the routes will help to create a pleasant and safe walking environment;
- Direct walking routes to schools will be provided across the Site which will avoid crossing main roads where possible. Additionally, streets will be designed to 20mph particularly near schools and the mixed use community hubs. Footways in the vicinity of these facilities will also be designed to cater for higher pedestrian flows and therefore widths will vary in accordance with DfT's Inclusive Mobility Best Practice Guide;
- Advanced Stop Lines (ASL) are proposed at two of the strategic Site junctions to give priority to cyclists. The recommended lane widths at ASL's have been informed by LTN 1/20;
- Signalised crossings on all arms of the proposed signalised junctions along the Site's western boundary will provide maximum benefit for existing and future residents in terms of accessing existing and future public transport provisions and local facilities.

STATUTORY CONSULTATION INFORMING THE DESIGN APPROACH

19.6 Extensive pre-application consultation has taken place with Highway Officers at BCC who are the Local Highway Authority (LHA) and Local Planning Authority (LPA) for the Site. The proposals were also discussed with Warwickshire County Council (WCC), as the neighbouring LHA and Highways England (HE) as the Highway Authority (HA) for the Strategic Road Network (A38 Trunk and M42).

19.7 In addition, consultation with the highway consultants at Peddimore has been undertaken in order to test and develop the most co-ordinated and robust access and movement solution between theses two strategic sites.

TRAVEL PLAN

19.8 In accordance with the travel demand management strategy for the development, and in addition to the provision of physical infrastructure (roads junctions, footways, cycleways, public transport), a framework travel plan has been submitted with the application. The Travel Plan will consist of a number of measures and initiatives to encourage sustainable trip making and create a modal shift away from single occupancy journeys. The Travel Plan will encourage the use of public transport services, walking and cycling facilities.

VEHICULAR SITE ACCESSES

19.9 Due to the scale and size of the development, vehicular access to the Site will be provided at multiple locations, these are shown at Figure 93.

19.10 The primary access to the Site from the strategic road network is to be provided from the southern extent of the A38 in conjunction with the adjacent Peddimore development (Figure 94).

19.11 Vehicular access is also to be provided from the northern extent of the A38 Figure 95.

19.12 Site accesses Figure 94 - Figure 102 will be provided along the western periphery of the Site, adjoining the existing highway network. The access locations of these junctions were initially informed by the Consortium's urban design team and then later refined by WSP. This followed micro-simulation modelling (undertaken in VISSIM) in order to determine the size and type of junction required.

Figure 93. Main Vehicular Site Access Points

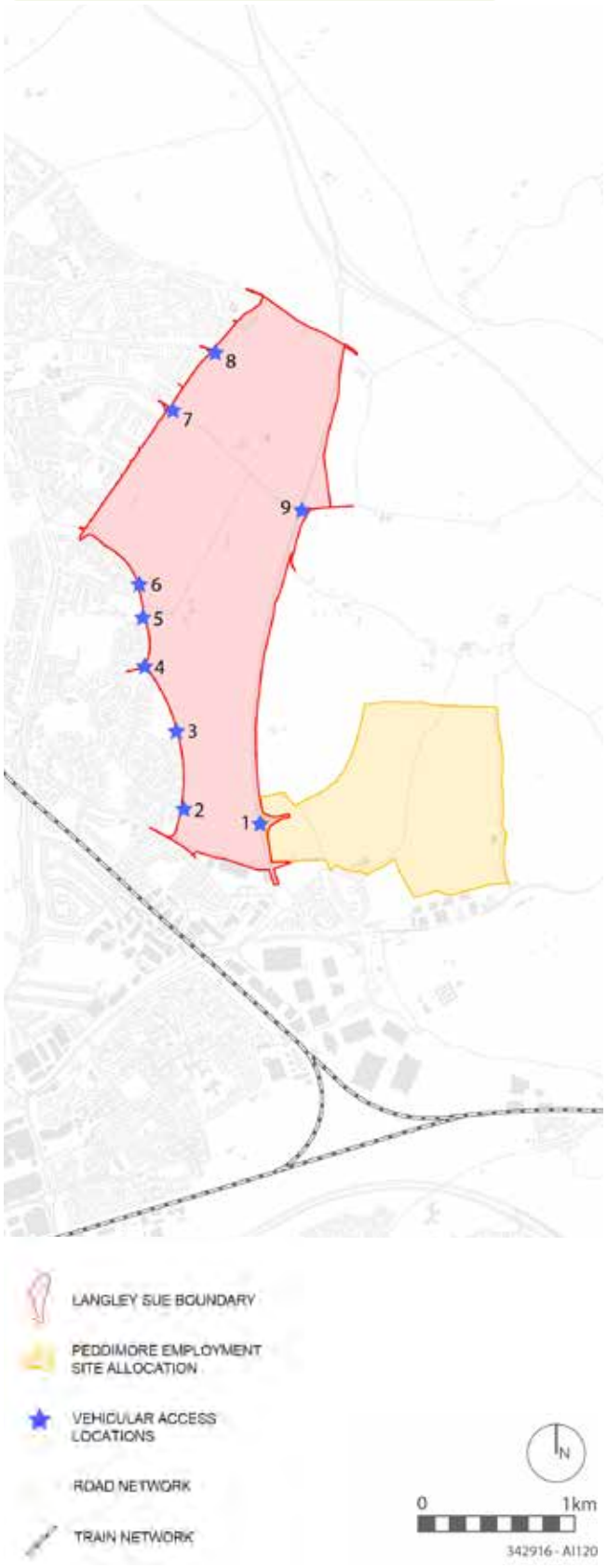


Figure 94. Site Access 1 - A38 Site Access South

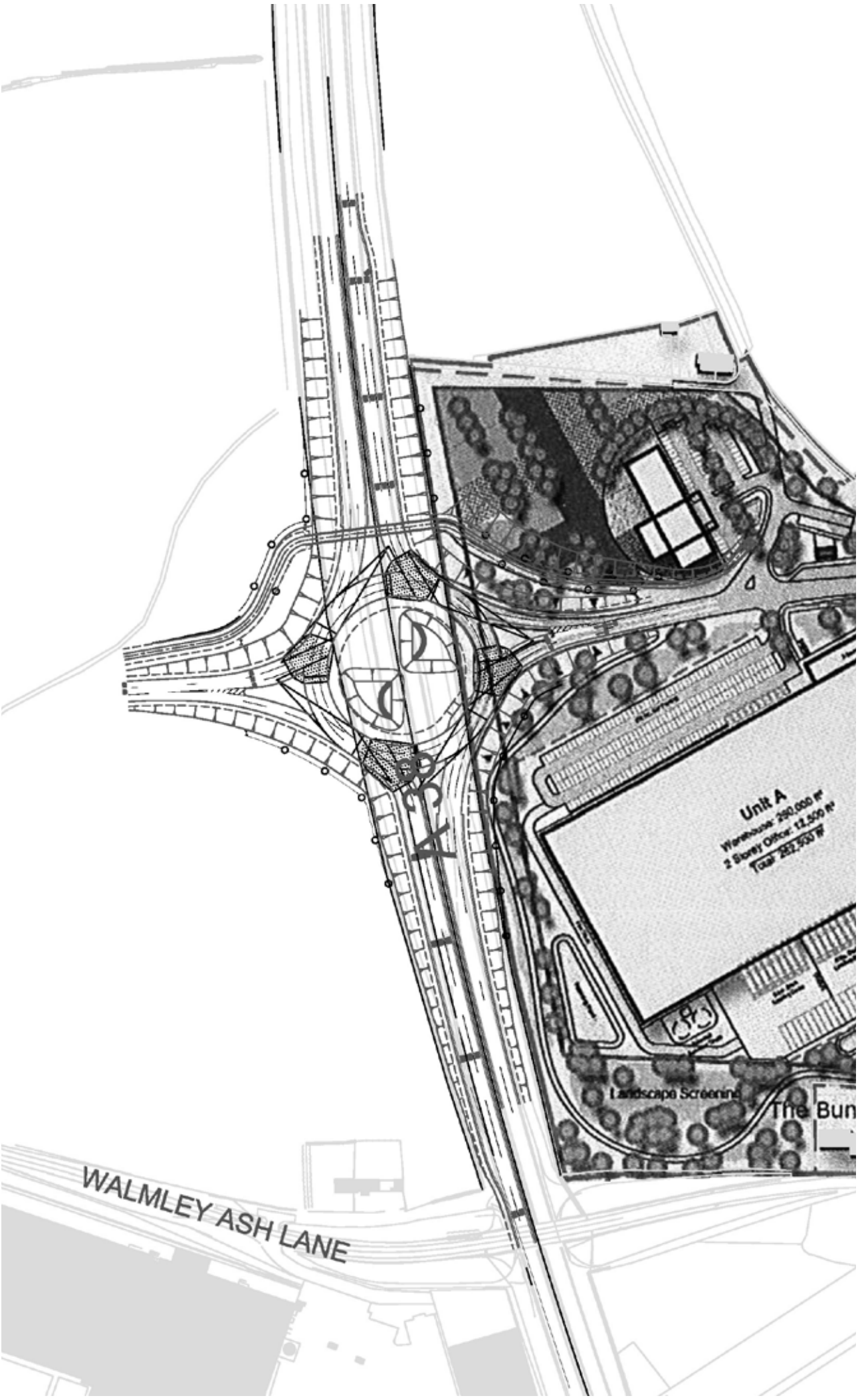
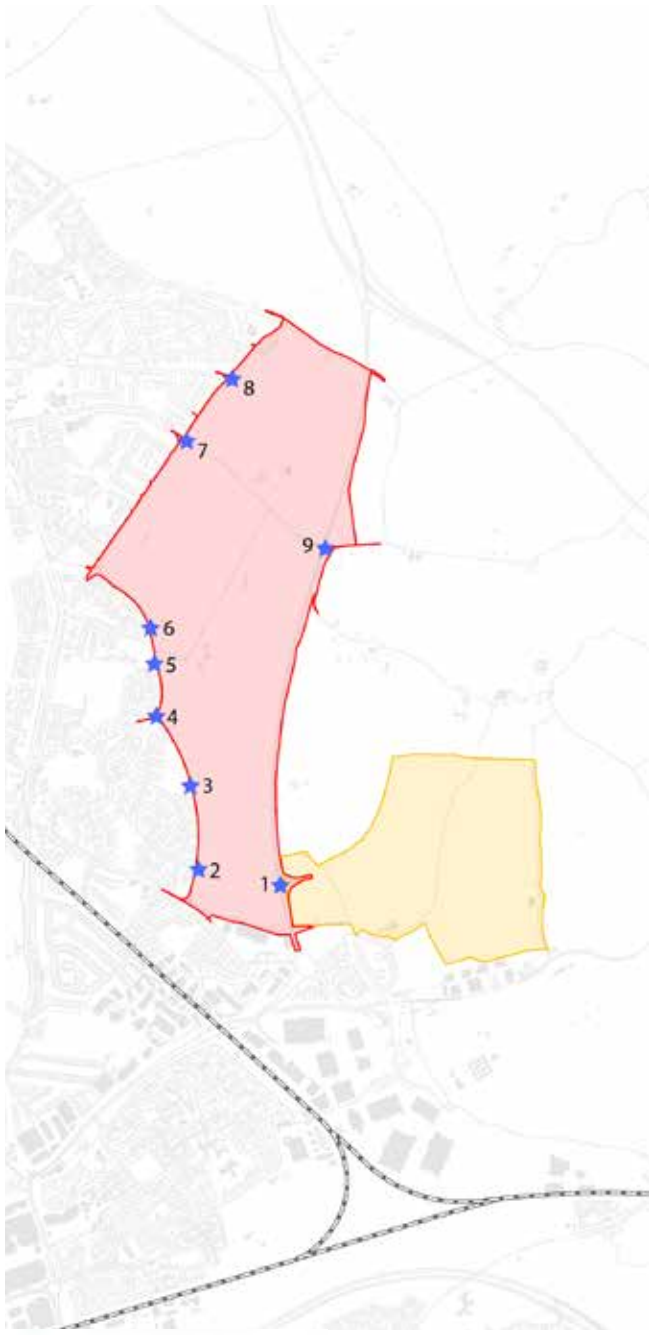


Figure 95. Site Access 9 - A38 Site Access North

19.13 A secondary vehicular access to serve Langley SUE will be provided at the northern extent of the A38, adjoining the Ox Leys Road. The current proposal is to provide south slips, reserving land to the north of the junction for future north slips if highway modelling require.



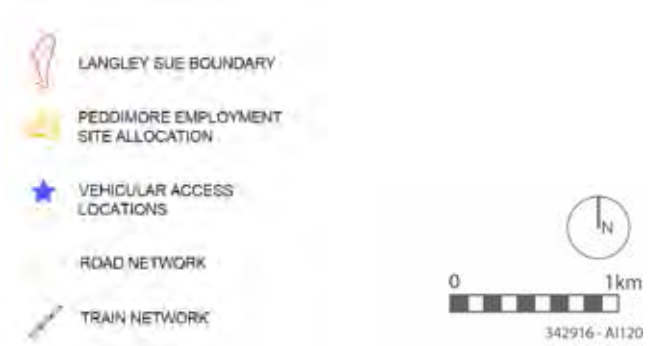
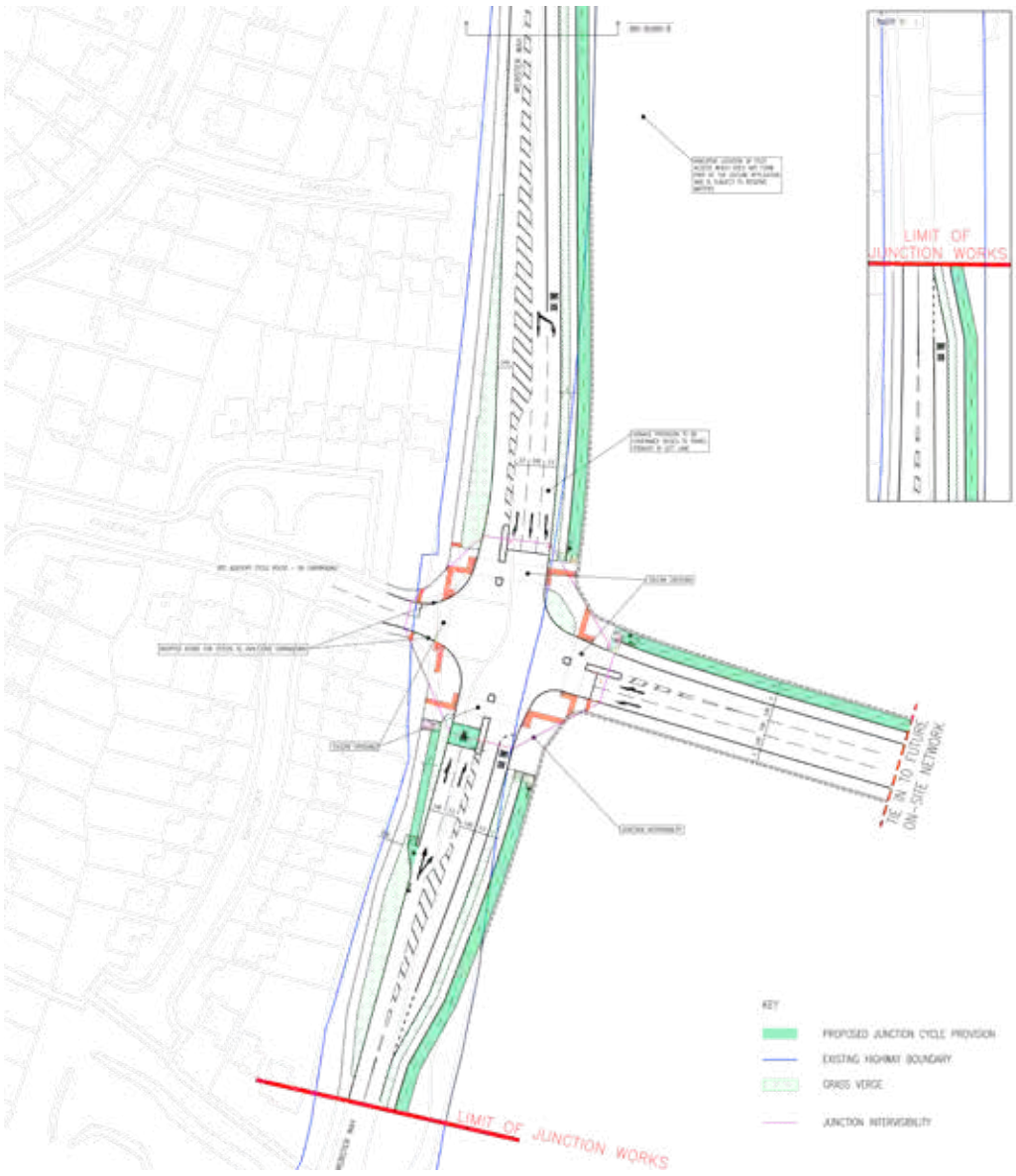
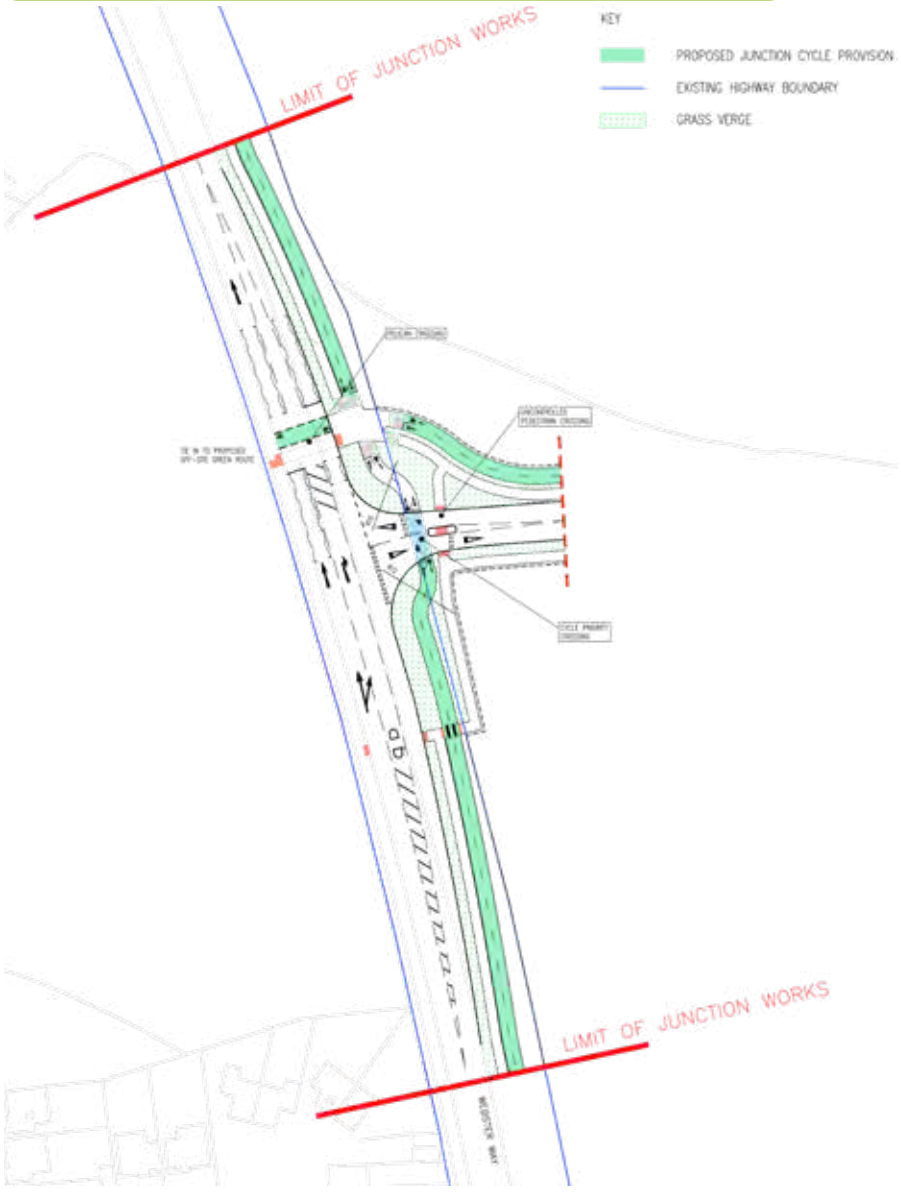


Figure 96. Site Access 2 - Webster Way/ Calder Drive / Primary Site Access



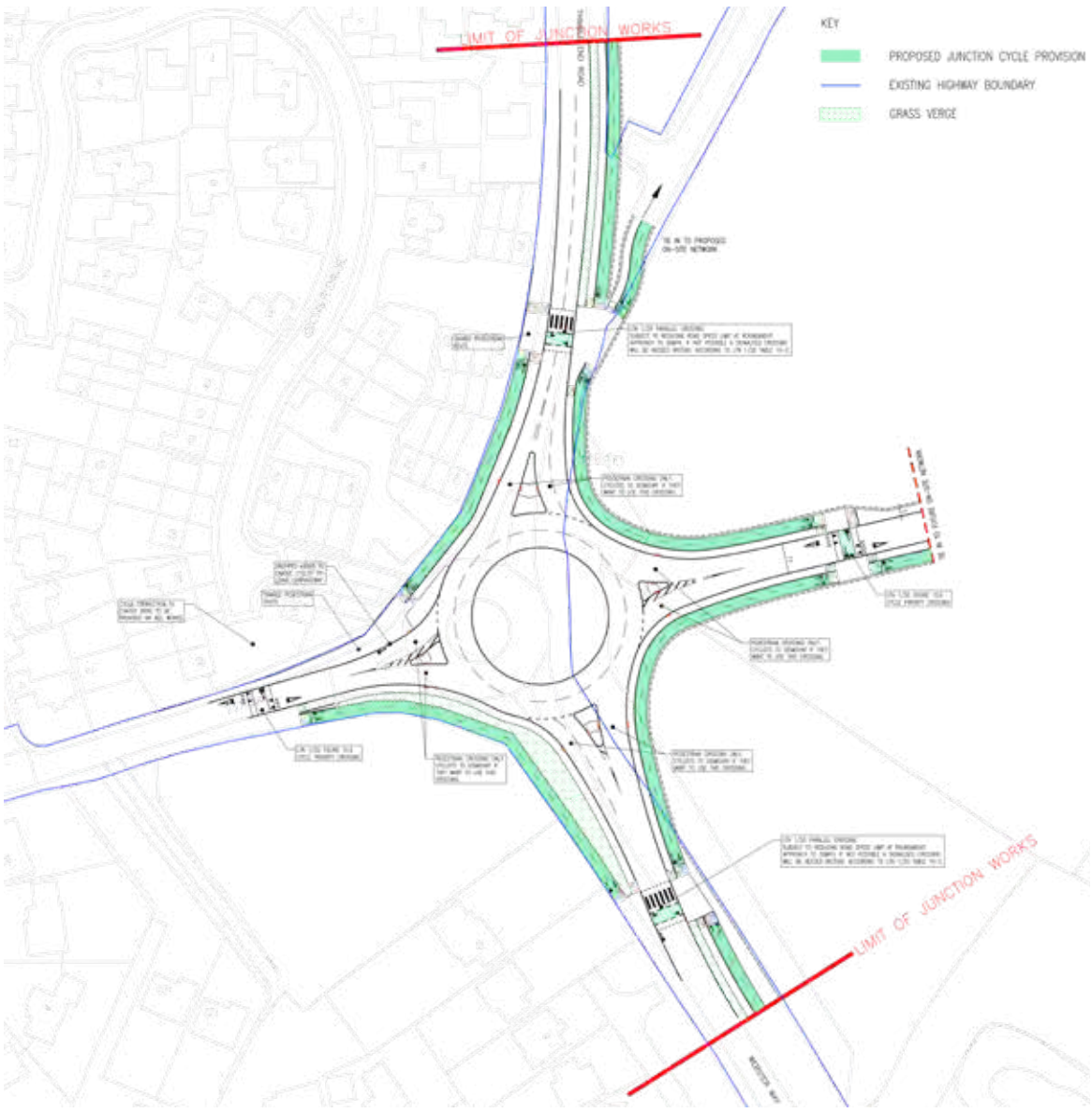
19.14 The southern most access from the western periphery of the Site will be provided from Webster Way / Calder Drive. It is proposed to reconfigure the existing junction (which is currently in the form of a mini-roundabout) into a four arm signalised crossroads. As per the Langley SPD, the junction has been designed to accommodate speeds of 30mph, therefore Manual for Streets has been used to inform the design.

Figure 97. Site Access 3 - Webster Way / Secondary Site Access



19.15 The Webster Way access (in-between Calder Drive and Fox Hollies Road), is located approximately 450m to the north of the Webster Way / Calder Drive junction (site access 2). The proposed junction will be a priority controlled junction, with a ghost island right turn lane on the Webster Way northbound approach arm. As per the Langley SPD, the junction has been designed to accommodate speeds of 30mph and therefore Manual for Streets has been used to inform the design.

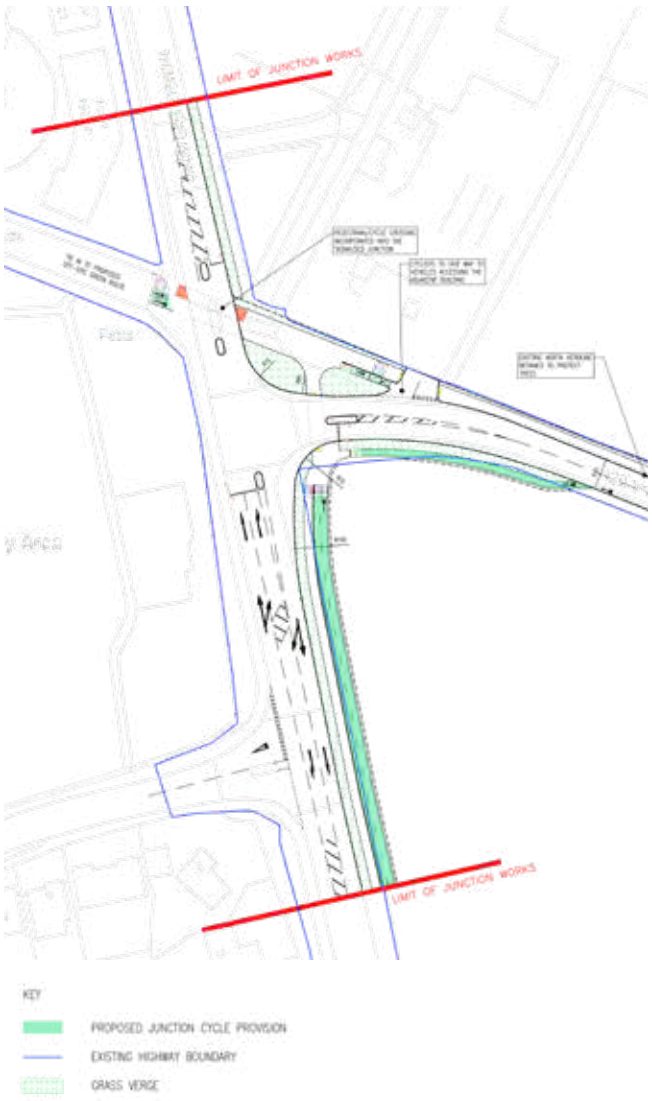
Figure 98. Site Access 4 - Thimble End Road,/ Webster Way / Fox Hollies Road Roundabout



19.16 It is proposed that this access will be provided via the Fox Hollies Road / Webster Way / Thimble End Road roundabout. An additional arm will be constructed to the east of the existing roundabout in order to provide access into the Site.

19.17 As per the Langley SPD, the junction has been designed to accommodate speeds of 30mph and therefore Manual for Streets has been used to inform the design.

Figure 99. Site Access 5 - Thimble End Road/ Signal Hayes Road Junction Amendments



19.18 It is proposed to re-configure the existing Thimble End Road / Signal Hayes Road priority junction into a signal controlled junction. This access will be designed to accommodate buses and Sprint, when it comes forward.

19.19 This access will serve the existing properties on Signal Hayes Road that are outside of the development area and will not provide a through access to the development site for private vehicles.

19.20 The junction, however, will serve as the bus access to the development and as such, there will be a bus only gateway situated on Fox Hollies Road between the existing properties and the development area to prevent through vehicle movements for non-bus traffic.

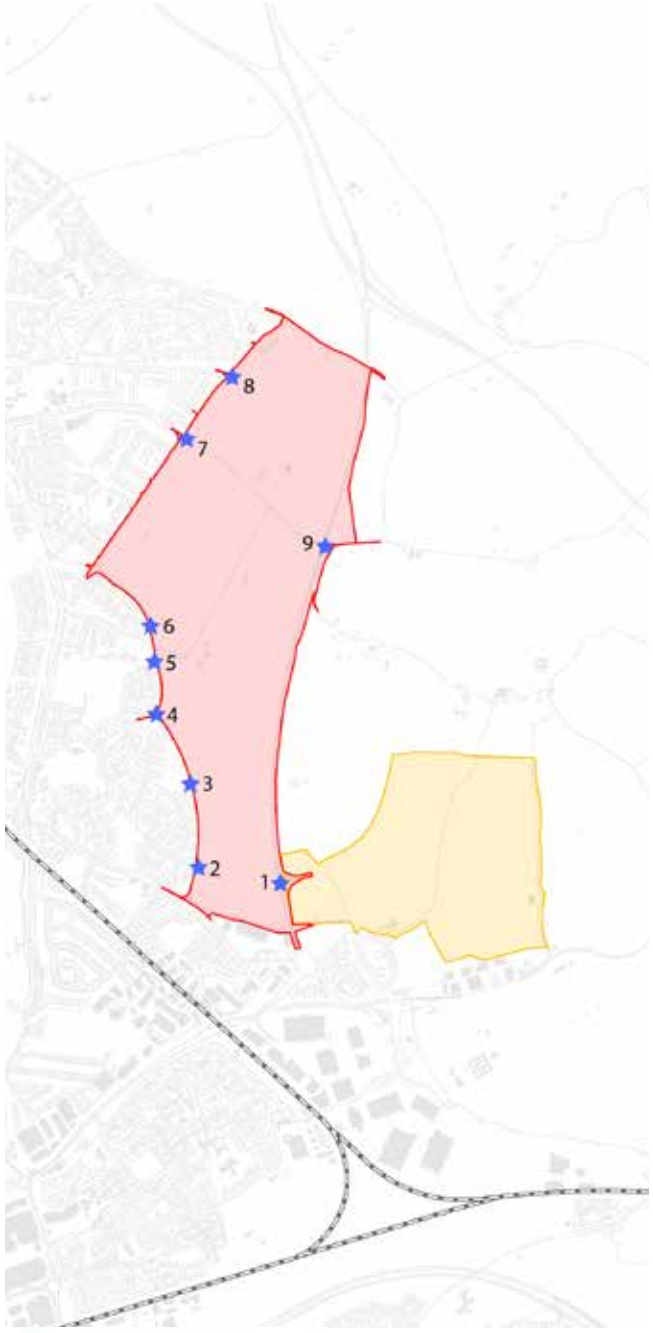
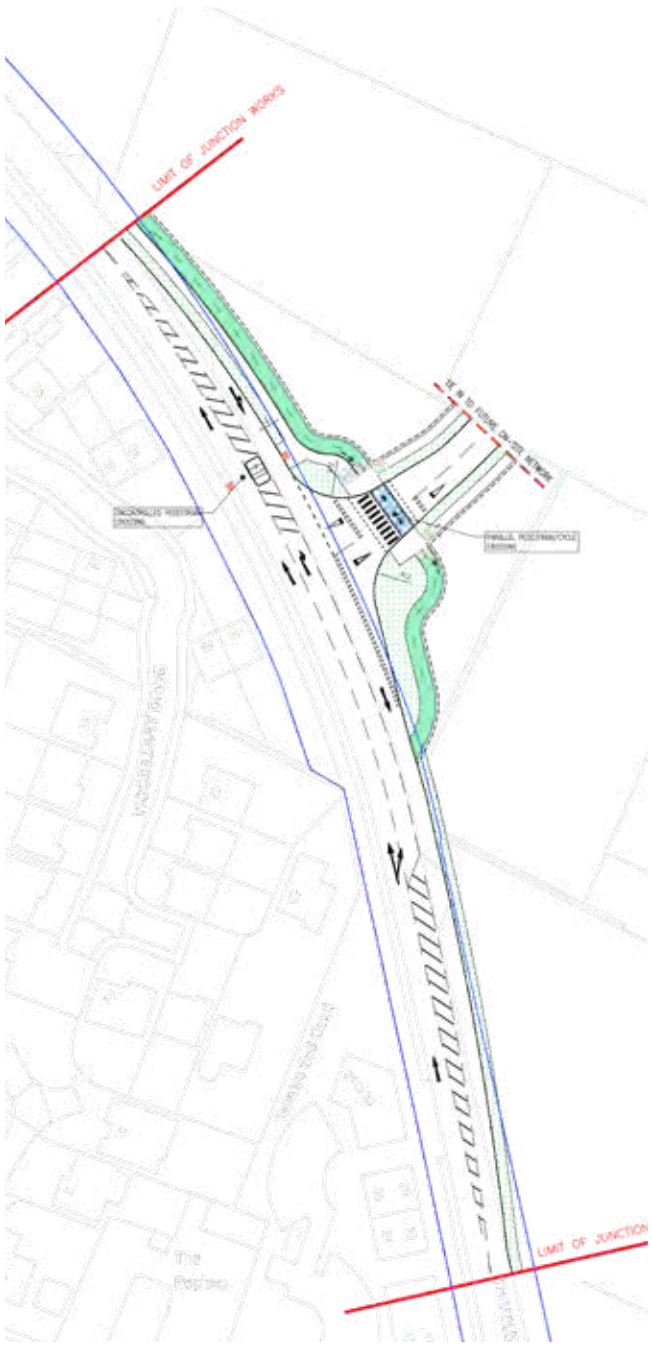


Figure 100. Site Access 6 - Thimble End Road / Primary Site Access

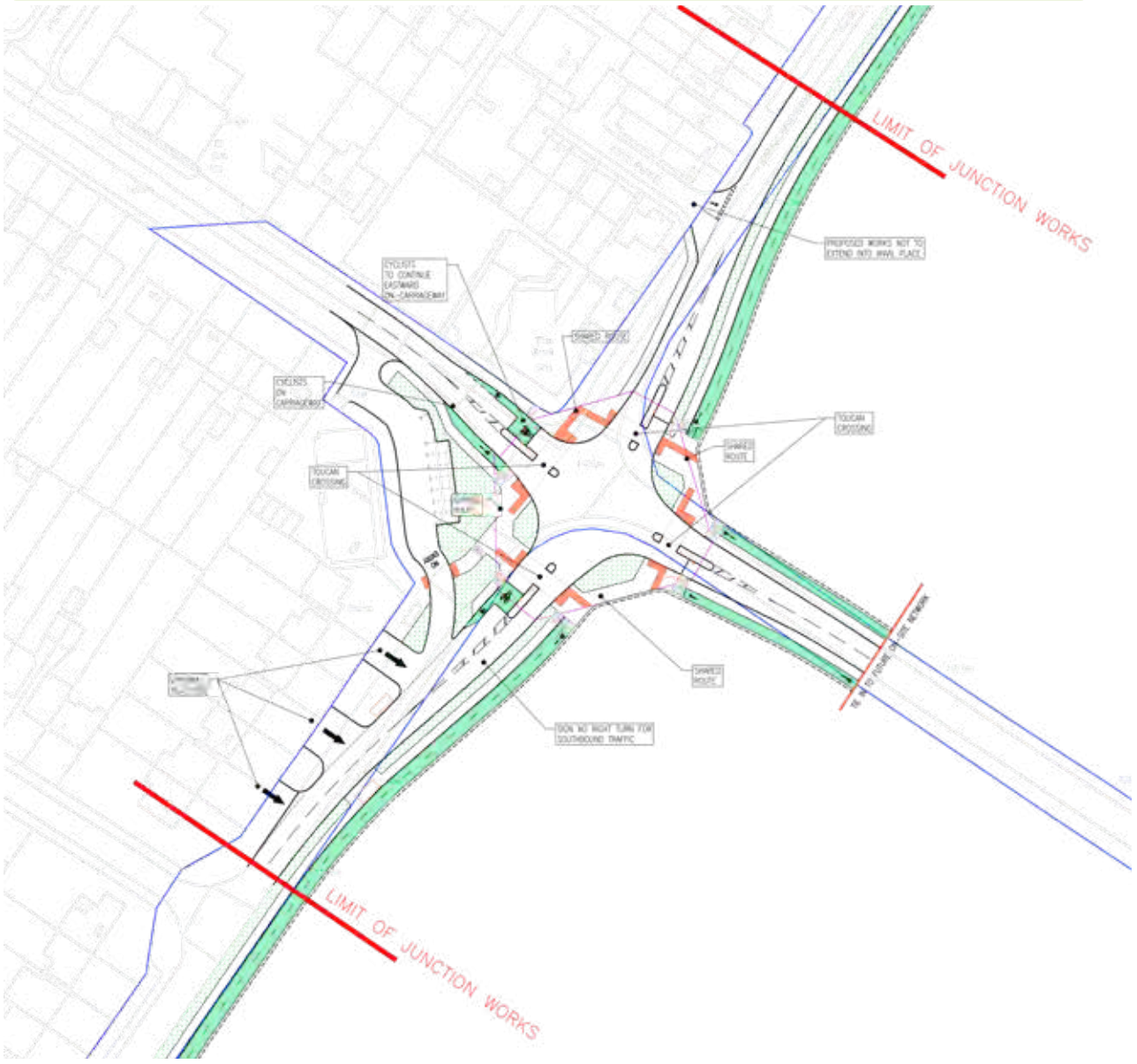


19.21 This access will be provided on Thimble End Road, approximately 300m north of the existing Signal Hayes Road junction. The proposed junction will be in the form of a priority controlled junction, with a ghost island right turn lane on the Thimble End Road northbound approach arm. This junction will provide access on to the Primary Movement Route within the Site.

19.22 As per the Langley SPD, the junction has been designed to accommodate speeds of 30mph and therefore Manual for Streets has been used to inform the design.

KEY
PROPOSED JUNCTION CYCLE PROVISION
EXISTING HIGHWAY BOUNDARY
GRASS VERGE

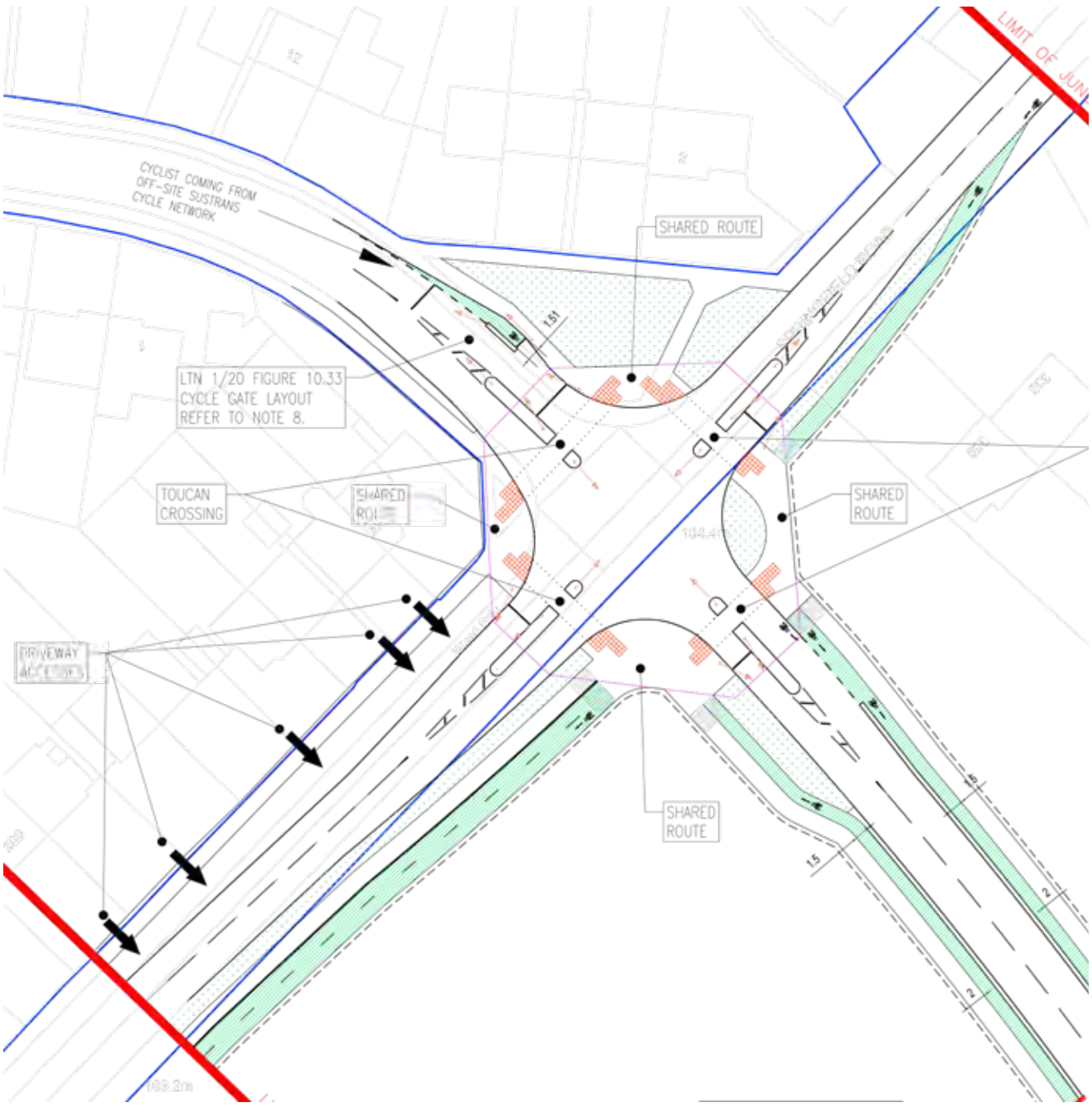
Figure 101. Site Access 7 - Springfield Road / Reddicap Heath Road / Ox Leys Road Amended Junction



19.23 It is proposed that this access will be provided via the existing Springfield Road / Reddicap Heath, Ox Leys Road junction. It is proposed to reconfigure the existing junction (which is currently in the form of a mini roundabout) into a four arm signalised crossroads. The design supports pedestrian movement between existing and proposed communities.

19.24 As per the Langley SPD, the junction has been designed to accommodate speeds of 30mph and therefore Manual for Streets has been used to inform the design.

Figure 102. Site Access 8 - Springfield Road / Churchill Road / Secondary Site Access Junction



19.25 It is proposed that this access will be provided via Springfield Road at its junction with Churchill Road. The existing junction arrangement is currently priority controlled (with priority given to Springfield Road). It is proposed to reconfigure this junction into a four-arm signalised crossroads by adding an extra arm to the east of Springfield Road in order to provide access to the Site.

19.26 As per the Langley SPD, the junction has been designed to accommodate speeds of 30mph and therefore Manual for Streets has been used to inform the design.

SITE VEHICLE MOVEMENT

19.27 Figure 103 shows the access and movement parameter plan formally submitted for the application.

19.28 The overall movement strategy has created a primary movement network which connects and links both the proposed development as well as parts of the existing movement network to join the new northern and southern A38 junctions. The logic of this approach has been to achieve a more even distribution of movement in the wider network while reducing existing trips south to the A38 junction at Minworth Island thereby freeing up capacity in the wider network.

19.29 Further objectives of the primary movement network has been to:

- Provide access to Langley Central and the Secondary School site at an early stage in the overall development phasing;
- Enabling some re-routing of existing through traffic from Springfield Road onto the primary movement routes thereby providing an opportunity to improve parts of the Springfield Road environs.

19.30 A network of secondary routes are indicated on the plan and these serve to connect and link the new development onto the primary movement network.

19.31 This plan is supplemented in this DAS at Section 24.0 by an indicative street hierarchy plan and illustrative street sections. These provide design principles for the primary and secondary routes as well as indicating principles around the finer grain street network and hierarchy of interconnected permeable streets and routes.

Existing Ox Leys Road Adjustments

19.32 As part of the proposals and in response to topographical, Langley Brook, and highway constraints, the alignment of part of Ox Leys Road will be adjusted. This will assist with traffic calming through traffic to the A38 north junction as well as providing appropriate highway and footway gradients.

CAR AND CYCLE PARKING

19.33 Parking and cycle parking provision on Site will be considered as part of the future reserved matters planning application. Prevailing car and cycle parking standards are set out within BCC's adopted parking standards and should be referenced at the detailed design stages. The preference will be for a minimum of 200% parking provision for all houses.

19.34 In addition, parking on site will also consider the Draft Birmingham Parking SPD (2019). Once adopted, these standards include the expectation for some parking to be provided in an unallocated way which makes more efficient use of space and provides for visitors, deliveries and servicing."

ELECTRIC VEHICLES

19.35 BCC's Car Parking Guidelines stress the importance of encouraging the use of electric vehicles and states that the Council is seeking to work with developers to arrange the inclusion of charging points for electric vehicles, in relation to new developments where appropriate.

19.36 Additionally, the Langley SPD states that the development must adhere to BDP Policy TP43 - Low Emission Vehicles. The developer is committed to deliver power infrastructure or passive-power generation and smart home technology to ensure that electric vehicles and/ or low emission vehicles will be accommodated across the Site.

19.37 It is envisaged that charging facilities will be provided on driveways / curtilage of properties, rather than on-street or informal parking. In cases where charging facilities are unable to be provided within curtilage (i.e. shared parking for apartments), allocated electric charging spaces will be provided in communal car parks. The number and positions of electric charging points will be provided as detailed designs are progressed.

CAR CLUBS

19.38 BCC wishes to promote the use of car clubs as an alternative to private car ownership. The inclusion of car clubs and specific parking for vehicles within new development will be encouraged. As such, provisions for car clubs will be made in the local and district centres, where they are likely to be in more demand. The locations and numbers of car club spaces to be provided will be included in the relevant submissions at the reserved matters stages.

Figure 103. Access and Movement Parameter Plan

LEGEND

- Application Boundary (302.79 Ha / 748.21 Ac)
- Existing Uses Excluded from Application (5.64 Ha / 13.94 Ac)
- Residential Development - C3 Uses (Includes Incidental Open Spaces and Access Infrastructure)
- Mixed Use Hub
- Community Hub
- Strategic Highway Junctions
- Existing Highways and Access to Existing Dwellings
- Primary Site Acces Positions
- Indicative Main Highway Movement Corridors
- Existing Fox Hollies Road Bus Only Link
- Existing Fox Hollies Road Altered to Accommodate Dedicated Pedestrian / Cycle Route and Vehicles
- Indicative Looped Movement Network (Exact positions to be agreed at Reserved Matters stages)
- Indicative Local Movement Network with Junctions Connecting with Existing Roads (Exact positions to be agreed at Reserved Matters stages)
- Potential To Redirect Existing Through Traffic Flows and Enhance Street Design
- Direct Frontage Access to Proposed Development
- Local Site Access Positions
- Potential Highway Improvement Works
- Existing Definitive Public Right of Way - Routes Subject to Review at Reserved Matters/ Infrastructure Application stage
- Approximate Position of Strategic Footway / Cycleway Route
- Approximate Position of Local Pedestrian Access

Strategic Footpath Links to be Formed Between Points:

- A B C — Langley Walk
- A D — Langley Brook Park
- E F — East to West Link
- A F G — Eastern Landscape Corridor

Note:
- All movement route alignments are subject to a lateral tolerance of +/- 30m unless stated otherwise.

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PEDESTRIAN MOVEMENT

19.39 Multiple pedestrian accesses can be provided along the western edge in to the Site as shown at Figure 103.

19.40 Pedestrians will also be able to access the Site via the proposed vehicular access points along the Site's western edge.

19.41 All vehicular access points will be designed to accommodate pedestrians with 2m wide footways on either side of the internal carriageway, equipped with tactile paving and dropped kerbs.

19.42 To aid pedestrian access, new signal controlled crossings will be provided on all arms of the proposed signalised junctions along the Site's western boundary.

19.43 The proposed pedestrian crossing facilities are located so that they provide maximum benefit for existing and future residents in terms of access to existing public transport provisions and local facilities.

19.44 High quality controlled crossing points will therefore be provided at the following locations:

- Webster Way / Calder Drive – aiding pedestrian access to facilities to the west of Langley, such as local facilities on the B4148 Walmley Road;
- Springfield Road / Reddicap Heath Road / Ox Leys Road – aiding pedestrian access to facilities located along Reddicap Heath Road;
- Springfield Road / Churchill Road – aiding pedestrian access to local facilities located along Churchill Road (Falcon Lodge).

19.45 In addition to the above, a number of uncontrolled crossing points will be provided along the western boundary and southern boundary of the Site to match key desire lines (as shown on the Parameters Plan). The uncontrolled crossings will be either formal or informal depending on the street environment which include:

- Three formal uncontrolled crossing facilities to be provided along Webster Way where traffic levels are expected to be higher. This includes the pelican crossing north of site access 3 to provide access to the proposed off-road Green Route, as well as two additional uncontrolled crossing facilities at local site access points (as shown on the Access and Movement Parameter Plan);
- A controlled toucan crossing will be provided on Walmley Ash Lane to link the development to the proposed off-road cycle route across Minworth Retail Park (to the immediate south of the site;
- Five informal crossing facilities to be provided along Springfield Road where the street scape is more rural in nature, therefore traffic levels are expected to be lower. Uncontrolled crossing facilities will be provided at local site access points (as shown on the Access and Movement Parameter Plan) and will be equipped with dropped kerbs, tactile paving and pedestrian refuge islands to allow safe passage; and
- Two formal uncontrolled crossing facilities will be provided along Thimble End Road. This includes uncontrolled cycle priority and parallel crossing facilities at the Fox Hollies Road / Webster Way / Thimble End Road roundabout (site access 4) and an uncontrolled parallel crossing in between Signal Hayes Road and Springfield Road (north of site access 6).

19.46 In terms of the internal Site layout, a number of pedestrian provisions will be provided in order to accommodate / encourage walking. The 'Strategic Pedestrian and Cycle Link - Langley Greenway' and 'New and Existing Pedestrian Routes' (see illustrative masterplan Figure 20) provides multiple links across the Site which caters for desire lines and are located logically to provide good quality walking permeability to internal and external facilities.

19.47 The strategic pedestrian and cycle link connects Churchill Road to the north-west of the development to Calder Drive / Webster to the south-west, as well as to the Peddimore development to the south-east and Walmley Ash Lane to the south.

19.48 Off- street leisure pedestrian routes will be in the form of 1.5m - 2m wide footpaths and will be constructed to a high quality, with planting and other landscape and built features used to create a pleasant, interesting and safe walking environment.

19.49 Direct walking routes to schools will be provided across the Site which will avoid crossing main roads where possible. Additionally, streets will be designed to 20mph near schools, local / district centres and shops. Footways in the vicinity of these facilities will also be designed to cater for higher pedestrian flows and therefore widths will vary in accordance with DfT's Inclusive Mobility Best Practice Guide.

CYCLE MOVEMENT

19.50 Cyclists can access the site via the primary access points on the western periphery of the site, as well as all the secondary and local accesses shown on the Parameters Plan. These access points have been designed to accommodate cyclists in line with TfWM Cycle Design Guidance and LTN1/20.

19.51 Cycle links will also be provided throughout the length of the Site. The 'Strategic Pedestrian and Cycle Link - Langley Greenway' (see Section 24.0 for further illustrative information) will connect cyclists north to south through the Site and over the A38 (eastwards) into the Peddimore development via a traffic-free footway /cycleway bridge. The strategic links will provide a connection to the off-road cycle path along Churchill Road (to the north-west of the Site) which continues westwards to meet NCN Route 534.

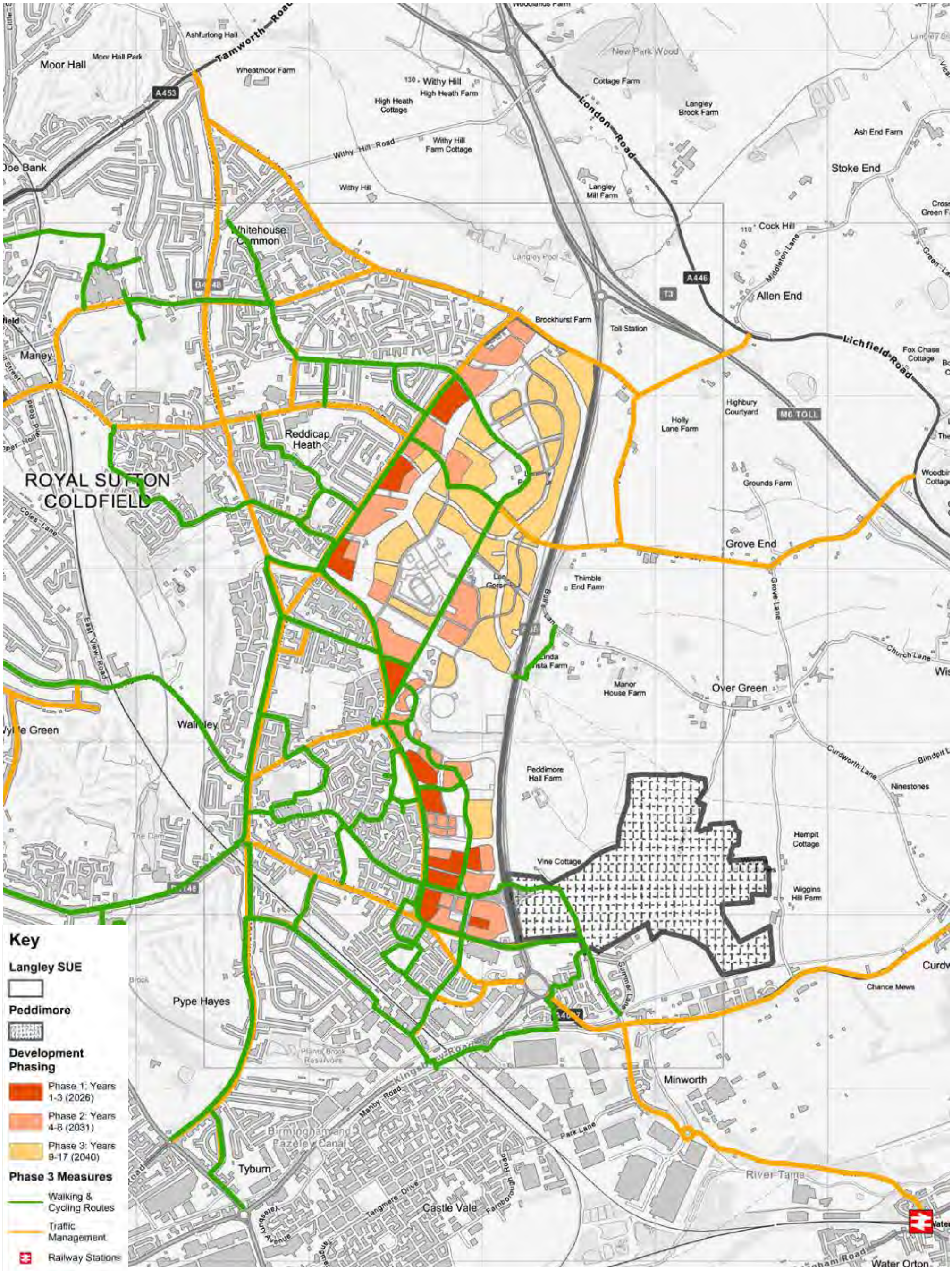
19.52 In accordance with the Cycle Design Guidance, the strategic cycle links could be in the form of a 3m - 4m wide cycle path with a 2m wide footway, both of which will be segregated from the carriageway. The cycle path should accommodate the maximum provision for cyclists (>150 bicycles per hour) in order to encourage as many future residents to cycle to and from the development, as well as to local destinations contained within the Site.

19.53 In addition to the above, the existing 'Primary Movement Routes' of Webster Way and Thimble End Road could also be upgraded to provide segregated pedestrian and cycle routes utilising the existing roadside verge area to the east of the existing highways. This will support connections to the existing Fox Hollies Road footpath and cycle route down to the Peddimore footpath and cycle connection. The designs of such routes are to be determined at the Infrastructure Application stage.

19.54 The 'Secondary Movement Routes' will be designed as 'all-purpose traffic lanes' to encourage shared use by vehicles and cyclists. These roads will be subject to a 20mph speed limit with curved alignments where possible. Again, the designs of these routes will be determined at the detailed design stage.

19.55 Primary cycle routes can be lit and sign posted to support way-finding. This can be invaluable to cyclists as it informs/promotes the user of the route, making potential users aware of its presence as an alternative to their current transport mode.

Figure 104. Existing and Proposed Cycle Routes



PUBLIC TRANSPORT

19.56 The Public Transport Strategy (PTS) for the Site is illustrated in Figure 105 - Figure 107.

19.57 The Langley SUE PTS identifies ways in which public transport services, in proximity to the development, may be enhanced in order to provide greater accessibility to residents and to encourage an increase in public transport mode share. The proposals within the PTS are based upon, or broadly complementary to the 2019 Eastern Fringe Bus Study (EFBS) and were informed by consultations with TfWM and Birmingham City Council. The strategy is split into three scenarios in line with the phased completion and demand requirements for each phase of the proposed development (see chapter 30.0 and 'Next Steps' for details). This PTS has been based around the following four main objectives:

- Ensure the majority of new homes are within the 350m catchment of a bus route;
- Short and medium distance sustainable journeys to be catered for by public transport;
- Making the best use of existing sustainable infrastructure; and
- Building a critical mass of patronage for the expansion of sustainable infrastructure.

PT Scenario One

19.58 The PTS Scenario One will occur from years 1-3 of the development and is scheduled to be completed by the year 2026. The measures proposed consist of two 'fill-in' bus stops on Thimble End Way and Webster Way. These would be provided to increase accessibility to the southern end of Langley, where there is currently a lack of bus stops.

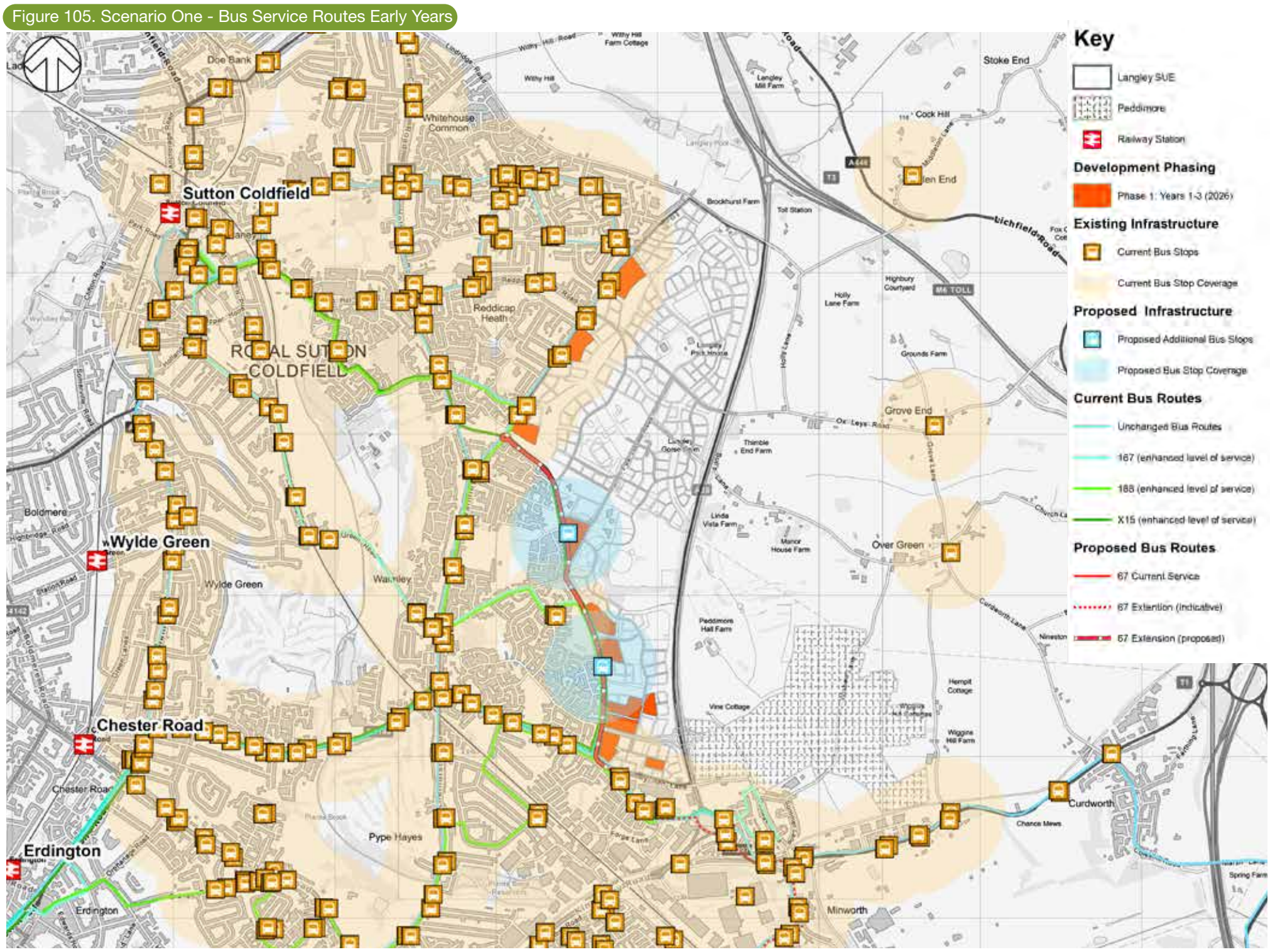
19.59 To serve these proposed stops, the X15, 167 and 168 services would be extended to cover the peak hours, providing an early morning and evening service, as well as a similar level of service on weekends. The service frequency is also proposed to improve to at least every 20 minutes. This would enable it to serve the stops and provide the south of the emerging development with direct connections to Birmingham City Centre and Sutton Coldfield Town Centre.

19.60 In addition to the above, Langley SUE is supportive and will contribute towards the package of public transport measures identified for service 67 within the EFBS. This includes extending the 67 through Castle Vale and Minworth to the western boundary of Langley towards the Thimble End Road / Fox Hollies Road / Webster Way roundabout. The proposals also the provision of bus priority measures along the A38 Tyburn Road to allow a more reliable operation of the service to and from Birmingham City Centre. This would also improve service provision for existing communities around Walmley and Reddicap Hill.

19.61 The north of the Site, adjacent to Springfield Road, is already reasonably well serviced by the frequent, high quality, X4 and X14 buses between Sutton Coldfield and Birmingham City Centre.

19.62 Scenario One is intended for the period of Langley's development prior to the delivery of the primary on-site corridors and therefore only makes use of the existing road network. This situation would only be viable for development Phases during the first 1 - 3 years as later phases of development would be beyond the CIHT Guideline of 400m direct line distance from bus stops.

Figure 105. Scenario One - Bus Service Routes Early Years



PT Scenario Two

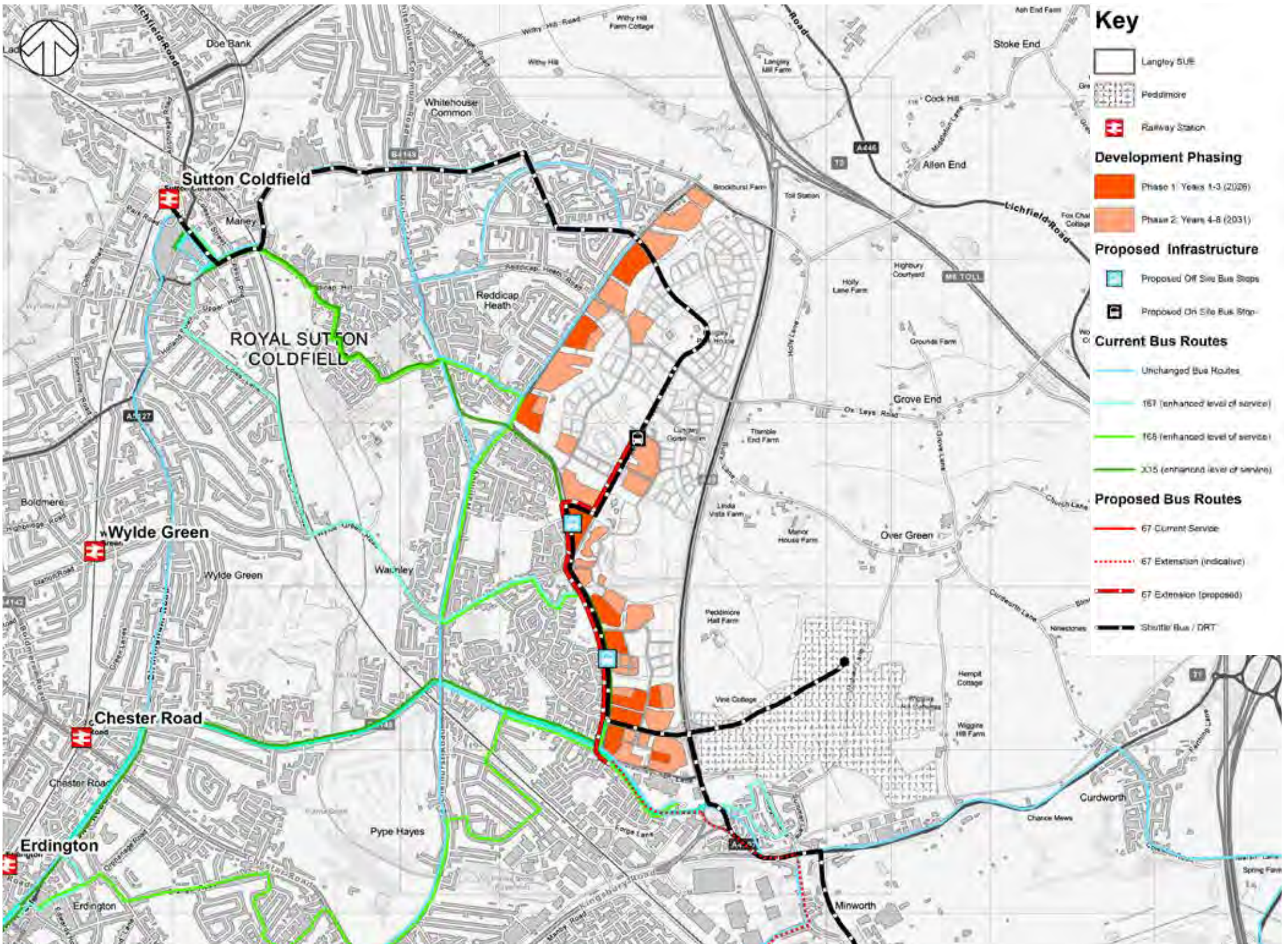
19.63 The PTS Scenario Two is anticipated to occur during years 4-8 of the development and is initially scheduled to be completed by the year 2031. To service the Site beyond year 4 of the development, it is proposed that bus services and stops begin to be provided on Site, with the preference being for stops near or adjacent to community uses such as the primary, secondary schools or the mixed use community hubs. The measures proposed in Scenario One will remain.

19.64 Scenario Two will provide provision of a corridor through the core of the site for public transport following the current on-site Fox Hollies Road alignment. The corridor will be accessed from the north by a new site access junction with Churchill Road / Springfield Road (site access 8) and accessed from the south by the reconfigured Thimble End Road / Signal Hayes Road (site access 5). A bus stop will be incorporated to serve the internal site plots.

19.65 In addition to the above, a shuttle bus or DRT service connecting the site to Peddimore and the train stations at Sutton Coldfield and Water Orton is also proposed. The service will ensure rail users can access both the line between Birmingham and Leicester and the Cross-City Line quickly and conveniently. It will also serve as a method for interconnectivity across the site, as well as providing a sustainable connectivity link to Peddimore employment development.

19.66 As stated above, Langley SUE as presented in Scenario One is supportive and will contribute towards the package of public transport measures identified for service 67 within the EFBS. The details are still to be refined but the additional measure to be implement during Scenario Two includes Langley SUE as destination of the route for service 67, penetrating and turning in the site.

Figure 106. Scenario Two - Bus Service Routes Full Development



Demand Responsive Bus Service

19.67 The PTS Scenario Three is anticipated to occur during years 9-17 of the development and is initially scheduled to be completed by the year 2040. By this time, it is anticipated that the site will be completed, operating at full demand levels and therefore buses are intended to be a vital component to interconnecting Langley SUE to the surrounding network. As such, Scenario Three will complete the step-change in provision of bus services proposed in-line with the strategic site objectives for cohesive and high-quality public transport links between the site and the rest of the West Midlands.

19.68 Given the above, the following measures are proposed as part of Scenario Three to help facilitate public transport trips to and from the site:

- Completion of an integrated corridor through the core of the site prioritising bus use along it. The future proposed corridor on Fox Hollies Road will incorporate during this phase:

  An Interchange Hub, providing connections to Sutton Coldfield and Birmingham City centre and ease of access to onward destinations across. The hub will integrate the bus stop proposed in phase 2. It will be located around the district centre and within walking distance to the education provision.

  2 additional bus stops created to the north of the one proposed on Phase 2, within a maximum of 400m radius of all residential dwellings to provide ease of access to bus services and

  A bus gate towards the south, just before the turn into Signal Hayes Road, providing priority movement for buses over general traffic through the site.

- Stop of the shuttle bus or DRT service as described for Phase 2 (consider the potential of Peddimore as a trip attractor to support a shorter service between both development sites) and

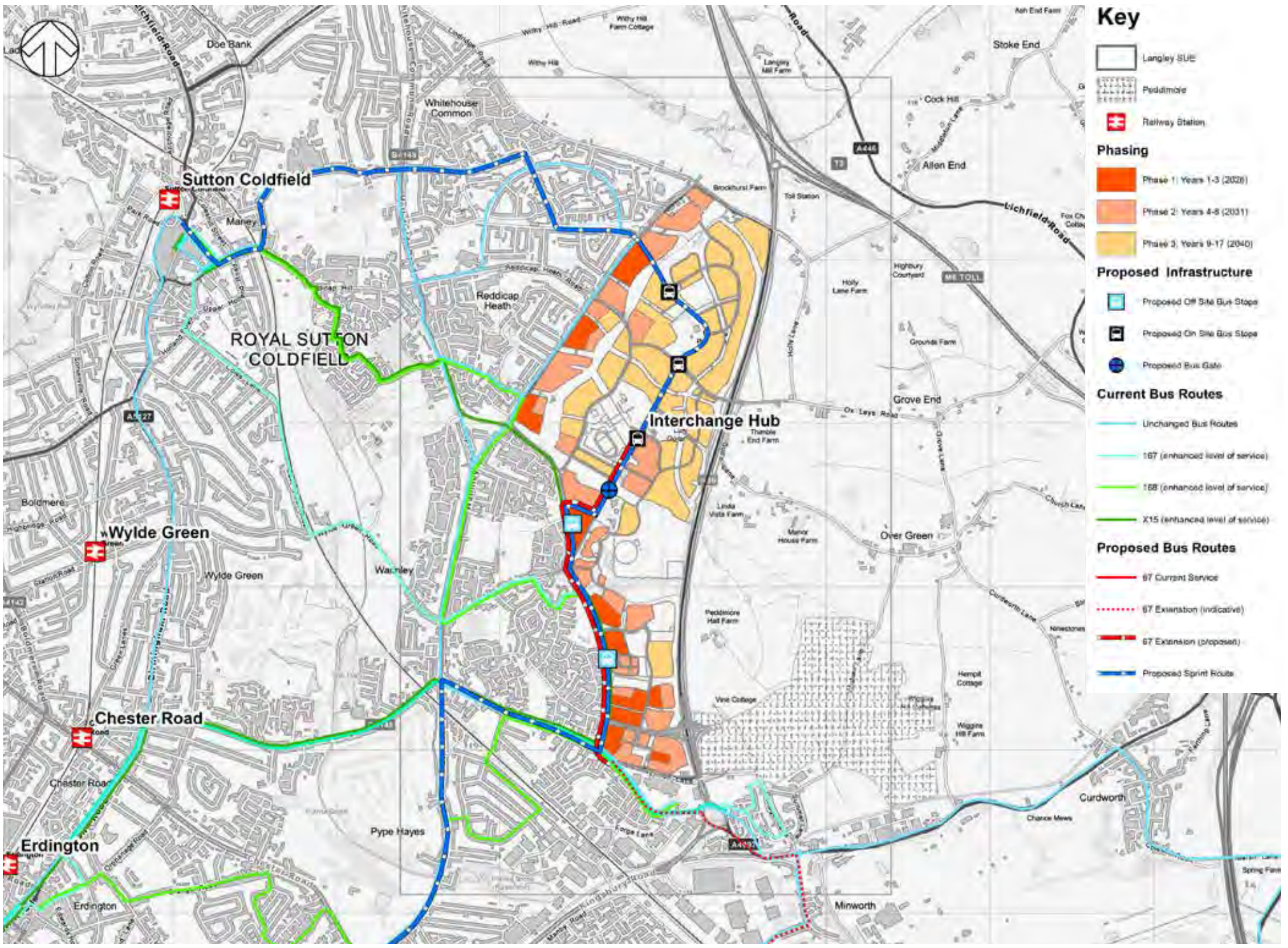
- Provision of a Sprint Bus Rapid Transit (BRT) route through the site.

19.69 The primary connection between Langley SUE and the wider West Midlands Region is proposed to be Sprint BRT. The core principal of the Sprint Network is to provide the public with a fast, reliable alternative to the car with a high-quality on-board experience, but at a lower delivery cost to light rail or trams (e.g. Birmingham's Metro). At the present time, it is proposed that Sprint BRT will operate on a corridor connecting the following key locations:

- Sutton Coldfield;
- Langley SUE; and
- Birmingham City Centre (for HS2 Curzon Station).

19.70 On route, the Spring BRT will also connect to the south of Walmley Town Centre and the Good Hope Hospital. The Sprint BRT service will operate at 10-minute frequencies across the majority of the day and with the provision of priority interventions. These interventions should save between 5 and 10 minutes over current bus journey times, as well as operating with greater reliability than the cover services which are vulnerable to delays relating to traffic.

Figure 107. Bus Services - Serving Existing and Future Demands



LANGLEY DESIGN FRAMEWORK

LANGLEY DESIGN FRAMEWORK

The following section provides a set of design principles and illustrative materials to support understanding and guide the preparation of future reserved matters applications, such that they comply with the project parameter plans. This section demonstrates how the masterplan can respond to local context and support the long term vision for the Site.

20.0 BUILDING HEIGHTS

20.1 The distribution of proposed building heights for the Site has been informed by:

- The Landscape Visual Analysis (submitted within the ES);
- The existing and proposed topography of the Site;
- The relationship to the A38 and the performance of the acoustic barrier;
- The relationship with existing and retained heritage features within the allocated Site area;
- The relationship with adjoining domestic scale development to the west, and also the existing and emerging commercial development context to the south (ASDA) and south east at Peddimore; and
- The use of building height variation at key locations to support development hierarchy, place making and legibility.

20.2 Figure 108 defines the maximum storey heights appropriate in each part of the Site. This plan is a simplified version of the formally submitted Heights Parameter Plan. The Height Parameter plan should be referenced to understand the maximum height envelope in metres Above Ordnance Datum (AOD) level, as well as the relationship of the storey heights to the existing and proposed ground levels.

20.3 It should be noted that:

- All building storey heights indicated are from the existing or where relevant proposed altered ground level to the ridge-line or equivalent highest point of the building (excluding chimneys and communication equipment);
- All land use areas and features subject to a location tolerance of 10m;
- Final ground and building floor levels for the development may range +/-3m from existing ground levels. This will be confirmed at the reserved matters stage for each character area;
- Building heights will vary according to strategic character areas defined in Section 24.0 of this DAS; local characteristics; and landscape visual assessment at Reserved Matters stages;
- Average Commercial Storey Height = 4m;
- Average Residential Storey Height = 3m;
- Any ancillary buildings/ structures located within the Green Infrastructure areas will be a maximum of 4m in height above finished ground levels and have a maximum footprint of 10m x 10m, unless otherwise agreed.

MIXED USE & EDUCATION

20.4 Figure 108 shows the maximum height to ridge-line appropriate for mixed use, education, and sports hub typologies. These are larger to accommodate sports halls/ auditoriums, and in the case of mixed use areas to accommodate upper storey uses such as offices or residential.

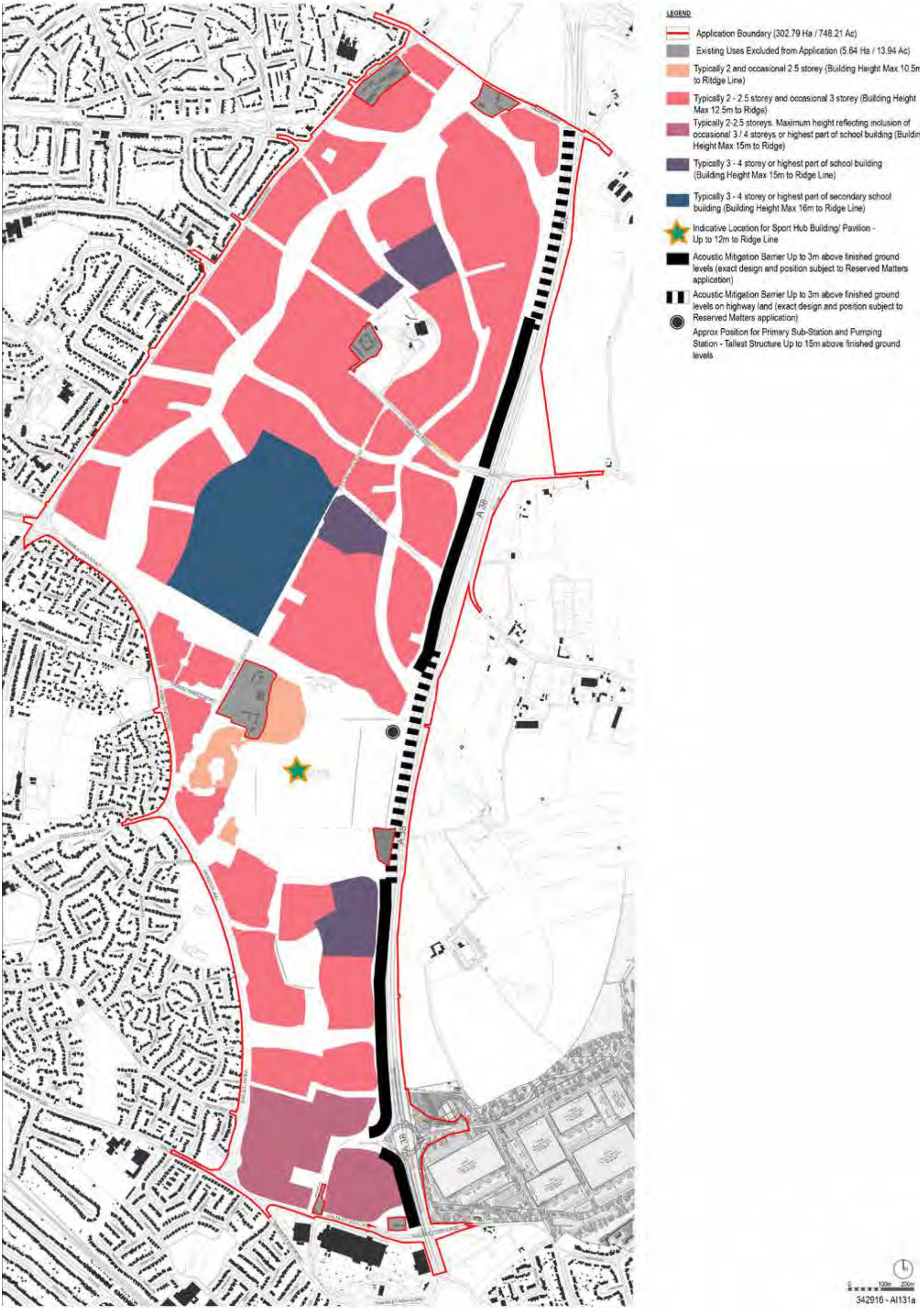
ACOUSTIC BARRIER

20.5 Maximum height information for the creation of an acoustic barrier along the eastern edge of the Site is also provided.

20.6 The height range of the barrier enables some flexibility both in terms of the location and form of the barrier (i.e. acoustic fencing or landscape bund); landscape proposals to form a bund; availability of spoil from works on the Site; and also in case noise levels change from the A38 during the build out of the development (potential reduction in noise from diesel and petrol cars due to government reduction targets).

20.7 Further principles for acoustic mitigation are provided in Section 21.0.

Figure 108. Building Storey Heights Parameter Plan



21.0 ACOUSTIC MITIGATION

21.1 Acoustic mitigation is required where noise levels will need to be controlled to reduce impacts on sensitive uses, i.e Residential Areas / Gardens. The heights plan Figure 108 shows the general position of an acoustic barrier feature.

21.2 It is acknowledged that over the build out period of the development the noise conditions may change and/or alternative acoustic mitigation methods may become available.

21.3 The illustrations at Figure 109 demonstrate a range of acoustic mitigation methods which satisfy the acoustic principles today for residential development. These illustrations are not intended to restrict alternative solutions coming forward in the future subject to noise monitoring and acoustic standards at that time.

21.4 It will be for the Reserved Matters application stages for applicants to demonstrate how the designs achieve the required acoustic mitigation principle.

POTENTIAL ACOUSTIC MITIGATION METHODS

21.5 Following extensive testing of a range of mitigation options for the Site, the following solutions used in combination are considered to offer the most significant mitigation and betterment. The testing approach has supported the maximisation of potential developable area on Site.

- Landscape/ acoustic barrier;
- Buildings fronting the noise source;
- Increased building heights;
- Building fabric specification.

Landscape/ Acoustic Barrier

21.6 Acoustic barrier solutions comprise either a fence, a formed earth bund of up to 3m in height or a part earth/ part fence construction, set back from but parallel to the A38.

21.7 Where the earth bund solution is proposed, the intention is to manipulate its appearance through creative landscape design and additional ground remodelling. This will support the quality and variety of an additional natural parkland and ecological corridor along the eastern edge of the Site.

Buildings Fronting the Noise Source

21.8 The acoustic model has identified the need for buildings adjacent to the noise barrier to front towards the noise source. This will further support the achievement of rear garden noise level of 55dB LAeq,T or lower without the need for additional acoustic barriers to each garden.

Building Fabric Specification

21.9 To achieve acceptable internal noise standards enhanced glazing specifications and mechanical ventilation may be required for acoustic frontage dwellings. The exact specification will be determined at the reserved matters stage and following additional acoustic analysis and testing.

21.10 There may also be requirements in other parts of the Site for building fabric enhancements. The extent and location of these will be determined at the reserved matters design stage, and through additional acoustic modelling and testing.

Acoustic Mitigation Principle:

To achieve:

- A maximum sound level of 55dB LAeq,T in rear private residential garden areas; and
- A maximum of 35dB LAeq,16hr in living rooms and bedrooms, and 30dB LAeq,8hr and 45dB LAmax in bedrooms.

Section A

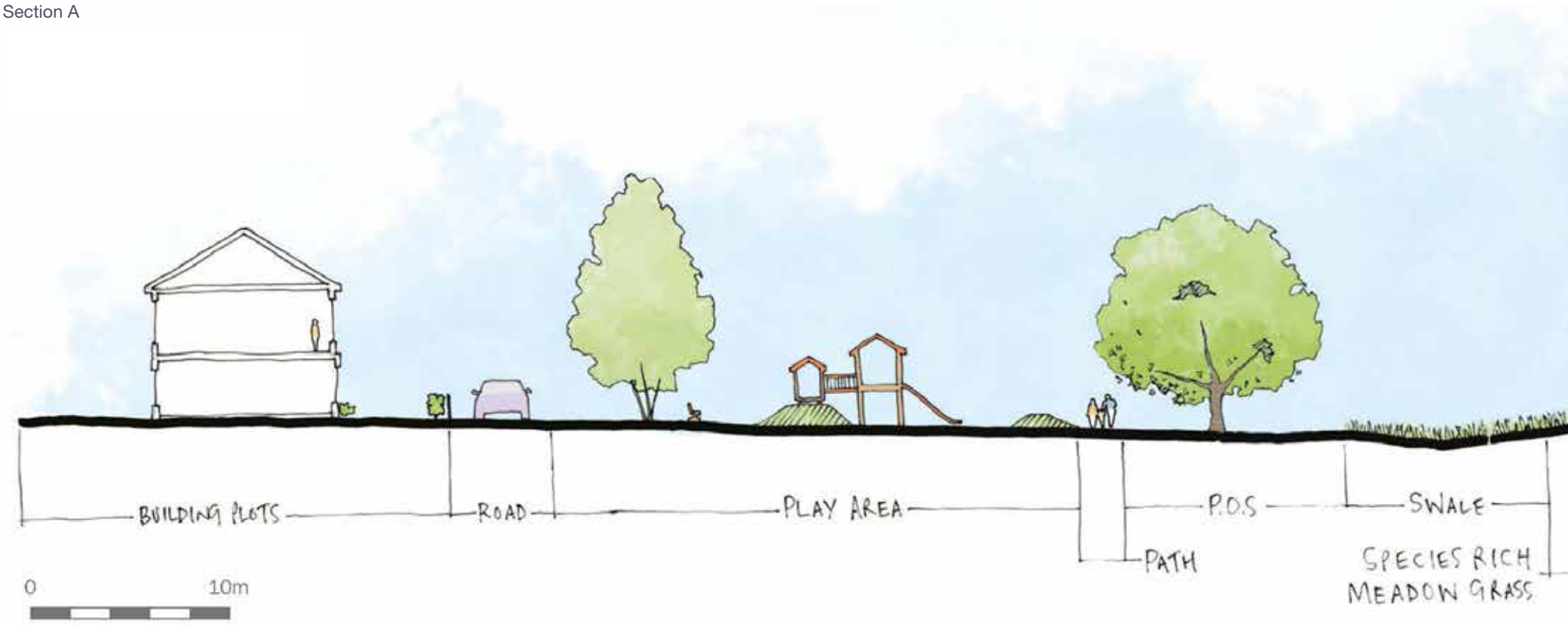
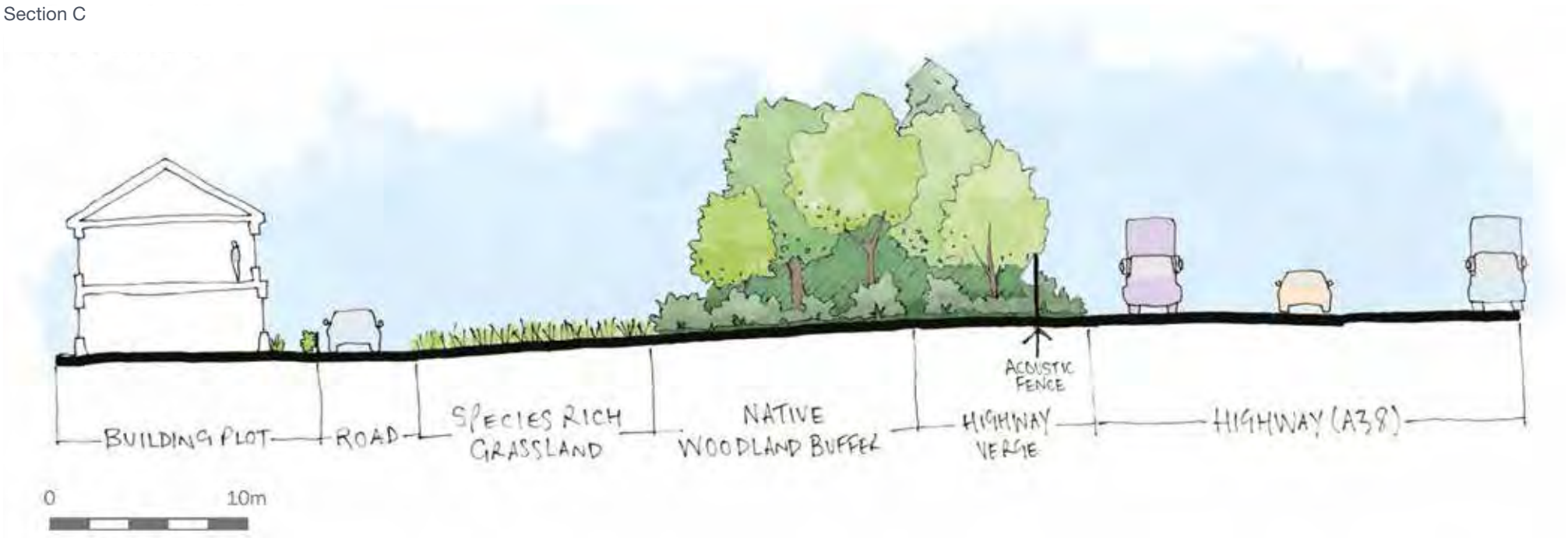
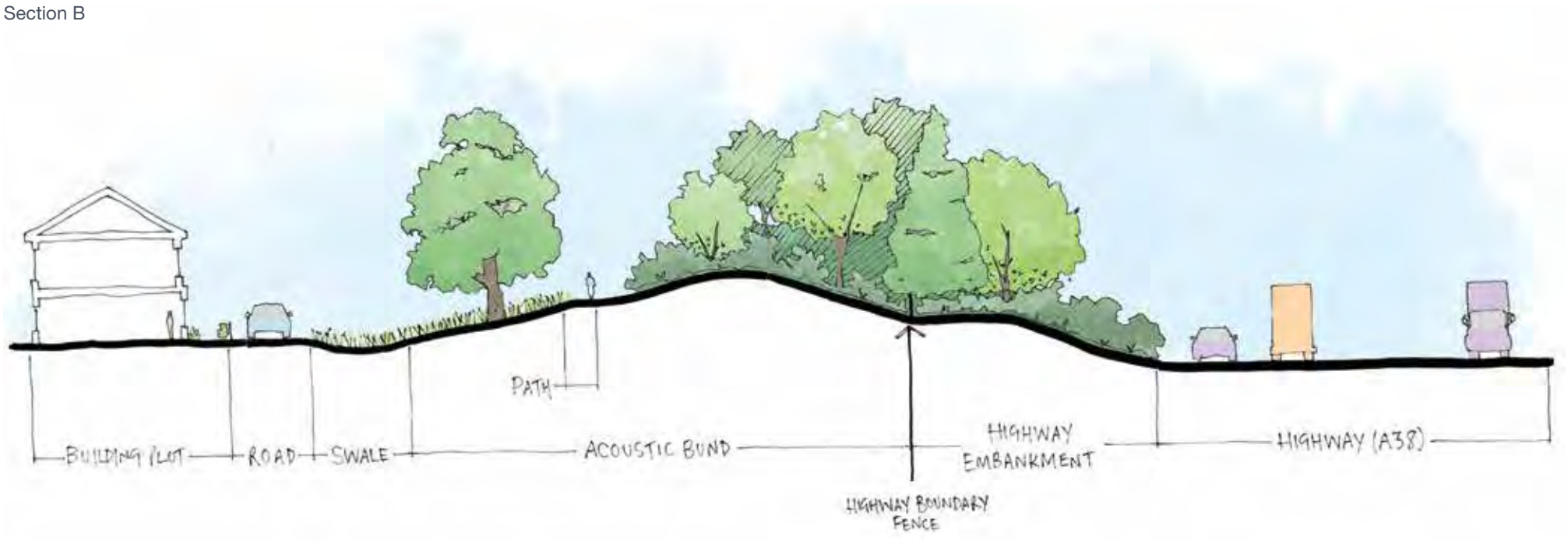


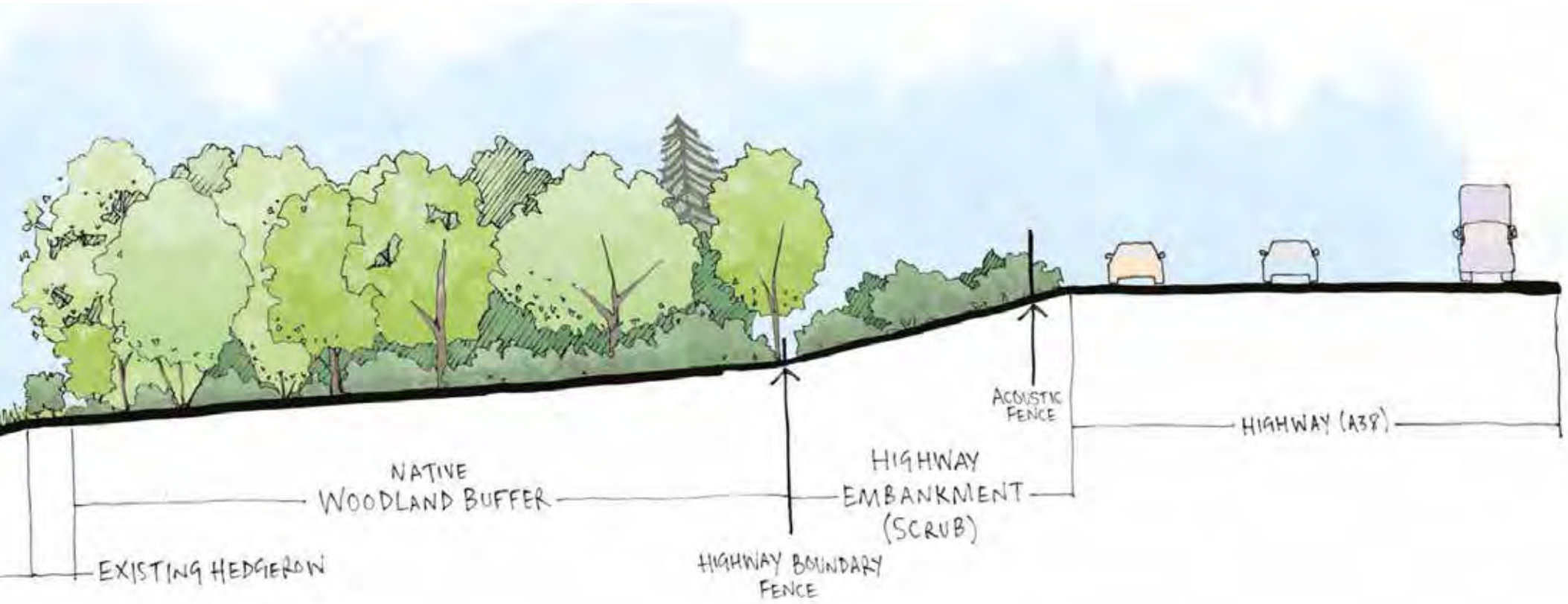
Figure 109. Indicative Acoustic Mitigation & Landscape

Section C



Section B





22.0 SITE EARTHWORKS STRATEGY

22.1 As identified in Section 9.0 parts of the Site are subject of quite undulating and steep contours, with some localised areas having a more significant incline.

22.2 To support development and achieve appropriate gradients for access and enhancements to the Site's drainage performance, some localised adjustment to the land form are proposed as shown on the ground levels parameter plan (Figure 11) submitted with the application.

22.3 An indicative and simplified cut and fill strategy plan (Figure 110) has also been prepared to better illustrate how the land form may adjust as designs are bought forward in the latter development stages.

22.4 This exercise has also explored how arisings from foundations or SUDs ponds could be used/ distributed on Site to reduce the need for any unnecessary removal off Site or import to Site. In particular the exercise explored how arisings could be used to form the acoustic barrier (earth bund) to the east of the Site in an efficient and timely manner.

22.5 Figure 110 shows indicative long cross sections of the existing ground level and indications of how proposed ground levels may work within the central Sports Hub part of the Site.

22.6 The final cut and fill strategy will be the subject of future Infrastructure and Reserved Matters Planning Applications.

Figure 110. Indicative Cut and Fill Sections A & B - Exaggerated Axis Dimensions

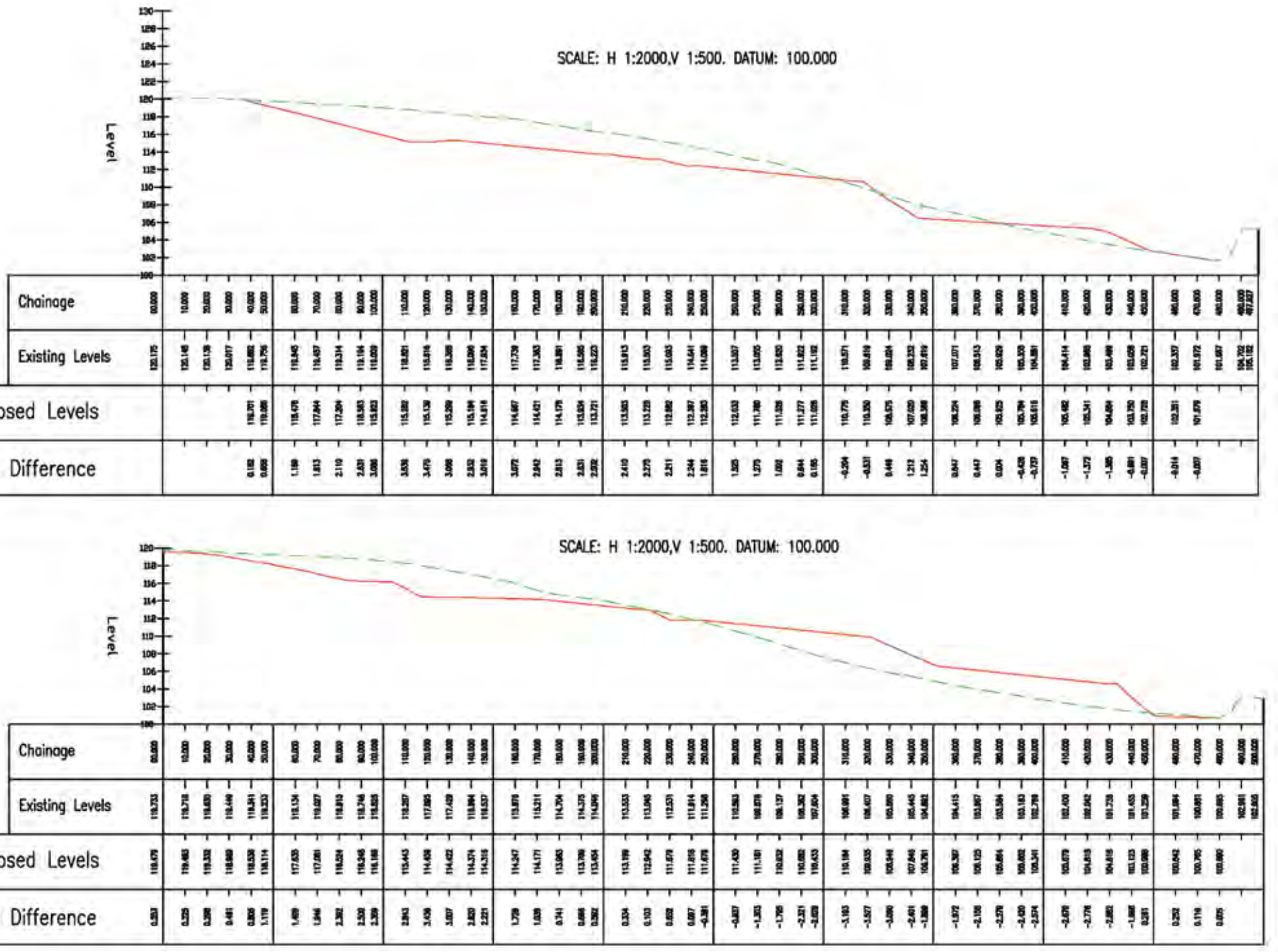


Figure 111. Indicative Cut and Fill Zones and Cross Section Locations

23.0 SURFACE WATER DRAINAGE STRATEGY

23.1 This section of the DAS summarises the proposed approach to climate change in relation to surface water management and fluvial flood risk to support the proposed outline application for the Site.

23.2 For further detailed information reference should also be made to the Flood Risk Assessment (WSP, 70042503-FRA-001) including the Baseline Model Report (WSP, 70042503-HMR-001) and the Strategic Sustainable Drainage Assessment (WSP, 70042503-SDS)-001) submitted under separate cover.

23.3 Given the scale and estimated time-frame for implementation of the proposed development at Langley, it is imperative that a robust approach is taken towards potential climate change impacts to the surface water and fluvial environments.

23.4 This section sets out the overarching design principles proposed to ensure implementation of a consistent approach to climate change across all phases of the development. The exact design of the network will be confirmed at the reserved matters stage of each phase.

23.5 Figure 113 illustrates the indicative SUDs network. The illustrative masterplan and accompanying design strategies have been produced in conjunction with the drainage strategy in order to maximise environmental benefits across the site.

23.6 It is proposed to manage water holistically within the Site, integrating sustainable management of fluvial and surface water on a site-wide and at a plot-scale. The proposed approach aims to mirror the pre-development hydrological regime within the Site, where possible enhancing watercourses and mitigating potential flood risk.

23.7 It is proposed to manage surface water up to and including the 1 in 100 year plus climate change event within the Site in its entirety, whereby a strategic network of green/blue corridors will be implemented to manage the higher return period events (e.g. events in excess of 1 in 30 year) and plot level infrastructure will be implemented to manage the lower return period events (e.g. events up to and including the 1 in 30 year).

23.8 Through the use of the design principles, the Site sustainably manages surface water runoff; so as to minimise the risk of flooding both within the Site and further downstream.

23.9 Section 25.0 illustrates how these principles are translated and co-ordinated in to a positive green, blue landscape and ecology strategy for the Site.

Surface Water Drainage Principles:

The strategic design principles for surface water drainage on Site are:

- The development will sustainably manage surface water for all events up to, and including, the 1 in 100 year plus 40% climate change storm event, as far as reasonably practicable;
- Each development parcel will attenuate the 1 in 30 year event and will connect into the Site-wide strategic surface water drainage network;
- The strategic site wide network will be designed to sustainably manage and convey surface water for all events up to, and including, the 1 in 100 year plus climate change event;
- The re-alignment of the Langley Brook is proposed through the development of an earthworks strategy on Site. This will naturalise the channel aiding flood risk management on Site and in the downstream catchment;
- Existing ordinary watercourses will be utilised to sustainably manage surface water flows within the Site;
- The proposed development will not exacerbate, and where possible will mitigate, the off-site flood risk;
- Use of multiple above ground SuDS within green corridors to provide a treatment train, minimising pollution risks and improving water quality within the Langley Brook and other receiving waters;
- Consider overland exceedance routes to ensure that flows are directed away from both proposed development and existing properties towards strategic infrastructure where surface water may be managed resiliently.

LANGLEY BROOK REALIGNMENT

23.10 It is proposed to realign and enhance the Langley Brook watercourse through integration of a two-stage channel (Figure 112).

23.11 The low flow channel is proposed to accommodate the smaller return period events, for example up to the 1 in 5 year event, with larger events up to the 1 in 100 year + 40% climate change accommodated in the wider second stage of the channel.

23.12 In addition to the two-stage channel, it is proposed to further enhance the watercourse environment in a number of places to enable controlled runoff from the Site to be accommodated. It is currently proposed to incorporate up to five areas of enhancement, whereby the capacity of the watercourse will be increased; these are indicatively shown in Figure 112.

Figure 112. Indicative Langley Brook Two Stage Channel Options

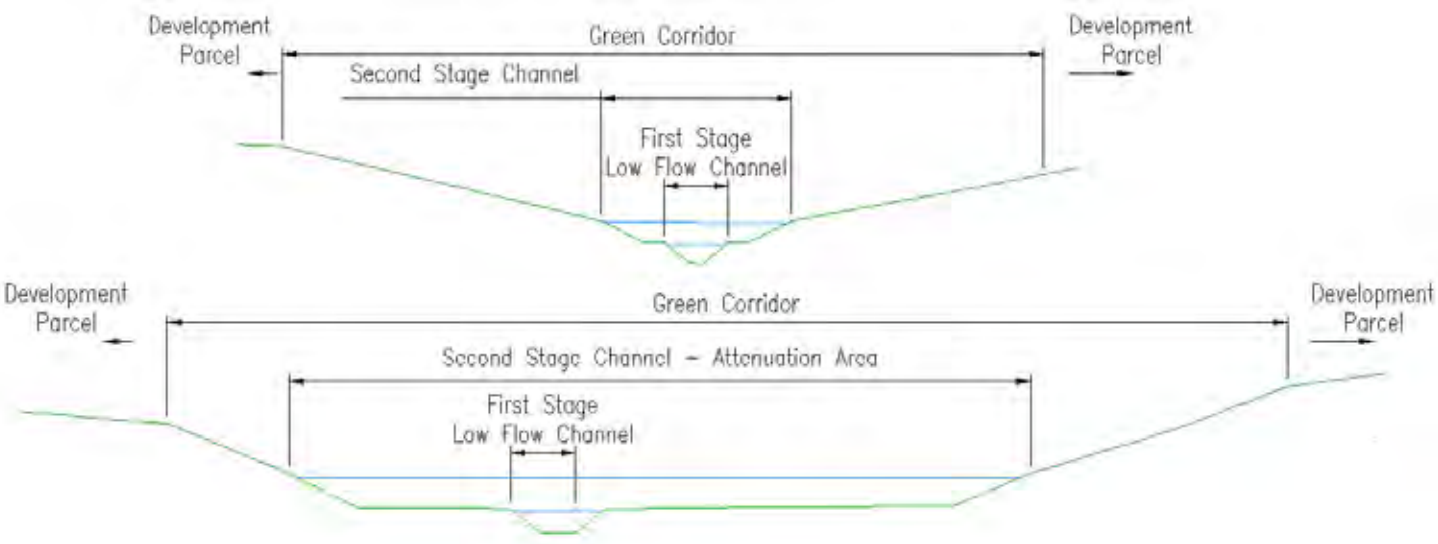


Figure 113. Strategic Surface Water Drainage Network

24.0 LAYOUT AND APPEARANCE PRINCIPLES

24.1 BDP Policy GA5 requires:

"Development layout, buildings and open spaces will be designed to the highest possible standards. The new neighbourhood will have a strong sense of place and distinctive character with building layout and design informed by the local topography, landscape and heritage assets complemented by appropriate use of innovation in design. It will be a safe place where carefully considered site layouts and well designed buildings and open spaces promote positive social interaction and natural surveillance and minimise the potential for crime and anti-social behaviour. Appropriate provision will be made for people with disabilities. Local people will play a meaningful role in shaping development and managing the new neighbourhood, contributing to a sense of community."

24.2 This section provides the guiding framework to inform the layout and general appearance of future reserved matters proposals which result in beautiful and distinctive places. It provides guidance on the following matters associated with layout and appearance and demonstrates compliance with BDP policy GA5 and Langley SPD requirements:

- Development Character and Urban Form;
- Street Hierarchy; and
- Community Safety is at the heart of the layout approach and informs a number of the principles set out in this section.

24.3 This section comprises Strategic Site Wide Principles, provides an illustrative layout, appearance principles and material relevant to each of the Site's character areas.

DEVELOPMENT CHARACTER AND URBAN FORM

24.4 Figure 115 illustrates the character and urban form principles proposed for the Site. These principles will assist in guiding the creation of a distinctive and locally responsive development character.

24.5 At a strategic level, character and urban form is influenced by the following layers:

- Topographical Variation and Block Structure;
- Character/ Neighbourhood Areas;
- Frontage Typologies;
- Key Long Distance and Local Views;
- Key Public Realm Spaces;
- Primary and Secondary Gateways.

Topographical Variation and Block Structure

- Flat / Gradual Land - For residential development on flat / gradual land, there are less physical constraints to block structure choice. However, this land form supports more standard back to back dimensions creating a gridded/ formal layout and enhanced efficiency in land take (Figure 114). Care is required in terms of street hierarchy application in a more regular grid structure to support legibility;

- Steep / Undulating Land - For residential development on steep or undulating land, block structure will be required to consider ways of achieving streets and dwelling thresholds at acceptable gradients to support walking and accessibility. It is also important to find layouts which reduce the need for retaining structures or large areas of cut and fill. In light of this, the block structure is more likely to adopt a more serpentine form, as blocks depths, shape and alignment are required to fluctuate in response to ground level changes (Figure 114). A well defined street hierarchy should still be required. However routes will inevitably have a more sinuous winding form. Residential blocks will tend to be larger and more elongated in response to land levels and stepped grading between housing plots. Layout designs may be required to consider 25m back to back distances between properties to prevent overlooking and to also absorb terracing between gardens.

Character Areas

24.6 Analysis of the surrounding context as well as features of the Site coupled with the concept of community building, has naturally defined seven character areas in the proposed development:

- Langley Hall;
- Langley Brook;
- Langley Central;
- Langley Penns;
- Langley Heath;
- Langley Fields.

24.7 Each area has its own contextual and site specific variations which underpin the creation of varied character and distinctive neighbourhoods across the Site. The characteristics of each are described in the following pages alongside illustrative material where appropriate. These character areas will also influence and guide other more detailed strategies such as the elevational details, materials and planting palette as coding is produced.

Character Frontage Typologies

24.8 Within each character area particular design responses related to landscape, architecture or street design are required in order to address identified features or conditions. Some of the characteristics of these character frontages are described and indicatively illustrated in the following pages in relation to Street Hierarchy. Further architectural and detailed building specifications for each character frontage will follow at the design code stage.

Key Long Distance and Local Views

24.9 Contextual and site specific analysis identified a range of longer distance views towards existing landmark or landscape features which should be preserved.

24.10 In addition, a range of new local views can be created which can be open towards wider landscape, or closed by new built / focal features. The variety in views will support legibility and way finding in the local area.

Key Public Realm Spaces

24.11 A network of key public realm spaces are proposed. These occur at nodes of anticipated activity, such as where main movement routes converge.

24.12 These spaces should adopt a high quality public realm treatment, and buildings fronting the space should be appropriately orientated to frame and enclose the space.

24.13 The use of key spaces will support decision making and legibility for users of the Site.

Primary and Secondary Gateways

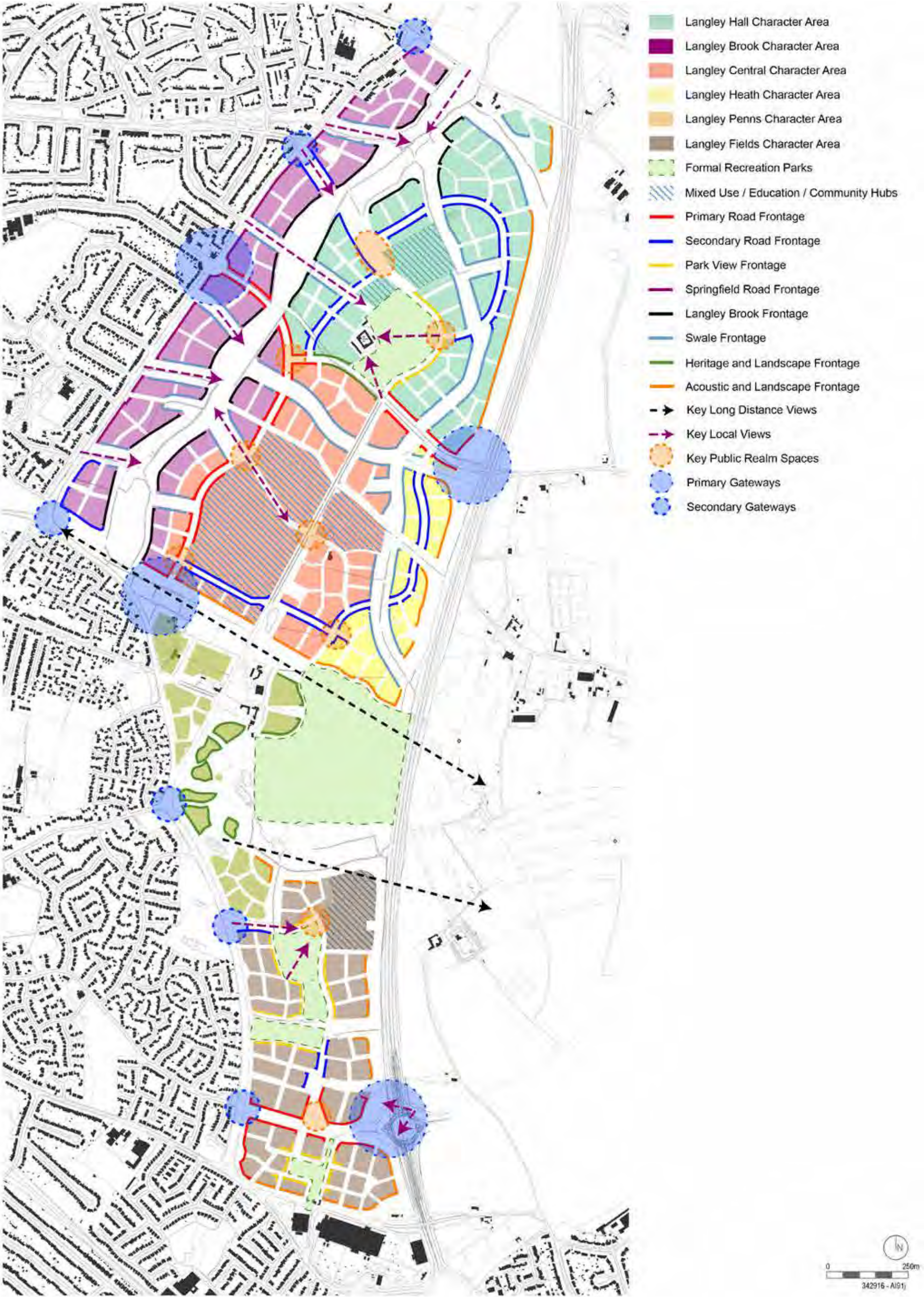
24.14 The plan indicates the location of both primary and secondary gateways. These are locations where users of the Site will experience a sense of arrival, either from a longer distance journey or from a more local journey perspective. Built form, public realm or landscape treatments can be used to enhance the sense of arrival and support the hierarchy and legibility of gateways.

Figure 114. Indicative Block Structures Responding to Topographical Variation

Regular Residential Block Structure - Appropriate for use on gradually sloping or flatter land areas

Irregular Residential Block Structure - Appropriate for use on steeper or undulating land areas.

Figure 115. Combined Development Character and Urban Form Principles



DEVELOPMENT OF CHARACTER AND URBAN FORM PRINCIPLES

24.15 Figure 116 to Figure 119 demonstrates the collective construct of character elements used to form the Character & Urban Form Principles.

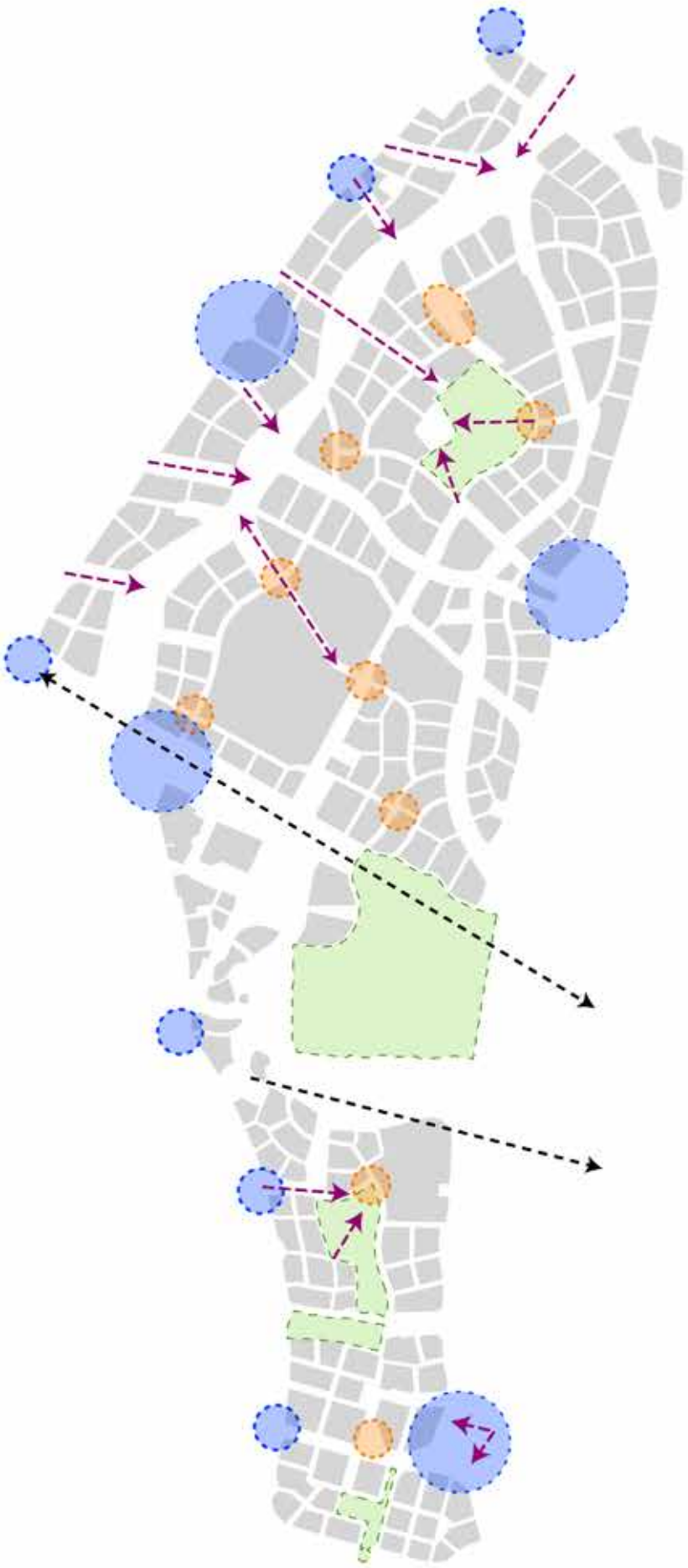
24.16 The Character & Urban Form Principles consist of four character contributors, namely Character Areas, Key Uses, Street Frontages and Place-making Elements.

Figure 116. Character and Urban Form Principles - Character Areas

Figure 117. Character and Urban Form Principles - Key Uses

Figure 118. Character and Urban Form Principles - Street Frontages

Figure 119. Character and Urban Form Principles - Place-making Elements



STREET HIERARCHY

24.17 To further guide the approach to layout, and to support the achievement of a cohesive development, a strategic network and hierarchy of streets are proposed as illustrated in Figure 121.

24.18 The following illustrations (Figure 120 - Figure 129) provide a series of design principles that are appropriate in each street and assist in defining the type of building line and public realm character that would be typical of the street.

24.19 The range of dimensions on each image enables some localised variations to be introduced to the street character at the reserved matters design stage.

24.20 Within development areas a range of other street typologies will be appropriate. These will be detailed at the design code stage for each character area.

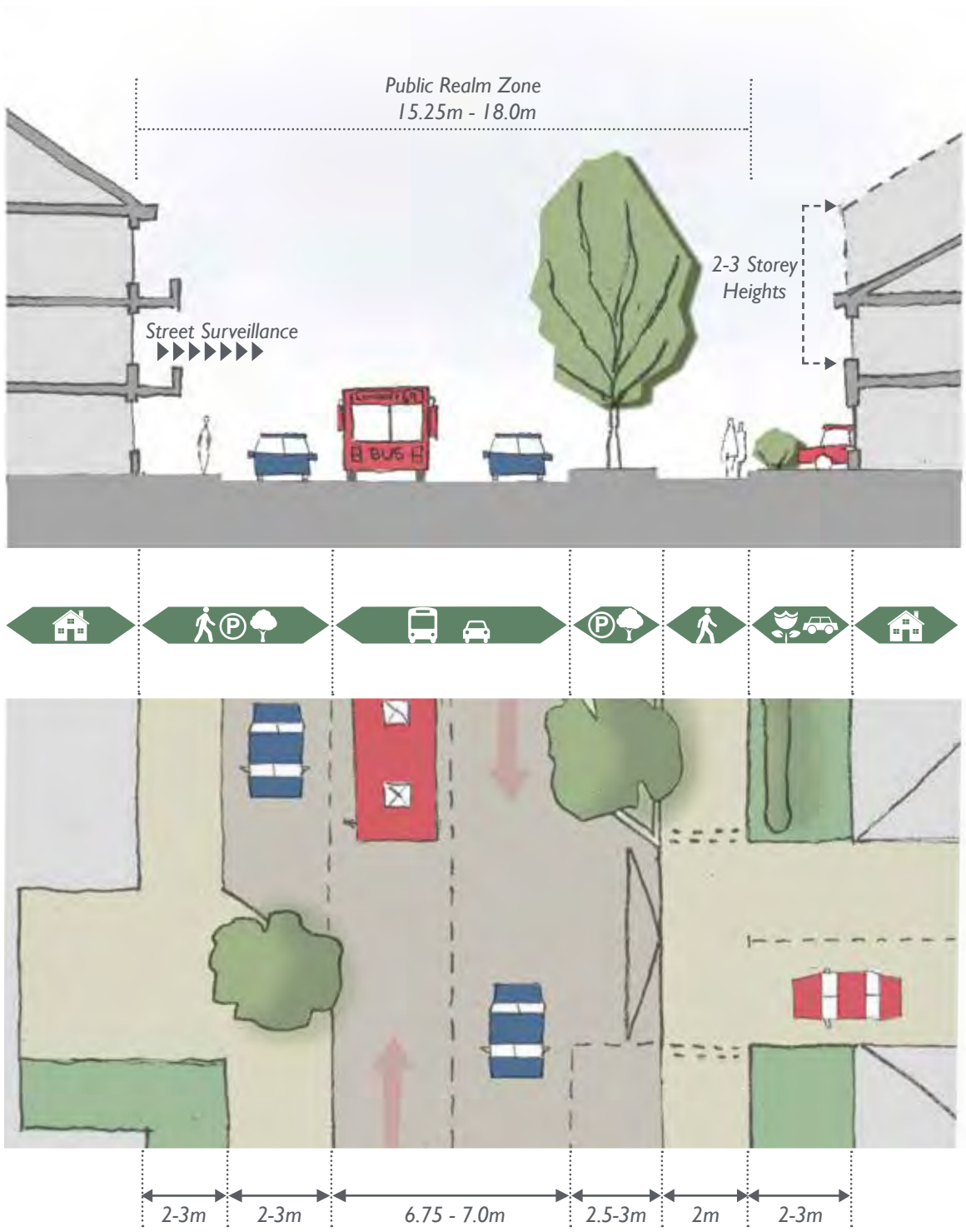
24.21 This street type passes through a variety of the character areas. This street type also has different expected usage and environmental mitigation requirements depending on exact location. As such its design will vary significantly depending on contextual and intended usage influences.

24.22 For instance the southern section (A38 link route south) will adopt quite different design features to that part passing through Langley Central and also the northern A38 link route. As such there are two indicative illustrations included for this street type (Figure 120 and Figure 122) in this DAS and it is expected that at the Infrastructure Application stage, and through reserved matters and design code stages further details will be confirmed.

24.23 It should be noted that this DAS does not detail those sections of existing primary road (Webster Way, Thimble End Road).

Primary Street

Figure 120. Indicative Primary Street Illustration - Langley Central



Street Characteristics...

- Predominantly terraced, town houses and apartments suitable through this part of the Site to achieve a strong and consistent building frontage. Occasional semi-detached or detached may be appropriate in localised situations;
- Predominantly 2 - 3 storey building heights, but up to 4 storeys particularly towards the interface with Langley central mixed use area or where key junctions, key spaces and key / focal structures are proposed;
- Dwellings situated along the primary road may require enhanced glazing and noise attenuation features (subject to future acoustic monitoring);
- Forward vehicle access to some dwellings will be possible along this street, although this will need to be cognisant of proximity to major junctions. Areas of anticipated high traffic movement will be served from off-street rear parking courts or side streets;
- Formal parallel building lines with more consistent building set back (1 - 2m) some variation around key spaces and gateways to support public realm designs;
- Alternating landscape verges to accommodate street trees or visitor parking bays appropriate along the street;
- Surface treatment changes on the approach to and within key spaces or important pedestrian cross points should be carefully considered and designed into the detailed proposals.

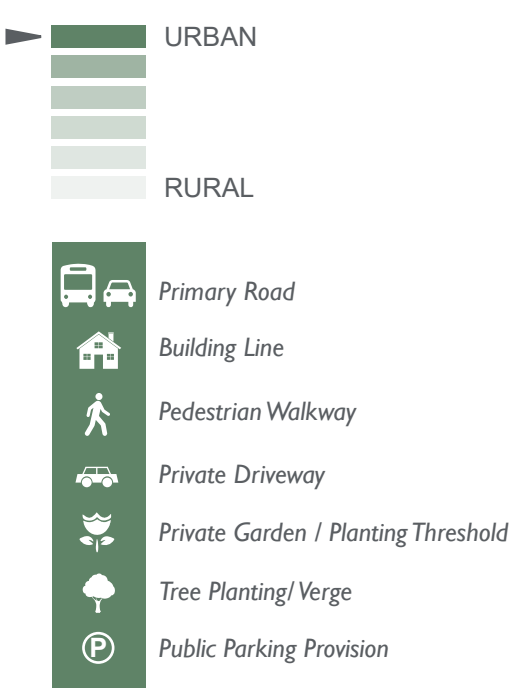


Figure 121. Street Hierarchy Plan

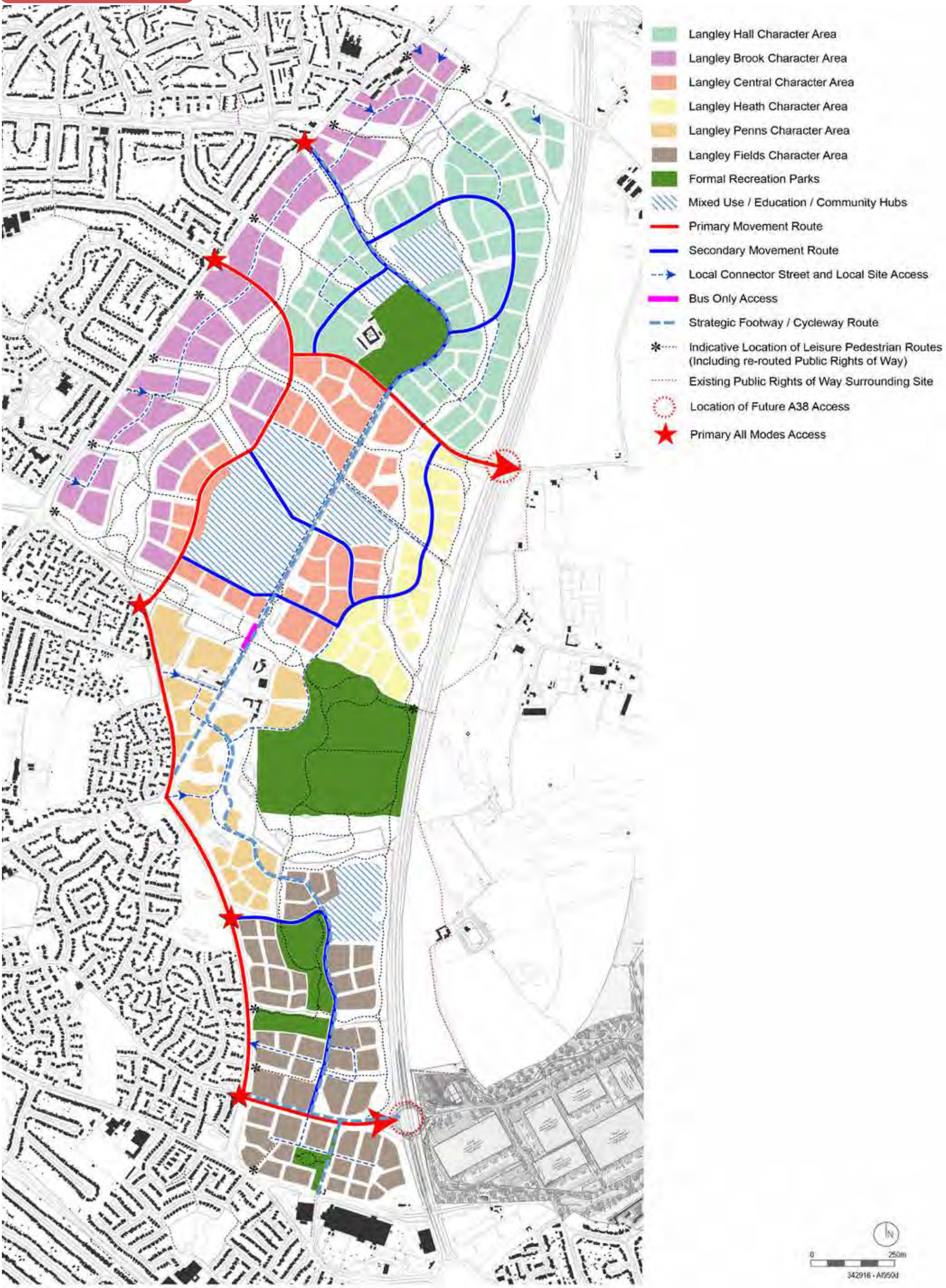
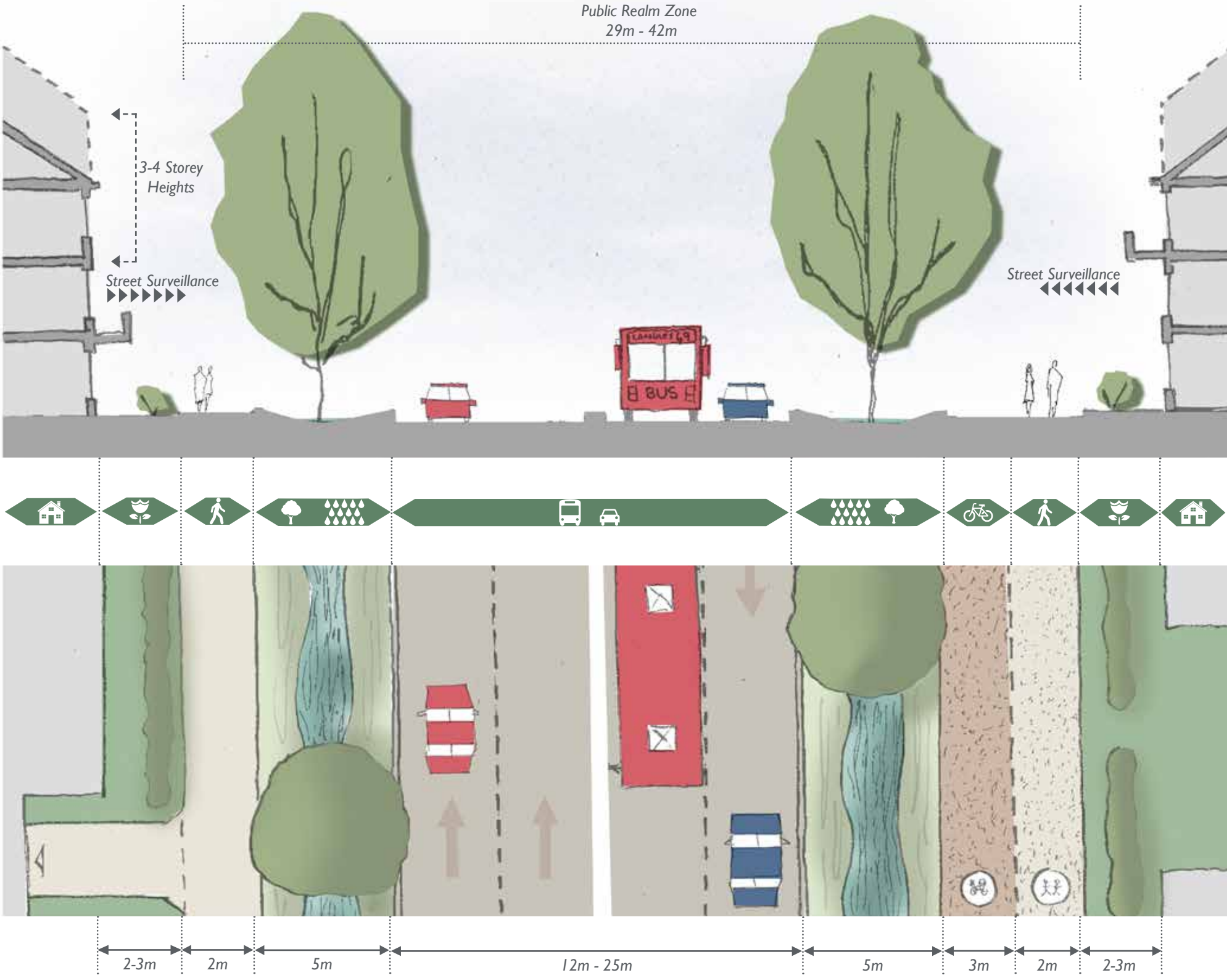


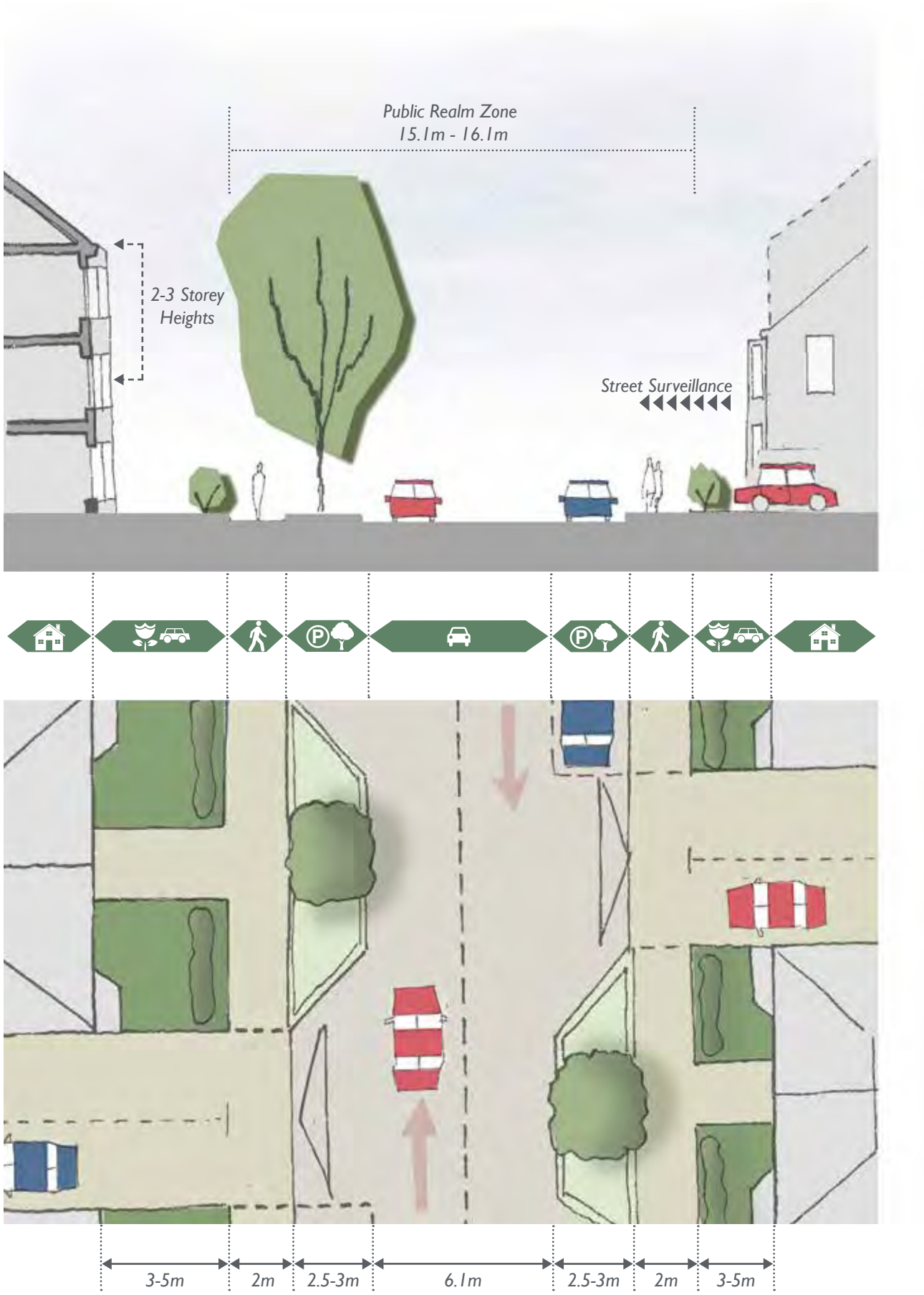
Figure 122. Indicative Primary Street Illustration - A38 Link Street South



Street Characteristics...

- The widest of the street conditions necessitated by anticipated vehicle through flows, pedestrian and cycle routes and the need to accommodate swales for surface water drainage functions;
- Responding to the width of the street, predominantly linked terraced, town houses and apartments front the street to achieve a strong and consistent building frontage;
- Predominantly 3 storey building heights, but up to 4 storeys particularly on key corners and junctions;
- Dwellings situated along the primary road may require enhanced glazing and noise attenuation features (subject to future acoustic monitoring);
- No forward vehicle access to dwellings along this street. All dwellings fronting the street will be accessed from parking courts or streets to the rear;
- Formal parallel building lines with more consistent building set back (2m - 3m) some variation around key spaces and gateways to support public realm designs;
- Consistent width of landscape verges either side of the street will accommodate street trees, swales and also serve to buffer dwellings from the traffic movements. Some undulation in the alignment will support narrowing in carriageway requirements if necessary;
- Combined footway / cycleway to be provided on one side of the street and ideally separated by a landscape verge from the through traffic route.

Figure 123. Indicative Secondary Street Illustration



Secondary Street

24.24 As with the primary street, this street type also passes through a variety of character areas within the Site.

24.25 This street type also has different expected usage and environmental mitigation requirements depending on exact location. As such its design will vary depending on context, character and intended usage influences.

24.26 For instance the northern secondary street passing through Langley Hall adopts a significant landscape character with alternating landscape verges.

24.27 The secondary street passing through Langley Central and Langley Fields will, by contrast, adopt a much more urban and formal character with longer more formally planted verges to one side of the street particularly where it interfaces with the strategic pedestrian and cycle route.

24.28 At the design code stages further details will be confirmed about the characteristics of the street.

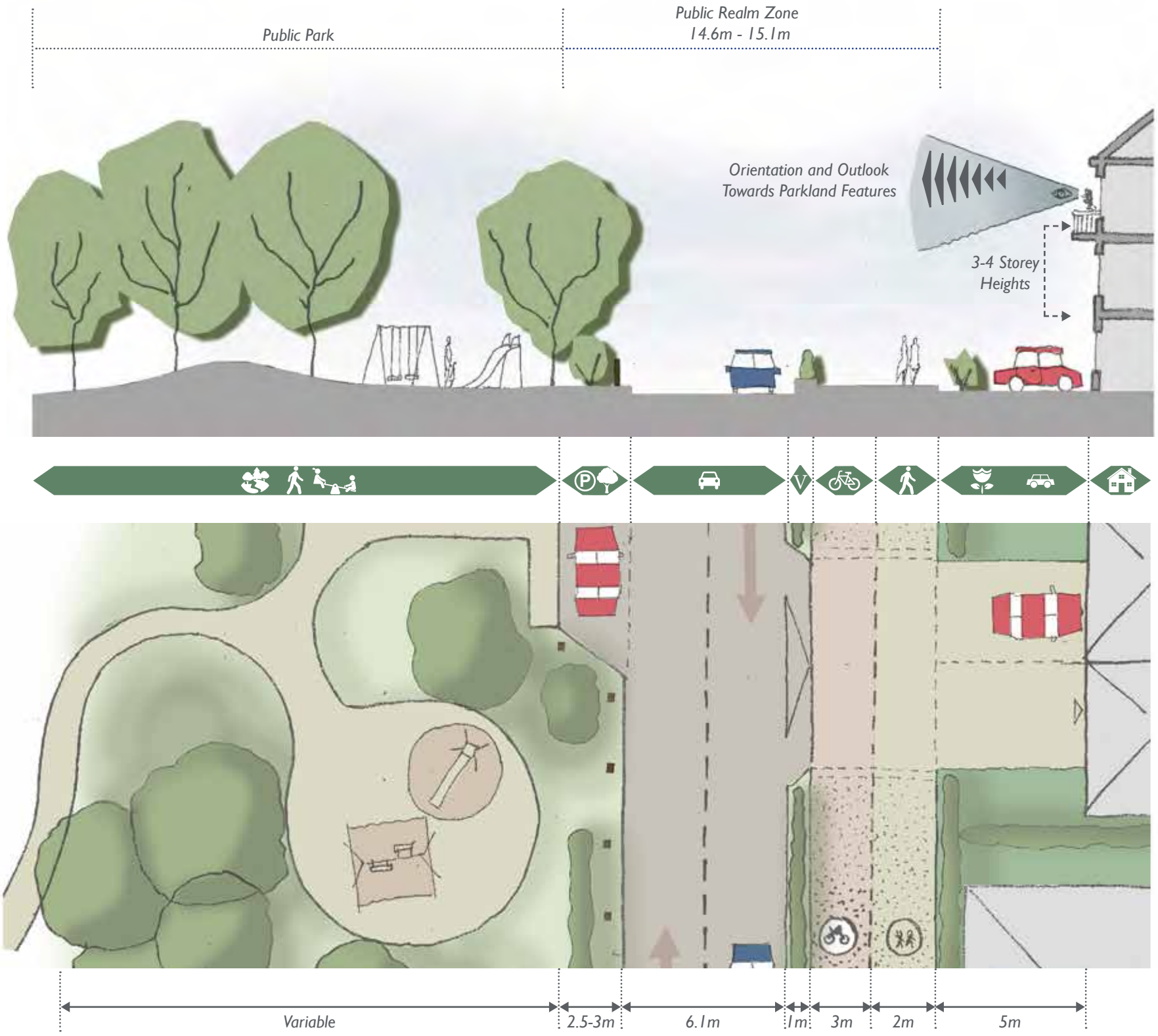
Street Characteristics...

- Predominantly semi-detached, terraced or town house dwellings. Occasional detached at corners if required;
- Predominantly 2 - 2.5 storey building heights with 3 storeys used around key spaces, focal building locations or more particularly addressing significant open spaces such as Langley Hall Park or Langley Fields Park;
- Generally consistent building line with some variation around key spaces and transitional roads;
- Landscape verge with tree planting alternates along the street. Verge area can also accommodate on street parking in localised situations;
- Frontage access to all properties from the street;
- Parking to be predominantly accommodated on plot and to the side of dwellings, with occasional on-street visitor parking bays;
- Where the strategic pedestrian / cycle route interfaces with the secondary street (i.e. Langley Fields and Langley Hall character areas) , the requirements of the footway / cycleway will be integrated with the design of the secondary route.

Other Street Types

24.29 Other street types will also support the function of the Site. The following figures illustrate other potential road typologies linked to frontage character types identified in Figure 115 that would be appropriate for use within the Site. The exact design details of each will follow at the design coding stage.

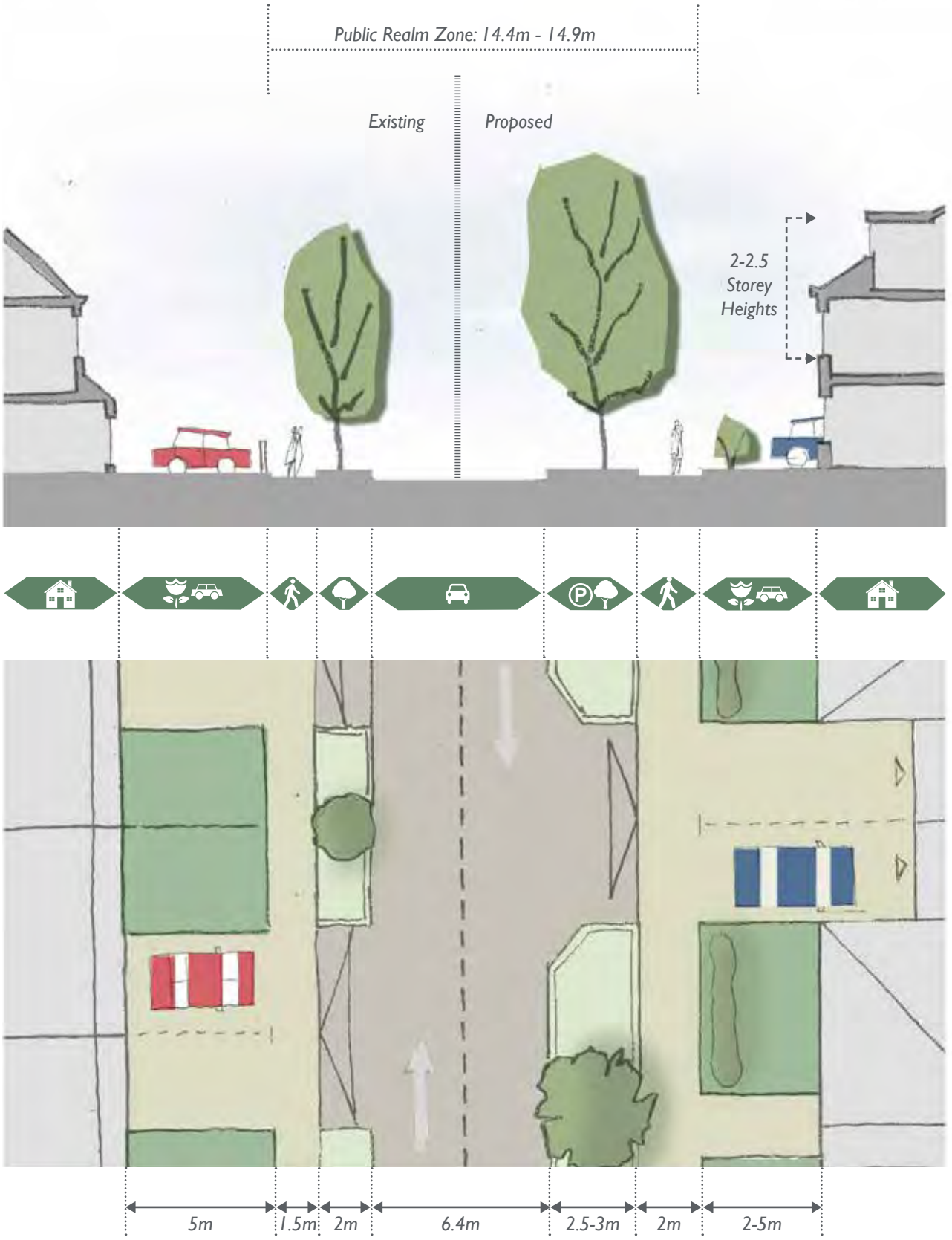
Figure 124. Indicative Park View Frontage Illustration - All Specified Character Areas



Street Characteristics...

- Relating to those parts of the Site where dwellings front on to northern and southern formal parks;
- Predominantly formal continuous frontages are desirable utilising linked unit types such as town-houses, terraces and linked detached;
- Predominantly 2.5 - 3 storey building heights are appropriate. Occasional 4 storey elements may also be acceptable if well designed;
- Gentle variation of building line with some undulation depending on approach to parking, dwellings should always be orientated towards the park, maximising value, views, and supporting natural surveillance;
- A minimum of 1m building set back from pedestrian walkway is required however, if parking is located to the front of the town house dwelling then up to 5.5m set back is required;
- Appropriately situated green verges and planting buffers along street with intermittent visitor parking bays incorporated;
- Integral garages, or linked garages should be carefully incorporated into the building frontage to support the continuous frontage. Ideally space over garages will be utilised as part of the habitable accommodation;

Figure 125. Indicative Springfield Road Frontage Illustration



Street Characteristics...

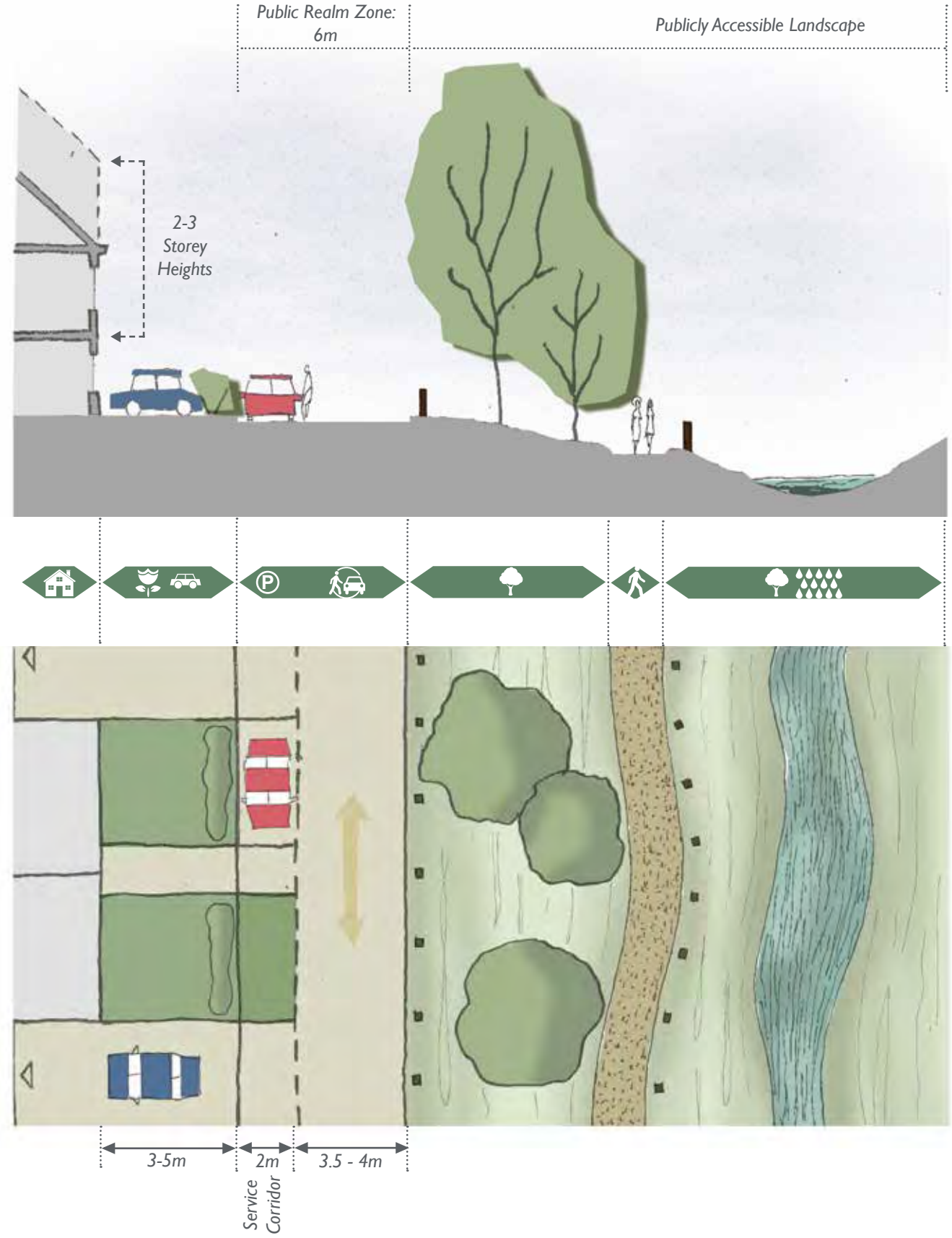
- Recognising the characteristics of the existing Springfield Road but also the potential to utilise existing infrastructure more efficiently, opportunities to form a two sided street have been explored;
- Predominantly semi-detached house types but with occasional detached and terraced typologies acceptable. These will mirror the existing arrangements along Springfield Road;
- Predominantly 2 storey but with occasional 2.5 and 3 storey building heights at key building locations;
- Dwellings to be orientated with frontage towards Springfield Road with forward vehicle access;
- Building line should be parallel with the existing dwellings;
- The building set back should support the accommodation of car parking to the front or side of the dwelling, but should avoid frontage parking dominating the street scene;
- Front garden areas must be provided and should clearly define the property boundary through the use of hedgerow and tree planting.

URBAN

RURAL

Secondary Road
Building Line
Pedestrian Walkway
Private Driveway
Private Garden / Planting Threshold
Tree Planting / Verge
Public Parking Provision

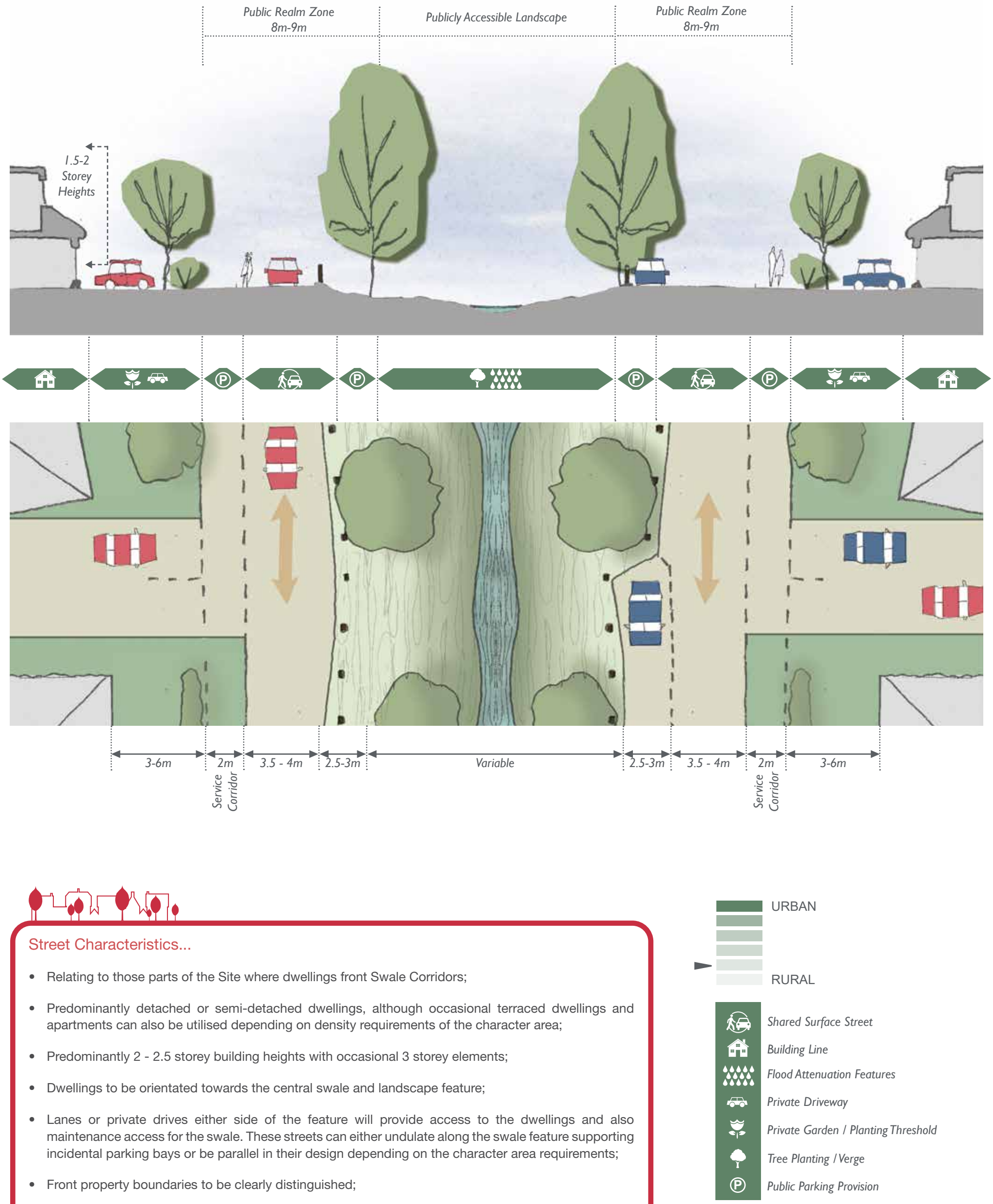
Figure 126. Indicative Langley Brook Frontage Illustration - All Specified Character Areas



Street Characteristics...

- Relating to those parts of the Site where dwellings front on to the Langley Brook Park;
- A mix of dwelling types are appropriate along the Brook Park. To the north within the Langley Hall and Langley Paddocks Character areas predominantly semi-detached and detached house types would be expected to front towards the Langley Brook Park. To the south within the Langley Brook character area, a more continuous frontage comprising terraced and apartments and semi-detached types would be expected;
- Predominantly 2 - 2.5 storey building heights with occasional 3 storey elements are appropriate within Langley Hall and Langley Paddocks character areas. To the south within the Langley Brook character area 2.5 - 3 storey with occasional 4 storey features are appropriate;
- All dwellings are to be orientated towards Langley Brook Park;
- A minimum front garden depth of 2m where parking is located to the side of the dwelling. Where parking is integral to the dwelling then garden depth extends to around 5m;
- The street will be shared surface or private drive in design, and country estate style posts should be installed along the park edge to avoid cars accessing the park. Incidental visitor parking should be designed into the street space alongside landscape features;
- Soft landscape boundary treatments should be incorporated within front gardens.

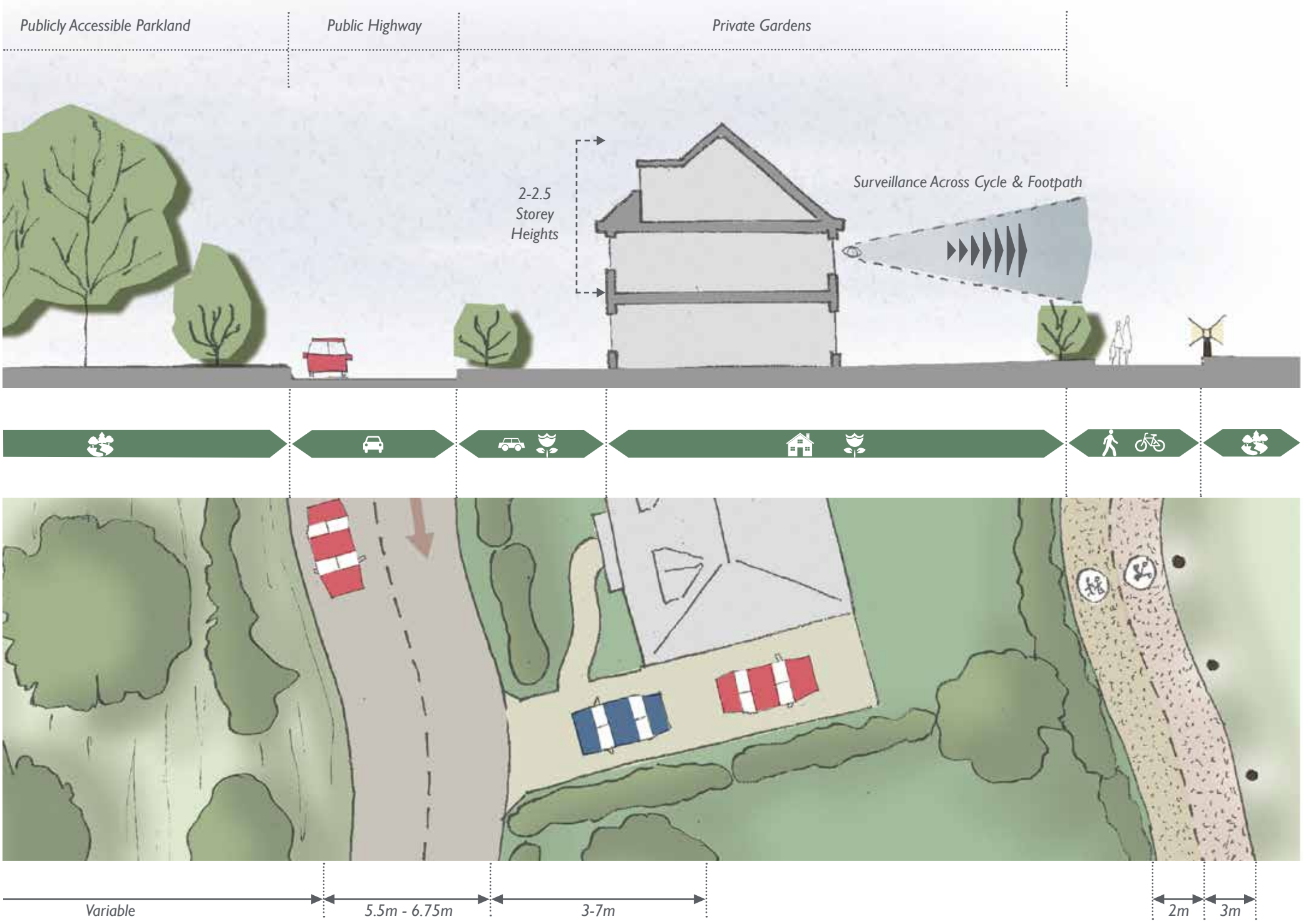
Figure 127. Indicative Swale Frontage Illustration - All Specified Character Areas



Street Characteristics...

- Relating to those parts of the Site where dwellings front Swale Corridors;
- Predominantly detached or semi-detached dwellings, although occasional terraced dwellings and apartments can also be utilised depending on density requirements of the character area;
- Predominantly 2 - 2.5 storey building heights with occasional 3 storey elements;
- Dwellings to be orientated towards the central swale and landscape feature;
- Lanes or private drives either side of the feature will provide access to the dwellings and also maintenance access for the swale. These streets can either undulate along the swale feature supporting incidental parking bays or be parallel in their design depending on the character area requirements;
- Front property boundaries to be clearly distinguished;
- Individual parking on plot recessed from street, combination of open drive and set back individual garages with some additional on-street visitor parking provision.

Figure 128. Indicative Landscape and Heritage Frontage Illustration - All Specified Character Areas



Street Characteristics...

- Parts of the Site are directly influenced by existing heritage or landscape features and requiring a more localised design response;
- Country estate style roads are appropriate for use in these areas, particularly within the Langley Penns Character area;
- Predominantly detached, semi-detached in farmstead style layouts or modern interpretations of country estate terraced cottages;
- Predominantly 1.5 - 2 Storey building heights with occasional 3 storeys in key locations;
- Undulating building line with varied orientation and outlooks;
- Varied setback from property boundaries (4m front /2m side minimum) with regular and generous spacing between buildings;
- Soft landscaping along property boundaries;
- Individual on plot parking recessed behind landscaped boundaries, or inner farmstead style courtyards with barn garages.

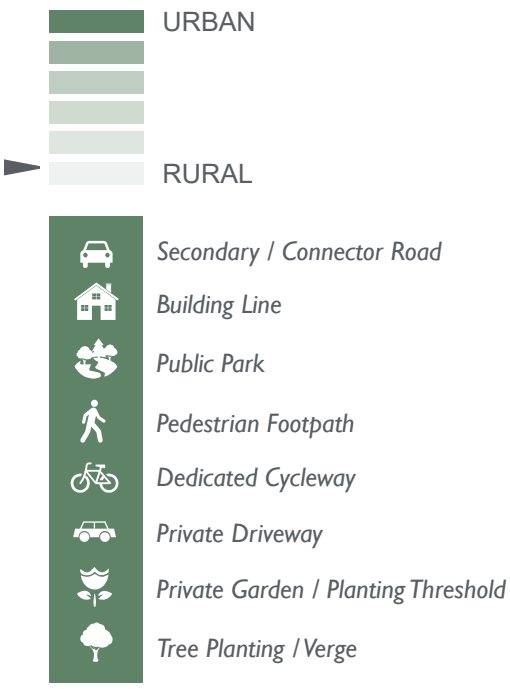
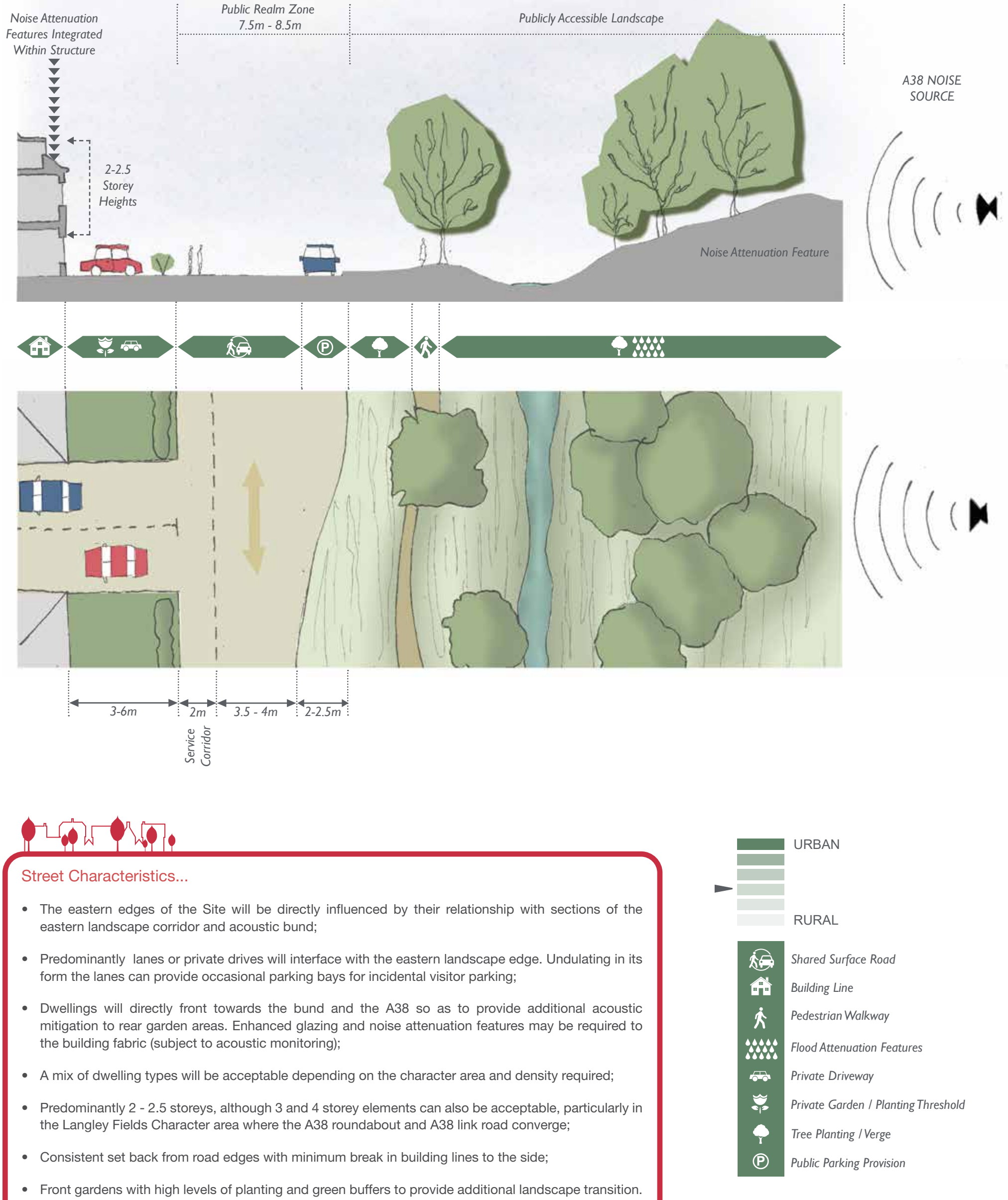


Figure 129. Indicative Acoustic Frontage Illustration - All Specified Character Areas



Street Characteristics...

- The eastern edges of the Site will be directly influenced by their relationship with sections of the eastern landscape corridor and acoustic bund;
- Predominantly lanes or private drives will interface with the eastern landscape edge. Undulating in its form the lanes can provide occasional parking bays for incidental visitor parking;
- Dwellings will directly front towards the bund and the A38 so as to provide additional acoustic mitigation to rear garden areas. Enhanced glazing and noise attenuation features may be required to the building fabric (subject to acoustic monitoring);
- A mix of dwelling types will be acceptable depending on the character area and density required;
- Predominantly 2 - 2.5 storeys, although 3 and 4 storey elements can also be acceptable, particularly in the Langley Fields Character area where the A38 roundabout and A38 link road converge;
- Consistent set back from road edges with minimum break in building lines to the side;
- Front gardens with high levels of planting and green buffers to provide additional landscape transition.
- Primarily on-plot parking desirable.

LANGLEY HALL - CHARACTER AREA PRINCIPLES

General Character Description

24.30 Langley Hall will be characterised by its landscape and topographical features as well as the heritage and archaeological assets at and adjacent to Langley Hall. The area will accommodate predominantly family homes located within a cascading landscape structure.

24.31 Langley Hall Park, the proposed primary school and the community hub (Local Centre) will form a key focus for this character area. Both formal and informal connected open space and landscape networks will provide the context within which development form will be integrated.

24.32 A more informal treed landscape character and public realm will be explored in this character zone particularly in the streets. This will provide a tree lined horizon in wider views as well as linking existing wooded and tree belt features along the Langley Brook and the A38.

24.33 Parts of this character area will provide a gateway into to the Site in relation to the northern A38 access point. The area will also provide a transition between the rural countryside characteristics to the north of the Site and the more urban characteristics of the rest of the Site.

Mixed Use Community Hub

24.34 The mixed use community hub (Local Centre) provides a focus for this character area. It is anticipated that the primary school will front on to the secondary route and the strategic pedestrian and cycle route. The school will serve as a local landmark and community destination.

24.35 Directly opposite will be a small cluster of mixed retail and community uses which will serve the new and existing communities. These uses will front onto the secondary movement network but should also aim to provide positive frontage towards Langley Hall Park. Parking for the mixed uses should also be available for users of Langley Hall Park.

24.36 Building heights of up to 16m will be acceptable in this mixed use area supporting the delivery of 3 - 4 storey units or clerestorey hall spaces/ mezzanine levels for the school and community buildings.

Character Frontages

24.37 Figure 130 identifies a number of distinctive character frontages that should be applied in this character area. These seek to respond to particular landscape, open space or movement hierarchy features. The treatment of these character frontages will be detailed in the design coding stage following the approval of outline planning permission. However, the indicative street cross sections in Section 24.0 start to articulate the differences in building line and treatment that may be expected along each of the character frontages.

Strategic Gateway

24.38 The proposed northern junction from the A38 to Ox Leys Road will provide a significant arrival gateway to Langley. The southern edge of Langley Hall character area interfaces with this gateway. The expectation would be for built form and landscape to form a positive arrival experience/ first impression of the development. Height and design should be carefully considered as well as the landscape treatments around the access and acoustic attenuation features to the A38.

Key / Focal Buildings

24.39 Key / focal buildings will provide landmarks and support legibility and place making. Height and/ or mass of the proposals along with landscape and public realm treatment should make these features distinctive from the surrounding designs.

Key Spaces

24.40 At this strategic stage, the illustrative position of key spaces are identified with the aim of supporting legibility and place making. The key spaces are generally at important junctions along the primary and secondary movement network.

24.41 Detailed design proposals should consider the arrangement and interaction between landscape and built form as well as public realm treatments to provide distinctive nodal points within the neighbourhood. These spaces should be about people and place and not dominated by highway features.

Natural Surveillance

24.42 Detailed residential design should aim to maximise natural surveillance over public open spaces and movement routes, through the use of building orientation and fenestration. In particular where buildings are located at the junction of two streets each elevation should be activated with fenestration to habitable rooms.

24.43 Where traditional perimeter blocks are not possible, (i.e. where developable land is compromised by constraints) bespoke residential dwellings will need to demonstrate that surveillance and security is maximised through alternative means.

Residential Block Structure

24.44 Back to back perimeter blocks should be the dominant form of block structure. Due to topographical variations and possible use of localised retaining features, back to back distances may need to be slightly extended to maintain residential amenity standards or to deal with any significant changes in level. In certain locations the use of cul-de-sacs or residential courts within the core of a block may be appropriate. Blocks should front out towards all public realm spaces wherever possible.

24.45 Proposed residential block layouts should protect the residential amenity of existing private properties at Langley Hall and Brockhurst Farm through careful building positioning, boundary planting considerations, separation between uses and building orientations.

Residential Building Height

24.46 Generally 2 storeys, with occasional instances of 2.5 (rooms in the roof space) and 3 storeys located at key/ focal building locations and frontages. In particular the frontage towards Langley Hall Park will support the use of 2.5 and 3 storey dwellings to support the creation of scale and enclosure.

Residential Density

24.47 The net density range appropriate to this character area will be approximately 30 - 37dph.

Residential Parking

24.48 Parking will be predominantly on plot in this character area, with a preference towards locating parking to the side of dwellings.

24.49 Occasional on plot to the front parking will be acceptable if all other options have been exhausted or if it aides traffic calming.

24.50 All houses should accommodate at least 2 parking spaces with room identified for visitor/ service parking either on plot or within the street. Larger dwellings of four + bedrooms will be expected to accommodate at least 3 cars on plot.

24.51 Rear parking courts may be acceptable in certain instances, particularly where topography impacts upon residential block depth, or small clusters of apartments are included within the mix of unit types. The courts should be secure and limited to a maximum of 12 spaces in any one court.

Green Infrastructure, Swales and Pocket Parks

24.52 A key component and focus of this part of the Site is the Langley Hall Park and the network of green links and swales connecting to the Langley Brook Park to the west. The green links are multi-functional and provide a superior landscape setting and pedestrian movement network for this character area.

24.53 The green links have been aligned to encompass existing areas of ecology features; work with the Site's existing and proposed contours, accommodate a wide variety of children's' play opportunities, and provide sweeping connectivity between Ox Leys Road and Langley Brook Park to accommodate a connected Swale network. The northern most link also accommodates existing Severn Trent Pipeline infrastructure with an easement.

24.54 The eastern edge of the character area is defined by a new landscape corridor providing a buffer to the A38, accommodating an acoustic attenuation barrier, part of the swale network and also part of the leisure footpath network.

24.55 Small instances of pocket green spaces may also be provided within the residential areas to further supplement the landscape led character of the Site and aid legibility.

Street Hierarchy and Character

24.56 Primary vehicular movement is located to the south along the realigned Ox Leys Road and newly formed road leading onto Reddicap Heath. The area is predominantly served by a looped secondary street network, supplemented by side streets and lanes.

24.57 The secondary streets through this area will adopt localised verges which alternate from side to side along the street or cluster around key spaces. These verges will accommodate street tree planting with room to mature, and where required swale features. These street trees will supplement the wooded horizon and nestle built form within the elevated land form.

Pedestrian and Cycle Movement

24.58 A network of leisure pedestrian routes will follow the alignment of the green links supporting connectivity between parks and key mixed use destinations across the Site.

24.59 The strategic pedestrian and cycle route - Langley Greenway, provides a north / south cycle network through the entire Langley Site. Future residents within the Langley Hall character area will benefit from easy access to the Langley Greenway, which passes through much of the character area, particularly alongside the mixed use community hub, primary school and Langley Hall Park.

Figure 130. Langley Hall Design Opportunities and Considerations

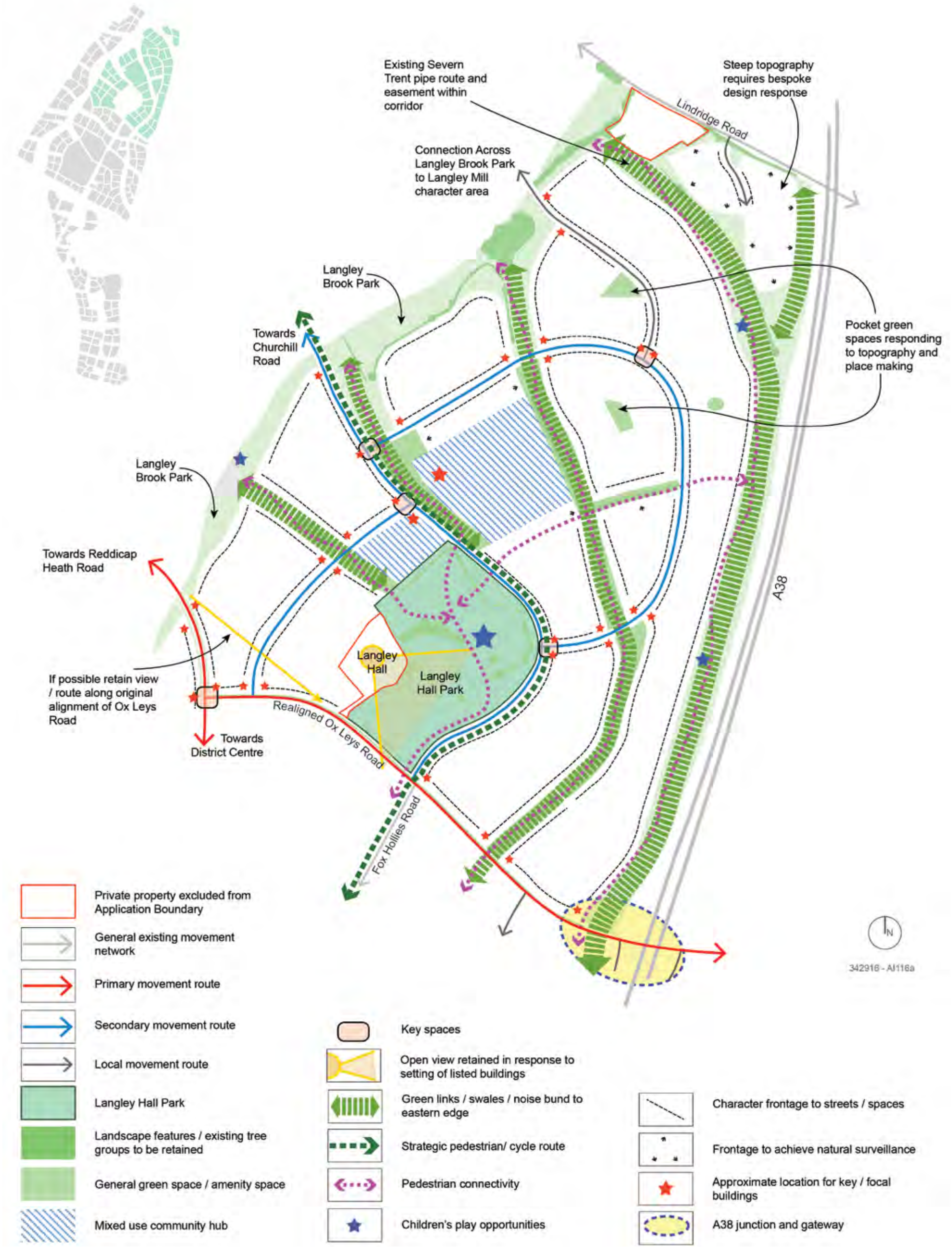


Figure 131. Illustrative Vignette - Langley Hall

1. Swale corridors incorporating existing and proposed landscape and children's play features
2. Proposed primary School utilising existing landscape features to enclose rear boundary
3. Key public realm spaces along secondary loop routes defined by material change and enhanced landscape and elevation treatments
4. Langley Brook Park with retained landscape and ecological features and footpath and play networks
5. Landscape buffer to A38 includes acoustic attenuation feature, swales and footpath routes
6. Existing retained landscape features

Figure 132. Illustrative 3d Sketch - Langley Hall

Strategic swale network provides pedestrian routes to Langley Brook Park and high quality landscape setting to new dwellings

A38 set behind landscape bund and planted buffer

Landscape verges along the Secondary Street accommodate street tree planting with room to grow and mature

Pocket green spaces within the development create legible focal points along the network. Opportunity for 2.5 storey dwellings to overlook the space

Secondary streets connect to adjacent development parcels

Dwellings, plots and streets aligned to work with the contours

Secondary streets provide connections to adjacent development parcels

Langley Brook Park with existing landscape features retained

Strategic swale network provides pedestrian routes to Langley Brook Park and high quality landscape setting to new dwellings

LANGLEY BROOK - CHARACTER AREA

General Character Description

24.60 Langley Brook will be characterised primarily by it's relationship with Springfield Road to the west and Langley Brook Park to the east and provides a subtle transition from the urban to the watercourse corridor.

24.61 The lower section of the Langley Brook character area will also directly interface with the existing urban edge of Reddicap Heath and provide the transition towards the higher density Langley Central character area to the east.

24.62 Passing though the centre of the character area is the linear Langley Brook Park providing a high quality environmental feature and pedestrian spine around which the character area focuses.

24.63 New homes either-side of the Langley Brook will be arranged to positively overlook and front onto the expansive green corridor of Langley Brook Park.

24.64 The north western most point of this character area will act as an arrival gateway to Langley at the junction of Springfield Road and Lindridge Road.

24.65 Landscape proposals for Langley Brook Park aim to reconfigure the drainage profile to provide a unique, water-managed parkland. Green swale routes and pedestrian connections between Springfield Road and the new Langley Brook Park (and beyond) will provide both distinction and function to the environment. The presence of green elements, such as green links, pocket spaces and Langley Brook Park will provide the new homes with pleasant outlooks onto landscaped environments.

Underground Utilities and Easement Zone

24.66 Existing foul sewer pipes with an associated 10m easement zone pass through this part of the Site. Access for maintenance is required to this network. As such, no development can be accommodated within the easement. Open Space, road or footpath infrastructure can be accommodated within the easement. This constraint provides a fix within any future layout.

Character Frontages

24.67 Figure 133 and Figure 134 identify a number of distinctive character frontages that should be applied in this character area. These seek to respond to particular landscape, open space or movement hierarchy features. The treatment of these character frontages will be detailed in the design coding stage following the approval of outline planning permission. However, the indicative street cross sections in Section 24.0 start to articulate the differences in building line and treatment that may be expected along each of the character frontages.

Strategic & Local Gateways

24.68 A large section of the character area interfaces with the primary movement route through the Site. As such, a new strategic gateway is evident at the amended junction of Springfield Road/Reddicap Heath Road/ Ox Leys Road. Here the new designs should integrate carefully with the existing built form around the junction.

24.69 A second strategic level gateway, defined by landscape and pedestrian function, is to be created at the east to west landscape link from New Hall Valley Park into the Site at the roundabout junction between Springfield Road and Thimble End Road.

24.70 Careful consideration should be applied at the detailed design stage to ensure highway design, landscape and built from collectively provide an enhanced sense of arrival.

24.71 Local gateways will provide memorable arrival points into the development from the local movement network. Local gateways are evident at junctions along Springfield Road and Lindridge Road, the largest of which will be provided at the junction with Reddicap Heath.

24.72 Careful consideration should be applied at the detailed design stage to ensure built form, highway design, and landscape collectively provide an enhanced sense of arrival in these areas.

Key/ Focal Buildings

24.73 Key / focal buildings will provide landmarks and support legibility and place making. Coupled with key spaces or function the design, height and/ or mass of the proposals along with landscape and public realm treatment should make these features distinctive from the surrounding designs.

Key Spaces

24.74 At this strategic stage, the approximate position of key spaces are identified with the aim of supporting legibility and place making. The key spaces are generally at important junctions along the primary and secondary movement network.

24.75 Detailed design proposals should consider the arrangement and interaction between landscape and built form as well as public realm treatments to provide distinctive nodal points within the neighbourhood. These spaces should be about people and place and not dominated by highway features.

Natural Surveillance

24.76 Detailed residential design should aim to maximise natural surveillance over public open spaces and movement routes, through the use of building orientation and fenestration. In particular where buildings are located at the junction of two streets each elevation should be activated with fenestration to habitable rooms.

24.77 Where traditional perimeter blocks are not possible, (i.e. where developable land is compromised by constraints) bespoke residential dwellings will need to demonstrate that surveillance and security is maximised through alternative means.

Residential Block Structure

24.78 Back to back perimeter blocks should be the dominant form of block. In certain locations the use of cul-de-sacs or residential courts within the core of a block may be appropriate. Blocks should front out towards all public realm spaces wherever possible. In areas where site constraints cause restriction, layouts will need to demonstrate the best possible design solution which maximises safety and security for both the property and also the surrounding public realm.

24.79 To the north, residential layouts should aim to protect the existing residential amenity of adjoining neighbouring properties through either securing the boundary by backing-on or providing surveillance and enhanced boundary planting towards the shared boundary.

Residential Building Height

24.80 Building height to be generally two storeys, with instances of 2.5 storeys located at key building locations and frontages onto Springfield Road. Along Langley Brook and also fronting towards the Langley Heath Park, up to 3 storey dwellings would be appropriate with occasional 4 storey elements.

24.81 It is also considered that where development parcels front onto the primary route 2.5 - 3 storey dwellings may also be appropriate.

Residential Density

24.82 The average net density across the character area will be approximately 30dph - 40dph. However areas of higher density may be provided near gateways and along primary routes particularly in relation to the transition to the Langley Central character area.

Residential Parking

24.83 Parking will be provided predominantly on plot and to the side of dwellings, however rear parking may be acceptable to serve Springfield Road and Langley Brook Frontages.

24.84 Where necessary either parking courts or occasional clusters of on-plot frontage parking will be acceptable. Rear parking may be acceptable in certain instances, particularly where topography impacts upon residential block depth, or small clusters of apartments are included within the mix of unit types.

24.85 All houses should accommodate at least 2 parking spaces with room identified for visitor/ service parking either on plot or within the street. Larger dwellings of four + bedrooms will be expected to accommodate at least 3 cars on plot. Apartments should provide a minimum 1.5 parking spaces per unit plus allowance for easily accessible visitor parking.

Green Infrastructure, Swales & Open Space

24.86 A key component and focus of this part of the Site is the Langley Brook Park and the network of green links and SuDS swales connecting from Springfield to the Park. The green links are multi-functional and provide a superior landscape setting and pedestrian movement network for this character area.

24.87 The green links have been aligned to encompass existing areas of ecology features; work with the Site's existing and proposed contours, and provide connectivity between Springfield Road and Langley Brook Park to accommodate a connected Swale network.

24.88 Small instances of pocket greens may also be provided within the residential area, particularly in response to existing trees and responding to the underground utilities.

Street Hierarchy

24.89 Langley Brook is defined by both Springfield Road, Thimble End Road & Lindridge Road, providing connectivity to Walmley, Reddicap Heath and Webster Way. The realigned Ox Leys Road connection will intersect midway through the character area.

24.90 A new primary street will define the northern edge of the character, connecting through Langley Central and out on to part of Thimble End Road. The design intention is that over time, Springfield Road will have less through-traffic due the majority of traffic being redirected elsewhere through the Site. As such, environmental enhancements, and traffic calming through design and new dwelling frontages to the street may be possible.

24.91 New homes will be served from either primary/ secondary streets or a residential street network linking internal sections of the character area.

24.92 The majority of the routes in this character area will comprise of side streets, lanes and private drives which should connect both north to south between primary and secondary routes but also provide a range of east to west connections.

Pedestrian & Cycle Movement

24.93 A network of pedestrian paths will provide access from Springfield Road across Langley Brook leading onto Langley Centre. This network will provide a leisure outlet for residents and ensure that pedestrian access and walkability is not compromised by Langley Brook Park.

24.94 A network of walking paths will also be provided within both the Langley Park and Langley Brook Park to provide a leisure and recreation outlet for future residents.

24.95 The Langley Greenway will provide a north / south cycle network through the Site. Future residents within the Langley Brook will benefit from easy access to the Langley Greenway, which cuts across the upper section of the character area alongside the secondary street, feeding onto the gateway between Springfield Road and Churchill Road.

Figure 133. Langley Brook Upper Design Opportunities and Considerations

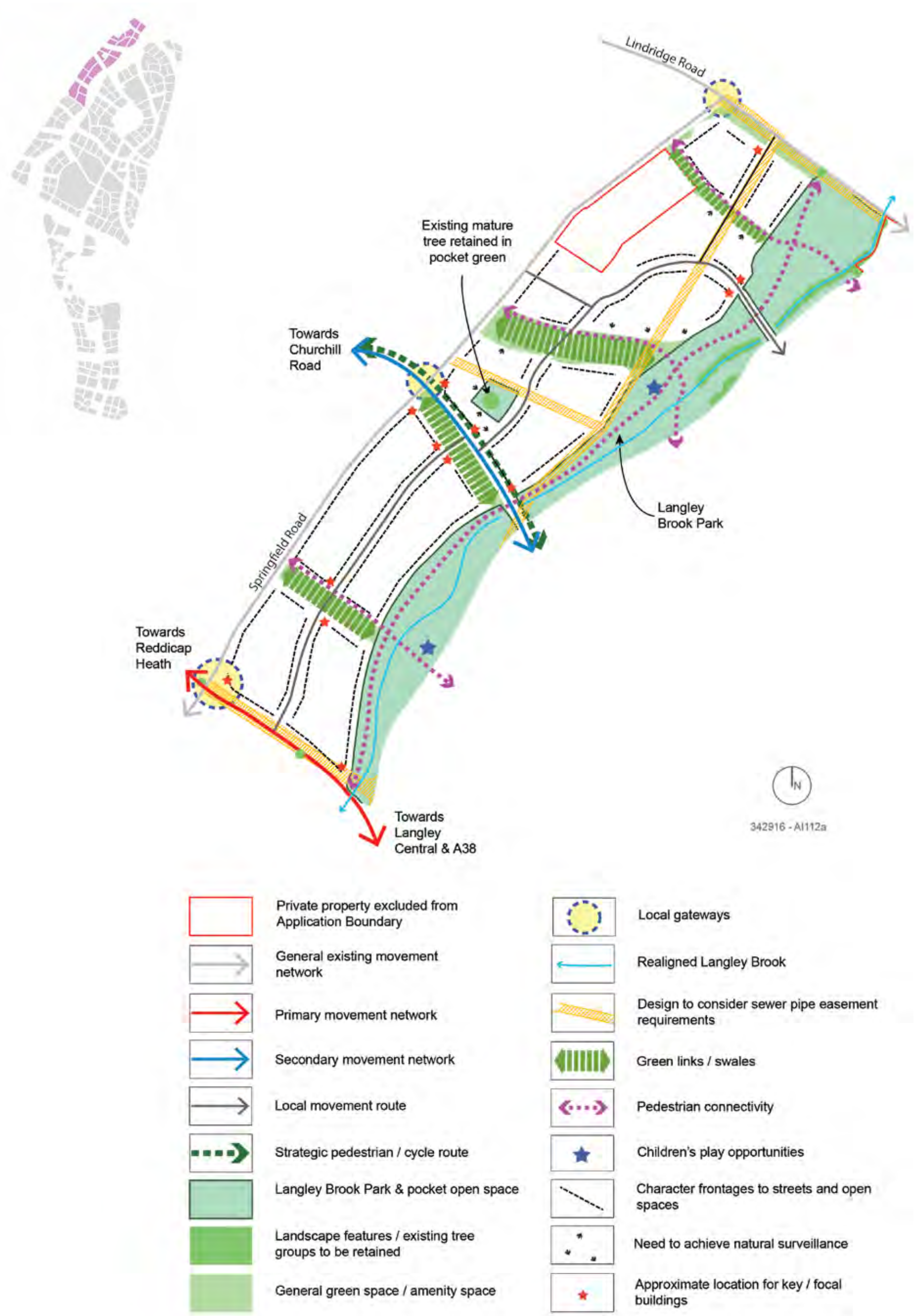
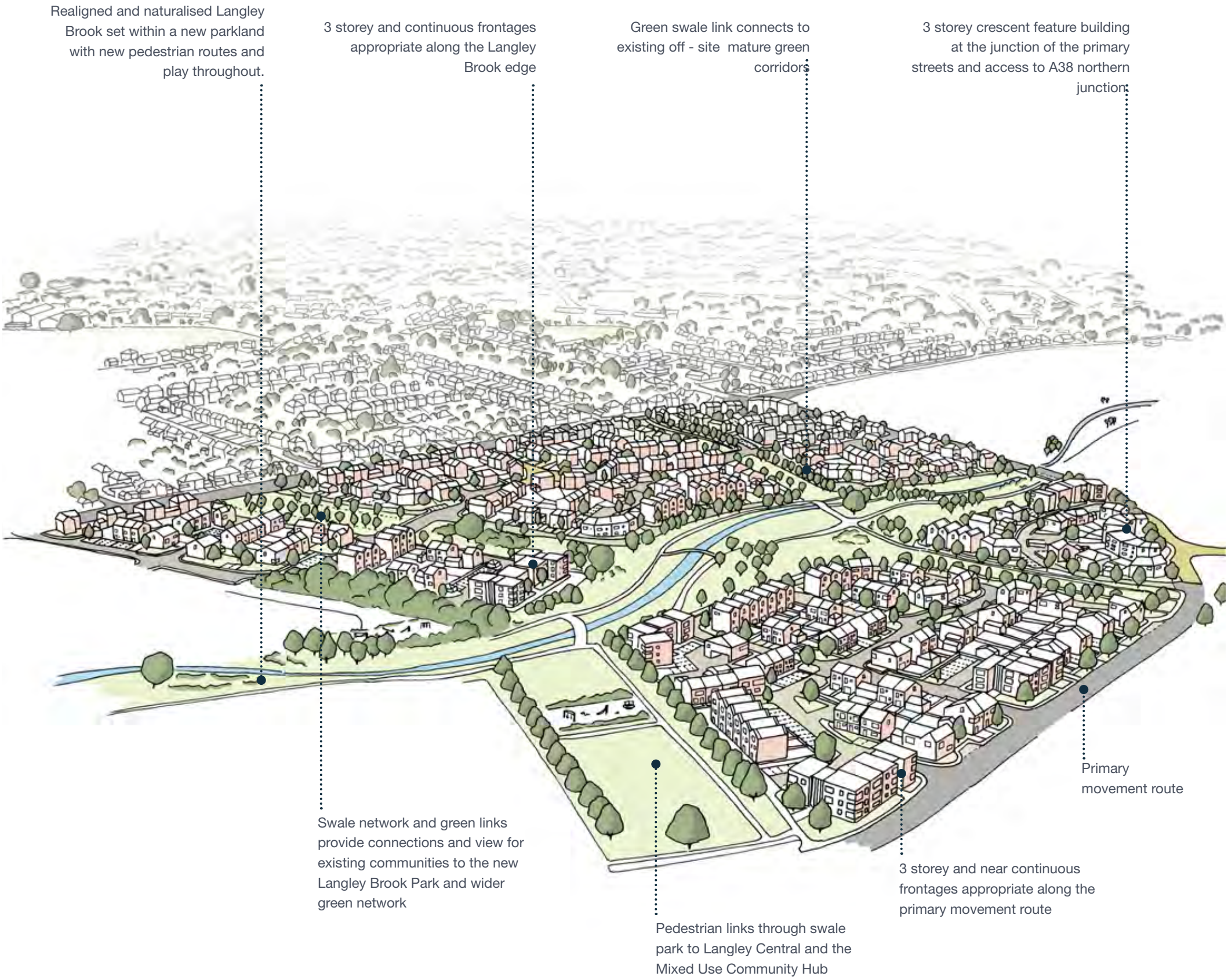


Figure 134. Langley Brook Lower Design Opportunities and Considerations

Figure 135. Illustrative Plan - Langley Brook

1. New Junction at Ox Leys Road/ Reddicap Heath Road and Springfield Road
2. Realigned Ox Leys Road primary route into and through the Site lined by regularly spaced boulevard style tree planting up to the Langley Brook Park
3. Key space and junction marked by a formal crescent form and tree planting
4. Langley Central and Mixed Use Hub ‘High Street’
5. Swale park connecting Langley Central to the Langley Brook Park
6. Swale connections providing access for the wider community to the Langley Brook Park
7. Naturalised and re-profiled Langley Brook Corridor
8. Local junction formed from Springfield Road to provide access to streets within the block depth and views from Springfield to the new green network beyond
9. Properties with frontage access to Springfield Road. New street tree planting and hedgerow boundaries to properties fronting on to Springfield Road
10. Near continuous frontage to the Primary Route and also towards the Langley Brook Park with incidents of taller apartment or townhouse clusters at key locations

Figure 136. Illustrative 3d Sketch - Langley Brook



LANGLEY CENTRAL - CHARACTER AREA PRINCIPLES

General Character Description

24.96 Langley Central will provide the civic heart to the Langley development. The area will be defined largely by the mixed use, community and primary and secondary education uses proposed. As such, a strongly gridded and permeable urban feel is proposed for this area.

24.97 The natural ridge along Fox Hollies Road provides a north to south spine around which the character area has formed. The mature trees along Fox Hollies Road also add a tree lined skyline to this character area. The character area and its formation is also influenced by the rising topography from the east and the west towards Fox Hollies Road; the existing public right of way from Springfield Road to Fox Hollies Road; the primary movement routes both to the west of Fox Hollies Road; and the north of the character area; and the proposed swale greens, Langley Brook Park and Langley Heath Park.

24.98 The area can provide higher density living and offer a wider range of residential options than other character areas. Building scale and mass will also be larger (approx. 3-4 storeys) to accommodate a wider range of uses but to also support the legibility and importance of this area as the heart of Langley within the wider context.

24.99 The area will be the subject of a design code following the approval of outline planning permission.

Mixed Use Community Hub

24.100 The largest concentration of mixed retail uses, community uses, healthcare services, education facilities are proposed within Langley Central. (District Centre)

24.101 The concentration of uses, the central location and access to the wider primary, secondary and also the strategic pedestrian and cycle movement route assists in supporting vitality and viability of the district centre.

Character Frontages

24.102 Figure 137 identifies a number of distinctive character frontages that should be applied in this character area. These seek to respond to particular landscape, open space or movement hierarchy features. The treatment of these character frontages will be detailed in the design coding stage following the approval of outline planning permission. However, the indicative street cross sections in Section 24.0 start to articulate the differences in building line and treatment that may be expected along each of the character frontages.

Gateways

24.103 The primary route access in from Thimble End Road will need to be carefully considered in terms of landscape response to create an appropriate arrival space. However, the built form to the north of this access point should also seek to positively address this gateway through height and architectural detailing.

Key / Focal Buildings

24.104 Key / focal buildings will provide landmarks and support legibility and place making. Coupled with key spaces or function the design, height and/ or mass of the proposals along with landscape and public realm treatment should make these features distinctive from the surrounding designs.

24.105 This part of the Site will contain more focal buildings and some should act as longer distance landmarks, again supporting the civic function of the area.

Key Spaces

24.106 At this strategic stage, the illustrative position of key spaces are identified with the aim of supporting legibility and place making. The key spaces will generally be at important junctions along the primary and secondary movement network.

24.107 Detailed design proposals should consider the arrangement and interaction between landscape and built form as well as public realm treatments to provide distinctive nodal points within the neighbourhood. These spaces should be about people and place and not dominated by highway features.

Natural Surveillance

24.108 Detailed designs should aim to maximise natural surveillance over public open spaces and movement routes, through the use of building orientation and fenestration. In particular where buildings are located at the junction of two streets each elevation should be activated with fenestration to habitable rooms.

24.109 Where traditional perimeter blocks are not possible, (i.e. where developable land is compromised by constraints) bespoke design approaches will need to demonstrate that surveillance and security is maximised through alternative means.

24.110 Long exposed boundaries to uses such as secondary and primary schools should be 'wrapped' by other uses so that the boundary is secured and an active frontage is provided, wherever possible.

Block Structure

24.111 Perimeter blocks should be the dominant block structure. Mixed use block depths and widths should increase in comparison to pure residential uses. This will support internal parking courts and servicing areas removing the visual clutter of parking and servicing from the street network.

24.112 The block structure and streets should work with the contours and minimise the need for retaining structures.

24.113 Buildings will be expected to step up with the contours to also avoid the need for large areas of retaining structures.

Building Heights

24.114 Within the mixed use part of this character area, buildings will generally be 3 and 4 storeys, with instances of 5 storeys located at focal building locations and key spaces. Where a prominent landmark building is proposed (e.g. proposed clock tower) a greater height will be permitted in order to fulfil the landmark function.

24.115 Within the purely residential parts of the area, 3 to 4 storeys along primary and secondary routes and then dropping down to 2 - 2.5 storeys everywhere else to achieve transition between adjoining character areas.

Residential Density

24.116 Although not directly comparable to the standard net density measurement, it is anticipated that residential density could range between 35 - 60 dph (particularly where upper storeys over mixed ground floor uses are proposed). Density will however, vary throughout the character area, with higher density's suited closer to the mixed use core area, Langley Heath Park and fronting the primary movement routes.

24.117 From Fox Hollies Road to the east and also to the north of the mixed use area, it is anticipated that residential densities will reduce to around 35 - 40dph in order to respond to topographical and landscape character elements but also providing a softer transition towards the eastern most character area at Langley Heath.

Parking

24.118 Linked to the mixed use area, a greater range of parking solutions will be appropriate in this character area and can include surface level car parks, multi-storey car parks, parking courts, integral parking and on street parking.

24.119 Detailed proposals should ensure that sufficient parking spaces for the mixed use area are provided whilst maintaining the quality of place-making. Innovative efficiencies in parking calculations and shared uses should also be factored in to future calculations.

24.120 All houses should accommodate at least 2 parking spaces with room identified for visitor/ service parking either on plot or within the street. Larger dwellings of four + bedrooms will be expected to accommodate at least 3 cars on plot.

24.121 Rear parking courts may be acceptable in certain instances, particularly where topography impacts upon residential block depth, or small clusters of apartments are included within the mix of unit types. The courts should be secure and limited to a maximum of 12 spaces in any one court.

Public Realm, Swales

24.122 The urban character of the mixed use area should be reinforced by the public realm designs, for example, urban swales/ rills could be integrated into the mixed use streets in combination with planting and seating areas. However, the contribution of the surrounding green spaces and swales should also be carefully co-ordinated into the design approach adopting more formality in places to support a transition between the character areas.

Street Hierarchy

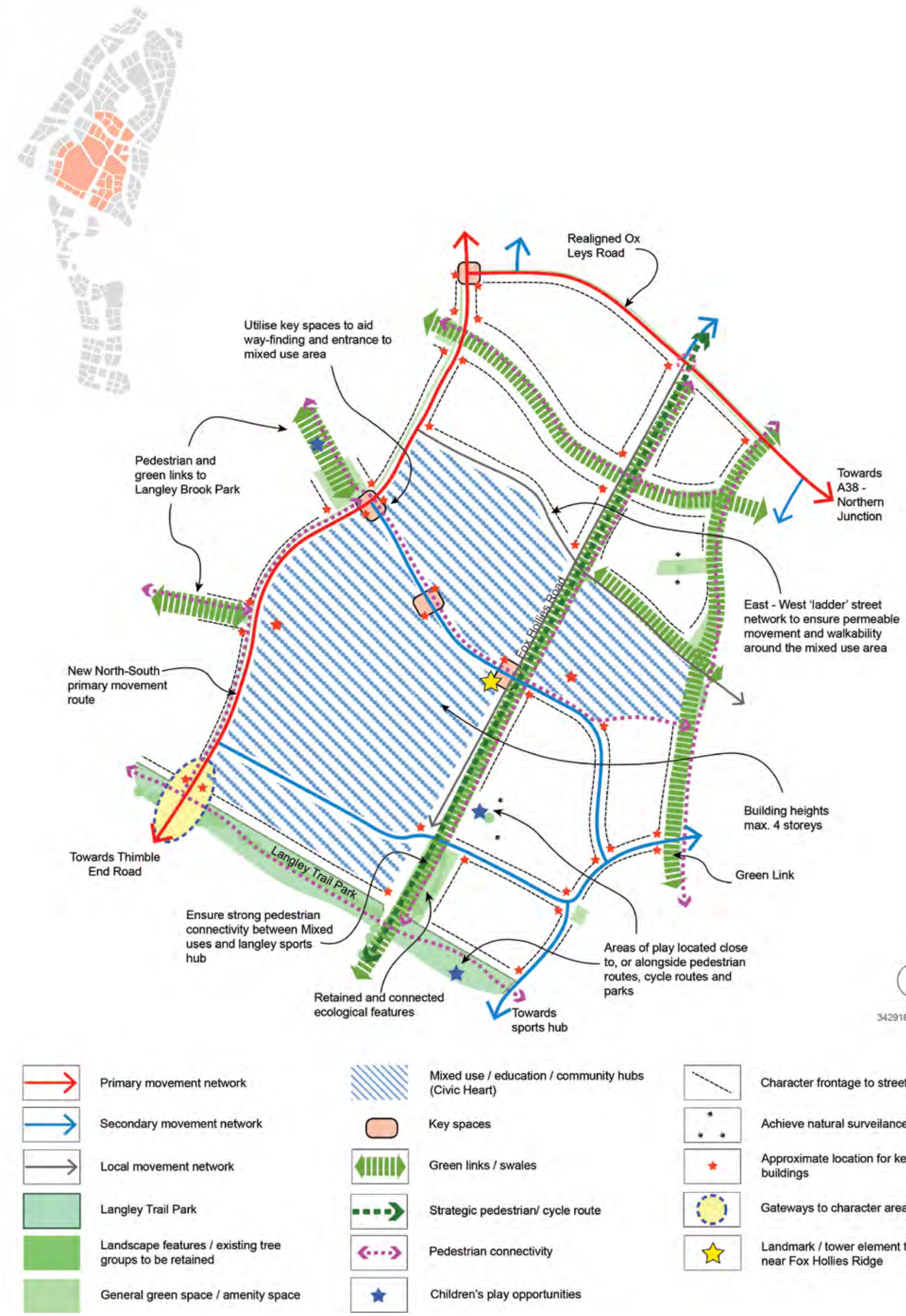
24.123 The newly formed north/south primary movement route and the realigned Ox Leys Road will provide the primary movement network within the character area, distributing most of the northern, southern and A38 traffic.

24.124 A 'ladder' of secondary streets moving east to west across Fox Hollies Road will support access to neighbourhoods east of Fox Hollies Road. Additional east - west movement through the mixed use centre will ensure optimum access and vitality to the proposed facilities at the core of the scheme.

Pedestrian & Cycle Movement

24.125 A network of pedestrian and cycle paths flow east to west and north to south through this area following the green links and proposed street networks. This network will encourage sustainable pedestrian and cycle movement from all residential areas, through mixed uses, and extensive open space networks. This network will also provide an attractive sustainable movement option for the whole community, while also supporting a wide range of safe routes for school and community facility access.

Figure 137. Langley Central Design Opportunities and Considerations



LANGLEY CENTRAL - MIXED USE COMMUNITY HUB

24.126 At the heart of Langley Central is the mixed use area (District Centre). While the detailed designs for this area will be subject to the preparation of a design code, at this outline stage some high level design intentions are suggested to inform character and place making.

24.127 It is considered vital that certain ingredients are included in order for the centre to be vibrant, functional and successful for the existing and future community.

24.128 As such, the following diagrams seek to build up the components and principles that should be explored further in the design code stage. These cover:

- The Infrastructure Components
- Land Use Components
- Urban Design Components

24.129 Figure 138 to Figure 141 on the proceeding pages illustrate one way these components could come together to create a high quality mixed use core.

Figure 138. Langley Central - Infrastructure Components

Infrastructure Components

24.130 Analysis of a number of examples of older and more recently developed mixed use hubs confirmed that proximity to residential population, and maximising the options for movement in and around the hub, as well as minimising the size of the urban grid were key contributors in the success, vitality and flexibility as a place for people to walk, interact, and socialise. This approach also reduced the number of opportunities for conflicts between competing uses and demands.

24.131 The focus at Langley has therefore been the formation of a permeable and connected landscape and movement network and hierarchy, forming an east to west ladder of routes connecting to primary and secondary north to south routes. While access and movement can be provided throughout the mixed use area, alternative routes in close proximity are also available enabling the centre to be avoided all together should a festival or street market be desirable.

24.132 Access from the mixed use hub to the network of public open spaces and recreation areas proposed on Site can support the function and attractiveness of the mixed use hub.

24.133 District centres benefit from access to nearby open space or leisure routes. These do not need to be immediately adjacent, but legible in the overall network. The structure proposed therefore aims to reinforce the connectivity of the mixed use area to the surrounding assets through direct route connections. i.e. A direct street linking Langley Brook Park and Fox Hollies Road and the associated strategic pedestrian and cycle route - Langley Greenway.

24.134 The structure proposed provides a range of sustainable movement options, whether it be by bus along the primary movement network, cycle access via the Langley Greenway or walking path access within the extensive landscape corridor network.

Figure 139. Langley Central - Land Use Components

Land Use Components

24.135 Conclusions drawn from the precedent analysis study identified how the mix and interrelationship of land uses and support services can either positively or negatively impact on the success of a mixed use core.

24.136 While at this stage it is not possible to determine the exact mix of users that will make up the mixed use element of the core, it is known that a range of community, health and education facilities are required early on in the development phasing.

24.137 The secondary school is perhaps the largest land use relating to community use and has the most specific requirements , such as:

- Proximity to the primary site access; proximity to a range of safe and sustainable routes to school;
- Flatter land area to accommodate a proportion of the sports pitch requirements and large footprint buildings;
- Close proximity to the proposed Sports hub area and core area car park to enable shared use and therefore land take efficiency for the school site;
- Ability to integrate the sixth form education element as part of the mixed use area rather than within the defined boundary of the secondary school.

24.138 On this basis the positioning of the secondary school has been a primary objective around which the rest of the network has been formed.

24.139 A second objective was to form a 'high street' style mixed use and community street which connects between the Langley Brook Park, the Primary Street and Fox Hollies Road. This provides access from public open space, bus routes and pedestrian and cycle routes at either end of the 'high street'.

24.140 Should a supermarket be included within the mix of uses it is understood that from a commercial perspective access and visibility from primary movement routes is important, as is the relationship to car parking. As such the objective of the layout has been to identify a prominent supermarket site location at the junction of the primary route and high street and adjacent to the main public car park facilitating shared use.

24.141 Ideally large uses such as the secondary school site and the supermarket should be wrapped with active uses to avoid long expanses of inactive boundaries.

24.142 Civic/community uses should be located in more prominent positions within the over all layout, but carefully distributed to add incidents of activity along the high street.

24.143 The final objective influencing the arrangement of uses was the desire to reduce the amount of traffic movement through the 'high street' so that it can be flexible and adaptable to seasonal or temporal uses. As such, a spread of accessible car parking areas have been placed around the edges of the high street uses. The development blocks have then been structured to achieve permeability and secondary uses between the parking areas and the main mixed use street. The spread of car parks removes pressure on one car park and surrounding streets if visitors are arriving from a variety of directions.

Figure 140. Langley Central - Urban Design Components

Urban Design Components

24.144 In order to enhance the sense of place and appeal of the mixed use area a series of urban form elements are proposed within the structure. A hierarchy of frontages are proposed in order to provide variation, both in terms of character and emphasis of activity.

24.145 It is proposed that the structure of the district centre is defined by the transition between three key spaces. The key spaces provided will offer localised areas of activity and destination points along the rising topography towards the natural ridge at Fox Hollies Road. As influenced by the character analysis, key spaces will be complimented by focal buildings and landscape features. Landscape features will also be used to soften the visual impact of parking areas and help guide users to common destinations, such as the secondary school and potential supermarket.

24.146 Pedestrian priority connections will be provided in order to provide a safe and pleasurable environment for users. Pedestrian access from rear parking areas will be provided through lanes and alleyways leading to the ‘high street’.

24.147 It is suggested that a minimum of three landmark buildings are provided, linked to civic and community functions. For example, the main secondary school building, the primary school building and a stand alone civic building at the top of the ‘high street’, on the ridge adjacent to Fox Hollies Road. The setting of the landmark buildings will be complemented by key spaces and landscape features. Focal buildings are also proposed at key junctures and movement nodes to aid legibility and enhance the sense of place.

Figure 141. Langley Central - Mixed Use Concept Plan

MIXED USE CONCEPT PLAN

24.148 The design rationale/ principles for the mixed use element of Langley Central have been carefully informed through technical constraint, character and precedent analysis and also a set of clear objectives outlined above.

24.149 The district centre component diagram above (Figure 141) is reflective of the illustrative masterplan provided. However variations to the structure and components can be explored further at the design code stage. Figure 142 illustrates one way in which this structure can be translated to provides a robust mixed use core for Langley.

Figure 142. Langley Central - 3d Artist Illustration - Northern Perspective

Public realm plaza space in front of the school provides pick up and drop off function and additional parking for the mixed use area. Can provide flexible temporary use space

Secondary School Building

Potentially Sixth Form/ Adult Evening Course Building

Inner court parking or multi-storey option

Pedestrian routes to ‘high street’

Supermarket

Primary Movement Route

Pedestrian routes to ‘high street’

Figure 143. Langley Central - 3d Artist Illustration - Langley Brook Perspective


Public realm plaza space in front of the school provides pick up and drop off function and additional parking for the mixed use area. Can provide flexible temporary use space
Potentially Sixth Form/ Adult Evening Course Building
Part of the Secondary School Sports Provision
Secondary School Building
Secondary School Sports Hall / Community Sports Hall
Green Space Linking On to Langley Brook Park
Pedestrian Link from Langley Brook Park
Bus Stops Along Primary Roaute Near District Centre
Primary Movement Route

LANGLEY HEATH - DESIGN PRINCIPLES

General Character Description

24.150 Langley Heath will be strongly characterised by its landscape and topographical features.

24.151 The area will accommodate predominantly family homes located within an undulating landscape and interfacing with the new Sports Hub area and Langley Heath Park.

24.152 A network of green links and pocket greens embedded within the development area will provide the context within which new development form will be sensitively integrated.

24.153 A secondary movement route pass through much of the character area, with it's alignment responding to and working with natural undulations in topography.

24.154 The built form will adopt a more organic rural feel providing a transition from Langley Central to the west towards the outlying rural characteristics to the east.

Character Frontages

24.155 Figure 144 identifies a number of distinctive character frontages that should be applied in this character area. These seek to respond to particular landscape, open space or movement hierarchy features. The treatment of these character frontages will be detailed in the design coding stage following the approval of outline planning permission. However, the indicative street cross sections in Section 24.0 start to articulate the differences in building line and treatment that may be expected along each of the character frontages.

Strategic Gateway

24.156 The proposed northern junction on to the A38 from Ox Leys Road is located at the north eastern corner of the Langley Heath character area.

24.157 Careful consideration should be applied at the detailed design stage to ensure highway design, landscape and built form collectively provide an enhanced sense of arrival.

Key / Focal Buildings

24.158 Key / focal buildings will provide landmarks and support legibility and place making. Coupled with key spaces or function the design, height and / or mass of the proposals along with landscape and public realm treatment should make these features distinctive from the surrounding areas.

Key Spaces

24.159 At this strategic stage, the approximate position of key spaces are identified with the aim of supporting legibility and place making. The key spaces are generally at important junctions along the secondary movement network.

24.160 Detailed design proposals should consider the arrangement and interaction between landscape and built form as well as public realm treatments to provide distinctive nodal points within the neighbourhood. These spaces should be about people and place and not dominated by highway features.

Natural Surveillance

24.161 Detailed residential design should aim to maximise natural surveillance over public open spaces and movement routes, through the use of building orientation and fenestration. In particular where buildings are located at the junction of two streets each elevation should be activated with fenestration to habitable rooms.

24.162 Where traditional perimeter blocks are not possible, (i.e. where developable land is compromised by constraints) bespoke residential dwellings will need to demonstrate that surveillance and security is maximised through alternative means.

Residential Block Structure

24.163 Back to back perimeter blocks should be the dominant form of block. Due to topographical variations and possible use of localised retaining features, back to back distances may need to be slightly extended to maintain residential amenity standards or to deal with any significant changes in level. In certain locations the use of cul-de-sacs or residential courts within the core of a block may be appropriate. Blocks should front out towards all public realm spaces wherever possible.

Residential Building Height

24.164 Generally 2 storeys, with instances of 2.5 storeys located at key building locations and frontages overlooking Langley Heath Park and the Sports Hub.

Residential Density

24.165 The net density range appropriate to this character area is approximately 28 - 37dph.

Residential Parking

24.166 Parking will be predominantly on plot in this character area, with a preference towards locating parking to the side of dwellings.

24.167 Occasional on-plot parking to the front of properties will be acceptable if all other options have been exhausted and / or traffic calming is aided .

24.168 All houses should accommodate at least 2 parking spaces with room identified for visitor/ service parking either on plot or within the street. Larger dwellings of four + bedrooms will be expected to accommodate at least 3 cars on plot.

Green Links and Open Space

24.169 A network of green swale links pass across this character area largely informed by the underlying topography as well as retained and enhancing landscape and biodiversity objectives. The green links flow generally in a north / south direction which will help promote pedestrian connectivity between Ox Leys Road in the north and Langley Park and Sports Hub in the South.

24.170 The eastern edge of the character area is defined by a new landscape corridor providing a buffer to the A38, accommodating an acoustic attenuation barrier, part of the swale network and also part of the leisure footpath network.

24.171 Small instances of pocket greens may also be provided within the residential areas to further supplement the landscape led character of the Site and aid legibility.

Street Hierarchy

24.172 This character area is accessed via a series of secondary routes flowing from Ox Leys Road in the north; the Penns character area in the south; and from Langley Central to the west.

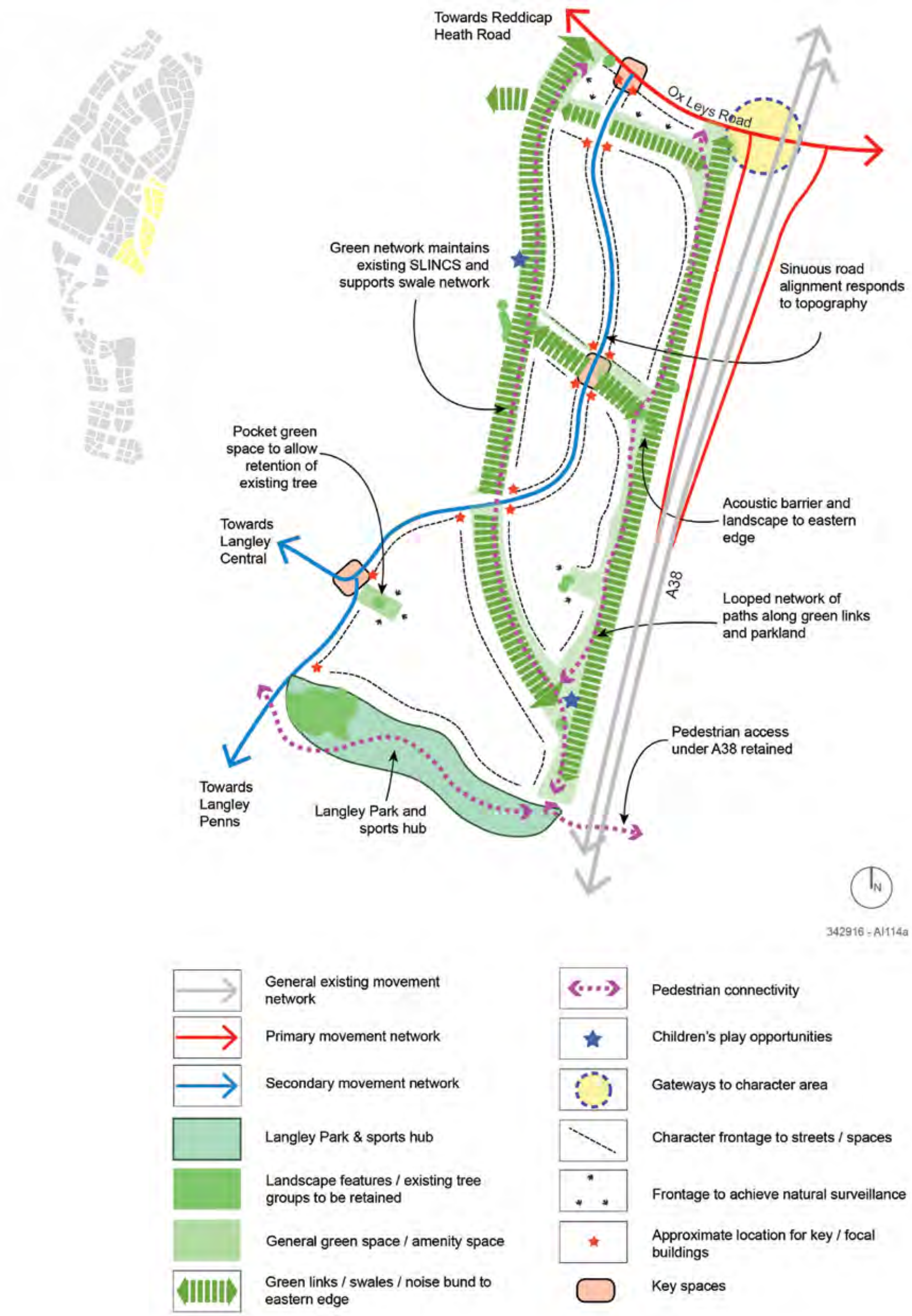
24.173 A network of residential side streets and lanes will feed from the secondary movement routes to serve the future development parcels.

Pedestrian and Cycle Movement

24.174 A network of leisure pedestrian routes will follow the alignment of the green links supporting connectivity to the sports hub and Langley Heath Park as well as back towards Langley Central.

24.175 The strategic pedestrian and cycle route - Langley Greenway, provides a north / south cycle network through the entire Langley Site. Future residents within the Langley Heath character area will benefit from easy access to the Langley Greenway, which passes to the west of the character area.

Figure 144. Langley Heath - Opportunities and Considerations



LANGLEY PENNS - DESIGN PRINCIPLES

General Character Description

24.176 The presence of clusters of mature trees, woodland block, existing public right of way footpath, ponds and heritage assets requires a more bespoke country estate / farmstead style development response in this part of the Site, applicable to both the highway treatment and the building forms.

24.177 In order to preserve trees and respond positively to the natural context, organic development parcels will be used. The residential environment will be largely made up of detached, semi-detached dwellings and country estate style cottages generally arranged in 'farmstead' style courts. Existing trees and landscape proposals will also help form a mature and verdant setting that will complement the built form.

Heritage and Views

24.178 Following detailed heritage, archaeological and landscape analysis, a number of views have been identified which should be preserved in order to protect and enhance the setting and outlook of adjacent heritage assets and around Fox Hollies House.

24.179 The historic character should inform positive design solutions. Therefore, detailed designs must carefully consider the placement, design and treatment of buildings in response to this heritage advice in order to comply with policy and the National Design Guidance.

Character Frontages

24.180 Figure 145 identifies a number of distinctive character frontages that should be applied in this character area. These seek to respond to particular landscape, open space or movement hierarchy features. The treatment of these character frontages will be detailed in the design coding stage following the approval of outline planning permission. However, the indicative street cross sections in Section 24.0 start to articulate the differences in building line and treatment that may be expected along each of the character frontages.

Gateway

24.181 While not providing a prominent gateway to Langley as a whole, A new secondary access gateway will be formed at the Thimble End Road/ Webster Way roundabout into the Site.

24.182 As this route will also provide local access towards the Sport Hub it is important that legibility is strong at this gateway. Careful consideration should be applied at the detailed design stage to ensure highway design, landscape and built from collectively provide an enhanced sense of arrival.

Key / Focal Buildings

24.183 Key / focal buildings will provide landmarks and support legibility and place making. Coupled with key spaces or function the design, height and / or mass of the proposals along with landscape and public realm treatment should make these features distinctive from the surrounding designs.

Key Spaces

24.184 At this strategic stage, the approximate position of key spaces are identified with the aim of supporting legibility and place making. The key spaces are generally at important junctions along the primary and secondary movement network.

24.185 Detailed design proposals should consider the arrangement and interaction between landscape and built form as well as public realm treatments to provide distinctive nodal points within the neighbourhood. These spaces should be about people and place and not dominated by highway features.

Natural Surveillance

24.186 Detailed residential design should aim to maximise natural surveillance over public open spaces and movement routes, through the use of building orientation and fenestration. In particular where buildings are located at the junction of two streets each elevation should be activated with fenestration to habitable rooms.

24.187 Where traditional perimeter blocks are not possible, (i.e. where developable land is compromised by constraints) bespoke residential dwellings will need to demonstrate that surveillance and security is maximised through alternative means.

Residential Block Structure

24.188 Where possible back to back perimeter blocks are preferred. However organic layout form is also acceptable providing property boundaries are treated positively and surveillance onto streets and public spaces is achieved via sensitive building arrangements and responsive house types.

24.189 Proposed residential block layouts should protect the residential amenity of existing private properties through careful building positioning, boundary considerations and building orientations.

Residential Building Height

24.190 Generally two storeys, particularly in close proximity to historic buildings. Instances of 2.5 storeys located at key building locations and frontages overlooking areas of green space will be acceptable.

24.191 Frontages to the Thimble End Road/ Webster Way roundabout can be up to 3 storeys is appropriately designed.

Residential Density

24.192 The net density range appropriate to this character area will be 25 - 37 dph, with the lower density range used around the mature tree clusters and listed buildings.

Residential Parking

24.193 Parking will be predominantly on plot or within farmstead style court yards where it will take on a much more organic form of provision.

24.194 Occasional on-plot to the front parking will be acceptable if all other options have been exhausted or if it aides traffic calming.

24.195 All houses should accommodate at least 2 parking spaces with room identified for visitor/ service parking either on plot or within the street. Larger dwellings of four + bedrooms will be expected to accommodate at least 3 cars on plot.

Green Features

24.196 Existing tree clusters will be retained within pocket parks and green spaces within the public realm.

24.197 A buffer zone of 10 - 15m has been provided along the boundary of the woodland to the east of the character area. This zone can contain new tree planting, meadow planting and / or swale features if required. Buffers will also ensure that the ecological value of the existing woodland and ponds is preserved.

Street Hierarchy and Character

24.198 A secondary movement route passes through the Langley Penns area providing access from the roundabout access to the sports hub and north up to the A38 northern junction. However, to discourage rat running through this part of the Site the road will be treated in the style of a country estate lane, and elements will be put in place to traffic calm through movement.

24.199 Properties will be served from access drives and shared surface lanes continuing the farmstead and country estate character.

Pedestrian Movement & the Langley Greenway

24.200 A network of pedestrian paths will flow within areas of green space and provide links to a wide range of connecting footpaths within the woodland / nature reserve.

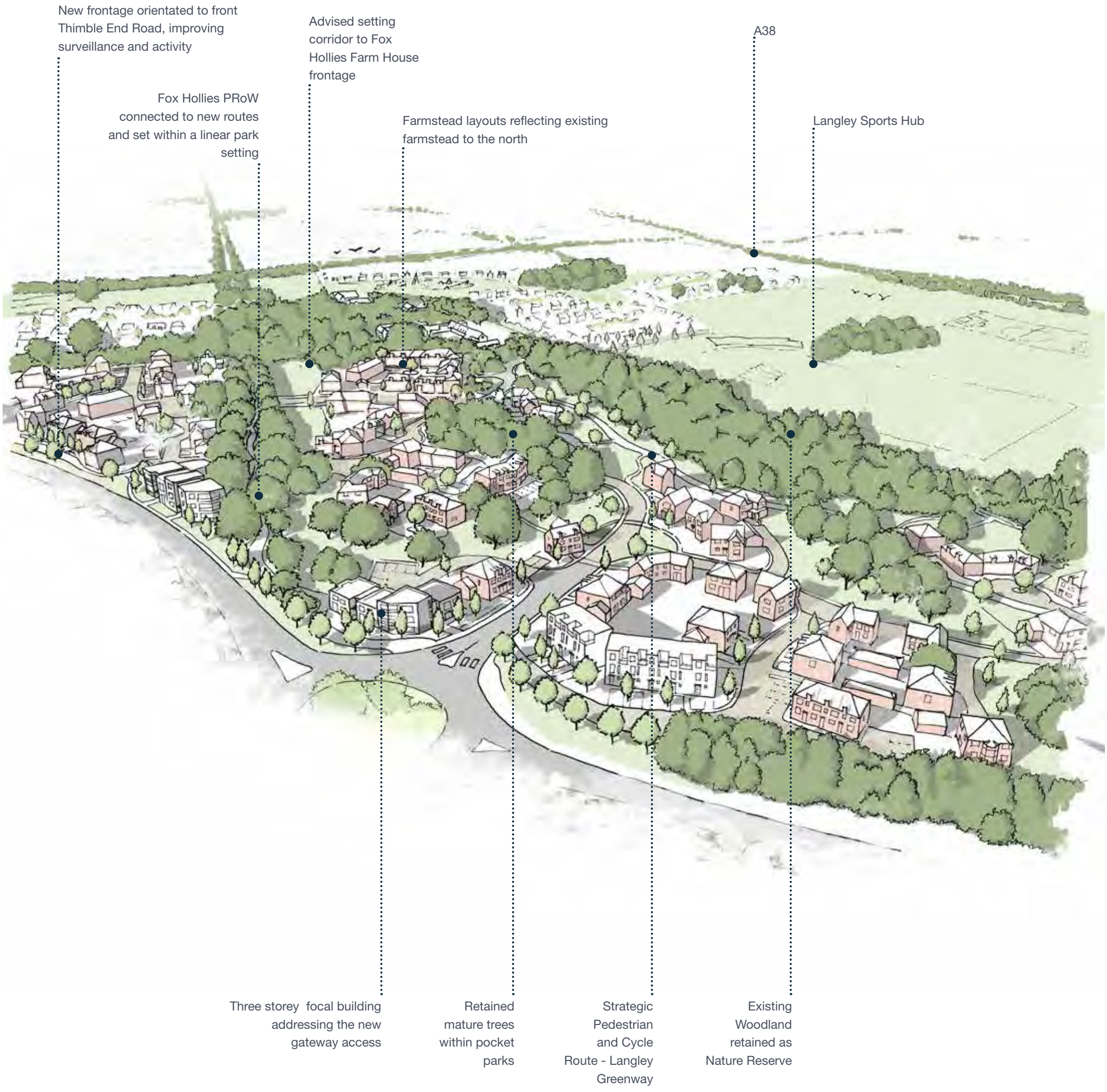
24.201 Thestrategicpedestrianandcycleroute-Langley Greenway will also flow through the character area, providing a key feature and providing residents with a sustainable pedestrian and cycle option travelling both north to Langley Central or south to Peddimore/ ASDA.

Figure 145. Langley Penns - Opportunities and Considerations

Figure 146. Illustrative Vignette - Langley Penns

1. Four arm roundabout formed to provide secondary access in to Langley Penns
2. Country Estate style road treatment to Secondary Movement Route
3. Landscape verges and connecting greens dominate the character of the secondary route
4. Existing mature trees retained within pocket greens and meadow public realm spaces.
5. Farmstead building layouts with informal inner courts accommodating parking and landscape elements.
6. Woodland retained and buffered from development by meadows, strategic pedestrian and cycle route and tree planting.
7. Gateway buildings addressing existing streets
8. Strategic pedestrian and cycle route work with contours to achieve acceptable gradients across route and also enhance surveillance from adjacent dwellings.
9. Footpath/ cycle route utilising the existing landscape verge along Webster Way and Thimble End Road and connecting to Fox Hollies Route.
10. Near continuous frontage to Thimble End Road to provide improved natural surveillance over the street. Some landscape treatment encouraged along this frontage as no forward access.
11. Area to accommodate existing trees, listed building setting and new community orchard planting if desirable.

Figure 147. Illustrative 3d Sketch - Langley Penns



LANGLEY FIELDS - DESIGN PRINCIPLES

General Character Description

24.202 Langley Fields will be characterised by its formal development pattern, mixed use community hub and central green space. As the area presents no topographical challenge, residential blocks will be devised in an efficient manner to form a more urban residential environment, with perhaps a more modern interpretation of architectural styles.

24.203 Green links will provide accessible leisure routes for local residents, whilst the mixed use community hub will cater for the daily needs of those within the immediate locality.

Mixed Use Community Hub

24.204 The mixed use community hub provides a focus for this character area. It is anticipated that the primary school will front on to the secondary route and the strategic pedestrian and cycle route. The school will serve as a local landmark and community destination.

24.205 Directly adjacent will be a small cluster of mixed retail and community uses which will serve the new and existing communities. Again these uses will front onto the secondary movement network but should also aim to provide positive frontage towards Langley Fields Park. Parking for the mixed uses should also be available for users of the Park and the school.

24.206 Building heights of up to 16m will be acceptable in this mixed use area supporting the delivery of 3 - 4 storey units or clerestorey hall spaces / mezzanine levels for the school and community buildings.

Character Frontages

24.207 Figure 148 identifies a number of distinctive character frontages that should be applied in this character area. These seek to respond to particular landscape, open space or movement hierarchy features. The treatment of these character frontages will be detailed in the design coding stage following the approval of outline planning permission. However, the indicative street cross sections in Section 24.0 start to articulate the differences in building line and treatment that may be expected along each of the character frontages.

Strategic Gateway

24.208 The proposed Peddimore / A38 junction will provide a major gateway, not just to the character area but to Langley as a whole.

24.209 Other local gateways occur to the west of the character area, where access to the Site is proposed from Webster Way.

24.210 The expectation would be for built form and landscape to provide a positive arrival experience/ first impression of the development. Height and design should be carefully considered as well as the landscape treatments around the access and acoustic attenuation features to the A38.

Key / Focal Buildings

24.211 Key / focal buildings will provide landmarks and support legibility and place making. Coupled with key spaces or function the design, height and/ or mass of the proposals along with landscape and public realm treatment should make these features distinctive from the surrounding designs.

Key Spaces

24.212 At this strategic stage, the approximate position of key spaces are identified with the aim of supporting legibility and place making. The key spaces are generally at important junctions along the primary and secondary movement network.

24.213 Detailed design proposals should consider the arrangement and interaction between landscape and built form as well as public realm treatments to provide distinctive nodal points within the neighbourhood. These spaces should be about people and place and not dominated by highway features.

Natural Surveillance

24.214 Detailed residential design should aim to maximise natural surveillance over public open spaces and movement routes, through the use of building orientation and fenestration. In particular where buildings are located at the junction of two streets each elevation should be activated with fenestration to habitable rooms.

Residential Block Structure

24.215 Given the strong urban and grid nature of the propose character area, back to back perimeter blocks should be the dominant block type. In certain locations the use of cul-de-sacs or residential courts within the core of a block may be appropriate. Blocks should front out towards all public realm spaces wherever possible.

24.216 Proposed residential block layouts should protect the residential amenity of existing private properties on Walmley Ash Lane through careful building positioning, boundary considerations and building orientations.

Residential Building Height

24.217 Generally 2 - 2.5 but with more opportunities for 3 and occasional 4 storeys particularly in relation to the primary routes, public open spaces, gateways and focal buildings.

Residential Density

24.218 The net density range appropriate to this character area will be approximately 37 - 55 dph.

Residential Parking

24.219 Parking will be predominantly on plot in this character area, with a range of options from integral to side of dwelling being appropriate. On plot to the front parking may also be acceptable providing landscape treatments are high quality to soften the visual appearance of parking on the street scene or where it supports traffic calming.

24.220 All houses should accommodate at least 2 parking spaces with room identified for visitor/ service parking either on plot or within the street. Larger dwellings of four + bedrooms will be expected to accommodate at least 3 cars on plot. Innovative solutions should be considered for this option.

24.221 Rear parking courts may be acceptable in certain instances, particularly where frontage access cannot be achieved or for apartments. The courts should be secure with good levels of natural surveillance.

Green Links and Open Space

24.222 Despite being a more urban environment, the area will still be characterised by significant green features. A network of green links have been incorporated which support retention of existing landscape features and accommodate surface water swales as well as pedestrian routes.

24.223 A destination park - Langley Fields Park located at the centre of the area will support retention of existing landscape features as well as supporting play and recreation opportunities.

24.224 A secondary pocket park area is proposed to the south of the primary route and will support surface water drainage, ability for trees to grow to maturity and the creation of a formal park around which new dwellings will front softening the more urban grid created by the application of higher development densities.

24.225 The northern edge of the character area will be defined by the retained ecology areas and the created nature reserve. Whilst providing an area rich in ecological value, future residents will also benefit from a network of existing and proposed paths through the nature reserve linking to the sports hub and on to Langley Central to the north.

24.226 The eastern edge of the character area is defined by a new landscape corridor providing a buffer to the A38, accommodating an acoustic attenuation barrier, part of the swale network and also part of the leisure footpath network.

Street Hierarchy

24.227 Webster Way and the new link road between Webster Way and the proposed Peddimore/A38 roundabout will provide part of the primary movement network.

24.228 Spurring north and south from the primary route is the secondary movement route which serves Langley Fields. Side streets and lanes will be served from the secondary route.

Pedestrian and Cycle Movement

24.229 A network of leisure pedestrian routes will follow the alignment of the green links supporting connectivity between parks and key mixed use destinations across the Site.

24.230 The strategic pedestrian and cycle route - Langley Greenway, provides a north / south cycle network through the entire Langley Site. Future residents within Langley Fields will benefit from direct and easy access to the Langley Greenway, which passes through much of the character area and in particularly the mixed use community hub, primary school and Langley Fields Park.

Figure 148. Langley Fields Opportunities and Consideration

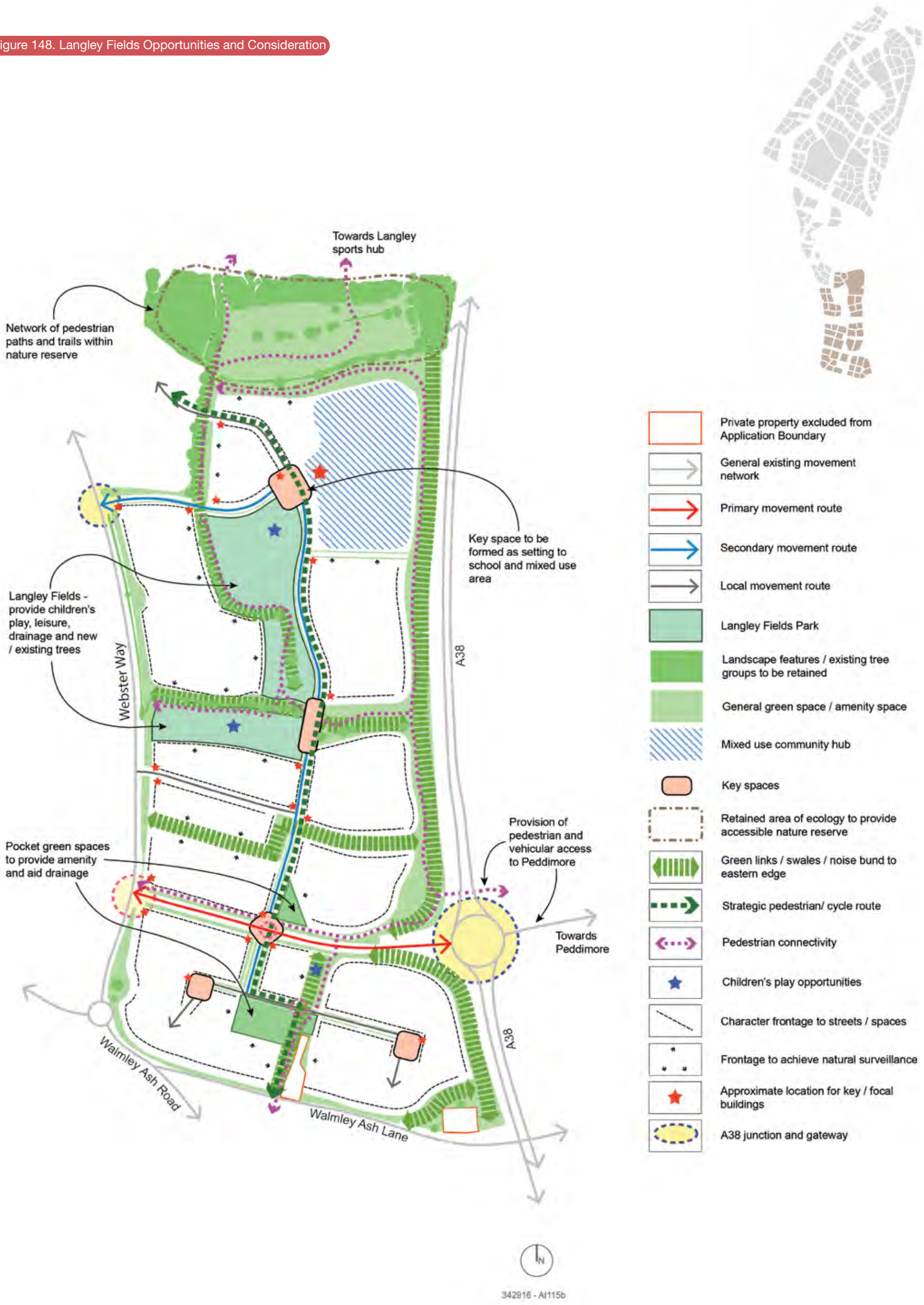


Figure 149. Illustrative Vignette - Langley Fields

1. New access junction formed Webster Way / Calder Drive towards the A38 roundabout
2. Peddimore A38 roundabout (subject of current planning application)
3. Primary movement route comprising two lanes either side and significant landscape verges to accommodate boulevard tree planting and swales
4. Pocket Park to accommodate surface water drainage and formal tree planting
5. Strategic pedestrian and cycle way route pass through this space and connect to the ASDA PRoW to the south
6. Formal crescent of buildings addresses retained mature tree and forms a striking landmark around the Walmley Ash Lane / Webster Way roundabout
7. Near continuous frontage to the Primary movement route to provide acoustic attenuation but also create a strong frontage to the main through route. Thimble End Road to provide improved natural. Significant verge planting provides positive visual separation between traffic and dwellings
8. Dwellings served from parking courts to the rear as no frontage access to primary route in this location
9. Alignment of road supports connection of foul water network to the south of the Site. No direct vehicle access to Walmley Ash Lane, pedestrian only.

Figure 150. Illustrative 3d Sketch - Langley Fields

LANGLEY GREENWAY DESIGN PRINCIPLES

Figure 151. Langley Greenway Character Variation

24.231 The Langley Greenway will provide a strategic pedestrian and cycle movement route for existing and future residents. This route is in addition to the wide variety of leisure routes to be provided across the Site.

24.232 The route will form a connecting spine through the Site measuring approximately 3.7km in distance and linking between existing foot and cycleway routes on Churchill Drive in the north and those located to the south adjacent to ASDA. The route will also provide access to key destinations and uses within and surrounding the Site.

24.233 The design approach ensures that the route is varied in character, informed by the range of existing and proposed on-site landscape features and proposed built character areas. This variation ensures that the route will be interesting and encourage residents to use and enjoy the feature.

24.234 At this outline application stage the design of this route is not for approval. However, a set of strategic design principles are proposed to articulate the design intention and to inform the future detailed designs for the route such that they correlate with the design intentions of the Site's character areas. Figure 152 provides a matrix of components namely; Landscape, Materials and Features that should be considered in relation to the context through which the route is passing within Langley (i.e. Urban / core, suburban and rural).

DESIGN PRINCIPLE...

- Offer a safe and direct strategic foot and cycle route through the Site where users have priority over motorised vehicles;
- Connect key uses and destinations within and surrounding the Site;
- Offer a range of experiences and character along the route, with a focus on achieving a sense of security for users.

Langley North	Suburban in character. Requires clear definition from the adjoining road. The section of the route will be characterised by streets, moderate levels of traffic movement, surveillance from new and existing dwellings and the Langley Brook Park.
Langley Hall Park	Suburban in character. This section will be defined by the presence of residential properties, community green space and moderate traffic movement, as well as the northern community hub and primary school.
Fox Hollies North	Semi - rural in character. This section will be defined by both existing and proposed trees, nearby residential, grass verges, hedgerows and low level school traffic.
Fox Hollies Central	Urban in character. Sections of this area will be defined by both existing mature and proposed trees, taller building heights, district centre uses, grass verges, hedgerows, occasional parking, primary and secondary school and moderate traffic levels.
Fox Hollies South	Rural in character. This section will be defined by both existing and proposed trees, historic and listed buildings, grass verges, low traffic flows and the intersecting Langley Parkland.
Langley Penns	Rural in character, despite the presence of residential properties. This section will be defined by its retained mature trees, additional tree planting, informal green space, meadow grassland and low traffic levels.
Langley Fields Park	Suburban in character. Sections will be defined by the presence of residential properties, community green space, street trees and moderate traffic movement, as well as the southern community hub and primary school.
Langley South	Urban in character. This section will be defined by the increased density of residential properties, the new A38 link road crossing, formal building arrangements, street trees and moderate to high traffic movement.
Peddimore Link	Urban in character. This section will function primarily as a link to the future employment provision at Peddimore. It be defined by it's separation from highway traffic; increase in street trees, sustainable surface water drainage areas, sculpted land forms associated with the acoustic bund and new landscape buffer planting.

Figure 152. Langley Greenway Design Principles Matrix

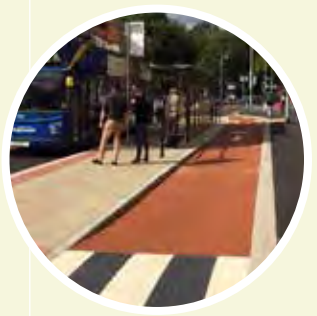
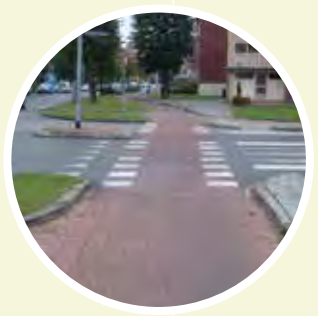
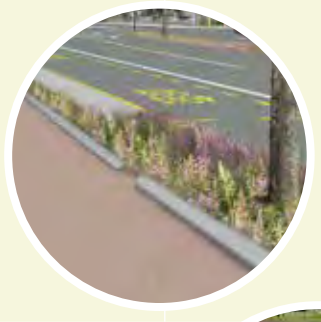
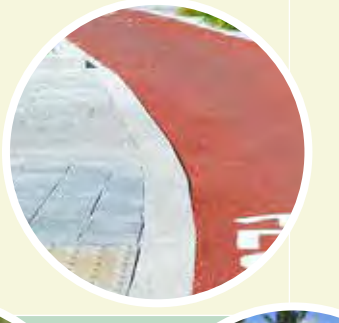
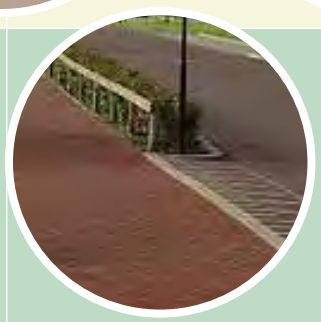
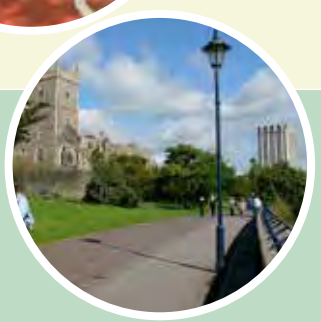
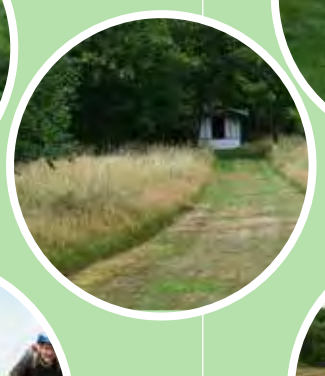
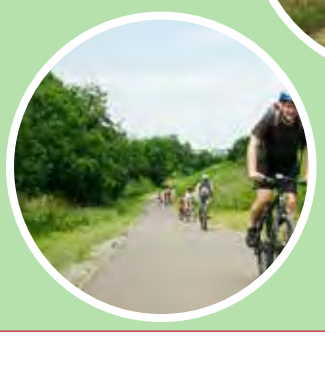
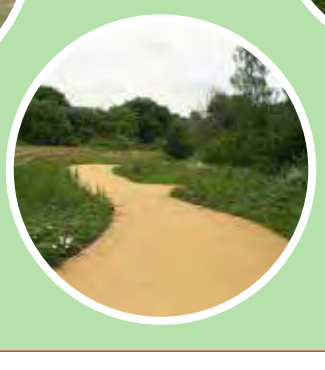
	LANDSCAPE	MATERIALS	FURNITURE
	Detailed proposals should carefully consider how landscape will support the experience and the character through which the footway/ cycleway is passing. Landscape elements such as trees, hedges, SuDS and planting can play an important role in defining the intended / varied character of the route.	Material treatments can be considered in conjunction with the intended function and context of the route. Surface treatments, street furniture, materials and colours should be carefully chosen to compliment and support character variation along the route.	Detailed proposals should consider the provision of furniture that aids the function of the cycle route, such as lighting, cycle parking, signs, markings and resting areas. These should be considered carefully to compliment the character and context along the route, as well as providing a practical use.
URBAN/ CORE Footway/ cycleway within an urban/ core context must seek to achieve priority for pedestrians and cyclists over vehicles while also balancing activity from other road users. The higher levels of activity in urban / core areas will necessitate careful management of all movement modes; alongside clear demarcation of the footway/ cycle routes; integrated signage; and places to safely park cycles without detriment to other users of the area.	       		
SUBURBAN Footway / cycleway within the suburban context must consider the interaction with housing and local residents. Homes overlooking the route will help provide active and natural surveillance to increase the sense of safety and security. The suburban character of the route should be more accessible in nature, in order to attract use from surrounding residents / families.	        		
RURAL Footway / cycleway within the rural context will need to achieve a level of natural or active surveillance. As such the route should seek to pass by clusters of dwellings wherever possible to benefit from natural surveillance Detailed proposals should therefore consider the route's natural setting and aim to compliment the character variation provided by the surrounding green environment.	       		

Figure 153. Langley Greenway Illustrative Sketch Locations

D

E

Langley Greenway Illustrations

24.235 The images A - E are indicative sketches articulating some early design thinking about the character variation that could be achieved along the strategic footway/ cycleway route at the detailed design stages.

Langley Integrated Figure Ground

24.236 Figure 154 illustrates the proposed development in figure ground format integrated into the existing figure ground of the surrounding urban form. This demonstrates how the form of Langley positively complements and connects with the existing urban fabric of Sutton Coldfield.

Figure 154. Langley Integrated Figure Ground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25.0 GREEN INFRASTRUCTURE STRATEGY

25.1 This section of the DAS explains the objectives and strategic proposals for Green Infrastructure (GI) at Langley.

25.2 The integrity and quality of the GI is fundamental to the success and viability of the development, and will serve many functions from the strategic landscape scale, down to the domestic scale. Green Infrastructure, as defined in the box below, will provide a network of integrated, cohesive, linked green spaces and natural and semi-natural features that are multi-functional and connected across the Site and to the wider rural and urban landscape.

25.3 This network will be well designed to provide an attractive framework that is robust, inclusive and accessible to all. This will contribute to a sustainable, accessible, and healthy environment that promotes healthy lifestyles and well-being through active access and contact with nature.

25.4 The landscape will play a role in the physical and mental health of the residents; encouraging people to engage with the landscape, partake in routine physical activity and have regular contact with green open spaces. A network of routes containing events (play, trim trail, seating) will create a usable, friendly and inviting green infrastructure.

25.5 The following pages illustrate the key GI areas that are proposed and summarise the purpose of the feature and the principles around management. Illustrative plans included in this section also indicate how some of the key public open spaces and the design principles could come forward, but these are not for approval at this stage.

Green Infrastructure Framework

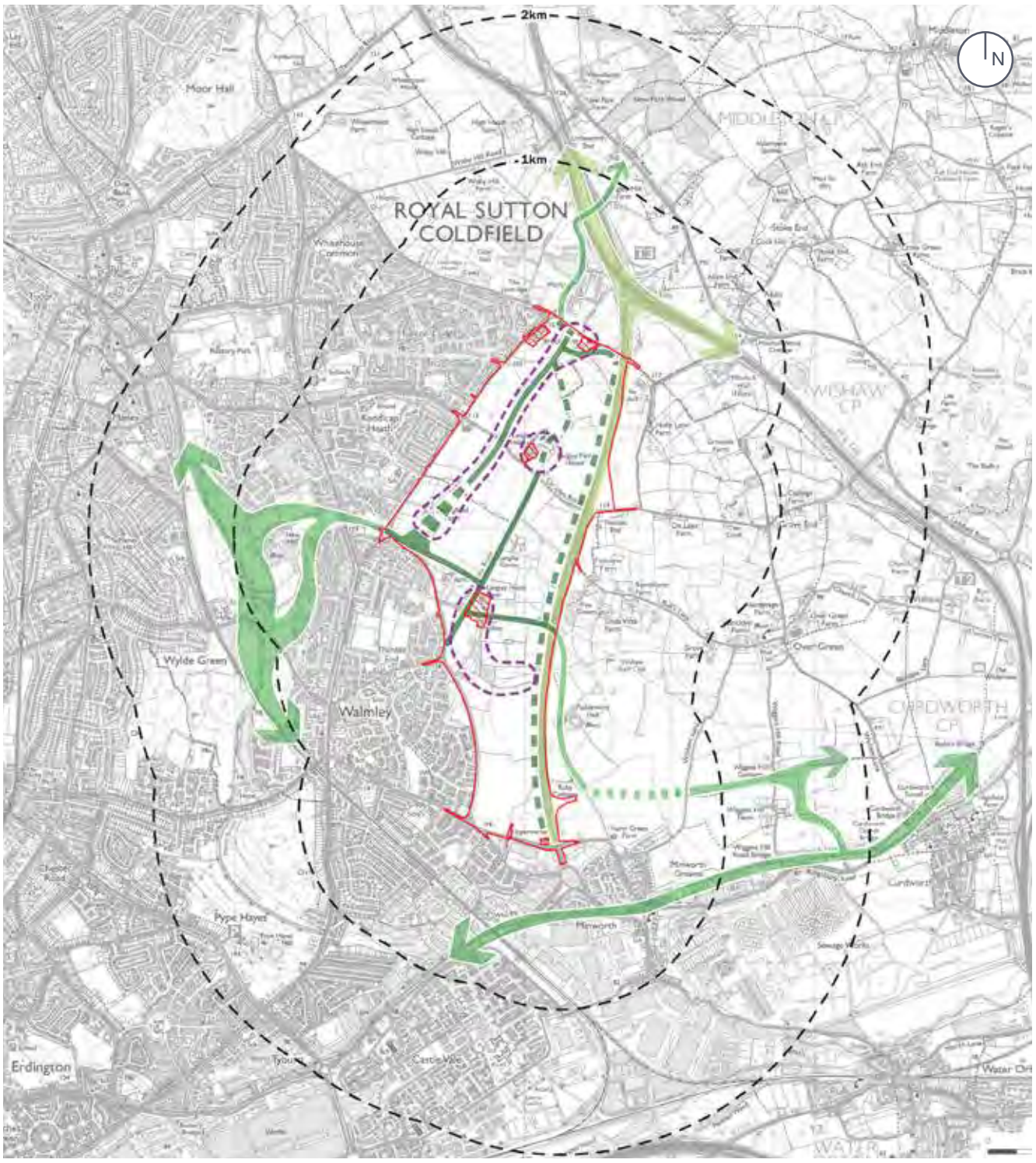
25.6 The baseline analysis work undertaken for the Site identified a range of GI opportunities for the development.

25.7 Figure 155 illustrates how both on Site and off Site features have combined to influence the strategic approach.

25.8 The 'Primary GI Assets' referred to on this plan provide the main multi-functional GI benefits supporting wider contextual objectives. While the 'Secondary GI Assets' generally providing ecological, access, hydrology, and landscape connections within and through the Site.

25.9 This framework plan has been influential in the resulting Green Infrastructure Parameter Plan (formally submitted for approval) for the Site (Figure 156).

Figure 155. Green Infrastructure Framework



Defining Green Infrastructure...

"The network of green spaces and other natural elements such as rivers and lakes that are interspersed between and connect villages, towns and cities. Individually these elements are GI assets and the roles that these assets play are GI functions. When appropriately planned, designed and managed, these assets and functions have the potential to deliver a wide range of social, environmental and economic benefits".

"A strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types".

(Landscape Institute definition of green infrastructure as in its Position Statement 'Green Infrastructure: An Integrated Approach to Land Use')

Figure 156. Green Infrastructure Parameter Plan

Green Infrastructure Proposals

25.10 Figure 157 illustrates the main GI features proposed on Site.

25.11 The 'Primary Areas' of the on-site GI provide the key multi-functional benefits, while the 'Secondary Areas' of the on-site GI generally provide a number of key ecological, access, hydrological and landscape connections within and through the Site.

25.12 The primary areas of the GI strategy comprise:

1. Langley Heath Park
2. Langley Brook Park
3. Fox Hollies Park
4. Fox Hollies Wood
5. Langley Hall Park
6. Langley Fields Park

25.13 The secondary areas of the GI strategy comprise:

7. Eastern Boundary Corridor
8. The Greenways

Figure 157. Green Infrastructure Proposals

PRIMARY AREA: LANGLEY HEATH PARK

25.14 Langley Heath Park will form a significant area of formal and semi-formal public open space providing a key destination for a variety of activities, and a strategic green corridor linking New Hall Valley Country Park with the countryside to the east of the A38.

25.15 Figure 158 illustrates the potential design principles for this space.

25.16 The park will provide connections into Sutton Coldfield and Birmingham via Newhall Valley Park which reaches into the urban fabric of Sutton Coldfield, and Birmingham. The park will also provide connections out to the wider countryside, via Fox Hollies Park and the A38 pedestrian subway. The park will also provide a network of pedestrian paths creating strong connections between adjacent communities to the north and south, notably to Langley Central via Fox Hollies Road and Langley Brook Park.

25.17 This provision will ensure compliance with BDP Policy GA5 and the Langley SPD.

25.18 The park will comprise a sequence of spaces each with its own character and sense of place. These spaces will be linked by a common design theme and include visual 'events' along the main through route. This approach will provide continuity; contribute to a holistic park identity; and provide navigation points drawing the user along the main route.

25.19 In addition to its recreational role, the Langley Heath Park can accommodate the undergrounded 132 kV power cables should this be required, as well as additional surface water attenuation features.

Figure 158. Illustrative Design Principles: Langley Heath Park

1. A formal arrival space containing a tall feature that draws attention to the park entrance and provides a sense of arrival and gateway into the Site.
2. An area designed to reflect the former heath with trees, meadow planting, or a change in level. This will provide a sense of transition between the formal through route and the proposed residential properties overlooking the open space.
3. The confluence of Langley Heath Park and Langley Brook Park provides a springboard to the main green routes and public space network within the Site. Figure 158 indicates a mound feature together with an oval water feature. Together these features will provide interest and activity alongside important SuDS functionality.
4. A community orchard contributing to the edible/ foraging landscape network across the Site.
5. A sensory garden with attractions for all.
6. A formal park area containing traditional elements but designed with a contemporary feel. This could include features such as a formal pond, planting beds, seating, places for play; and SuDS features.
7. An adaptable function area providing an uncluttered, serviced, open space with elements, such as a 'band stand'/ performance area, to facilitate community gatherings and events.
8. A more informal space, to the east of Fox Hollies Road, accommodating a play area and native planting to provide a habitat link between the ecological pond, to the north, and Langley Wood to the south.







PRIMARY AREA: LANGLEY BROOK PARK

25.20 Langley Brook Park will form a significant area of informal, naturalistic open space with a distinct wetland character. It will provide a key destination for recreation and leisure; a substantial north/south green route; and a high quality landscape setting for homes.

25.21 The brook will make a significant contribution to the character of the space as well as to the SuDS proposals for the Site and the majority of the park falls within the proposed functional floodplain. The park is illustrated at Figure 159.

25.22 The Langley Brook Park will incorporate existing and new landscape elements, primarily associated with the Langley Brook. This will create an attractive fluvial landscape for informal recreation and wildlife.

25.23 The norther third of the Brook area, in the vicinity of Brockhurst Farm, will be retained as existing, including retention of lining wooded vegetation, areas of small semi-improved grassland fields, and potential historic features.

25.24 By contrast the rest of the Brook will be opened up, redesigned and reprofiled to create a more naturalistic, meandering route with varied profile and native planting. This will: maximise biodiversity opportunities and visual amenity; allow for reduction in the gradient of the eastern valley side; and adapt the brook to positively contribute to the SuDS function.

25.25 Across the primary flood area, adjacent to the Brook, the landscape will primarily comprise open, species-enriched grassland with occasional trees along the line of the brook. There is the potential here for provision of new habitat including overflow routes, 'scrapes', and other permanently or seasonally wet features. As the land rises away from the Brook, more informal groups of native trees will be introduced. Planting will be used to define routes, uses, and spaces, control access to the water, and contribute to biodiversity.

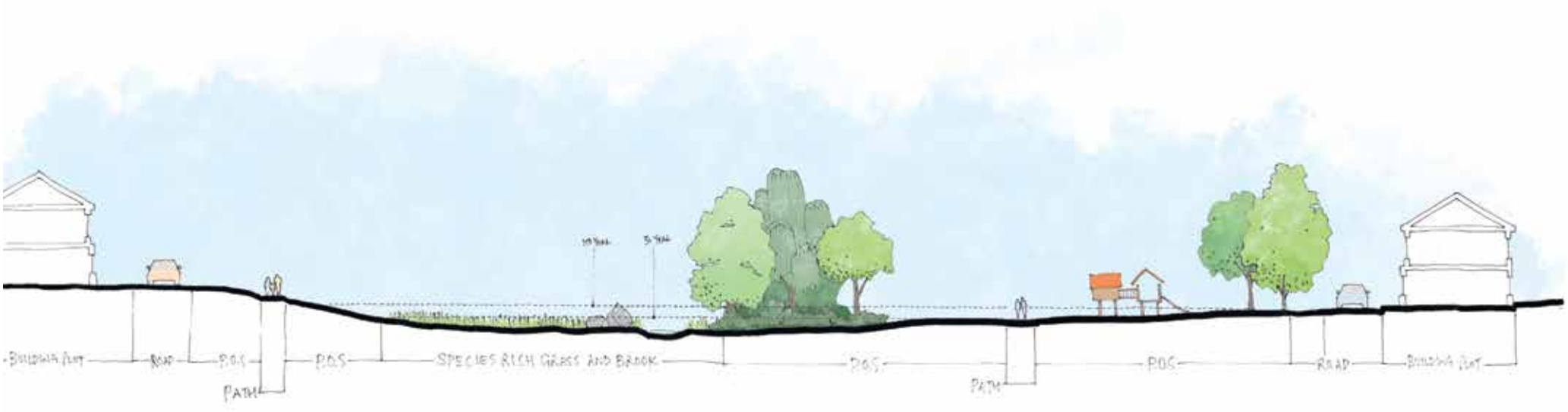
25.26 The main footpath route along the Brook Park; formal play areas; and footbridges over the Brook will be provided outside the flood zone but within the landscaped park.

25.27 There are opportunities for the park to connect to the off site features north of Lindridge Road including lower reaches of the brook and PRoW 1121 (footpath).

25.28 The park will also provide a network of pedestrian paths connected by footbridges across the brook, creating strong connections to Langley Heath Park, and to adjacent communities to the west and east, and more notably towards Langley Central. The connection of Langley Brook to off-site resources, including Middleton Pool SSSI, Collets Brook Valley SLINC, Lindridge Pool and Langley Mill SINC, means that it is essential to retain water supply and quality on, and leaving, the Site at all times.

Figure 159. Illustrative Design Principles: Langley Brook Park

Figure 160. Langley Brook Park: Section



PRIMARY AREA: FOX HOLLIES PARK

25.29 Fox Hollies Park forms a key community feature to the Site. Alongside publicly accessible open space and landscape, the park also provides the formal sports hub for the development. The sports hub is a shared facility for use not only by the wider community but also serving part of the sports needs of the Secondary School. This enables a reduced secondary school site area within the Langley Centre.

25.30 The park will address the requirements of the City's Playing Pitch Strategy and support formal sports provision for the new Langley community as well as wider integration with existing communities. The key design principles of the park are illustrated at Figure 161.

25.31 While this area is subject to existing ground level undulation and in places steep slopes, as well as ecological and landscape features, the intention is for careful re-profiling of the ground levels to establish a series of plateaus and intervening landscape and footpath embankments. Retention of a predominantly green land-uses in this part of the Site, combined with informal planting, will soften views towards the Site from the countryside to the east, as well as provide the new community with open/ wide views towards the countryside.

25.32 The existing pond and seasonally wet pond, and the surrounding vegetation, will be retained, as will the vegetation across Langley Woodland to the south. While the wet pond, to the north, has some value for wildlife including GCN, the seasonally wet pond has a lower value and has potential to be developed for adventure play.

25.33 The park has the potential to accommodate the following sports facilities:

- grass football pitches;
- all-weather football pitches;
- cricket pitch; and
- a sports pavilion with associated changing facilities, club rooms, sports equipment storage and parking.

25.34 The final layout and design of the pitches will be the subject of future design discussion, though Figure 161 provides an example of how the area could be laid out which responds to the existing features and opportunities and uses adult sized pitches.

25.35 The proposed planting will form a framework of existing and new informal native structure planting.

25.36 The park will form an integral part of an east/ west green route across the Site and part of a larger core green space comprising Langley Heath Park, Langley Woodland, and the eastern boundary buffer. It will also provide a network of pedestrian paths creating strong connections to these areas of open space, to adjacent communities and, notably, to Langley Central via green corridors. The wider Sutton Coldfield area is easily accessible by walking, cycling and public transport.

25.37 This retained vegetation will be augmented with new native woodland planting to provide:

- An attractive, cohesive, woodland framework for sports and play provision and informal recreation;
- Shelter for users;
- Habitat connection, primarily for newt, between existing ponds and Langley Woodland;
- Visual screening of built and structural elements and flood lights; and

25.38 Woodland-grassland transition zones will be created between woodland/tree groups and adjacent species-rich grassland habitats. This will soften the habitat edges and create a more natural feel as well as providing valuable habitat for wildlife in particular GCN.

PRIMARY AREA: FOX HOLLIES WOOD

25.39 The evolution of proposals for the Site has focused heavily on the protection and enhancement of the ecologically sensitive meadow and historically sensitive hedgerow pattern in this part of the Site. The aim for this area is to retain and enhance its wildlife value and the historic line of its hedgerows while creating opportunities for human contact with nature. The challenge will be to manage these aspirations in harmony.

25.40 The intention is to manage the woodland, ponds, and meadow as a 'nature reserve' to maximise their wildlife potential while allowing pedestrian access via gates and along informal footpaths.

25.41 Access to woodland areas will be via meandering controlled access paths. Access to ponds will be along limited sections of their banks only. Access to the meadow area will be limited to boardwalks.

25.42 Interpretation boards will be provided to enhance understanding and promote respectful use of these areas.

Figure 161. Illustrative Design Principles: Fox Hollies Park and Wood

1. Sports Hub Pavilion with associated parking area.
2. Upper plateau accommodating cricket oval and seasonal grass football pitch.
3. Gentle sloping embankment accommodating footpaths and new native tree planting linking existing landscape features. This slope can also serve as a viewing platform for spectators watching sports games on the lower pitches.
4. Mid plateau accommodating grass or 4g pitches, with potential to accommodate flood-lighting if required.
5. Lower plateau accommodating grass or 4g pitches, with potential to accommodate flood-lighting if required.
6. Emergency/ Service access track and pedestrian footpath
7. Existing retained landscape features integrated into the wider network and protecting ecological and landscape elements.
8. Preserving the historic alignment of public right of way footpath as well as wider views from existing properties outside the application area.
9. All new footpath routes through this area to connect to the A38 underpass giving access to the wider footpath network.
10. Area reserved for potential accommodation of community orchards, additional sports courts (i.e. tennis) or general open space provision.
11. Fox Hollies Wood retained and managed as a publicly accessible nature reserve area.
12. Boardwalk features through the ecologically sensitive meadow area.
13. Retained and enhanced tree and hedgerow belts.
14. 3m acoustic fence set on edge of A38 highway where carriageway is higher than site.




PRIMARY AREA: LANGLEY HALL PARK

25.43 Langley Hall Park provides the northern open space hub for the Site. It will support the retention of views towards the south-eastern elevation of Old Langley Hall (Grade II) and will incorporate heritage assets, provide play, formal and informal recreation opportunities, and contribute towards site biodiversity. The park is located adjacent to the proposed primary school site and mixed use community hub supporting vitality and activity between all the uses.

25.44 Existing historic features such as the medieval fishponds and moat are to be retained within an area of open grassland. An informal framework of native woodland planting will contain the features thereby retaining the character and relationship between these assets and the adjacent Old Langley Hall residential properties. Grassland areas within this part of the park are to be a mix of species-enriched grass and mown grass to contribute to wildlife and visual amenity; allowing opportunities for access. The area will also include seating and interpretation boards to encourage quiet enjoyment of this area. This approach will support retention of the residential amenity of existing residents within Old Langley Hall.

25.45 To the north-east of, and set back from, Old Langley Hall, it is proposed to provide natural, themed, play opportunities for toddlers through to pre-teens with a multi use games area (MUGA), a shelter, and outdoor gym equipment, or similar, for teenagers.

25.46 To the south-east of Old Langley Hall, an informal kick-about area is proposed. Retaining the open aspect of this part of the park will allow views to the historic south-eastern façade of the stables from the junction of Fox Hollies Road and Ox Leys Road and respect the open outlook of existing residents.

25.47 In addition to these provisions, there is the potential to provide a kiosk or a combined facility which could contain a café and toilets and a small parking area, should it be required in the future.

25.48 These elements are all to be provided within a carefully designed treed landscape that provides screening, shelter, and a green focal point on this hill top location while also allowing for natural surveillance.

25.49 The park will also provide a network of leisure pedestrian paths linked to adjacent green corridors, as well as linking to the strategic pedestrian and cycle route along its south eastern and north eastern edges.

Figure 162. Illustrative Design Principles: Langley Hall Park

PRIMARY AREA: LANGLEY FIELDS PARK

25.50 Langley Fields Park provides the southern open space for the Site. As with the north it is located opposite the proposed primary school site and mixed use community hub such that there is shared activity and function between all uses.

25.51 The park will incorporate existing mature vegetation and trees and provides play and formal and informal recreation opportunities.

25.52 This area will provide natural, themed, play opportunities for toddlers through to pre-teens and can include a MUGA, a teen shelter, and outdoor gym equipment, or similar. The area also includes an informal kick-about area and SuDS features which will be designed to provide a naturalistic appearance.

25.53 These elements are to be provided within a carefully designed landscape structure that provides privacy for adjacent residents, whilst allowing passive surveillance. The park will provide a network of pedestrian paths to form strong connections between adjacent communities and the new community, primarily via green corridors. The strategic pedestrian and cycle route also passes the eastern edge of the park supporting easy access to the new facility. Opportunities to incorporate a kiosk or similar can also be explored at the detailed design stage.

1. Existing Trees and Hedgerows
2. Proposed Green Corridors and Swale Links
3. Proposed Primary School Site
4. Proposed Natural Play Features
5. Kick About
6. MUGA
7. Strategic Pedestrian / Cycle Route
8. Mixed Use Community Hub
9. SuDS Features

Figure 163. Illustrative Design Principles: Langley Fields Park

SECONDARY AREA: EASTERN BOUNDARY CORRIDOR

25.54 This multi-functional green space along the eastern boundary will contribute to the integration of the Site into the surrounding countryside and provide future residents with some separation from the A38. The corridor is illustrated at Figure 164.

25.55 It will be designed to provide an informal, naturalistic, settlement edge and green route running the full length of the Site providing connections for people and wildlife and doorstep open space for adjacent residents fronting the park.

25.56 The corridor will be a minimum of 30m wide and will serve a number of additional functions including:

- Accommodation of noise attenuation features for the adjacent A38. (See Section 21.0 for the range of attenuation feature options);
- Visual screening of the A38 for adjacent residents. Screening is to be achieved through native structure planting in combination with the noise attenuation features;
- SuDS surface water retention and conveyance;
- The opportunity and setting for the main entrances into the urban area from the east. The main entrances will be from the new A38 roundabout, to the south, and along Ox Leys Road, to the north. Entrance features here will be designed at the detailed application stage and will need to be appropriate to the context as well as integrate with noise attenuation, SuDS, and highway visibility requirements. It is likely that they will comprise land sculpture.

25.57 Native woodland planting, containing some evergreen species with informal, sculpted, transition zone edges, will be used to provide a strong framework. Within this framework noise attenuation bunding will be designed with naturalistic contours and profile; attenuation fencing will be screened wherever possible; and SuDS features will be designed with naturalistic shapes and contours with areas of permanent open water and marsh. Footpaths will meander through the area to create a continuous north to south green link and connections into adjacent neighbourhoods via green corridors.

Figure 164. Illustrative Design Principles: Eastern Boundary Corridor

1. A38 Access Junctions - Earth sculpting to create arrival points.
2. Undulating footpaths/ leisure routes and Swales
3. Proposed Primary School Site
4. Sports Hub
5. Swale/ Green Corridors

Figure 165. Illustrative Design Principles: The Greenways

SECONDARY AREA: THE GREENWAYS

25.58 The main drivers for the network of GI across the Site have been the retention and linkage of key GI elements and the integration of SuDS provision to add value and create a truly multi-functional framework.

25.59 The incorporation and addition of SuDS surface water retention and conveyance corridors to the GI opportunities has added to the GI network through the creation of greenways. These greenways tie into existing features, wherever practicable, and provide additional linear connections for people and wildlife and doorstep open space for adjacent residents.

25.60 Generally, these greenways will be designed to provide informal, naturalistic, green routes creating strong connections for wildlife and people. Native plants and tree planting will be used to clearly define boundaries and routes passing through the greenways. Ground form and natural elements will also be used to create incidental, and informal 'playable' landscapes.

25.61 Within the Site's broader framework greenways will also provide the transition between different character areas. This idea will be developed further at the detailed design stage, but some initial ideas are described below.

25.62 Langley Hall and Langley Heath character area: These areas have some inter-visibility with the wider countryside. As such, the greenways will be informal and naturalistic with serpentine swales of varying depth and profile. Footpaths will meander through the space following the course of the swale in places and leaving it in others. Large native trees will be arranged individually or in informal groups within areas of species-enriched meadow. A similar approach will be used across Langley Penns, where the design will mirror the existing network of narrow watercourses opening into larger waterbodies.

25.63 Langley Brook character area: This area is influenced by the brook and adjacent development. The design will be semi-formal with more formal, uniform, linear swales with informal tree planting to the side and within the swales. This area also derives strong influences from the adjacent development and the future Langley Central character area. The design will be formal with uniform, linear swales lined to one side by an evenly spaced row of trees.

25.64 Langley Central character area: Here an urban formality is proposed. As such, the design will be formal with a wide, uniform, linear swale delineated with an avenue of large urban street trees.

25.65 Langley Fields character area: This area has strong urban influences from the adjacent development and future Peddimore development. As such, the environment is more urban, uniform and compact. Swales will also be more formal in design adopting, in certain instances, vertical sides and marked by hard materials which will contrast with the informal, native planting provided within the swale.

Upton - multi-functional greenways/ swales incorporating planting adjacent to lanes footpaths

Swales designed for function and offering informal play opportunities

TREES, WOODLANDS AND HEDGEROWS

25.66 The retention of existing trees, woodland and hedgerows together with the proposed planting will play an important role in:

- Retaining existing landscape features including the tree-lined ridge along Fox Hollies Road and the landscape to the south-east of Fox Hollies; and
- Helping to integrate the development into the existing local context, for example filtering views of the development from the north and east and providing opportunities for habitat enhancement and connectivity.

25.67 Substantial tree planting is proposed throughout the development along streets and within open spaces. The locations of retained and proposed tree and woodland planting are shown indicatively on Figure 166.

Existing Trees

25.68 Existing trees have been retained wherever possible, as illustrated at Figure 166, with priority given to Category A and B trees (within and outside areas subject to TPO), including veteran trees. The illustrative masterplan has taken account of the root protection areas of these trees accommodating them within public open spaces.

Proposed Tree Planting

25.69 The objective has been to provide new tree, woodland, and hedgerow planting across the Site, including within woodland areas, open space, streets, and gardens. The principles for new tree planting are as follows:

- New planting should be located and specified to complement their location, character area in which they are located and any specific role they are intended to provide within the Site;
- Planting within the strategic GI should be linked for maximum contribution to biodiversity;
- Wherever appropriate, locally native tree species of a sufficient potential size in the longer term to make a meaningful contribution to the landscape should be allowed for rather than small 'domestic scale' species;
- Where smaller species are used these should be of value to wildlife. Species and varieties will be agreed with the Local Planning Authority at later stages of the planning process.

25.70 All planting, new and retained, will be protected during construction works, in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction Recommendations, and subsequently, as necessary in accordance with the Environmental Impact Assessment.

25.71 Across the Site, a variety of tree species and sizes will be used to ensure that the tree stock does not come to maturity, and require replacement at the same time.

25.72 Plant nurseries may be set up on site to raise plants under site-specific conditions. This would reduce the shock when plants are transplanted, thereby potentially contributing to increased survival and growth rates. It would also give better opportunity to grow plants from locally sourced seeds so reduce transportation requirements and supporting local distinctiveness and sustainability.

Figure 166. Illustrative Tree, Woodland and Hedgerow Strategy

25.73 The location of trees in relation to services is fundamental to their health and survival. The routes of services to be located to ensure that the root structure of existing or proposed trees is not disturbed if repairs to the services are required. In addition, root barriers to be used as appropriate to prevent future negative implications.

25.74 If trees are to be located in private areas, legal controls over their protection will be imposed.

Proposed Structural Woodland Planting

25.75 Structure planting provides a framework to the development giving organisation, definition and screening, both visual and physical. It comprises existing and proposed native woodland planting.

25.76 The existing woodland has been retained, where possible, for visual amenity and ecological value. Primarily this comprises woodland to the south-east of Fox Hollies, to the south of Brockhurst Farm, and adjacent to Thimble End Road.

25.77 The development provides the opportunity to deliver new woodland cover across the Site, notably along the eastern development edge adjacent to the A38. The woodland planting should comprise native woodland mix based on species found across the Site and context as set out below.

25.78 Within new structure planting areas, planting will be designed to provide a variety of species, age/planting size, density, planting grid, and form, particularly in relation to trees. This will give a more naturalistic look and contribute to future-proofing of the structure planting. In addition, by planting advanced nursery stock amongst the transplants, a mature looking landscape can be created more quickly. These species will be thinned when the slower growing species have matured giving an optimum woodland mix.

Proposed Native Woodland

25.79 Newly planted woodland within open space areas will be native species chosen to reflect the existing planted woodland mix within, and adjacent to, the Site and will include the following:

- Field maple (Acer campestre);
- Hazel (Corylus avellana);
- Hawthorn (Crataegus monogyna);
- Holly (Ilex aquifolium);
- Wild cherry (Prunus avium);
- Blackthorn (Prunus spinosa);
- Penduculate oak (Quercus robur); and
- Scots pine (Pinus sylvestris).

25.80 The majority of trees and shrubs to be whips and transplants with occasional larger feathered and standard trees to create age and form diversity. Trees and shrubs to be planted on a random grid with 2m between plants. To promote canopy growth, trees and shrubs will be planted in same-species groups with groups irregular in shape. Oak to be planted in groups of 9 to 25 plants; other broadleaved trees and shrubs to be planted in single species groups of between 7 and 15 plants. In the short term, a weed-free area around each whip to be created, using a tree spat, and tree/shrub guards will be fitted to protect the trees and shrubs from mammals (e.g. deer, rabbits and voles).

Proposed Tree Planting in Streets, Formal Parks and Squares

25.81 The main purpose of this planting is to:

- Provide visual amenity and softening of the built development;
- Bring a human scale to the streets and open spaces, help to break up the larger spaces into smaller elements and provide a sense of enclosure;
- Contribute to sense of place and legibility and reinforce hierarchy;
- Provide valuable wildlife habitat and bring vegetation, and the natural environment, into the development; and
- Contribute to a favourable micro-climate and to climate change adaptation through urban thermal cooling (trees in urban areas serve to reduce temperatures through a combination of shading and evapotranspiration from leaves).

25.82 The approach to tree selection and planting arrangements makes a significant contribution to the creation of character and legibility of place.

25.83 The following species are appropriate for use in formal parks and squares:

- Horse chestnut (Aesculus hippocastanum)
- Common hornbeam (Carpinus betulus);
- Atlas cedar (Cedrus atlantica);
- Common beech (Fagus sylvatica);
- Maidenhair tree (Ginkgo biloba);
- Princeton sentry maidenhair tree (Ginkgo biloba ‘Princeton Sentry’) where a narrow tree is required for emphasis;
- Dawn redwood (Metasequoia glyptostroboides);
- Scots pine (Pinus sylvestris);
- London plane (Platanus x hispanica);
- Penduculate/English oak (Quercus robur); and
- Large-leaved lime (Tilia platyphyllos).

25.84 The following species are appropriate for use in main streets (greater than 10m to the nearest building):

- Common hornbeam (Carpinus betulus);
- Maidenhair tree (Ginkgo biloba);
- Caucasion lime (Tilia x euchlora), which does not suffer with aphids to the extent other Lime trees do;
- Mongolian lime (Tilia mongolica); and
- Elm ‘New Horizon’ (Ulmus ‘New Horizon’) a new cultivar that is resistant to dutch elm disease.

25.85 In neighbourhood streets, local streets and some private drives (between 5-10m to the nearest building):

- Field maple (Acer campestre);
- Narrow canopy field maple (Acer campestre ‘Elegant’ or ‘Streetwise’) for more restricted spaces;
- Field maple Louisa Red Shine (Acer campestre ‘Louisa Red Shine’) for interesting leaf colour;
- Himalayan birch (Betula utilis jacquemontii);
- Bird cherry (Prunus padus);
- Callery pear ‘Chanticleer’ (Pyrus calleryana ‘Chanticleer’);
- Whitebeam (Sorbus aria);
- Mountain ash (Sorbus aucuparia);
- Narrow canopy Oak (Quercus robur fastigiata ‘Koster’); and
- Narrow canopy Lime (Tilia cordata ‘Rancho’).

25.86 These trees will be planted as large specimens (for example, ‘extra-heavy standards’) to provide a visual amenity function at the time of planting.

Proposed Tree Planting within Less Formal Open Spaces

25.87 Within wider open spaces, some areas will be planted with standard trees in grassland. These will often be planted as specimen to create a sense of maturity on implementation. In dryer areas (likely the predominant ground condition across much of the Site), the suggested tree species for planting in open spaces could include the following:

- Common beech (Fagus sylvatica);
- Field maple (Acer campestre);
- Hazel (Corylus avellana);
- Hornbeam (Carpinus betulus);
- Rowan (Sorbus aucuparia);
- Whitebeam (Sorbus aria);
- Wild cherry (Prunus avium);
- Penduculate/English oak (Quercus robur); and
- Small-leaved lime (Tilia cordata).

25.88 In wetter areas, the following species are suggested:

- Alder (Alnus glutinosa);
- Crack willow (Salix fragilis); and
- White willow (Salix alba).

Woodland-grassland Transition Zones

25.89 Transition zones between woodland/tree groups and adjacent species-rich grassland habitats are an important habitat in their own right but tend to be overlooked and are largely absent from formal landscapes. Transition zone habitats, comprising a mix of tall grassland and scattered shrubs, will be created beside many of the proposed woodland areas, tree groups and mature hedgerows. This will not only soften the habitat edges and create a more natural feel, but will also provide valuable habitat for wildlife, in particular GCN.

25.90 The woodland-grassland transition zones will comprise the species-rich grassland (dry mix) described below, with scattered group planting of low growing native shrubs (or shrubs tolerant to trimming) such as hazel, hawthorn, field rose, and blackthorn.

Existing Hedgerows

25.91 Existing hedgerows will be retained wherever possible and will generally be incorporated into green corridors or open spaces. New native hedgerow planting will also be incorporated into the proposals for the Site. Although a net loss of hedgerows is anticipated, the extent of new hedgerow and swales, that provide an alternative linear ecological element, and woodland planting combined is considered to adequately mitigate this impact, albeit not on a strictly like-for-like basis.

Proposed Hedgerow Planting

25.92 Proposed hedgerows will be composed of mixed native species to reflect the composition of existing species-rich hedgerows in the local context including:

- Field maple (Acer campestre);
- Hazel (Corylus avellana);
- Hawthorn (Crataegus monogyna);
- Holly (Ilex aquifolium)
- Wild privet (Ligustrum vulgare);
- Guelder rose (Vibernum opulus)
- Blackthorn (Prunus spinosa); and
- Elder (Sambucus nigra).

25.93 New native hedgerows will be planted as a double staggered row with five plants per linear meter and have appropriate shrub shelters to facilitate growth for the first two seasons. Proposed hedgerows within residential areas will be designed to facilitate public access and permeability through the appropriate siting of ‘puncture points’ through the hedgerows (as illustrated on Figure 167).

25.94 Within more formal landscaped areas (for example, civic spaces and garden planting schemes), single species native hedgerows may be appropriate, including for example, beech, box and wild privet.

Figure 167. Illustrative Grassland Strategy

Grasslands

25.95 The locations of the existing grassland and the different types of proposed grassland are shown on Figure 167.

Existing Grasslands

25.96 Ecological surveys undertaken as part of the EIA found that existing grassland within the Site is predominantly restricted to the small fields of semi-improved pasture including: to the south-east of Fox Hollies (of regional importance); to the north of Springfield Farm and to the south-west of Brockhurst Farm (of local importance); and to the west of Langley Heath Farm (poor).

25.97 The regionally important grassland fields to the south-east of Fox Hollies will be retained in their entirety. Within the meadow with local importance, fields to the south-west of Brockhurst Farm will be partially retained.

Proposed Meadow (Dry Mix)

25.98 New dry meadow habitats are proposed as part of the open space proposals for the Site. This habitat will include spring meadow, allowed to grow long in the spring but cut throughout the summer to allow easier access when informal recreational demand is likely to be at its highest, and 'permanent' meadow cut once or twice a year. These areas will be seeded with a broad spectrum wildflower and grass mix such as BSH WF3 General Purpose Neutral Soils Seed Mixture.

Proposed Meadow (Wet Mix)

25.99 New wet grassland habitat may be appropriate within the attenuation basins, along the banks of watercourses and drainage ditches, and adjacent to ponds, depending on ground conditions. A species mix suitable for damper situations, for example, BSH RE2 Lowland Meadow, is recommended.

Proposed Amenity Grassland

25.100 Areas of amenity grassland will be provided to create spaces with opportunities for informal recreation, such as ball games and relaxation. Sports pitches will also be provided and are discussed separately below.

25.101 Amenity areas will be maintained with short mown grasses and therefore appropriate, hard-wearing, amenity grass seed mixes, such as BSH A24 'Wear and Tear', would be appropriate.








EDIBLE LANDSCAPES

25.102 New hedgerow and landscape planting across the Site will support the Council's aspiration for an 'edible' landscape. This will be achieved by bolstering existing and proposed hedgerow and marginal planting with fruit-bearing plants such as blackberry, elderflower, sloe and apple varieties particularly within the extensive open space network.

Community Orchards

25.103 The edible landscape can also take the form of groups of community orchard trees located around the Site within the public open spaces. At this time three potential locations for orchard clusters are indicated at Figure 168. These are not fixed but indicate that room is specifically available for orchards should they be desirable as part of the edible landscape strategy.

25.104 Fruit trees should be chosen that are local to the area wherever appropriate.

25.105 This approach will encourage people to engage with the landscape and be educated in the benefits of a rich and productive landscape.

BLUE INFRASTRUCTURE

25.106 Figure 168 shows water and flood attenuation features. The land associated with them is able to support a diverse range of habitats of particular value to aquatic invertebrates, wetland plants and amphibians. They may also be used by a variety of invertebrates, mammals and birds for nesting and feeding.

Proposed Flood Attenuation Features

25.107 In addition to delivering surface water and flood management roles SuDS basins and water features should be designed to deliver opportunities for wildlife, enhancement of visual and informal recreational amenity, and to contribute to the character of open spaces. Primarily this should be achieved through: the use of naturalistic slopes and curves; shallow sloping sides, typically a maximum of 1 in 4, to allow easy and safe egress to allow for maintenance and informal play, in line with CIRIA guidance; the inclusion of areas of open water and marsh; and appropriate planting.

25.108 In addition, some of the attenuation basins could be designed to have sufficient volume to accommodate permanently wet areas/ponds. Others will be 'dry' features, designed to fill with water only during flood events. Both types of feature provide a range of GI benefits through the creation of permanently wet, damp, and seasonally wet areas. The proposed development will generally contain 'dry' attenuation features on account of the characteristics of the bedrock and character of the surrounding landscape.

25.109 Grassland planting within and adjacent to attenuation basins has a number of functions: to prevent the erosion of surfaces and soils; to trap silt; assist with the treatment of pollution; create valuable wildlife habitat; and enhance the visual amenity of the features. The features will be seeded with different grassland seed mixes depending on the landscaping objectives ranging from short amenity grassland to dry species-rich and wet species-rich mixes (see 'Grasslands' below). Should the erosion of soils following construction create difficulties in allowing the seed mix to germinate, the use of pre-seeded coir blankets will be considered.

Figure 168. Indicative Locations for Edible Landscape Features

Existing Watercourses

25.110 Langley Brook and tributaries will form a part of the SuDS provision for the Site. This work will include: uncovering of the main underground section; creation of a more meandering route and varied profile to improved flood mitigation; creation of controlled flood areas across adjacent open space; and wildflower meadow and native scrub and tree planting. This will enhance the ecological environment and provide greater visual interest and recreational amenity within Langley Brook Park.

25.111 The Peddimore Brook tributaries will be retained along their current alignment and with a continued supply of clean water to ensure retention of the water supply to ponds and the meadow to the south-east of Fox Hollies.

25.112 The connection of these watercourses to off-site water resources, notably Langley Brook connection to Middleton Pool SSSI, Collets Brook Valley SLINC, and Lindridge Pool and Langley Mill SINC, means that it is essential to retain a high water quality of water flowing into the brooks and leaving the Site during construction and operation of the Site.

Existing Ponds

25.113 The development proposals provide the opportunity to enhance the existing on-site ponds, and the surrounding landscape, through excavation, management of pond vegetation, and removal or reduction of overhanging vegetation.

Proposed Ponds

25.114 A minimum of three small 'wet' ponds are proposed in association with the woodland and meadow to the south-east of Fox Hollies – for the purposes of expanding and reinforcing the breeding population of great crested newts found within the ponds across this area. They will need to be lined to prevent the loss of water by infiltration; and carefully designed in accordance with standing best practice and expert advice. Ponds will not have a constant water supply so will be susceptible to drying out and this will need to inform pond size and the type of lining used.

25.115 The proposed wildlife ponds will be designed with shallow sloping sides, typically a maximum of 1 in 4. This allows the establishment of 'marginal' wet habitat greatly enhancing the wildlife value of the pond.

25.116 A suitable seed mix to use in these locations would be British Seed Houses (BSH) WFG9 Wetlands and Pond Mix which includes a range of species suitable for the wet conditions at the margins of ponds such as yellow flag iris, purple loosestrife and meadow sweet. These taller species will assist residents and visitors in identifying and avoiding the edge of wetter areas which, combined with the use of shallow sloping sides to the features, is considered by the CIRIA guidance to provide the most appropriate form of risk management in relation to access to the water's edge.

25.117 The aim is to avoid the need to fence off these ponds, enhancing their visual appeal and integration with the adjoining greenspace.

25.118 In order to ensure ecology objectives are met, these new ponds will need to be linked to the existing ponds, and the wider countryside, by green routes possessing a suitable vegetative structure (including tall grassland).

25.119 The ponds will provide wetland habitat and be managed to provide opportunities for great crested newts to breed. The ponds will have a minimum water depth of 1.1m during the spring (breeding season), will be suitably lined to retain water and be finished with soil to provide a growing medium for new marginal and aquatic planting, including plants suitable for egg-laying by great crested newts.

Figure 169. Blue Infrastructure

MANAGEMENT AND MAINTENANCE

25.120 A management and maintenance schedule for landscape areas will be submitted as part of Reserved Matters submissions or to discharge relevant planning conditions. This schedule will set out maintenance operations to be carried out during the defects period (years 1-2 after planting/construction), establishment period (years 3-5 after planting/ construction) and ongoing maintenance post establishment (year 6 onwards).

25.121 Each element of the landscape will be considered separately to ensure the correct maintenance prescriptions are carried out for each area, ensuring the successful establishment and long-term care of habitats to maintain the aesthetics of the landscape, ecological value and functionality. Detailed maintenance schedules will be set out for existing woodland/mature trees, newly planted woodland, orchards, and specimen trees, retained hedgerows, newly planted hedgerows, structural shrub planting, marginal/aquatic planting, newly planted wet grassland, and meadow areas. An Ecological Management Plan for areas of high ecological value such as wet grassland and woodland will be provided as part of reserved matters submissions. Other key features of the landscape, such as SuDS features, hard surfaces, site furniture, signage, trim trail/play equipment, fences and gates will also be included in the maintenance schedules to ensure all features are kept in a safe condition, good state of repair and maintain their intended function.

25.122 For general planting works maintenance operations during the defects period (years 1-2 after planting / construction) will include:

- Weeding to reduce competition from unwanted species and ensure healthy strong growth and establishment;
- Watering;
- Checking plants and associated planting features such as stakes, guards and rabbit proof fences are firmly bedded in and in good condition;
- Pruning;
- Cutting/mowing to maintain species diversity in new grassland habitats;
- Replacement, in the next planting season, where planting has failed or suffered from pest damage or vandalism;
- Litter removal;
- Maintaining SuDS features to ensure they are fully functioning, and;
- Checking hard surfaces, signage, site furniture and fencing or defects and repairing as necessary in line with the original specification.

25.123 Operations will generally be carried out monthly, quarterly, twice yearly, or annually.

25.124 During the establishment period (years 3-5) maintenance operations will continue to ensure the successful establishment of the new planting works, to maintain the existing habitats, and keep the Site in a good state of repair. Operations will include:

- Weeding to maintain a weed free ring around newly planted trees and shrubs for the third year. After this planting should be sufficiently established to keep weeds to a minimum however periodic checks will take place to ensure that inappropriate weeds are removed;
- Stakes, guards and rabbit proof fencing will be removed once planting is sufficiently established;
- Pruning and cutting/mowing will continue to maintain grassland species diversity, promote healthy growth and ensure access ways and paths are kept clear for vehicles and pedestrians as required;
- Litter removal and maintenance of all hard landscape features will continue to ensure they are maintained in a good state of repair.

25.125 Operations will generally be carried out quarterly, twice yearly, or annually depending on the operation. Post-establishment (year 6 onwards) an ongoing programme of management and maintenance will be carried out with the aim of retaining habitat diversity, ensuring the Site is safe for users and ensuring the continued development and retention of landscape features.

26.0 PUBLIC ART STRATEGY

26.1 Public art enriches the living environment and creates an additional dimension which can link history, nature and culture as well as adding detail to place. As such, it will be an important contributor to the quality and interest of place making at Langley.

26.2 The approach will be to integrate Public Art within the development in a range of ways which can include:

- Public Realm - for example as part of the hard and soft landscape design, street furniture, and lighting;
- Buildings and structures - incorporation into the design of buildings and structures for example plaques, sculptural, decorative elements, boundary treatments.

26.3 Following the approval of outline planning permission a public art strategy will be prepared in response to a condition of the permission.

26.4 The strategy will seek to identify key public realm areas across the Site which would benefit from the inclusion of public art features alongside a palette of suggested options or approaches. The strategy will also cover aspects such as community engagement, formation of an arts steering group, the commissioning process, health and safety requirements, budgets, and the approval process.

26.5 As each reserved matters application comes forward, reference should be made to the strategy and details of how the public art strategy has been integrated into the detailed proposals must be demonstrated.

26.6 The public art strategy can explore the inclusion of both permanent and temporary works of art. However, the art strategy should seek to respond to the following objectives:

- To enrich and enliven perceptions and create a memorable environment;
- To create a significant public art aspect within the Green and Blue Infrastructure network proposed at Langley;
- To achieve a strong sense of ‘connectedness’ to the parts of the Site influenced by retained landscape, heritage or archaeology;
- To assist in setting a new distinctive context for each of the Site’s defined character areas which references contextual aspects of local Sutton Coldfield character (i.e. clock towers and weather vanes) and developing art themes appropriate to the location;
- To provide a response to inherited natural resource and specifically a link with the Sites landscape and ecology;
- To provide a basis for integrating the new and existing communities via community engagement;
- To generate or stimulate a changing and responsive dialogue between people and art; between people and buildings; and between art and buildings, old and new;
- To encourage an open and collaborative approach to the design of the public realm, working in partnership with Public Art Advisory Teams, public bodies, development partners, architects, artists, the voluntary sector and the community to find mutually compatible solutions. The response should be an informal integrated way of working with designers and stakeholders in different media and formats using innovative ways of multidisciplinary working;
- To source artworks from a wide variety of traditional genres, as well as the newest technological and innovative forms of art.

Public Art can be...

- Permanent sculptures;
- Temporary artworks;
- Political activism;
- Socially-engaged practices;Monuments
- Memorials;
- Community-based projects;
- Off-site museum and gallery programmes earthworks and land art;
- Site-specific work;
- Street furniture or bespoke public realm design;
- Urban design and integrated architectural designs.

27.0 COMMUNITY SAFETY

27.1 Paragraph 130 of the National Planning Policy Framework (NPPF) states that developments should:

"Create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."

The design proposals have been informed by best practice approaches and reference to documents including "Manual for Streets" and ACPO Secure by Design 'New Homes 2014'.

27.2 As a result, the development principles will support the creation of an environment that is well designed, attractive, clearly defined and well maintained. In so doing, future residents should feel comfortable and safe and have a sense of shared ownership and responsibility. The design principles seek to clearly define the public and private realm and how the two interface.

27.3 The masterplan framework has adopted the following design principles:

- Use of perimeter blocks in both residential and mixed use layouts. This approach ensures rear private amenity spaces or semi-private spaces are enclosed, secure and positively overlooked from surrounding units;

- Maximising natural and passive surveillance within the public realm. New streets, pedestrian/cycles links and public open spaces are proposed to be overlooked by habitable room windows from houses or active windows from other uses on the Site. This provides maximum levels of natural and/ or passive surveillance;

- All routes are proposed to be direct providing access to dwellings, public open spaces and linking to existing streets and amenities within the wider context;

- Land uses will be carefully located and mitigation methods applied to avoid conflicts between uses;

- As illustrated in the Layout and Appearance Section 24.0 car parking will be located on plot or allocated bays. In instances where courtyard or grouped car parking is proposed, spaces will be visible from the dwellings/ land uses that they belong to;

- Use of high quality boundary treatments. A range of (screen) walls, fences, railings, hedges/ low level planting and surface treatments will be defined at the design code stage but should seek to enhance each character area, demark ownerships and define public and private realms;

- All buildings will be secured to the relevant standards as set out in Building Regulations or by the Local Planning Authority;

- All new Public Open Spaces and areas of natural play are proposed to be appropriately lit (whilst addressing sensitive hedgerows or ecological areas) and overlooked by new housing frontages that will promote natural surveillance and discourage anti-social behaviour;

- Dwellings of private ownership will be maintained by the individuals who own or occupy them. Affordable dwellings will be grouped in clusters of up to 8no. dwellings facilitating ease of management by public or private companies;

- The majority of roads and footways will be designed to adoptable standards (based on Manual for Streets and City Council Guidance) however some lanes will fall within private ownership;

- Public Open Spaces are proposed to be designed to adoptable standards but retained within the Langley Consortium management company.

28.0 COMMUNITY DEVELOPMENT AND GOVERNANCE

28.1 The Consortium has already carried out extensive engagement prior to the submission of the outline planning application with a wide range of organisations and groups, including: existing residents; Local Councillors; Royal Sutton Coldfield Town Council; Project Fields; the local Consultative Forum; WMCA; and Birmingham City Council Officers; as well as other statutory consultees and stakeholders. This engagement has informed the proposals and principles for this sustainable urban extension set out within the outline planning application.

28.2 The Consortium is keen for this broad approach to engagement to continue through the construction and operation phases of the development. There will be further opportunities to inform the form and function of development proposals through engagement at the pre-application and determination stages of the reserved matters applications that will be submitted for the residential and infrastructure components of the scheme in the future.

28.3 The Consortium is also seeking to formalise an ongoing engagement forum process which may comprise representatives from the Consortium, Birmingham City Council, Councillors, businesses, existing residents and the new community to discuss the progress of the development as well as matters relating to the management and maintenance of the new environment and opportunities for social interaction.

28.4 The provision of new community buildings and significant areas of public open space, including sports facilities will provide a range of options for residents, organisations and community groups to get involved in formal and informal activities within the new scheme.

28.5 It is recognised that the involvement of a Management Company to oversee the management and maintenance of the community assets that are not adopted by Birmingham City Council could provide further opportunities for community engagement to achieve and maintain a sustainable and thriving new community. One of the Management Company roles could be to act as the day to day point of contact for the new community and to oversee a programme of social / cultural activities for the residents. Alternatively there is an opportunity for such a role to be delivered by a Community Liaison Officer.

28.6 There is an opportunity for further details on the Management Company structure and operation, and the potential for delivering ongoing coordination through a Community Liaison Officer, to be established further through the provisions of the S106 Legal Agreement.

28.7 The wider strategy for community development and governance will be developed further as the scheme proposals progress.

29.0 SUSTAINABILITY, ENERGY AND UTILITIES STRATEGY

SUSTAINABILITY SUMMARY

29.1 The proposals will deliver a place that is based on the most recent requirements for sustainability and low energy use, responding to more than a dozen policies in the Birmingham Local Plan that relate to sustainable design as set out in the Sustainability Strategy that accompanies the outline planning application.

29.2 The proposals are based on the following principles:

Building Safe and Sustainable Homes and Communities

- Creating healthy homes and neighbourhoods by encouraging active travel, creating shared spaces for communities, ensuring access to green public space and delivering social value;
- High quality homes will be energy efficient, safe to build, healthy for building users, innovative and will be adaptable to changing policies, trends and needs;
- Energy and resource efficiency will be maximised in the construction and operation of buildings.

Managing Land, Engagement and Planning

- The scheme will seek to deliver a network of sustainable transport infrastructure;
- Flood risk assessment (FRA) and Sustainable Drainage Systems (SuDS) will mitigate the risk of flooding and incorporate the impacts of climate change into design;
- The Consortium will seek to engage with the local community through effective stakeholder engagement initiatives.

Operating Safely

- Consistent monitoring and reporting on safety will be promoted across all aspects of the scheme.

Protecting the Environment

- The scheme will consider reducing the carbon emissions throughout the construction and operational stages of the scheme;
- High standards of air quality management will be put in place throughout the construction phase;
- Water will be managed efficiently on-site to minimise water consumption during construction;
- Waste management will ensure an efficient use of resources and reduce construction waste;
- Biodiverse networks will be implemented through green infrastructure and protected by environmental management plans.

Sourcing Responsibly

- The Consortium have a high level of supply chain standards to support local and new businesses and will be assessing risks of modern slavery;
- Materials will be sustainably sourced and construction techniques will aim to have a minimal environmental footprint.

Investing in People and Skills

- Diversity, inclusion and gender balance within the workforce will aim to maximise equal opportunities for all;
- Health and wellbeing opportunities will provide support and advice on both physical and mental health for all staff.

Partnering with Charities

- The Consortium will be supporting education of local students by creating links with local primary and secondary schools;
- Fundraising and volunteering for charitable organisations by all staff members andcustomers will be encouraged.

Governance, Management and Performance

- The sustainability aspects of the scheme will be communicated through employee and community engagement.

ENERGY STATEMENT SUMMARY

29.3 The Energy Statement has been structured in accordance with the energy hierarchy: Be Lean, Be Clean, Be Green, which aims for reduced energy demand, an efficient supply of energy and use of low and zero carbon technologies.

29.4 The proposals for the scheme have been developed in accordance with the desire to achieve an energy efficient and sustainable development.

29.5 Further design development will determine the residential accommodation schedule and, eventually, the specification and fabric values of construction materials used. As this is an outline energy statement with limited detail available, an element of flexibility is required at this stage.

Be Lean

29.6 The dwellings will be designed to achieve good energy performance and will incorporate the following design features:

- All dwellings will meet or exceed the minimum fabric requirements of Part L1A (2013) of the Building Regulations;
- All dwellings will include 100% low energy lighting;
- Buildings associated with these non-residential uses will incorporate building fabric that is in line with notional values and high efficiency LED lighting; and
- External lighting is also intended to consist of high efficiency LEDs.

Be Clean

29.7 The houses are currently planned to be served by high efficient gas boilers. Flats are likely to be served by a communal heating system.

- It is not viable or desirable to create a new or connect onto any existing district heating networks in the local area;
- Gas-fired CHP units are not recommended as they are high carbon and not viable for this scheme.

Be Green

- Photovoltaics should be considered for use on a proportion of dwellings within the proposed development, subject to viability; and
- Other renewable technologies viable at the Site may be reconsidered for inclusion as the design develops.

29.8 Whilst the residential accommodation schedule with exact design and specification is still under development, the policy requirements can be met by a combination of efficiency measures (fabric first approach) and a roof-mounted solar photovoltaic (PV) system, subject to viability.

Energy Conclusion

29.9 Through the utilisation of energy efficiency measures and photovoltaics, the buildings in the Proposed Development will reduce overall carbon emissions against Building Regulations Part L 2013. Further work will be undertaken at a later design stage to provide more detail on maximising energy efficiency measures and the required PV, subject to viability.

UTILITIES STRATEGY

29.10 Utility Stakeholder network records for Gas, Electric, Water have been used as the basis of identifying utility infrastructure within and close to the proposed development zones, and in consultation between WSP and the utility stakeholders to identify proposed points of connection and any network alterations to accommodate the anticipated utility load profile arising from the project proposals.

29.11 Based on the anticipated loads, enquiries have been issued to the incumbent electricity, gas, potable water to access the impact of the demands on their existing networks.

29.12 The required on site infrastructure will be supplied from the existing networks surrounding the Site with the infrastructure and service connections distributed to and around the Site below ground and arranged in accordance with National Joint Utilities (NJUG) guidelines.

Electricity

29.13 To serve the anticipated demand profile it is proposed that a new primary substation is delivered on Site. It is likely to comprise 2 x 132/11kV transformers. The location of the primary substation will be determined following approval of the outline consent. However, at this outline stage an approximate location is suggested along the eastern boundary in proximity of the existing pylon tower.

Gas

29.14 Gas will be provided by way of new pipe provision and connections from Rectory Road and Lindridge Road into the Site. No reinforcement of the existing network is envisaged.

Potable Water

29.15 The exact requirements for this will be finalised post outline planning permission. However, it is envisaged that substantial reinforcement of mains water will be required but will be dependant on the location of development phases.

Lighting

29.16 Proposed artificial lighting provision shall be in accordance with the limitations mandated by Institution of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light (ILP, 2020) GB01:2020 for relatively dark outer suburban and rural character corresponding with Environmental Zone E2.

- Proposed lighting design shall deliver the right amount of light in the right place and at the right time to create a healthier, safer and greener network;

- A sensitive and robust lighting design that looks to current standards, good practice and careful selection of equipment shall be implemented such that the impact of any permanent lighting may be mitigated. It is recommended to install Light Emitting Diodes (LEDs) which are fundamentally a directional light source. When combined with good luminaire design, this can reduce or remove light emitted into the sky and light spill in the surrounding area. Further mitigation can be offered through dynamic lighting control technology such as Central Management System (CMS) to reduce the lighting levels where required.

29.17 It is considered the design of any future development in accordance with the above recommended guidelines would control light impacts at sensitive locations to an acceptable level.

30.0 PHASING STRATEGY SUMMARY AND NEXT STEPS

30.1 The phasing strategy summary indicates the intended sequence of development and relationship to the delivery of infrastructure and facilities.

30.2 The phases are indicative, timeline based and aim to demonstrate at this strategic stage the progress of the Site in five year increments, anticipating completion of the whole development in approximately 17+ years.

30.3 The intention is to commence infrastructure and residential development from the western edge of the Site in the early years utilising existing service and utility capacity while new infrastructure and services are developed within the Site (i.e. primary sub-station) which will then release more utility capacity to support additional development, and enable the focus of development to move away from the western edge.

30.4 It has been long recognised that there is no available capacity in the existing education provision (primary or secondary) in Sutton Coldfield. As such, the early delivery of education facilities has been worked into the phasing strategy. Facilities will be either temporary (whilst permanent fixtures are constructed), or permanent facilities from the outset.

30.5 The new social infrastructure being provided will create the additional capacity required to mitigate the impact of the development proposals at the time that it is required. This is to avoid detriment to the capacity of existing services.

30.6 It is anticipated that construction traffic will utilise new haul routes constructed within the Site at the earliest stages in order to avoid conflict on the existing road network.

30.7 Notwithstanding the identification of specific parcels and timings for the phases, in reality the phases will overlap with subsequent phases beginning before the full completion of the previous phases.

30.8 A detailed phasing strategy will be prepared post outline consent and will be submitted to the Council. This will form the basis for the build out of the development.

Figure 170. Indicative Phasing Strategy - Years 0 - 5

INFRASTRUCTURE

- Established Under Construction
- New Under Construction
- Complete
- Established Construction Haul Route
- Foul Pumping Station
- Temporary Structure for Education/ Community

DEVELOPMENT PARCEL

- New Development Parcel + Anticipated Dwelling Number Under Construction
- New Local Access Junction Formed

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Figure 171. Indicative Phasing Strategy - Years 5 - 10

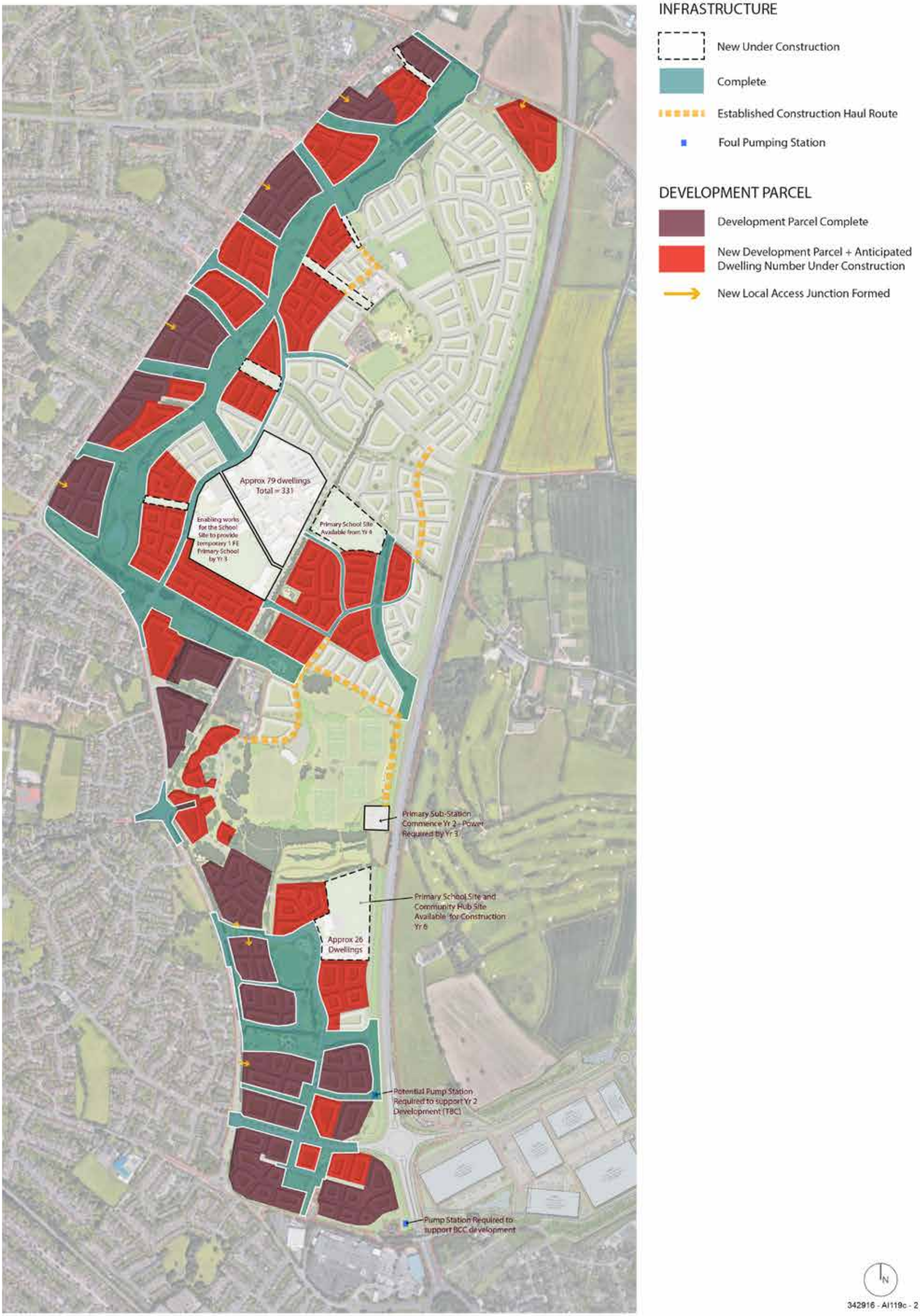


Figure 172. Indicative Phasing Strategy - Years 10 - 15

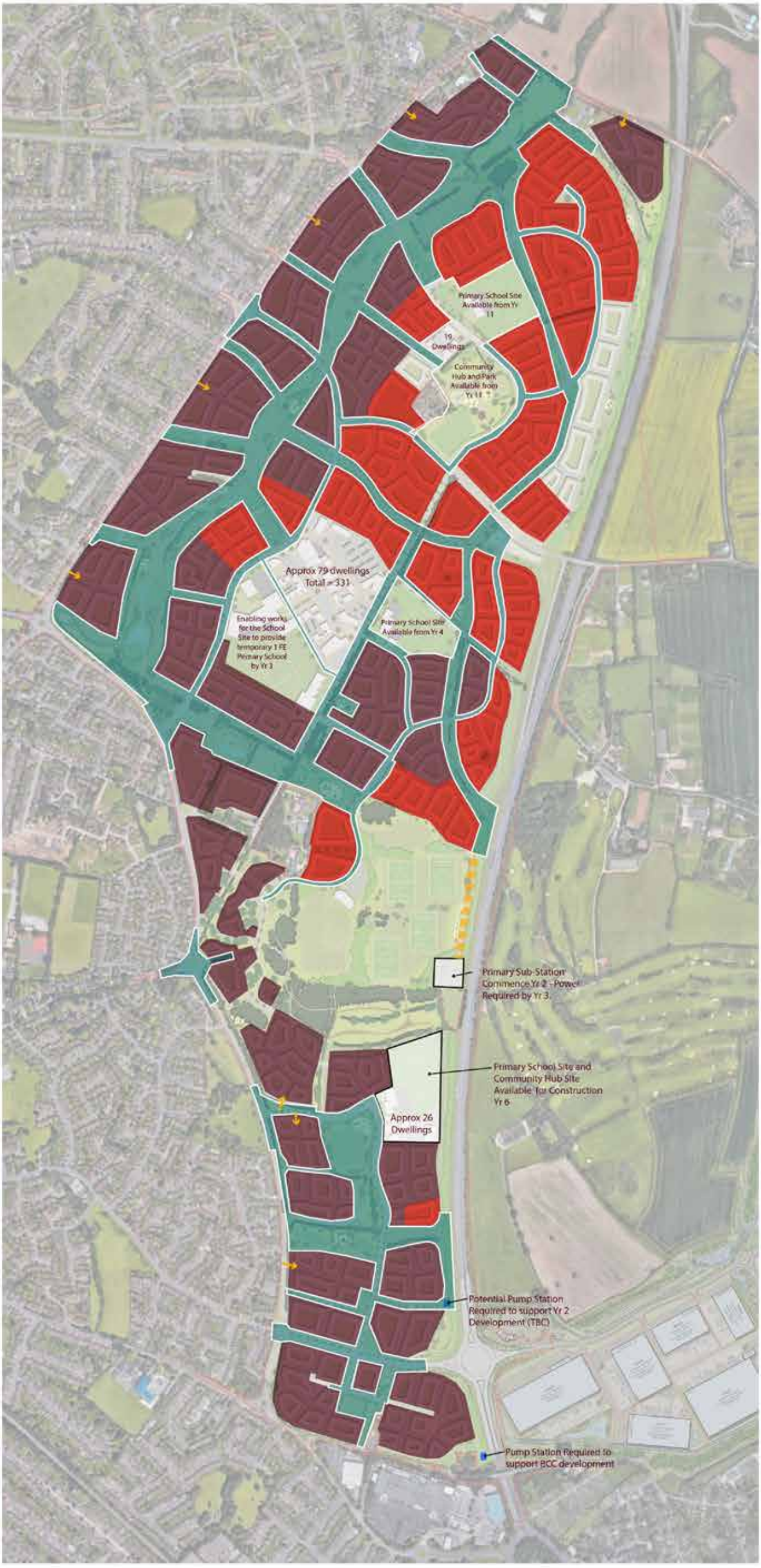
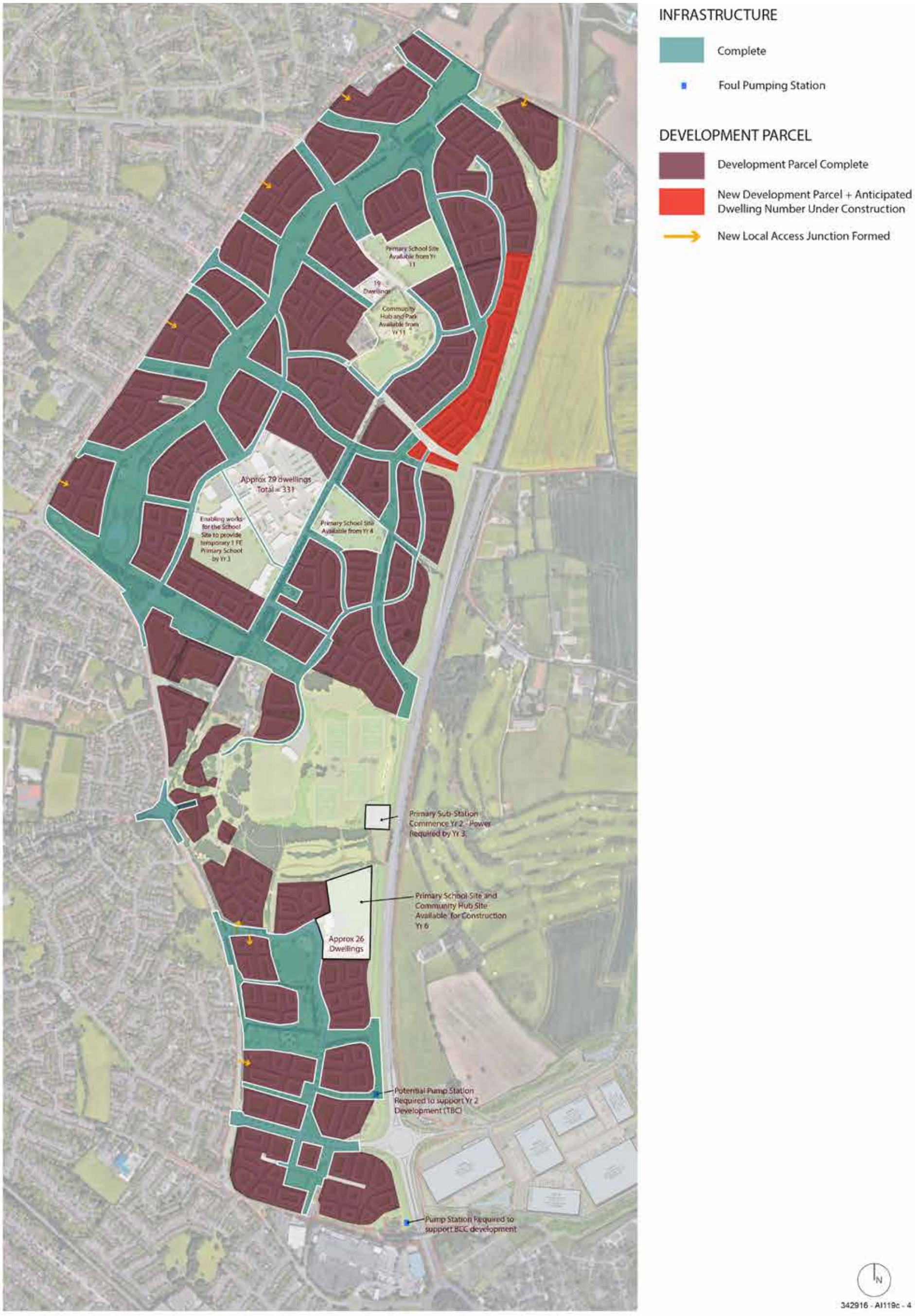


Figure 173. Indicative Phasing Strategy - Years 15 +



View along Walmley Ash Lane

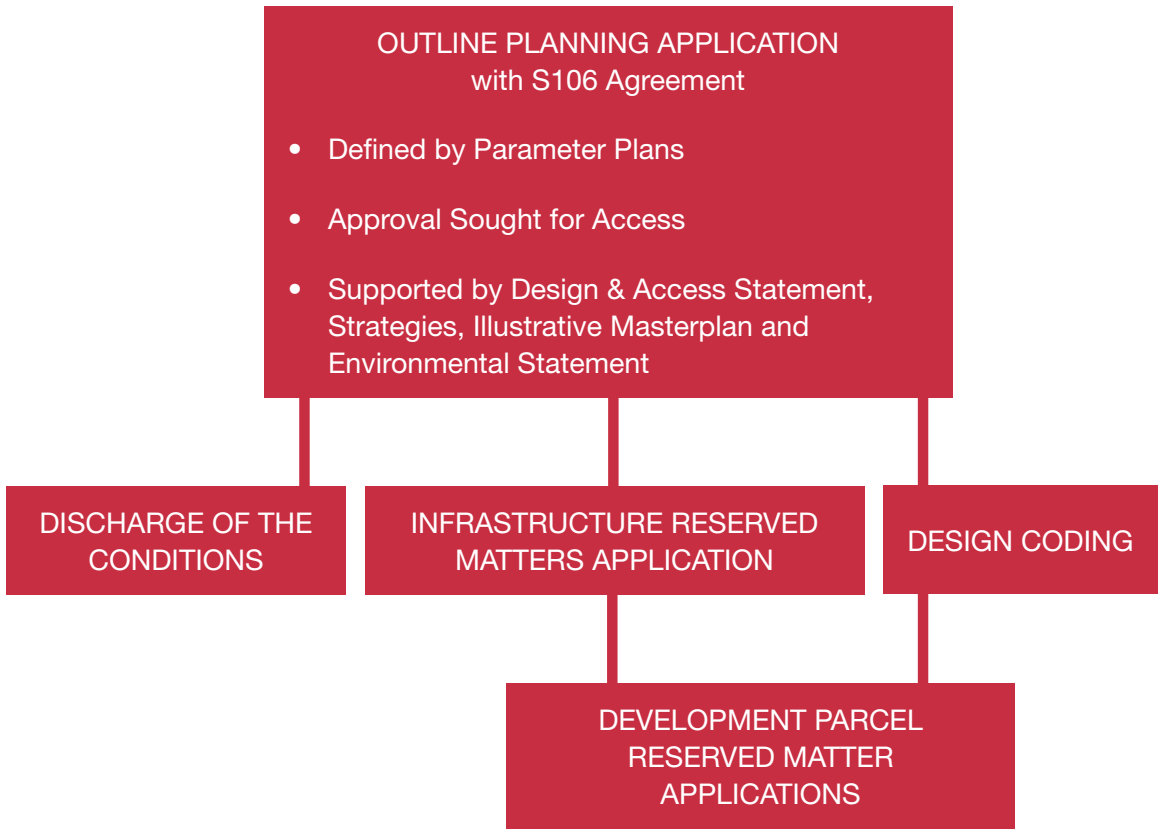
Next Steps

30.9 The outline application stage for a scheme of this scale sets a framework within which future applications are prepared and submitted. As stated in the "NOTE ON USING THIS DOCUMENT" on page 13, some of the plans for outline approval have been referenced within this document, such as Parameter Plans (Figure 3 to Figure 11) and Vehicular Access Plans (section 19.0).

30.10 A post outline design and approval process is set out in Figure 174. This illustrates the range of tasks which follow on from the granting of outline consent and supports the design evolution and delivery of development on Site in a timely and co-ordinated way.

30.11 The following pages provide more information on the key elements of the design and approval process, as well as maintaining design and quality control over the lifetime of the development.

Figure 174. Post Outline Consent Design Process



MAINTAINING DESIGN AND QUALITY CONTROL

Langley – Sutton Coldfield – Strategic Design Guide

30.12 The Langley SPD recognises that due to the length of the construction period and number of developers delivering on the Site, clear guidance is required to enable design and sustainability standards to be achieved and to contribute to coherent place-making and neighbourhoods of distinctive character. The SPD states that the submission of a Design Framework as part of the outline planning application is essential to embed key principles to coordinate and guide development. This Design and Access Statement includes a Design Framework to provide significant design guidance and illustrative material on key strategies to support the Site's ongoing development and design. The intention is for these principles and illustrations to be further supplemented by high level public realm coding alongside the Infrastructure Application.

"Langley – Sutton Coldfield – Detailed Design Codes"

30.13 In order to achieve a co-ordinated end development, a masterplan and design code will be prepared for each character area. These will be prepared in accordance with the parameter plans, high level public realm coding and the approaches identified through the strategies and will be submitted to Birmingham City Council ahead of the relevant Character Area commencement.

30.14 Each of the detailed design codes shall contain guidance and coding relating to the following matters unless otherwise agreed by the local planning authorities:

- Guidance and coding on the location and distributions of the land uses;
- Guidance and coding on residential densities;
- Guidance and coding on parcelisation and phasing, including the phased provision of key community facilities in accordance with the Community and Leisure Facilities Strategy;
- Guidance and coding on building form, scale and design, including heights, massing, materials and detailing, colour palates and boundary treatments; and the identification of key building groups, frontages, landmarks and corner buildings, and important public realm spaces around those buildings.
- Affordable Housing: the location and distribution of affordable housing within the development parcels.
- Movement Strategy to include:

  (i) Highways and access: A plan showing proposed roads, footpaths and cycleways within the Sub-Area;

  (ii) Surface finishes and street furniture: Guidance and coding giving details of typical surface finishes and of street furniture for roads, footpaths, cycle-ways and car parking areas relating to that Sub-Area;

  (iii) Car parking strategy, including principles of public/private split and management and maintenance of private car parking;

  (iv) Guidance and coding on speed restraint measures;
- Guidance and coding on the design and distribution of public realm, landscape, open space and ecology areas in accordance with the Landscape Strategy, including identification of planting species, the hard and soft public realm treatments, provision of public squares, incidental green open spaces, edible landscapes, trim trail and areas of children's play.
- Guidance and coding on the incorporation and promotion of sustainability and renewable energy initiatives in accordance with the Sustainability and Energy Strategy, The guidance will include statements as to the achievement of:

  (i) Energy efficient layouts;

  (ii) Energy efficient building design;

  (iii) Renewable energy generation including the safeguarding on residential buildings with a southerly aspect the option of providing in the future for energy generation by the use of solar panels or photo voltaic cells;

  (iv) Water use minimisation and recycling; and

  (v) Provision for waste recycling.

DESIGN FORUM

30.15 The Langley – Sutton Coldfield Consortium intend to coordinate a Design Forum with key stakeholders and interested parties. This will manage and co-ordinate, at pre-application stage, purchaser's scheme designs and layouts. This will facilitate a comprehensive and co-ordinated development in accordance with the objectives and guidance within respective design codes.

30.16 Under the S106 Agreement, a Liaison and Performance Protocol, has been agreed that sets out the key principles for liaison, formal communication and the determination of consents, approvals and reserved matters applications related to the development. Purchasers will be required to comply with the general provisions set out therein.

30.17 NOTE: As part of the contract of sale, purchasers design teams will be obliged to participate in this Forum.

DESIGN DEVELOPMENT FORUM

30.18 In addition to the design forum above, the Consortium as master developer will set up a 'Design Development Forum'. The purpose will be to preview House Builders and Developers proposals in advance of any reserved matters submissions to BCC. The aim of this forum is to encourage house builders and developers to coordinate designs, layouts, materials and to ensure delivery of place-making objectives, key groupings and key buildings are coordinated, as well as maintaining the Consortium's high standards and expectations for the quality and legacy of the Langley development.

Consortium and BCC Liaison And Performance Protocol : Agreed Principles

30.19 The Langley Consortium and BCC will agree a Liaison and Performance Protocol that will set out the key principles for liaison, formal communication and the determination of consents, approvals and reserved matter application ("reserved matters") related to the Development. The Liaison and Performance Protocol will also seek to identify realistic timescales so as to provide a guide timeline for dealing with key matters identified.

30.20 The Langley Consortium and BCC will agree and keep under review the guide timeline for delivery of the project overall and for agreed key matters as considered appropriate by the The Langley Consortium and BCC.

30.21 The Liaison and Performance Protocol will seek to identify measures and procedures and agreed objectives in order to reasonably ensure that the project guide timelines are achieved.

30.22 The Liaison and Performance Protocol will address, but not be confined to, the following matters:

Reserved Matters

- The Liaison and Performance Protocol will deal with procedures and timescales for consultation between the Councils and with an agreed range of consultees;

- The Langley Consortium will use reasonable endeavours to ensure that all submissions made to the relevant BCC officers in respect of reserved matters comply with the strategies;

- The target timetable for all reserved matter applications will be thirteen (13) weeks from the date of submission and all other reserved matter applications shall be eight (8) weeks unless otherwise agreed by the parties;

- Each reserved matter application made, will be accompanied by a standardised package of information the form of which will be detailed and agreed within the Liaison and Performance Protocol between the Langley – Sutton Coldfield Consortium and Birmingham City Council.

Liaison

(i) The Langley Consortium and BCC will seek to agree a framework of regular meetings to ensure liaison on all aspects of the project;

(ii) The Langley Consortium and BCC will meet on a monthly basis to review and undertake the following tasks:

- Review the overall and agreed timetables for delivery of the project;

- Keep under review the overall performance and handling of all planning approvals, consents, reserved matters and discharge of conditions. Each party will notify the other of matters to be included in the review five working days in advance of the monthly meeting;

Use reasonable endeavours to take the necessary action to rectify address problems identified.

(iii) The Liaison and Performance Protocol will set out measures to seek to ensure effective liaison with key Government Departments, Agencies or bodies whose activities may impinge directly or indirectly on the implementation of the scheme;

(iv) A programme of meetings will be agreed to cover a twelve month period within one month of signing the Agreement;

(v) Meetings will be attended by the Assistant Planning Director of Birmingham City Council or his/her nominee. The Langley – Sutton Coldfield Consortium will be represented by a Director of the Project Infrastructure Company [PIC];

Liaison with Third Parties and New Investors

(i) The Langley Consortium will use reasonable endeavours to ensure that once it has transferred land for residential, employment and commercial purposes to third parties they are made aware of and will comply with the general provisions set out in the agreed Liaison and Performance Protocol and where relevant the provisions of the Agreement;

(ii) The Langley Consortium will attend any initial meetings arranged between BCC and any third party making a reserved matter or new application with the overall settlement framework;

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APPENDIX

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APPENDIX

The Appendix of this Design & Access Statement Comprises of Additional Studies Relating to Design.

APPENDIX

31.0 Additional Precedent References

32.0 Summary & Building for Life 12 Pre-Assessment

APPENDIX

31.0 ADDITIONAL PRECEDENT REFERENCES

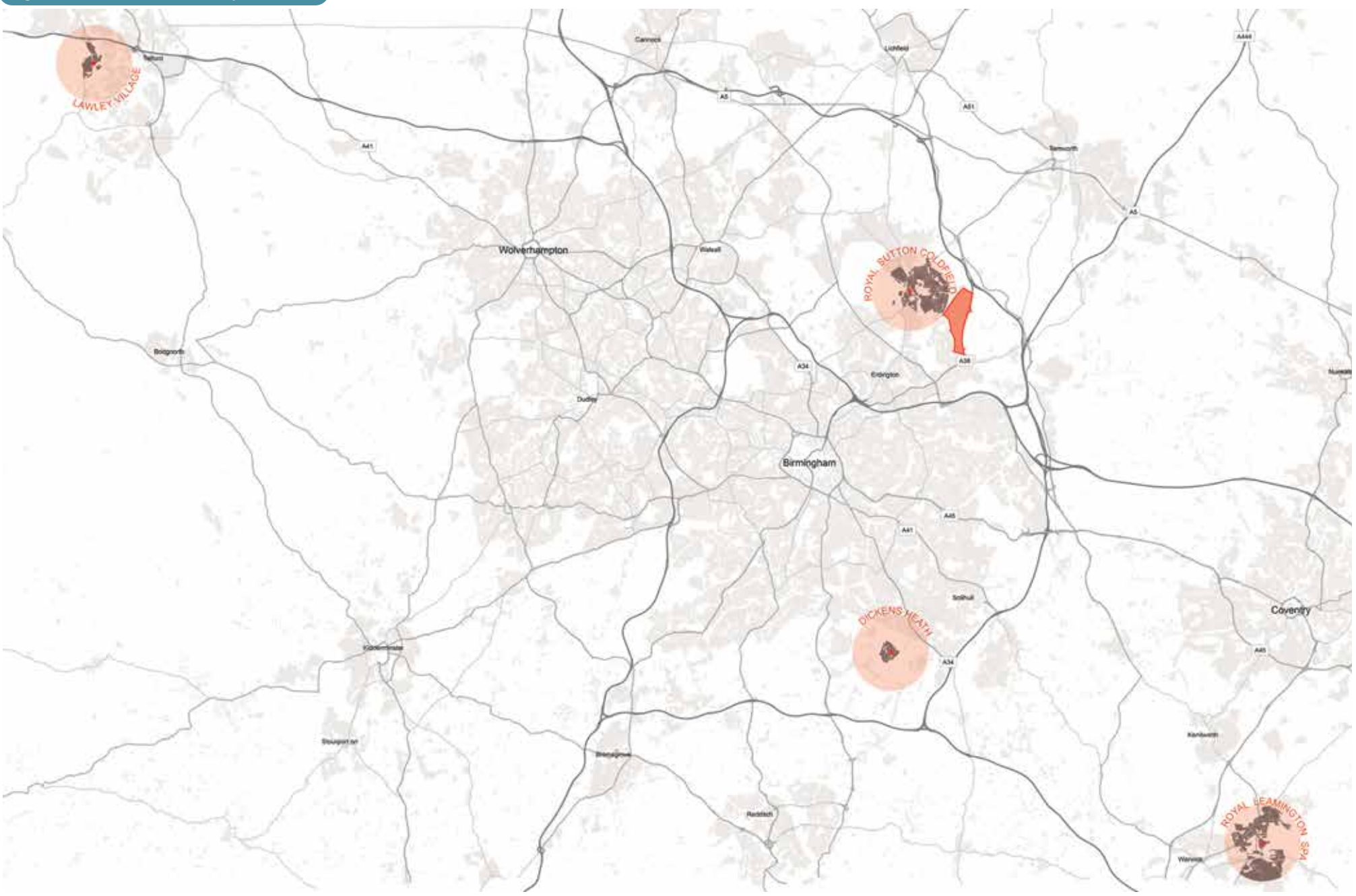
MIXED USE CENTRES

31.1 The following pages provide a review of four mixed use centres within the West Midlands region (Figure 175). The selection comprises two recently constructed mixed use centres within large residential development areas; and two highly valued/well established mixed use centres, both of which hold Royal title:

- **Dickens Heath** - A more recently constructed (2004) mixed use centre delivered as part of a new village settlement for around 1,700 homes located to the south west of Solihull;
- **Lawley Village** - A recently constructed mixed use centre delivered as part of a 4,000 dwelling sustainable Urban Extension in Telford;
- **Royal Sutton Coldfield Town Centre** - The primary retail centre serving Sutton Coldfield. While this serves a considerably larger population and is a higher order centre than that proposed for Langley, the case study provides local character references synonymous to Royal Sutton Coldfield;
- **Royal Leamington Spa Town Centre** - A distinguished and popular town centre, which provides a balance of opportunities for social, civic and leisure activity, as well as retail and services. While again this serves a considerably larger population, the case study provides an insight into elements that can be interpreted at all scales and which support adaptability and vitality for the community.

31.2 The study has sought places within the region where the relationship between mixed uses is positively achieved such that conflict between uses and users is limited.

Figure 175. Mixed Use Study Locations



1. Dickens Heath Mixed Use Centre
2. Lawley Village
3. Sutton Coldfield - High Street
4. Leamington Spa - Parade

DICKENS HEATH

31.3 Dickens Heath Village is located approximately 3 miles to the south west of Solihull town centre.

31.4 The originally planned village is now largely complete and occupied and therefore offers an example of a functioning new village and community.

31.5 A series of clear design aspirations were established early in the design process to influence the initial masterplan and then the more detailed plans:

- Have a clear identity which gives residents a sense of place and belonging;
- Echo the traditional features of village development including homes, employment, recreation, social and welfare facilities intermixed to create a cohesive whole;
- Provide a range of housing, from first-time buyer housing through to family housing and smaller units suitable for the elderly, thereby creating a mixed community of all ages and incomes;
- Create a safe and pleasing environment for pedestrians while still accommodating the motor car, but without allowing it to dominate the environment.

31.6 The provision of a mixed use area at the heart of the design was a direct response to 'echoing' the traditional village features. The following provides observations in relation to the mixed use core.

General Settlement Structure

31.7 As illustrated at Figure 177, the mixed use centre of Dickens Heath is predominantly located around a street perpendicular to the 'intended' main east - west through movement routes.

31.8 The centre comprises a combination of medium to high density residential, retail, professional services, health care, pubs and restaurants and community amenities. To the north of the centre is a public open space and to the south the centre connects with the canal corridor.

31.9 The concentration of residential uses in and immediately surrounding the centre supports walking and cycling to shops and services, alongside a place for the community to gather and socialise. This supports a sense of community building and identity.

31.10 While visually the plan structure appears logical and has elements that would be expected in a village settlement, it is understood that later highway interventions altered the function of the road network and stopped up the through movement to the north of Main Street. This has made the legibility of the settlement, and in particular the core, difficult to immediately understand particularly in a car. Passing traffic which may have stopped and used the centre to the benefit of the businesses now circumnavigates around the core.

Figure 176. Aerial Photo - Dickens Heath Mixed Use Core

Figure 177. Dickens Heath Land Use Distribution

Built Form

31.11 The centre of Dickens Heath is defined by a single street 'Main Street' that connects between the central open space to the north and the canal network to the south. Continuous, parallel and three to four storey built form defines each side of Main Street creating a very strong sense of street enclosure, more akin to a town centre than a traditional village centre.

31.12 The deliberately tight street network, alongside deflections in the building alignment at key spaces succeeds in reducing car dominance. However, the environment does feel overly enclosed in places, and reduces the ability to quickly visualise and understand the wider structure of the village i.e. it is difficult to see and therefore locate in relation to key assets such as public open spaces and recreation routes.

Civic / Community Use

31.13 Civic and community function buildings (library and GP surgery) are located in prominent locations within the centre, adjacent to key movement nodes or spaces. This allows the buildings to be more legible and accessible.

31.14 These civic buildings also adopt architectural differences to further distinguish their civic function.

Supermarket

31.15 A 'local' supermarket is provided at the northern end of the Main Street in close proximity to the primary east to west route. The supermarket occupies the ground floor while apartments are accommodated above. The style of the supermarket building has been co-ordinated with the surroundings creating an integrated solution rather than a standard supermarket led architecture.

Landmark / Focal Buildings

31.16 The Dickens Heath Library and adjoining clock tower act as a distinctive local landmark. Other distinctive focal buildings and tower elements are located throughout the centre. These tend to be situated within movement nodes and key spaces, or as a way of terminating views along internal streets.

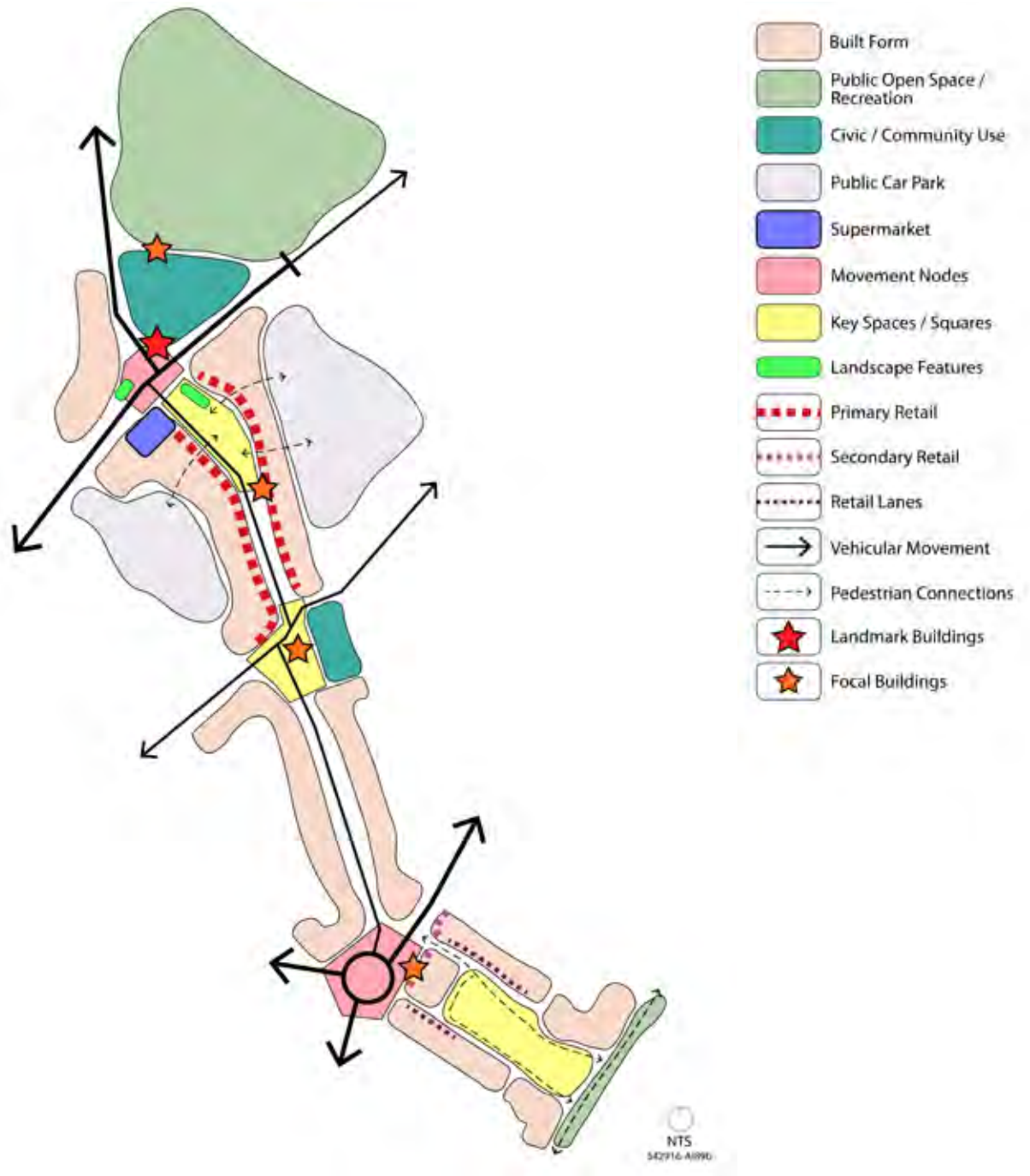
31.17 The rich array of distinctive built form contributes positively to the local character and perception of quality.

Movement Nodes & Key Spaces / Squares

31.18 Two movement nodes bookend much of the village centre network. This provides the gateway to the Main Street but also offers alternative routes reducing through traffic movement within the Main Street.

31.19 A series of key spaces are located at intervening junctures along Main Street. These key spaces provide helpful variation to the street environment, as well as a more spacious setting to showcase key buildings.

Figure 178. Main Street - Design Analysis



Parking

31.20 Public parking is provided within surface car parks to the rear of the Main Street. Arched alleyways provide convenient access between the public car parks and the Main Street. This allows access, while reducing the impact of car parking on the character of the Main Street.

31.21 A small area of public parking is provided within the Main Street but this has been landscaped through formal tree and hedgerow planting to visually reduce the impact.

Public Open Space / Recreation

31.22 The visual connectivity from the core to surrounding open space and leisure canal routes is blocked by intervening buildings. This gives the core a very hard urban feel, and again precludes visitors to the village understanding the assets available.

Landscape Features

31.23 Green landscape is relatively limited in the Main Street. The box cut trees at the northern end of the space are particularly distinctive and memorable.

31.24 Hard landscape features are more prevalent as illustrated in the next pages, and particularly around key spaces and squares. Here additional outdoor demise areas for cafés can be accommodated adding a real vitality to the space.

Summary

31.25 The vitality and function of the mixed use centre at Dickens Heath is evident, particularly with cafés and shops appearing busy both during the day and into the evening.

31.26 The strong adherence to design principles such as 'terminating views'; 'creating a strong sense of enclosure'; and 'providing interest through key buildings' has perhaps resulted in a more confusing user experience, however, distinctive and memorable character is in abundance.

31.27 The alteration to the highway function around the village has negatively impacted on the user experience, but the opportunity to resolve this remains possible as a result of the robust structure.

Townscape Analysis

31.28 The character of Dickens Heath is strongly influenced by traditional place making theory.

31.29 New streets have adopted interest through the use and creation of framed views and vistas, nodes, key spaces and focal/ landmark buildings. Figure 179 illustrates this.

31.30 The diagram and photos illustrate how the plan translates in 3 dimensions and shows how built form and architectural design combine to create character and local distinctiveness.

Figure 179. Dickens Heath - Townscape Analysis

Towers act as landmarks in views from north and south and also denote the primary nature of the space and a change in direction in the street.

Stand alone market house structure provides a focal building in the secondary space.

Archways evident throughout the architecture. Change in height also helps to reduce the sense of enclosure felt in other parts of Main Street.

Careful design reduces the mass of a four storey building. Box trees are a distinct feature in this space.

View towards the junction with Main Street.

Architectural Features

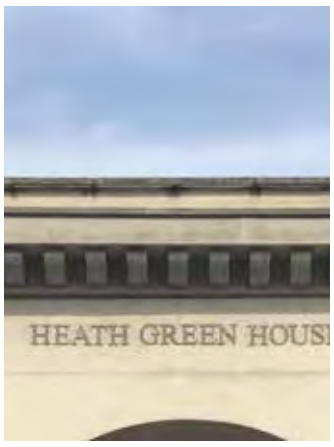
31.31 Thefollowingprovidesaphotoanalysisofcommon architectural features found in the Dickens Heath core. It is strongly influenced by traditional references.

Arches and Archways - A strong theme in the architecture and utilised both in shop fronts but also as carriageway arches over footpath connections or as a colonnade feature.

Ornamental enclaves

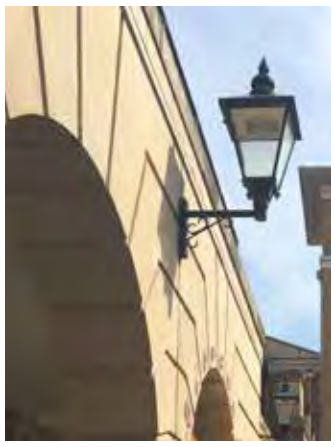
Physical and clear separation between the use of brick and stone,

Vaulted and colonnade walkways with ornamental pillars.



Permanently Identifying / Naming Significant Buildings

Simple information signs



Ornamental Street Lighting - both on buildings and on-street.

Street signs subtly located on lamp posts to reduce street clutter

Towers commonly used to demarcate key buildings and terminate street views.

Large glazed commercial frontages support vertical emphasis of the architecture.

Shop signage strategy is sensitively incorporated into the architecture.

Continuous shop rhythm and high level of glazing - interpretation of traditional shop style with residential living above.

Stone balls define the pavement/ road edge. Also assists parking controls and security for the retail units.

LAWLEY SQUARE - LAWLEY VILLAGE

31.32 Lawley Village is located approximately 2.5km west of Telford town centre. Development began in 2007 and is anticipated to continue until 2027.

31.33 When completed, Lawley Village will have approximately 4,000 new homes. The village centre comprises a range of shops, healthcare facilities, education, eating establishments, and a pub/ restaurant with residential over. The vast majority of the centre is now complete and occupied. This case study provides a modern reference for the design and delivery of a new mixed use area.

31.34 ThekeyobjectivesforLawleyrelatetotheprovision of high quality homes in a sustainable community. The Village consists of four distinct neighbourhoods surrounding the mixed use commercial and social hub - Lawley Square.

General Settlement Structure

31.35 The settlement structure has been largely influenced by the existing highway infrastructure (A5223) which passes to the west of the Site, and the realignment of the connecting B5072 road.

31.36 The development is formed around an internal spine road (Birchfield Way) connecting between the A5223 up to the B5072. It is around the junction of the Birchfield Way and the B5072 that the new mixed use centre has been formed. This creates a centre with good visibility from passing highway traffic but also a centre that is more dominated by passing trade rather than a clearer focus on its immediate residential community. While there are residential dwellings within the centre the linear nature of the development, open space provision and also surrounding developments reduces the critical mass of population and population density that directly resides and therefore interfaces with the centre.

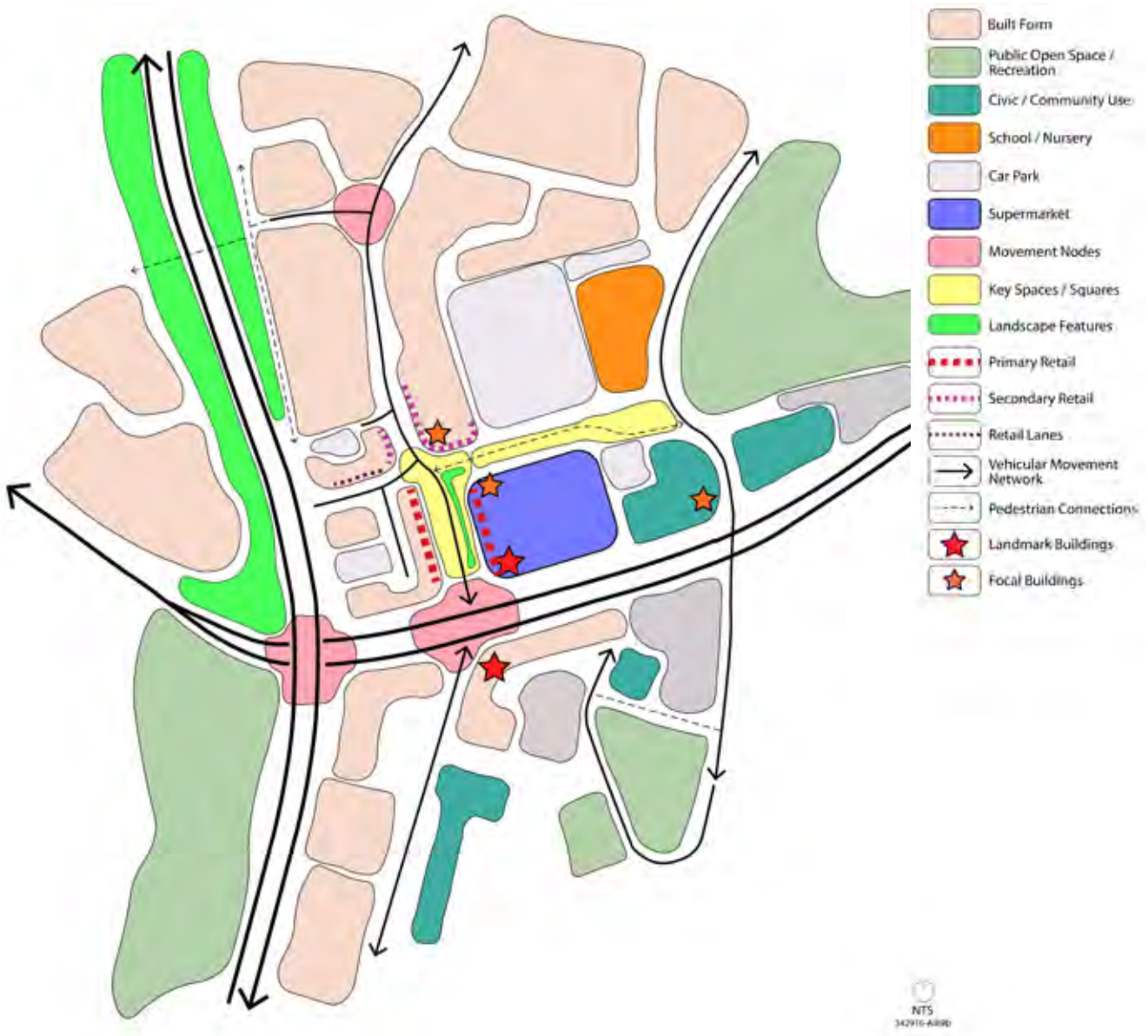
31.37 Pedestrian and cycle links to the centre are circuitous as a result of the highway dominance in the area. Dedicated pedestrian / cycle bridges do seek to address this matter but are not immediately in proximity of the centre.

31.38 A potential benefit to the land use configuration of Lawley Village is that it is not entirely surrounded by residential uses. Employment, community and leisure are also provided in close proximity. This provides a variation of activity to help sustain a level of vitality within the district centre.

Figure 180. Aerial Photo - Dickens Heath Mixed Use Core

B5072 - The main connecting road from the A5223 towards Telford.

Figure 181. Structure Review - Dickens Heath Mixed Use Core



Built Form

31.39 Lawley Square is defined by buildings that are 3 to 4 storeys in height framing an area of public realm comprising Birchfield Way, parking and wider pavement areas. It is understood that the profile and dimensions of the Square are primarily influenced by Shrewsbury Square in Shrewsbury.

31.40 The height to width ratios of the square do provide a comfortable space. However the primary movement network passing along the southern edge of the square does have a negative impact on the quality of the space, result in noise and disturbance and a sense of exposure rather than enclosure. This reduces the attractiveness of the space for congregation and social interaction.

Supermarket and Retail

31.41 A significant proportion of the centre is given over to the relatively large supermarket. This building acts as the main retail 'anchor' for the centre. The supermarket is located in a highly accessible location, gaining the benefits of prominent visibility and passing trade from the primary road network.

31.42 The premises is served by a single large surface car park to the rear and provides front door access from the car park.

31.43 The western edge of the supermarket, and its internal cafe faces towards Lawley Square. The remainder of the western edge has been 'wrapped' with small retail units on the ground floor fronting Lawley Square and residential dwellings on the upper floors.

31.44 The building design although inactive along the southern edge has been well articulated and responds reasonably well to the primary road.

Civic / Community Use

31.45 Civic & community buildings are not located in prominent positions or near key spaces. Such buildings have instead been placed in locations where maximum visibility can be gained from the primary road network.

31.46 The perception is that these assets which best encourage social interaction and community cohesion are aimed at serving passing trade rather than the new community. Architecturally, the civic / community buildings differ from the district centre, and sit as isolated elements away from the centre. In addition, all are served by large car parks encouraging arrival by car rather than by foot or cycle.

School / Nursery

31.47 Primary school provision is provided within walking distance of the core, but accessed from main roads and car parks. Again discouraging easy access by foot.

Landmark / Focal Buildings

31.48 The main landmark is provided by the Morrison's supermarket. The provision of landmark elements buildings / features is not highly obvious. The modern, architectural style does contribute towards an attractive environment, however certain aspects lack a level of design detail and it remains to be seen how some materials stand up to the test of time.

Movement Nodes & Key Spaces / Squares

31.49 Two movement nodes exist close to the district centre. However these are highly trafficked vehicle junctions and are therefore not an attractive prospect for pedestrian and cyclists.

Parking

31.50 A large, single area of surface parking is provided to serve the core. Short stay parking bays are also provided within Lawley Square providing short term stop and drop access to some shops and services.

31.51 A strip of public realm from the car park into Lawley Square is provided to encourage pedestrian movement between the two. However, there are limited attractors in the Square so movement between the two is perhaps more limited.

31.52 Private properties back on to large sections of the communal car park, raising some concerns over security, particularly as no natural surveillance is provided on to the space.

31.53 For many visitors, the communal car park is the first point of arrival to the centre. Some tree planting has been provided. However, there does not appear to be enough space to allow tree planting grow large enough to significantly enclose and improve the car park setting.

31.54 The large parking area contributes to general functional requirements of the district centre by providing easy access to for the motorist. However it does little to enhance the local setting and appearance.

Public Open Space / Recreation

31.55 Some common areas of public open space are located in relatively close proximity to the centre. However the configuration of the centre has not been in any way influenced by the desire to encourage people to use the recreation assets provided.

31.56 The centre is further divorced from open space / recreation by severance caused by the primary movement network and a public car park.

Landscape Features

31.57 Some trees and low level planting are provided within Lawley Square, providing a visual uplift. The space is not dominated by landscape features however. Planting doesn't serve to provide shelter or enclose the space.

31.58 A significant amount of street furniture exists for user convenience, such as seating areas and bins. A high number of metal bollards have been used to manage parking, many of which have been knocked over or damaged by vehicles.

Townscape Analysis

31.59 Lawley Village has adopted 5 distinct character areas (neighbourhoods), namely; Lawley Village, Lawley Square, Lawley Bank, Newdale and Newdale Valley. The mixed use centre is located centrally within the Lawley Square character area. Here a modern architectural design approach is advocated.

31.60 The design of the centre has been derived from the ambition to provide a single focal point for activity. This is provided within the key space identified in Figure 182. A node of activity has formed within the square where the various access routes converge.

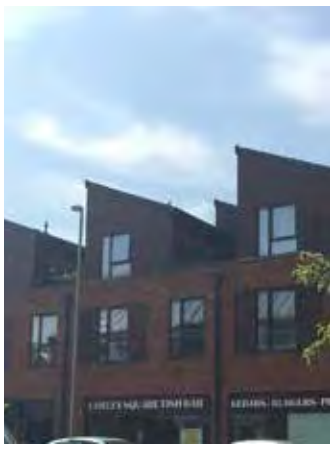
31.61 A focal building is also provided at this node and helps to terminate north-south views and reinforce a sense of enclosure within the square.

31.62 In general, the provision of an anchor supermarket with associated car parking, combined with the impact provided by existing road infrastructure, has made place-making objectives more difficult to successfully achieve.

Figure 182. Lawley Square - Townscape Analysis

Architectural Features

31.63 The following provides a photo analysis of common architectural features found in the Lawley Square core.



Distinctive balconies overlooking public realm & street.

Incidental seating space incorporated into public realm.

Landscape utilised to separate pedestrian and highway.

Short-stay parking within the central public space.

Shared - surface paving, with bollards to define the edges of highway space.

Complementary materials include brick, metal and timber.

Colonnade provides shelter and rhythm to the street scene. Also enables balcony framework.

Pillars serve as clear separation between the road and pavement.

Vertical emphasis through gables.

Higher density accommodation over shops brings critical mass to the centre.

Provision of distinctive architecture for community attractors.

Clear architectural rhythm along key frontages.

Need to design for parking in order to avoid excessive use of bollards.

Need to provide robust / low maintenance street furniture

Need to avoid large areas of exposure to the rear of residential properties, particularity onto public areas.

ROYAL SUTTON COLDFIELD

31.64 The centre of Sutton Coldfield is located approximated 2.75km from Langley. The centre represents the historic core of Sutton Coldfield and provides the town with much of its distinctive character.

31.65 Having evolved over time, Sutton Coldfield town centre provides a rich tapestry of built form, representative of individual time periods. As such, planned elements of place-making are less evident than other study areas.

31.66 The character of the town centre has therefore evolved more organically. As a result some quality elements of townscape do exist. There are instances where more recent interventions (particularly related to the need to accommodate the car and modern retail demands) have had a negative impact on the centre's function and appeal.

General Settlement Structure

31.67 Much of the town centre's historic core contains residential uses mixed with small independent businesses.

31.68 A large part of the town now also accommodates a purpose built retail centre. The retail complex consists of a pedestrian only street with larger purpose built high street retail units. Other land uses exist within the town centre environment, such as light industrial / shed retail, community / civic uses, recreation and residential suburbs.

31.69 The mixture of land uses within the town centre is indicative of many towns where uses are more sporadically distributed owing to ownership boundaries, urban renewal and changes in demand from town centres over time.

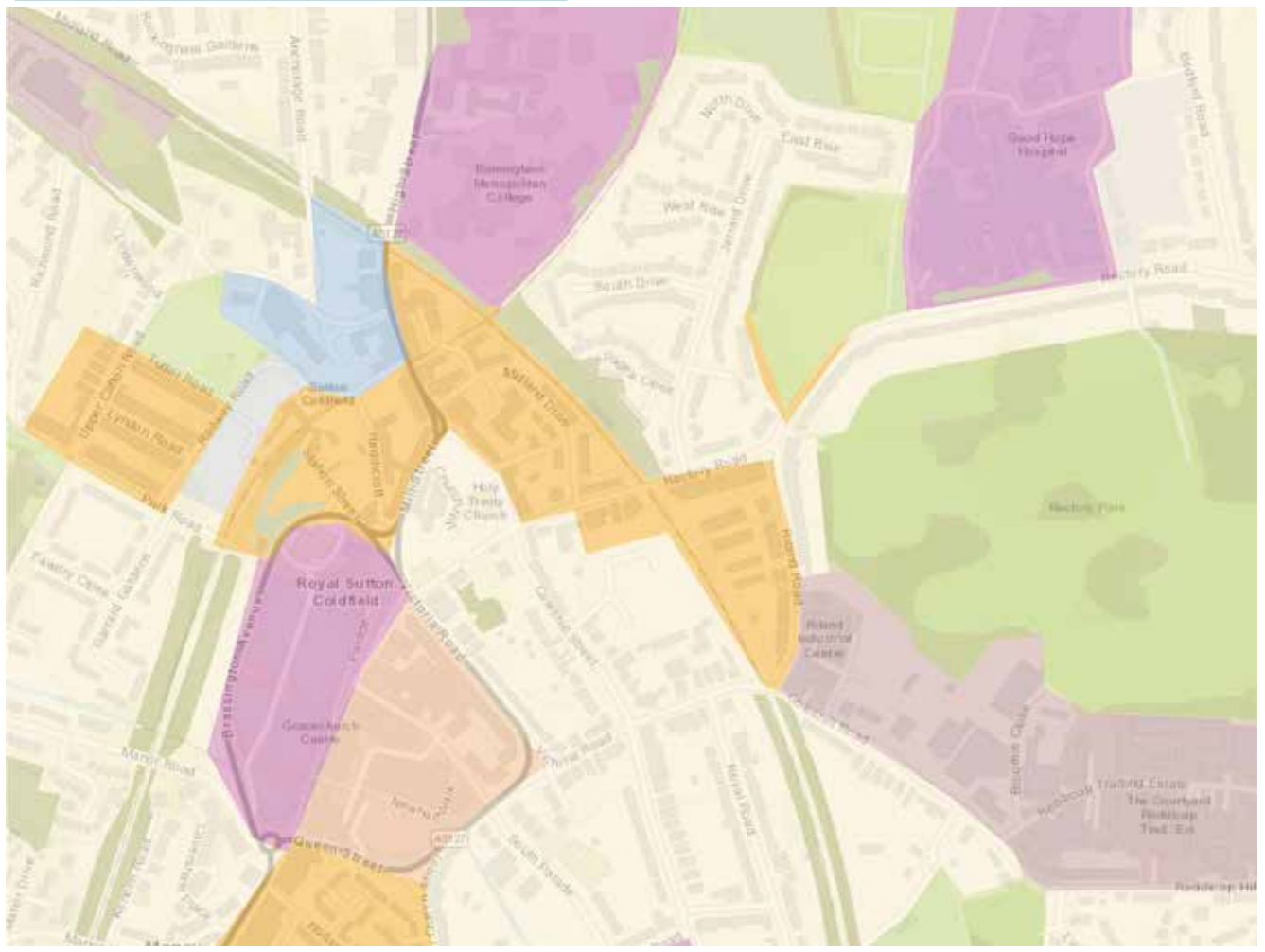
Built Form

31.70 The nature of built form varies between the finer grained historic town and the larger grained retail-led environment to the south. The nature of the built form provides two very distinct impressions. Within the historic core, there is a stronger relationship to the street, which is dissimilar in many ways to the open 'shopping mall' environment of the main retail core. The resulting variation has caused a separation between typical high street retail uses and independent enterprise.

31.71 More building variation exists within the historic townscape north of the retail core, with buildings continuously varying in relation to appearance, roof-line and height (between 2-3 storeys). Building heights and architectural style is more uniform within the retail core, where little architectural and roof-line variation exists. Building heights also remain consistent at 2 storeys.

Figure 183. Aerial Photo - Sutton Coldfield

Figure 184. Sutton Coldfield Land Use Distribution



Retail Streets

31.72 The pedestrian only street network within the southern retail core acts as the primary retail street. The retail offering is based on a typical multinational shopping mall model, where consumers arrive by car, visit the mall and do not explore the local area much further. Smaller independent stores exist within the old town, where they are better suited to the level of accommodation provided.

Civic / Community Use

31.73 Civic & community buildings tend to be placed in well-established / prominent locations, outside the retail core.

31.74 Civic / community use buildings benefit from easy access and provide some of the more architecturally appealing buildings within the centre.

Movement Nodes & Key Spaces / Squares

31.75 A network of movement nodes exist, four of which are located along the central ring-road that now circumnavigates the retail core.

31.76 Movement nodes tend to be highly trafficked / complexed highway junctions. As such, ease of movement for pedestrian and cyclists is restricted. Tight pavements and the closing-off of natural pedestrian desire lines add to the inconvenience for pedestrian / cycle users.

Landmark / Focal Buildings

31.77 Landmark buildings tend to be associated with civic and community uses. Due to the organic nature of the centre's growth, landmark elements have not been intentionally constructed with place-making in mind. That being said, such buildings are placed in prominent locations close to key spaces and the primary movement network and also on some of the highest ground levels adding to their prominence. However, the setting of key buildings is often compromised by excessive highway infrastructure and gap sites utilised as surface level parking.

Public Open Space / Recreation

31.78 Instances of open space have come about incidentally, as oppose to being intentionally incorporated into the overall make-up of the centre.

31.79 Some small areas of open space exist near Holy Trinity Parish Church. This open space does provide a positive contribution to the urban environment. However, despite providing some occasional users with an option for respite, it fails to offer any function related to wider recreation and activity.

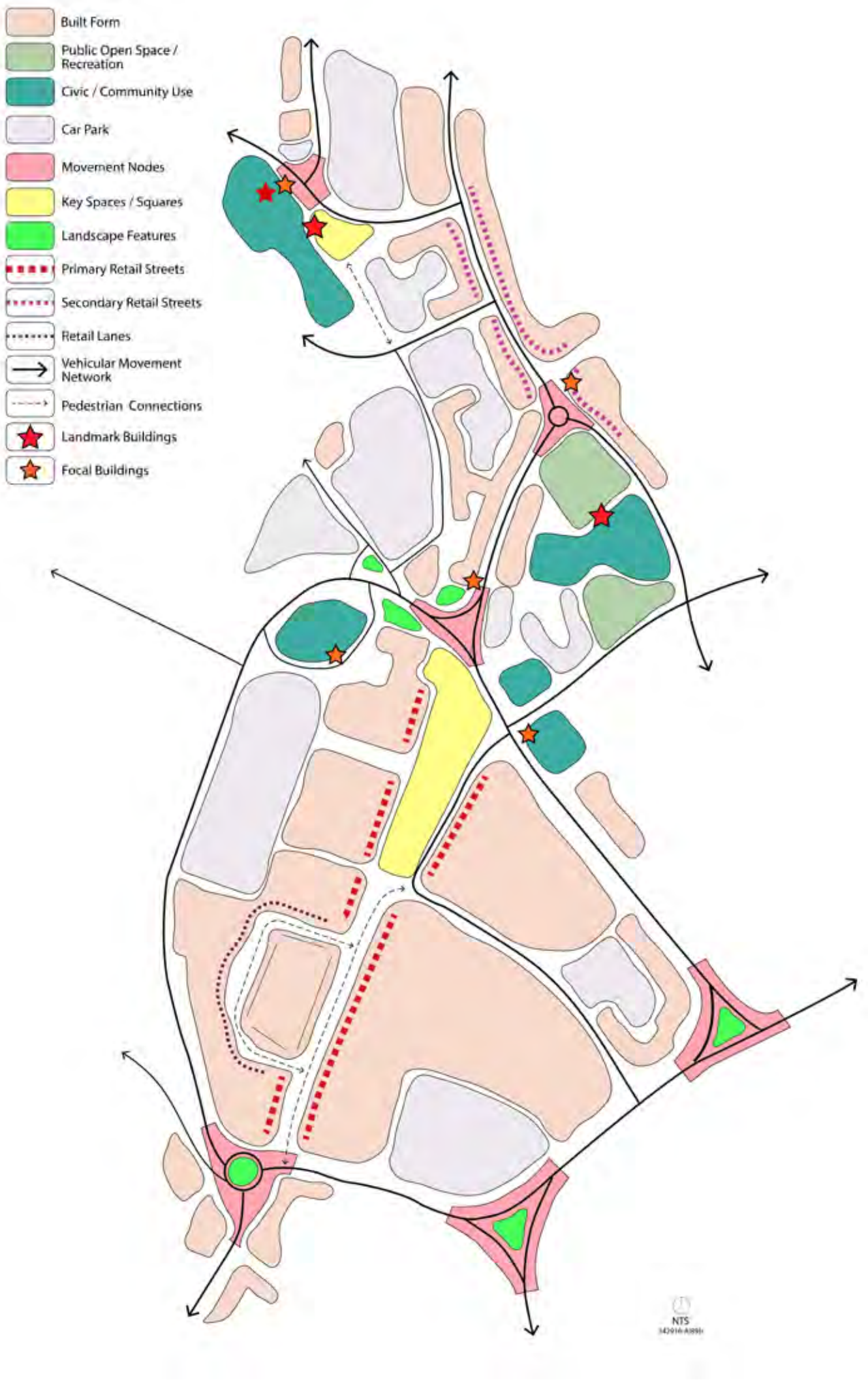
31.80 The lack of open-space / recreation options within the town centre discourages many users from using the centre for more social and health purposes.

Landscape Features

31.81 Small instances of landscaping have been provided in areas of left-over incidental space, formed largely through the alignment of the inner road network.

31.82 Little landscape of any impact is provided within the retail core. Due to the nature of the town centre's growth, landscaping has been applied more as an afterthought, as oppose to a key driver behind place - making.

Figure 185. Structure Review - Town Core



Parking

31.83 A large number of surface level car parks exist throughout the centre, which has drawn some negative impact on the function and appearance of the built environment.

31.84 Open breaks of built form, caused by parking, has negatively fragmented positive elements of townscape by creating expansive areas of openness.

Movement Framework

31.85 The general movement infrastructure within Sutton Coldfield has evolved as the town and it's population grew more reliant on the car.

31.86 Streets typically respond to the town's natural topography. A number on dead-ended streets exist and a distinctive street hierarchy is not obvious. A ring road system surrounds the retail core. However, it serves primarily as a fast moving vehicular through movement route and in parts is not considered as a particularity safe environment for pedestrians and cyclists.

Townscape Analysis

31.87 Despite not being a formally planned town centre, key features and spaces do exist that provide some enhancement to the urban environment.

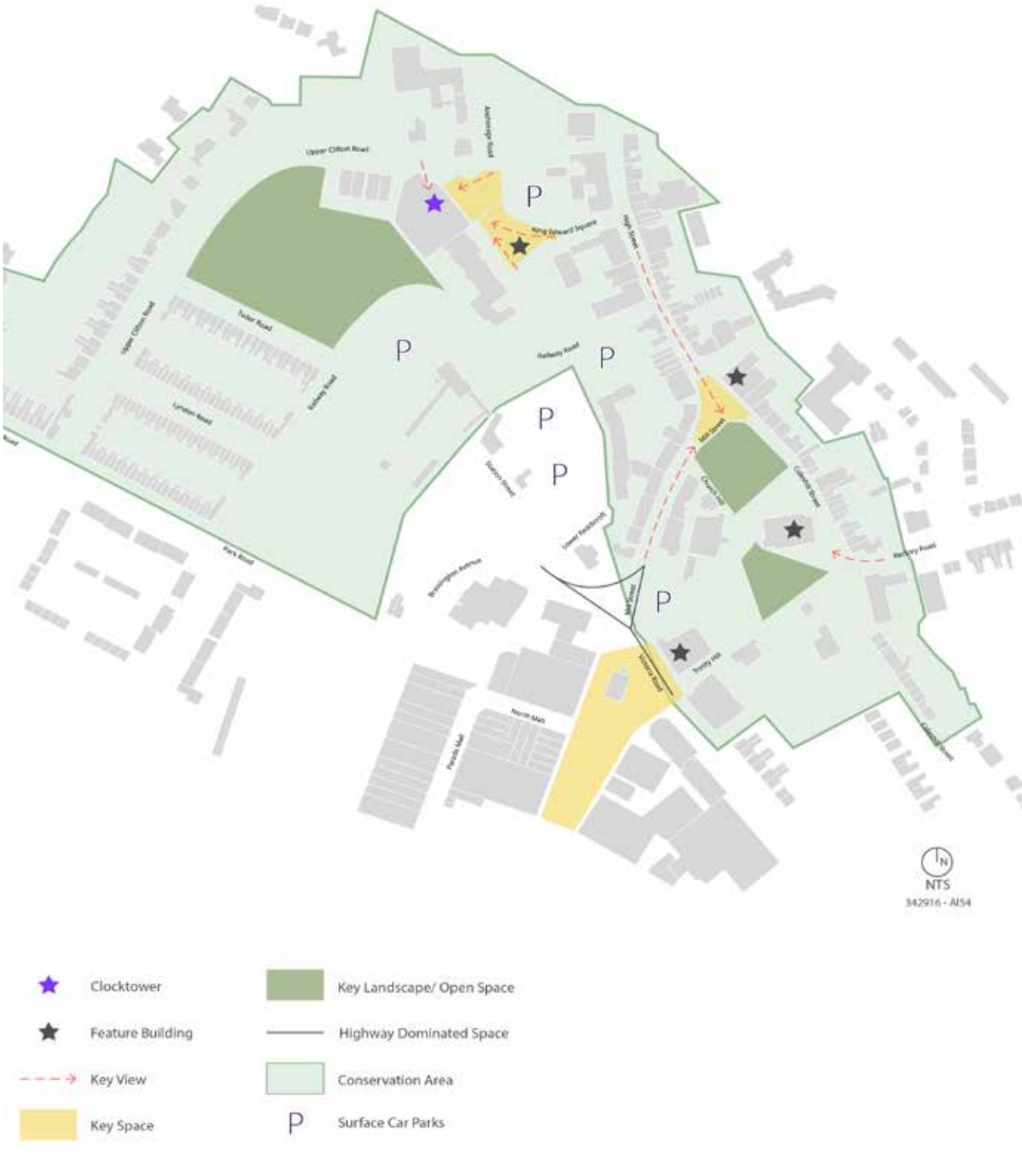
31.88 Key spaces assist with the transition between the more historic townscape in the north to the retail core in the south. However, the transition is not seamless due to fragmented building arrangements and over dominant highway infrastructure.

31.89 A number of key and focal buildings are located throughout the town providing assistance in way finding and legibility and are located within key view corridors.

Architectural Features

31.90 The adjacent provides a photo analysis of common architectural features found in Sutton Coldfield.

Figure 186. Sutton Coldfield - Townscape Analysis



Feature clock tower a significant town landmark.

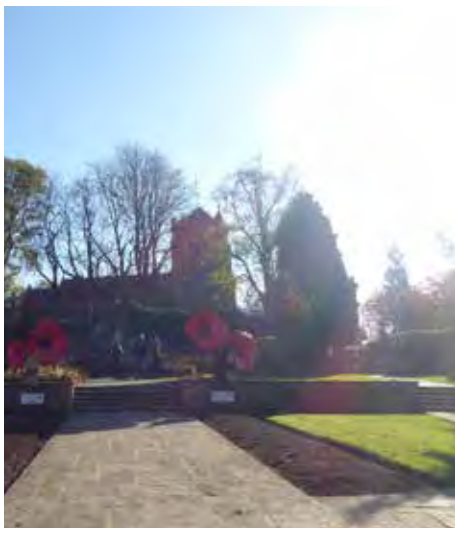
Central landmark building with substantial height and presence.

Architectural Features

Consistent storey heights, but with variation to roofscape.

Regular window arrangements, marked by consistent symmetry and proportions

Feature clock and weather vane provided at key decorative corner buildings.

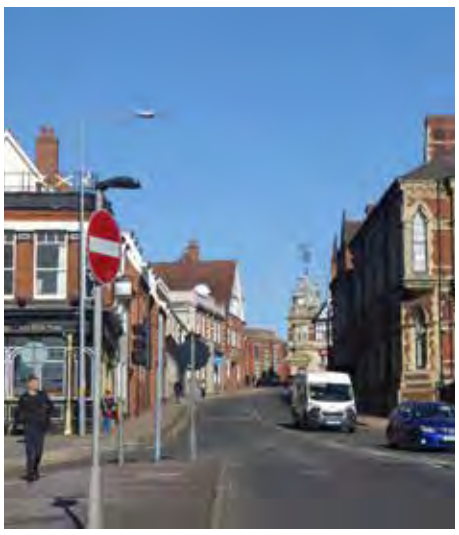


Landscaped open space, suitable for placing statues or public art.

Depth to blocks, with rear residents parking and secure access to the main street.

Decorative exterior window surrounds.

Architectural variation between classical and modern designs.



Framed views and vistas (however obstructed by highway signs and posts).

Continuous building lines. Later infill developments have respected this approach.

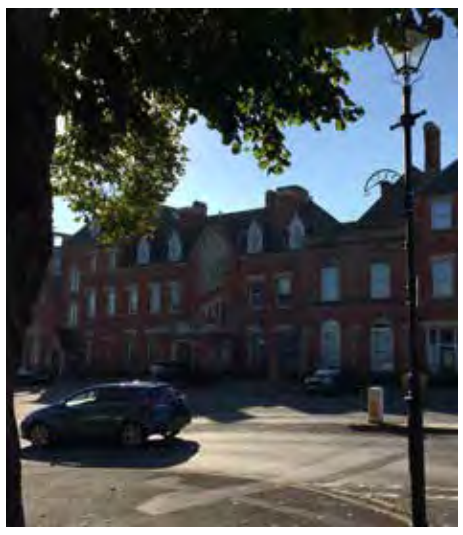
Ornamental street lighting.

Occasional material variation and drop down of building scale

Tight streets forming a strong sense of enclosure.

Monuments / Statues.

Low rise pedestrianised spaces in the modern shopping core, lack people and activity.



Dominant use of red / orange brick

Parking provided within key spaces to service prominent civic buildings

ROYAL LEAMINGTON SPA

31.91 The centre of Leamington Spa is located approximated 30km from Langley. The modern day centre of Leamington Spa formed during the 1820's -1830's. As the town's popularity grew as a Spa resort, builders began concentrating the town's expansion on land north of the River Leam.

31.92 As growth focused largely on housing 19th century gentry, the urban layout and architectural design drew influence from best practice architecture of the time. This influence resulted in a gridded block structure, designed to serve development from the shared network of streets.

31.93 The gridded urban network succeeds in catering for modern needs and complements many of the wider urban design objectives, in particular legibility, permeability, adaptability and walkability.

General Settlement Structure

31.94 Much of Leamington Spa's town centre is characterised by retail and commercial uses with residential above, As can be seen in Figure 188 the mixed use area is relatively compact but situated around a highly permeable gridded street network.

31.95 Immediately surrounding the core is areas of medium to high density residential.

31.96 Parkland uses are located both north and south, providing natural book-ends that help contain and define retail core.

31.97 The gridded street network ensures that the presence of certain land uses or occasional events do not restrict the ability of the town to keep moving freely for all modes.

Figure 187. Aerial Photo - Leamington Spa

Figure 188. Land Use Distribution

Figure 189. Leamington Spa - Townscape Analysis

Built Form

31.98 The centre is defined by a network of gridded streets set on an almost north to south alignment and rising with the underlying topography towards the highest point at the end of the Parade. The blocks tend to be consistent in size (approx. 175m (L) x 85m (W).

31.99 Within the blocks the buildings also follow a strict alignment. However some have been adapted over time for alternative business / commercial use and parking. This is testament to the ability for urban block adaptability for alternative uses without the need to compromise movement and way-finding objectives.

Retail Streets

31.100 The Parade running northern - south through the centre acts as the primary spine for Leamington and for retail, providing larger multi-national high-street stores.

31.101 Secondary streets and retail lanes are located on the east to west street alignments and provide a greater variation of retail uses and services, many of which are independent retailers. The established street hierarchy therefore complements the need to provide a range of retail / service provision, where stores can transition from a smaller premises into larger outlets.

31.102 A number of food convenience shops are located throughout the centre. However, a larger supermarket (Tesco) is located at the northern end of the Parade and is integrated into the street scene. This supermarket does not have its own parking but shares municipal parking in the towns car parks.

Civic / Community Use

31.103 A number of key civic / community buildings are located in prominent sites and clustered to the south of the town centre closest to the main public open space.

31.104 Civic buildings tend to be distinctive from the surrounding buildings through a different architecture, materials and scale.

Landmark / Focal Buildings

31.105 The Leamington Lump Rooms provide a landmark building at the entrance point to the town centre from the southern bridge crossing. Landmark towers are also provided at the Town Hall and St. Peter's Roman Catholic Church, denoting each buildings importance to the town and local community. The Town Hall, police station and courts also offer landmark and focal buildings to the street scene.

31.106 All buildings are located in prominent locations and draw benefit from the natural setting provided by mature trees and the surrounding parks and gardens.

Movement Framework

31.107 The gridded street network allows for safe pedestrian and vehicle movement. A easily defined street hierarchy is provided, making way-finding and movement easy.

31.108 A greater emphasis is on north/south connectivity. This emphasis correlates with the natural topography of the centre, leading users downhill towards the network of green spaces along the River Leam embankment. The movement framework therefore encourages travel through more sustainable methods, such as walking and cycling.

31.109 The gridded network also enables flexibility in terms of routing and the occasional opportunity to close streets for temporary activities such as market day, and town festivals, without impacting on the movement function of the town.

Movement Nodes & Key Spaces / Squares

31.110 Nodes of activity are focused at the main junctions within the town. Key spaces and squares are not a particular feature of the town with streets and the public open spaces providing that function. However, there are a couple of notable areas where pedestrianised public spaces have been created.

Parking

31.111 Communal surface and multi-storey parking options are located throughout the town This provides convenient access from all directions of travel and enables traffic pressure to be distributed rather than focused.

31.112 Parking areas tend to be served from side streets rather than directly from the primary movement network. This ensures that a continuous frontage is maintained along main streets, and through movement is maintained. Many of the streets are also wide enough to support incidental drop-off parking or short stay parking.

Public Open Space / Recreation

31.113 Leamington Spa is well known for it's formal and informal parks and gardens. For many, the ability to enjoy landscaped gardens and well-maintained open space provides a great deal of appeal when choosing the town as a destination to live and work.

31.114 The Parade connects the formal green space at Beauchamp Square in the north to Jephson Gardens and the Pump Room Gardens to the south.

31.115 As well as providing residents with a valued amenity outlet, these spaces are flexible and hold regular community events and fairs without impacting on the continued function of the retail businesses to the north.

Landscape Features

31.116 The majority of landscape features within Leamington town centre is generally reserved for it's central parks and gardens. Other landscape elements, such as parade greens and mature street trees provide an enhancement to the setting of key buildings and general built form.

Townscape Analysis

31.117 Leamington is built around a simple and logical principle of formal order and hierarchy.

31.118 The gridded network provides a highly permeable urban environment, allowing users to move freely in all directions. The grid network also allows for effective traffic management, where one way flows (if required) and safe pedestrian crossings can be easily accommodated. Nodes and meeting places occur at junctions where north to south and east to west movement routes intersect.

31.119 Prominent building façades provide useful reference points upon arrival.

31.120 The regal façades (generally 4 storeys) along the Parade help demarcate the primary retail street within the centre, and visually denotes and supports the space hierarchy, while side streets adopt a subservient and in some places domestic scale.

31.121 While the gridded streets provide for the majority of activity, occasional 'key spaces' have been formed, primarily around the Town Hall and Livery Street. Both the linear streets and key spaces provide flexibility in terms of use, allowing the centre to accommodated occasional pop up events, such as seasonal festival and street markets.

31.122 Tree lined areas of green space exist towards the southern end of the centre, complimenting the setting of more civic buildings and in turn providing a transition from the more retail focused urban environment towards the park. Space is also provided in and around key buildings, drawing benefit from key views.

Architectural Features

31.123 The adjacent provides a photo analysis of common architectural features found in Leamington Spa.

Figure 190. Sutton Coldfield - Townscape Analysis

Architectural Features

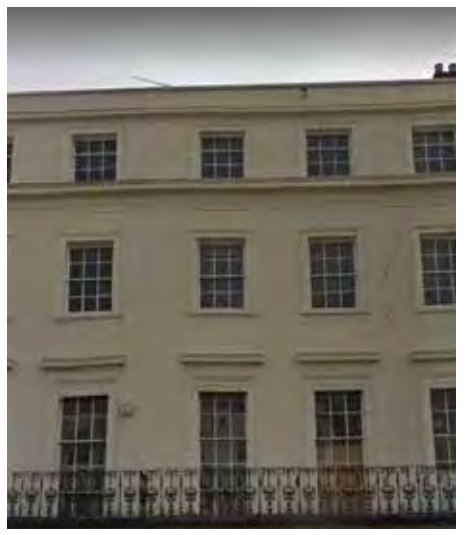
Statues and monuments located in civic spaces and complemented through landscaping.

Tree lined streets and spaces.

Wide linear primary retail streets with suitable space to accommodate bus, car, cyclist and pedestrian.

Contrasting colour variations between landscape planting and pale building façades.

Landmark clock tower demarcating civic use.



Regular window arrangement, becoming smaller in size towards upper floors

Small continuous balconies, emphasising the separation between ground and upper floor uses.

Pedestrian only lanes within combined urban blocks to form more intimate commercial spaces. Particular suited to outdoor eating and creating a better night time economy.

Contrasting architectural design and materials for key civic buildings.

Canopy and pillars denote key public entrances from the Parade

Well-maintained landscaping, with sensitive integration of street furniture, such as street lighting and bins.

Sensitively configured shop fronts, integrated into overall building design.

Formal, Regency style architecture with consistent building line.

Regular building heights with parapet roofs.

32.0 SUMMARY & BUILDING FOR A HEALTHY LIFE PRE - ASSESSMENT

32.1 Figure 191 - Figure 193 provides a review of the outline masterplan proposals set out in this Design and Access Statement against the design criteria of Building for a Healthy Life (BfHL), superseding Building for Life 12 (BFL12). Building for a Healthy Life (BfHL) is a Design Code to help people improve the design of new and growing neighbourhoods. Updated from BfL12, BfHL now reflects changes in legislation and the increasing need to consider health and well-being when formulating new environments.

32.2 Throughout the design development process, the superseded BfL12 was reflected upon and health awareness was promoted through local authority advisors. The principles under BfHL, many of which have carried over from BFL 12, have therefore helped inform and shape proposals leading up to this outline application stage. Further refinement and responsiveness to BfHL will be developed at the reserved matters stage and through the design coding exercise.

32.3 BfHL presents twelve considerations to provoke thought on the design approach. No grading or assessment is required under BfHL, therefore the following tables provide a summary at this outline stage, demonstrating a strong level of responsiveness and consideration to the BfHL principles. The BfHL review also demonstrates how the proposed scheme provides the appropriate level of site assessment and contextual information, whilst setting an appropriate framework in which to move proposals forward to the next stages.

Figure 191. BfHL Pre-Application Scheme Review - Integrated Neighbourhoods

Building for a Healthy Life (BfHL) Criteria - Integrated Neighbourhood	
Natural Connections	The approximately 300ha Site offers a wide array of characters and contexts with which to physically, visually and socially connect to support the integration of the existing and proposed neighbourhoods and communities. Analysis of the existing public right of way (PRoW) pedestrian and cycle networks surrounding the Site highlighted a relatively disjointed and disconnected provision. Wherever possible the proposed pedestrian and cycle network connects between existing neighbouring routes extending their functionality. In addition a wide range of new leisure, pedestrian and cycle routes can be formed within the extensive Green Infrastructure (GI) network within the Site providing existing and proposed residents with a wide range of connectivity options. The Site design responds directly to the constraints and opportunities, while creating a legible and connected design structure. Generally, where the Site addresses an existing urban edge it responds with an equally urban character and where a more rural context is present a softer transitional approach is proposed. The movement arrangements reflect and respond to the existing road network and central ridgeline along Fox Hollies Road (which provides a reference point for north-south / east-west connectivity. Edge to edge connectivity is therefore provided throughout the scheme. Proposals aim to maximise permeability along the proposed network of linked and connected streets, with a particular focus on pedestrian permeability. Dwellings are proposed to front onto all streets and areas of open space in order to maximise natural surveillance and promote the creation of a safe environment. The parameters and principles put forward promote (where possible) a grid-like structure to allow drainage to flow in its natural direction towards existing low points, such as Langley Brook and the eastern edge. Following the analysis of the Site and the context, nine new or enhanced Site entrances are proposed. Two new junctions connect the Site to the A38 on the eastern boundary. The southernmost A38 junction is a shared access with the new Peddimore employment site to the east. The northernmost junction is a pair of south-facing slip roads from the existing Ox Leys Road onto the A38. Land has been reserved for northern slips at a future stage should demand be demonstrated. The remaining main access connections for all modes of movement are proposed along the western edge of the Site. All junction locations and designs are illustrated in section 19.0 of the DAS. The purpose and designs of theses connections have sought to ensure that the existing local population and future population can all easily and safely access both new and existing services and facilities in the area. Significant green links are provided and safeguarded through the parameter and principles put forward as part of the outline application. As well as providing ecological and habitat enhancements, these links double-up to aid legibility and provide amenity in the form of parkland and walking / cycle routes. The proposed development also supports the accommodation of a range of new and extended bus services (including Sprint/ rapid transit if it comes forward in the future). The bus services will provide connections between on-site facilities as well as to Sutton Coldfield town centre and railway station, and also into Birmingham City Centre.
Walking, Cycling and Public Transport	The parameters and design principles promote a highly permeable framework to encourage people to choose walking and cycling when it comes to making small journeys. The permeable street network supports easy access to the bus route, as well as the proposed pedestrian and cycle routes detailed in section 19.0. The walking and cycling offer is supplemented further through a designated cycle route running north-south along the full length of the scheme, as well as a network of pedestrian connections through green spaces to provided interconnectivity and access to leisure outlets throughout the scheme. Design principles for each character area with the DAS (section 24.0) promotes building surveillance onto all streets and routes to create a well over-looked public realm. The design principles for the primary and secondary movement network within the Site supports the accommodation of bus routes through the Site, with bus stops positioned to place all residents within 400m direct line walking distance of a stop. Services are intended to connect the Site (particularly Langley Central and the two local mixed use community hubs) to Sutton Coldfield and Birmingham City Centre. As set out in section 19.0 two potential public transport network routes are illustrated meeting wider public transport objectives. The final details for these routes will emerge as designs are worked up in more detail in the future. Section 12.0 of the DAS identifies the need for the scheme to positively link to the nearby rail network. The scheme therefore proposes a permeable movement framework, offering north/south and east/west movement options across the extent of the scheme, offering links to the surrounding movement network. By providing a more permeable network in conjunction with pedestrian, cycle and bus links, future residents will be more inclined to access Sutton Coldfield, Wylde Green, Chester Road and Water Orton Rail Stations, depending on their proximity within the scheme. The movement framework is also on broad alignment with the connectivity framework set out in the Langley SPD (section 13.0 of the DAS)

Facilities and Services	Based upon the scale of the proposed development, the projected size of the new population (circa 14,000 people), and analysis of existing services and facilities in the surrounding area, including the capacity of particular services such as education the following new facilities and services are proposed to be provided on Site: • A mixed use community hub - Langley Central providing opportunities for a vibrant civic and retail heart to the development (principles are described in section 24.0). • Two local mixed use community hubs - located to the north and south and providing opportunities for local doorstep provisions and community facilities. • A Secondary School - with up to 9 forms of entry and an adjacent sixth form to be located and integrated within the fabric of Langley Central. This provision will help offer a key focus to the civic functions. • Three Primary Schools - One to the north adjacent to the northern local mixed use community hub, one centrally adjacent to Langley Central, and one to the south adjacent to the southern local mixed use community hub. • A formal sports hub - offering formal sports pitch provision within a landscape parkland setting. • A significant and connected Green Infrastructure network of around 92ha provides formal and informal outdoor leisure, recreation and children's play features all well within required walking catchments of all new residents as required by BDP policy TP9. These areas also provide natural and semi-natural features providing ecological enhancements. (see section 18.0 and section 25.0 for more information) Each of these elements have been strategically located to ensure good catchment and easy walking distances via the public footway and cycleway network for future residents and also supplementing facilities for the existing neighbouring communities. Langley Central and the Local mixed use community hubs can accommodate a wide array of uses from Classes E(a-c) retail, Sui Generis (p-r) such as public houses and takeaways, E(e) Healthcare, F1/F2 Community Buildings, E(g) Businesses, C1-C3 Residential (including the potential for an Extra Care Facility), F1(a) & E(f) school & day nursery and E(d) & F1 uses to include Indoor Sport, Recreation or Fitness uses / Learning & Non-Residential Institution uses. Collectively, the range of uses proposed will help support a healthier community. It is expected that some of the uses will layer horizontally i.e. residential uses could be located over community and retail uses. This will ensure that vibrancy and activity as well as natural surveillance can be achieved within this part of the Site. Langley central, alongside local centres located in the north and south of the Site, provide more intensified development areas, benefitting from good access to public transport. The location and arrangement of the District Centre and Secondary School has been strategically positioned in order to avail of key amenity assets in the form of Langley Brook Park, Langley Park and Fox Hollies Greenway. Such environments will provide alternative opportunities for meeting places and human interaction beyond the district centre. Primary school provision and location of formal play facilities are located in close proximity to the Langley Greenway, in order to encourage children to walk, cycle and interact on their way to school i.e. 'Play on the way'. The central sports Hub will be accessible to all through the walking and cycling network indicated. Alongside provision of formal parks both north and south of the Site, the Sports Hub will play a key role in helping improve public health and physical activity. The provisions put forward are captured under the 'Langley Living Vision' (pg. 5), which sets out to promote a healthy, vibrant and active community; a key element when it comes to assisting those affected by loneliness and isolation. Play areas will also be provided throughout the scheme within the green infrastructure element. Play provision will be well-surveilled and located in highly accessible and shared areas.
Homes for Everyone	The application proposes up to 5,500 dwellings on Site. As set out in Section 18.0 an indicative dwelling mix is proposed which places the focus on family housing delivery in line with the Langley SPD principles but also provide a mix of other dwelling types and sizes. As such a mix of 1, 2, 3 and 4+ bed dwellings will be provided. The actual mix will be confirmed as details for each character area are worked up at the reserved matters stages. In line with BDP policy 35% of the proposed dwellings will be affordable in a mix of sizes and tenures. Section 18.0 provides an indicative affordable mix. The final mix is to be agreed with the LPA at the reserved matters design stage for each phase and in line with local demand and requirements. It is intended that the affordable dwellings will be tenure blind and should be pepper potted around the development in clusters of around 8 dwellings, unless flats are proposed. Recognising the demographics of Sutton Coldfield, the potential to accommodate extra care and/ or retirement living options within the development will be explored. Specifically extra care use classes have been proposed within Langley Central - mixed use community hub. Inclusion will be confirmed at reserved matters stages for this part of the Site and will be based on demand and the availability of a suitable service provider. The location of extra care and/ or retirement living options will consider proximity to proposed facilities and services. Supported accommodation within the District and Local Centres will consider provision above mixed uses at ground floor level. Apartment / multi-level living will aim to provide an element of private amenity and be located in areas where public open space can be easily accessed, thereby helping people's mental health and wellbeing, especially when social distancing and travel restrictions are in place.

Figure 192. BfHL Pre-Application Scheme Review - Distinctive Places

Building for a Healthy Life (BfHL) Criteria - Distinctive Places	
Making the most of what's there	Section 9.0 provides a summary of all of the on-Site opportunities and constraints and Section 8.0 illustrates how design proposals have worked with those features, particularly existing and proposed topography, water courses, landscape features, heritage and archaeology features, existing habitats and ecological features, and existing built context. Part of the Langley Brook watercourse is presently culverted within the Site. Proposals seek to open up and naturalise the brook within a new 14ha public park - Langley Brook Park providing recreation, leisure, landscape and biodiversity enhancement opportunities. Section 25.0 provides illustrative principles for the brook and the space. The drainage strategy seeks to work with the Site's natural contours and feed into the wider amenity and ecology function the green infrastructure has to offer. The Site has an extensive existing network of mature and veteran trees, some of which are protected by Tree Preservation Orders (TPOs). These have been retained and incorporated into the structure of the development wherever possible. Utilising this existing green infrastructure will help to create a characterful place and aid the integration of the new development with the local vernacular and character. In particular the area around the retained Fox Hollies House is particularly verdant, this green infrastructure is to be retained and incorporated into the proposed Langley Heath Park (6.9Ha) which in turn connects into Fox Hollies Park sports hub area comprising a further 16.78ha. Similarly, Langley Hall Park responds to listed building setting, archaeology and landscape features and Langley Fields Park works with the existing mature tree and hedgerow network providing an instant maturity to the character of the park and this part of the Site. The linear alignment of Fox Hollies Rd will be utilised to accommodate the Langley Green way, thereby making the most of the route's central location and way-finding prominence along the natural ridgeline. Responding to the existing context but also the proposed context,building heights are generally between 2 and 2.5 storeys. Areas such as Langley Central and particular character frontages and focal building locations can support 3 to 4 storeys. Orientation and separation distances between existing and proposed dwellings will maintain the residential amenity of existing dwellings. The proposed built form structure is designed to reflect the various topographical constraints / opportunities, where the topography is sloping the urban grain is sinuous to allow better transition between levels, then in flatter parts of the Site the grain is more regular and geometric allowing for a tighter more gridded urban form.
A memorable character	Analysis of the settlement's evolution and character, and in particular the development adjacent to the Site confirms that there is significant variation in existing character in proximity of the Site which is linked to periods of construction rather than a particular local or distinctive character. Opportunities have therefore been taken to create a development that provides a sensitive transition between existing development and the new development but also a development with areas of its own distinct character and identity which are closely informed by proposed uses, topography, landscape structure and delivery of quality place making. An extensive provision public spaces, each providing an alternative context and function, will help encourage activity and bring life to the new built environment, thereby supporting its character and appeal. Section 24.0 sets out urban form and street hierarchy principles for the whole Site which assist in defining character areas and character frontages at the outline application stage. The principles of each character area are then defined in more detail including aspects such as block structure, net density ranges, key frontages, gateways, key spaces and focal buildings etc. Accompanying the principles are illustrative plans and vignettes which demonstrate one way that the area principles can be interpreted to deliver distinctive character and variation. At the next stages, character area design codes are proposed. These will provide co-ordinating details to support reserved matters applications and to further elaborate on the differentiation between character areas.
Well defined streets and spaces	The urban form principles and the street hierarchy plans (section 24.0) support the creation of well-defined streets and spaces. The roads do not specifically dictate the character of the street, rather the landscape built character will guide the resulting character of the streets and spaces. Design principles presented in section '24.0 Layout and Appearance Principles' promotes perimeter block arrangements to help clearly define public and private spaces, as well as surveillance onto the public realm. Further detail on advising well defined-streets and spaces will be established at the design coding stage following the approval of outline planning permission, determining elements such as requirements for dual aspect homes on street corners, building lines and well-resolved internal vistas.
Easy to find your way around	The urban form plan (principally the key spaces, focal building positions) alongside the indicative street hierarchy plan show how the development will be easy to navigate and be memorable for users. Local views towards existing focal features, both green and built will be maximised wherever possible to aid legibility and way-finding. In addition, several features will be utilised to enhance legibility within the proposed development. For instance a new clock tower feature within Langley Central and located close to Fox Hollies Road ridge line will create a prominent and widely visible feature both for the new and existing communities. Clock towers are a particularly distinctive feature within Sutton Coldfield. In addition changes in development density particularly around Langley Central will aid the senses and legibility of the Site. See section 24.0 for further details. The movement framework put forward seeks to provide straight and direct streets where possible, however some street alignments have been influenced by technical elements, such as site topography, drainage and utilities. The movement framework combined with green infrastructure and place-making objectives will create distinction, making it easier for residents and visitors to form a mental map of the Site.

Figure 193. BfHL Pre-Application Scheme Review - Streets for All

Building for a Healthy Life (BfHL) Criteria - Streets for All	
Healthy Streets	The design speed of all primary and secondary streets within the Site is intended to be a maximum of 20mph, with side streets and lanes aiming to generally achieve a design speed of 15mph. Vertical deflections in alignment (i.e build outs and parking bays etc) and changes in surface treatments at key public realm locations will aid in the reduction of traffic speeds. A hierarchy of other street types are proposed. The multi-function of each street type will vary depending on vehicle movement and frequency. Side streets and lanes have a lower frequency of movements and vehicle speeds and therefore provide opportunities for more shared surface treatment and multi-functional uses. Dwellings will front onto the streets providing good levels of natural and active surveillance. Design principles encourage gradients of no more than 1:20 along streets to support ease of access for all sectors of the community, as well as suitable egress into properties. Through the principles set, roads and junctions alignment will respond to pedestrian / cycle desire lines, i.e. not staggered or overly convoluting in response to car movement preferences. The design approach enables the scheme to accommodate safe, attractive and convenient walking and cycle routes to encourage residents to adopt healthier and more sustainable travel practices. Further detail will be provided on public realm accessibility and inclusivity at the design coding stage.
Cycle and Car parking	Parking will be provided in accordance with the requirements of the Council's Car Park Design Guide SPD, but also responsive to the locations and the size of dwellings proposed. Section 24.0 provides principles relating to parking locations and provision per character area to assist in supporting the creation of distinctive character across the Site. Design principles for Langley Central also illustrate a range of parking solutions that could be used to support the creation of a well-functioning mixed use community hub. The design code for this zone will further define the range of appropriate approaches. At the design code and brief stages, and also via reserved matters applications, cycle and car parking solutions will be detailed further.
Green & Blue Infrastructure	The scheme has evolved with the aim to maximise the potential contribution of green and blue infrastructure. Quality public open space is therefore a significant component of the proposed development, not only providing a verdant character but also providing a range of parklands, a substantial public walking network, habitat enhancements and an extensive range of children's play opportunities, formal recreation and sports hub as detailed in section 18.0 and section 25.0. The network of spaces also serves as an integrated engineering solution for sustainable urban drainage, supplementing the function and maintenance of the Site. Such provision will provide a significant potential to aid well-being and offer the opportunity for interaction and exploration of a range of green and blue environments. All facilities will be accessible from existing and proposed pedestrian and cycle routes as well as from the proposed bus route. The approach has been discussed and agreed with the Council's leisure and recreation team through extensive pre-application discussions. At the outline stage, development blocks have been sized to provide private amenity spaces to meet the Council's private garden standards as set out in Places for Living SPD. Innovative delivery of the required areas can also be explored in the higher density parcels at the design code stages.
Back of Pavement; Front of Home	It is intended that plot boundary and threshold treatments will play a significant role in distinguishing street scene character, the principles of which are set out in section '24.0 Layout and Appearance Principles'. Details on such elements will be established in further detail within the design coding exercise, subsequent to obtaining outline planning approval. In addition, provision is made within the design principles to achieve acceptable back to back distances and residential amenity in line with the Council's Places for Living SPD. Refuse and cycle storage principles will also be confirmed at the design code stage.

LANGLEY

SUTTON COLDFIELD

DESIGN & ACCESS STATEMENT

APPENDIX

AUG / 2021